

# Water Rights and Equity in the Arab Region

## 1. Introduction

Water Rights refer to the right of a user to use water from a water source. That water source could be a river, pond, lake, stream or a groundwater source.

The term "Water Equity" refers to the equity of water resources allocation for different users within the same sector and also among different sectors. The equity issue often takes international dimensions when it involves different riparian states that share a river basin.

The search for Equity is a big quest, along which many questions should be answered such as how are the priorities set? How could water be fairly allocated between different sectors? And when equity is achieved, are the benefactors free to trade their shares? (EWP, 2005). The answer to these questions would surely help in defining at least the outermost frame to water rights and Equity and bridge the gap in opinions that has developed around these issues.

## 2. Water Rights and Equity in International law

Two divergent approaches to water law and water rights were internationally developed: the doctrine of "riparianism" and the doctrine of "prior appropriation". The riparian doctrine held that a riparian right holder had the right to make "ordinary" use of the water flowing in the watercourse. A riparian land owner also had the right to use the water for any other purpose provided that it did not interfere with the rights of other proprietors, upstream or downstream (FAO, 2006). The prior appropriation doctrine accorded the best rights to those who first used water just as they had accorded mining rights to those who first located ore deposits (FAO, 2006).

The Helsinki rules of 1966 provided eleven factors pertinent to hydrographical and socio-political criteria for the equitable use of water. The two main principles of the 1997 UN Convention are "equitable and reasonable utilization", and "no significant harm" to other watercourse states, (Diabes-Murad, 2004). The concept and guidelines for "reasonable and equitable" sharing of common waterways were introduced in the Helsinki Rules of 1966, as well as the 1997 UN Convention. The 1966 Helsinki rules and the 1997 UN convention had some differences in terminology, for example, The UN convention pertains to water in "an international water course" as opposed to "international drainage basin" in the Helsinki rules. (AbuZeid, 2001).

## 3. Water Rights and Equity from a religious perspective

”ونبنهم أن الماء قسمة بينهم كل شرب محتضر“

صدق الله العظيم

سورة القمر، الآية الثامنة والعشرون

قال رسول الله صلى الله عليه و سلم "المسلمون شركاء في ثلاث الماء و الكالأ و النار"  
صدق رسول الله صلى الله عليه و سلم

عن أبي هريرة رضى الله عنه قال "حرم رسول الله بيع فضل الماء "

***"And tell them that Water is shared for everyone"***

Holy Qura'an 54:28

The story behind the descendance of the last verse is the story of the prophet Saleh, Thamoud: the tribe that he was delivered to, and the miraculous camel. The message behind the verse is the equity in water between humans and other beings.

Islam's Holy Book "The Qura'an" has many verses assuring that water is the source of life and a gift from God. The instructions of Islam are applicable to all times. Islam organizes the relationship between God, man and nature. Man is referred to as a trustee (khalifah). Being a trustee is more of a responsibility than a privilege. It entails being answerable to God as to how God's gifts were managed and used in a wise and fair way. Hence, the necessity of proper water management and equity becomes clear. Being a gift from God, water actually belongs to God, it could be implied that the issue of water pricing would be a very controversial one in an Islamic community; in fact it is prohibited according to one of Prophet Mohamed's (PBUH) sayings. Some Islamic scholars have studied some of the sayings of prophet Mohamed (PBUH) that mentioned a story about a man purchasing a well, and accordingly concluded that water can be sold (Farouki et. al, 2002). However, it has been later confirmed that Prophet Mohamed has prohibited selling water. As for the purchased well, it was bought by a Muslim (Osmam Ibn Afan) from non-Muslims who do not adhere to the prophet's sayings. The official quote (hadeeth) from Sahih Muslim which was narrated by Aby-Huraira says " The Messenger of Allah, Prophet Mohamed (PBUH) has prohibited the sale of the gift of water" (Farouki et. al, 2002). Mentioning the word "gift" in the hadeeth makes the reason behind prohibition self explanatory. Another hadeeth says "Muslims are partners in water, earth, and fire."

#### **4. Water Rights and Equity in the Arab Region**

Although the agricultural sector has the major water share, the official Egyptian water allocation policy prioritizes domestic water requirements over all other sectors followed by the industrial and agricultural sector. There is a governmental policy to control the cultivation of high water consuming crops like rice and sugarcane however, there is a need to clearly identify and justify water rights given to farmers who cultivate these crops, and to better define the concept of equity when other farmers demand similar privileges.

On the riparian scale, there have been some agreements involving Egypt and the Nile, River countries. These agreements were supposedly meant to insure fair water allocation for all riparian states. However, some of these agreements were affected by the European colonization that prevailed in the 19<sup>th</sup> and early 20<sup>th</sup> century. In Egypt's

case, agreements, such as the 1929 agreement, were made to assure that downstream countries such as Egypt remain to get its natural river flow of the Nile; however, upstream countries saw these agreements as assuring Britain's supremacy, and the servitude of its needs. The more significant and meaningful River Nile agreement was that between the two independent states of Egypt and Sudan in 1959. The agreement was a great move in terms of applying water equity and rights on the portion of the Nile River basin waters that naturally flows in Northern Sudan and Egypt in the downstream part of the Nile. Although, some argue that the agreement left out the other eight countries that share the Nile, it is not clear how their inclusion would have made a difference to the shares of the most downstream countries of the natural flow of the river that is currently being fully utilized.

Jordan is one of the arid countries in the Arab Region, neighbors countries with the highest on-growing political tension in the world. Not only the water resources are scarce, but also shared with other countries and often disputed. The water allocation trends in Jordan tend to achieve equity by the highest economically efficient techniques. Each household is entitled to 15 cubic meters of water per month at subsidized prices (ESCWA report, 2003); this secures the basic needs for personal and sanitation uses.

As for sectoral water allocation, agriculture consumes about 80% of the water. However, it only contributes to the national GDP by 3 to 5 % (ESCWA report, 2003).

On the riparian scale, water allocation to Jordan is dictated by many international agreements. The water conflict over the waters of the Jordan basin dates back to the late 1800s and reflects the Arab-Israeli ever growing struggle. The Jordan River has been an additional reason for escalating the conflict caused by Israel's claims to the riparian states waters.

Rainfall is the main source for surface water in Yemen. The law says that water rights are granted to individuals under the condition that they use it in a manner that doesn't affect the public benefit or the prevailing traditions in a certain area. Written laws are contradicted by local customs, as Qat consumes 20% of the nation's water. There is a huge "underground" water market in Yemen. It is well established, but operated by the "wrong" people who has no official rights in the water they supply. Article 20 of the Yemeni water law states that domestic uses have the highest absolute priority. Article 21 of the same law assigns the second priority to five sectors. Although, it is not explicitly mentioned, it can be indicated that the law gives equal priority to those five sectors. The five sectors are: animals, public buildings, irrigation, industry and other environmental needs. Article 27 defines Water Rights and assures that these rights would only be taken away in emergencies. Article 29 states that a land owner who is privileged with specific water rights can include these rights when selling the land, i.e. the water rights will be transferred to the new owner.

Direct rainfall is the main source of water in Tunisia. As it is highly variable, the country has suffered from many droughts over the years. The government has issued a mobilization plan that aims to enhance the efficient use of water (Tunisian Ministry of Agriculture, 2002). 80% of the water is allocated to agriculture and the demand for water by other sectors is highly increasing (UNDP, 2005). The other water consuming sectors are the domestic sector, the industrial sector and tourism respectively. Existing

water markets are implemented among farmers or between farmers and urban water companies or hydropower companies.

The main national concern in Morocco is to decrease the water availability gap between the rural and urban areas as the current water allocation is strongly proportional to rainfall areas. More than 13 million people living in the rural areas rely on non-renewable groundwater for both domestic and Irrigation uses. The current water use situation in Morocco is chaotic as individual benefits are more favored than the common benefit. Moreover, the government lacks the appropriate financial and human resources to inspect or assure the enforcement of the law. (Ministry of national soil, water and Environment, Kingdom of Morocco, 2003).

Saudi Arabia is ruled by the Islamic law (Shari'ah) which would certainly have many reflections on water rights and equity. Private ownership of water is only applicable when the water source is fully enclosed, the same way it can be enclosed in a jar or a pool. Otherwise, the possession of water is not valid, although the right to use water is. The government is implementing a series of measures to reallocate water to other sectors to cope with the increasing demand in these sectors, mainly the agricultural sector. The government approach is based on the efficient use of water (ESCWA, 2003).

Aside from the water struggle with Israel, The Palestinian Water Authority (PWA) that was established in 1996 has managed to issue the water law in 2002. It has been concluded that most of the water rights for Palestinian people are in the hands of Israeli authorities, who are encroaching on the Palestinian water right which is a tributary to the right of self determination (Biswas et. al, 2008). The Israeli occupation authority has destroyed 140 Palestinian wells to divert the water through Israel's national carrier. Palestinians were only allowed to dig 13 wells in almost 20 years. Israel keeps drilling wells alongside the borders of the Gaza strip which adds to the Palestinian misery, it has been estimated that Gaza will have no potable water within fifteen years (League of Arab States, 2008).

## **5. Recommendations:**

A common vision on Water Rights and Equity should be clearly identified and respected in the Arab Region.

Riparian countries should cooperate on the allocation of all possible resources and support to bridge the gap between water availability and demand.

An efficient law enforcement mechanism is absolutely important in preserving water rights.

Achieving equity must relate directly to people's needs and consider their social and economic conditions. That should be the basis of water allocation among different sectors. Assigning the first allocation priority to the domestic sector should always be reassured, in support of the achievement of the millennium development goals.

Using rainwater (Green Water), where available, for agriculture and other purposes should be highly considered. Riparian countries with abundance of rain should understand arid countries high need for river water (Blue Water) (AbuZeid, 2008).

Water allocation within the irrigation sector should not be in excess to high water consuming crops on the expense of other crops.

Countries sharing a common water resource should agree on many terms defining the equitable and reasonable use of the water body in a more practical way.

Water is a public property. It is not for sale. Water rights are privileges awarded to those who deserve it for a specific purpose, trading these rights may be against the public interest.

Profiting from water clearly contradicts the fact that water is a public property. Profiting from water services could be regarded as a disguised method to profit from water, as the whole trade will still be based on people's need for water. Profiting from water services might be accepted in communities seeking additional luxurious services, in the presence of other non-profit options. In the same light, selling bottled water can be regarded as selling a luxurious method of drinking water, given that water is also available for free.

Applying “Volumetric Cost Recovery” for irrigation and drinking water services may be reasonable measures for achieving equity. “Targeted Subsidies” is recommended where charging for the domestic water services may be categorized by income, and maybe waived for individuals below a certain wealth limit. It is up to governments to set the level of subsidy it can provide to its population. Some countries can afford to provide full subsidy for all population, and others may be able to provide partial subsidy to some or all of its population. On the other hand, the proportion of people’s taxes that contribute to water infrastructure investments by the government has to be assessed and considered when setting any water tariffs for cost recovery of water services to avoid double counting.

Bridging the knowledge gap in Arab states could be seriously enhanced by public awareness on Water Rights and Equity. Individuals need extensive knowledge on both issues on both the national level and the riparian level. Building a knowledgeable community has a positive impact on the public opinion, which in turn affects policies and law enforcement for better water management.

Bridging the opinion gap on terminology and concepts of water rights and equity measures in the water sector at the national and transboundary level, between countries within the region and/or outside the region is necessary and requires substantial efforts to achieve.

It is also essential to take water out of any political struggle, be prepared to challenge the status quo, both in relation to political power and water availability. When water rights are clearly defined and conflicts are resolved, the next step should be working towards a joint management system to be fairly applied basin wide, and also craft agreements which are sustainable over time, using customary international law as a bench mark.

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