



Politics, Water Resources and Peace in the Middle East

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ABSTRACT

Water is essential both for life and economic activities. Water plays important role in manufacturing and food production. Natural resources can be root causes for conflicts and wars among the countries. As water is a natural resource, it can be subject for conflicts within the countries and among the countries. Water resources are not homogeneously available throughout our world. As the Middle East has scarce water resources, one of the main causes for wars in the Middle East is the scarcity in water resources. For this reason, attempts towards solution of water problem can contribute to the peace in the Middle East. Peaceful policies both within the countries and among the countries are vital so that the countries can manage their water resources efficiently and effectively as well as they can solve water conflicts through negotiations and collaborations.

KEYWORDS : politics, water resources, wars, peace, Middle East.

Human beings survival depends on the natural resources' availability. Control over natural resources is among the key causes of war (Wright, 1942; Acemoglu et al., 2012). For example, natural resources were among the main reasons in the Iran-Iraq war, Iraq's invasion of Kuwait, and the Falklands war (Caselli et al., 2012). As water is also a natural resource, it can effect countries' relations and water resources can be a reason for war and conflict (Cooley, 1984; Bulloch and Darwish, 1993; Falkenmark, 1992; Gleick, 1993; Dajani, 2011:3). Despite of the fact that the world population increases, the water resources are remained constant or even are decreased due to the pollution (i.e. industrial effluents). The importance of water for sustainability of human life has been emphasised by the Federal Councillor Didier Burkhalter in keynote speech of the Global High Level Panel on Water and Peace as quoted from (FDFA, 2015): "... While the world population grew fourfold in the 20th century, freshwater withdrawals grew nine times. According to this year's World Water Development Report by the UN, global water demand is projected to increase by another 55% by 2030. The world is projected to face a 40% global water deficit if the current trends continue" (FDFA, 2015).

Water is essential for human life and it is also essential for economical productions. Water is needed for human being primary needs as it is essential ingredient for food, crops and animals as well as for industrial development having their own water footprint. Arjen Hoekstra introduced the concept of the water footprint which focuses on both the direct and indirect use of water by a consumer or producer (Hoekstra, 2008). For example, the water footprint of 1 slice of bread is the amount of water that is needed to produce that amount of 1 slice bread. Similarly, in order to produce 1 hamburger (150g) 2400 litres of water is required, and for 1 slice of bread (30g) 40 litres of water are needed (Hoekstra and Chapagain, 2006). The water footprint of a human being or a community can be defined as the amount of water used to produce the services and the goods (Hoekstra, 2008:51). All these facts emphasise the importance of the water in the world.

Water is essential for industrial production. There is both direct and indirect water consumption in producing the industrial products. 400,000 litres of water is needed in order to produce a car (Canada Water Week, 2012). In Alberta's Oil Sands mines in order to produce one barrel of oil 2.5 barrel of water is needed (Canada Water Week, 2012). Furthermore, water plays an important role in the production of daily consumer products. For example, 36 litres of water is needed in order to produce 0.5 litre of pet bottle coke (Hoekstra, 2013).

Water is essential for the sustainable development and peace in the world. The Federal Councillor Didier Burkhalter emphasised that water is not only essential for countries' development but it is also essential for security and peace in the world and that competition over water can contribute to the emergence of conflicts (FDFA, 2015). He further stated that: "*Bad governance exacerbates the risk of water-related conflicts, as it impacts on variations in the distribution and availability of water resources.*" (FDFA, 2015).

37 out of 1831 water-related incidents observed between the years 1948-1999 throughout the world, have reached to conflict level whereas 30 out of these 37 incidents have been emerged in the Middle East among Israel and its neighbour countries (Wolf, et al 2003:39; Dajani, 2011:3). This fact reveals the importance of water resources for the peace in Middle East. Middle East is among the problematic regions with respect to water resources. Middle East has scarce water resources. 5% of the world's population lives in the Middle East and the North Africa whereas this area has 1% of the world's renewable fresh water resources (Kubursi, 2011:2). As 5% of the world's population located in the Middle East just gets 1% of water resources, the peace in the region depends on the peaceful solution of the water problem among the countries. Furthermore, there is risk that conflicts on water resources can deteriorate availability of water resources and related infrastructure making the situation even more severe. For example, water has even been used as a weapon of war in the conflict in Syria and Iraq as in Syria, half of the production capacity of the country's water infrastructure has been destroyed due to the war (FDFA, 2015). Caselli et al. (2012: 2-3) argue the following: "*Locations of natural resources are potentially important determinants of territorial conflict... We model war as the stochastic draw of a new border, which may lead one of the two countries to capture some of the other country's territory*". A resource can cause war if it is a factor of state power (e.g. control of mineral resources between the Athenians and Thasians during the Peloponnesian war 2500 year ago) (Lip-schutz, 1989; Thucydides, 1954:54 Gleick, 1994:42). The emergence of root causes of conflicts on the water resources in the Middle East emerged thousands of years ago. Starting from 3000 BC there were conflicts on water resources in the Tigris and Euphrates river valleys (Gleick, 1994:42). Today conflict over water resources continues in the area as emphasised by the Former United Nations Secretary General Boutros Ghali who said that 'The next war in the Middle East will be fought over water, not politics' (Wolf, 2007:214; Dajani, 2011:3).

For the last century many wars took place in the Middle East. Some of these wars are 1948 and 1967 the Six Days war and 1973 the Yom Kippur war (Encyclopaedia Britannica, 2016). Even if Jordan River can be classified as a small river in international standards, both Jordan River and the ground water resources in Jordan Basin have vital importance for their region, as there are not much alternative water resources in the area (Gleick, 1994:42). Israel made an attack to Egypt and Syria in 1967 (Gat, 2005). After the 1967 war Israel increased its sphere of influence over Jordan River. Jordan and the West Bank inhabitants lost important share of their water supplies (Lowi, 1990: 342; Gleick, 1994: 43). During the Six day war both Egypt and Syria lost territory. Egypt lost the Sinai Peninsula and the Gaza Strip; on the other hand Syria lost Golan Heights (History.com, 2016). "*Israel's occupation of the Golan also eliminated all Syrian access to Lake Tiberias*" (Dajani, 2011:8). Yom Kippur War started in 1973, and in this war Israel was attacked by Egypt and Syria (Encyclopaedia Britannica, 2016) as Egypt and Syria wanted to regain the territory that they lost in the 1967 war. Syria wanted to regain Golan Heights (History.com, 2016). One of the important reason for this, is that region has important water re-

sources. Golan Heights are also important for Israel due to the water reserves in the area. Two thirds of the area is under Israel's control and this area provides approximately 30% of the fresh water supply of the country (Gurtler, et al., 2010:14; Shuval, 2000:614; Dajani, 2011:7).

Water resources are still important for the peace in the Middle East. As in 1979 Anwar Sadat said that, *"The only matter that could take Egypt to war again is water"* (Starr, 1991; Gleick, 1994:43). Furthermore, Syrian leaders wanted Israel to give Golan back to Syria before negotiations (Renger, 1998:49; Miller, 2000:134; Dajani, 2011:11). Taking this information into consideration, if the Middle East countries cannot solve the water problems of the region, more problems and conflicts can emerge among the countries.

The importance of water resources will further increase in the near future due to depleted water resources. This situation is expected to further endanger the peace in the world. As quoted from Sundeep Waslekar's article on the 2nd December 2015 published in the Jordan Times (Waslekar, 2015): *"At present, water resources are depleting at the rate of over 320 billion cubic meters in Asia, Africa and the Middle East. This is equal to ten Euphrates Rivers disappearing from the face of the earth every year. If this trend continues, there will be steep decline in food production and a fresh demand for about 200-300 million tonnes of food grains in the international market."* Waslekar (2015) further emphasised that the scarcity of water will increase the food prices which will result in food riots, forced migration, terrorism, dictatorships and even perhaps in a world war.

As the Middle East has scarce water resources and as water is essential for food production, conflicts can emerge not only among the countries but also within the countries, if the countries cannot solve their water problems. Rising food prices played an important role in the emergence of the Arab Spring as even before the Arab spring, there were bread riots in Morocco, Jordan, Yemen, Bahrain and Egypt in 2008 (The Economist, March 17th 2012). Another important point related with food is that most Arab countries import half of their food from abroad (The Economist, March 17th 2012). For this reason, if the Middle East countries cannot solve their water problems, wars can happen due to the water related conflicts. This will worsen their economies and deepen their problems.

In conclusion, natural resources can play important role in the emergence of conflicts and wars among the countries. Water resources have been among the main causes of many conflicts and wars around the world as water is important for economy and food production. Water can be seen as one of the main causes of wars in the Middle East where there is scarcity of water resources. If the Middle East countries cannot solve their water problems, both internal and external conflicts can occur. For this reason, Middle East water problems must be solved in order to provide peace in the region. It is very important that the countries manage their water resources efficiently and effectively. They need to solve water conflicts through negotiations and collaborations.

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