



Futuristic Security Council (FSC)

Addressing Water Wars and climate-induced security threats in the
2050s

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Forum: Futuristic Security Council

Issue: Addressing Water Wars and climate-induced security threats in the 2050s

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Introduction

The futuristic security council will be a committee set in the 2050's, hence it is imperative that delegates are aware of possible future events. Delegates should note the importance of evaluating their state's potential risks and tolerance to the possibilities of the future. Security Council is an ad hoc committee, meaning delegates present clauses that are debated as if they were complete resolutions. Furthermore, the Security Council is legally binding and the P5, (China, France, Russia, UK and USA) have veto power.

The 2050s are likely to be a pertinent decade when it comes to global security due to climate change and water security issues. Projections of the coming years based on past events expect temperatures, extreme weather patterns and the depletion of freshwater resources to continue rising across the globe. ^[2]

Water is increasingly becoming an international affair. Due to expected population growth to 9.8 billion in 2050, global water consumption is expected to increase by 20 to 50 percent. ^{[4][11]} This increase of demand for water is likely to increase the number of states which experience water stress or water scarcity. Projections made by the World Resource Institute (WRI) expect an extra 1 billion people to be living in regions with high water stress. ^[6]

Water scarcity is also likely to be further increased by the effect of climate change, which reduces the reliability of water sources. Breaches in water security can cause so called 'water wars' due to states not having sufficient access to water. ^[8] Armed conflicts between countries often come from a lack of resources, as such, a lack of water, a necessity for all people, may very well cause conflicts. Most water wars occur in geographically arid areas that are prone to drought. ^[5]



There are a multitude of other climate induced security threats. Firstly, food scarcity and agricultural collapse have increased over the last century due to a multitude of factors. Secondly, biodiversity is decreasing and can cause ecosystem collapse in extreme cases. Thirdly, the frequency of natural disasters such as hurricanes, wildfires and floods are increasing. Lastly, sea levels are rising and may cause the submersion of low-lying coastal zones. These factors as well as water wars may cause the migration of the populous to different areas.

This research report aims to give an overview of the issue currently as well as possible future events and impacts based on scientific models.

Definition of Key Terms

Water wars

Water wars are armed disputes or conflicts due to competition over water.

Climate Induced Security Threat

Risks to international peace due to climate change effects including extreme weather and resource scarcity.

Transboundary Water Conflict

Conflicts between states which share access to water bodies, such as rivers or lakes over the access and/or allocation of the water resource.

Climate Refugees

People forced out of their homes due to climate induced hazards such as drought, floods or hurricanes.

Environmental Scarcity

The reduced availability of renewable resources due to the effects of climate change.

Hydro-hegemony

The strategic dominance of a state over others via the control of shared water resources.



General overview

Due to increasing global freshwater demand, water stress is projected to become a major factor for regional as well as international conflicts by the 2050s. Currently, WRI projects that over 1.7 billion people will live in areas with extremely high water stress in 2050.^[3] The large majority of which being in the Middle East, North Africa, and parts of South and Central Asia.

Water Wars

Transboundary water resources are quite vulnerable to political tension. There are already existing disputes, including over the Nile and the Indus show how competition over water control can inflame political rivalries. Climate change has and will decrease the reliability of these water resources as such there is a higher risk of water wars, especially in geographical regions with low rainfall and fragile governance.^[5]

The Ethiopia-Egypt-Sudan dispute over the Nile River originated from the Grand Ethiopian Renaissance Dam near the base of the river, where 85% of the water passes through. The dam, which began construction in 2011, seeks to use the Nile to supply a large amount of hydroelectric power. As Egypt and Sudan are upstream of the dam and rely heavily on the Nile for their already limited freshwater supply, they heavily contest the construction of this dam. Furthermore, a 2% reduction in the water from the Nile could result in the loss of 200,000 acres of irrigated land.^[1]



Figure 1 – ‘Ethiopian Dam Effects’ (BBC, 2023)

Climate Induced Migration

Environmental scarcity can cause mass migration of populations in the areas affected. The World Bank warns that up to 216 million people could become climate refugees by the year 2050 due to environmental scarcity.^[13] This mass migration causes security issues for receiving states, as they may not have the capacity to take these refugees. There may also be increased militarisation around borders to prevent illegal immigration.

An example of climate induced migration can be seen in Lake Chad, a lake which since 1960 has decreased in size by 90% and is shared by Cameroon, Chad, Niger and Nigeria. It offers a lifeline to 40 million people, however, due to its overuse and lack of management, it can no longer offer proper livelihood to those people. This resulted in large populations having severe food scarcity. Furthermore, there is a water war occurring in this area due to the insurgence of a non-state armed group called the Boko Haram. This led to the displacement of 2.5 million people from their homes. ^[12]

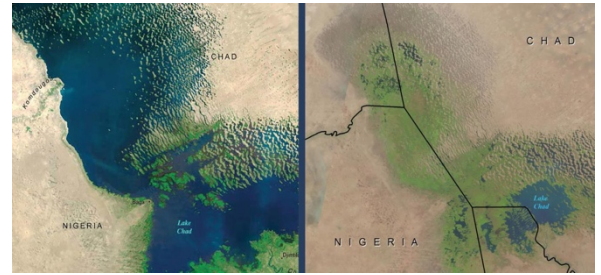


Figure 2 – 'Lake Chad Drying' (UN, 2019)

Maritime Issues

Rising sea levels show another security risk, especially for coastal countries and cities. Due to changing coastlines, disputes over maritime boundaries and territorial waters may escalate. Specifically in the Pacific, Kiribati and the Maldives are expected to lose significant territory ^[14], changing their possible sovereignty under international law. There is also the threat of melting Antarctic ice. Continued warming causing Antarctic ice sheets to melt is expected to add more than one meter to global sea levels by 2100. ^[2] This directly endangers many coastal cities. Melting polar ice opens new Arctic sea lanes and exposes new natural resources. This may cause maritime disputes due to overlapping claims to these routes and natural resources. ^[9] This can especially be seen in the South China Sea, the Arctic and the Indian Ocean.

Militarisation of Water

Armed non-state bodies have increasingly exploited water systems in war to gain social control. During the Syrian and Iraqi conflicts, ISIS took control of the water infrastructure and used it to exert hydro-hegemony. ^[7] In future conflicts, as preceded by earlier conflicts, non-state bodies could sabotage or seize control of water infrastructure as a method of warfare. This would be especially effective in areas already facing water scarcity. Hence, as water scarcity worsens, critical infrastructure will be far more vulnerable, even becoming a strategic liability for governments. ^[10]

Key Events Timeline

Date	Description of event
16 June 1972	UN Conference on the Human Environment: the first major global conference on environmental governance.
21 May 1997	The UN Convention on the Law of the Non-Navigational Uses of International Watercourses is Adopted.
2006 - 2011	Syria's longest recorded Drought.
2 April 2011	Construction on the Grand Ethiopian Renaissance Dam begins.
4 April 2014	ISIS captures Iraq's largest dam, threatening mass flooding.
12 December 2015	The Paris Climate Agreement is signed.
8 October 2018	IPCC report on global warming of 1.5°C is published, warning extreme water stress and increased conflict if global warming reaches 1.5°C.
2021	Yemen water crisis: the destruction and weaponisation of water during the Houthi-Saudi coalition conflict.
20 March 2023	IPCC AR6 published, reconfirming accelerating climate change.
2050	Additional 1 billion people will live in regions of high water stress.

Principal Stakeholders

China

China houses the upstream of many important rivers travelling through Asia, including Mekong, Brahmaputra, and Salween. Its water decisions have major impact on downstream states such as Vietnam, Laos, Cambodia and India.

Egypt, Ethiopia and Sudan

The Nile River passes through all three nations, but the upstream is mainly in Ethiopia. Ethiopia is constructing a dam on the Nile, which may have devastating impacts on the water security of the other two nations.

India and Pakistan

Both nations depend on the Indus River and follow the Indus Water Treaty of 1960. Tensions have increased between the two nations due to increased threats to water security as a result of climate change.

United Nations Security Council (UNSC)

The UNSC is responsible for authorising interventions when there are threats to peace as a result of water or climate security. The committee has already held multiple debates on the topic of climate security.

World Bank

The world bank finances many water infrastructure projects and supports drought resilience and flood adaptations in affected regions. Due to its direct finance of many water infrastructure projects, it can aid in diplomacy in the event of projects.

Potential Avenues for Resolution

There are a multitude of possibilities in solving this issue. Please note that these suggestions are merely suggestions and delegates may provide alternative solutions during debate.

It is possible to simply strengthen the international frameworks which uphold water security globally. Expanding upon and adopting treaties such as the 1997 UN Watercourses Convention in the Security Council would cause it to be legally binding. A possible clause could be based on the Indus Water Treaty which has effectively prevented conflicts between India and Pakistan for over 60 years.

Increased investment in water cleaning technology such as desalination plants as well as eco-friendly technology may aid in the battle against this issue. Furthermore, developing satellite systems to provide effective global warning systems may be helpful.



The improvement of regional basin management may aid localised conflicts between member states regarding water supply due to human effects on border-crossing water bodies. This may be done through the creation of water-sharing negotiation programs.

Counterterrorism programs could be developed in order to protect critical water infrastructure in all nations from terrorism. Due to the Security Council's binding nature, this could be done very effectively.

Arctic security may be improved in order to keep future water levels from rising as well as developing a diplomatic approach to the change in water borders due to changing coastlines.

Suggested Resources

The AR6 synthesis report (<https://www.ipcc.ch/report/ar6/syr/>) – It gives a summary of climate change as well as a more in-depth report with figures and headline statements.

Water conflict chronology (<https://pacinst.org/water-conflict-chronology/>) – A catalogue of conflicts to do with water, very helpful for delegates wishing to delve into their state's conflicts.

The Groundswell Report Part 2 – A report on the analysis and projection of climate induced migration.

World Resources Institute (<https://www.wri.org/aqueduct>) – Reports tracking current and projected global water stress levels.

Climate Change Risk assessment 2021 (<https://www.chathamhouse.org/2021/09/climate-change-risk-assessment-2021>) – Evaluates security risks due to climate change.



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