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**The Role of Diplomacy and International Law in Water-Related Disputes:
Case Studies of the Nile River Basin and the Jordan River Basin**

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ABSTRACT

This research is focused on the influence of diplomacy and International Law in disputes derived from water security and scarcity in the region of Middle East and North Africa. The research analyzes two case studies: The Nile and the Jordan River Basins. Their comparison enables to identify similarities and differences regarding the type of dispute, the number of riparian states, the will to cooperate, the relations between countries within the basins and the role of third parties. Through an analysis of varied and complementary sources, valuable conclusions have been reached demonstrating that diplomacy and International Law are useful tools to deal with water-related disputes, albeit sometimes in a very limited way.

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1 INTRODUCTION

It is easy to believe that water is abundant on our planet as it makes up 70% of our world. However, fresh water is very limited, accounting only for 3% of the world's water. Even worse, two-thirds of this percentage is inaccessible for human consumption (WorldWideLife: n.d.). For this reason, countries have to securitize this resource. Water security is defined as:

The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability (UN-Water: 2013).

However, this security might be compromised when there is water scarcity which “can mean scarcity in availability due to physical shortage, or scarcity in access due to the failure of institutions to ensure a regular supply or due to a lack of adequate infrastructure” (UN-Water: n.d.). For instance, in 2019, nearly 31% of the world's inhabitants were affected by water scarcity (Pavon: 2019).

When dealing with water, water supply and demand must be considered. However, water distribution is difficult when there is water scarcity and consequently demand cannot be fully met. The scarcity of vital natural services, such as cropland, freshwater, forestry, and fisheries, is a major contributor to conflict in many parts of the world. Even if these are not the cause of international wars, they can intensify domestic conflicts, resulting in ethnic disputes, civil strife, and insurgencies (Homer-Dixon: 1996).

A region is considered to be ‘water-stressed’ when it extracts 25% or more of its renewable freshwater resources (UN-Water: 2021). Currently, water stress is present in 45% of the world's countries, with around 18% experiencing high water stress and 9% severe water stress (*ibid.*). In particular, the most water-stressed region in 2019 was the Middle East and North Africa (MENA), as twelve out of seventeen countries affected by water shortage were located there (Hofste *et al.*: 2019).

The blue water scarcity matrix adapted from Malin Falkenmark shows the levels of water stress in relation to consumption/availability (%) and shortage; water availability (m³/cap/year).

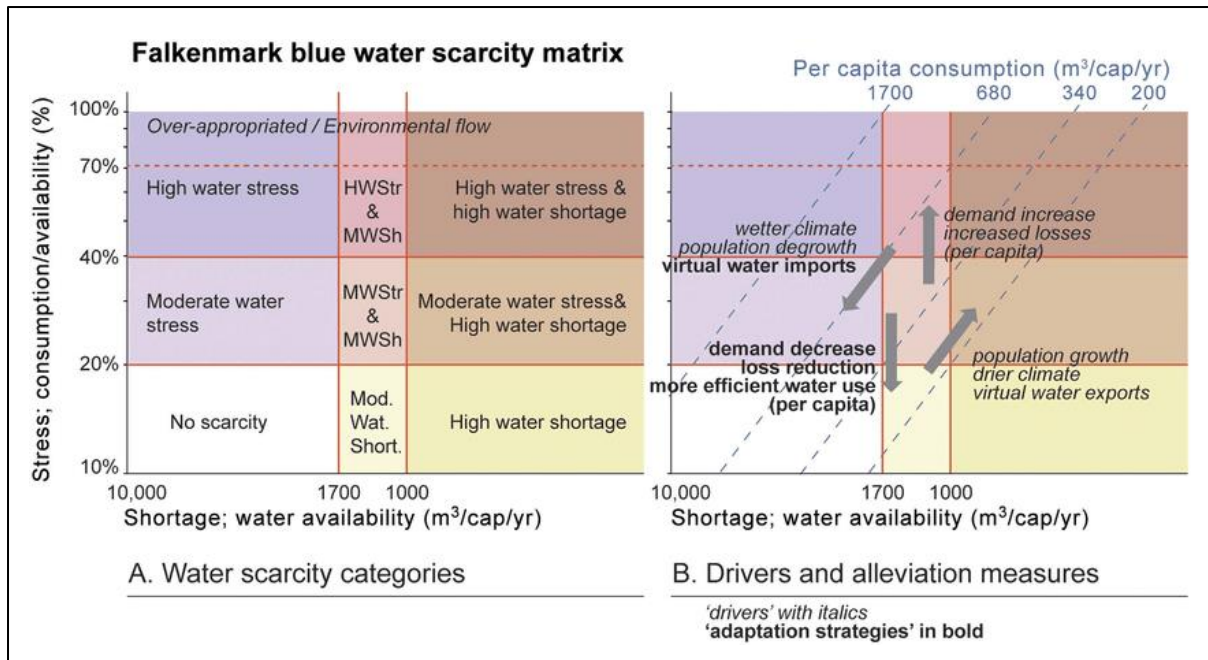


Figure 1: Water Scarcity Matrix (adapted from Falkenmark 16 and Falkenmark et al. 17) (Source: Kummu)

In this context, “fierce national competition over water resources has prompted fears that water issues contain the seeds of violent conflict. If all the world’s peoples work together, a secure and sustainable water future can be ours” (UN Secretary-General Kofi Annan, World Water Day: 2002, cited in Cosgrove: 2003, p. 1).

It is also a reality that there is an unbalanced distribution of water resources in the world. There are countries with many resources, such as Canada, United States of America and Brazil, and others with no resources, such as Palestine, Kuwait or Bahrain (FAO: n.d.) In some cases, countries share resources in transboundary river basins, as it happens in the Nile or the Jordan River Basins.

Nowadays, there are several conflicts in the world because of water. Some examples are the Tigris - Euphrates River System (Western Asia), the Indus River (India-Pakistan), the Jordan River (Syria-Israel), the Río Grande (United States-Mexico), the Mekong River (China-Cambodia-Vietnam, etc) or the Nile River (Egypt and many more) among many others.

For this reason, there needs to be cooperation so that these conflicts end in the best terms possible and water security can be ensured for the maximum number of people. Nonetheless, regarding transboundary cooperation, only 22 countries in the world have confirmed that they have functional cooperation agreements with the states with whom they share rivers, lakes, and aquifers (UN-Water: 2021).

1.1 Motivation and justification of the relevance of the topic

The motivation of this research is found behind the interest in how water is becoming more and more decisive in international relations. In fact, the access to this resource will presumably increase the number of conflicts between nations and become a key factor conditioning the geopolitical order in this century. In this context, it is fascinating to see how a basic resource can have an impact on and involve so many different fields. For instance: (i) Geopolitics as the geographic position of water resources has a great impact on international politics and involves several international actors; (ii) International law as a mechanism to solve this kind of conflicts; (iii) History, since to understand many of the disputes, it is necessary to have past background knowledge of the specific region where the conflict is taking place; (iv) Economy, as many of these disputes are born out of or worsened because of a lack of economic resources in the area; and (v) Communication, for sometimes the only reason to solve the problem is through means of negotiation and mediation.

1.2 Objective, research questions and hypothesis

1.2.1 Objective

Water is an extremely valuable resource, vital for life and human development. Throughout history, society has developed diverse ways to deal with water conflicts, ranging from wars to the intervention of civil society organizations such as NGOs, among others. The present work aims to assess whether diplomacy and International Law are useful tools to manage disputes in the water-related domain.

1.2.2 Research questions

Thus, the research questions are the following:

- First, to what extent are diplomacy and International Law useful tools to cope with water-related disputes?
- Second, in the particular case of water resources, are diplomacy and International Law more effective than other conflict-solving tools?
- Third, how diplomacy and International Law could be improved to be more efficient in solving water-related conflicts?

- Forth, could there be an opportunity to promote International Law enforcement worldwide?

These questions will be answered through the case studies of the Nile and the Jordan River Basins.

1.2.3 Hypothesis

Diplomacy and International Law are indeed useful tools to deal with water security and scarcity conflicts. They are the best tools to use in water management conflicts as, in the end, it will be more beneficial for countries to talk about what they want among themselves, rather than fighting for it. Maybe, for these tools to be more efficient, there is a need to create new programs or treaties that involve each party in the conflict. And, if these tools work in water-related conflicts, it could be an opportunity to give them more recognition and use them to solve conflicts in other fields.

1.3 Methodology

Theoretically, the most suitable approach, in this case, would be institutional liberalism, which is a branch of liberal theory.

Institutional liberalism considers that both international institutions and organizations could be a great asset when it comes to partnerships, collaborations, or assistance between states, as it would be the case in the present study. This is due to several reasons. First, the key actors are riparian states¹, conjointly with international organizations willing to apply diplomacy or International Law. Second, the main actors are the ones involved in water disputes, both in the Nile and the Jordan River Basin cases. In this context, actors are capable of cooperating, which reinforces the arguments of liberal institutionalism. Third, states are actors with several interests because they want to end a current active conflict, but they also need benefits and maintain the peace after negotiation and mediation have resulted in a solution for the problem. Hence, states are open to cooperation. Fourth, actors in the International System are interdependent, meaning that there is no hierarchy, and all the actors are considered rational and utilitarian. Finally, change is possible here because if actors engage in negotiation,

¹ Riparian States are those living in the banks of a river or its tributaries, that is, within its basin.

mediation, and/or collaboration, this could lead to the desired outcome for all of the parties involved.

That said, the methodology of this research will be qualitative, namely, a comparative analysis of the Nile and the Jordan River Basins.

The methods used to gather information will include, first of all, primary sources such as interviews with experts in the field and involved stakeholders. However, most of the sources will be secondary as the bibliographical search will be drawn on articles, books, and journals written by other experts.

Regarding the primary sources, interviews have been conducted with people who could give (or at least transmit) the point of view of each country. The idea was having people from different backgrounds and paths in life, and see if they could have similar opinions regarding diplomacy and International Law. The constraints encountered were, on the one hand, that only around one third of the emails sent were responded and, in some cases, the respondents said they could not help. On the other hand, due to the current high tension between Egypt and Ethiopia over the Grand Ethiopian Renaissance Dam (GERD), it has not been possible to find someone to talk about the position of Egypt in the Nile River.

The people finally contacted are the following:

- **Mr. Alberto Ucelay.** Spanish Ambassador to Sudan.
- **Mr. Alon Tal.** Chair of the Tel Aviv University Department of Public Policy, as well as a Professor in the same university.
- **Mr. Aaron Wolf,** who has acted as consultant to the US Government, the World Bank, the US Bureau of Reclamation, among others on various aspects of water resources and conflict management.
- **Mr. Javier Pérez Farguell.** Consul of Ethiopia in Barcelona.
- **Mr. Jihad Kanaan.** Head of the Syrian International Water Directorate.
- **Ms. Maysoon Al-Zoubi.** Former Secretary-General of the Jordan Ministry of Water & Irrigation.

The interviews have been carried out in different ways. Mr. Kanaan and Mr. Tal have been interviewed via email. Mr. Ucelay, Mr. Pérez Farguell, Ms. Al-Zoubi and Mr. Wolf, have been interviewed via zoom, with the former one following a structured interview and the latter three following semi-structured interviews. In the cases of Mr. Ucelay and Mr. Pérez Farguell, interviews were done in Spanish, so the quotes included in the text have been translated into English by the author.

2 LITERATURE REVIEW

Water is a paramount topic nowadays. All authors agree that it is a very valuable resource, as it is essential for life and human development. That is to say, water resources – and the hydrological cycle itself – are crucial as they do not only serve to drink but for other many different reasons such as the preservation of species that live in water, agriculture and industrial activities, health, etc.

2.1 Reasons for Water Scarcity and Water Scarcity indicators

Experts generally stress the importance of water resources, including the scarcity problems, and the importance of water security. However, several authors agree that water scarcity sometimes is not due to the actual shortage of the resource but to its mismanagement. For instance, Malin Falkenmark, a hydrologist expert in the sustainable use of water resources, together with Jan Lundqvist, Anders Jägerskog and Håkan Tropp (2007) reflects about how water scarcity does not just arise because there is a physical lack of it, but frequently because it is complicated to convey freshwater resources. Manuel Schiffler (1998: p. 1) shares similar thoughts, commenting on how the problem of difficult access to potable water is not a “global water scarcity” but a “policy failure and misallocation of resources”. “Water wars’ are for the most part not genuine conflicts over scarce water but a symptom of deeply rooted historical and political conflicts, while water scarcity presents the occasion, or at best a catalyst, for additional tensions” (Schiffler: 1998, p. 1). Another author, Leif Ohlsson (1999: p. 213), claims that “the risk of international conflict is derived from the necessity to avoid what is defined as second-order conflicts within countries, caused not by water scarcity itself, but by the institutional change required to adapt to water scarcity”.

Moreover, Peter H. Gleick, a renowned scientist for his studies on freshwater resources, considers that environmental issues are very much related to international conflict and cooperation, and in fact, this relation is being accentuated in different spheres (political, military) but also in different levels (local and global) (Gleick: 1993). Gleick also states that “where water is scarce, competition for limited supplies can lead nations to see access to water as a matter of national security” (Gleick: 1993, p. 79). Following Gleick’s studies, Igor A. Shiklomanov emphasizes the water scarcity problems and how there must be annual calculations of water resources (Shiklomanov: 1993). One of these calculations is the “Falkenmark Water Stress Indicator” introduced in 1989, which indicates the level of water

scarcity in a specific region and measures the quantity of water available for people to use (Falkenmark, Lundqvist & Widstrand: 1989). In this context, Ohlsson decided to introduce a new tool, related to Falkenmark's indicator: the so-called Social Resource Water Stress/Scarcity Index (SWSI), which incorporates the traditional hydrological indices along with the UNDP Human Development Index (Ohlsson: 1999, p. 213).

2.2 Causes of Water Scarcity

In terms of water scarcity, several authors agree on different causes (e.g. growing population or climate change, among others). In her book called *Rapid Population Growth And Water Scarcity*, Falkenmark focuses on Africa and mentions the increasing water scarcity due to the growing population and not enough water availability for all (Falkenmark: 1990). Moreover, Falkenmark, Lundqvist, Jägerskog and Tropp differentiate between two types of water scarcity. On the one hand, the apparent water scarcity, which implies a lot of water resources available but a disorganized and ineffective use of them (Falkenmark, Lundqvist, Jägerskog and Tropp: 2007). On the other hand, real water scarcity, which refers to the limited source of water due to insufficient rainfall or because a great amount of population depends on a resource that is not enough (*ibid.*).

William Cosgrove, an author who contemplates population as a problem too, talks about how the increase of population has led to growing competition for water (Cosgrove: 2003). He adds that “conflicts over water could be looked upon as consisting of three key spheres: hydrosphere, economic, and political. There is a strong potential conflict between the ecosystem's needs for water and human needs” (*ibid.*, p. 3).

Another cause to understand this water scarcity is climate change. The UN-Water is an organization inside the United Nations that every year produces a World Water Development Report. Last year's report focused on climate change and stressed how it “will affect the availability, quality and quantity of water for basic human needs, threatening the effective enjoyment of the human rights to water and sanitation for potentially billions of people” (UNESCO World Water Assessment Programme: 2020, p. 2). Moreover, it also remarked how the growing population, economic development, and the changes in consumption have been factors concerning water scarcity as the use of global water has escalated in the last 100 years by a factor of six and continues to grow at 1% rate/a year (UNESCO World Water Assessment Programme: 2020).

Jon Martin Trondalen, in a report he made for the United Nations Potential Conflict to Cooperation Potential (PCCP) program, says that climate change could have a deep impact on water vulnerability and security in those regions with a conflict background regarding their national and international waters' management, e.g., the Middle East and Central Asia (Trondalen: 2009). Indeed, climate change triggers water security challenges for the international community. However, Trondalen considers that in Middle East countries, the most important factors affecting water vulnerability situations – even more than climate change – would be the growing population or land management. He considers that the way climate change impacts water security should be examined in a far-reaching context regarding water management and conflict development (Trondalen: 2009)

For his part, Mark Zeitoun introduces a new tool called “web” of water security which serves as guidance to policy and research. Zeitoun describes it as:

The ‘web’ of water security identifies the ‘security areas’ related to national water security. These include the intimately associated natural ‘security resources’ (water resources, energy, climate, food), as well as the security of the social groups concerned (individual, community, nation) (Zeitoun: 2011, p. 290).

In addition, Elinor Ostrom and Charlotte Hess share similar thoughts with Zeitoun as they consider that water resources are often defined as “common pool resources” because it is extremely difficult to reject – legally or physically – other actors to access the resource. Furthermore, if one actor takes more water resources, it lessens the quantity for another actor (Ostrom & Hess: 2007, cited in Mason and Blank: 2013).

In a nutshell, sufficient resources for everyone are necessary to guarantee water security. However, there are several reasons regarding why water is scarce that cannot be controlled, such as climate change or the growing population. What can be controlled is how to correctly manage the resources that are available, and how to equally distribute them. In this context, several tools and measures that have been adopted to deal with this issue will be presented.

2.3 Tools to deal with Water Scarcity

Cosgrove also talked about the means and tools that could serve to deal with shared water resources. In this context, he mentions Alternative Dispute Resolution (ADR) and the need for “negotiators, facilitators and mediators [that] must acquire the skills and learn the techniques

required by their roles” (Cosgrove: 2003, p. 92). For instance, the Water Cooperation Facility (a UNESCO/World Water Council (WWC) initiative), together with the Permanent Court of Arbitration (PCA) and the Universities Partnership for Transboundary Waters (UPTW) could perform some or all of these roles (*ibid.*). Nowadays the PCA and the UPTW still exist. Cosgrove proposes as well to strengthen International Law to protect water facilities, to use the International Year of Freshwater, and the Third World Water Forum, to “develop guidelines for military manuals and instructions on the protection of water facilities in times of armed conflict” among others (*ibid.*, p. 94).

Another tool mentioned by Kyungmee Kim and Karin Glaumann is Transboundary Water Management (TWM). Analyzing findings from the Stockholm International Water Institute (SIWI) database of the Swedish Water House, these authors claim that “the primary objectives of TWM cooperation can be divided into three categories: 1) maximum utilisation of the common good (utilitarian approach); 2) conflict prevention; and 3) maintaining ecological sustainability” (Kim and Glaumann: 2012, p. 3). Kim and Glaumann highlight the argument put forward by Anton Earle, the Director of capacity building in SIWI, who considers that to succeed in the usage of TWM, it is crucial to secure (i) the involvement of stakeholders and make sure (ii) that all participants have sufficient knowledge in the field of international water law, hydropolitics, negotiations or the resolution of conflicts (Earle, cited in Kim and Glaumann: 2012). What’s more, it is also essential to consider the different spheres of the local level – government, NGOs, civil society, academia, and the private sector – as capacity building in the local level is as important as in other levels when implementing an international agreement (*ibid.*).

Another solution to water-related problems is water diplomacy. In fact, Dr. Magdy A. Hefny considers that conflicts regarding water and scarcity in the Arab countries should be solved by means of managing their international waters through a water diplomacy procedure. This way, water security could be guaranteed (Hefny: 2011).

The UN has made several contributions to the area. An example is the Convention on the Law of the Non-Navigational Uses of International Watercourses, a treaty adopted in 1997 that summarizes the main principles of International Water Law (McCaffrey: n.d.). This convention was controversial and raised discussions basically because of Article 7, which stated that “Watercourse States shall utilize an international watercourse in such a way as not to cause appreciable harm to other watercourse States” (General Assembly of the United Nations: 1997,

cited in *ibid.*). The conflict arose because of the formulation of the “appreciable harm” concept, which was later changed to “no significant harm” as the former could be considered as if there was the possibility that a state could have some permitted reason to harm other states (*ibid.*). Furthermore, it seems like Article 5 of the same convention, contradicts somehow Article 7. This is because Article 5 draws on the equitable use by all parts of a shared international watercourse. But how could there exist this equitable use, if the usage of some of the parties could cause significant harm to other parties?

According to Simon J. A. Mason and Dorothea Blank, at all levels, global stability is more and more related to water resources. This situation becomes more complex since aspects such as climate change, population increase, and migratory movements among others affect the quality and availability of those water resources in an unparalleled way so far (Mason & Blank: 2013). For this reason, a method to consider the use of water resources and the sharing of water infrastructures is through negotiation platforms with powerful capacities in mediation that help get sustainable solutions of water management (*ibid.*).

In this case, and to further analyze this field of knowledge, this study will be focused on two case studies: the Nile River Basin and the Jordan River Basin. As for the Jordan River, it has a basin with low precipitation, and consequently, water is a very treasured resource, making it more prone to water conflict. Besides, the already mentioned problem of the growing population does not help the correct management of the resource. Analyzing how that problem can be solved in an area that tends to be in conflict would be interesting. In the case of the Nile, – also with rather low rainfall – it is the longest river in the world and includes eleven riparian countries. In this case, the difficulty to arrive at an agreement or consider each of the countries involved, is much more challenging.

In both cases, there is a need to focus on importance of diplomacy and International Law to solve conflicts. Diplomacy is needed so countries will cooperate with each other, and International Law is necessary to have a legal tool that reinforces it so that if one of the riparian countries does not comply with what has been agreed upon, that country will suffer the legal consequences. This agreement may encompass all the dimensions of the conflict: economic, political, environmental, demographic, etc. The current problem is that even if in both case studies there exist several initiatives, organizations, conventions, etc., in the case of the Nile River there is no agreement that includes all eleven riparian countries, and that is one of the causes of this unresolved conflict. Similarly, in the case of the Jordan River, there seem to be

no agreement that works for all parties. Offering parties a place to sit, negotiate and talk about what each one of them wants, makes them feel included and listened, which can help a little bit to improve the conflict.

3 DISCUSSION

3.1 Background: MENA region

The Jordan River is located in the Middle East. The Nile River, on the other hand, is considered to be located in East Africa. This is because the headwaters of the river, as well as the upstream countries, are in East Africa. However, the Nile River is the longest in Africa, flowing from Central Africa to North Africa — where Egypt and Sudan are located — until it flows into the Mediterranean Sea.

In 2019, the Middle East and North Africa (MENA) was the world's most water-scarce region, with more than 60 percent of the population having limited or no access to potable water (Al-Zu'bi: 2019). Moreover, in 2019, Egypt was the driest state in the world in terms of total annual precipitation, with just 51 mm of rainfall per year (Pavon: 2019). This data helps us to understand how in the Jordan and the Nile Rivers water is so valuable, not only because of the resources per se but also the threat that it poses to the future development of their riparian countries.

3.2 Contextualization of the cases

3.2.1 River basins

As abovementioned, this project will analyze two case studies: the Nile River Basin and the Jordan River Basin. Both basins have several riparian countries. What makes the difference is that the Nile River Basin doubles the number of countries within the basin in comparison with the Jordan River.

On the one hand, the Nile River Basin – which covers an area of 3.2 million km² – has eleven riparians: Tanzania, Burundi, Rwanda, Kenya, Uganda, the Democratic Republic of Congo (DRC), South Sudan, Ethiopia, Eritrea, Sudan, and Egypt (Nile Basin Water Resources Atlas: n.d.). The Nile River (6,695 Km) is the longest river in the world, with the Amazon in second place. The Nile River has two main tributaries, namely the White Nile and the Blue Nile. The White Nile has its headwaters in the area of Lake Victoria. In turn, the Blue Nile, with headwaters in the area of Lake Tana in Ethiopia, is the more affluent and brings more water to

the basin. The two tributaries join in Khartoum (Sudan) forming the Main Nile which flows downstream to the Mediterranean Sea.



Figure 2: Nile River Basin (Source: The World Bank: 2000 cited in ResearchGate).

On the other hand, the Jordan River Basin, with an area of 18,285 km², has five riparians: Lebanon, the Syrian Arab Republic, Israel, Palestine, and Jordan (UN-ESCWA & BGR: 2013). The length of the river is 223 km. The Jordan River's headwaters are located in the Anti-Lebanon Mountain Range in the Golan Heights, which is a very contested territory between Syria and Israel since the latter occupied it during the Six-Day War in 1967. The Jordan River feeds the sea of Galilee (also called Lake Tiberias) to finally flow into the Dead Sea. The countries most dependable on the Jordan River's water for their survival are Israel, Jordan, and Palestine. These three countries are also the most involved in peace treaties or agreements.



Figure 3. Jordan River Basin (Source: Acreman)

3.2.2 Explanation of the problems

In the case of the Nile, the main problem is water itself as a resource. For a long time, the two main countries discussing water-related issues have been Egypt and Sudan. Then, Ethiopia started to become an important discussant too (the other riparians have been barely involved). However, the current problem basically concerns only Ethiopia, Sudan, and Egypt as it involves the construction of the Grand Ethiopian Renaissance Dam (GERD) which is located on the border between Ethiopia and Sudan. This dam “is Africa’s biggest hydroelectric project and the 10th largest in the world” (Maru: 2020). The construction of GERD is almost finished and now the controversy is how the dam should be filled and managed.

One of the main arguments that Egypt and Ethiopia use to justify their position regarding the construction of the dam has been based, from both parts, on Articles 5 and 7 of the Watercourse Convention from 1997. On the one hand, Egypt could contend that it has a right to restrict

upper riparian production of the Nile's water supply under Article 7 of the Watercourse Convention, which establishes an obligation on states to take action to avoid causing significant harm to other countries sharing an international watercourse (Abebe: 2014). In this case, Egypt considers that the GERD would lower the Nile's water volume and consequently reduce Egypt's water availability (*ibid.*). Egypt is worried as the country's water depends 90% on the Nile (Mutahi: 2020). For this reason, it encourages Ethiopian growth without jeopardizing the rights of neighboring countries (Sadek: 2021). Egyptians consider that any lack of its share of the Nile River's water would cause instability and security problems in the region of the Middle East and Africa (*ibid.*).

On the other hand, Ethiopia may claim under Article 5 that the Convention opposes an appropriation approach to international watercourses (Abebe: 2014). This would mean that the first state to use the watercourse should not be the only one to take advantage of the recourse, but that all riparians should have equitable use of it (*ibid.*). So Ethiopia considers that the construction of the dam to take profit of the Blue Nile's water in the country's territory would be compliant with Article 5 of the convention (*ibid.*). As the Ethiopian consul of Barcelona, Javier Pérez Farguell argues, "Ethiopians have not regulated much the flow of the Blue Nile, even though it contributes nearly 80 percent of the Nile's flow, according to them [Ethiopians] and the data they provide" (Interview with Pérez Farguell, April 8th 2021; see Annex 1). Pérez Farguell also mentions that "Ethiopians believe that the water is, in theory, theirs and that they need so much of it to produce energy, irrigate the country and supply water to its inhabitants" (Annex 1). Alberto Ucelay, Spanish Ambassador to Sudan comments how Sudanese authorities think that "for Sudan, it has important advantages; for example, the regulation of the flow of the Blue Nile. For flood prevention, for agricultural planning, and power generation purposes. And therefore, alongside the dangers, Sudan highlights the benefits" (Interview with Ucelay, April 18th 2021; see Annex 1). However, Ucelay also mentions that Sudanese authorities are worried about the fact that the lack of a binding agreement with regards to the dam could be dangerous for the sake of a smaller Sudanese dam called Roseires, located near the frontier with Ethiopia (Annex 1). Anyway, Egypt, Ethiopia, and also Sudan are currently under negotiations to see if they can reach an agreement about the reservoir.

In the case of the Jordan River, the dispute does not intrinsically come from the water resources but from the confrontation between countries in the region, which have triggered four Arab-Israeli wars (1948, 1956, 1967, and 1973), as well as two Lebanon Wars (1982, 2006). Thus,

the disagreements in regards to water are a ramification of these long-lasting tensions. In this context, each nation has a different point of view. For instance, in the words of Jihad Kanaan, Head of the Syrian International Water Directorate, the water dispute in the Jordan River Basin “stems mainly from the occupation of Syrian, Palestinian, and Lebanese lands by the occupation state of Israel” (Interview with Kanaan, April 15th 2021; see Annex 1). In this sense, if the problems of the borders are not solved, it is natural that each country considers the water in these disputed zones to be theirs as well. For her part, Maysoun Al-Zoubi, former Secretary-General of the Jordan Ministry of Water and Irrigation, comments on how the problem is not solved because to do so, all riparian countries must be involved, and in this case, Syria and Lebanon do not have a peace treaty (Interview with Al-Zoubi, April 10th 2021; see Annex 1). So, at the moment, this process is not finalized yet. For his part, Alon Tal, chair of the Tel Aviv University Department of Public Policy, as well as activist for water pollution for a long time, considers the dispute in the Jordan River Basin as “dormant. At least among decision makers, it is pretty much a non-issue” (Interview with Tal, April 26th, 2021; see Annex 1).

3.2.3 Negotiation dates and agreements

Both basins have had some peace treaty or agreement signed throughout the years. In the Nile River, a treaty was signed in the year 1902 between the British Empire and Ethiopia. However, the treaty only has one Article (III) talking about water. What is more, that article says different things in English and Amharic (Ethiopian language). The English version states that Ethiopia must have the permission of the government of Sudan to arrest the flow of the waters whereas, in the Amharic version, the Sudan Government is not mentioned (Ullendorff: 1967). Besides, there were two other treaties in 1929 and 1959. The first one was signed by Egypt and the British Empire and the second one was the actualization of the 1929-treaty, signed by Egypt and Sudan. In both treaties, the other riparians were not taken into account.

A key issue emerging from the conflict between Egypt, Sudan and the remainder of the upstream countries of the Nile was that Egypt and Sudan claimed the waters of the Nile under the ‘historical uses’ principle, which could be proved by the agreements between Egypt and Sudan made in colonial and post-colonial times. This led to the adoption of Article 4 of the Watercourses Convention which requires that all riparians affected by a watercourse agreement should be party to it (Gupta: 2016, p. 123).

Furthermore, in 1999 the Nile Basin Initiative was created. It is a partnership between all the Nile riparians except for Eritrea who is an observer. This initiative is defined as an “all-inclusive basin-wide institution” that serves to achieve win-win benefits through cooperation and consultation between countries (Nile Basin Initiative: n.d.). There is a treaty called the Cooperative Framework Agreement (CFA) within the institution which “outlines principles, rights and obligations for cooperative management and development of the Nile Basin water resources” (*ibid.*). In 2010, three upstream countries (Rwanda, Tanzania, and Uganda), as well as Ethiopia, signed it, ratifying it years later. However, this treaty cannot enter into force until 60 days have passed since six countries have ratified it, which has not happened yet. When countries in the Nile Basin Initiative were discussing if they should open the CFA for signature, Egypt and Sudan refused the idea (*ibid.*).

Table 1: COMPARISON OF JORDAN VALLEY DEVELOPMENT PLANS

	<i>Main Plan</i>	<i>Arab Plan</i>	<i>Cotton Plan</i>
Dunams of land to be irrigated			
Lebanon	—	35,000	350,000 ^a
Israel	416,000	234,000	1,790,000
Jordan	490,000	490,000	430,000
Syria	30,000	119,000	30,000
Total	936,000	878,000	2,600,000
	<i>(Jordan & Yarmuk)</i>	<i>(Jordan & Yarmuk)</i>	<i>(Jordan, Yarmuk & Litani)</i>
MCM of water per year			
Lebanon	—	35	450.7
Israel	394	182	1,290 ^b
Jordan	774	698	575
Syria	45	132	30
Total	1,213	1,047	2,345.7
KWH of power per year.....	210,000,000	Close to Main Plan	1,412,400,000
Cost	\$121,000,000	Close to Main Plan	\$470,000,000
Time to construct.....	10-15 years	Close to Main Plan	25 years

a. Includes lands outside the Jordan Valley.
b. Comprising 670 MCM from the Jordan-Yarmuk system; 620 from the Litani.

Table 1: Comparison of Jordan Valley Development Plans (Peretz: 1955).

In the case of the Jordan River, there have been negotiation periods too, which went from 1953 to 1955, and then from 1980 up to the present. Eric Johnston, a U.S. envoy sent by the then President Dwight Eisenhower, was the driving force behind the Jordan River growth in the 1950s. After four visits to the Middle East and his tireless mediation attempts, both parties agreed on a consensus strategy (Reguer: 1993). Johnston started presenting a Main Plan, which

was responded to with the Arab Plan by the Arabs and the Cotton Plan by Israel. In the table above, the differences of each plan can be seen.

After reaching a Unified Plan that was a compromise between all the parties, Jordan understood that the plan did not benefit them from many perspectives (Wishart: 1990). The Johnston negotiations died as a result of this, as well as the Arabs' reluctance to accept Israel's development goals and the idea of a security agreement between the U.S. and Israel (*ibid.*). Finally, the more recent agreements have been in 1994, with the Wadi Araba treaty between Israel and Jordan, and in 1995, with the Oslo accord between Israeli and Palestine.

3.2.4 Hydro-hegemony

The form in which sovereign states with water-related power regulate water politics is referred to as hydro-hegemony (Gupta: 2016). The hegemon establishes the "rules of the game", defining what constitutes a problem and what does not (Zeitoun & Warner: 2006, p. 438). Hegemony does not imply that water is under the jurisdiction of only upstream countries, as downstream Egypt has managed to have power over the Nile through the instrument of historical use-related rights. This happens because besides being geographical or established by law, power may be economic, military, or political (Gupta: 2016). Hegemons have used as a tool of power the signing of an agreement in times of cooperation and reconciliation as happened between Egypt and Sudan in 1959, when Sudan signed because the treaty gave them enough profit to do so (Zeitoun & Warner: 2006, p. 447).

3.3 The role of diplomacy

The main purpose of diplomacy is "to enable states to secure the objectives of their foreign policies without resort to force, propaganda or law. It achieves this mainly by communication between professional diplomatic agents and other officials designed to secure agreements" (Berridge: 2015, p. 1).

However, the problem with bilateral/multilateral diplomacy comes up when there are no diplomatic relations between two or more countries that have some unresolved dispute. In the case of the Jordan River, Israel does not have diplomatic relations either with Lebanon or Syria. Neither of the two countries recognizes Israel as a state (Shah: 2020). This makes more difficult the settlement of the dispute. Then, the involvement of a third party becomes necessary. As for the Israeli-Palestinian relations, they are complicated. According to Human Rights Watch

(2021), Israel confiscates Palestinian lands as well as controls their borders. All Palestinians are subject to a complete travel ban, with the exception of those that Israel considers to be in "exceptional humanitarian situations," such as those in need of life-saving medical care and notable business figures (Human Rights Watch: 2021).

So, the following table serves to better understand the relations of the countries within the Jordan River Basin.

	Israel	Jordan	Lebanon	Palestine	Syria
Israel	-	Yes	No	No ²	No
Jordan	Yes	-	Yes	Yes	Yes
Lebanon	No	Yes	-	Yes	Yes ¹
Palestine	No ²	Yes	Yes	-	Yes
Syria	No	Yes	Yes	Yes	-

Table 2: Diplomatic relations between riparians in the Jordan River (Source: self-made).

Note (1): The Embassy of Lebanon in Syria is currently closed.

Note (2): The relationship between the two countries is not the diplomatic standard one.

In the case of the Nile River Basin, several countries within the basin do not have diplomatic relations with one another. This happens because some of those countries are very small and have neither the territory nor the resources to deploy embassies or consulates in each of the other Nile River Basin riparian countries. For instance, South Sudan is recognized by Ethiopia, Rwanda, and Tanzania but does not have diplomatic relations with them.

One alternative tool that could be applied when diplomatic bilateral relations are not feasible is the **Alternative Dispute Resolution (ADR)**. ADR, as denoted by its name, is a way of solving a dispute without going to court. This type of dispute settlement helps to reach an agreement or resolution through methods like mediation, arbitration, or negotiation among others. This is a good alternative to going to court, but for ADR to work, there needs to be cooperation. In fact, in river basins, all parties concerned must recognize a shared advantage that can only be realized by collaboration (Wolf: 1996). Aaron Wolf, a trained mediator/facilitator, states that sometimes countries involved in a dispute “have to keep a

political front of strength, faith, patriotism, unity... and often need a third party to be the object of observer and to give them the excuse almost to enter into dialogue” (Interview with Wolf, April 20th 2021; see Annex 1). So, in the case that mutual effort is achieved, each participant must agree to cooperate willingly and recognize the project's collective result (Wolf: 1996).

At this point, the only challenge to be addressed is the distribution of the resulting shared costs or benefits. “The design of a plan or project can incorporate a feedback loop to allow for greater cooperation as political relations develop, encouraging the project to remain on the cutting edge” (Wolf: 1996, p. 22). If the arguing parties truly want water to be the key to building peace rather than drift into a mutually damaging competition, this resource will indeed become the cornerstone to building stability in the region (Dellapenna: 1996).

In the context where water is treated as a source of peace and parties are willing to cooperate, there needs to be Transboundary Water Management (TWM). “Some 276 river basins [in the world] cross the political boundaries of two or more countries and are home to about 40 per cent of the world’s population. However, roughly two-thirds of these [transboundary basins] do not have a cooperative management framework” (Stockholm International Water Institute: n.d.).

Both the Nile and the Jordan River Basins, are transboundary, so their shared management is crucial. At this point, it is worth stressing that one of the most important things in achieving cooperation is including all the riparians.

In the case of the Nile, peace agreements have been reached bilaterally by Egypt and Sudan, although nowadays Ethiopia is trying to have a say in the matter too. However, it would be advisable that Uganda, Tanzania, Burundi, and all the others would be taken into account when signing any type of agreement that concerns them. Otherwise, peace will never be reached.

The same happens in the Jordan River Basin where the five riparians should sit and talk to find a solution. In this case, cooperation is indeed far more difficult than in the Nile River Basin, considering the lack of diplomatic relations between some of the countries. According to GCI:

Fragmented attempts at resolving water disputes, which exclude other basin states or important sectors of water users, have seriously compromised chances of achieving long-term solutions. [...] [For instance,] the 1994 peace agreement between Israel and Jordan, which left out the Palestinians, Lebanon and Syria and the 1959 agreement

between Egypt and Sudan over the Aswan High Dam, which ignored all other Nile riparian states, most importantly Ethiopia (GCI: 2000, p. 59 cited in Warner and Zeitoun: 2006, pp. 447-448)

3.4 The role of international institutions

When talking about unresolved conflicts, there is a tendency to think that international organizations or external countries can help get another perspective. This is why, for instance, the United States got involved in the negotiations of the Jordan River in the 1950s. Nevertheless, not all countries involved in these disputes find the need for these kinds of third parties useful.

The African Union (AU) is an important organization with an active role in the Nile River Basin. AU has been present in the negotiations between Egypt, Sudan, and Ethiopia on the GERD led by the South African President Cyril Ramaphosa. Experts in the field think AU should be key to solving this dispute. Moreover, the AU must develop a system for water supply mediation, dispute resolution as well as to improve collaboration (*ibid.*). Other considerations take into account that the AU will speak from an African standpoint that is reasonably impartial since the three countries are members of the organization (Owojori: 2020). Impartiality is something that is needed since previous negotiations that involved the World Bank, as well as the U.S. Treasury Department, failed due to alleged United States preference for Egypt, as they have been allies for a long time (*ibid.*). Due to the dam tensions, the United States withdrew foreign assistance to Ethiopia, which included the halting of “security assistance, counterterrorism and military education and training” among others (Gramer: 2020). This was considered a blunt threat that reduced the likelihood of a settlement (Owojori: 2020). In conclusion, “U.S. diplomacy has failed. African diplomacy can’t afford to” (*ibid.*). “The AU can provide the mechanisms for regional discourses on water management and enhance the ability of member countries to develop and adopt effective systems to manage international watercourses” (Ani *et al.*: 2018). “Cooperative solutions can begin at home” and for this reason, subsidiarity, which means tackling problems at the most local level, has been recently discussed (Waterbury: 1997, p. 286).

As opposed to the case of AU, the participation of the United Nations (UN) in this dispute is not that desired (*Al Jazeera*: 20 June 2020). The UN Security Council (UNSC) rarely meets to discuss water issues, but tensions between the parties concerned were elevated (*Al Monitor*: 29

June 2020). In this context, and after the negotiations conducted earlier by the United States ended without an agreement, Egypt asked the UNSC to intervene so as to reopen negotiations (*Al Jazeera*: 20 June 2020). However, Ethiopia kept on disagreeing with the UNSC being involved. Ethiopia's Ambassador to the United Nations, Taye Atske Selassie, quoted UN Charter Article 33, which states that conflicts should be resolved at the provincial level first (*Al Monitor*: 29 June 2020). "We are working hard to reach a deal, but still we will go ahead with our schedule whatever the outcome is. If we have to wait for others' blessing, then the dam may remain idle for years, which we won't allow to happen", said the Ethiopian Foreign Minister Gedu Andargachew (*Al Jazeera*: 20 June 2020).

In the case of the Jordan River Basin, the role of international organizations has not been much. For instance, the UNSC did get involved to tell Israel to withdraw its troops in the territories that it occupied in the Six-Day War in 1967 (United Nations: 1967).

The situation of the Jordan River Basin dispute is very different from the one in the Nile River Basin, for right now the riparians are not in negotiation terms and they do not seem to want a third party to arbitrate. According to Mr. Kanaan, "international organizations, powerful states or other relevant actors in the international arena do not have a strong will for a just solution, they are mainly interested in achieving the interests of the Israelis at the expense of other states in the region" (Annex 1). For her part, Ms. Al-Zoubi thinks that riparians do not need the international community to help solve their problem. She states that Jordan, Israel, and Palestine already have a peace treaty and they just need financial help from the international community to fund certain projects (Annex 1).

3.5 The role of International Law

International Water Law did not begin to take shape in any significant way until after World War I (Cano: 1989 cited in Wolf: 1996, p. 16). From then on, there have been several important achievements in this topic like the Helsinki Rules on the Uses of the Waters of International Rivers (1966), the Convention on the Protection And Use of Transboundary Watercourses and International laws (1992), the United Nations Convention on the Law of the Non-Navigational Uses of the International Watercourses (1994), or the Berlin Rules on Water Resources and the International Law Commission's Draft Articles on Transboundary Aquifers (2006).

Among these, the 1994 Convention has been the most controversial. This is due to the discussions it raised because of the contradiction between Article 5 (about the equitable use) and Article 7 (about the no significant harm), which is a consequence of International Law trying to gather all riparian claims and not succeeding in it (Waterbury: 1997). Also, because its usefulness has been questioned. In fact, by 2016 the Convention had not been ratified by any hydro-hegemon and only by one-fifth of the world's countries (Gupta: 2016). Actually, some consider it outdated. For instance, this is reflected in the fact that it “deals very superficially with pollution issues”, which nowadays are very important, especially taking into account climate change (*ibid.* p. 126). Consequently, the Convention is clearly not dynamic and adaptable to current times, different from the Climate Convention (ratified in 1994) and the 1994 UNECE Water Convention (*ibid.*).

To summarize, it is challenging to make use of International Water Law given the fact that few conventions or rules have been devoted to it, and these ones are not completely useful as exemplified with the 1994 Convention.

Another problem is that International Law cannot be enforced. Mr. Pérez Farguell mentions that “the problem with International Law is that it has limits that affect its effectiveness” (Annex 1). Mr. Wolf comments that “International Law, certainly International Water Law is basically an umbrella under which countries have to negotiate but there is no real court that can determine who's right or who's wrong” (Annex 1). Then, Mr. Ucelay states that “international law on international water resources is not part of international *jus cogens* and it would be difficult to argue that this is a peremptory right for anyone” (Annex 1). The other interviewees, Ms. Al-Zoubi and Mr. Kanaan, feel the same way. According to Mr. Tal, “nation-states don't seem to see water bodies as a sufficiently central national interest to invest the resources and diplomatic capital in suing other nations in international court” (Annex 1). Within this framework, “as with any international law or accord, a treaty is not easily enforceable. Violations of the spirit or letter of the treaty by the stronger side are answerable only to structures within the existing balance of power” (Zeitoun & Warner: 2006, p. 447). The dominant riparian state may arrange the treaty to reflect established inequality, and then pressure can be used to get the poorer to sign. This type of situation, in which a stronger party strikes such a "contract" with a weaker party can be deemed as "agreed to under duress” (*ibid.*). In addition to that, International Law only addresses states' interests and obligations, and as a

result, certain political bodies like Palestinians in the Jordan River, are not represented (Wolf: 1996).

Taking into account what has been stated so far, it is understandable that sovereignty and hydro-hegemony have a significant role in the development process of global agreements, especially if there is an absence of internationally binding legislation dealing with water resources (Gupta: 2016). And the problem with the few treaties and conventions that have been made about water is that they are either not ratified by all the countries involved, they are outdated, or even if they could work, some countries who are not beneficiaries of it decide not to implement them. Actually, Ms. Al-Zoubi considers that Annex 2 of the 1994 Peace Treaty between Israel and Jordan, should be revisited as some things that were promised there are not being complied with (Annex 1).

3.6 Possible evolution of the particular cases in the future

As mentioned in the literature review, climate change, growing population, and so on, are factors affecting water scarcity.

3.6.1 Climate Change

In 1946, the average water-supply allocation per year to every Jordanian inhabitant was 3,600 m³ (Radford: 2017). This supply fell in 2017 to 135 m³/year, far below the 500 m³/year established by the United Nations as a reference for “absolute scarcity” (*ibid.*). As for the Nile River, it has practically always produced annual floods, something which the Jordan River has never been known for. The Jordan Rivers’ flow is expected to decrease in the future, and this is going to cause more arguments over the water left (*ibid.*). This information would be a general overview of how the Jordan River Basin has been and could be affected by climate change.

In the case of the Nile, Egyptian records show that its flows are unreliable, with devastating droughts dating back to 2000BC (Bazza *et al.*: 2018). Droughts were triggered by climate conditions that extended well beyond Egypt's national borders, affecting the other nine countries in Eastern Africa that make up the Nile River Basin (*ibid.*). Sudan is also affected, having seen 16 extreme droughts since 1972 (*ibid.*). As for Ethiopia, it has suffered several severe droughts, such as the one in 1984, which caused a disgraceful famine; or the one that took place in 2015, called *El Niño*, considered the worst in the last 50 years (Joselow: 2016).

Consequently, the country has been suffering water shortages for a long time, and it seems that climate change will worsen this situation (Terefe: 2019)

3.6.2 Demography

When talking about water security, the Nile River Basin faces a massive problem. The basin's population is predicted to double in the next twenty-five years. As a consequence, the water supplies will be dramatically reduced as agricultural, residential, and industrial demands keep rising (FAO & IHE Delft: 2020). The overall population of the Nile Basin is reported to be 257 million people, 85.8 million of which are Egyptians and 37.6 million are Ethiopian (Nile Basin Water Resources Atlas: n.d.).

In four of the 11 Nile River Basin riparian nations, the urban population is expected to exceed 50% of the total population by 2050. In the other seven countries, the urban population already accounts for more than 40% of the total population (Nile Basin Water Resources Atlas: n.d.)

Increased temperatures are occurring as Jordan's population steadily grows, from less than 6 million in 2006 to about 10 million in 2019 (Whitman: 2019). This population is growing so much because, since its independence in 1946, Jordan has taken in Palestinians, Iraqis, and Syrians, as well as a smaller number of Sudanese, Somalis, and Yemenis (*ibid.*). In 2019, the country had over 750,000 registered refugees, a number that did not account for unregistered immigrants or all the people who had arrived in Jordan and acquired citizenship over the years (*ibid.*).

An initiative that has been mentioned to try to increase Jordan's water supply has been the Red Sea-Dead Sea Water Conveyance Project, which is expected to be finished in 2025 (Whitman: 2019). The idea is to build a canal from the Red Sea to Amman where desalinated water can provide around 10% of Jordan's water needs, while the salt solution extracted from the Red Sea would go directly to the Dead Sea (*ibid.*). Ms. Al-Zoubi thinks that this project is a good initiative as it tackles both desalination and shared water. In her opinion, the water from the Red Sea should be taken benefit from. However, she claims: "we were promised to have the rule of the international community to give financial support. But, unfortunately, once we signed the agreement then they started talking about the feasibility and no one was ready to finance this project" (Annex 1).

4 CONCLUSIONS

From the analysis above, several conclusions can be drawn. Firstly, the selected case studies, the Nile and the Jordan River Basins, show different situations regarding to what extent the use of diplomacy and International Law applies.

Secondly, diplomacy is almost always preferred as the best tool to solve conflicts. Everyone chooses diplomacy first if the alternative is military conflict.

However, it is important to stress that diplomacy is especially useful provided that there is cooperation and willingness by the parties to solve a conflict. If coordination is reached, then the parties can sign an agreement, a convention, or even a treaty ratified by International Law.

The first problem comes when there is no cooperation between parties. This situation could happen when parties do not want to give anything up because they feel that the win-win situation is not possible in any sense, as giving something up would imply a “loss” of their interests. In this case, bilateral/multilateral diplomacy between countries does not work, and the need for a third party to intervene is necessary.

The intervention of these third parties could come in different forms within the Alternative Dispute Resolution (ADR) mechanism. In that sense, alternatives such as negotiation, mediation, or arbitration among others, have to be tried before solving the dispute by judicial means. Nevertheless, for these alternatives to be useful, all the countries in the dispute must accept the involvement of this third party.

When ADR does not work, another option would be to take the case to International Law. However, several problems arise in this situation. On the one hand, when tackling water-related disputes it is necessary to talk about International Water Law (IWL) as the domain of law more closely related to the matter. The disadvantage of IWL is that it is quite recent and there are very few treaties or conventions regarding it and the laws that already exist seem not to be very useful for they are outdated or contradictory. One example would be the aforementioned 1994 Watercourses Convention.

On the other hand, another issue comes up when not all the countries in a dispute sign a treaty where they all agree to comply with IWL. International Law cannot be imposed and, consequently, IWL cannot be imposed either. Indeed, powerless, poor, or developing countries can easily be prevailed upon to do so, whereas it is difficult for powerful and rich countries that

do not want to comply with the law to be compelled to do it. Hardly anyone, or even no one has the means to, and that is the main problem. Negotiations can be successful and treaties can be signed, but if a powerful country does not want to comply, little or nothing can be done. For this reason, hydro-hegemony has so much power. They fill the void of law by being the main authorities in their respective rivers, where their actions are often considered *fait accompli*. As it happens in geopolitics on a world scale, the existence of more than one hydro-hegemon in the same river basin (or, actually, the inexistence of them) would be a factor against the possibility of one single country having the sole power, thus increasing the chances to use diplomacy and International Law.

When speaking about having all the riparians involved in a basin, the relevance of each country in the dispute must be considered. Transboundary Water Management (TWM) is definitely a solution when dealing with river basins trespassing borders and it is necessary to have an agreement or an initiative that takes into account all countries so that each one of them has a say in the matter. However, when it comes to specific disputes such as the one with the Grand Renaissance Ethiopian Dam in the Nile, it is necessary to distinguish between the countries that should be involved in negotiations (Egypt, Sudan, and Ethiopia) and the countries that, even though are part of the basin, are not directly affected by that specific problem (Uganda, Tanzania, etc.).

Focusing on the case studies, the Nile River Basin has a more easily solvable problem. There, diplomacy seems to be working because countries are negotiating about the management of the dam, including the years it will take to fill it up. This is something that some time ago was not even a possibility.

For its part, the Jordan River Basin is a much more complicated scenario. Some of the countries within the basin do not have relations and even do not recognize each other. What is more, they have opposite standpoints and some of them could even deny the existence of the problem. If countries cannot sit at the same table, it is difficult for the problem to be solved. In this context, TWM cannot be appropriate when there is no agreement between all the parties, even if there are several bilateral agreements between some of them.

There are many things that need to be tackled here and it seems like neither diplomacy nor International Law can solve them, at least for the moment.

So, to what extent are diplomacy and International Law useful tools to deal with water-related disputes? The answer is that they are useful if there is a will for them to be. If there is not, their usefulness is quite limited. Anyway, in the ironic words of Mr. Tal, diplomacy and International Law “are imperfect tools to be sure, but there are the only ones we have. Ultimately, an enormous intervention by a philanthropist could be a game changer – and a well-meaning billionaire would probably be more influential than international environmental lawyers or diplomats”.

In any case, water scarcity and security are paramount problems that will probably get worse during this century. In this context, it is extremely important to find mechanisms helping to approach water-related disputes in a constructive way. Otherwise, water disputes may trigger conflicts that could get widespread, given the inequitable availability of this strategic resource, exacerbated by climate change and the rapid increase of demography and development.

5 BIBLIOGRAPHY

5.1 Books and journals

Abebe, D. (2014). “Egypt, Ethiopia, and the Nile: The Economics of International Law”. [ONLINE] Retrieved from:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2483399 [Accessed April 14, 2021]

Al-Zu’bi, I. (2019). “Water scarcity is a growing problem across the Middle East. Is this how we solve it?”. [ONLINE] Retrieved from: <https://www.weforum.org/agenda/2019/03/water-scarcity-is-a-growing-problem-across-the-middle-east-is-this-how-we-solve-it/#:~:text=water%20for%20all,-.The%20most%20water%2Dscarce%20region%20in%20the%20world%20is%20the.no%20access%20to%20drinkable%20water.&text=This%20scarcity%20poses%20a%20significant,%2Dterm%20social%2Deconomic%20development> [Accessed April 20, 2021]

Ani, K. J. *et al.* (2018). “Aqua-Conflicts and Hydro-Politics in Africa: Unfolding the Role of African Union Water Management Interventions”. *Journal of African Union Studies*, 7(1), 5-29. [ONLINE] Retrieved from:

https://www.jstor.org/stable/26889972?seq=21#metadata_info_tab_contents [Accessed April 17, 2021]

Bazza. M. *et al.* (2018). *Drought characteristics and management in North Africa and the Near East*. FAO. [PDF File] Retrieved from: <http://www.fao.org/3/ca0034en/CA0034EN.pdf> [Accessed April 18, 2021]

Berridge, G. R. (2015). *Diplomacy. Theory and Practice*. London: Palgrave MacMillan.

Cosgrove, W. (compiled by) (2003). *Water Security and Peace: A Synthesis of Studies Prepared under the PCCP – Water for Peace Process*. UNESCO. [PDF File] Retrieved from: <https://archive.worldwaterday.org/2009/downloads/133318e.pdf> [Accessed December 19, 2020]

Dellapenna, J. (1996). *Rivers as Legal Structures: The Examples of the Jordan and the Nile*. [PDF FILE] Retrieved from: <https://core.ac.uk/download/pdf/151599171.pdf> [Accessed April 06, 2021]

“Egypt calls on UN to intervene after impasse in Nile dam talks”. (2020). *Al Jazeera*, 20 June. [ONLINE] Retrieved from: <https://www.aljazeera.com/news/2020/6/20/egypt-calls-on-un-to-intervene-after-impasse-in-nile-dam-talks> [Accessed April 18, 2021]

“Ethiopia, Egypt, Sudan discuss Nile River dam at UN Security Council”. (2020). *Al Monitor*, 29 June. [ONLINE] Retrieved from: <https://www.al-monitor.com/originals/2020/06/ethiopia-sudan-egypt-discuss-nile-river-dam-unsc.html> [Accessed April 18, 2021]

Falkenmark, M.; Lundqvist, J. & Widstrand, C. (1989). *Macro-scale water scarcity requires micro-scale approaches. Aspects of vulnerability in semi-arid development*. [ONLINE] Retrieved from: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1477-8947.1989.tb00348.x> [Accessed February 20, 2021]

Falkenmark, M.; Lundqvist, J.; Jägerskog, A. & Tropp, H. (2007). *On the Verge of a New Water Scarcity: A Call for Good Governance and Human Ingenuity*. SIWI Policy Brief. SIWI. [ONLINE] Retrieved from: https://www.researchgate.net/publication/42765865_On_the_Verge_of_a_New_Water_Scarcity_A_Call_for_Good_Governance_and_Human_Ingenuity [Accessed December 19, 2020]

Falkenmark, M. (1990). “Rapid Population Growth and Water Scarcity: The Predicament of Tomorrow's Africa”. *Population and Development Review*, 16, 81-94. [PDF File] Retrieved from: <https://www.jstor.org/stable/2808065?seq=1> [Accessed December 19, 2020]

Falkenmark, M. & Rockström, J. (2006). *The New Blue and Green Water Paradigm: Breaking New Ground for Water Resources Planning and Management*. [ONLINE] Retrieved from: https://www.researchgate.net/publication/228621945_The_New_Blue_and_Green_Water_Paradigm_Breaking_New_Ground_for_Water_Resources_Planning_and_Management [Accessed February 20, 2021]

FAO (n.d.). *World Water Resources by Country* [ONLINE] Retrieved from: <http://www.fao.org/3/y4473e/y4473e08.htm> [Accessed May 04, 2021]

FAO & IHE Delft (2020). *Water Accounting in the Nile River Basin*. FAO WaPOR water accounting reports. [PDF File] Retrieved: <http://www.fao.org/3/ca9895en/CA9895EN.pdf> [Accessed April 18, 2021]

Gleick, P. H. (1993). *Water and Conflict: Fresh Water Resources and International Security*. *International Security*. [ONLINE] Retrieved from: <https://doi.org/10.2307/2539033> [Accessed November 26, 2020]

Gramer, R. (2020). “U.S. Halts Some Foreign Assistance Funding to Ethiopia Over Dam Dispute with Egypt, Sudan”, *Foreign Policy*, 27 August. [ONLINE] Retrieved from: <https://foreignpolicy.com/2020/08/27/trump-africa-gerd-dam-us-halts-foreign-assistance-funding-ethiopia-over-dam-dispute-egypt-sudan/> [Accessed May 24, 2021]

Gupta, J. (2016). “The Watercourses Convention, Hydro-Hegemony and Transboundary Water Issues”. *The International Spectator*, 51:3, 118-131 [ONLINE] Retrieved from: https://www.researchgate.net/publication/309169609_The_Watercourses_Convention_Hydro-hegemony_and_Transboundary_Water_Issues [Accessed April 05, 2021]

Hefny, M. A. (2011). “Water Diplomacy: A Tool for Enhancing Water Peace and Sustainability in the Arab Region”. UNESCO. [PDF File] Retrieved from: [http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Cairo/Water%20Diplomacy%20in%20Action%20Strategy%20Doc%203%20Rev%202%20Final%20and%20Action%20Plan\[1\].pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Cairo/Water%20Diplomacy%20in%20Action%20Strategy%20Doc%203%20Rev%202%20Final%20and%20Action%20Plan[1].pdf) [Accessed December 19, 2020]

Hofste, R. W. et al. (2019). *17 Countries, Home to One-Quarter of the World's Population, Face Extremely High Water Stress*. [ONLINE] Retrieved from: <https://www.wri.org/blog/2019/08/17-countries-home-one-quarter-world-population-face-extremely-high-water-stress> [Accessed April 05, 2021]

Homer-Dixon, T. F. (1996). “Environmental Scarcity and Mass Violence”, in Gearóid Ó Tuathail, Simon Dalby and Paul Routledge (eds), *The Geopolitics Reader*. London: Routledge,

pp. 204-211.

Human Rights Watch (2021). *Israel and Palestine. Events of 2020. World Report 2021*. [ONLINE] Retrieved from: <https://www.hrw.org/world-report/2021/country-chapters/israel/palestine> [Accessed April 25, 2021]

UN-ESCWA & BGR (2013). “Jordan River Basin”, *Inventory of Shared Water Resources in Western Asia*. [ONLINE] Retrieved from: https://waterinventory.org/surface_water/jordan-river-basin [Accessed April 25, 2021]

Joselow, G. (2016). “El Nino-Linked Drought Is Ethiopia's Worst in 50 Years”, *NBC News*, 20 February. [ONLINE] Retrieved from: <https://www.nbcnews.com/news/world/el-nino-linked-drought-ethiopia-s-worst-50-years-n520686> [Accessed April 25, 2021]

Kim, K. & Glaumann, K. (2012). *Transboundary water management: Who Does What, Where? Analysing the Data in SIWI's Transboundary Water Management Database*. SIWI. [PDF File] Retrieved from: https://www.siwi.org/wp-content/uploads/2015/09/2012_TWM_REPORT.pdf [Accessed December 19, 2020]

Kulshreshtha, S.N. (1993). *World Water Resources and Regional Vulnerability: Impact of future changes*. [PDF File] Retrieved from: <https://www.ircwash.org/sites/default/files/Kulshreshtha-1993-World.pdf> [Accessed December 08, 2020]

Maru, M. T. (2020). *The Nile Rivalry and Its Peace and Security Implications: What Can the African Union Do?*. Institute for Peace and Security Studies. [PDF File] Retrieved from: https://media.africaportal.org/documents/The_Nile_rivalry_and_its_peace_and_security_implications.pdf [Accessed April 17, 2021]

Mason, S. J. A. & Blank, D. (2013). *Mediating Water Use Conflicts in Peace Processes*. [PDF File] Retrieved from: https://peacemaker.un.org/sites/peacemaker.un.org/files/MediatingWaterConflicts_SS_2013.pdf [Accessed December 20, 2020]

McCaffrey, S. (n.d.). “International Water Law For The 21st Century: The Contribution Of The U.N. Convention”. [PDF File] Retrieved from: <https://core.ac.uk/download/pdf/60534697.pdf> [Accessed December 19, 2020]

Mutahi, B. (2020). “Egypt-Ethiopia row: The trouble over a giant Nile dam”, *BBC News*, 13 January. [ONLINE] Retrieved from: <https://www.bbc.com/news/world-africa-50328647> [Accessed April 22, 2021]

Nile Basin Initiative (n.d.). “About”. [ONLINE] Retrieved from: <https://nilebasin.org/> [Accessed April 23, 2021]

Nile Basin Water Resources Atlas (n.d.). “Demography. Estimated and projected total population in Nile Basin Countries”. [ONLINE] Retrieved from: <https://atlas.nilebasin.org/treatise/estimated-and-projected-total-population-in-nile-basin-countries/> [Accessed April 23, 2021]

Ohlsson, L. (1999). “Water Conflicts and Social Resource Scarcity”. [ONLINE] Retrieved from: <https://www.sciencedirect.com/science/article/abs/pii/S146419090000006X> [Accessed February 11, 2021]

Owojori, O. (2020). “The African Union Needs to Resolve Ethiopia’s Dam Dispute”, *Foreign Policy*, 24 September. [ONLINE] Retrieved from: <https://foreignpolicy.com/2020/09/24/african-union-ethiopia-egypt-sudan-dam-dispute/> [Accessed April 17, 2021]

Pavon, C. (2019). “10 Most Important Water Scarcity Facts”. [ONLINE] Retrieved from: <https://worlddata.io/blog/10-water-scarcity-facts> [Accessed April 05, 2021]

Radford, T. (2017). “Climate change threatens survival of the River Jordan”, *Climate Home News*, 6 September. [ONLINE] Retrieved from: <https://www.climatechangenews.com/2017/09/06/climate-change-threatens-survival-jordan-river/> [Accessed April 18, 2021]

Reguer, S. (1993). “Controversial Waters: Exploitation of the Jordan River, 1950-80”. *Middle Eastern Studies*, 29(1), 53-90. [ONLINE] Retrieved from:

https://www.jstor.org/stable/4283541?seq=9#metadata_info_tab_contents [Accessed April 20, 2021]

Sadek, H. (2021). “Opinion | The issue of the Grand Ethiopian Renaissance Dam”, *Daily News Egypt*, 14 April. [ONLINE] Retrieved from: <https://dailynewsegypt.com/2021/04/14/opinion-the-issue-of-the-grand-ethiopian-renaissance-dam/> [Accessed April 16, 2021]

Schiffler, M. (1998). “Water Scarcity in Developing Countries?”. [ONLINE] Retrieved from: <https://www.die-gdi.de/en/briefing-paper/article/water-scarcity-in-developing-countries/> [Accessed December 19, 2020]

Shiklomanov, I. A. (1993). “World Fresh Water Resources”, in Peter H. Gleick (ed.), *Water in Crisis*. [ONLINE] Retrieved from: https://www.academia.edu/902661/Water_in_Crisis_Chapter_2_Oxford_University_Press_1993 [Accessed December 08, 2020]

Stockholm International Water Institute (n.d.). *Cooperation Over Shared Waters*. [ONLINE] Retrieved from: <https://www.siw.org/priority-area/transboundary-water-management/> [Accessed April 13, 2021]

Shah, S. (2020). “30 countries, including Pakistan, still do not recognise Israel”, *The News*, 22 August. [ONLINE] Retrieved from: <https://www.thenews.com.pk/print/704187-30-countries-including-pakistan-still-do-not-recognise-israel> [Accessed April 24, 2021]

Terefe, D. (2019). “Faced with climate change and growth, Ethiopia's capital shores up its water supply”, *Reuters*, 10 October. [ONLINE] Retrieved from: <https://www.reuters.com/article/us-ethiopia-water-climate-change-idUSKBN1WP0KP> [Accessed April 25, 2021]

Trondalen, J. M. (2009). “Climate Changes, Water Security and Possible Remedies for the Middle East”. [PDF File] Retrieved from: <https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptationlibrary/middle-east/regional---middle-east/Trondalen.-2009.-CC,-Water-Security--Possible-Remedies-for-the-Middle-East.pdf> [Accessed December 19, 2020]

Ullendorff, E. (1967). The Anglo-Ethiopian Treaty of 1902. *Bulletin of the School of Oriental and African Studies, University of London*, 30(3), 641-654. [ONLINE] Retrieved from: <http://www.jstor.org/stable/612393> [Accessed April 24, 2021]

UNESCO World Water Assessment Programme (2020). *The United Nations world water development report 2020: water and climate change*. UNESCO. [PDF File] Retrieved from: [The United Nations world water development report 2020: water and climate change - UNESCO DigitalLibrary](#) [Accessed February 18, 2020]

United Nations (1967). *Resolution 242 (1967)*. [PDF File] Retrieved from: [https://undocs.org/S/RES/242\(1967\)](https://undocs.org/S/RES/242(1967)) [Accessed April 23, 2021]

UN-Water (2018). “Solutions to water challenges in the Middle East and North Africa region”. [ONLINE] Retrieved from: <https://www.unwater.org/solutions-to-water-challenges-in-the-middle-east-and-north-africa-region/> [Accessed April 17, 2021]

UN-Water (2021). “Summary Progress Update 2021: SDG 6 - water and sanitation for all”. [ONLINE] Retrieved from: <https://www.unwater.org/publications/summary-progress-update-2021-sdg-6-water-and-sanitation-for-all/> [Accessed April 03, 2021]

UN-Water (n.d.). “Water Scarcity”. [ONLINE] Retrieved from: <https://www.unwater.org/water-facts/scarcity/> [Accessed April 04, 2021]

UN-Water (2013). “What is Water Security? Infographic”. [ONLINE] Retrieved from: <https://www.unwater.org/publications/water-security-infographic/#:~:text=%E2%80%9CThe%20capacity%20of%20a%20population,ecosystems%20in%20a%20climate%20of> [Accessed April 02, 2021]

Waterbury, J. (1997). “Between Unilateralism and Comprehensive Accords: Modest Steps toward Cooperation in International River Basins”. [ONLINE] Retrieved from: <https://www.tandfonline.com/doi/abs/10.1080/07900629749692> [Accessed April 09, 2021]

Whitman, E. (2019). “A land without water: the scramble to stop Jordan from running dry”, *Nature*, 4 September. [ONLINE] Retrieved from: <https://www.nature.com/articles/d41586-019-02600-w> [Accessed April 18, 2021]

Wishart, D. (1990). "The Breakdown of the Johnston Negotiations over the Jordan Waters". *Middle Eastern Studies*, 26(4), 536-546. [ONLINE] Retrieved from: https://www.jstor.org/stable/4283397?seq=9#metadata_info_tab_contents [Accessed April 20, 2021]

Wolf, A. (1996). "Middle East Water Conflicts and directions for Conflict Resolution". [ONLINE] Retrieved from: https://www.researchgate.net/publication/5055877_Middle_East_water_conflicts_and_directions_for_conflict_resolution [Accessed April 12, 2021]

WorldWideLife (n.d.). "Water Scarcity. Overview". [ONLINE] Retrieved from: <https://www.worldwildlife.org/threats/water-scarcity#:~:text=Clean%20freshwater%20is%20an%20essential,may%20be%20facing%20water%20shortages.> [Accessed April 03, 2021]

Zeitoun, M. (2011). "The Global Web of National Water Security". [ONLINE] Retrieved from: https://www.researchgate.net/publication/264327888_The_Global_Web_of_National_Water_Security [Accessed December 19, 2020]

Zeitoun, M. & Warner, J. (2006). "Hydro-hegemony – a framework for analysis of trans-boundary water conflicts". [ONLINE] Retrieved from: <https://iwaponline.com/wp/article/8/5/435/20292/Hydro-hegemony-a-framework-for-analysis-of-trans> [Accessed April 07, 2021]

5.2 Interviews

Javier Pérez Farguell. Ethiopian Consul in Barcelona. April 8th, 2021. [ONLINE]

Maysoon Al-Zoubi. Former Secretary-General for the Jordan Ministry of Water and Irrigation. April 10th, 2021. [ONLINE]

Jihad Kanaan. Head of the Syrian International Water Directorate. April 15th, 2021. [EMAIL]

Alberto Ucelay. Spanish Ambassador to Sudan. April 18th, 2021. [ONLINE]

Aaron Wolf. Professor of geography in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University and water diplomacy expert. April 20th, 2021. [ONLINE]

Alon Tal. Chair of the Tel Aviv University Department of Public Policy, and professor at the same university. April 26th, 2021. [EMAIL]

6 ANNEXES

6.1 ANNEX 1: Interviews

INTERVIEW WITH JAVIER PÉREZ FARGUELL

Mr. Javier Pérez Farguell. Consul of Ethiopia in Barcelona. He has a degree in Business Administration and Management from Esade, as well as in Law from the University of Barcelona. He also studied the International Management Program by H.E.C. (Paris) and the Stanford Executive Program. Moreover, he graduated from Insead and Harvard Business School. His professional career began in the financial sector. He is currently Partner of Clearwater International.

¿Cómo describiría brevemente el conflicto del río Nilo?

Lo primero que te quiero decir es que yo no soy el especialista en absoluto eh del tema, del conflicto. Yo solo soy cónsul honorario de Etiopía en Barcelona a raíz de que yo colaboré con una ONG que era Intermón y había estado en Etiopía varias veces y tal, y el gobierno Etíope me dijo: Oye, ¿quieres ser consul? Y bueno, si puedo ayudar en algo pues lo haré, ¿no? Dicho esto, no soy para nada un especialista pero lo que te puedo decir pues es lo que he oído, no son opiniones mías, no.

Pero esencialmente, la posición que yo he leído o que tu habrás podido leer si te ha dado tiempo de leer los artículos básicamente es, bueno, el Nilo que ya sabemos todos que es el río más largo de África tiene como dos ramales. Uno que procede de África Central, que nace por el lago Victoria que es el Nilo Blanco y luego tienes el ramal, que es el Nilo Azul que nace en el altiplano Etíope junto al lago Tana que es uno de los lagos mayores de África junto al lago Victoria. Entonces, los etíopes no han regulado mucho el caudal del Nilo Azul, pese a que es, según ellos y son los datos que aportan, aporta casi el 80% del caudal del Nilo, aunque parecería que el Nilo viene del centro de África pero en realidad a nivel de caudal de agua, la parte que viene de África central es relativamente minoritaria y la mayoritaria es la de Etiopía.

Dado que el río es fundamental para los países como Sudán y Egipto, siempre han tenido como gran, digamos celo en defender que el cauce del río no pudiera ser controlado aguas arriba. Pero claro, si el agua no baja, pues para Sudán y sobre todo para Egipto pues esto es un gran

problema. Y al mismo tiempo, los etíopes consideran que el agua, en principio es suya y que la necesitan tanto para generar electricidad, que es el objetivo, uno de los objetivos del gran embalse. Sabes que hay un gran embalse que está casi terminado y que es un embalse equivalente al de Aswan en Egipto y que servirá; por una parte para controlar el flujo de agua y para irrigar el país. Etiopía es un país muy grande y tiene zonas desérticas y zonas verdes. En la zona donde nace el Nilo Azul es una zona bastante verde porque es bastante alta, pero hay grandes partes del país que están muy áridas, que están muy secas y además en cualquier caso, como no controlan el cauce hay una estación seca pues que prácticamente se mueren de sed y hay estaciones de lluvias donde hay mucha agua. La cuestión de los etíopes es: Nosotros queremos aprovechar este agua y no vamos a impedir que el agua vaya aguas abajo pero queremos aprovechar tanto como para que haya electricidad como para estabilizar la capacidad de suministrar agua a sus propios habitantes.

En su momento, Etiopía, ellos siempre tienen la gana de decir que nunca han sido colonizados aunque tuvieron una pequeña ocupación italiana durante cinco años, pero nunca han sido un país que ha sido colonizado. Pero cuando el imperio británico controlaba Egipto y controlaba Sudán, de alguna manera firmaron un acuerdo que según los Etíopes ellos nunca reconocieron pero firmaron lo también con países de África central como Kenya como Uganda, como otros países, por el cual había un reparto de aguas en el que de alguna manera protegía los intereses de Egipto y Sudán. Que en esto han ido siempre bastante de la mano Egipto y Sudán. Los etíopes nunca han estado de acuerdo, han dicho que esto ellos no lo firmaron y que ellos no estaban de acuerdo, que esto era un tema colonial y que ellos no tienen porque estar sometidos a un acuerdo firmado bajo los auspicios del imperio británico.

Entonces el punto en el que están ahora, es por una parte la presa está casi terminada y es en qué ritmo o a qué velocidad se llena la presa. La posición de Etiopía, y esto sorprende a los que no entendemos nada de pantanos, porque la posición de Etiopía es: Nosotros la llenaremos en tres años (que ya me parece mucho tiempo). Y la posición de Egipto es que ellos pretendían o al menos inicialmente que esto se pudiera o se debiera llenar mucho más despacio y proponían 21 años, que es un plazo que suena larguísimo. Entonces, en función de eso hay toda la discusión de que en plazo se debe llenar. La posición de los Etíopes es que tres años es suficiente, además ha habido unos años de buenas lluvias, aparentemente y no van a necesitar mucho más plazo. Y además ellos son muy críticos con el hecho de que el agua en el embalse Etíope tiene un nivel de evaporación muy inferior al agua Aswan, dónde al ser un clima mucho

más desértico y mucho más caluroso, pues ellos dicen: bueno es que al final el agua que se remansa en el Aswan tiene un nivel de evaporación altísimo, bueno esto es la tesis etíope.

En pocas palabras los etíopes vienen a decir: nosotros estamos por negociar con Sudán y con Egipto un reparto justo del agua, nosotros entendemos que es fundamental para Egipto y para Sudán pero ellos han de entender que Etiopía son 110 millones de habitantes y que un porcentaje altísimo de la población todavía no tiene electricidad, ni agua potable ni agua de riego, pues necesitamos este agua porque es un recurso esencial. Y ahí está el dilema. Un poco la discusión es esta: Egipto y Etiopía son dos países de población parecida y los dos son aliados occidentales. Entonces aquí hay una cuestión de alianzas. Históricamente no ha sido siempre así, Egipto siempre ha estado más cercano de la antigua Unión Soviética; Etiopía tuvo una dictadura comunista hasta el año 1991, pero los dos países son aliados naturales de occidente. Con lo cual, la mediación occidental puede ayudar porque en ambos casos interesa que occidente equilibre. También hay una sospecha, yo no la puedo confirmar, pero hay quien dice que parte del agua del Nilo acaba en Israel, que a través del Sinaí acaba por canales en Israel. Los etíopes dirán: el agua es para Egipto, no es para terceros. Pero esto es una hipótesis que yo no te puedo confirmar porque no lo sé.

Aunque Israel ya tiene su propio problema con el río Jordán.

Claro. No, pero supongo que Israel necesita mucha agua, tiene poca. Claro, el Nilo es un río importante, no sé. Aunque habría la posibilidad de canalizar ese agua hacia Israel, que lo pueden pagar perfectamente.

Respecto a la disputa que ha habido recientemente entre Egipto y Etiopía sobre llenar la presa, ¿cómo cree que va a evolucionar?

Esto viene de muy atrás. Yo creo que llevan años discutiendo esto y llevará años. A ver, la posición etíope tiene bastantes simpatías de otros países de la Unión Africana, porque el resto de países de África central tienden a simpatizar con la posición etíope en el sentido de decir, oye, es razonable. Pero yo creo que esto es un tema diplomático, unos dicen mucho plazo, otros menos y acabará llegando a un cierto entente y un punto de equilibrio. Esto es lo que tiene sentido.

En algún momento, ha habido incluso amenazas bélicas, por parte de Egipto llegaron a decir: pues si no llegamos a un acuerdo, pues bombardearemos la presa y entonces no habrá discusión.

A mí esto me parece una barbaridad porque además los egipcios también tienen una presa. Si tu te expones a esto pues... Ni me lo imagino, que los dos países pudieran ser tan irracionales de pensar que esto lleva a algún lado.

La presa está casi terminada y se llenará, eso no hay duda. La cuestión es a qué ritmo. Pues en esto sí que puede haber algunas discusiones que se alarguen más, menos y que permanentemente estemos aquí discutiendo cual es el plazo. También Egipto y Sudán a veces van juntos y a veces no van tan juntos. Ha habido posiciones en las cuales, Sudán ha estado un poquito más próximo a la posición de Egipto y otras veces que ha sido más comprensivo respecto a los intereses etíopes. Forma parte de los problemas regionales de una zona que es muy conflictiva porque claro tienes los problemas de Sudán con Sudán del Sur, tienen los problemas que ha habido en el pasado de Etiopía con Eritrea, tienen los problemas permanentes en Somalia y ahora más recientemente tienen los problemas de Etiopía en el Tigray, que es la región de Etiopía más en el norte donde hay un conflicto importante regional.

En este contexto, ¿cuál cree que es el papel de las organizaciones internacionales (como la ONU o la UA, países poderosos u otros actores relevantes en el ámbito internacional)?

Bueno, yo creo que en estos conflictos, cuando las dos partes están un poco encoladas como es el caso, es necesaria la mediación de gente que pueda ayudar a ambos países. Porque el problema del agua es importante pero tanto Egipto como Etiopía necesitan muchas cosas porque ambos países tienen problemas sociales, demográficos, económicos muy importantes. Entonces aquí, como todas estas ayudas que son complementarias en tema del agua las proporcionan países ricos, por decirlo así, pues estos sí que pueden influir, y decir: nosotros podemos ayudar más en otros ámbitos. En el caso de Egipto, recibe mucha ayuda militar por parte de Estados Unidos. En el caso de Etiopía no tanta pero recibe también financiación multilateral del Banco Mundial y también de países como China que está aportando mucha financiación.

Yo creo que a nadie le interesa que este conflicto degeneren o desescale más allá de un cierto nivel. Yo creo que es lógica la tensión, el agua siempre ha sido fuente de conflicto en todas partes y no va a ser una excepción un caso tan importante. Porque ambos países necesitan mucha agua: si tienen 100 millones en un lado, 100 millones en el otro, economías fundamentalmente agrarias y la irrigación [que] es fundamental para la supervivencia de los dos países. Y en África, al menos en esa parte de África, no hay mucha más agua, es la que hay. Supongo que hay aguas subterráneas pero realmente el Nilo es la fuente fundamental de

agua tanto como para Egipto como para Etiopía. El cauce principal del Nilo es el Nilo Azul pero luego hay otros ríos que desembocan en el Nilo ya en territorio de Sudán que también nacen de Etiopía. Y esos ríos no están afectados por esta presa, porque esta presa digamos que cogen el agua, hasta donde yo sé, del Nilo Azul. Hay ríos que más al norte van a parar al Nilo pero no a través de la presa, sino directamente con su cauce actual. Pero bueno también se puede pensar que en el futuro también se pueden hacer otras presas más al norte.

Sí, pero básicamente el Nilo Azul es el que está más afectado por la presa, los otros ya son ríos más pequeñitos.

Son pequeñitos en términos, a ver, son ríos como el Ebro. Son ríos más pequeños pero no son tan pequeños. Efectivamente, el cauce fundamental es el del Nilo Azul pero ahí hay más ríos. Y todos nacen porque al final Etiopía es un altiplano, tienes alturas de 2000/ 3000 metros donde ahí sí que hay agua. En cambio, en Sudán y en Egipto, el agua que tienen es la que reciben, no hay ninguna agua propia, por decirlo así.

¿Cree que la gestión compartida de cuencas fluviales / cuencas transfronterizas es un buen enfoque para hacer frente al conflicto?

Como te he dicho al principio, yo no soy especialista en nada en esto. Pero por sentido común, toda la zona de África Oriental ha sido una zona extremadamente conflictiva. Egipto con conflicto en Oriente Medio y toda la zona del cuerno de África por distintos conflictos: desde la Guerra Fría que enfrentó a unos contra otros, desde la propia pobreza, el yihadismo que es otro conflicto que está ahí, que no afecta directamente o mucho todavía a Etiopía pero si afecta a Sudán, afecta al Sahel, afecta a Somalia. Y por lo tanto, países que están en una línea política de desarrollismo y de intentar vía crecimiento económico que la población pueda tener medios de vida superiores a los actuales, pues sí que creo que tiene que haber los acuerdos.

Ahí tienes también otra influencia muy importante que es la que procede de los países del golfo, porque son los vecinos ricos de todos ellos, tanto en Egipto como en Etiopía, y allí las alianzas también son variables. Ha habido momentos que Catar ha jugado cierto papel ***. Pero no hay duda que tanto del punto de vista de la capacidad económica y la manera de financiación, pues que los países musulmanes del golfo (Arabia, Emiratos, Qatar, Kuwait), todos esos países juegan un papel importante. En el caso de Egipto es fundamental porque recibe muchísima ayuda de otros países musulmanes. Etiopía como sabes es un país que más o menos tiene una población dividida entre una pequeña mayoría cristiana ortodoxa, que es muy diferente del

catolicismo, pero bueno es cristiano. Y una minoría muy importante musulmana, que es casi 60/40. Depende de a quién preguntes te dice: 60% cristianos, 40% musulmanes. No es un gran conflicto, el conflicto religioso en Etiopía, hasta hoy, pero bueno dentro del conflicto general del yihadismo y tal pues tienes allí potencialmente una amenaza de que puede pasar si esto acabara, digamos. Hoy por hoy Etiopía lo ha controlado bien, hasta ahora. Las veces que he estado ahí y he hablado, yo no he percibido tensiones. He percibido tensiones interétnicas pero no interreligiosas, que es diferente. Básicamente, en Etiopía hay dos etnias muy importantes en términos de población que son los Oromos y los Amharas y una menor que son los Tigray, que son pocos pero son los que han mandado mucho. Entre estas tres etnias sí que hay tensiones, pero no por el hecho de ser cristianos o musulmanes hasta donde yo he sabido leer.

En su opinión, ¿son la diplomacia y el Derecho Internacional herramientas útiles para resolver el conflicto?

Bueno es que esto por definición, antes que el conflicto, antes que la violencia, siempre. Lo que estos países no se pueden permitir gastar demasiado dinero en cosas que no sean ayudar a su propia población. La diplomacia siempre será más barata que no cualquier vía más agresiva. Sin ser un especialista, por definición, claro que debería ser así. El problema del derecho internacional, como sabes, es la capacidad de hacerse efectivo. El derecho internacional, te da una legitimidad. En general, volviendo al tema del agua, yo creo que todo el mundo entiende que Etiopía no puede renunciar a ese recurso, es de sentido común. Y todas las posiciones internacionales tienden a pensar que una posición de fuerza por parte de Egipto no parece que sea razonable. Pero bueno, el derecho internacional, como sabes, la capacidad de ejercer y de ser efectivo pues tiene sus límites, porque no hay una autoridad que imponga las decisiones de los tribunales internacionales. Dentro de qué, de la opinión pública internacional, de las opiniones, pero bueno ojalá que fuera más efectivo.

¿Cree que es factible imponer el derecho internacional?

Fíjate que en muchos casos la opinión pública es un factor de presión más efectivo que determinados “órganos” (sic) internacionales. Imagínate toda la campaña que ahora hay, en doble sentido, con el tema del algodón en provincias de Shinshan en China. Pues por una parte, los países occidentales, o los consumidores occidentales, por decir algo, pues han sido efectivos en obligar a suministradores de productos textiles a cambiar formas de comportamiento. Digo en Shinghan o digo en países del sudeste Asiático, para evitar las malas praxis pero

inversamente también el gobierno chino ha creado una gran presión sobre cadenas textiles occidentales (H&M me parece) para decir: si ustedes nos crean pruebas con esto, ustedes no van a entrar en China. Yo creo que la opinión pública y el consumidor es muy sensible a estas cosas. Pues determinados comportamientos, como lo que ahora está pasando en Birmania, a parte de los convenios internacionales, si los consumidores perciben que determinados regímenes no se comportan como deben comportarse y se hacen campañas que son bastante efectivas, tienen a veces más presión incluso que los propios códigos de derecho internacional.

En el caso que nos ocupa, por ejemplo Etiopía evidentemente, cuando el primer ministro actual, que se presenta a elecciones dentro de dos meses, pues logró el premio nobel, tuvo una gran *boost*, un empuje de popularidad por el empuje de democratización. Ahora en el conflicto con el Tigray, claro las opiniones están más divididas porque la gente tampoco conoce bien lo que pasa y la información quizá no es concreta pero que ha habido claro, esa sensación. La opinión pública se pone siempre de lo que percibe como el lado débil. Esto suele ser así. Y en el conflicto del Nilo que estamos viendo, el lado percibido como débil no está claro. Porque por una parte el país más débil quizá ha sido Etiopía pero a la vez, la gente también puede ser sensible de que Egipto necesita agua.

Para llegar a un acuerdo exitoso, ¿cree que todos los países ribereños deben participar (o ser tenido en cuenta) en las negociaciones?

Sí, claramente. La posición de Etiopía, salvo error, salvo que me equivoque, siempre ha sido que esto no es un problema entre Egipto y Etiopía. Esto es un problema unilateral, que afecta a muchos países en mayor o menor medida y que por tanto debe resolverse. Es verdad que también le conviene hacerlo así, porque al haber muchos más países que ceden el agua, digamos en términos numéricos, tienes más países de tu lado. Egipto está solo con Sudán que son los países receptores del agua. Los demás aportan agua. Pero sí, yo creo que el problema de una cuenca como la del Nilo afecta, me parece, a 11 países, osea que no es un problema de tres, es un problema de muchos.

¿Qué podría hacer su país para poner fin a este conflicto en buenos términos?

No lo sé, porque yo no soy especialista, insisto. Pero yo creo que son ejercicios de paciencia. Son problemas milenarios. El problema del agua no es un problema de la semana pasada, o de esta presa. Es un problema que viene de mucho tiempo atrás e incluso en la biblia había las

famosas crecidas del Nilo. Hablamos de hace 2.000 años, las crecidas del Nilo cuando no había Aswan y todo el delta se inundaba y el delta del Nilo es consecuencia de estas crecidas.

Entonces lo que hay que hacer es tener una visión de no ser impaciente. De ser paciente, de seguir hablando e ir llegando a veces a pequeños acuerdos que te permitan avanzar. Lo que estoy seguro es que la presa de Etiopía se terminará, ya está casi terminada y que se va a llenar, eso seguro. Bueno, si se va a llenar en tres años, en siete o en diez... En términos históricos tampoco es tan importante, porque al final hemos estado 2.000 años sin presa, no creo que cambie tanto.

Lo que pasa que es normal, que cuando tu has hecho una inversión y un esfuerzo financiero importante es normal que quieras correr en llenar esa presa. Bueno y que el proceso de financiación de la presa, Egipto bloqueó todo lo que pudo para que hubiera dificultades para financiar. Egipto siempre se han considerado un poco como los líderes del mundo árabe, porque era el país árabe más poblado y ha sido una potencia también históricamente muy importante. Y ellos de alguna manera se consideran un cierto líder regionales. A ver, entre Etiopía y Egipto ha habido peleas desde siempre. ¿Porque Etiopía no es un país musulmán? Precisamente porque el nacionalismo etíope se reforzó en base al cristianismo, sino sería un país más de la esfera musulmana, y no es el caso.

¿Hasta qué punto crees que la iniciativa del río Nilo que se creó en 1999 ha sido útil hasta ahora?

No lo sé, esto ya es muy preciso y no lo sé. Yo creo que cualquier foro que permita que la gente se sienta, que hable, se exprese y de su punto de vista me parece mejor que... A veces los foros se juntan y dicen: es que no ha servido para mucho. Pero la pregunta real es: ¿Si no hubiera habido, estarías mejor? La respuesta es no, hubiera estado seguramente incluso peor. Como tantos organismos internacionales que la gente dice: no, es que no sirven para nada. Bueno, no sirven para nada pero la pregunta real es, ¿si no estuvieran estarías mejor o peor? Y la respuesta casi siempre es estarías peor. Esto es aplicable a Naciones Unidas y tal. Puede ser que no se la manera más eficiente de disponer de los recursos, pero de ahí a decir que no sirven para nada, yo creo que hablar siempre es mejor que no hablar, eso ponlo así y como mínimo previene conductas agresivas.

Piensa que en todo este período, en Egipto han habido cambios de régimen importantes. Cayó Mubarak, llegaron los hermanos musulmanes, ahora está al-Sisi. Ha habido, en este período

relativamente [corto], tres visiones diferentes con posiciones muy diferentes. Y en Etiopía ha habido como mínimo también dos etapas. La etapa previa al actual primer ministro dominada por los Tigray, la etapa de Meles Zenawi que fue el anterior primer ministro y esta etapa, y es un cambio muy importante también. Hay que ir viendo cuál es el momento en que los astros encajan y hay una buena actitud para poder avanzar en esto.

¿Cómo ve la evolución de esta disputa en el futuro? (no solo desde un punto de vista político, sino también teniendo en cuenta la demografía, el cambio climático y el desarrollo del país.

Ambos países, hablando de Egipto y Etiopía. Egipto lo conozco poco, he estado pero no lo conozco mucho. Ambos países tienen un problema de demografía muy importante. Piensa que Etiopía hoy son 110 millones de habitantes pero las proyecciones del 2050 es que serán 230. 230 millones es muchísima gente y aunque el país es grande tienen que desarrollarse, fundamentalmente hay una estrategia económica de país que pasa por dos brancas. El desarrollo industrial que es a lo que se dedica hoy la gente, a la agricultura y a procesar todo esto y vender productos no sólo para su propia población sino también exportar para generar divisas y convertirse en una potencia manufacturera que es lo que están haciendo. Dado que los salarios de Etiopía son más bajos que en Asia, están intentando convencer a la gente de decir: traed producción, deslocalizad lo deslocalizado. Lo que se deslocalizó a China, Vietnam, Malasia o Bangladesh, pues ahora parte de esto llevarlo. Esto se va haciendo, han hecho haciendo parques industriales y tal. Todo para dar trabajo a una población muy joven pero que está creciendo y que sino no se va a morir de hambre y entonces lo que va a hacer es emigrar y hay todo un movimiento migratorio. En el caso Etíope no es masivo, no es como en otros países del Sahel pero sí que la hay, emigración muy interafricana. Los países del golfo, hay mucho etíope en estos países.

Y en el caso de Egipto es lo mismo, Egipto tiene un poco de petróleo, tiene Suez y tiene turismo, cosa que Etiopía turismo hasta ahora ha sido poco importante, podría serlo pero no lo ha sido mucho. El turismo es hipersensible a la estabilidad, la menor indicación que no hay seguridad se acaba el turismo. Esto lo has visto en Egipto y es así. Entonces, desde este punto de vista, no sé si me he desviado un poco de tu pregunta, pero ambos países necesitan un poco la estabilidad para desarrollar los recursos que tienen que son agroindustrial, capacidad de fabricación y el turismo. En el caso de Etiopía, hasta ahora no ha habido hidrocarburos, parece ser que han descubierto algunas bolsas de gas natural en algunas regiones y podría ser una

fuelle pero Etiopía es muy dependiente de la importación de hidrocarburos. Egipto me parece que es ligeramente excedentario en hidrocarburos, me parece, pero tampoco lo sé con seguridad. Pero lo que está claro es que si no tienen un buen desarrollo con esta incrementa de la población pues tienes una bomba de relojería. O la gente puede emigrar y eso tiene sus límites o la gente no puede tener como en zonas de tal, tasas de desempleo de 60/70 por ciento entre la población joven, es impensable.

INTERVIEW WITH ALBERTO UCELAY

Mr. Alberto Ucelay. Spanish Ambassador to Sudan. Ucelay holds a degree in Law and entered the Diplomatic Career in 1996. He has been Head of the Legal, Social and Humanitarian Affairs Service and Deputy Director-General of the Middle East in the Spanish Ministry of Foreign Affairs. Abroad, he has been posted to Gabon, São Tomé and Príncipe, Paraguay, and Jerusalem.

¿Cómo describiría brevemente el conflicto del río Nilo?

Tengo que precisarle que obviamente nosotros somos la embajada de España, el gobierno de España, por lo tanto no podemos hablar en nombre de Sudán. España tiene muy buenas relaciones con los tres países: con Sudán, con Etiopía y con Egipto y la Unión Europea también. La Unión Europea como sabe, ha sido recientemente observadora en las últimas negociaciones y yo creo que nuestra posición, la de España, la de la UE que está interlineada en este tema, se resume en impedir, y lo ha hecho recientemente el otro representante Borrell y también nosotros, en pedir que esto sea no una fuente de conflicto pero una oportunidad de cooperación, porque creemos sinceramente de que es posible. Y en cuanto a las modalidades de resolución, el apoyo a la labor de la Unión Africana, eso también es otra idea fundamental.

Usted me pregunta en que consiste el conflicto, bueno como sabe el proyecto de la presa del renacimiento empezó a materializarse, primero a formularse y luego a materializarse sin que hubiera un acuerdo de los dos países ribereños (de Sudán y de Egipto) pero desde 2011 empezó a haber negociaciones y contactos que se tradujeron en 2015 en la declaración de principios que seguro que usted conoce. Y a partir de ahí y a medida que fue avanzando el proyecto, las negociaciones o los intentos de alcanzar un acuerdo se fueron intensificando hasta que el año pasado la administración norteamericana se involucró más directamente en un intento de mediación que dio lugar ya a la elaboración de un acuerdo parcial que luego Etiopía rechazó pero que incluía un calendario de llenado progresivo de la presa.

Lo que nos dicen las autoridades sudanesas es que prácticamente todo está acordado, lo han dicho públicamente, además. Es que prácticamente el 90% de los asuntos técnicos están acordados y que lo que queda son asuntos políticos y que es una cuestión de voluntad política. Por lo tanto, bueno, en qué consiste el conflicto, lo ideal sería llegar a un acuerdo que gobernara el * de Sudán. Sudán dice que haya un acuerdo que gobierne todos los aspectos del llenado y

de la posterior operación de la presa y además quieren que se haga un acuerdo jurídicamente vinculante y también han pedido en el pasado, que tenga un mecanismo de solución de controversias que también sea *.

¿Cuál es la opinión de Sudán sobre la Gran Presa del Renacimiento Etíope (que está actualmente en construcción, y depende de acuerdos entre Sudán, Egipto, y Etiopía)?

En las últimas semanas, Sudán sigue insistiendo en lo que han sido las constantes de suposición a lo largo de los últimos años. Por un lado, están de acuerdo con lo que ha dicho también la Unión Europea, la presa puede y debe ser una oportunidad de cooperación para los países ribereños, puede ser un acuerdo ganador-ganador en el que todo el mundo gana. Para Sudán tiene importantes ventajas por ejemplo la regulación del flujo del Nilo Azul. A efectos de prevención de inundaciones, a efectos también de planificación agrícola y de generación eléctrica y por lo tanto, junto a los peligros, Sudán pone de manifiesto las ventajas. Y eso lo han hecho siempre y consistentemente los últimos años.

En segundo lugar, las autoridades Sudanesas dicen que si ese llenado, aunque sea parcial, se hace sin un acuerdo vinculante previo que permita a Sudán tener garantías de que ese llenado de operación de la presa no se va a hacer en contra de sus intereses, si no hay ese acuerdo vinculante entonces si que pasa a tener plano el aspecto de los peligros que plantea la presa y tienen varios, que han dicho también públicamente con todo detalle, es el peligro que se cierne sobre la presa sudanesa de Roseires que sabe usted está muy cerca, a muy pocos kilómetros de la frontera. La presa del renacimiento está prácticamente en la frontera entre Sudán y Etiopía pero muy pocos kilómetros después, río abajo del Nilo Azul está la presa Sudanesa de Roseires, que es diez veces más pequeña que la presa del renacimiento y claro, si no hay una coordinación muy estrecha en los flujos, en el caudal de agua que libera Etiopía (sea por generación eléctrica, sea por regulación del nivel de la presa, o sea porque haya un problema técnico puntual o un accidente) si eso no está muy bien coordinado la presa de Roseires corre riesgo de destrucción, porque es mucho más pequeña, se la puede llevar literalmente. Y a eso, generalizan los Sudaneses diciendo que pone en peligro o puede poner en peligro a 20 millones de sudaneses que son los que viven en la cuenca que estaría afectada por esa enorme inundación.

Por lo tanto, oportunidad de cooperación primero, segundo, dicen también encierra peligros pero también encierra oportunidades y lo que le he dicho en la primera pregunta, de ahí ellos desprenden la necesidad de un acuerdo vinculante que regule todos los aspectos del llenado y

de la operación. Esa ha sido la posición sudanesa y luego ya, un punto de vista ya más de corto plazo, sabe usted que han propuesto este mecanismo cuatripartito del que luego podemos hablar.

¿Cómo ve la evolución de esta disputa en el futuro? (no sólo desde un punto de vista político, sino también teniendo en cuenta la demografía, el cambio climático y el desarrollo del país).

Yo creo que es obvio que todo pasa por un acuerdo, que haya un acuerdo que pueda revestir distintas modalidades. Los sudaneses insisten en que sea un acuerdo jurídicamente vinculante y que tenga todos los aspectos del llenado de la operación. Pero evidentemente Etiopía tiene otra posición y en su momento Egipto puede tener otra. Pero lo importante es que haya un acuerdo y sobretodo que haya un respeto de las normas de derecho internacional que algo tiene que decir en este aspecto también.

Cómo sabe usted, la declaración de principios se remite también a las normas del derecho internacional con recursos de agua internacionales. Luego podemos hablar si quiere porque creo que lo plantea usted en su entrevista y creo que es un aspecto muy interesante de la gestión integrada de cuencas. Pero creo que si pensamos en un acuerdo, y pensamos que un acuerdo o la aplicación de las normas de derecho internacional puede ser la base para una solución, a partir de ahí es muy fácil imaginar las inmensas oportunidades de colaboración que se abren para los tres países. Imagínese, por ejemplo, en tema de generación eléctrica. Etiopía es deficitaria en electricidad, Sudán también. Un acuerdo sobre la presa y sobre la situación eléctrica puede ser muy beneficioso para todos los países. Lo que hablamos antes de la regulación del caudal. El año pasado, las inundaciones aquí en Sudán batieron récords históricos, nunca había habido unas inundaciones como estas en los registros desde hace más de un siglo. La presa también puede contribuir a atenuar esos efectos. Pero todo paso por un acuerdo y yo creo que nadie quiere ni siquiera contemplar un escenario distinto al de un acuerdo. Y por eso es por lo que todos tenemos que trabajar y hay que fijarse en NOSQUE.

Entonces, el papel de las organizaciones internacionales (como la ONU o la UA), entiendo que debe ser para ayudar a conseguir este acuerdo.

Exactamente, Sudán ha planteado desde finales del año pasado, principios de este año, ya con mucha claridad que las partes solas no pueden llegar a un acuerdo y que necesitan observación al menos y si es necesario mediación activa.

En primer lugar de la Unión Africana, que es lógico, es el mecanismo regional que es competente sobre el tema en el espíritu del lema de soluciones africanas para los problemas africanos que todos apoyamos, que la Unión Europea apoya. Pero Sudán también ha invitado a la Unión Europea, las Naciones Unidas y a Estados Unidos a ejercer o ayudar a la Unión Africana a esta labor de mediación que hoy por hoy todavía no está acordada. Etiopía sigue objetando a este * internacional muy acentuado que Sudán y Egipto proponen, sobretudo Sudán. Pero si que parece que la Unión Africana ya está intentando ejercer algún tipo de papel, sino de mediación por lo menos de buenos oficios, de elaborar propuestas, de recabar opiniones de los expertos, de presentárselas a las partes, de a lo mejor formular textos alternativos.

Todas esas posibilidades están ahí para la Unión Africana y para las otras potencias o los otros países amigos que puedan apoyar. Y la representante de la Unión Europea ha dicho que la Unión Europea estaría dispuesta a estudiar un papel a este respecto.

¿Cree que la gestión compartida de cuencas hidrográficas / ríos transfronterizos es un buen enfoque para hacer frente al conflicto?

Yo personalmente creo que sí. Como he dicho, lo primero que hay que tener en cuenta es que todo pasa por un acuerdo sobre la presa. Hablar de cuenca si no hay acuerdo sobre su principal punto, digamos conflictivo, me parece un poco quimérico. Yo creo que los sudaneses están interesados en ese enfoque también, lo han dicho públicamente. Pero qué duda cabe que la gestión integrada de cuencas, que como sabe usted es una aportación española. Es una cosa que en España tenemos muy arraigado y que es una aportación nuestra a la gestión del agua. Forma parte hoy de los objetivos de desarrollo sostenible, ya no es solamente un desideratum, es un objetivo de la comunidad internacional, que los usos de agua internacionales también estén gestionados de manera integrada y con acuerdos entre todos los países ribereños.

Eso por lo tanto creo que es deseable, es posible, siempre y cuando se logre este acuerdo sobre la presa del renacimiento. Y creo que es algo que sería muy interesante para todos los países de la zona. Imagínese las consecuencias por los beneficios medioambientales, para la población, las plantaciones agrícolas, ganaderas, lo que se podría ganar con un enfoque integrado para toda la cuenca. Y yendo aún más allá, también los acuíferos y las aguas superficiales y las aguas subterráneas, porque hay recursos, lo importante es cómo se pueden gestionar de manera integrada. Yo sí creo que es un aspecto que desde luego las autoridades sudanesas no lo descartan, después de que llegemos a un acuerdo sobre el tema.

En su opinión, ¿son la diplomacia y el derecho internacional herramientas útiles para resolver el conflicto?

Por supuesto, y además creo que se está demostrando. El año pasado cuando las autoridades sudanesas, bueno este año, nos dijeron: el 90% de las cuestiones técnicas están resueltas, lo que falta son decisiones políticas sobre el carácter vinculante o no del acuerdo, el mecanismo concreto de solución de controversias por el que se opte al final... son decisiones políticas.

Luego también por ejemplo, una cosa que quedó por resolver en las cuestiones de Washington del año pasado es como el acuerdo prejuzga o no futuras instalaciones o futuros proyectos etíopes más arriba, aguas arriba del Nilo Azul. Pero es verdad que todas estas cuestiones que tienen su aspecto técnico, no son cuestiones hidrográficas, con cuestiones jurídico-políticas que se pueden resolver a través de la negociación.

Por lo tanto, lo que hace tan solo unos años se pensaba y que mucha gente sigue pensando es que esto es un conflicto irresoluble, que es un juego suma-cero, que el agua que gana uno la pierde el otro. Yo creo que no es así, y creo además que la posición de Sudán lo demuestra y deja claro que es posible un acuerdo en el que todos ganen. La misión del derecho internacional, de la diplomacia, de las negociaciones es encontrar ese punto de mutuo beneficio entre todas las partes. Desde aquí estamos convencidos, no solamente los sudaneses pero también los amigos de Sudán en la Unión Europea, España desde luego, de que es posible ese acuerdo. Es posible un acuerdo basado en el derecho internacional en el que todos ganen.

¿Cree que es factible imponer el derecho internacional?

En este caso es una muy buena pregunta, en este caso es muy difícil. Como usted sabe, habría quizá opiniones al respecto, pero el derecho internacional de recursos de agua internacionales no forma parte del *jus cogens* internacional y sería difícil argumentar que esto sea un derecho imperativo para nadie. Todo pasa por un acuerdo. Es evidente que hay unas reglas que tienen que ser la referencia, también es evidente que las partes se han suscrito a una declaración de principios que se recoge en esas reglas. Por lo tanto se podría argumentar que son vinculantes para las tres. Pero, al final no se puede imponer el derecho internacional, tiene que haber un acuerdo entre las partes.

El obstáculo es la falta de confianza. En este expediente a lo largo de mucho tiempo, se ha creado una desconfianza recíproca. Es natural también porque es un recurso de agua que

arrastra una historia milenaria. Ha habido civilizaciones, fíjese usted, en Egipto, en Nubia, en Etiopía, cuantas guerras habrá habido por esto. Se trata de que no vuelva a haber otra, de que esa confianza se pueda recuperar, se pueda reestablecer entre las partes para que eso que parece fácil para un observador extranjero, que haya un observador sudanés, un observadores egipcio en la presa que puedan estar seguros de cómo se opera en tiempo real, con garantías, que puedan estar tranquilos de cómo se libera el agua, la cantidad y con confianza recíproca. Y en eso es donde la diplomacia puede y debe jugar un papel y yo creo que lo está jugando. No solamente la Unión Africana pero la Unión Europea, Estados Unidos, Naciones Unidas... Estamos todos intentando ayudar a crear esa confianza para que el derecho internacional pueda ser la base para la solución de la controversia.

Para llegar a un acuerdo exitoso, ¿cree que todos los países ribereños deben participar (o ser tenidos en cuenta) en las negociaciones?

Cómo sabe usted, esta es una muy buena pregunta. Este es uno de los puntos que están ahora mismo en discusión entre las partes. Etiopía ha respondido, esto es público también, ha respondido a la propuesta de mediación cuatripartita de Sudán (Unión Africana, Unión Europea, Estados Unidos y Naciones Unidas) diciendo que si va a haber implicación internacional entonces hay que hablar de toda la cuenca. Claro, cuando hay que hablar de toda la cuenca y de todos los países ribereños surge la cuestión del acuerdo del 1959 entre Sudán y Egipto que establecía cuotas de agua y que para Sudán y para Egipto, sobretodo para Egipto es una cuestión innegociable. Entonces, hoy por hoy se sigue tropezando con el obstáculo de que esta idea de la cuenca y de la iniciativa de la cuenca del Nilo sigue siendo vista por una de las dos partes como un obstáculo o como una alternativa al acuerdo sobre la presa, mientras que la otra parte (Sudán y Egipto) lo ven como algo que tiene que venir después. Como algo que sí, que ciertamente es posible pero que tiene que venir después. Y ese es el punto de controversia entre partes en el que por ahora ninguna de las dos cede. Entiendo yo, y es mi opinión personal esto lo quiero subrayar, yo creo que es una cuestión de confianza recíproca. Si se consigue restablecer la confianza, sobretodo entre Sudán y Etiopía, que es donde está el problema mayor de gestión concreta de esa presa de Roseires que puede estar en peligro si hay un desbordamiento del renacimiento o un caudal sencillamente demasiado fuerte, si se consigue restablecer esa confianza, yo creo que todo es posible. Pero vamos a ver cómo se desarrollan las negociaciones, a ver si las partes vuelven a la mesa y se pueden hablar, se puede hablar ya

de cosas concretas y de acuerdos, que sabe usted el tiempo apremia porque en julio es la temporada de lluvias aquí y la presa **.

¿Qué podría hacer Sudán para poner fin a este conflicto en buenos términos? Supongo que me va a decir que siga en las negociaciones y siga con la diplomacia.

Efectivamente. Yo creo que es lo que Sudán está haciendo cuando hoy por hoy en sus declaraciones públicas, los responsables sudaneses dicen que lo que contemplan en caso de que no haya acuerdo es seguir recurriendo a medio jurídicos y creo que esta es la vía. Hay mecanismos de resolución de controversias, en algún momento han hablado de arbitraje, veremos. Pero yo creo que es importante seguir hablando de la posibilidad de un acuerdo y sino de los medios jurídicos para resolver la controversia que pueda surgir sobre esto. Pero hoy por hoy son las negociaciones la mejor fórmula, la mejor opción para resolver esta cuestión. Convertirla, como hemos dicho al principio, como yo creo que ve todo el mundo que se interesa por el expediente, son las posibilidades de cooperación. Así se logran.

INTERVIEW WITH MAYSOON AL-ZOUBI

Ms. Mayson Al-Zoubi. Currently the Secretary-General of the Higher Population Council. She has a bachelor of Engineering at the University of Jordan and a Master of Water Demand Management at the Jordan University of Science and Technology. From January 2009 to July 2012, she has been the Secretary-General of the Jordan Ministry of Water & Irrigation. Al-Zoubi has 29 years of experience managing water resources and utilities in Jordan demonstrating political savviness and diplomacy working closely with numerous political and private stakeholders. In this context, she served as the Technical Committee Chair for the ambitious Red to Dead Sea Project, Negotiator and Ambassador for climate change, Jordan.

How would you describe the conflict in the Jordan River Basin?

You know, we signed with Israel, as Jordan, but still, there is another riparian, so it is not finalized yet. Basically, Palestine, Lebanon, Syria. Of course, Lebanon and Syria, they don't have yet a peace treaty, so they are not partners. We signed with Israel the Wadi Arava treaty and there is annex 2 which talks about water rights, let's say water allocation, between Jordan and Israel. So, the other riparians are not there. So, from my point of view it is not final yet because we need them all involved.

When we signed this agreement, what is written in the agreement is implemented. But some of the numbers that Jordan were promised to have as water share, was not correct at that time. Therefore, I would say, before signing any agreement you have to have the real information and especially with the Yarmuk River. And we were promised to have to give to Syria I think 90 MCM (Million Cubic Meters) and to Israel 25 MCM from Yarmuk River and the rest was allocated to Jordan. But, at that time it was estimated around 300-400 MCM, what we receive now is only like 40 or 60 (MCM) because you know Syria is not on board and they are in the upstream and we signed with them. It is not the treaty, it is the investment programme, the investment agreement to build the Unity Dam. And in that investment agreement we limited the number of wells to make sure that we will have the right from Yarmouk to fill the dam, but this was not respected because in Jordan we have legal * everywhere. So, this is what happens with water.

I always like to say water diplomacy, I hate saying water conflict because water could be a cause for war and if we don't like what we are witnessing now, in the Jordan or in the Nile

River (with the dam in Ethiopia). But you see, still now, they start talking and right now there is no war and they keep on diplomacy. But is water enough to say water diplomacy and water cooperation if we really want to solve the problem. If you are targeting a solution, war is not the solution, war does not bring water, war damages even the water infrastructure. So with war, it kills the water. There is not in any way a water, but it might cause conflict and we are all seeing what will happen in Jordan or in the Nile River. I don't know but luckily in * they are negotiating a meeting, I hope they will. But with the Jordan River, what is the right I tell you, what the Arava writing. A lot of things are happening, we have climate change.

First of all, in order to have a right treaty we have to have all the riparians on board. You have to have trust, you have to have it before you start talking. I am not talking about water shares or allocation but maybe sure benefits. Definitely, all the countries who share the water resource. They have different needs, not the same needs. So, if we can share the benefit better than talking about this amount of water. Because we don't have in the Middle East enough quantity of water so we have to talk about water management, we have to talk about efficient use of water, we have to talk about sharing the benefits rather than saying it is my share and I like what it does in Wadi Arava. But, we have this agreement with Israel, and again, if we look at annex 2 you will see that it is written the decrease and the flow of the Jordan River. Basically, it is because of the use of riparians. You know, about the Israel base they started establishing a national conveyor where they conveyed most of the Jordan River and they use it in this pipeline to irrigate the use of agriculture, most of it. So, most of the water is there, of course the rest is used by Jordan and then Syria, but in some places it is extreme, no more. We have the problem of the Dead Sea which in Jordan River is *. But this is needed I think you know, with the things we are witnessing, we need the rivers to this again, this annex or agreement. I don't know what will happen with Palestine. The Palestine water document will be finalized there, if we have Syria and Lebanon because they are riparians. And again, we think even to revisit because we have climate change now and Corona and you see with the Corona, the solution they say is you need to wash your hands under the tap 20 seconds, the domestic demand in peace in Jordan by 40%. We have to sit together and see how to use our water efficiently.

How do you see the Jordan River matter evolving in the future (taking into account climate change, demography, country development...)

If you are talking about water security it is an issue, because as I told you, the Jordan River, now, in some places is dry and we don't depend on Jordan. Except for Israel, which is their

major source of national conveyor, it is converted. Because Israel, they have this Golan Heights, which is where the Jordan River comes from. That is why the water, you know the history of upstream and downstream. So, the Jordan River is in the upstream and they converted most of its water. If you visit Jordan and you see, it is like in some places it streams. Most of the resources are not the clean water you know, most of it is west water, it comes from people and that is why you will see evidence of this. We see the Dead Sea, because it is the major tributary to the Dead Sea. The Dead Sea is now shrinking and is declining because they used to receive 1 billion 250 MCM from the Jordan River and now they only receive 250 (MCM). The evaporation and because of climate change, you know, in the Middle East or in Jordan in particular.

According to the scenarios of climate change we are expecting that the temperature will be increased from 1.5 to 2.5. When you talk about temperature increase this means evaporation is increased, the need of water is increased. So, if you need more water, the demand will increase, this is one thing about climate change, and then even with the peace * we are expecting more drought season, less “receptation” (sic) and increase in the duration of the chart. And sometimes we have these flash floods, and I don’t know if you heard about what happens in the Dead Sea where this flash flood is. Sometimes because of the deaths, climate change where you can have these strong floods. So, this limited list increases efficiency but sometimes we have a very heavy “receptation” (sic) where we have flash floods and you know the Dead Sea is the lowest point of the Earth, so it damages all the infrastructure and we have flood problems. This is one thing of climate change so that is why we have to sit again and recalculate our resources. In Jordan, the Jordan River is not any of our resources. Basically, in Jordan is basically domestically drought water and some of the dams that we have.

Again, also with demography, it is not only the growth rate, in Jordan, it is the last year, the fertility rate, when they can calculate it, it was in the last sense it was 2.5, it is not too big. But we have a problem, we have the river flows of refugees. We witness Jordan because of the secure and safe area among the region, we keep on receiving refugees from everywhere, starting before, ***. We receive from Russia, Soviet Union, Armenia and Sarkissian. So, this is the first way where they come here to Jordan and now they are Jordanians. They fully include, this inclusion now is 100% inclusion and they are rehabbed Jordanian. Then, our war with Israel in 1984, so the Palestinian refugee could stay in Jordan. In 1957 we also had the Iraqi war, so we received Iraqi and they stayed here. The last problem is with Arab Spring when we

have Syrians and now Syria is gone and still, we have them. So, Jordan, our population triplet maybe and long time, we were planning to live with the medium term by having Syrian refugees, they use the resources that were planned to cover immediate time for Jordan. Now, Jordan is approaching 11 million and the water that he has is enough barely for 3 million. But 11 million, 30% of them are non-Jordanian and 50% of the 30% are Syrian refugees: they live here, they use the very limited resources. They use the health sector, which is planned to serve a certain number of people, the water, everything, all the resources, the infrastructure is damaged, all the development has been *of this.

Now, the water is very limited, the by capita availability of water is 90 x 90 MCM. Per capita for all uses, including the leakish. You know what is this number, 90 MCM for all uses, if you compare it to what is in America, they have 800, the poverty line is 15 hundred. Jordan is 90 for all uses and including the leakish we have unaccounted for water, by 50%. So, you see, when I say availability of water resources, it is the water that is available, meaning groundwater and surface water. We are not talking about non-conventional water. Because non-conventional is just desalinated water, treated and clean water. It has cost us a lot to produce this water. Availability of water is very limited. And how we can provide the service for our people, the cost, the depletion of our aquifers. We have like 12 aquifers, ten of them are now depleting, we are over pound. *** In order to save these people. The wastewater is 90%, it is really used in Jordan. We are not wasting any source of water. *** Most of our treatment plants are rehabilitated to produce this treated water. We limit * the water allocated for every culture. We are in the region where all of them 80 to 90 % of water is used for agriculture. In Jordan, we manage by efficient use of water. To use 54% of the water is for agriculture. In the Jordan Valley, 40% of this water is treated water so efficient water is quite a lot. But we don't know till what we can, overpump *? We look at the desalination with this Red to Dead project.

When we had this Wada Arava treaty we were promised the three countries (Palestine, Jordan and Israel) we were promised prosperous to benefit from this peace. The three countries we supported fresh * water. The idea is in the Wadi Arava treatment, there is an item where we all sit together and look for new resources of water. But this idea of serving the Dead Sea is sovereign water from Red to Dead and it was a big debate until we convinced the international world that it is more feasible to have a Red to Dead not Mediterranean to Read Sea and then we said it is feasible to bring water to the Dead Sea. Why not benefit from this water, so to generate lots of revenues, to help the project be more feasible. So, the idea of desalination and

shared water. And it was like we were promised to have the role of the international community to give financial support. But, unfortunately, once we signed the agreement then they started talking about the feasibility and nobody was ready to finance this project. We cannot do it, the income of the Jordanians is very little. If we talk about the project of estimated desalinity. Because you know, in Jordan even we have the sea in the southern part where the water is there, and the shortage of water in the northern part with having also the refugees in the northern part. So, it is not the cause of desalination only, it is the cost of transport as well. So, it is very expensive the idea, if you look at this project, it has cost us 1.5 maybe JD. In JD you have to multiply by 1.4 to know how much it is in the dollar, the meter. If you add to it desalination and you are expecting it to be like 5 dollars a meter and it will all go into a network that we have so this is an ***. So this is expensive and this is why maybe people listen in the street they don't believe the worth of the Wadi Arava treaty because they did not see the prosperity that they were promised to do. And now people in the street are against it and they ask the government to stop this. We will not stop it, in Wadi Arava we received like 55 MCM of water which we serve the capital. People in the street don't know the real thing again. But this is what happens, they do not see that there are benefits, but still, I will tell you, our agreement with Wadi Arava is going, even with problems, but the water document they meet whenever. No matter what conflict might be between ** but the water is still working. They meet twice a year and they talk about the water budget.

But this is a good thing, but still, there need to be other riparians to set and again we need to revisit our type of cooperation. It is not a share because we don't have enough water, it has to be a step further, maybe in cooperation, maybe in having commission like what we have in Rhine and Danube. We need to have, it should be managed at the basin level. So, why not put rid of this technical committee and change it into commission, this will be better. But this will not happen if we don't have a fair peace, without a fair peace, nothing will. Without having all the riparians on board, without having the Palestinian problem solved it won't be. The conflict here is really little resources and the refugees that you see so there will be no water. This is very difficult for the Jordanians.

What do you think is the role of international organizations (like the UN), other powerful countries, or other actors in the international sphere?

In Jordan, we have a signed peace treaty, and yeah, you need a third party and it is under the umbrella of the American government. I think this should be the riparians, they should sit

together and think, and you see how many people interfere with Egypt. With Jordan the story is different, we have this peace treaty and it has this special annex for water. Even Palestine, they also have an agreement or treaty and Israel, and we hope other countries will join. The only thing that the international [community should do] is come and help us financially. Jordan, Israel, and Palestine we have a treaty and we have the peace for cooperation but we need those people to help us finance some project. Because this Red to Dead is very expensive, we cannot finance it. But we need them to help us improve our water situation. We don't want them to come and to build peace. We have this but ** I don't know if there will be a problem with water. But again, we don't need them to help us to improve or solve our problem. Is not for us to sign a peace treaty because it is already there and we have this peace treaty and nobody will think of pretending that. But again, help us because there is an item and * and we should look for new resources, so they have to help us in this regard.

The example of Red to Dead. It is not a good example, they promised to help us. The World Bank managed to raise funds, 15 million and 50% taken by the World Bank as the fees and the other 50 for the studies and they stopped there. Why? It is a very expensive project, and we cannot, there are three of us. Israel is a rich country but Palestine and Jordan are not rich at all. But they come to help us support this peace. We already have peace but we need support from the international community to help us to keep this peace. It is not to sign an agreement, we have already one but we do not want to lose it. And if they come and help us to sustain the treaty to improve it, to show the people in Jordan that we are benefiting from this treaty. So, maybe later Syria will join, Lebanon will join. We have to give a good example.

In Jordan, we don't have an agreement with Syria about the Unity Dam. It is not an agreement, it is an investment. When we built the Unity Dam, Jordan paid all the costs and it was a loan, it was not granted money and we built this money. Now you see the water because of what is happening in Syria, because of the war and they don't grow plants, they do not use water. And if you go to the Unity Dam now you will see water, but before that, it was no water, no electricity. It is not a treaty. We already have a peace treaty with Israel and Palestine also have this. I would say we need their help to sustain what we have and maybe to improve it. Then, it will be a role model for other countries. If we want to exchange with the Nile, they have a problem now. The Jordan River is converted and it is written in the peace treaty that whatever, all infrastructure is there should be like, no change. So, what is the point? I don't know how much have they have taken now because of climate change but it should be like one billion. I

think 600 converted to this national conveyor. And Jordan, Syria, and Palestine they use 200 but it is used. We cannot go and tell others: look at what we have and how we can benefit.

So yes, with Jordan's case we need the international community, the international countries to come and help improve or to sustain this peace and show others how cooperation with water is working. We have a very good example not in Jordan, not in the Middle East. Look at Senegal, look at ***, even though with the Nile, Egypt they believe they have this water for them, they don't believe they have to share. So this is the thing, for us, we don't want someone to help us find peace, we need someone to sustain this peace. The three of us need to do it, it is not only Jordan, we need those people to help us develop our country and cope with what we have.

You mentioned that Egypt does not believe they have to share water.

There is the international water law. So, you have principles, right? One of the principles is equitable share and reasonable quantity of water and no harm. No harm, this is the critical thing. Egypt, it is not that they Egypt does not want to share, they use the maximum share, they cannot live with lesser quantity. Egypt and Sudan are in the downstream and they use the maximum and I think there is a British agreement that guarantees Egypt to use all the water and the rest the others can use and the Halali dam. And now Ethiopia says that Sudan and Egypt use all the water and now they want to use it like them. This is not how this works, this is not how you solve this. For Egypt is a matter of life, it is not because they don't want to share, they cannot. Egypt, they don't have enough rain and when it comes to Ethiopia or Uganda or those countries, a lot of water they have and it is not only the Nile. Some of them have other resources. Egypt they set monthly, we cannot give up some of our shares because we use the maximum. Maybe Sudan likewise. Egypt and Sudan are in the downstream, Ethiopia above them.

So, Ethiopia decided to build this big dam. If this went well and they allow, then maybe the other countries in the upstream start also building dams. Then, there will be no water for Egypt. So, if they agreed then it will be something that happens and they can use it, so others will follow. I visited the Nile Basin Initiative, it was in Uganda and we listened to them. They said if we don't use water efficiently with the high drought threats, in those countries in Africa, where lots of development uses water... They said that if we don't sit together and start seeing how we can manage these resources, we will need another Nile to live.

Egypt now negotiates with Ethiopia, I don't know the number of countries that share the Nile but it is not only them and it originated from Uganda (Victoria Lake). Those people invite Egypt and Sudan to join this initiative, why does not this initiative become a whole mission like Danube or like Rhine? First of all, in Egypt, they do not have another resource, the only water resource that they have is the Nile. In Ethiopia they have more, they said now they use it for electricity, but you know, whenever you have water electricity you have the economy. And the economy consumes water, you never know, right? For Egypt it is a matter of life. Even in Egypt, the availability of water when the only resource is the Nile is 700 and when you talk about the poverty line is 15000.

So, they have to sit together. We have this principle of international water law of equitable use and the use of water efficiently. But again, the *no harm*, those together, how you can. How you have no harm and how you have an equitable share? Is difficult. You cannot have all principles at the same level: either no harm or equitable share. If there is a lot of water, no problem! Like it was in the past years, so they have plenty, so they don't care. You use this or that but with Egypt, the only resource of water is the Nile and they use this share at maximum. So, how can you take some of their water? So, for them, they want to make sure that this share will not be decreased. This is one of the no harm right? Because when there is a conflict, human rise, human dignity is number one. That is why is difficult, it is not that they are stubborn, they don't want to share, but this is a matter of life for Egypt and Sudan. In Sudan, they have a flood and they said okay we have this dam that protects you from floods.

This will be when it is solved, when you have this Nile Basin Initiative is what happens in Danube or Rhine. When they have a problem of pollution that is why this is the need and they sat together and you have this commission. If you have a commission at the basin level with all the countries they said. Because those people in the upstream have to know what is the problem. And then, if you have this commission, of course, it will take time to gain trust but at least they can listen together and any new development has to be share, informed. It is not like the GERD in Ethiopia, it is almost done. What will they do? They have to think about how they can cooperate together, but it should be at a higher level. There is why they need a third party to see this.

So, you consider that transboundary basin management is important.

Yes, of course. This is the only way that we can make cooperation, that can make no war. The mere reason for war is water, so try to solve problems so you will not end up forced to go into war. In Ethiopia they can pump the dam, I don't know if they will do it and I don't know what is in Egypt's mind but it is a matter of life for them. Again, it is better for them that they can sit together because it is not the problem of only Egypt, Sudan, and Ethiopia. Ethiopia is upstream compared to Sudan and Egypt, but I know I heard from this initiative that they plan to produce 6 billion megawatts of electricity hydrobars. What does it mean? Maybe they then plan on having more dams, how do you get this hydropower? And they want to have this electricity for them and they will export.

But if GERD passes with no problem with Egypt, then others will follow. If everyone will decide on their own and of course definitely then it will be a conflict, a severe conflict. These are difficult things, this has to be managed at the Basin level. All the riparians should be present and should be treated at the same level. We should not look different at underdeveloped countries. When you sit at the same table you have to have the same rights and the same respect. And this will take time. They have already the Nile River Basin Initiative. Why not start working on this? Why to go to the African Union or others? Go to this initiative, because these people need to know. Now, this is the problem with Ethiopia, later on, it will be the problem with Uganda or other countries, because they are in the upstream. If Ethiopia builds this big dam, then others will build big because they plan to have electricity or hydropower and they only think it is them. Sometimes you need somebody but I don't know what is behind Ethiopia, they are very confident. And you know the Prime Minister got a Nobel right? He is the Prime Minister who launched the dam, he got the Nobel. How? Because of having this dam. So, for them, I would say cooperation is the solution and they have to start (Egypt and Sudan) have to join this Nile River Basin Initiative because all riparians have to sit together and start talking. Now Ethiopia is upstream and building a dam but maybe later, if somebody in the upstream builds another dam, (Ethiopia) they will end up like our Unity Dam, a dam without water.

If there is no coordination, if there is no transboundary management, they will build the big dam and then the country above them maybe will make another dam, so the water will be less because Ethiopia is in the downstream comparing to those in the upstream, but the solution is cooperation and it should be between the countries. And even when they started in Ethiopia. When they started, then they wrote the first announcement, those who are universal are only the representatives from the three countries. So, the decision should be between them, not the

three countries. Because it is not the problem of the GERD, others maybe follow. I think the decisions should be among them, not others.

In your opinion, do you think that diplomacy and international law are useful tools to solve this matter?

Yes, of course. And it will. **

Do you think that is feasible enforcing international law to the countries?

International law is a principle, even there is no special course, no. If you see international law it is a principle and even some of them like I told you, contradict. How you will have no harm, equitable share. I think they are good principles and they help but again, we need to have people that sit together and regional institutions where all the riparians sit together and start talking and exchanging information. They can start with small things to build trust. Look at **, even with our peace treaty we cannot use International Law to ask Israel to realize some of the Jordan River water. This is of no harm, they have already. If we will apply this, they already have this national carry. So, if we ask them to realize some water, this will damage, this is no harm. And even with this principle, you cannot force. The only thing that can help is to have cooperation, to think of how to make better cooperation and again, it is important that all the riparians sit together. It is important for me, that the decisions should be internally between them. I don't know if maybe then later the international community can help finance some of the investments with development. People when they feel the benefit of things they will feel it but the decisions should be taken by the riparian themselves.

What do you think Jordan could do to end this because you mentioned cooperation and everything but it seems like it will last forever.

We signed an agreement and the water annex number 2 but not all the riparians are there. It will not last like this. Even if we don't have riparians it has to be revisited because the situation is different now. We have climate change, we have to sit together, the water is very scarce, we have here a lot of refugees, the growth rate is very high, ** and now we have the corona as well. And with corona the increasing demand. The peace treaty is there and will not change but annex 2 which talks about water, it has to be revisited. ** It was written in 1940 and the information was not right. We have to work hard, exactly, even with climate change. We have

to have our model, we have to know how Jordan will be affected. It's not only Jordan because we live in an area of shortage of water and the impact will be severe on the water scarcity.

So, it is the implementation. The peace treaty takes a technical committee, they have to sit together and always think about how they can produce, how they can manage the water, they don't. So, they only met twice a year to talk about the water budget and this is the same amount, is 55 million and how we need and we don't need it, something like this. They don't even get a step further than this. I would say that a peace treaty is there so nobody thinks or wants to go back to the war, it is not the option. But even with the peace treaty, I am a water expert so I'm only talking about annex 2, but we can do better. In Israel they have the best irrigation system in the world, they complete with **, they have very good agriculture. So, if we have the right, then we can exchange so people can learn. We can exchange, they have the best desalination technology in the world. So, why not start these technical committees with this, with what we have in the current situation as we have these technical committees on water *. If this can be upgraded to have a commission and not just Jordan and Israel and Palestine, why not the three of us? Especially with the Palestinian, it is paralyzed, they cannot do anything. It is very difficult, in Jordan the situation is much better but in Palestine, they cannot, if they want to import like pump, this technical committee is nonsense because there is another committee in Israel where they have to take approval, many approvals, and all the time they got this. So, it is very difficult to help them.

So, why not start again to have this commission, we can start with Palestine, Jordan, and Israel, the three of us, and sit together and see how we can improve. We can start with having the right information, especially with climate change, why not have this alarming system, why not to think of all the new technology of treated water, the new technology of producing water, anything that can efficiently use water. Why not sit together but we need it, it is better first this technical committee and they can upgrade to be a commission. This commission we can start because we have already signed the peace treaty, we can start Palestine, Jordan, and Israel and later if this is what the condition to having a fair peace, it is not the more powerful the one who decides, this will not work. We have to be at the same level, so then when the Palestinian problem is solved and we have the two state solution, once Palestine on board, I don't think Syria and Lebanon if it's solved they can get on board, because we need them, of course, they are riparians for Yarmouk River and Jordan River. We can start with this commission like the Rhine, it is a real commission, it is a real one. It does not work, this technical committee, the

current situation. if we can work. We need help to sustain and improve the peace that we have so others can join if they find something that is good to come. So if we work for this, first with the technical committee and we can have a commission at the Basin level, the three countries sat together and then they have to work to see how they can help Lebanon, there is also a problem with this and Syria and have them on board with this comprehensive peace, the Middle East will be something else.

But the current situation with what happens in Palestine is much work, and I'm talking from the people's point of view. How come you will see the Palestinian are quelled in the street and how they are treated, even in Palestine they don't have water, they drink *. If you see this unfairness that happens to the Palestinians nobody will come, even the people, and forget about the government but the people they have to see. ** Solving the Palestinian problem in the Middle East with the two-state solution if we have them. I think it will solve a lot of problems and keep us progressing with the peace.

You were mentioning that the three countries have to sit and talk: Jordan, Israel, and Palestine.

For the time being yes, for the time being. They talk but bilateral. They talk and we used to meet because I was the Secretary-general of the Ministry of Water and at that time I was the chairman of this Red to Dead project. And in this project the three (Israel, Palestine, and Jordan) sat and we have other initiatives. One of the initiatives for the peace treaty that they call the Exact initiative where Jordan, Palestine, and Israel sat together and shared information and data. I don't know if it is still working but is one of the good things that should be replicated. It was a very good thing. But they sat, they talked bilaterally. It is not fully institutionalized let's say. It is not that they don't sit, it is no that they don't talk, they do. But we need to have like a commission, a legal institution where they sit together, a commission you know in the Danube. And in the Rhine they took them like 60 years to reach where they are now, it is not from day one.

But in the peace treaty with us and Palestine and Israel, we have two different treaties, there is this technical committee, and in the technical committee apparently they don't do a meeting. In Jordan, they only meet and decide but the idea or the objective of having this technical committee is to sit together and think about how we can improve the water security. I said this year in summertime and wintertime, ** we have to think how we can use the water beneficially.

We have to think about agriculture and new crops, we have to do research, to study what will be the impact of climate change but this is the role of the committee. So, once we have this commission at the river basin we can start with Jordan, Palestine, and Israel because we have a peace treaty already. Syria should be part, Lebanon also, but they don't sign the peace treaty, how can they join? But we can start with this, this commission then, the secretariat of this commission they can do a lot of stuff together, they can even think about new projects and new research, anything, but we have to have this institution.

So, basically you say we need cooperation and revisit this peace treaty that we already have and to sit and talk.

It is not the peace treaty, it is the annexes, at least implement. Let's say this amount of water. Annex 2, what we were promised on Jordan, it is not right because it was not based on real data. You know, **, we were promised to have like three hundred million. Annex 2 is said it should not be a written document and we have to think together. Many things have improved, there is a lot of development in technology, in everything. In Jordan, we are very good at solar energy, why we not produce solar and share? Israel might have water and I guess importation because we need water for drinking. We can exchange but without having this regional commission, transboundary commission on Jordan River, we cannot proceed and a technical committee and we have to have the three countries. This is important but I don't think, none of the countries think back to war, but we don't want to be forced to go to conflict. If the situation continues like this you never know what will happen. If we are not doing something that will improve, you will never know what will happen. Especially now with Corona and the economic situation of the Jordanian. They cannot buy bread, unemployment is 25%. And with quarantine and restrictions, those who work on the taxi, and in the shops, they are losing money and the situation is very difficult. And when you see people hungry you cannot stop them. You see people that feel hungry and thirsty, how can you control those people? How can you guarantee there will be no conflict? Very difficult.

INTERVIEW WITH JIHAD KANAAN

Mr. Jihad Kanaan. Head of the Syrian International Water Directorate.

How would you describe the water dispute in the Jordan River Basin?

This dispute stems mainly from the occupation of Syrian, Palestinian, and Lebanese lands by the occupation state of Israel. This is the main issue.

How do you see this dispute evolving in the future? (not only from a political point of view but also considering demography, climate change, and the country's development)?

Given the demographics, climate change, and the country's development; things are getting more complicated, of course, but political issues cannot be separated from all other factors mentioned.

In this context, what do you think is the role of international organizations (such as the UN or AU), powerful countries, or other relevant actors in the international sphere?

There is something ambiguous here, I see that international organizations, powerful states or other relevant actors in the international arena do not have a strong will for a just solution, they are mainly interested in achieving the interests of the Israelis at the expense of other states in the region.

Do you think that shared river basins / transboundary basin management is a good approach to deal with the conflict?

No. This a complete package issue, I think that partial approaches are inappropriate.

In your opinion, are diplomacy and International Law useful tools to solve the conflict?

Only when a solid will for a fair solution accumulates, which is far from true at the point.

Do you think that enforcing International Law is feasible?

Enforcement is not feasible; it always leads to future disputes that could be fiercer. As you can see the world is suffering now from bloodsheds resulting from the forced solutions at the dawn of the twentieth century.

In order to reach a successful agreement, do you think all riparian countries must participate (or be taken into account) in the negotiations?

It depends, every case is unique.

What could Syria do to settle the dispute on good terms?

As the head of Syrian international water directorate, I am not willing to disclose such a thing.

INTERVIEW WITH ALON TAL

Mr. Alon Tal. Chair of the Tel Aviv University Department of Public Policy, as well as a Professor in the same university. He holds degrees in environmental policy, law and economics. In 2003, he authored an amendment to Israel's water law which for the first time formally granted nature rights to water allocation. In 2018, he was the lead petitioner in the largest class action in Israel's history about water resources, suing chemical plants in Rotem for contamination of the Havurat Yehudah Aquifer and the Boqeq stream.

How would you describe the water dispute in the Jordan River Basin?

Dormant. At least among decision makers, it is pretty much a non-issue.

How do you see this dispute evolving in the future? (not only from a political point of view but also considering demography, climate change, and the country's development)?

The situation in the River is unlikely to improve. I expect that water scarcity will make life for Jordanian and Palestinian farmers even more challenging and economically problematic than it is at present.

In this context, what do you think is the role of international organizations (such as the UN), powerful countries, or other relevant actors in the international sphere?

I believe that international actors can raise the stature of the present situation politically. But it will take a great deal of money to move forward and the question remains – who will pay for the desalinated water required to produce a minimal environmental flow? Ultimately, the diversions from Syria and the reduction in precipitation due to climate change bode badly for the River's future.

Do you think that shared river basins / transboundary basin management is a good approach to deal with the conflict?

Yes, I think it's the only way forward. Unilateral actions will accomplish very little.

In your opinion, are diplomacy and International Law useful tools to solve the conflict?

They are imperfect tools to be sure, but there are the only ones we have. Ultimately, an enormous intervention by a philanthropist could be a game changer – and a well-meaning

billionaire would probably be more influential than international environmental lawyers or diplomats.

Do you think that enforcing International Law is feasible?

The instances where the International Court in the Hague have ruled in on water disputes are extremely limited. Nation-states don't seem to see water bodies as a sufficiently central national interest to invest the resources and diplomatic capital in suing other nations in international court. Presumably, a more vociferous environmental movement, focused on utilizing international norms to improve local natural resources, could change the political calculus. But there are few signs that this will happen any time soon. But you never know. Greta Thunberg has changed a lot of our assumptions... hasn't she.

In order to reach a successful agreement, do you think all riparian countries must participate (or be taken into account) in the negotiations?

No. Lebanon, for example, is a relatively modest player and they are in the watershed as well. But definitely, Israel, Syria, Jordan and Palestine need to be at the table.

What could Israel do to settle the dispute on good terms?

Israel has already stopped pumping water from the Kinneret lake to the national water carrier. We could insist that the water we transfer to Jordan, that will only increase over time, first flow through the River Jordan before being collected and pumped to Amman. If I become Minister of the Environment, this is certainly something I would support. But Alas, that appointment does not seem to be imminent.

INTERVIEW WITH AARON WOLF

Mr. Aaron Wolf. Professor of geography in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. He has an M.S. in water resources management (emphasizing hydrogeology) and a Ph.D. in environmental policy analysis (emphasizing dispute resolution). Wolf has acted as consultant to the US Government, the World Bank, the US Bureau of Reclamation, and several international governments and development partners on various aspects of water resources and conflict management. He has been involved in developing the strategies for resolving water aspects of the Arab-Israeli conflict, including co-authoring a State Department reference text, and participating in both official and "track II" meetings between co-riparians around the world. Wolf, a trained mediator/facilitator, directs the Program in Water Conflict Management and Transformation at the Oregon State University.

What is the situation of water-related conflicts right now in the world?

It's a big topic. There are three hundred ten transboundary basins and in most of them, water is either not an issue or it is an issue of cooperation. There are treaties in place, river basin organizations in place, and on a few of them, there are tensions. The political tensions are exactly the kinds that you are looking at. Somebody upstream wants to build something and somebody downstream does not want them to build it. In a few places, the idea that people are developing projects without coming to an agreement first with their neighbors about how to deal with the projects is something that is creating stress in a lot of the world. In the two that you are looking at, in the Jordan, in the Nile, but also on the Mekong, in the South, China has dams on most of the headwaters of the rivers of Asia. So, I think that is the general. And then within countries, there is lots of tension between different users worldwide.

How do you see them evolving in the future? (not only from a political point of view but also considering demography, climate change, and the country's development?)

I think it is worth dividing two sets of issues. One is what I think of these water crises, and that is simply the lack of water for human security for environmental security, people suffering, people dying, ecosystems being degraded and I think on a crisis level I think things are bad and getting worse. Water is increasingly becoming polluted or dam dubbed or being used for the industry at the expense of local populations, sustainability, and ecosystem health. So, on the

one hand, at the crisis level, the amount of devastation and suffering is bad and getting worse. On the other level, there is the political side, the political stresses and I think similarly there is going to be more stresses in the future but I think we are learning increasingly how to deal with those stresses and so there are better treaties, there are better monitoring mechanisms, there are better institutions in place to help people dialogue and so, if I were to think about those two worlds, I would think that a crisis is one that we really need to be focusing on. Poverty alleviation, sustainable development, ecosystem health and continue to help build institutions that are so important to facilitating dialogue on the political side.

In this kind of conflict, what do you think is the role of international organizations, powerful countries, or other relevant actors in the international sphere?

Yeah, well they do quite a lot. Again, the biggest trigger is a development project without an agreement and those development projects get funded even by a development bank, by the World Bank, or even by a big country like China. So, thinking about, do you fund a project or can you use the funding as an incentive to help countries come to dialogue, is something both the World Bank or sometimes countries like China are using. And also I think there is quite a lot of the topmost levels the World Bank, the UN, governments like the Swiss, the Dutch, the Germans are all helping to build different institutions to facilitate dialogue. There is a global water hub in Geneva that has a lot of support, there are universities all over the world are in a partnership in water cooperation and diplomacy and I think increasingly in the water world we are training people, training people like you, International Relations people to think about water and also training people in war to think about International Relations and political relations. So I think all of that is helping to create a cooperative world in these issues.

In your opinion, are diplomacy and International Law really useful tools to solve the conflict?

Absolutely, this is exactly what's facilitating it. I mean, you have seen them, in the Nile and the Jordan, you've looked into their histories. It is generally third parties that have been helpful in bringing some kind of diplomacy and I think on the Nile they keep looking on the right third party. Went to the Arab League, then to the US. And Sudan was facilitating, so there is no shortage but regularly it's requiring, I mean you are an International Relations student, you know that when a politician is talking about these issues, they are talking to their eternal constituents and so they are not necessarily interested in the problem solved. So, they have to

keep a political front of strength, faith, patriotism, unity... and often need a third party to be the object of observer and to give them the excuse almost to enter into dialogue.

So, you consider that diplomacy is necessarily having a third party? Because maybe in a two-party conflict they can have diplomatic relations by themselves, right?

Yeah, you're right. Spain and Portugal have wonderful agreements in place and there are still tensions but you're right, they solve them without any third parties. And the same with U.S. and Canada. I think if relations are generally good, you don't need a third party. When I'm thinking diplomacy, I'm generally thinking about facilitation but yeah, you make a really important point. I'm trying to think, certainly in Europe... I think that when countries have decent relations, that they can solve things by themselves and prefer to. But if there is any kind of stress or power differences then I think third parties are useful.

But, I think that at some point diplomacy gets stuck.

Yeah, that makes an awful lot of sense. You need the excuse or the incentive to be able to move forward.

Do you think is feasible to enforce International Law?

No. International Law, certainly International Water Law is basically an umbrella under which countries have to negotiate but there is no real court that can determine who's right or who's wrong. The Court of Justice is useful if the countries agree to be there, both countries agree to be there. But there's no enforcement mechanism. I think the Court of Justice has heard one water case and they basically said: Go back in negotiating. They have no expertise, it is not like a court system within a country that somebody can say: this is legal, this is illegal, and we are going to send the police after you if you are doing something wrong. There is no international police. So, the international Law is there are guidelines but in the people who are responsible for it as the UN, the ICC, they basically set up consultative bodies to help people negotiate. At the end of the day, it is only through negotiations that these issues are resolved. And as you said, negotiations lead to treaties, river basin organizations, or at the very least, implicit agreements between the countries who are involved.

Do you think that shared river basins / transboundary basin management is a good approach to deal with the conflict? For all the countries to manage the river together.

It is interesting, so how would that look in the Jordan? Five different countries that to this day, Syria, Lebanon, and Israel do not want to be in the same room together. So, how would this look in your model?

It is difficult, especially in the case of the Jordan River. I thought about this because Spain is one of the countries to use this, but I know it is difficult.

I think you're right in principle. Where I always get stuck is, it feels like the more countries are in the room, the more difficult an agreement becomes, so what I think has happened in basins like the Jordan is that you have sets of bilateral agreements. Lebanon and Syria have an agreement, Syria and Jordan have an agreement, Jordan and the Palestinians have an agreement and the Palestinians and Israel have an agreement. So, there is nobody that manages the basin as a whole but each of these agreements is kind of coordinated in a way that the basin is managed fairly and effectively. And certainly, I think you could do the same thing in the Nile. I mean, the six upstream countries in the White Nile have an agreement [the Nile Basin Agreement]. I think the trick now is Ethiopia, Sudan, and Egypt. But, certainly is not farfetched a thing that Sudan and Ethiopia could have an agreement and Sudan and Egypt could have an agreement and they could work in parallel with each other.

In this context, what is your view on the water conflict in the Nile River Basin?

I think it is solvable. The direction of your questions I think is the direction of the solution. I think to think about it you would have to think about the White Nile and the Blue Nile together and think about how the management of both could be helpful. So, the big problem that needs to be overcome is that Egypt feels very sensitive about what's flowing into its country, and its focused now on this dam in Ethiopia. But it's not farfetched to think that on the White Nile you could have a program of water efficiency that would allow more allow more water to come to Egypt from the White Nile who would allow it to be more flexible on the Blue Nile. And that is what I think the real possibilities are, is to think of the basin as a whole, about different baskets of benefits that everybody could benefit from. Once the dam is full, there won't be as much of a conflict, they just have to figure the timing of the flow. But it's now, it's the filling period that is most sensitive. So, I think that may be the kind of solution that would be helpful. But the question is, which party has the standing to be able to facilitate that kind of dialogue and that is the problem that I haven't seen be resolved yet.

And in the Jordan River Basin?

I think in Jordan there are two very interesting sets of issues that are related. I think Palestinian water rights are critical and something that Israel can actually be flexible about because they have been moving so heavily on desalination that they actually have enough water to be able to make the kind of great gestures that are helpful in diplomacy. If the Israeli government wanted to they could totally disengage from Palestinian water sources and just leave the Palestinians to manage their own without endangering their own water security. And the other interesting issue is on instream flows in the * Jordan and I think there likewise I think the fact that is such an important river spiritually for all three religions in here is something that really does facilitate dialogue. And so groups like EcoPeace, I think they've really been leading the way on both sets of issues, on trying to alleviate suffering in Gaza and also in trying to make sure there's enough water for instream flows. I think there are real opportunities for advances, it's just as always the politics have to be right. Israeli just had an election, the Palestinians are about to have an election, Jordan has its own set of stresses, Syria has its own set of stresses, you know, it's a tough neighbor for political stability so, slowly, slowly.

7 TABLES AND FIGURES

- Figure 1: Kумmu, M. (n.d.). *Water Scarcity Matrix (adapted from Falkenmark 16 and Falkenmark et al. 17)* [ONLINE] Retrieved from:
https://www.researchgate.net/figure/Water-scarcity-matrix-adapted-from-Falkenmark-16-and-Falkenmark-et-al-17-A-the_fig3_311537501 [Accessed May 04, 2021]
- Figure 2: ResearchGate (n.d.) *The Nile River Basin* [ONLINE] Retrieved from:
https://www.researchgate.net/figure/The-Nile-river-basin-Source-The-World-Bank-2000_fig1_284813246 [Accessed April 25, 2021]
- Figure 3: Acreman, M. (n.d.) *The Jordan River Basin 2005* [ONLINE] Retrieved from:
https://www.researchgate.net/figure/The-Jordan-River-Basin-2005_fig1_45182385 [Accessed April 25, 2021]
- Table 1: Peretz, D. (1955). *Development of the Jordan Valley Waters* [ONLINE] Retrieved from: https://www.jstor.org/stable/4322748?seq=11#metadata_info_tab_contents [Accessed April 20, 2021]
- Table 2: Self-made