

INTRODUCTION

A concern with international rivers is not a new phenomenon in international law. Indeed, water issues have been a major focus of international law since the beginning of the modern era, much earlier than such sister fields as political science, security studies, and international relations put water in a prominent position. However, in recent decades the physical, environmental, political, legal, and, perhaps most importantly the psychological significance of water related issues, more specifically hydropolitics, has become increasingly central to global policy. A major paradigm shift has occurred during the last two or three decades, carrying societies from a condition of water "blindness" to one of water anxiety, and in this transition, creating a "new hydropolitics." While researchers, scholars, politicians, and international civil servants have devoted considerable attention to hydropolitics, and have upgraded the value of water as a strategic resource, its emerging scarcity has led riparian countries into frequent struggle over the supply and use of water.

This new awareness and anxiety has been manifested in reactions to political crises, especially in a region where water is currently both scarce and vital, such as the Middle East. Deeply influenced by these alarming events, international law has initiated a series of efforts to identify and promote the peaceful uses of international waters. Meanwhile, a major driving force of international law, international organizations, have underscored the world community's interests in water, bringing new attention to water-scarce, arid and semi-arid regions, as well as to emerging political conflicts among riparian countries.

In this period of "water scarcity," traditional approaches to hydropolitics and water law principles have unfortunately not been able to find solutions and overcome tensions among riparian countries that continue to be deeply committed to the outmoded classical idea of national sovereignty over their own fresh water resources. Moreover, controversies involving water are generally embedded in a web of interconnected issues that encompass development strategies, economic self-sufficiency, environmental issues, and social and political stability. These issues cannot be resolved simply by addressing the challenge of water allocation in isolation.

Water is a fundamental source of life. It touches everything related to human life and survival. There are many distinct uses and many users of water. Many losers emerge within this hydropolitical circle of dependence. The interconnected and complex web of issues makes hydropolitics and water law almost impossible to analyze from the detached perspective of pure international law. This, then, was the first challenge faced in writing this book: to situate the vital issues of legal order pertaining to water in a contextualized manner that leads to understanding. My effort to overcome this challenge pervades this entire work. Inevitably, such an approach addresses many issues that belong to various fields in a way that shifts the primary concern with law into a wider context, but in a restricted way that does not pretend to be comprehensive. Such an ambitious undertaking accepts the fact of superficiality in treating the overall context within which international water law is evolving.

The scope of this book is restricted to international law bearing an international rivers, but the wider implication of such an analysis relates, in general, to all bodies of fresh water resources. The book is divided into three parts. The first part gives a historical perspective moving from ancient civilizations to the present time. The second part deals with the legal principles and their development that make up the substance of international water law. And the third part analyzes a specific instance of water conflict by considering in some detail the international river disputes that have arisen in the Euphrates and Tigris rivers basin, causing tensions among Turkey, Syria and Iraq.

While doing this research, I have become convinced that the history of hydropolitics is fascinating, and indispensable for a proper understanding of the current problems of water policy. On this basis, I have devoted this introductory section to tracing the first appearances of hydropolitics. Of course, this is a vast topic that deserves major independent research and careful interpretation. However, even a less sustained analysis contributes greatly to our understanding of "society-water-power" relations. A short journey from the ancient hydraulic societies that proceeded from the rise and fall of the first human civilizations to the Roman Empire, then to medieval Europe, and finally to our time, provides significant lessons to be learned. These include insights related to protecting the environment, the proper governance of water resources so as to meet human needs without destroying the environment, as well as how beneficially to share this valuable resource with users from other states. In the background of this survey is a vital question as to whether unequal sovereign states can learn to cooperate and compromise so as to satisfy their water needs in an equitable and sustainable manner.

It is not surprising that as with the hydrological cycle of water, the corresponding legal principles have also cycled on a long path through history. During this history of hydropolitics, legal principles regulating uses of water

have changed and adjusted to reflect new interests and the needs of societies, striving to resolve various conflicts peacefully that arise among diverse users, sectors and states. It seemed to make sense to begin this inquiry with an examination of the historical evolution of water law principles, starting with the origins of water law principles in ancient law, considering briefly the Hammurabi Code and Roman Water Law principles. This is a vast subject-matter that has generated extensive independent research. Some valuable studies have been done, but there remains lots of room for further interpretation. In this book, these ancient water law principles are summarized mainly as background and a source of contemporary international water law principles. It will become evident that many of these principles derived from ancient times, but adapted and adjusted, continue to provide the basic content of current international water law principles. Roman Law is not only the foundation of the modern European legal system, but it also influences many other countries around the globe as a result of legal transplantation and reception. The major legal systems in the world, namely Common Law, Islamic Law and Judaic Law, will be each briefly depicted in relation to this common Roman background. The reason for including such disparate material is, first of all, to facilitate legal comparison among various societies, and to understand how their religious, cultural, social, economic and geographical conditions affect the distinctive modalities that give shape to abstract water law principles. The conclusion reached is that there are no significant differences among these dominant legal systems in terms of water law principles, but that the specifics of geography and climate do drive the development of law in a variety of directions. A second reason for adopting this comparative approach is more practical. These major legal traditions are each relevant to a credible interpretation of water issues in the current setting of the Middle East, thereby infusing the case study of river conflict to be presented in Part Three. The variations among such legal systems remain applicable in the Middle East of today.

Against this background of an historical and comparative approach to water law principles, intensifying water scarcity and emergent challenges in the 21st century will be presented as a matter of present urgency for global policy in Chapter III. The major aim of this chapter to demonstrate the need for immediate action to avoid the prospect of alarming water shortages and conflicts. In this chapter some basic questions are posed: "Why global fresh-water crises, if we have a blue planet that is 97% covered with water?" "What challenges bearing on water use and rights are we expecting from anticipated global crises?"

It is my aim to explain simply, but not scientifically, the biological cycle of water. It has become a major undertaking of many hydrologists to present a dark picture of water prospects, as well as a very precarious balance

between the supply of and demand for water. Environmental degradation and human disturbance of natural water cycles are major causes of scarcity. Once the balance of the cycle is disrupted, water is no longer a renewable resource. Moreover, this is not the only or even the most serious disruption relating to the hydraulic balance. When we restore the environment, it is assumed that the water cycle will be able to reproduce fresh water, and scarcity can be overcome, but the reversal of scarcity is not this simple. Moreover, population growth and rising living standards, are giving rise to dramatic increases in water consumption that make the overall water picture appear extremely bleak. But freezing economic growth in the midst of massive poverty is a social impossibility. Beyond this, scientific uncertainties remain and unpredictable climate changes could undermine plans to replenish water supplies.

As political boundaries generally do not follow ecological realities, and further, many parts of the world suffer from a highly uneven distribution of water resources, global solutions are too general to fit the range of specific circumstances. However, the present time is often hailed as the advent of the "global village." The world is more closely connected than ever before in history. The need for global action in response to global concerns is shaping global politics to an unprecedented extent. In this setting, a new understanding of hydropolitics has been deeply influenced by wider patterns of global environmental politics, especially during the period of 1970–2000. Environmental concerns and the global environmental policy of sustainable development radically shifted water policy concerns from allocational issues among riparian countries to preoccupations with the adequacy of supply and quality relevant to existing and projected water resources.

In the meantime, the new hydropolitics has generally assumed a significantly different meaning for the developed and developing worlds. In North America and Europe, major water projects already lost their popularity, and in this period are rarely undertaken. Water politics incorporates strong conservationist attitudes, with important implications for policy. The decommissioning of dams, measures for the recovery of salmon, and river clean-up projects are illustrative. However, a recent policy change in California that involves raising the heights of several dams and building new ones, a decision taken by groups that had been fighting over dams for years, is considered a significant throwback to the dam building era. This does not mean that policy makers have changed their views about dams. Rather, they have been forced to these decisions by the state's seemingly limitless need for cleaner and more plentiful water. In the developing world, governments are continuing to promote the construction of dams to satisfy water supply and energy needs, thereby meeting pressures mounted by their fast growing and often massively deprived populations. These countries seek ways to lessen burdens

on displaced people and to mitigate the adverse environmental side-effects of big water projects, but they remain committed to the projects themselves.

Another major policy change in the new hydropolitics arises from the involvement of new actors. As the new concept of water management became more than a matter of the allocation of water resources among riparian countries, states as the traditional major player of hydropolitics lost some of their authority to limit the participation of various non-state actors in global policy arenas. These new actors, such as inter-governmental organizations and non-governmental transnational citizen associations have become active participants in decision making bearing on water policy. In this perspective, the role of the United Nations and its specialized agencies, including the World Bank, a major player in hydropolitics in the developing world as a result of its financial role, will be discussed, as will the bearing of transnational civil society on the practices and policies that are being formed in hydropolitics.

Part Two is entirely devoted to legal responses to freshwater scarcity. As mentioned above, the regulation of water use is a rather well developed field of international law, having been dealt with in numerous treaty arrangements among sovereign states. There are approximately three thousand registered international agreements bearing on water issues, consisting mainly of bilateral and regional treaties. According to international law experts, these materials can be divided for study into two distinct topics: those governing navigational uses of international rivers and those regulating non-navigational uses. The first period begins with the Westphalia Treaty of 1648, which is also the conventional starting point of modern international law. It marks the most convenient way to locate the birth of "the nation-state system."

The navigational uses of international rivers lost much of their importance at the beginning of the twentieth century. Earlier, rivers had played a crucial role in international trade, providing transportation links for many parts of Europe. International water law, as with other sectors of international law, primarily evolved to accommodate the needs of the major European countries, and reflected the internal power relations that existed among them. This water law regime was also extended to the colonial arrangements linking Europe to the rest of the World. Throughout these Eurocentric centuries, "freedom of navigation," port management, transportation and safety regulations, and commercial privileges were the main preoccupations with regard to rivers. Another notable aspect of this initial period was that river principles tended to be incorporated into larger peace treaties rather than being negotiated as independent agreements.

The second period, "non-navigational uses of international rivers" developed in importance after the end of World War II. Two world wars had brought to the international arena many newly independent states, as well

as the establishment of a major international organization, the United Nations. These innovations in world order created new opportunities to shape international life. It became necessary for international law to become more comprehensive, multilateral, and of a geographically wider scope than had been the case when it embodied perspectives on law based almost exclusively on European experience. Moreover, many rivers, lakes, and other natural resources suddenly became internationalized due to new, often artificial, political borders. River transportation, at least as bearing on trade relations, lost much of its earlier importance. The rise of the "industrial revolution," a considerable increase in the growth of the population, the growing demand for more and new industrial and agricultural products, and the rise of densely populated cities caused serious air, water and soil pollution having many adverse transboundary effects. In this period, the water quality of rivers and lakes became an important issue in many parts of the world raising concerns about pollution on one hand, while the use and consumption of water in response to growing demands, raised problems of water quantity. International law had to change and adjust its principles to address these new needs and ambitions of sovereign states.

The period of non-navigational uses of international rivers became the first time that states began to search for the right principles by which to allocate rights to use transboundary rivers and lakes. This portion of the book focuses on allocation agreements, a wide range of utilization principles that extends from the Harmon Doctrine to ideas about joint management. This section concludes by noting the dilemma that arises from combining environmental protection with the behavior of sovereign states toward the use of shared natural resources for purposes of rapid economic growth. The treaty practices of governments demonstrate that the majority of states still adhere to the cardinal principal of "state sovereignty" in the context of water use rights. This traditional mentality of sovereign rights makes it very difficult to protect fresh water resources from depletion and pollution, especially in transboundary settings.

With respect to international water law, customary water law principles, unlike treaty practices, have not been very prominent. Until the 1950s there were no accepted customary law principles devoted especially to water allocation or to such river conflicts as have occurred in such important river basins, including those of the Indus, Nile, and Mekong Rivers. The first comprehensive attempt at the formulation of customary principles was made in the 1960s by the International Law Association (ILA), resulting in a statement that became the "Helsinki Rules of 1966." The ILA Helsinki Rules did not purport to be known legally binding principles but they received support and a wide ranging degree of acceptance especially by international organizations.

This successful articulation of the ILA Helsinki Rules encouraged

governments to accept the idea of having legally binding water rules. In the 1970s the United Nations was assigned the task of creating such a regime through negotiations among states, and assigned the background work to the International Law Commission (ILC). The ILC concluded its work, by submitting a Draft Convention to the United Nations General Assembly in 1997. Finally, after a half century, international rivers, or in the Convention's term, "watercourses," are the subject of a multilateral treaty that offers to states a framework of rights and duties by which to structure bilateral and regional water agreements. However, the UN Convention has by no means received full acceptance. There have been many criticisms of its content made by states for a variety of reasons, and it still has not yet entered into force because of insufficient ratifications. These issues will be considered in Chapter V.

Chapter VI, the search for water law principles in judicial arenas, emphasizes a discussion of the International Court of Justice judgment in 1997 to resolve the dispute between Hungary and Slovakia over the Gabčíkovo-Nagymaros Project on the Danube River. This was a notable decision for the development of international law and a hopeful precedent relating to peaceful settlement of future interstate resource conflicts. The judgment also made some important doctrinal contributions to the future of international water law. The judgment of the World Court will be evaluated in relation to the future development of water law, including whether the approach adopted at the Hague is usefully innovative and environmentally sound.

Evaluating these developments in international forums, the conclusion reached here is that two main forces are shaping water law principles:

- (1) tensions between state interests, of independent NGO's, and an epistemic community of water law specialists;
- (2) the impact of a rising environmental awareness in international politics on the development and application of water law principles.

To assess whether, after three centuries of evolution, international law is able to provide guidelines for the peaceful management of international rivers, in Chapter VII, an innovative perspective on international water law will be proposed. To do this, sub-fields of international law that have enjoyed some success in the last two or three decades will be examined for relevance and insight, particularly international human rights and international environmental law. As a fundamental source of life, why should individuals and groups not enjoy fundamental rights of access to water? In domestic and international politics, this question is answered positively. It will be a crucial development for all humanity, especially for people who are severely deprived, and especially the 1.2 billion persons who live in poverty, currently

earn less than a \$1 a day, the widely used yardstick which vastly understates the reality of world poverty.

Part Three is devoted to a case study drawn from the Middle East: the conflict over use of the Euphrates and Tigris rivers basin, shared by Turkey, Syria and Iraq. There are several reasons to emphasize this twin river basin conflict. The first reason is historical. The Euphrates and Tigris rivers basin, earlier called by its antique name of "Mesopotamia," as initially discussed in Chapter I, has been historically the most important region in hydropolitics. Even after more than four thousands years, the region preserves its pre-historic archeological value and political importance. The second reason is hydropolitical. The Middle East is one of the most fragile regions in the world having a semi-arid and arid climate with very little fresh water resources and strong competing state interests over the international rivers, many of which flow through densely populated small States at odds with one another. The region has already faced several serious of water conflicts including the Nile River, the Jordan River, and Palestinian-Israeli water aquifer conflicts. These remain active sources of conflict in regional and international politics.

The third reason is legal. The Euphrates and Tigris rivers basin is one of the few important river basins that is not regulated by an international water agreement. Many river basins, comprehensive or not, old or new, satisfactory or not, at least are governed by partial agreements between selected riparian countries. Despite experience elsewhere and the last two decades of bilateral and trilateral talks, as well as on and off joint technical committee meetings, these three countries have not been able to agree on how to share these twin rivers in an equitable, reasonable, and sustainable manner.

The fourth reason is a practical one as there exists at this point no comprehensive scholarly publication that deals adequately with the Euphrates-Tigris basin, particularly from an international water law perspective. The last reason for picking this case is personal. I had been dealing with water issues in a transboundary context while I was a public official in Turkey during the late 1980s. Although I was not personally involved in bilateral and trilateral talks among Syria, Turkey and Iraq, I was working at an international level, particularly on water policy efforts within the European Economic Commission (ECE), a regional organization of the United Nations, to deal with Turkish water policy and law in a transboundary context. My main interest in this role was the development of Turkish water policy and law in the transboundary context, and environmental aspects of international law. During these years, I had the opportunity to learn about international environmental politics from the side of government, and subsequently from the side of international organizations, and more recently as an independent scholar, from the side of individual citizens. Each of these perspectives is quite different, and each is necessary to achieve an understanding of the delicate bal-

ance between state interests, the interest of humanity as a whole, as well as the interests of particular local and transnational communities.

As mentioned above, there are other major river conflicts that have already been the subject of a significant amount of scholarly inquiry from different angles. The political and hydrological complexity of the Middle East sets the context for inquiry into the Euphrates and Tigris rivers basin conflict. From the perspective of this book, to analyze the water sharing problem among the three riparian countries it is necessary to consider issues of water supply and demand as a foundation for a legal inquiry. On this basis, it is essential to depict the conflicts pertaining to the utilization of the rivers by the three countries. Such conflicts are then analyzed in relation to major water related crises of the last three decades that have arisen in the basin. Finally, the controversial significance of the major Turkish water development project, called South Anatolian Project (GAP), involving 13 dams and 20 irrigation facilities on the Euphrates and Tigris rivers basin, will be considered.

Turkey, an upper riparian country is accused by the middle riparian Syria and the lower riparian Iraq of reducing the flow of water significantly. It is alleged by critics of Turkish behavior that the GAP project will create major environmental problems in the future, even if these are not yet in evidence. The arguments and counter arguments made by these three countries will be presented and evaluated.

As is the case with most other river conflicts, the waters of the twin rivers is not the only problem that causes problems for relations among the three countries. It is necessary to look at other secondary conflicts such as ethnic, political, historical and colonial era memories, current geopolitical interests, balances and imbalances. The purpose of this wider analysis is to pose a crucial question: "Is it politically feasible to establish a peaceful management regime for the Euphrates and Tigris rivers?" To produce an answer, we must possess some sense of the legal mechanism that would be needed to establish a system or regime of democratic, transparent, ecologically and socially just water management. Some tentative ideas about such a regime will be presented as conclusions to this study, but offered with the realization that for a subject matter of this complexity finality is neither a goal nor a possibility. At best, a constructive process can be initiated that produces results that benefit each of these three countries.

In general, international law will be increasingly tested to produce flexible and creative solutions for river basin and other fresh water conflicts involving two or more sovereign states. These solutions need to be sensitive to present and future human interests as well as responsive to the national interests of rival states. Possibly, the recent focus on "human security" can exert a benign influence on the development of international water law in years and decades ahead.