



FORUM: United Nations Environment Program (UNEP)

AGENDA: Ensuring Equitable Access to Clean Water and Air in the Tigray Region of Ethiopia

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Esteemed Delegates and Honorable Advisors,

It is my utmost honor and immense pleasure to welcome every single one of you to TTMUN'26.

Ever since its first session in 2015, TTMUN Conferences have been an undeniable portrayal of unity, collaboration, and resilience by the fellow members of the TTMUN Club. As the executive team of TTMUN'26, we have dedicated countless hours to organize the 11th annual session of TTMUN; while doing so, we have maintained the same passion and dedication with every step we have taken to sustain the quality of TTMUN. That being said, as the Secretary-General of TTMUN'26, I would like to thank my fellow executive team members and our remarkable advisor, Vesile Acar, whose support made it possible to organize this conference and host you here at our school on the 27th, 28th, and 29th of April. Yet, beyond its tradition, TTMUN'26 is shaped by its purpose.

Our mission in TTMUN Club is to foster mutual growth in a collaborative environment where we are not only discussing real-world issues but also work towards solutions. Therefore, in correlation with our mission, we have chosen the theme of TTMUN'26 to be "Bridging Divides in Human Rights". The significance of the theme lies in the unfortunate irony of the persistence of human rights violations. Today, our world is witnessing and turning a blind eye to human rights violations that the United Nations was initially established to ensure that the world would never witness and do so again. Acknowledging this, we, the youth shall not only wait for our turn to come tomorrow but shape it today. Hence, as the executive team, we hope for a fruitful conference where everyone, regardless of their role, contributes to the debates, lobbying, and discussions, bearing the urgency of our global reality in mind.

As we embark on this journey, this mission will be in action over the course of three days as the delegates will have the opportunity to be active in one of nine committees of TTMUN'26 with fifteen diverse agenda items that seek to solve the serious issues that our world is facing. While doing so, let's embrace the unparalleled value of collaboration, respect, and empathy for a better future. Finally, I hope that you have an incomparable MUN experience and once again as the Secretary General, I wholeheartedly welcome everyone to the TTMUN'26.

“All my hope is in youth!”

—Mustafa Kemal Atatürk.

Yours sincerely,

Derin Halatçı - Secretary General

INTRODUCTION

Ensuring fair access to clean water and clean air in the Tigray region of Ethiopia is an important issue that affects people's daily lives, health, and well-being. Clean water is necessary for drinking, cooking, and hygiene, while clean air is essential for breathing and preventing diseases. These basic needs are recognized as human rights by



the United Nations, meaning that every person should be able to access them regardless of their situation.

In recent years, the Tigray region has gone through a serious conflict that started in 2020. This conflict has damaged many important systems, such as water supply networks, sanitation facilities, and energy sources. Because of this, many people no longer have regular access to safe drinking water. Wells, pipes, and treatment plants have either been destroyed or are no longer working properly. At the same time, environmental damage and lack of proper waste management have negatively affected air quality. The situation has become even more difficult because many people have been forced to leave their homes. These displaced people often live in temporary shelters or camps where access to clean water is limited. In such conditions, diseases can spread easily, especially those related to unsafe water. In addition, many families rely on burning wood or other fuels indoors for cooking, which creates smoke and leads to poor air quality inside homes. This can cause breathing problems and other health issues, especially for children and elderly people.

Another important challenge is inequality. Not everyone in Tigray has the same level of access to resources. Rural areas, poorer communities, and those directly affected by the conflict often struggle more to find clean water and safe living conditions. Climate change also makes the problem worse by causing droughts and reducing the availability of water in the region.

Solving this issue requires both short-term and long-term actions. Emergency aid is needed to provide immediate access to water and basic services, while long-term solutions should focus on rebuilding infrastructure and protecting the environment. Organizations such as the United Nations Environment Programme play an important role in helping countries manage natural resources and improve environmental conditions.

Overall, ensuring access to clean water and air in Tigray is not only about survival, but also about improving quality of life and supporting recovery after conflict. It requires cooperation between governments, international organizations, and local communities to create fair and lasting solutions.

DEFINITION OF KEY TERMS

Clean Water

Clean water refers to water that is safe for human use, especially for drinking, cooking, and personal hygiene. It does not contain harmful bacteria, viruses, chemicals, or pollutants that could cause disease. Clean water is essential for survival and maintaining good health.

Safe Drinking Water

Safe drinking water is a more specific term that refers to water that meets health standards set by organizations such as the World Health Organization. It must be free from dangerous microorganisms and toxic substances and should be accessible in sufficient amounts.

Water Scarcity

Water scarcity means a lack of enough available water to meet the needs of a population. This can be caused by many reasons such as drought, overuse of water resources, poor management, or damage to water systems.

Water Infrastructure

Water infrastructure includes all physical systems used to collect, store, and distribute water. This includes pipelines, wells, pumps, reservoirs, and water treatment plants. Damage to infrastructure can prevent people from accessing clean water.

Sanitation

Sanitation refers to systems and practices that ensure safe disposal of human waste and proper hygiene. This includes toilets, sewage systems, and waste management. Poor sanitation can contaminate water sources and spread diseases.

Clean Air

Clean air refers to air that does not contain harmful levels of pollutants such as smoke, dust, chemicals, or toxic gases. Breathing clean air is essential for preventing respiratory diseases and maintaining overall health.

Air Pollution

Air pollution occurs when harmful substances such as smoke, gases, or particles enter the air. These pollutants can come from sources like burning fuel, industrial activities, or conflict-related destruction, and they can seriously affect human health and the environment.

Indoor Air Pollution

Indoor air pollution refers to contamination of the air inside homes or buildings. It is often caused by cooking or heating with fuels like wood or charcoal in poorly ventilated spaces. This is a major issue in many low-income or conflict-affected areas.

Environmental Degradation

Environmental degradation means the damage or decline of the natural environment. This can include pollution, deforestation, soil damage, and loss of clean water sources. It is often caused by human activities or conflict.

Conflict (Armed Conflict)

Armed conflict refers to fighting between organized groups, such as government forces and armed groups. In the case of Tigray, conflict has led to destruction of infrastructure, displacement of people, and environmental damage.

Internally Displaced Persons (IDPs)

Internally displaced persons are people who are forced to leave their homes due to conflict, violence, or disasters but remain within their own country. In Ethiopia, many people in Tigray have become IDPs due to the conflict.

Humanitarian Crisis

A humanitarian crisis is a serious situation where large numbers of people are unable to meet basic needs such as food, water, shelter, and healthcare. It often requires urgent international assistance.

Equitable Access

Equitable access means that all people have fair and just access to resources, even if they have different needs or face different challenges. It focuses on fairness, not just equality.

Public Health

Public health refers to the health and well-being of the general population. It includes efforts to prevent disease, promote healthy living, and ensure access to healthcare and safe environments.

Waterborne Diseases

Waterborne diseases are illnesses caused by drinking or using contaminated water. Examples include cholera and diarrhea. These diseases spread easily in areas without clean water and sanitation.

Climate Change

Climate change refers to long-term changes in temperature and weather patterns, often caused by human activities like burning fossil fuels. In regions like Tigray, it can lead to droughts and reduced water availability.

Sustainable Development

Sustainable development means meeting the needs of the present without harming the ability of future generations to meet their own needs. It includes balancing environmental protection, economic growth, and social well-being.

Sustainable Resource Management

This refers to using natural resources, such as water and air, in a way that does not deplete or damage them over time. It ensures that resources remain available for the future.

Human Rights

Human rights are basic rights and freedoms that every person is entitled to. Access to clean water and a healthy environment is increasingly recognized as part of these rights by the United Nations.

BACKGROUND INFORMATION



The Tigray region is located in the northern part of Ethiopia, a country in the Horn of Africa that has long faced environmental and economic challenges. Even before recent events, Ethiopia struggled with limited access to clean water, especially in rural areas. Many communities

depended on rivers, wells, or seasonal rainfall, which were not always reliable or safe. Historically, Ethiopia has experienced repeated droughts due to its climate. Rainfall in the region is often unpredictable, and periods of drought can last for years. This has made water scarcity an ongoing issue, especially in regions like Tigray where agriculture is the main source of income. When water is scarce, it affects not only drinking supplies but also food

production and overall livelihoods. In addition to natural challenges, population growth has increased pressure on water and environmental resources. As more people rely on the same limited water sources, it becomes harder to ensure that everyone has enough clean water. At the same time, limited infrastructure development has meant that many areas never had strong water systems to begin with.

The situation worsened significantly after the outbreak of the Tigray conflict in November 2020. This conflict involved the Ethiopian government and regional forces and led to widespread destruction

across the region. Critical infrastructure, including water supply systems, sanitation facilities, and electricity networks, was damaged or destroyed. Without electricity, many water pumps and treatment systems stopped working,



cutting off access to clean water for large parts of the population. Healthcare systems were also heavily affected. Hospitals and clinics were damaged or became inaccessible, making it harder to treat diseases related to unsafe water and air pollution. As sanitation systems broke down, the risk of water contamination increased. This created conditions where diseases could spread more easily. Another major consequence of the conflict was mass displacement. Millions of people were forced to leave their homes and became *internally displaced persons (IDPs)*. These individuals often moved to temporary camps or shelters where access to clean water and proper sanitation was extremely limited. In such crowded conditions, maintaining hygiene is difficult, and outbreaks of disease become more likely.

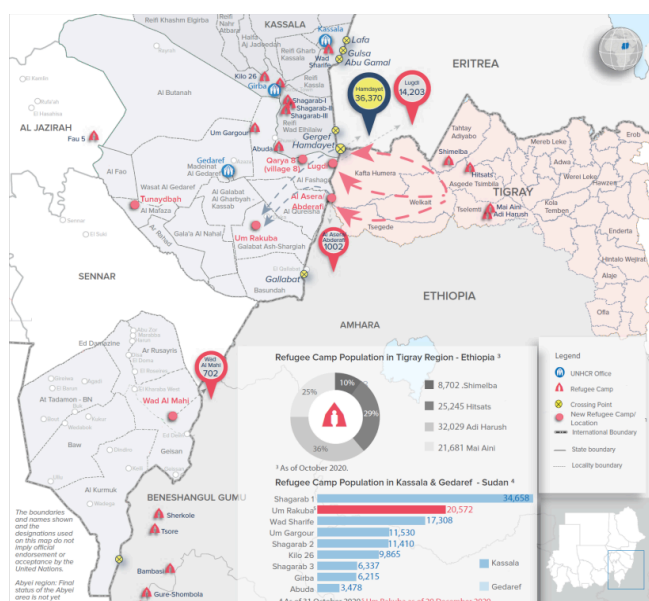
Air quality has also been affected. Due to the destruction of infrastructure and lack of access to clean energy, many households rely on burning wood, charcoal, or other solid fuels for cooking and heating. This leads to indoor air pollution, which can cause serious health problems such as respiratory infections. Environmental damage, including deforestation and dust from degraded land, also contributes to poor air quality in the region. Environmental degradation in Tigray has been increasing over time. Conflict has accelerated this process by

damaging land, increasing unregulated resource use, and reducing the ability of governments and organizations to manage the environment properly. For example, when people are displaced, they may cut down trees for fuel or shelter, leading to deforestation and further environmental harm. Climate change adds another layer of difficulty. Rising temperatures and changing rainfall patterns in the Horn of Africa have made droughts more frequent and severe. This reduces water availability and makes it harder to recover after crises. As a result, communities in Tigray face both immediate and long-term environmental challenges.

International organizations, including the United Nations and the United Nations Environment Programme, have been involved in efforts to address these issues. They have worked on providing emergency water supplies, supporting sanitation projects, and promoting sustainable environmental practices. However, ongoing instability and limited access to certain areas have made it difficult to fully implement solutions. Overall, the background of this issue shows that the lack of access to clean water and air in Tigray is not caused by a single factor. Instead, it is the result of a combination of long-term environmental challenges, limited infrastructure, rapid population growth, armed conflict, and climate change. Understanding these factors is essential in order to develop effective and realistic solutions.

CURRENT SITUATION

The current situation in the Tigray region of Ethiopia remains complex and unstable, even after the official end of the major conflict in 2022. While a peace agreement was signed, recovery has been slow, and many of the problems related to clean water and air access are still ongoing. One of the biggest issues is that basic infrastructure has not been fully restored. A large portion of water systems, healthcare facilities, and sanitation services were either damaged or destroyed during the conflict. Even today, many communities still lack reliable access to safe drinking water because pumps, pipelines, and treatment systems are not functioning properly. In some



areas, water systems remain completely unusable, forcing people to rely on unsafe sources such as rivers or untreated wells. This increases the risk of waterborne diseases and creates serious public health concerns.

Another major issue is ongoing displacement. Millions of people were forced to leave their homes during the conflict, and many have not yet been able to return. Some seek refuge in neighboring countries, leaving Ethiopia. According to recent humanitarian data, 100.000 Ethiopian refugees expected to seek refuge in Sudan, an estimated 80.000 of the 96.000 Eritrean refugees in Tigray, and 650.000 IDPs require life saving assistance and protection.

These displaced populations often live in temporary shelters or camps where:

- Clean water is limited
- Sanitation facilities are inadequate
- Hygiene conditions are poor

As a result, access to safe water is not only limited but also unequal, with the most vulnerable groups being the most affected. The overall humanitarian situation in Ethiopia also remains severe. The country is currently facing a combination of problems, including drought, economic instability, disease outbreaks, and the long-term effects of conflict. These overlapping crises make it much harder to improve water and air conditions.

Even though large-scale fighting has decreased, tensions and instability still exist in Tigray. In 2025 and early 2026, there have been reports of renewed clashes and political struggles within the region. This instability slows down reconstruction efforts and makes it difficult for aid organizations to safely operate in all areas. In terms of environmental conditions, the region continues to suffer from long-term damage. The conflict caused deforestation, soil erosion, and destruction of ecosystems, which has reduced the availability of natural resources. Because of this, communities often rely more heavily on natural resources like firewood, which further worsens environmental degradation.

Air quality is also a concern, although it receives less attention than water. Across Ethiopia, pollution levels are considered moderate but still exceed safe guidelines. Fine particulate matter (PM2.5), which is harmful to human health, is several times higher than recommended levels set by the World Health Organization. In Tigray specifically, indoor air pollution is a serious issue. Due to lack of electricity and clean energy, many households burn wood or

charcoal for cooking. This produces smoke in poorly ventilated spaces, increasing the risk of respiratory diseases, especially among women and children.

There are ongoing efforts to improve the situation. International organizations and NGOs are working to:

- Rebuild water infrastructure
- Restore sanitation systems
- Provide emergency water supplies
- Support environmental recovery

For example, some projects aim to restore hundreds of damaged water points and improve access for thousands of people. However, progress is slow due to:

- Limited funding
- Continued insecurity
- Difficult access to remote or conflict-affected areas

Overall, the current situation in Tigray is still a post-conflict humanitarian and environmental crisis. While there have been some improvements since the end of major fighting, access to clean water and air remains limited and unequal. Long-term solutions will require not only rebuilding infrastructure but also addressing environmental damage, political instability, and climate-related challenges.

MAJOR PARTIES INVOLVED

Government of Ethiopia

The Ethiopian government is the primary authority responsible for managing resources, rebuilding infrastructure, and ensuring access to clean water and air in Tigray. It plays a key role in post-conflict recovery, policy-making, and cooperation with international organizations. However, its involvement in the conflict has also made trust and coordination more challenging in some areas.



Tigray Regional Authorities (Tigray People's Liberation Front – TPLF)

The Tigray People's Liberation Front (TPLF) is the main political and military group representing the Tigray region. It has been directly involved in the conflict and continues to influence governance in the region. Its cooperation is essential for implementing humanitarian and environmental programs locally.



United Nations (UN)

The United Nations plays a central role in coordinating international aid, peacebuilding, and development efforts. It supports Ethiopia through multiple agencies and helps ensure that humanitarian needs, including water and air quality, are addressed.



United Nations Environment Programme (UNEP)

UNEP focuses specifically on environmental protection and sustainable resource management. In Tigray, it is important for assessing environmental damage, supporting recovery projects, and promoting long-term solutions for clean water and air.



United Nations Children's Fund (UNICEF)

UNICEF is heavily involved in providing clean water, sanitation, and hygiene (WASH) services, especially for children. It works on emergency water supply, hygiene education, and rebuilding sanitation systems in affected communities.



World Health Organization (WHO)

WHO focuses on public health issues related to unsafe water and air pollution. It monitors disease outbreaks, provides medical support, and sets standards for water safety and air quality.



World Bank

The World Bank provides financial support and funding for infrastructure projects, including water systems and environmental programs. It is important for long-term development and rebuilding efforts.



Eritrea

Eritrea played a direct role in the Tigray conflict by supporting Ethiopian federal forces. Its involvement has had a major impact on the region's stability and infrastructure damage. Continued tensions can affect recovery efforts and regional cooperation.



Sudan

Sudan has been affected by the conflict due to refugee flows from Tigray. Many displaced people have crossed the border into Sudan, putting pressure on its resources. Sudan is also important in regional discussions on humanitarian aid and water access.



Major donor countries (e.g., United States, United Kingdom, Germany)

These countries provide significant humanitarian aid and funding for recovery efforts in Ethiopia. They support programs related to water access, sanitation, healthcare, and environmental protection. Their financial and political support is essential for large-scale solutions.

European Union (EU)

The European Union is a major donor and partner in development projects. It funds humanitarian assistance, supports infrastructure rebuilding, and promotes sustainable environmental practices in Ethiopia.



Non-Governmental Organizations (NGOs)

Organizations such as the International Committee of the Red Cross (ICRC), Médecins Sans Frontières (MSF), and Oxfam are actively working on the ground. They provide emergency water supplies, healthcare, sanitation services, and support for affected communities.

RELEVANT INTERNATIONAL DOCUMENTS

NATIONAL WASH AND ENVIRONMENTAL HEALTH STRATEGY

https://www.washinhcf.org/wp-content/uploads/2023/02/National-WASH-and-Enviromental-Health-Strategy-Final_ETHIOPIA-1.pdf

ETHIOPIA EMERGENCY SITUATION (TIGRAY), UNHCR REGIONAL APPEAL

https://www.unhcr.org/sites/default/files/2021-12/UNHCR%2520-%2520Ethiopia%2520emergency%2520supplementary%2520appeal%2520-%25202023%2520December%25202020_1.pdf

SOLUTION ALTERNATIVES

Rebuilding and Repairing Water Infrastructure

One of the most important solutions is restoring damaged water systems. Many pipelines, wells, and treatment plants were destroyed during the conflict, so rebuilding them is essential.

The government of Ethiopia, with support from organizations like the World Bank and the United Nations, can invest in:

- Repairing water pipelines and pumps
- Rebuilding water treatment facilities
- Expanding water access to rural areas

This solution focuses on long-term improvement and ensures that communities have stable and safe water sources.

Emergency Water Supply Programs

While infrastructure is being rebuilt, immediate action is needed to help affected populations.

Organizations such as United Nations Children's Fund and NGOs can:

- Deliver water through trucks to affected areas
- Distribute water purification tablets and filters

- Set up temporary water stations in IDP camps

This helps prevent disease and ensures that people have access to safe water in the short term.

Improving Sanitation and Hygiene (WASH Programs)

Clean water alone is not enough, sanitation and hygiene are equally important.

Programs supported by the World Health Organization can:

- Build or repair toilets and sewage systems
- Provide hygiene education (handwashing, waste disposal)
- Supply basic sanitation kits

This reduces the spread of waterborne diseases and improves public health.

Promoting Clean Energy for Better Air Quality

To reduce air pollution, especially indoor pollution, it is important to provide alternatives to burning wood or charcoal.

The United Nations Environment Programme and partner countries can support:

- Distribution of clean cookstoves
- Access to solar energy or electricity
- Training on safer cooking methods

This improves air quality and reduces health risks, especially for women and children.

Environmental Restoration and Protection

Long-term solutions must include protecting and restoring the environment.

This can involve:

- Reforestation programs (planting trees)
- Protecting water sources from pollution
- Sustainable land and water management

These efforts help ensure that natural resources are available in the future and reduce the impact of climate change.

Strengthening International Cooperation and Funding

The scale of the problem requires strong global support.

Countries such as United States, Germany, and organizations like the European Union can:

- Provide financial aid
- Support reconstruction projects
- Share technology and expertise

Better coordination between international actors can make aid more effective.

Ensuring Equitable Distribution of Resources

It is important that all groups, especially vulnerable populations, have fair access to water and clean air.

Governments and organizations should:

- Focus on rural and conflict affected areas
- Prioritize displaced populations (IDPs)
- Monitor distribution to prevent inequality

This ensures that solutions are fair and inclusive.

Supporting Peacebuilding and Stability

Finally, long-term success depends on stability in the region. Without peace, infrastructure cannot be rebuilt and aid cannot be delivered effectively.

The United Nations and regional actors can support:

- Peace agreements and dialogue
- Conflict resolution efforts
- Safe access for humanitarian workers

Overall, no single solution is enough. A combination of humanitarian aid, infrastructure rebuilding, environmental protection, and international cooperation is necessary to ensure lasting access to clean water and air in Tigray.

USEFUL LINKS

- <https://projects.worldbank.org/en/projects-operations/project-detail/P133591>
- <https://www.worldbank.org/en/results/2025/10/23/strengthening-sustainable-wash-access-and-resilience-in-ethiopia>
- https://www.researchgate.net/publication/333172902_Rural_households'_access_to_water_resources_under_climate_impacts_based_on_field_evidence_in_Tigray_Region_Ethiopia
- https://www.adaptation-fund.org/wp-content/uploads/2025/02/MOFEC_Ethiopia_FP.pdf

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[P5g1p4AAAAA:sKFuM-Exo3LDO8ZQtGfdclhvz2hWsr6KT9vpmtXPZUh4XYhil-T](http://www.sciencedirect.com/science/article/pii/S143846392400141X?casa_token=XdRsxP5g1p4AAAAA:sKFuM-Exo3LDO8ZQtGfdclhvz2hWsr6KT9vpmtXPZUh4XYhil-T)

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