

Essay : Water crisis is a national security threat to Pakistan

Outline

I. Introduction

Thesis statement: The water crisis in Pakistan is more than a shortage. it's a ticking national security time bomb. With depleting resources, internal tensions rise, and diplomacy is strained. Therefore, water scarcity is an existential national security threat.

Write simple sentences to avoid structural mistakes

II. Correlation between water crisis and national security

III. Water crisis a national security threat to Pakistan

- (a) Geopolitical tensions on water resources
- (b) Economic downturn due to water crisis
- (c) Social unrest as communities compete for limited water resources
- (d) Internal displacement because of unavailability of water
- (e) Energy vulnerability due to decline in hydropower production
- (f) Water scarcity a leading cause of food crisis
- (g) Biodiversity and environmental degradation

- (h) National defense challenge ✓
- (i) Water theft and black market ✓
- (j) Limited access to clean water ~~can~~ result in health crisis ✓
- (k) Disputes and tensions with India over the Indus Water Treaty ✓
- (l) A setback to industrial sector ✓
- (m) Inter-provincial conflict over water resources ✓

IV. Conclusion

Also mention
recommendations to
counter this challenge

Water scarcity is like an invisible enemy infiltrating a nation's defenses. Just as a country needs a strong army to protect itself, ensuring ample water resources is vital for its survival. Without enough water, the nation becomes vulnerable, impacting agriculture, health and overall stability. There is a strong link between water resources and national security. Water crisis is a national security threat to Pakistan due to multiple reasons. First among them is rising geopolitical tensions on water resources. Secondly, economic downturn will increase due to water crisis. Similarly, scarcity of water will trigger social unrest and internal displacement. Pakistan will also face energy crisis along with food insecurity if water shortage exacerbates. Further, biodiversity and environment will be destroyed due to declining water sources. Additionally, water crisis is a national defense challenge. It is also stimulating water theft.

Likewise, health sector and industrial sector are vulnerable owing to water crisis. Moreover, regional and inter-provincial conflicts are rising because of scarcity of water resources. In simple words, the water crisis in Pakistan - it is a ticking ~~national security~~ time bomb. With depleting water resources, internal tensions rise, and diplomacy is strained. Therefore, water scarcity is an existential threat to security of Pakistan.

The correlation between water crisis and national security is a pressing issue. Inadequate access to water resources can exacerbate existing tensions, disrupt economies, and lead to social and political unrest. Steven Solomon mentioned in his book "Water: The Epic Struggle for Wealth, Power, and Civilization," that many conflicts and tensions were erupted on a national scale due to scarce water resources. Likewise,

the water crisis poses a direct threat to various sectors - agriculture, health, food - critical for a country's well-being. Therefore, national security is intertwined with water security.

The first reason for taking water crisis as a national security to Pakistan is rising geopolitical tensions over water resources. Due to a significant dependency of Pakistan on different rivers to fulfill its domestic, agricultural and industrial needs. However, the bordering countries have reservations on distribution of water resources. For example, there is a conflict between Pakistan and Afghanistan on Kabul river. Afghanistan has started two projects "salma" and "shatoot" dam on the river Kabul - leading to the decline in the flow of water towards Pakistan. Pakistan's different areas like Peshwar and the merged districts - Bannu, Lakki Marwat are highly dependent

on the water of this river. Therefore, it has become a bone of contention between Pakistan and Afghanistan.

Furthermore, the economy of Pakistan is also badly affected due to water crisis. Pakistan is an agrarian country with more than half of its population is directly and indirectly connected with agriculture. For instance, according to the Water Regulation Authority of Pakistan and the WAPDA, almost 80% of Punjab and Sindh are dependent on three rivers - Indus, Jhelum and Chenab for their agricultural needs. Therefore, the decline in the flow of these rivers will directly affect the productivity of agriculture sector. The decline in agricultural yield means a downturn trend will be reported in the overall GDP of Pakistan. Moreover, according to the Pakistan Council of Research in Water Resources (PCRWR), nearly 50 percent of the land area

suffers from water scarcity. Hence, the scarcity of water has detrimental impacts on the economy of Pakistan.

In the same vein, many social problems and tensions are erupting among communities over meagre water resources. Illegal water hydrants are complicating the issue in different areas of Pakistan. For example, Karachi residents have been experiencing extraordinary disruption in the water supply. The illegal hydrants, which routinely cripple water supply in many areas of the city, flourish because of the clandestine collusion of influential local people, industrialists, law enforcement agencies and water utility staff. Water tankers can be seen plying the streets. The general perception is that tankers do roaring business when there are water shortages. This is pushing people towards frustration, unrest and alienated because of depleting water resources.

In addition, internal displacement in Pakistan has become a pressing issue, primarily attributed to the escalating water crisis. The depletion of water resources, exacerbated by climate change, has led to frequent droughts, reduced agricultural productivity, and compromised access to clean water for many communities. As a result, people are forced to abandon their homes and migrate to other areas in search of better living. As reflected in the book 'Water:

Asia's New Battleground' by Brahma Chellaney that the internal displacement had profound socio-economic implications, creating challenges for both the displaced populations and the host communities. Hence, internal displacement is a threat to nation security.

Similarly, water crisis has far-reaching implications for the country's power generation and overall energy security. The water scarcity has a direct impact on hydropower production, a major source

of electricity in Pakistan. Reduced water availability diminishes the capacity of hydropower plants, leading to energy shortages and an increased reliance on hydrocarbons. This vulnerability is well explored in the book "Water, Peace, and War: Confronting the Global Water Crisis" by Brahma Chellaney, where the author delves into the intricate connections between water scarcity, energy production, and geopolitical challenges. So water crisis will lead to energy crisis in Pakistan.

Conjointly, the water deficiency in Pakistan has catalyzed biodiversity loss and environmental degradation, posing severe threats to the country's ecosystems. As water scarcity intensifies, ecosystems crucial for supporting diverse flora and fauna are adversely affected, leading to habitat destruction and fragmentation.

Reduced water availability disrupts the delicate balance of ecosystems, jeopardizing the survival of numerous plant and animal species. A comprehensive exploration of the linkage between water crisis, biodiversity loss, and environmental degradation can be found in the book "Ecosystem Services for Well-Being in Deltas: Integrated Assessment for Policy Analysis" by Robert J. Nicholls and Charlotte H. Streck. Thus, water crisis is considered as a major factor behind biodiversity loss and environmental degradation.

In the same manner, water scarcity is a leading cause behind food crisis in Pakistan. The water crisis has triggered a significant food crisis, as the agriculture sector heavily dependent on irrigation, grapples with dwindling water resources. It has led to decreased crop yields, affecting staple food production and contributing to food insecurity. Jeremy J. Schmidt

highlights this fact in his book "Water, Abundance, Scarcity, and Security in the Age of Humanity" that there is a deep connection between water shortage and food insecurity. He says that water crisis is a leading factor behind increasing hunger and poverty in the world. Hence, food crisis is an ultimate outcome of water crisis in the country.

In the similar manner, national defense of Pakistan is at stake owing to water crisis. The ^{water} crisis presents considerable defense challenges, intertwining issues of water resources scarcity, regional geopolitics, and security. As water deficiency escalates, it exacerbates existing tensions and potential conflicts with neighboring countries, adding a layer of complexity to Pakistan's defense landscape.

"The Age of Consequences: How the Decisions of Today Shape Our World Tomorrow" by Courtney

White sheds light on the geopolitical and security ramifications of water scarcity. In this way, it is a threat to national defense of Pakistan.

Additionally, the water crisis has spawned a troubling phenomenon of water theft, leading to the emergence of a clandestine black market for this vital resource. A notable case study highlighting this issue involves the rampant illegal tapping of water from irrigation canals, particularly in rural areas heavily dependent on agriculture. The black market for water has become an informal yet thriving economy, where middlemen exploit the desperation of farmers and communities by selling water at exorbitant prices. This illicit trade not only deepens the economic woes of those affected by water scarcity but also

Fuels social tensions. In this way, water crisis is spawning water theft along with a black market.

By the same token, health crisis is becoming worse due to unavailability of clean water. The water crisis is affecting millions of people in Pakistan especially children. Insufficient water supply and poor sanitation contribute to the spread of waterborne diseases, posing serious threats to public health. Contaminated water sources become breeding grounds for pathogens, leading to outbreaks of diseases such as cholera, dysentery and Typhoid. "The Big Third: The Secret Life and Turbulent Future of Water" by Charles Fishman offers insights into the global water crisis and its linkage with various aspects of human life including health. It also highlights how vulnerable communities, especially those in rural areas, bear the brunt of these health

challenges, experiencing higher rates of morbidity and mortality. Consequently, health issues are emerging due to water scarcity.

In the similar fashion, India and Pakistan have faced longstanding disputes over the Indus Water Treaty, a water sharing agreement signed in 1960. The treaty, brokered by the World Bank, allocates the waters of the Indus River system between the two nations. Tensions arise periodically due to concerns about water scarcity, infrastructural development, and accusations of violations by either party. For example, India is building different dams and barrages like Kishanganga, Baglihar dam and many more on the Western tributaries by violating the Indus Water Treaty. These dams and barrages are diverting the flow of water from Pakistan. Moreover, the level of water flow is also

declining. These developments are raising concerns for Pakistan. Therefore, this water conflict can turn into a nuclear flashpoint between these two states.

Similarly, the water crisis has generated interprovincial conflicts, with provinces grappling for their share of the diminishing water resources. Competition over water allocation has intensified tensions among provinces, leading to disputes over the distribution and control of this critical resource. For example, there is a dispute between Sindh and Punjab over the water of the Indus river. Likewise, Kalabagh dam's construction was halted due to Sindh's reservations over its structure and operations. Hence, the interprovincial tensions are affecting the national integration. Consequently, the national security of Pakistan is in peril.

Moreover, the water paucity in Pakistan poses a significant setback to the industrial sector, hampering economic growth and stability. The scarcity of water resources has led to disruptions in industrial operations, particularly in sectors heavily reliant on water for manufacturing processes. As highlighted in "Running out of Water: The Looming Crisis and Solutions to conserve Our Most Precious Resources" by Peter Rogers and Susan Leal, the industrial sector's dependence on water makes it vulnerable to the impacts of shortages, affecting production and amplifying existing challenges. Therefore, industrial growth of Pakistan is heavily affected by water crisis.

To conclude, the water crisis in Pakistan is more than a shortage - it is a ticking national security time bomb. Internal tensions and external threats

are intensifying due to intensifying water paucity. There are following reasons which substantiate water crisis is a national security threat to Pakistan, the first among them is geopolitical tension over water resources. Further, economic crisis and social unrest are increasing. Even the food sector and the ecosystem are not spared. In the same vein, water theft is rising day by day. Lastly, health crisis, regional and national tensions are intensifying owing to paucity of water resources. Hence, water crisis is a national security threat to Pakistan.