
GLOBALIZATION AND WATER RESOURCES MANAGEMENT: THE CHANGING VALUE OF WATER

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TRADABLE WATER IN GATT/WTO LAW: NEED FOR NEW LEGAL FRAMEWORKS?

Katsumi Matsuoka*

ABSTRACT: International community is facing a water crisis. In dealing with this problem, experts suggest that tradable water would lead to the most efficient use and allocation of water. However, things are not so easy. What types of water resources are covered by international trade law? Is it possible to have “clean water” in an international market? How far can the States exercise their hydro-sovereignty in respect of trading water? Can states really be better off by exporting and importing water without environmental degradation? Do we need more sustainable regulation concerning the international trade of water? These questions will be addressed in the context of GATT/ WTO as the international regulators of the world trade. This paper will also discuss defining and identifying water as a good, the GATT provisions for water trade, and their current interpretation in terms of seeking a balance between trading water and its conservation.

KEY TERMS: water law; international trade law; sustainable development; GATT/ WTO.

INTRODUCTION

In recent years one has increasingly heard the term “water crisis”. Sometimes water is too much, sometimes water is too little. The key issue is getting the right sort of water into the right places in the right amounts, under the right water management in a system that is well guided by the right legal policy. At the international level, water issues have now moved to the center stage. Global water consumption is rising quickly and the availability of water is likely to be one of the most pressing issues in this new century. By the year 2100, the world population will double to more than ten billion people. The problem is that, while the amount of human consumption will change as the growth of human population in this way, the quantity of water, available for human consumption does not change on an absolute base. Thus, experts believe that “ by the year 2025, over 30 countries will not be able to provide 1000 cubic meter water per capita per year. 1000 cubic meter or less water is a yardstick, generally accepted as “scarcity” of water. This situation threatens the human dignity to have access to safe water and adequate sanitation.

So, how should we deal with this water crisis? Of course, a holistic approach is required. The peaceful management of freshwater resources is linked to broader policy issues, such as global security, environmental protection, education, poverty eradication, human rights and so on. Thus, United Nations has been active in this area since the UN Water conference 1977 at Mar del Plata. Today efforts to address the water crisis or problem are underway in many of the UN agencies.

Moreover, developments of international law including “soft law” is playing a vital part to prevent and resolve conflicts over water, and facilitate the implementation of effective strategies for dealing with the water crisis (for example, the ILA Helsinki rules 1966, Agenda 21, decisions of PCIJ and ICJ, the 1997 UN Convention on the Law of International Watercourses, and regional agreements, and so forth).

Having said that, my focus is on the more economic perspectives associated with international trade law. Currently there is increasing attention paid on economic value of water as a commodity. This is partly because of new concepts of water management, that is creating more open markets for trading water and water rights, reducing of government subsidies, or privatizing water supply while regulating to preserve ecosystem and environment. Economists suggest that the market should determine the viability of development, and tradable water should lead to

* Professor of Law, Department of Business Law, Fuji University, 450-3 Shimoneko, Hanamaki, Iwate, 025, Japan, Phone: +81(198) 23-6221, Fax: +81(198) 23-5818, E-Mail: matsuoka@fuji-u.ac.jp

the most efficient use and allocation of water and promote sustainability. Alongside this movement, we have had a paradigm change in water policy. The old paradigm, prevalent from 1950s, is that constructing large-dams is one of the main responses to water demand and this is also a sort of symbol of economic power of a given society. However, this paradigm has to give way to the new paradigm that water should be supplied under demand control and in a more environmentally friendly way. Herein lies the importance of the economic re-evaluation of water.

This economic re-evaluation of water is combined with the currently developing technology to transfer water at the large scale. This development and possibility would challenge the stigma that water, as a natural resource, is untradable. For example, Canada has plenty of water, but not a high population. In contrast, the United States has plenty citizens and the especially southwestern arid regions, like California, are in a position to buy water. In 1991, a California company tried to buy water via bulk shipments but this project was suspended by the government of British Columbia. Canada has indeed 20 percent of world's fresh water—a relatively large amount. They export timber, mineral, fish—so why not water?

Turkey has wanted to bring water on commercial terms into the Middle East and the Persian Gulf. The Netherlands was offered by Norway cheaper drinkable water by means of big flexible bags drawn by tugboats. Moreover, just recently I had news that a Japanese ship company set a new scheme for exporting Japanese water. Although all of these cases have not come into reality, it is only a matter of time before bulk water transportation will actually occur. It is economic theory that if some states have extra water in their territory and some states are in shortage of water or looking for less expensive and better quality water, both sides can be better off by exporting and importing water. And presumably this regime can contribute to a fair distribution of water in the international community and become one option to alleviate or avoid the water crisis.

On the other hand, states also have sovereignty to control their domestic water resources and to protect the watershed environment from over-exploitation. There is a chance that market forces will knock out any attempts to alter its mighty course. Without the notion of sovereignty, the aquatic environment may be easily losing its ecosystem-balance by bulk amount of water abstraction.

In this regard, environmentalist and nationalists argue that water is different and should not be brought into the free market. The majority of scientific research lends support this argument, showing that water is a special kind of natural resources, because it is impossible to calculate the replacement-rate of water reserves, most of which are underground aquifers.

This raises some questions. Has international trade law developed sufficiently well in order to deal with the conflicts between economic goals and the need to protect the aqua-environment? Is it possible to have “clean water” in the international markets? How far can States exercise their hydro-sovereignty in respect of trading water? Can states be better off by exporting and importing water without environmental degradation? Do we need more sustainable regulation concerning international water resources? These novel issues extend beyond scope of the traditional international water law.

DEFINING WATER AS A GOOD

Let me move on the question of whether water is considered to be subject to international trade law. There are debates over whether water is “in” or “out” of GATT (General Agreement on Tariffs and Trade) or other regional agreements, such as NAFTA (North American Free Trade Agreement). This question is an initial and crucial step for dealing with the relationship between free trade and the protection of water resources.

If a relevant international treaty directly regulates interstate transportation of water, we would not have difficulty in concluding the application of trade law to the possible water conflicts. Unfortunately, GATT does not squarely provide what the term “goods” is, and it is clear that GATT applies only to trade in goods (Jackson, 2000). However, many commentators interpret that water can be defined as a “good” under GATT.

First, water, as an agricultural product, is included under the tariff headings of GATT. The Agreement on Agriculture applies agricultural products (Art. 2) which are covered by HS chapters 1-24 (Annex 1). HS means “Harmonized Commodity Description and Coding System.” This system is used as the tariff headings of GATT, which would imply water as a beverage (tariffs heading 22.01.90, “Waters, including natural or artificial mineral water and aerated waters,...;ice and snow”). Second, by GATT's definition of “primary products”, water can be more directly construed as a tradable good. GATT does not define the term “product” but does define “primary products” as “any product of farm, forest or fishing or any mineral, in its natural form or which has undergone some processing as is customarily required to prepare it for marketing in substantial volume in international trade” (Annex I Notes and Supplementary provisions., Art. XVI). Third, it can be argued that insofar as GATT does not explicitly exclude the possibility of water as a good, water will be capable of being governed by GATT (de Haan

1997). The same line of arguments can be made under NAFTA because NAFTA states agreed to secure their existing rights and obligations under GATT.

IDENTIFYING WATER AS A TRADABLE GOOD

We may assume that water can be treated as a good under international trade law, but even if this is true, it may not be easily conceivable that every kind of water in a hydrologic circle should be always considered to be a good of commerce. Therefore, the next question will arise “when and how “ water becomes a good from the perspective of international trade law. There is no clear answer to this question but several observations can be made.

Transaction Feasibility

First, a distinction can be made between tradable and non-tradable water in the light of transaction feasibility. Every status of water in the hydrologic cycle can not be fit for transaction. In actuality, water in the water such in air or undefined channel of underground, as it were, could not become a good for trade. Perhaps though, in the near future, by weather modification technology, atmospheric water resources may become objects of the transaction, as well as surface waters. At least, some feasibility to appropriate a certain quantity of water is required for trading water.

Water in its Natural State

Secondly, one could argue that water in its natural state such as in aquifers, lakes, and normal stream of rivers is not construed as a good since it has not entered into commerce. According to this position, for something to become a good altered from its natural state, it is observed that, at minimum, “some human act of intervention” such as “production process” is required (Thomas and Tereposky 1993). However, when it comes to think about what is exactly meant by the notion of some human act of intervention, its ambit is still debatable.

For example the distribution of water for various users, that is, the assignment of water rights to riparian owners and licensees would have to be regarded as allowing water to be exploited for commercial use. In this respect, it may be presumably construed that the notion of “some human act of intervention” as a requirement for tradable water would be able to include not only a certain actual process of production but also some other arrangement such as facilitating water into commerce.

Therefore, under “natural-state-water standard”, it remains unclear what kind of process amounts to a change of water from its natural state into tradable goods.

Small- and Large-Scale Water Transfers

For the third standard as regards when and how something becomes a good, a line can be drawn between small-scale and large-scale water transfers (Housman and Orbuch 1993). Small-scale water transfers ranges from bottled water to water exports by marine vessels. As such, small-scale water transfers fall under international trade law. Probably everyone would agree that bottled water as a good of commerce, but what about large-scale water transportation diverted by upstream states into downstream states or possibly by pipeline across the states’ borders? A position can be taken that large-scale water transfers do not fall under international trade law.

In my view, “the large-and small scale of water standard” should not be the determinant for identifying water as tradable goods because a line between large- and small-scale of water transfer is not absolutely clear. For instance, water transportation by supertankers may be classified as either way.

In short, a large-scale water transfer can be construed as entered into commerce, not because of its size of transportation, but because of relevant parties’ intentions or the specifications of waters to be delivered. In any event, for the purposes of my research, I would like to move on with the premise that some kind of water comes under GATT/WTO law. Then, recent development of the relationship between trade and environment will be touched upon.

RECENT DEVELOPMENT OF THE GATT/ WTO FOR “GREEN TRADE”

In the last decade or so, with the global economy becoming aware of environmental concerns, the need for reconciliation between the free trade principles and environmental protection has become more evident. “[B]efore

1991, the relationship between the protection of the environment and international trade was an arcane specialty that attracted little attention”(Schoenbaum 1997).

Two years after the UN Conference on Environmental and Development in Rio in 1992 , at the end of the Uruguay Round at Marrakesh in 1994, the countries of the world, in establishing the WTO, paid more attention to the environmental protection tied up with the notion of sustainable development. In the Marrakesh Agreement, the countries recognized in its preamble that:

“[T]he optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment”

The term *“the optimal use of the world’s resources”* is notably compared with the fact that the GATT 1947 states, as its objectives, *“the full use of resources of the world and expanding the production and exchange of goods”*. So, the change of the wording from *“the full use of resources”* to *“the optimal uses of the world’s resources”* clearly indicates an orientation for the conservation of resources and their sustainable uses.

At Marrakesh, the participating countries decided also to begin a comprehensive work programme related to trade and environment in the WTO. They created the WTO Committee on Trade and Environment and this brought environment-related issues into the mainstream of the WTO work. In addition, the new WTO dispute settlement process has started to take more environmentally friendly positions (Mann 1998).

GATT Provisions for “Clean Water”

Now we look at GATT provisions for “Clean Water.” A number of the provisions of the GATT are potentially relevant to conservation of water resources. Firstly, it is important to note the cornerstone principles of the GATT. These include Article I and III related to the principle of non-discrimination. This has two aspects: the most-favoured-nation and national treatment. The most-favoured-nation-treatment principle of the GATT, Article I means that all WTO members must “be on an equal footing” and grant each other equal treatment of like products originating or destined for the territories of all other WTO members. The national-treatment principle in Article III means that once goods have entered into a market, they must grant equal treatment for foreign and domestic goods.

A second key provision of the GATT is found in Article XI (1), which prohibits the quantitative restrictions on import or export of products.

Third, in the light of the domestic conservation of water resources, the following Articles are most pertinent and may justify the related measures and most of which are likely to export restrictions or prohibitions on water:

- Article XI(1) permits non-quantitative restrictions on export by the use of fiscal measures such as duties, taxes or other charges;
- Article XI (2)(a), as an exception to Article XI (1), permits quantitative prohibitions or restrictions on export, temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to a exporting WTO member.

In addition, different types of quantitative prohibitions or restrictions may be invoked under Article XX. A state may take measures by invoking one of “general exceptions” laid down in this article, contrary to GATT obligations, and particularly in this context:

- Article XX(b) allows a member state to apply export restrictions necessary for the protection of human, animal or plant life or health;
- Article XX (g) provides with measures relating to conservation of exhaustible natural resources.
- Article XX (j) sets forth measures essential to the acquisition or distribution of products in general or local short supply.

Of these items, because of time limitation, I would like to focus on Article XX.

Environmental Exceptions under Article XX

Article XX prescribes the environmental exceptions to GATT obligations, which enables the WTO members to control water export for the environmental protection. The word “environment,” which is defined to mean

“nature and the natural world,” came into current use only in the late 1960s, and the GATT, drafted in 1947, uses the older term “natural resources” (Schoenbaum 1997). Although Article XX does not contain any specific term of “environment,” it contains the term “natural resources” and “human, animal or plant life ”and thus from a current environmental perspective, Article XX may be applied to justify trade-related environmental measures that are inconsistent with basic GATT disciplines. Accordingly, much of the discussion about the relationship between trade and the environment has converged upon Article XX. Likewise, in thinking about possibility of “clean water” in international trade, Article XX is the most pertinent provision of all.

At first sight, the wording of the sub-paragraphs (b) and (g) of Article XX seem to apply quite readily to meet environmental concerns. However, this is not the case. One needs to take account of the judicial interpretations of these terms. GATT/WTO decisions traditionally have interpreted Article XX as a *limited and conditional* exception, and, in particular, this is true with respect to the sub-paragraphs (b) and (g). In fact, a heavy burden of proof is assigned on the party invoking these provisions.

As for water related measures, to be qualified under (b) or (g), they have to meet requirements to be found in rulings by GATT/WTO decisions. Let me turn now to the requirements of sub-paragraph (g).

Is Water “an exhaustible natural resource” under Article XX(g)?

Interestingly, some legislative history indicates that this environmental exception was designed to conserve natural resources in terms of “*export*” restrictions, rather than as import restrictions(UN Docs. E/PC/T/C. II/50). In this sense, seemingly Article XX (g) would be more suitable for exports restrictions on “natural resources” such as water. However, we need to take care. For the measures to be justified under Article XX (g), it is observed that a party invoking the exception have to demonstrate that the measures at hand satisfy the following requirements:

- (1) the policy in respect of the measures for which the provision was invoked fell within the range of policies related to the conservation of exhaustible natural resources;
- (2) the measure for which the exception was being invoked were related to the conservation of exhaustible natural resources;
- (3) the measure for which the exception was being invoked were made effective in conjunction with restrictions on domestic production or consumption; and
- (4) the measure were applied in conformity with the requirements of the introductory clause of Article XX.

One argument can be made that water does not constitute “exhaustible natural resources” because that water is capable of being reproduced or renewable, and thus it is not exhaustible. Indeed, the natural resources in this context originally envisaged include things such as raw materials, minerals, and metals. “Renewable” or flow resources like animals, plants, soil, and *water* were not originally included in Article XX (g)(Charnovitz, 1991).

Despite this, GATT/WTO decisions have taken a broader view of the term “exhaustible natural resources” in this context. So far, salmon, clean air, and even sea turtles have been found to fall within the meaning of “exhaustible natural resources.” In the *Shrimp-Turtle* case, the Appellate Body of the WTO adopted the evolutionary notion of this term referring to “the objective of sustainable development” of WTO agreement. Therefore, it is very likely that water may be found to be within the meaning of “exhaustible natural resources.”

Ultimate Availability of Article XX : Nature of “Chapeau”

Even though a measure is provisionally justified under Article XX (b) or (g), it must also satisfy the requirements of the introductory clauses, the so-called “chapeau” of Article XX. Ultimate availability of the exceptions under the Article XX depends upon the compliance by the invoking WTO member with the requirements of the chapeau. The sequence of steps in examination between chapeau and particular exceptions (a) to (j) is crucial: first, provisional justification of one of the exceptions, and second, further conformity with the chapeau.

The reason for the sequence of the steps of this application concerns the nature and objective of the chapeau. While it can be noted that its current interpretative evolution in respect of sustainable development is adding some texture, it is the *raison d'être* of the chapeau to prevent the abuse of the exceptions of Article XX. This is indeed based on the doctrine of abuse of rights that is governed by the principle of good faith in international law. In its basic concept, this doctrine prohibits the abusive exercise of a state’s rights and thus watches over the abusive manner rather than rights them selves.

The extent of the application of this doctrine is broader. It is also aimed at securing a balance between the

right of state and the rights of other states. In this context, the function of the chapeau is striking a balance between the right of WTO members to invoke environmental exceptions and the rights of other WTO members under the substantive provisions of the GATT 1994.

CONCLUSION

Article XX has been criticized for “its nebulous language,” and alleged confusing result that might occur should governments employ its sanctions (Patterson, 1992). However, this question has been clarified by the emerging case law, especially following the adoption of the notion of sustainable development. Nevertheless, as far as the ultimate applicability of the article includes the delicate task of balancing between members’ rights, justification of a measure would be a matter of policy. At present, it is unforeseeable that a government will invoke these environmental measures, and accordingly the further development of substantive rules is still awaited.

Although states should have the system of water security in terms of water leaving their country, what would be the situation if every state were allowed to maintain unilateral protectionist measures for the benefit of domestic environmental policy? Such actions could cause adversely affect the other states and result in chaos in world trading system.

It is also important to note that there must be some scope for state sovereignty, under which where states have a right to control their natural resources. At some level, a state can exercise its rights to control exploitation and alienation of water by regulatory measures, such as a statutory permit systems or other legislation, in order to protect its national water resources. At a different level, in terms of international trade, states’ hydro-sovereignty will collide with other states’ rights. The function of Article XX and the other relevant Articles of GATT 1994 is to deal with this collision. In thinking about the nature of Article XX, it is not originally designed to cover the entire range of environmental policies since environmental protection was not at issue when the GATT 1947 was drafted.

The new concept has emerged that trade and the environment can be mutually supportive in a sustainable way. It is, however, not an easy task to integrate these notions, especially since each of these two notions has been developed distinctively with different purposes. The most effective way to deal with this problem is through the international water resources agreement that can synthesize these two different positions.

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