

POWER STRUCTURES IN WATER REGIME FORMATION: A COMPARISON OF THE JORDAN AND EUPHRATES TIGRIS RIVER BASINS

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Abstract

This article is a comparative analysis of the effects of power structures on the success and/or failure of the water regimes in the Jordan River Basin and Euphrates Tigris River Basin. In order to see the differences and/or similarities between the two river basins, both of which are located in the same geographical region, regime theory is taken as the theoretical framework. The article contributes to the research on water in the Middle East in two ways: first, it analyses the role of domestic powers as well as global and regional powers on regime outcome; and second, it provides a basis for understanding why the riparians have chosen cooperative strategies in the Jordan Basin while in the Euphrates Tigris region temporary resolutions have been chosen.

INTRODUCTION

In most water poor regions, access to water may draw the borderlines for relations among regional actors. As fresh water is vital for the livelihood of human beings, the struggle for access to and control over water resources has been a major cause of tensions among communities. Water that transcends state boundaries may lead to further complexities in terms of riparian relations and institutional limitations. The vitality of fresh water, accompanied with the water scarcities in water poor regions, makes hydro-politics among riparian states one of the most complex issues in international relations.

Given the environmental security dimension of transboundary water issues, two different approaches have been used to explain them. On the one hand, some scholars like Gleick (1993) and Homer-Dixon (1994) stress the likelihood of violent conflicts arising over water resources. On the other hand, scholars like Wolf (1998) focus on the likelihood of cooperation over water resources based on empirical evidence. As far as empirical records are concerned, in spite of the potential for

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tensions in shared river basins, the record of acute conflict is overwhelmed by the record of cooperation. According to the Oregon State University's *Transboundary Freshwater Dispute Database*, in the last fifty years, just thirty-seven acute conflicts have occurred, while 150 water treaties were negotiated and signed.¹ That is to say, cooperation rather than conflict is the rule in transboundary water relations.

According to Elhance (1999) when studying conflict or cooperation in river basins, a number of factors should be taken into consideration. First of all, the hydrology of a river basin paves the way for interdependencies among riparians in terms of politics, environment and security. The physical geography is one of the denominators that determines the nature and degree of dependence of each riparian on the shared river as well as the urgency of the need for cooperation. Although states tend to exploit the water resources that flow within their territories, hydrological interdependencies in the basin gradually force them to find compromised solutions and cooperate over shared waters. In addition to hydrological interdependencies, the riparian structure of the basin constitutes another important aspect of riparian relations. Within this context, physical geography plays a substantial role in defining bargaining powers of the riparians as well as their power position in the basin (Elhance 1999). In most cases, upstream states exploit the waters of rivers that flow through international borders. Thus, this exploitation may negatively affect the quality and quantity of waters available to downstream states. Particularly in the absence of a basin wide agreement, upstream states can alter the flow and, consequently, downstream states can suffer from low levels of quality and quantity of water. In spite of the importance of being upstream, the relative power of the riparians also influences hydro-politics in the basin. Thus, hegemonies in the river systems can play important roles in defining the basics of basin wide agreements in favour of their own interests.

As water is a shared resource and a public good, it must be considered as a common property resource which is supplied jointly and which no party within the river basin can be excluded access to. But in practice, states are reluctant to share control over the rivers that flow within their borders. In order to maximize their gains, states tend to exploit transnational water resources unilaterally. States' unilateral actions in international river basins have constituted a challenge for basin wide solutions to protect this common property resource and enhance the benefits to all. As experienced in the Middle East river basins, scarcity is not the main reason for worsening disputes. Rather, unilateral actions such as dam construction or river diversion in the absence of an agreement, lead to destabilization of the basin.

¹ Transboundary Freshwater Dispute Database is available at: < <http://www.transboundarywaters.orst.edu>>.

According to Postel and Wolf (2001:61), “the red flag for water-related tension between countries is not water stress per se but rather a unilateral attempt to develop an international river, usually by a regional power.”

The Middle East is one of the most water poor regions and has the world’s lowest per capita water consumption. As the climate is largely arid with average annual rainfall levels of less than 250 mm/year, annual water supply in the region is not reliable. Thus, the region suffers from acute water scarcities. Consequently, hydropolitics in the Middle East have been characterized by intense and occasionally armed hostility since the second half of the 20th century.

Until the 1940s the regional economies were regarded as water secure with enough water to meet domestic and industrial demands. But parallel with increasing population rates, the use of fresh water increased six-fold over half a century. Water has therefore become one of the vital security issues among water poor Middle Eastern states (Allan 2002). Furthermore, the policy of food security and self-reliance as a national economic goal for most of the regional governments has caused over use of water in irrigation. Over 70% of water supplies in the region are used for irrigation. In spite of the poor economic returns, these agricultural policies have been pursued as a primary political objective, making water resources extremely valuable for governments. Within this context, for most of the Middle Eastern governments national security translates into food security, and food security translates into water security (Morris 1997). Therefore, the allocation of water resources that transcends boundaries (e.g. Euphrates, Tigris, Nile, Jordan, Yarmuk etc.) has become one of the sources of inter-state tensions. The main factors that might fuel these water related tensions are: rapidly growing populations, economic development, increasing living standards, technological developments, political fragmentation and poor water management. These factors, accompanied with inadequacy of international water laws, can lead to an escalation of conflict in the region over shared water resources (Drake 2000). Most of the riparian governments face common water problems which can be either the incentive for further tensions or an impetus towards regional cooperation in order to overcome political, social and economical problems. Within this context, in spite of the growing water demand the Middle East has not experienced any significant war over water resources with the exception of some minor military events in the Jordan Valley in the early 1960s.

In this article two of the conflict-prone water basins, Euphrates Tigris and Jordan Basins both located in the Middle East, will be examined and compared in order to analyze the role of power structures and actors other than the state on water regime formations. The overall goal is to analyze the power structures and actors that have

affected the regime outcome in two different but overlapping regional river basins. Within this context, possible answers to the following questions will be sought:

In what ways do regime formation outcomes in the Euphrates Tigris and Jordan River Basins differ from each other?

How do global, regional and domestic power structures affect the processes and outcomes of water regime formations in the two river basins?

The first part of the article presents regime theory and regime formation arguments as the main theoretical framework. The second part of the article consists of a comparative analysis of the cooperative efforts and respective agreements in the two river basins. In addition, the role of power structures will be assessed vis-à-vis their impacts on water regime formations.

INTERNATIONAL REGIMES AND WATER REGIMES

One of the main characteristics of the contemporary globalised international system is the high level of interdependence among international actors. Keohane and Nye (1989) define situations characterized by reciprocal effects among international actors as **interdependence** in world politics. According to Keohane and Nye, interdependence affects state behaviour and policies. Within this context, new procedures, rules, or institutions for certain kinds of activity have been created in order to regulate and control transnational and interstate relations. In general, these cooperative efforts are called international regimes.

Regime theory provides a tool for explaining international cooperation in the presumed anarchic international system. The consensus definition of international regime was elaborated by Stephen Krasner and is defined as “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations” (Krasner 1991:2). According to Krasner (1991) regimes are not regarded as ends in themselves; rather they affect related behaviour and outcomes. In an international system, based on the idea of sovereign states, the main function of regimes is to coordinate state behaviour in order to achieve desired outcomes. Within this context the major function of international regimes is to facilitate mutually beneficial agreements among governments (Keohane 1991).

With regard to international watercourses, the concept of **water regimes** has been attracting more and more attention. Water regimes refer to the constrained

mechanisms that guide the actions of parties in a river basin (Jagerskog 2001:4). For Hafterdorn, water regimes come into existence “when affected states to a conflict observe a set of rules designed to reduce conflict caused by use, pollution or division of a water resource or the reduction of the standing costs and the observance over time of these rules” (Hafterdorn 2000:65). Hafterdorn distinguishes between regimes that are established to deal with all future water conflicts, like the *1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses*, and water regimes that are connected to a particular conflict.

In general, the conceptualisation of international regimes is rooted in the conventional definition of international politics and refers to relations between sovereign actors who pursue self-preserved policies. Thus, the outcomes emerging from the interactions of states, which can range from war to cooperation, are the reflections of states’ interests and preferences (Stein 1991). The realist school, however, argues that conflict is the dominant outcome in terms of relations among self-interested international actors. International regimes are thus an anomaly from this standpoint (Keohane 1991). Within this context, the logic and impetuses behind the formation of regimes requires examination.

REGIME FORMATION

According to Keohane (1991) and Stein (1991), international regime formation relies on rational-choice analysis. Stein argues that

...the same forces of autonomously calculated self-interest that lie at the root of the anarchic international system also lay the foundation for international regimes. ...[T]here are times when rational self-interested calculation leads actors to abandon independent decision making in favour of joint decision making (Stein 1991:132).

With this formulation, Stein presumes the existence of interdependence which makes mutual expectations very important.

An international system is characterized by independent self-interested decision-making. According to Stein, there is no need for a regime if there is no conflict between interests of the states. However, if all the actors have an incentive to avoid independent decision-making, self-interested calculations would pave the way to joint decision making since independent self-interested behaviour might result in undesirable outcomes. Stein defines these situations as dilemmas of common interests. According to Stein, in order to solve the **dilemma of common**

interests individual actors have to come together to form an international regime. As far as international collective goods are concerned, optimal provision can be assured only if states abstain from independent decision-making. Otherwise, independent decision-making leads them to be free riders and results in either the sub-optimal provision or the non-provision of collective goods (Stein 1991).

The tragedy of the commons is the best example of the dilemma of common interests and the necessary collaboration to move from the sub-optimal equilibrium. The commons are open to all and the tragedy is the overgrazing that resulted from unrestrained individual use. Each actor most prefers to be the only user of the common source, followed by joint restraint in the mutual use of the good, and least prefers a situation in which his or her own restraint is met by the others' lack of restraint. Each actor prefers to share the resource rather than to see their own restraint allowing either the continued existence of the resource for others' use or the disappearance of the resource because of others' unrestricted usage. "The actors have a common interest in moving from their sub-optimal (but not least preferred) outcome to one in which they exercise mutual restraint by collaboratively managing the resource" (Stein 1991:129). In a nutshell, regimes arise when actors give up independent decision making in order to deal with the dilemmas of common interests for the sake of their own self-interests.

As far as the structural basis of regimes is concerned, the distribution of power among relevant actors shapes the structural characteristic of a regime. Young (1991) defines three different paths to regime forms: 1) **spontaneous**, in which regimes emerge from converging expectations; 2) **negotiated**, in which regimes are formed by agreements; and 3) **imposed**, in which regimes are forced by external powers. Among these formation shifts, imposed regimes are the most sensitive to shifts in the division of power within the international system since they are most closely tied with the power structures.

Regime theory proposes that cooperation will bring better payoffs. However, real-world cases of international cooperation cannot be regarded as being initiated in a spontaneous manner. Instead, strong leadership tends to initiate international cooperation in many cases. In all types of regime formation, power plays a vital role. In many cases, a hegemon plays the role of a "facilitator" for international cooperation and works synergistically for better solutions for all member countries within the system (Min 2003). Most often, hegemonic powers use their powers to sustain a regime that promotes their interests, or they may veto the formation of a regime that challenges their interests. In terms of sub-systemic regimes, hegemonic powers can structure the choices and preferences of less powerful actors and shape regional outcomes.

Keohane (1984) takes the concept of **benevolent hegemony** and incorporates it as the starting point of his regime theory. According to Keohane, the hegemon is a leader who reinforces cooperation among actors to produce symbiotic effects in collective actions. Although he shares the liberal argumentation proposing the possibility of non-hegemonic cooperation, his concept of benevolent hegemony is inspired by the realist argument of accepting the hegemonic role for maintaining the stability of the international system. However, for Keohane hegemony is not a sufficient condition for international cooperation. Keohane focuses on state decisions rather than on power capabilities and argues that the legitimate nature of hegemony is founded upon the consent of non-hegemonic states. According to him, hegemony is distinguished by its “willingness to sacrifice tangible short-term benefits for intangible long-term gains” (Keohane 1984:45). On the other hand, in the coercive version of the hegemonic stability theory, a hegemon is understood as a utility-maximizer that coerces or extracts subordinate countries as much as possible. One of the major characteristics of coercive hegemony is the hegemon’s forceful action toward other countries in the system. Thus, a “rational” hegemon extracts available resources from others in addition to providing international public goods for systemic purposes (Min 2003). According to Gilpin (1981), states seek optimum combinations of power and welfare. Therefore, the systemic behaviour of a hegemon or other states can be explained by the expected utility calculated by these actors. Furthermore, he argues that international systems are changed by states that receive positive expected benefits exceeding expected costs from the change.

In addition to the influence of hegemons, the power relations among actors within a sub-system should be taken into consideration. Both in the formation and continuation of a regime, interdependency among actors and the vulnerability of actors towards others’ actions within the system also play major roles. In other words, both the sub-systemic and global power structures can affect the nature of the regime, and the regime in turn governs the political bargaining and decision-making within the system (Keohane and Nye 1989).

In general, regime theory is criticized for neglecting domestic politics. This neglect of domestic politics poses limitations for understanding cooperation among international actors. In order to understand the reasons behind states’ cooperative or non-cooperative actions or policies in the international system, the domestic political context needs to be examined since foreign policies are mainly reflections of domestic interests. Particularly in security issues, the perceptions of elites play a major role while in economic issues, the internal distribution of the costs and benefits of international policies plays the major role. Thus, the tendency to ignore domestic politics has caused deficiencies in explanations of the security and

economic policies of individual states since, in most cases, the internal character of states and elites is one of the central elements in determining state preferences.

Consideration of domestic politics is, hence, essential for understanding international cooperation for three reasons: First, domestic politics shows how preferences are aggregated and national interests constructed; second, domestic politics help to explain the strategies that are adopted by the state in order to realize the goals; and third, domestic politics are essential to ratify international agreements and cooperation documents (Milner 1992).

Krasner and Katzenstein (1978) focus on structural factors as domestic determinants of foreign policy. Both authors state that central decision-makers (i.e. the state) must be concerned simultaneously with domestic and international pressures. Furthermore, according to Putnam:

...a more adequate account of the domestic determinants of foreign policy and international relations must stress politics: parties, social classes, interest groups (both economic and non-economic), legislators, and even public opinion and elections, not simply executive officials and institutional arrangements (Putnam 1993:435).

In light of the importance of domestic politics, Putnam uses the “two-level game” metaphor:

At the national level, domestic groups pursue their interests by pressuring the government to adopt favourable policies, and politicians seek power by constructing coalitions among those groups. At the international level, national governments seek to maximize their own ability to satisfy domestic pressures, while minimizing the adverse consequences of foreign developments (Putnam 1993:436).

Thus, governments should be in line with their respective domestic interests for pursuing international policies. Since regime formation is part of international policies of a particular government, as far as regime formation is concerned, domestic politics absolutely do matter. In order to explain the interaction between domestic politics and regime formation, Zurn takes Krasner’s conceptualisation of regimes as “intervening variables” between the “basic causal variables” and “the observable related behaviour” and identifies basic causal variables as “domestic politics” (Zurn 1993).

WATER REGIMES IN THE JORDAN AND EUPHRATES TIGRIS RIVER BASINS

Since the second half of the 1990s, relations between riparians in both the Jordan River Basin and the Euphrates River Basin have been dominated by peaceful resolution of disputes. This is contrary to the general view that both basins are conflict-prone and, therefore, it is likely that water will lead to conflicts. In the Jordan Basin agreements for settling water distribution disputes were signed and Joint Water Committees (JWC) were initiated. However, in the Euphrates Tigris region relations between the Turkish and Syrian governments are getting more cooperative and friendly. In the following section, the tendency towards cooperation and/or resolution of tensions in the Jordan and the Euphrates Tigris River Basins will be analysed within the framework of regime theory.

Since the independence of the Arab states and the foundation of the State of Israel, wars and/or armed conflicts between Arabs and the Israelis have been a part of the relations among Jordan riparians. By contrast, among the Euphrates Tigris riparian states the only war between riparians was the Iran-Iraq war.

As opposed to the assumption that freshwater conflicts are the significant determinant of riparian tensions, in reality the main reasons behind most of the wars/armed conflicts in both river basins are political disputes involving territorial disputes, ethnic rivalries, nationalism or regional hegemony. Although water security has been considered as an indispensable part of national security by the riparian states' governments, freshwater has not been the only reason for conflicts or tensions between riparians in both basins. The only real war over water resources was the *Six Days War* (1967) in the region. In most cases, the impact of political tension between riparians is a significant component in freshwater conflict escalation, as experienced between Israel and its Arab neighbours since their independence.

In the Euphrates Tigris Basin, water has not been one of the determinants of state ideology and, therefore, water related tensions were not experienced between riparians in the initial periods of state building in the basin. On the other hand, access to water resources was one of the significant determinants of the Zionist ideology which paved the way for Israel's occupation of the West Bank, Gaza Strip and the Golan Heights to strengthen its hydro-strategic position in the basin. Given the importance of the water, especially for Jordan and the Palestinians, Israel's de facto confiscation of water resources has always been a highly contentious and tension-ridden issue in the Jordan Basin.

In spite of the general assumption that war/armed conflict over water resources is inevitable in the Jordan Basin, particularly between Jordan and Israel, there have been ongoing efforts since the 1950s to form a kind of water regime between the two states. As a result of the interdependence between Jordan and Israel and their dependency on water resources, formation of some procedures, rules, or institutions was inevitable in order to regulate and control their relations. In this sense, the formation of a water regime between Israel and Jordan can be considered as part of the rational-choice analysis of the two states, both of which decided to abandon independent decision making in favour of joint decision making in accordance with their rational self-interested calculations. In spite of the conflictual policies and unilateral projects of Jordan and Israel in terms of the water diversion from the Yarmouk and Jordan Rivers, with the 1994 Peace Agreement both countries accepted that the individually preferred outcome is neither accessible nor stable. Therefore, in order to reach an optimal outcome they decided to review their dominant strategies.

The case of Jordan and Israel may be considered as a water regime created to solve the dilemma of common interests. As regimes established to deal with the dilemma of common interests require collaboration, the water regime between Israel and Jordan specifies the rules for allocation, storage and protection within the Annex II of the Israel Jordan Peace Treaty.² Furthermore, as a part of collaboration efforts, a JWC was formed in order to implement and monitor the principles agreed upon. In spite of agreement on the principles with regard to common water resources, the regime has been limited in its effectiveness due to political disputes between Israel and Jordan that have forced them into non-compliance of these rules at times (Jagerskog 2003).

Although control over and access to water resources is one of the basic conflictual issues between Israel and the Palestinian Authority, it was the first issue agreed upon by the two conflicting parties. Since the establishment of the Palestinian Liberation Organization (PLO) Palestine has not been recognized as a state, which caused Israel and Jordan's rejection of Palestine as a co-riparian. Until the 1995 *Israeli-Palestinian Interim Agreement*,³ Palestinians were considered as a population under the occupied territories of the West Bank and the Gaza Strip in spite of the Palestinian Authority's claims on water rights within the framework of the principle of the absolute territorial sovereignty. Unlike its equal position with Jordan as a sovereign state, in the Palestinian case, Israel is considered as the owner

² Treaty of Peace Between The State Of Israel And The Hashemite Kingdom Of Jordan (1994) Available from: <<http://www.mfa.gov.il/mfa.go.asp?MFAH00pa0>>.

³ The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip (1995) Available from: <<http://www.us-israel.org/jsource/Peace/iaannex3.html#app-40>>.

and the provider of water supplies for the West Bank and the Gaza Strip. At the beginning of the negotiation process, both Israel and Palestine started with contradictory claims and assumptions on the water issue. However, during the negotiations both sides compromised their claims and, by the end, found an optimal point for agreement even though this did not serve all their self-interested demands. In spite of its favourable position, Israel was forced to agree on an optimum resolution over the water issue, which is an integral part of the interim agreement within the framework of the Middle East Peace Process initiated by the United States. By signing the interim agreement, Israel accepted the Palestinians' water rights to some reasonable degree. In order to facilitate the water allocation issues and water related projects and improve the efficiency of water systems especially in the West Bank and the Gaza Strip, a JWC was established between Israel and the Palestinian Authority. Despite some exogenous challenges and a slow decision-making mechanism, the cooperation has continued (Jagerskog 2003).

In both cases, there is a power asymmetry between the sides. According to Keohane and Nye (1989), asymmetrical interdependence can be a source of bargaining power in favour of the ones who have control over resources or the potential to affect outcomes. As experienced in the negotiations between Jordan and Israel, Jordan was not in a strong position with regards to control over water. As a result, Jordan tended to negotiate with Israel in order to guarantee an optimum share and to prevent further conflicts with Israel. On the other hand, as a less dependent and more powerful actor, Israel was the leading actor during negotiation. Because of this, any changes in the existing regime will most likely be less costly for Israel than Jordan. As far as Palestine is concerned, although it is the weakest actor in the basin, during negotiations Palestine had the international community's support for its case against Israel. However, changes in the existing regime will more likely cause significant harm to the Palestinians since Israel still has the power to control water supplies in the Palestinian settlements.

Compared with the Jordan Basin, in the Euphrates Tigris Basin no significant tensions have been experienced apart from some diplomatic tensions or verbal threats, since none of the riparians are as vulnerable in terms of water shortage. The conflicts in both basins are mainly distributional conflicts. However, the main reason for tensions in the Jordan Basin is absolute shortage, whereas in the Euphrates Tigris it is relative shortage (Hafterdorn 2000). Major tensions among riparians started with the unilateral dam construction projects of Turkey and Syria. Turkey's Greater Anatolia Project (GAP)⁴ was perceived by Syria and Iraq as a

⁴ Since the late 1960s, Turkish governments have initiated a series of water development projects in the Southeast Anatolia region known as the Greater Anatolia Project (GAP). After the 1980s, the GAP transformed from a largely hydroelectric project to an integrated regional development program. The GAP is a multi-sector and

threat to their water quantity and quality – Syria was accused by Iraq of reducing waters as a result of the Al Thawra Dam. The tensions between Iraq and Syria were not long lasting, whereas the tensions between Turkey on the one hand and Iraq and Syria on the other continued until the end of the 1990s. Recently the tensions among riparians have been simply frozen. Thus, it is likely to exacerbate new tensions. Iran has generally stayed out of the basin-wide tensions and resolution efforts because of its water-sufficient position and its regional marginalization.

Unlike the Jordan Basin, in the Euphrates Tigris there are no stable alliances among riparians. In the basin, alliances among riparians have been contingently formed. These unreliable alliances and lack of trust among riparians has prevented the formation of a water regime in any real sense in the basin. As opposed to the Israel-Jordan and Israel-Palestine cases, until now no water regime has formed between the Euphrates Tigris riparians. Attempts have been made to resolve water related tensions and disputes between Turkey-Syria and Turkey-Iraq through bilateral agreements as well as Turkey's unilateral initiatives to release more water in order to prevent accusations and ensure international financing in building its dams as experienced in 1965 (Keban Dam), 1976 (Karakaya Dam) and 1990 (Ataturk Dam).

In spite of the formation of the Joint Technical Committee (JTC), this committee and its agreements cannot go beyond data sharing and water allocation discussions. In this respect, the agreements between Turkey-Syria or between Syria-Iraq are just "one-shot" agreements with no regime in place to facilitate these arrangements. According to Keohane and Nye (1989), regime governed behaviour must be beyond short-term interests. In order to establish a regime, states should accept reciprocity and sacrifice short-term interests with the expectation that other actors will reciprocate in the future. Within this context, the only possibility for a regime formation would be if Syria and Iraq accepted Turkey's *Three Staged Plan*.⁵ But neither Syria nor Iraq is inclined to accept the plan since the logic behind the plan is not compatible with their claims.

integrated regional development program that encompasses irrigation, hydraulic energy, agriculture, rural and urban infrastructure, forestry, education and health sectors. The water resources development dimension of the project consists of the construction of twenty-two dams and nineteen hydraulic power plants as well as the irrigation of 1.7 million hectares of land. In this regard, some of the basic strategies of the project are environmental protection, employment generation, spatial planning and infrastructure development (GAP Administration 2002).

⁵ This plan is Turkey's proposal for optimisation of the use of freshwater resources based on the ideas of integrated development and management of an international watercourse system for the maximum possible benefit for all the riparian states.

The main reason behind the failure of the formation of a water regime between the Euphrates Tigris riparians is that water scarcity in the Basin is not so acute and riparians are not below water stress limits like the Jordan Basin riparians. As a result of the relative abundance of renewable water resources compared to the Jordan Basin, the significant consequences of “the tragedy of commons” have not been felt yet. Therefore, the riparians have not felt any urgency to form a water regime in order to improve water resources collectively or agree upon efficient ways of using the water resources. Still, self-interested policies overwhelm the collective goods and sustainability.

POWER STRUCTURES IN THE WATER REGIME: FORMATIONS OF THE JORDAN AND EUPHRATES TIGRIS BASINS

According to Keohane and Nye (1989), regimes are intermediating factors between international power structures and political bargaining. Thus, both the failure or success and the nature of the regime are affected by the structure of the system and the distribution of power among states. Furthermore, as far as regimes are concerned, the perceptions of elites and the internal distribution of costs and benefits of international policies play significant roles both in the formation and continuation of the regime. Thus, domestic politics is essential for understanding cooperation among international actors.

Even though cooperation will bring better payoffs for the relevant actors, cooperation among international actors cannot be initiated in a spontaneous manner. In most cases of regime formation, a powerful regional actor or global hegemon takes on a facilitator role for international cooperation and regime formation.

The Middle East has always been one of the regions that grabs the global hegemon’s attention. Especially after the end of the Cold War within the context of a new international order project promoted by the United States, the region has started to gain importance. In accordance with the assessments and contingency plans of the region, US policies have focused on the Persian Gulf due to the largest recoverable deposits of crude oil in the region. As a result of its importance for the US economy, the United States has engaged with the region through two channels: initiating the Middle East Peace Process between the Arabs and the Israelis; and pursuing a containment policy towards Iraq and Iran, as both countries have posed threats to US interests in the region.

In the region which covers all the Jordan and Euphrates Tigris riparians, the United States has used its powers in two different directions in terms of regime formations. On the one hand, while it has maintained pro-Israel policies and its general support

of Israel before the international community, since the 1990s the United States has used its power to form water regimes in the Jordan Basin as a part of the peace process. On the other hand, it has pursued policies of divide and rule among the Euphrates Tigris Basin riparians which have prevented cooperation over the water resources. This is in contrast to Keohane's assumption (1984) that the hegemon is a leader who reinforces cooperation among countries to produce symbiotic effects in collective actions. In order to contain the Iraqi threat to maximizing its utility in terms of regional oil resources, the United States has coerced Turkey and Syria as well as other regional states in the region to take a stand against Iraq under the banner of providing regional stability and security for the sake of the international system. However, unlike its coercive policies in the Euphrates Tigris Basin, in the Jordan Basin the United States has pursued more benevolent policies based upon the consent of non-hegemonic states as experienced during the negotiations. In this sense, the hegemonic intervention for the formation of the water regimes between Jordan and Israel and between Israel and the Interim Palestinian Authority was significantly important in addition to the riparians' own consent to the agreement as a reflection of the rational choices of all three riparians.

In addition to the effects of global power structure in terms of the hegemonic power's influence on the formation of the water regimes, the power relations among actors within the river basins should be taken into consideration. According to Keohane and Nye (1989), both in the formation and continuation of a regime interdependency among actors and the vulnerability of actors towards others' actions within the system also play major roles. Physical geography plays a substantial role in defining bargaining powers of the riparians as well as their power position in the basin. However, in addition to the importance of being the upstream riparian the relative power of the riparians also influences the hydropolitics in the basin.

In the Euphrates Tigris Basin among Syria, Iraq and Turkey, Turkey is the most powerful country both in terms of control over water resources and in terms of political and military power. Turkey's close alliance with the United States as a NATO member has been a protection shield against possible threats from its eastern neighbours. Even during its conflict with Kurdish separatist groups, tensions with Syria or Iraq never turned into armed conflicts as a result of Turkey's relative military power and alliance with the United States. As for Iraq, since the Iran-Iraq war, Iraq's military power has been deprived and, as a result of ongoing wars, Iraq's water systems and infrastructure have been severely damaged. Furthermore, after the "Operation Iraqi Freedom" the Iraqi government lost sovereignty over its national resources including water. Until elections are held, an interim government rules the country but major projects for improving natural resources are mainly

coordinated by the coalition powers. Moreover, with the GAP project, Syria and Iraq are alienated from Turkey. Thus, the GAP has left them in a relatively weak position. As a result, Iraq has felt that it is at the mercy of Turkey and Syria, both of which have the power to prevent Iraq from obtaining enough water. Syria also has felt uneasy since, once Turkey completes the GAP, it will have power over both its neighbours thereby putting Syria in a merciful position. As a result of this asymmetrical power structure, Syria and Iraq have pursued non-cooperative policies and rejected Turkish proposals for unitary management of the Basin, thereby preventing the formation of a water regime in the Basin.

By contrast, in the Jordan Basin, Israel is in the most favourable position even though it is a downstream riparian. As previously mentioned, by occupying the Golan Heights and the West Bank, Israel strengthened its hydro-strategic position in the region and has the uppermost position thanks to its military power. Furthermore, as a result of its economic power, Israel is able to implement projects for water resources development, whereas other economically weak riparians have difficulties finalizing their projects with regards to efficiency of water resources. On the other hand, their lack of ability to finance water development projects together with Israel's economic power can stimulate development of multilateral projects on the shared rivers. Overall in the Jordan Basin, as a result of the powerful position of Israel and vulnerable position of Jordan and Palestine, Israel has played a leading role in defining the basics of the water regimes both with Jordan and Palestine.

The most interesting commonality between Turkey and Israel is their close alliances with the United States, although their power positions with the United States are slightly different in terms of bargaining power. Israel has more bargaining power with the US because of the existence of a powerful Jewish lobby in the United States, whereas Turkey is more like a follower in terms of its relations with the United States. However, Israel's and Turkey's power positions in the region differ vis-à-vis the international communities' perceptions. In the Jordan River Basin, Israel has been perceived as an "occupier" and has been accused of pursuing hostile policies toward its Arab neighbours, particularly toward Palestinians. On the other hand, in the Euphrates Tigris Basin, Iraq, Iran and Syria have been labelled as rough states particularly by the United States. Of the three, only Turkey is regarded as a state respectful of international norms and rules. The US policies against Iraq, Iran and Syria, including embargoes on all three countries and operations against Iraq, have caused marginalisation of the three riparians and led to serious damages to the relations among the Euphrates Tigris Basin riparians, not only in terms of water regime formation but all kinds of cooperation efforts in the Basin.

In addition to regional power structures, domestic determinants of foreign policy are also among the significant dimensions of regime formation in both Basins. As far as the Jordan and Euphrates Tigris Basins are concerned, state characteristics and government structures in both basins have repercussions on riparian policies with regard to water resources. In both basins, most of the riparian states have authoritative governments except Turkey and Israel which have relatively populist regimes and democratically elected governments. As a consequence of the democratic system, popularity of the policies is more important for the Turkish and Israeli governments than for the authoritarian governments of the other riparians. However, interest groups are an integral part of political life for all riparians whether they are authoritarian or not. Thus, interest groups create some impact on policy decisions of all riparian states with regard to water resources.

In the Turkish case, one of the main reasons behind the unilateral implementation of the GAP (a move that prevents water regime formation in the Basin) in spite of other riparian's objections, is the interests of the political elite seeking popular support for their political rule. Therefore, the GAP serves the electoral purposes of the ruling parties. According to Carkoglu and Eder, the GAP has a political rationale with two dimensions:

...the first is the political potential that the region offers for parties to utilize the traditional patronage linkages in implementation of the project in order to mobilize electoral support behind the parties in power. The second concerns national security and integration of the region to the rest of the country (Carkoglu and Eder 2001:51).

Furthermore, as previously discussed, the GAP is a very significant project for Turkey because of the government's long-term expectation that by implementing this huge development project it will be able to resolve the social and economic basis of the "Kurdish Problem" in the region. Evidently, both dimensions reveal a preoccupation with domestic political concerns even though the second one relates to international interactions within the framework of national security. Within this context, the political rationale behind the project has been influential on Turkey's relations with Syria and Iraq.

For Israel, domestic interest groups have been playing significant roles. On the one hand, settlers and right wing political parties have influenced Israeli arguments over water allocation issues with Jordan and Palestine during negotiation processes in order to prevent the Israeli government from completely withdrawing from the occupied territories without guaranteeing secure and adequate freshwater sources for Israel (Elhance 1999). On the other hand, as far as the Israeli government's

internal policies with regard to water allocation from the agricultural sector to industrial and domestic sectors are concerned, the policies can be implemented easier now than in the previous period, since the political influence of the agriculture and irrigation lobbies have been declining substantially. In Israel, interest groups must be taken into consideration both in terms of national water policies such as reducing water allocation to agriculture, introduction of strict cost-based water-pricing policies for irrigation etc., and in terms of foreign policies with regard to hydro-politics.

In spite of the relative power of authoritarian governments, interests groups, particularly bureaucrats and farmers, can be very influential on national water policies especially in Jordan and Syria. Given the importance of agriculture for state economies, in Jordan and in Syria water charges are mainly maintained at low levels in order to diminish costs in the agriculture sector. However, the need for water policy reform in both states, which includes re-allocation of water from irrigated agriculture to industry in order to improve economic efficiency, has caused some social problems. Demand management, including population growth control, economic restructuring, supply redistribution and water conservation techniques, is needed for both Syria and Jordan. But as for Syria, the value of agriculture is beyond its economic value. As stated by Naff (1994)⁶ agriculture is culturally embedded, highly symbolic, and politically and militarily significant in Syria as in many other developing countries. Within this context, it is not easy to implement radical demand management policies in Syria and Jordan in spite of the power of the governments.

Unlike Turkey and Israel, domestic interests groups in Syria and Jordan are not so influential on the governments' foreign policies with regard to water regimes. The only probable link with domestic interests and the water related policies of the state vis-à-vis their relations with Israel is the given importance of food security and the importance of water resources for irrigated agriculture. Within this context, it may be presumed that agricultural interests are among the main denominators of the national water policies of these states.

As far as Iraq is concerned, under the Ba'th regime national security issues and political interests of the state elites overwhelmed the interests of lesser groups as evidenced in the drainage of marshlands. The Iraqi government simply ignored the importance of the marshlands for the livelihood of Marsh Arabs, who had no power to oppose this project, and implemented the drainage project.

⁶ Naff as quoted by Marwa Douady (1999-2000: Web document).

Both in the Jordan and the Euphrates Tigris cases, different domestic power structures have impacts on hydro-politics and water regime formation in the basins in different forms. For the most part, riparian governments and their policies are more or less in line with their respective domestic interests.

As far as water regime formations are concerned, all riparian states of the two Basins have proved Putnam's two-level game metaphor. On the one hand, at the national level, domestic groups pursue their interests by pressuring their governments to adopt favourable water policies, and politicians in turn seek power by satisfying their needs. On the other hand, national governments seek to maximize their own ability to satisfy domestic pressures while minimizing the adverse consequences of water regime formations.

CONCLUSION

This article began with the assumption that water regime formation is not a spontaneous process despite the obvious advantages and better payoffs of cooperation for the riparians. In order to initiate the formation of a regime, a facilitator or strong leadership is needed. The main stimulus behind the positive outcomes of the Israeli-Jordan and Israeli-Palestinian agreements over water allocation issues was the role of the US as a benevolent hegemon and "facilitator" for the resolution of conflicts among the riparians. At the same time, the main obstacle for water regime formation in the Euphrates Tigris is the US as a coercive hegemon. In both cases, the US as global hegemon has structured the choices and preferences of the riparians and shaped regional outcomes, but in different ways.

A second assumption with regard to the role of global and regional power structures on water regimes was that the country positioned upstream in the basin could be more influential on hydro-politics. However, in addition to the importance of being upstream the relative power of the riparians in the region was also seen to be a significant denominator. Moreover, both Turkey's and Israel's relations and close alliances with the US must be taken into consideration when evaluating their dominant positions in the Basins. It can therefore be proposed that when evaluating the role of power structures in regime formation, the relevant actors' relations with the hegemon vis-à-vis the hegemon's perception of each actor must also be considered.

In sum, the argument that power both global and regional plays a vital role in all types of regime formation was illustrated in both cases. However, Keohane's assumption of the benevolent hegemon was challenged by the Euphrates Tigris case where the hegemon was shown to be coercive.

As regime theory's neglect of domestic politics poses limitation for understanding cooperation among international actors, this article considered domestic interests and their effects on decision making in water regime formation in order to more fully understand the reasons behind states' cooperative or non-cooperative actions or policies in the international system.

The role of domestic influences on the outcomes of cooperative efforts and conflict resolutions were analysed in the Jordan and Euphrates Tigris Basins. Within this context the general assumption was that domestic actors, like NGOs, firms, elites and so on, have influence on governments' decisions with regard to water regime formations. However, throughout the research, no evidence of any significant influence by NGOs or the business sector could be found. This is because in most of the riparian states the water sector is coordinated by the State, and civil society is not very powerful in comparison to the State. It was shown that domestic pressures come mainly from political elites who want to strengthen their power to rule, and from farming interest groups considered to be at the foundation of the national economies of most of the riparian states. Besides the general argumentation on the role of domestic politics, it is also worth noting that government regime types also have significant repercussions on regime formation. However overall, both the Jordan River Basin and the Euphrates Tigris River Basin cases prove Putnam's two-level game metaphor, which puts emphasis on the role of domestic group interests on government policies and actions with regard to regime outcome.

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