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TOPIC B

Global Water Scarcity

GA3
General Assembly Third Committee

Head Chair: Mariana Gajardo
Deputy Chair: Emma Grubb

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Topic B: **Global Water Scarcity**

Introduction

Water scarcity is an increasingly critical issue affecting over two billion people worldwide. It occurs when the demand for freshwater exceeds the available supply, either due to physical shortages or lack of infrastructure and access. This challenge not only threatens human health but also affects food production, economic growth, and global peace and security. With the growing impact of climate change and population growth, the urgency to address water scarcity has become more prominent than ever before.

Definition of Key Terms

- **Water Scarcity**
  The condition where water resources are insufficient to meet the demands of a population, either due to natural shortages or economic and infrastructural barriers.

- **Physical Water Scarcity**
  When natural water resources are unable to meet a region's demand, often happens in arid and dry regions.

- **Economic Water Scarcity**
  Exists when there is water in the environment, but access is limited due to poor governance, lack of investment, or weak infrastructure.

- **Water Stress**
  A measurement of the ratio between the water used and water availability. Higher stress indicates being closer to water scarcity.

- **Integrated Water Resources Management (IWRM)**
  A process that promotes coordinated development and management of water, land, and related resources to maximize social and economic welfare without compromising sustainability.

Background information

The issue of water scarcity dates back centuries but has gained global prominence in recent decades. Currently, over 2 billion people live in water-stressed countries, and projections suggest that by 2040, one in four children will live in areas of extremely high water stress. The causes are multifaceted, including population growth, urbanization, pollution, inefficient water use, and climate change. Agriculture consumes nearly 70% of global freshwater, making irrigation efficiency a critical focus. In urban areas, aging infrastructure and pollution from industrial activity further restrict clean water access. Countries with poor governance face economic water scarcity even if physical water is available. The consequences include conflict over shared water bodies, forced migration, disease spread, and reduced food security.

Major Parties Involved

- **India**

Faces severe water stress due to rapid urbanization, overextraction of groundwater, and inefficient irrigation practices. The government has launched initiatives like "Jal Jeevan Mission" to improve rural access.

- **Egypt**

Relies almost entirely on the Nile River, creating tension with upstream countries. Faces both physical and geopolitical challenges in water management.

- **Ethiopia**

Home to the Grand Ethiopian Renaissance Dam (GERD), which has raised regional tensions with downstream countries like Sudan and Egypt. Balances national development with transboundary cooperation.

- **United States of America**

Although well-resourced, faces internal water crises in areas like California and the Southwest due to drought and overconsumption. Promotes innovation and research in water conservation.

- **Saudi Arabia**

One of the world's most water-scarce nations. Relies heavily on desalination and is investing in water-saving technologies and artificial recharge projects.

Previous Attempts to Solve the Issue

- **Sustainable Development Goal 6 (SDG 6)**:
  Calls for universal and equitable access to safe and affordable drinking water and sanitation by 2030.

- **UN-Water Initiatives**:
  Coordinates action among UN agencies and promotes international cooperation.

- **The 1992 Dublin Statement on Water and Sustainable Development**:
  Introduced the principle that water is an economic good and must be managed sustainably.

- **World Bank Projects**:
  Provides funding for water infrastructure and sanitation systems in low-income countries.

- **Regional Agreements**:
  Treaties such as the Nile Basin Initiative and the Indus Waters Treaty encourage cooperative water sharing.

Possible Solutions

- **Invest in Water Infrastructure**:
  Improve pipes, reservoirs, and treatment facilities to reduce loss and increase access.

- **Promote Efficient Agricultural Techniques**:
  Encourage the use of drip irrigation, drought-resistant crops, and smart farming.

- **Strengthen Transboundary Cooperation**:
  Support peaceful negotiation and data sharing between countries that share rivers or lakes.

- **Expand Use of Technology**:
  Leverage satellite monitoring, AI, and mobile systems to track and manage water use efficiently.

- **Educate and Involve Communities**:
  Raise awareness on water conservation, especially in schools and local municipalities.

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