



Thirsty Nations, From Conflict to Cooperation: Navigating the Climate Change Implications on Pak-Afghan Hydro-Politics



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Abstract: *The security landscape is constantly evolving, encompassing a broader range of non-traditional threats such as environmental, human, food, health, and social security. Water security and related environmental and social threats are significant in this expanded understanding of security. Globalization, urbanization, industrialization, population growth, and the depletion of natural resources pose more realistic risks than conventional military threats. Environmental issues can lead to conflicts between national and local stakeholders, as warned by Ismael Serra Gildin, former Vice President of the World Bank. This article aims to consider water as a non-traditional security threat and explore its impact on Pak-Afghan relations by analyzing water politics' influence and its economic implications for both states. By bridging hydro politics and regional implications, this study paves the way for future research to incorporate the climate perspective in understanding state relations, which is crucial in the current context.*

Key Words: Climate Change, Human Health, Food Production, Energy Consumption

Introduction

Recently, there has been a growing realization that climate change is the greatest serious challenge in contemporary times to human health and food production and energy consumption and security. Storms, tornadoes, flooding, and droughts brought on by climate change have already had an impact on both states, as have other recent events (McCracken, 2019). There is a lot of focus on Pakistan's western borders regarding the flow of water with India, but few people are aware that there could be a dispute over Pakistan's western borders regarding the

water flow with Afghanistan. Those who reside in Pakistan are now compelled to live in a country where good drinking water is scarce. There are several other reasons that contribute to this, including population growth, urbanization, global climate change, a lack of conservation measures, and industrialization. At this point, there appears to be no inclination from Afghanistan to come to an agreement with India on water sharing on the Kabul River, as there was in 1960 (Cooley, 2011). Obtaining fresh water is going to be challenging for Pakistan in the near future due to the massive population and

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numerous storage reservoirs upstream in Afghanistan.

As an example, Pakistan and Afghanistan have little to do with the rise in global temperature. There is only ten per cent as many carbon dioxide emissions produced by the world's least developed countries as there are by those in more developed countries (Majidiyar, 2018). In spite of this, Pakistan and Afghanistan are more vulnerable to the effects of climate change than the rest of the globe because of their geographical location and social and economic inadequacies. If there were a lack of resources and an incapacity to adapt, the situation would get even worse.

Climate change is supposed to have a devastating effect on people living in poverty on both banks of the Kabul River. People in poverty are less able to adapt to climate change because they depend more heavily on natural resources. Because of this, this is why. Five river basins drain Afghanistan into the Pamir Mountains. Kazakhstan and Tajikistan are two of the Central Asian countries that share the Amu Darya River. Three countries share their capitals: Uzbekistan, Tajikistan (and Tajikistan's neighbouring Tajikistan), and Iran (Conca, 2006). As with Iran and Turkmenistan, Iran and Pakistan also share Harirud, whereas Afghanistan's capital city of Kabul is shared by the two countries. Even though most of these rivers originate in Afghanistan, the country loses more than 75% of its water to neighbouring countries, creating a perpetual issue for the landlocked country. However, the rest of the region is enjoying an increase in water supply, whereas Tajikistan is suffering a decline in supplies. In order to avoid conflicts with neighbouring countries, water shortages must be addressed before they get out of hand. So, riparian countries will know exactly how much water they get from their source countries, which is good news for everyone.

Similarly, Pakistan and Afghanistan are connected by a variety of connections, including geographical proximity, language, culture, religion, regional and tribal affiliations, and ethnic nodes. Despite such different similarities, they experienced a cataclysm of interrelationships. The regional and international

dynamics of power politics have exacerbated the hostility between the two neighbours. Major irritation-Durand Line, pointing, refugees, Afghanistan's Indian policy continues to influence their interrelationships. In addition to struggling with myriad traditional security challenges, both countries are facing Pakistan. Extreme non-conventional safety threat, i.e. the difficulty of shared waters with no regulatory mechanism. Both nations are following unilateral Water Sector Strategy on shared rivers without consulting the co-riparian. (Baksh, 2014)

Pakistan and Afghanistan's proportionally waters of rivers however have signed no settlement on the way to together govern and control the shared water sources. This might also additionally turn out to be a first-rate difficulty as ongoing electricity and irrigation tasks upstream in Afghanistan, especially on shared water of the Kabul River Basin (KRB) might also additionally affect water glide downstream in Pakistan (Majidiyar, 2018). Similarly, any diversion at the Chitral River in Pakistan's aspect of the basin might also additionally have a bad effect on groups residing in the Afghan aspect of the basin. The shared waters can as a consequence turn out to be a critical irritant among the riparian states in the absence of any regulatory framework.

There is an urgency to increase an incorporated mechanism primarily based totally on the essential precept of gain sharing in preference to dividing waters or any unilateral developments. In the idea of gain sharing, there may be a focal point for far from sharing volumes to sharing advantages derived from water sources (Gleditsch, 2006). Likewise, is the shift in technique from 'my water' vs. 'your water' which leads to a 0-sum sport to a wonderful sum sport, treating water as a 'not unusual place pool'. It makes a speciality of harnessing and sharing the most efficient ability of water sources for the most gain of groups and economies. A cooperative improvement of shared water sources will allow each of the riparian states to make the most of the total ability of the Kabul River and could offer a clean street toward a cautiously chalked-out water-sharing regime or treaty. Instead of dashing into an all-encompassing treaty dialogue, the two states can

first discover promising avenues for cooperation in dam improvement, watershed management, enhancing efficiency, coping with floods and droughts, layout and infrastructure, statistics sharing and institutional arrangement.

With this in mind, this article attempts to bring water into the realm of security as a non-traditional security threat and discusses the impact of climate catastrophe on Pak-Afghan relations by (i) analyzing the water politics impact on relations and (ii) its implication on the economic front for both states. This study shall try to build a bridge between Hydro politics and its implication on the region. This study shall provide a pathway for futuristic research to take into consideration the climate lens of state relations as it's the need of the hour.

Water as a Non-traditional Security Threat

The world's security environment is constantly changing with changes in security discourse. More comprehensive security covers a wider range of non-traditional threats facing the state, from security as pure military security to environmental security, human security, food, health and social security (Gleich, 1996). Water security and water-related environmental and social security threats are well-positioned in this broader understanding of security. Globalization, urbanization, industrialization, the rapid pace of population growth, and the consequent rapid depletion of natural resources are more realistic threats than weapons and the military. According to Peter Gleick, environmental problems can lead to conflicts between national and local stakeholders. Ismael Serra Gildin, then Vice President of the World Bank, warned in 1995: "If the war of this century is fought over oil, the war of the next century will be fought over water (Gleich, 1996).

Development and Economic Growth Under Climate Change

The changes in Global climate "represent a major Security threat to the economic growth of Pakistan. The country is vulnerable in different sectors like water scarcity, food security, migration, and socioeconomic development

(McCracken, 2019). The neighbouring states and regional competitors have posed serious concerns in the shape of new alliances and economic engagements.

In this emerging scenario, there is a dire need to develop a comprehensive study plan that would scientifically evaluate the opportunities and limitations of Pakistan's National and foreign policy in the context of global climate change (Basharat, 2015). Pakistan is contributing very little to greenhouse emissions but unfortunately, the country is on the list of the top five worst affected countries of global climate change.

Pakistan is an agricultural state and mostly depends on agricultural production for its economic growth but due to the global climate issues, it is difficult to achieve the sustainable goals of development because of severe weather conditions for the last few years (Baksh, 2014). In 2021 the current statistics shows that in the first two weeks of January because of heavy smog in all different parts of Pakistan most of the socio-economic activities like the flow of goods, transportation and labour are at rest because the smog is affecting everyday life very badly. As visibility reduces significantly due to smog, unprecedented traffic issues are also being caused. Distance of minutes has to be covered in hours because of poor visibility during night, early morning and evening. Several casualties are being reported in traffic accidents during peak hours of smog. Power outages have also increased because of it (Gleditsch, 2006). Overall the economy is suffering badly due to this climate change.

There is little scientific evidence regarding the accurate causes of this polluted fog (Westcoat, 2000). While some experts blame the coal-fired power plants in India for these adverse climatic circumstances, others believe that it is being caused by sand and dust storms in Middle Eastern countries. Burning of agriculture waste, smoke-emitting traffic, uncontrolled pollution, poor implementation of environmental laws, improper disposal of industrial waste, indifference from the general public and numerous other factors have all played their part in worsening the environmental issues in Pakistan.

Winter crops in Pakistan are also suffering at the hands of this deadly smog and bad weather conditions. The field workers are unable to work in the fields like they used to before. The Farmers and labourers working at the crop fields used to start their work at the very beginning of the day and for several hours they work and then take a break near midday and wind it up by afternoon because the weather and environment were very friendly (Cooley, 2011). This has been a practice for generations. Now because of bad weather, the early risers cannot start their agriculture work in the early morning hours because the heavy smog makes the air unbreathable and the working conditions are not suitable till the sun has risen for three to four 14 hours. The harvests and their yields are also being exaggerated due to this air pollution. So the productivity of agricultural land is also affected severely, with deterioration in quality. It will be difficult for Pakistani exports to compete in the international market. Standing crops are also being poorly affected by this foggy condition. Smog in the current year is worse than last few years and it is a sorry state of affairs that such foggy winters are expected in Pakistan and neighbouring countries for the coming years too. Very little effort is being put into making things better. The government as well as the layman are complaining about it, but taking very few practical steps to improve the situation at large.

Trans-boundary Water Issues and Management

Furthermore, water isn't a countrywide useful resource — it is a Tran's boundary aid that spreads past administrative boundaries. Afghanistan isn't always a single kingdom in this location going over scarcity of water. But some other states like Iran, India, Bangladesh, Pakistan, and different neighbouring states also are facing water deficiencies (Gould, 1988). So, as Afghanistan shocks to finance within the control of its water reservoirs delivered with the aid of building dams, irrigation structures, diversions and other infrastructure at a bigger scale, it needs to be a hazard multiplier for Afghanistan's members of the family with neighbouring states. Currently, Afghanistan has one settlement with Iran that was signed in 1973, which outlines the allocation of discharge from

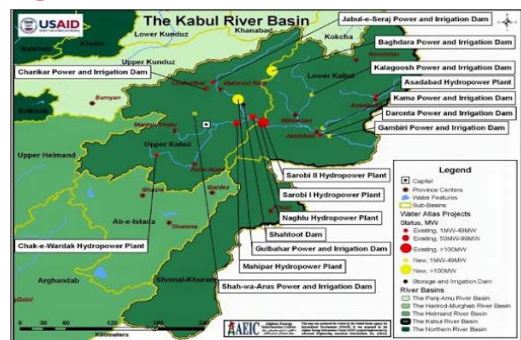
the Helmand River to Iran in 12 months. (Baksh, 2014)

The 2011 Water Scarcity file of the US stated that “the U.S. Technique ought to exacerbate local tensions” if the interconnection of water problems among Central and South Asian states is omitted. Thus, the control of water needs a general coverage that guarantees the maximum green utilization and maintainable abstraction of water, within a bigger global background, that has been assigned to the near neighbour nation of Pakistan (Wolf, 2007). It is truly important for the Afghan government to be involved in mutual and multidimensional discussions, through a technique known as hydro diplomacy, which has been largely absent from deprived of that critical procedure, and arrangement growth will be faced with severe obstacles.

Analyzing the Pak-Afghan Relations Under Water Politics

There is no other country in South Asia than Pakistan, fronting severe threats from global climate change. Pakistan is under severe water stress due to environmental causes, so our focus must be on India's construction of dams on the eastern tributaries under the Indus Waters Treaty and croft the control to turn away Pakistan's water.

Figure 1



Source 1: Kabul River and its Branches

Although possessed with the water disagreement with India, some in the country are conscious of a new probable clash rotting on the western boundaries in the form of the Kabul River, the

water flow between Pakistan and Afghanistan (Westcoat, 2000). Therefore there is a dire need to keep a vigilant eye and conduct a comprehensive study to understand the Pak-Afghan relationship in this particular context. In addition to that, India Afghanistan's investment, to make Dams on the Kabul River has created significant fear for Pakistan. So there is a need to develop a scientific study to analyze Global climate change as a threat multiplier for the constrained Pak-Afghan Relationship. Transnational Basins Mutual by Afghanistan and Adjoining States The United Nations in 2006 said that the water crisis is not due to a bodily absence of freshwater, as a substitute for the mismanagement and absence of funding in water supplies.

However, with the assistance of the global network, Afghanistan has been rebuilding these systems. The worldwide network supplying help has in the main centred on rehabilitating and rejuvenating vintage water networks and structures that were destroyed. However, the World Bank noted that 17 the funding and packages for the Agricultural and Water area have had a modest effect on the "rural economy and enhancing rural livelihoods." The Ministry of Water and Energy reports that 90 per cent of general water intake inside the USA Is for agricultural functions, which sees more than 50 per cent water loss because of inefficient systems of water management — specifically unsustainable irrigation for crop manufacturing (Baksh, 2014). There are formal and casual irrigation systems in Afghanistan. The formal systems are huge-scale irrigation schemes that evolved with the help of the primary authorities in financing, control, operations, and maintenance. However, 88 per cent of the entire irrigated place is still done through casual structures of irrigation, which can be centuries old and traditionally evolved to cope with water management locally.

In casual systems, water control is monitored and administered through traditional water masters called Mirabs. Farmers meet with the local Mirab for some exceptional purposes, which include discussing irrigation plans in addition to resolving disputes in some instances the Mirabs bodily open and close the channels for

irrigation. The Ministry of Water and Energy blames most of Afghanistan's water disasters on its "vulnerability" to climate exchange, bringing up a sixty-two per cent drop in rainwater (Conca, 2006).

. Higher common temperatures are also increasing the amount of snowmelt from the mountains earlier in the 12 months. A lack of infrastructure will result in this snowmelt being misplaced as runoff instead of being stored in reservoirs. With eight million Afghans presently dealing with food lack of confidence, this variety will extensively increase with the drought aggregating the meals deficit in 2018. Afghanistan is likewise taken into consideration as one of the global maximum inclined areas to desertification, that's the rising motive of natural disasters together with droughts, floods, soil erosion and landslides.

Conclusion

The Kabul River is vital to Afghanistan's destiny, power independence and economic increase, and to Pakistan's expansion of the energy it provides to its citizens. The whole United States of America of Afghanistan generates only three hundred megawatts of strength or approximately per cent of the strength generated by means of Pakistan. As an end result, Afghanistan ought to import around -thirds of its energy from associates in Central Asia. Projects presently under improvement promise to triple Afghanistan's strength technology, however also have the capacity to reduce the availability of water downstream.

The extraordinary claim for water sources on each facet of the border, blended with anticipated discounts in water accessibility because of herbal and artificial actions demand the want to collaborate on the distribution of the river water. The shift from weather exchange to water security is basically about how the sector needs to speak about sustainability challenges. Water isn't a part of the weather trade hassle. Rather, weather exchange is part of the water hassle. Scholarship and policy papers in herbal useful resource management have to now not solve questions like, "What does this have to do with weather exchange?" Rather, scholarship

and advocacy in herbal aid and environmental law and policy have to be sought to answer the question, "What does this have to do with water protection?" This shift in communication is

possible all the greater critical with the new Trump administration's hostility to weather alternate-framed policy discussions.

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