India-Pakistan Political Relationships; a Water War between Neighbor Countries

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ABSTRACT

Water is considered a valuable resource of our planet. For most of the regions in this world, water has been in profuse supply all together and regarded as an accessible resource for mainstream humanity. Unfortunately, this situation prevails no more. Almost all the countries, are facing issue of water shortage. The South Asian economies are at most alarming stage. According to UNDP Pakistan will face water scarcity issue by 2025. There are various factor which are responsible for this water shortage such as, lack of dams, unnecessary use of water, poor water management and most important Indian breach of 1960 agreement between India and Pakistan drafted by World Bank. There are various issues between India and Pakistan from the very beginning of 1947, both countries spend huge amount on defense equipment. If the matter of water does not resolve among the neighbor centuries, both economies will have to suffer a lot.

Key Words: India Pakistan Relationships, Water Scarcity, Water Shortage, South Asia. Pakistan.

Introduction

Water is considered a valuable resource of our planet. For most of the regions in this world, water has been in profuse supply all together and regarded as an accessible resource for mainstream humanity. Unfortunately, this situation prevails no more. In its recent Global Risk report, World Economic Forum mentioned water crisis in top ten risks for its impact (World Economic Forum, 2018). World experience water stress when yearly water supplies goes down below 1700 cubic meter per person and if this threshold declines to less than 1000 cubic meter, it is termed as water scarcity while there will be absolute scarcity when this limit fall below 500 cubic meter (Damkjaer & Taylor, 2017). Improved living standards, changing consumption patterns, rising world populace, inefficiencies in water use, and economic development mainly are driving forces to scarce the water resources worldwide (Ercin & Hoekstra, 2014; Vörösmarty, Green, Salisbury, & Lammers, 2000). According to UN-Water Development Report, 2017, 1.2 billion people that

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makes two third world's population are experiencing water shortage for as a minimum one month per year. Approximately, one third of underground water systems are already in distress (Richey et al., 2015). Moreover, one fourth global population don't have essential infrastructure to extract water from rivers (FAO, 2016). Burek et al., (2010) further mentioned that nearly, half world's populace is residing in water scarce regions and this situation can be worst to 4.8-5.7 billion people by 2050.

Explicitly talking about South Asian region, UNDP, (2018) mentioned it as the fastest growing zone with growth rate at 45.3% during 1990-2017. Out of seven members economies, only Pakistan is having rainfall less than 500 mm annually. Contrastingly, all other countries in South Asia have an average rainfall of more than 1000 mm per annum (State Bank of Pakistan, 2017). According to Asia Foundation, 22 major big cities of India encounter water scarcity on daily basis. Kathmandu, Nepal's capital has become accustomed to people waiting in their long queues for procuring drinking water. Also, in Karachi, Pakistan, water shortage has compelled the people to protest on roads.

Water Scarcity in Pakistan

Pakistan is categorized as semi-arid country where annual average rainfall remains below 240 mm. Approximately, 180 billion cubic meters of water originates from India, our neighboring country and the main source is vaporization of snow in Himalaya mountain range (Briscoe, Qamar, Contijoch, Amir, & Blackmore, 2005). Basically, there are three main resources of water in Pakistan. First one is rainfall which pours down with an average of 212mm and 53mm during the Kharif and Rabi seasons respectively (Naseer, 2013). Secondly resource is glaciers that spread over the 13, 680 square km area of Pakistan.

But scientists have asserted an alarming situation that Himalayan glaciers have reduced to its one fifth in last three decades and are believed to disappear by 2035 (AFP, 2011). Third main resource is Indus River that is nurtured by the glaciers of Karakoram and Hindukush and is principal source of freshwater and satisfy industrial, agricultural and household needs. Pakistan heavily relies on Indus river and its tributaries (Satluj, Chenab, Ravi, Jhehlum, and Kabul) for almost 140 million acre feet water supplies annually (see Table 1).

Table 1: Water Availability and River Flows (1979-2015)		
	Average (MAF*)	
Water availability		
Available water at farm gate	76.70	
Available groundwater	47.01	
Availability of water-Total	123.71	
Available groundwater	50.02	
River Inflows	143.30	
Available Supply-Total	143.32	

* Million Acre Feet

Source: Water and Power Development Authority (WAPDA)

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According to Naseer (2013), Pakistan's economy is significantly dependent on growth. Hence the water resources are shared to irrigation purpose and leave behind not more than 10% to drink and to use for sanitation. At the time of independence, water availability per capita was 5,600 m³ but now, this volume is declined to 1000 m³ and this scarcity is anticipated to grow by 2025 when available water can conform to needs of 35 population only ("Water storage capacity just for 30 days," 2013). Further, it has been noted that one third population in Pakistan is deprived of safe and pure drinking water and this is causing expiries of 630 children per day only because of diarrhea.

Reasons of Water Scarcity in Pakistan

Less Rainfall

The hydrological cycle is responsible for maintaining the systematically flow of water. This cycle is mainly dependent on vaporization. This process is badly influenced by immense contamination of oceans, rivers, and wet lands. According to one Pakistan based UN report, nearly 7000 to 9000 hectares' jungles per annum are cut that has left only 5% large land of jungle which previously used to be 25% of all land.

High Population Density

Pakistan is ranked 6th most densely inhabited country of the world with 197 million in 2016 that is growing at the rate of 1.95%₂. Available water is not enough to satisfy the needs of this huge population. Already stuck in tribulations health, food, poverty, and education, expanding population will put extra burden on available scarce water.

Indus Water Treaty (IWT) 1960

After partition, the two nations Pakistan and India were in a dispute over water distribution. In 1960, Indus Water Treaty was initialed through World Bank. Both parties agreed over the allocation of rivers and canals. Pakistan got hold of western rivers: Jhelum, Indus, and Chenab. Eastern rivers, Beas, Ravi, and Sutluj came under the jurisdiction of India. This agreement was a mismatch between irrigated area located in east and origin for water supply to Pakistan in west. Now a day, Indian's intentions of constructing dams on Pakistani allocated western rivers in violation of IWT have posed a serious threat to water shortage scenario. Moreover, the other party either does not release water causing shortage of water or releases excessive water causing floods ("Indus Water Treaty," 2003).

¹ https://nation.com.pk/30-Dec-2013/water-storage-capacity-just-for-30-days

² The World Bank Data

Negligence to Silting of Reservoirs

Water shortage and load shedding have enraged the citizens and instigated billion dollars loss too. Despite this, no government focused on silting of reservoirs that reduces the reservoirs lifespan. In last 36 years, only Tarbela and Mangla dams were harmed up to 6.6 MAF silting and this is distressing. Silting damages the storage capacity and hence impairs the purpose for which reservoirs were built (Gandapur, 2010).

Table 2: Main Reservoirs of Pakistan, their Location, and Capacity			
Sr. No.	Reservoir	Location	Storage Capacity*
1	Tanda	Kohat	0.08
2	Tarbela	Abotabad	10.20
3	Rawal	Islamabad	0.04
4	Mangla	Mirpur	5.6
5	Warsak	Peshawar	0.05
6	Hub	Malir	0.09
7	Khanpur	Khanpur	0.06

*In MAF= Million Acre Feet

Main reservoirs of Pakistan are listed in table 2. To maintain their capacity, timely silting is necessary to avoid the water shortage in the country.

Others

Water scarcity is not only limited to the factors described above. However, inefficiencies in utilization and management of water, ignoring the construction of new dams for more water storage, global climate change, and deforestation at large scale are main other reasons of water scarcity spreading over Pakistan.

Role of India in Pakistan's water shortage

A World Bank report confirmed that the Pakistan is in the world at number three in water scarcity. Another report of UNDP and PCRWR alarmed that South Asian countries will face severely water shortage problem by 2025. One of the major reasons of water shortage in Pakistan is neighboring country India's interference. It is also confirmed from very authentic sources that India wants to convert Pakistan into desert. How India contributing in Pakistan water shortage? Almost all the Pakistani river comes from Indian tertiaries. In 1960 with the help of World Bank, it was promised that flow of water will be free to its lower riparian. According to 1960 agreement it was ensured that India has full right to use water of Sutlej, Beas and Ravi and Pakistan has full right of water utilization of Indus, Chenab and Jhelum. In the World Bank agreement is clearly mentioned that the countries have full right of water use, and not changing of any kind in the flow of water. The prime objective of 1960 water agreement between India and Pakistan by World Bank was to bring equality in natural resources usage and bring peace in the relationship of India and Pakistan. It's worthy to mention here that, Pakistan tried to keep good relationships with eastern neighbor, while India always bring

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threats to Pakistan in different forms. And the major role play by new government of Prime Minister Narendra Modi 2014. The Prime Minister Modi canceled the Committee meeting of Indus water in 2016 and tirades that "blood and water cannot flow simultaneously."

After this tirades, the Indian Modi government started to build dams Kishanganga and Baglihar on river Jhelum and RatleDam on Chenab for electricity production, which is the contrary to the 1960 agreement. The prime objective of Modi this initiative is only to hurt Pakistan in form of water scarcity. Furthermore, Pakistan and India don't have good term due to other several issues as well (Meo et al., 2018)

Indo-Pak relationships due to Water Scarcity

In 1960, the agreement of water was between India and Pakistan with the help of World Bank. Basically in this agreement it was clearly mentioned that how both the countries will share water resources. There are 6 rivers which flow from India to Pakistan as the Chenab, Indus, Beas, Sutlej, Ravi and Jhelum. According to World Bank 1960 treaty Beas, Sutlej and Ravi will be used by India and Jhelum, Chenab and Indus by Pakistan. Alongside the Chenab in 1990 India constructed a hydro-electric plant in Doda district, while this river was designated to Pakistan to use its resources.

After this the various political, religious and government officials saw that India wanted to control water of these rivers. While this was an act of breach of agreement between India and Pakistan made by World Bank, which is clearly an indication of threat for the Pakistan economy. From the various channels this will effect Pakistan, per capital water will be reduced, water for the agriculture purpose will be ended. Furthermore, India also released excess water to Pakistan at flood time that create tension as well (Lawteacher, 2018).

Conclusion

Almost all the countries are facing issue of water shortage. The South Asian economies are at most alarming stage. According to UNDP, Pakistan will face water scarcity issue by 2025. There are various factors which are responsible for this water shortage such as, paucity of dams, unnecessary use of water, poor water management and most importantly Indian breach of 1960 agreement between India and Pakistan by World Bank. There are various issues between India and Pakistan from the very beginning of 1947, both countries spend a huge amount on defense equipment. If the matter of water does not resolve among the neighbor centuries, both economies will have to suffer a lot.

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