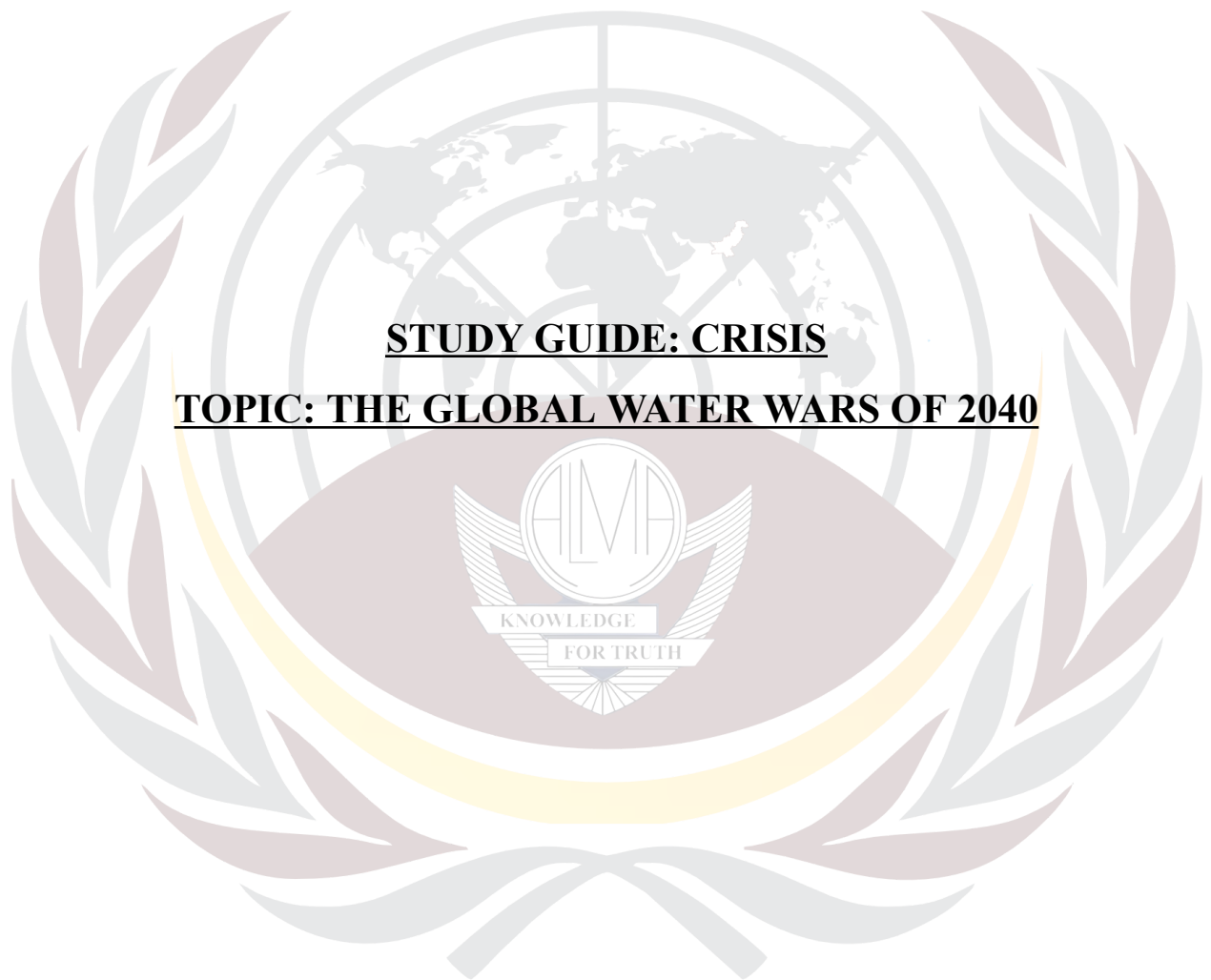




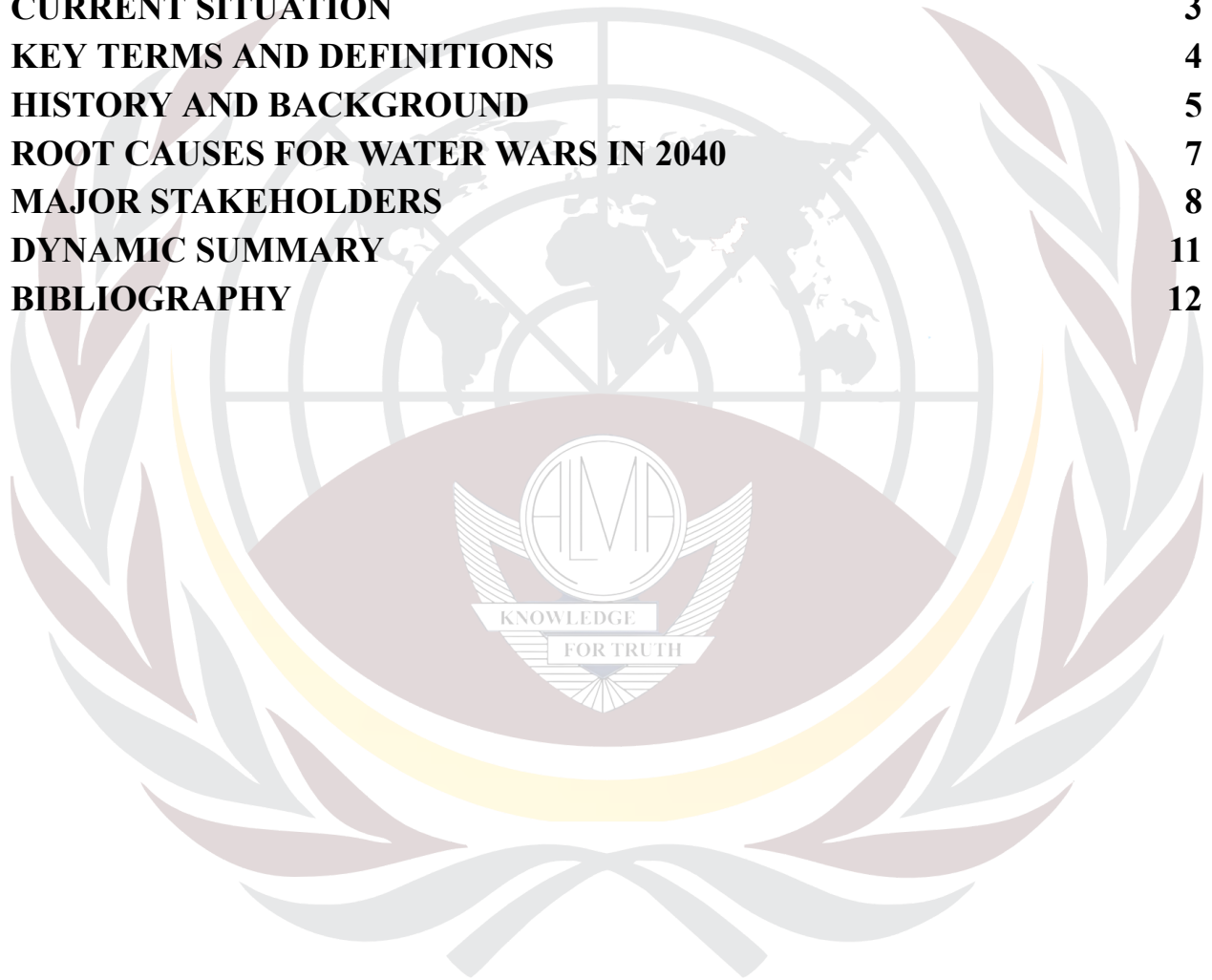
STUDY GUIDE: CRISIS

TOPIC: THE GLOBAL WATER WARS OF 2040

LAMUN **XI**

Table of contents

INTRODUCTION TO THE COMMITTEE	3
CURRENT SITUATION	3
KEY TERMS AND DEFINITIONS	4
HISTORY AND BACKGROUND	5
ROOT CAUSES FOR WATER WARS IN 2040	7
MAJOR STAKEHOLDERS	8
DYNAMIC SUMMARY	11
BIBLIOGRAPHY	12



LAMUN **XI**

INTRODUCTION TO THE COMMITTEE:

A crisis committee is a committee unlike other committees you may have seen before in the UN. Whereas General Assemblies tend to focus on building consensus and developing frameworks for your nation's party to carry forward, crisis committees are about doing. This means that crisis committees deal in direct actions, which carry direct consequences. Unlike a General Assembly, a crisis committee has power unto itself (not just what your delegation may propose and second). This could take the form of a cabinet, a royal court, a corporate board of directors, a revolutionary committee, or any number of small power structures, both governmental and non-governmental. Crisis is a faster paced committee that involves a speeded-up form of MUN dealing with emergencies as they happen. This incorporates a set of global issues, or crises. The Crisis Committee – or CC for short – also differs in that it focuses on actionable resolutions rather than just posturing and passing non-binding resolutions.

Note: the committee will be set in 2040

CURRENT SITUATION (2035 - 2040)

Owing to global warming as well as years of unrestrained pumping leading to aquifer depletion, freshwater resources around the world are depleted. Decades of unsustainable use of freshwater have led to water stress, a phenomenon that has turned water into a contested resource. According to World Resources Institute 2037, over 60% of the world's population currently resides in regions of high and extremely high water stress. Water has turned from a necessity into a strategic resource.

One of the newest developments leading to increased water stress is the rise of Artificial Intelligence and its data centers. Due to their immense thirst for water which is used in their cooling systems one of the largest datacenters in the world would consume as much water as a mid-size city annually. Though the rise of the digital economy has led to exponential increases in global GDP, it comes at an enormous environmental cost, namely water stress.

China has begun to divert and store water from the Brahmaputra River, which has caused a drastic decrease in flows downstream towards Bhutan, India, and Bangladesh as well as alterations to the Brahmaputra basin's river dynamics. Brazil has placed restrictions on freshwater exports from the Amazon basin in an effort to prevent severe water stress on the region. Hours ago, unknown armed forces seized the Shoaiba power and desalination plant in Saudi Arabia and cyberattacks from the same forces have caused additional restrictions – leaving millions without access to freshwater. Water has become a contested resource, with excessive AI

demands and global warming leaving less and less water for other nations, which leads to restrictions and political tensions between states.

KEY TERMS AND DEFINITIONS:

AI Water Consumption:

The excessive water consumption by Artificial Intelligence and data centers for their cooling systems. One of the largest contributors to water stress in the modern day. Causes mass freshwater stress in the year 2040.

Global Warming:

The rise in temperature of Earth's atmosphere, which has led to shifts in biomes and extreme weather patterns. Has also caused water stress by shifting weather patterns, causing water to become a strategic resource.

Drought:

An extended period of dryness resulting in water becoming a scarce resource. One of the largest drivers of freshwater restrictions. Nations place restrictions on water exports owing to the fear of droughts.

Water Supply Restriction:

A restriction placed by a nation on another nation's water supply. Nations place restrictions on water exports owing to the fear of droughts which causes international geopolitical tensions.

Geopolitical Tensions:

International disagreements between states owing to political reasons. Water supply restrictions are the largest cause of geopolitical tensions between nations, as water has become a strategic resource. Nations disagree with other nations' policies on water.

Brahmaputra River Diversion:

The diversion of water from the Brahmaputra river by China into reservoirs. This has led to drastic decreases in water flows in the Brahmaputra river. The diversion has drastically impacted India and Bangladesh's access to water.

Transboundary River:

A river that flows through multiple nations. The Brahmaputra river is a transboundary river which flows through China, India, and Bangladesh. Diversion of water from the river by China impacts downstream nations.

Dam:

A structure built on a river to store water. Dams are used to store water in large quantities. China builds dams on the Brahmaputra river to store and divert water.

Reservoir:

A large storage unit, usually built on a river, which stores massive quantities of water.

Water Scarcity:

A condition wherein the demand for water has exceeded the supply of water. Water scarcity is the driving force behind the "Global Water Wars" of 2040. Water has become a strategic resource, and nations now engage in open conflicts to secure water for their nations.

HISTORY AND BACKGROUND:

Most historians of the present time agree that up until 2040, freshwater scarcity was mostly a consequence of political decisions, with the natural environment, such as droughts and floods, playing only a minor role. By analyzing the policies of various governments in the 2000s, 2010s, and early 2020s, it becomes obvious that states had been pursuing a policy of securing their water supply by any means necessary, regardless of the consequences of these policies on other nations. The most prominent examples of this trend are the construction of the Aswan High Dam in Egypt in the 1970s, which resulted in downstream nations such as Sudan and Ethiopia becoming dependent on Egypt, both politically and economically. On the Indian subcontinent, India's decision to build hydroelectric power plants on the rivers of the Indus basin led to

worsening relations with Pakistan and resulted in both nations becoming increasingly distrustful of each other's intentions in regards to water.

The situation in South Asia, however, was not unique – similar scenarios played out in Tibet, South America, and the Middle East. It was not until the early 2000s that the people of China began investing heavily in the construction of large-scale hydroelectric power plants in Tibet, with the intent of not only generating electricity but also storing water in large reservoirs for future use. Downstream nations such as India and Bangladesh were negatively affected by this decision, as both saw their fresh water supplies diminish several years later. Other examples of upstream nations reducing the water supply of downstream nations by constructing large dams and reservoirs include Turkey's interference with the Tigris and Euphrates rivers, and Ethiopia's construction of the GERD on the Blue Nile. By 2026, the growing demand for water from AI cooling systems made states even more protective of their resources. This resulted in Brazil placing restrictions on freshwater exports from the Amazon basin, as well as various armed groups seizing desalination plants. By analyzing past events, it becomes apparent that all of these incidents had a similar root cause, namely, the fact that large-scale dam construction projects by upstream nations have resulted in freshwater scarcity for downstream nations, which in turn led to the water becoming a strategic resource, and, ultimately, the "Global Water Wars" of 2040.

By 2040, AI was considered to be one of the largest contributors to the water crisis as it was one of the largest growth sectors in the 2020s. The rise of AI and its data centers resulted in a build-up of infrastructure which required substantial water for cooling purposes. Between the years of 2022 and 2026, the demand for data centers skyrocketed and, as a result, companies built vast numbers of said facilities. To cool the data centers, companies employed large-scale water-cooling systems, which resulted in billions of liters of water being consumed by the facilities annually. One of the largest data centers would consume a billion liters of water every year for cooling purposes. This would be equivalent to the water consumption of a medium-sized city of roughly 50,000-100,000 people. The issue with this method was the fact that the majority of data centers were built in arid regions, namely Arizona, Texas, Jordan, UAE. These problems were compounded with the droughts of 2026, and government officials began voicing concerns regarding the water consumption by the AI industry. This resulted in 2026 "AI water consumption" becoming a formal policy issue. From then on, water for AI was thought of as "water for wars". The global infrastructure powering AI consumes 945 terawatt-hours of electricity annually that is nearly triple the combined electricity use of Pakistan, Bangladesh, and Nigeria, countries collectively home to 650 million people.

However, this is just the tip of the iceberg. On top of the carbon footprint, every unit of electricity used by data centers also has a "water footprint" for cooling and energy production, and a "land footprint" associated mainly with power generation and transmission.

ROOT CAUSES FOR THE WATER WARS IN 2040:

1. Climate change and hydrological instability

Between 2035-2040, climate change resulted in hydrological instability, particularly in the Himalayan, Andean, and Amazonian regions. Unpredictable weather patterns resulted in years of drought, followed by years of flooding, whereas glacial melts in the Tibetan plateau decreased the water supply by 30%. In 2036, the Amazon region experienced its lowest water levels in 120 years, with many tributaries running dry as the Pantanal region began experiencing droughts. Consequently, states began to adopt a policy of water security, as storing water in reservoirs during wet seasons had become a necessity. Although national governments positioned them as mitigation efforts, the unilateral nature of those measures triggered a regional arms race for water with dire consequences.

AI/Tech Angle: There were predictive models but the data was not shared on a global scale, which resulted in insufficient preparedness.

2. AI industry and its demand for water

Between 2035-2040, AI data centers, semiconductor manufacturing plants, and green hydrogen production facilities became voracious consumers of water. US, Chinese, and EU tech conglomerates utilized 18% of the global water footprint for their cooling needs by 2039. At the same time, food production still accounted for 70% of freshwater withdrawals, which created challenges for policymakers who were forced to choose between sustaining the energy-intensive digital economy and maintaining the food supply. Pursuing the former, the Chinese government dedicated the resources to the development of key AI economic corridors in the North, whereas Brazil redirected water from the Amazon basin to support agribusiness. While the US promoted its desalination technologies in Southern Brazil and the Western US, American corporations were accused in the public opinion of promoting water consumption for strategic reasons. Overall, the resource switched from being considered a human right to a strategic input for the global economy.

AI/Tech Angle: AI has created both the problem and a potential solution, but the distribution of benefits from either has been uneven.

3. Collapse of transboundary freshwater treaties

This crisis was compounded by a confluence of legal and geopolitical factors that have made international law enforcement all but impossible. China reduced the flow of the Brahmaputra by 42% in 2037-2038, citing “domestic emergencies”, which had a particularly devastating impact on downstream India and Bangladesh. In 2036, Brazil enacted the Amazon Water Sovereignty Act, which formally prohibited any exports of Amazon water. Downstream nations such as

Argentina reacted by restricting water imports from Brazil. Meanwhile, in South Asia, India initiated a program of water diversion from the Indus basin to the Ganga basin in 2037, while the country also suspended water sharing with Pakistan on a temporary basis in 2038 owing to “domestic emergencies”. In Egypt, the government announced its intent to militarize the Aswan Dam following the completion of the GERD’s third filling by Ethiopia in 2035. These unilateral actions by individual countries, while framed as reasonable responses to looming water insecurity, created numerous security dilemmas and acted as catalysts for conflict. The situation was complicated by the fact that no country was willing to enforce treaties, which is why the UN acted as a mediator in 2038 (having done so already in 2036, with limited success). Nevertheless, neither the UN nor any other power had any enforcement capability at the river basin level.

AI/Tech Angle: The UN attempted to utilize satellite + AI technology to monitor compliance in 2036, but states were not willing to share data with a multilateral organization.

4. Food – energy nexus and national security

In 2036, food prices saw a spike, driven by the disruptions to agricultural production in South Asia and South America, caused by the combination of droughts and floods. Simultaneously, the global energy demand rose due to the AI industry and the increased electrification of economies around the world. Owing to this, many governments began to adopt a policy of strategic resource conservation. Egypt announced a ban on food exports to upstream states and began diverting water to the Nile basin from other water sources, whereas India engaged in an extensive inter-basin water transfer program. Similar measures were taken in Brazil, where water was prioritized for urban centers over rural ones. These restrictions created a climate of suspicion, as states realized that treaties concluded in the early 20th century barely took into account the realities of the 2040s. All countries involved adopted the position that water should be considered a national security issue, which created additional barriers to negotiations.

MAJOR STAKEHOLDERS:

In the period of 2035-2040, transboundary water stress reached its peak because of the combined impact of drought, melting glaciers and demands from AI industries. Upstream states took advantage of this situation, regulating the river flows and securing their domestic water supplies. As a result, several downstream countries were obliged to develop water scarcity policies.

THE PEOPLE’S REPUBLIC OF CHINA:

Being the regulator of water flows in the Brahmaputra, Mekong and Salween Rivers. China built three reservoirs on the Yarlung Tsangpo River between 2035 and 2038. That is why, during the drought in 2037, the flow of water was cut down by 42 percent. They claimed that the reason for

doing so is to ensure energy supplies and AI data corridors. However, this situation created problems for farmers in India and Bangladesh.

THE UNITED STATES OF AMERICA:

Despite being a developed country with various desalination and water recycling plants, they did not share water with the countries suffering from the water crisis. By 2039, American companies gained sixty percent control in the desalination and AI water management market. In 2038, the USA imposed sanctions on countries that used water as a weapon. The USA also initiated the Global Water Tech Initiative selling desalination and leak detection systems to other countries. In 2039, the USA helped China, India and Bangladesh to negotiate. The United States promoted the use of technology and free trade of water, but opposed unilateral regulation of water flows.

THE EUROPEAN UNION:

The Union suffered from a severe drought in Spain, Italy and Greece from 2036 to 2037. The European Union reacted to this crisis by investing two hundred billion euros in desalination, water recycling and cross border pipeline projects. The EU became the advocate of a binding United Nations treaty criticizing countries hoarding water and imposing economic sanctions. The position of the European Union was to collaborate, share data and finance each other to address the consequences of climate change.

THE RUSSIAN FEDERATION:

Russia started treating water as a strategic commodity, not as a basic human right. Although Russia possessed twenty percent of the world's unfrozen freshwater and did not stop exporting water, it increased the price of water exports by four hundred percent between 2036 and 2039. Russia also signed agreements with China, India, and the Gulf states to secure water supplies

THE FEDERATIVE REPUBLIC OF BRAZIL:

After passing the Amazon Water Sovereignty Act in 2036, Brazil restricted the export of freshwater and the sale of hydropower to Argentina, Paraguay and Uruguay. Brazil diverted tributaries to the Cerrado region for farming and to supply cities like São Paulo and Manaus. The reason Brazil gave for doing this was to protect its water reserves during the drought in the Amazon in 2036. However this caused a thirty percent drop in irrigation downstream. It led to disputes with other countries in the Mercosur region, by 2039.

ARAB REPUBLIC OF EGYPT:

Egypt relies heavily on the Nile. In fact the Nile is the source of 97 percent of Egypt's water. After Ethiopia finished building the GERD in 2035, Egypt took some steps to protect its water supply. The government made a rule called the Nile Protection Directive. This rule included stopping food from being sent to countries that are upstream on the Nile, limiting the amount of water that can be used for things like growing crops and putting more soldiers at the Aswan High Dam. Egypt said it had to do these things because its water supply was in danger. This was a threat to the 110 million people who live in Egypt.

REPUBLIC OF INDIA:

Because it is located in the middle of a big river system, the country is much affected by the fact that the Brahmaputra River is not flowing as much as it used to. In 2037 India started a project called "Project Jal Raksha" to move water from one river basin to another. India stopped sharing water from some of the rivers that flow into the Indus River with Pakistan. India said it had to do this because it needed to make sure it had water for its own people, especially during times of extreme weather.

People's Republic of Bangladesh and Islamic Republic of Pakistan:

These countries faced crucial consequences as they are located downstream on the river system. They do not have any control over the rivers that flow into their countries. Bangladesh had a problem in 2037 and 2038 when the Brahmaputra River did not flow as much as it usually does and this caused crops to fail. Pakistan also had a problem when India stopped sharing water from the Indus River. Both countries asked the United Nations to get involved and to make the countries that are upstream on the river system pay for the damage that was done. They wanted the "no harm" rule to be enforced, which means that countries should not do things that will hurt other countries.

GULF COOPERATION COUNCIL. UAE, SAUDI ARABIA:

UAE and Saudi Arabia are countries that have plenty of money and have the capability to construct desalination plants that could convert seawater into freshwater. During the years of 2035 to 2040 these countries have constructed 15 desalination plants. By 2039 they have already been able to export freshwater and water technology to countries in Sub-Saharan Africa. They claimed that technology investment is the only way to prevent war over water. They believed that sanctions would not be a solution and preferred trade.

WATER VULNERABLE NATIONS ALLIANCE:

WVNA is an alliance of 42 countries from Sub-Saharan Africa, Southeast Asia and Small Island States that formed in 2038. These countries are highly vulnerable because they have no control over the major rivers that flow into their countries and they have no money to construct desalination plants. They were highly affected by the water crisis between 2036 and 2040 and had to suffer from displacement, famine, high prices and other issues that followed. They asked for help from countries that are more developed and wealthy and wanted to get money in order to cope with the crisis and access to technology in order to build their own desalination plants. They also requested the rule that prohibits water use as a weapon.

DYNAMICS SUMMARY 2035 - 2040

The water crisis led to emergence of four types of nations – those which controlled the water and did not want to share it, the ones which suffered because of the water crisis and stood up to the fight, the ones which earned from selling the freshwater and water technologies and the ones which were at great risks and needed assistance. Technology and money became equally as important as the geography of the nations. There were no laws, hence water could be used both as the resource and as a weapon. The Arab Republic of Egypt, Republic of India, People's Republic of Bangladesh, and Islamic Republic of Pakistan were among those which were affected by the water crisis. Gulf Cooperation Council, UAE, Saudi Arabia managed to earn money by selling the freshwater and water technologies. The Water Vulnerable Nations Alliance (WVNA) was an alliance of countries which were in great risk and required assistance. The United Nations Water Security Council tried to assist in solving the problem. It lacked authority to impose its decisions.

By 2040, desalination, atmospheric water harvesting and AI leak-detection became mainstream. USA and GCC led the exports of desalination. The EU invested in recycling plants. China and India piloted the AI river monitoring. However, costs and energy requirements for implementation of these methods limited their application only to the rich countries. Alternatives remained too costly for the majority of the Global South states.

BIBLIOGRAPHY

<https://www.unicef.org/wash/water-scarcity>

<https://www.who.int/news/item/26-08-2025-1-in-4-people-globally-still-lack-access-to-safe-drinking-water---who--unicef>

<https://www.unwater.org/water-facts/water-scarcity>

<https://www.worldwildlife.org/our-work/freshwater/water-scarcity/>

<https://www.undp.org/water>

<https://www.undp.org/nature/our-work-areas/water-governance>

<https://www.adaptation-undp.org/water-resource-management-and-access-water>

<https://www.adaptation-undp.org/>

<https://www.un.org/en/desa/ai-in-advertising-risks-fuelling-misinformation-crisis-un-warns>

LAMUNXI