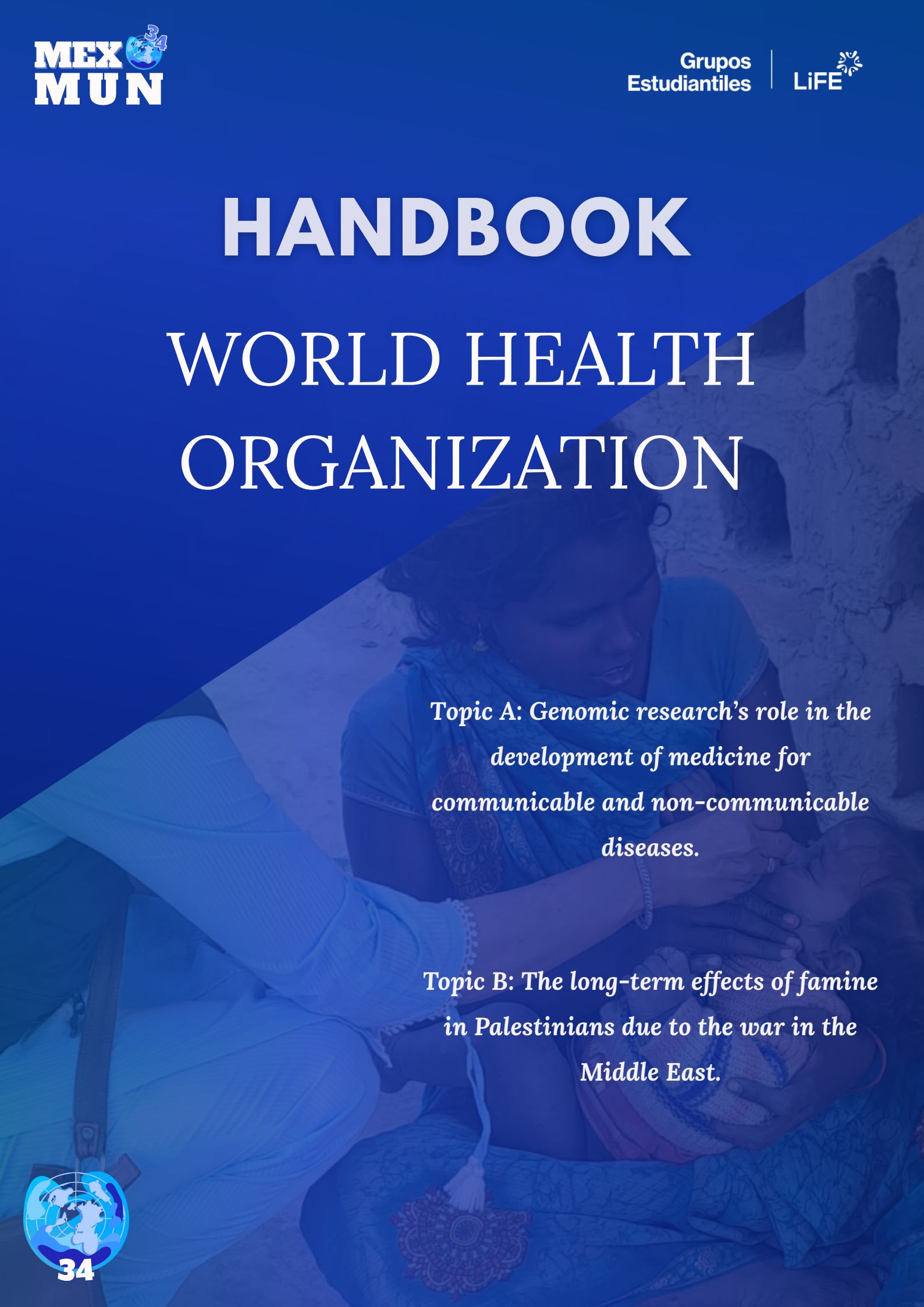
MEX MUN 34

Grupos Estudiantiles | LiFE

HANDBOOK

WORLD HEALTH ORGANIZATION



Topic A: Genomic research's role in the development of medicine for communicable and non-communicable diseases.

Topic B: The long-term effects of famine in Palestinians due to the war in the Middle East.

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MEXICO MODEL UNITED NATIONS
XXXIV EDICIÓN

Dear Delegates,

It is an honor to welcome you to the 34rd edition of the Mexico Model of United Nations, MEXMUN 2025. My name is Madeleine De Anda Flores, president of the World Health Organization. This year's topics have been selected to address complex and current global issues that are being faced by the global community. This committee's objective is to inspire you to come up with innovative solutions and have critical thinking. As your chair we hope you will be able to keep and open minds, consider diverse perspectives and explore the complex relations between the international community through your arguments and proposals sustained by solid evidence.

As your chair, we are committed to providing and encouraging a respectful environment that fosters debate and collaboration regarding current health issues in the international community. You will be taking part as representatives of world leaders, diplomats and forces of change. Throughout this period of debate we hope you will be able to develop skills of proposal presentation, diplomatic negotiation, and leadership. We understand the challenges that come with becoming a delegate, and with this in mind we expect you to represent a nation and advocate for its stance with empathy, resilience and respect. We are sure these three days of debate will be an enriching and growing experience for becoming a thinker and leader. With this in mind we encourage you to approach these discussions with both a strong stance and an open mind, keeping collaboration and understanding as crucial aspects for developing great delegates and a peaceful and more just world.

As the chair our job is to guide you every step of the way, do not hesitate to contact us. We will ensure you will have a memorable experience. Remember to follow the MEXMUN and the World Health Organization protocol. Thank you for being part of this experience, and we are looking forward to seeing how your creativity and ideas impact this model and the effort for global health.

Sincerely,
Daniela Gutiérrez Ortiz, WHO President;
Samantha Rivas, WHO Moderator;
Valentina González, WHO Conference Officer;
Cynthia Ramírez Sandoval, WHO Conference Officer.

Leonardo Villaseñor Rodríguez
Secretario General

Emiliano Sáenz de Miera Piza
Secretario de Contenido

Ximena Meléndez Hochstrasser
Secretario de Logística

Sofia Estrada Oria
Secretaria de Comunicación

Aranza Y. Domínguez Gómez
Secretaria de Finanzas

World Health Organization

President: Daniela Gutiérrez Ortiz
Moderator: Samantha Rivas Martínez
Conference Officer: Valentina Gonzáles Estrada
Conference Officer: Cynthia Ramírez Sandoval

Committee background

The World Health Organization (WHO) is the specialized agency of the United Nations agency responsible for international public health. Its primary objective is to connect the global community to promote health, keep the world safe and serve the vulnerable; so everyone, everywhere can attain the highest level of health. The WHO leads global efforts to expand Universal Health Coverage (UHC). It coordinates the world's response to health crises, and promotes health through science-based policies from pregnant to old age.



Importance

WHO is dedicated to creating a free disease world and addressing not only biological threats but also the social determinants of health.
WHO aims to transform and improve global public health in the long run through measurable impact. Using timely, reliable, actionable data to improve the health of billions.The Triple Billion targets are WHO's tool and strategy to tackle the issue, with one billion more people benefitting from universal healthcare coverage, with with one billion more people better protected from healthcare emergencies and one billion more people enjoying better health and well-being. These are tackled through six key programmatic divisions: universal healthcare coverage, health emergencies programme, access to medicines and health products, antimicrobial resistance, science division and data, analytics and delivery for impact.

Topic A

Genomic research's role in the development of medicine for communicable and non-communicable diseases.

Context

Since the 1980s, scientists began to show concern about the effects that radiation and environmental factors could have on human DNA. This led to different international collaborations, such as the Atlanta Summit, which later contributed to the creation of the Human Genome Project (HGP). The main objective of this project was to understand the structure and function of human genes.

By the early 2000s, the mapping of the human genome marked an important change in the medical field. From that moment, genomics started to grow from being only a research field into a useful tool in healthcare. Today, it is used to study both human genes and the genetic structure of pathogens, helping to better understand how diseases develop and how they spread (NHGRI, 2022).





Importance

Genomic research has had a strong impact on medicine, especially by allowing a transition from general treatments to more personalized ones, also known as precision medicine. This is very important in non-communicable diseases such as cancer, where genetic testing can help identify which treatment is more effective for each patient.

At the same time, genomics is also important in the fight against communicable diseases. It allows the identification of pathogens and their variants in a faster way, which is necessary to control outbreaks and to support vaccine development, as it was seen during the COVID-19 pandemic (WHO, 2022).

However, the access to these technologies is still limited. Many developing countries face challenges such as high costs and lack of infrastructure, which makes it more difficult to implement genomic medicine. Because of this, a large part of the global population still cannot benefit from these advances. Therefore, it is important to discuss solutions that improve access and reduce inequalities in healthcare systems worldwide.

What has been done about it?

Genomic research has enabled important advances in medicine, benefiting thousands of people worldwide. The Human Genome Project provided the first complete map of the human genome, which has supported further research into genetic diseases.(National Human Genome Research Institute, n.d.) It has also contributed to treatments such as cancer, where therapies analyze the DNA of tumors to identify specific mutations. During the COVID-19 pandemic, genomic sequencing was used to identify and monitor new variants of the virus, supporting public health responses and informing vaccine updates. Organizations such as the World Health Organization have promoted more equitable access to genomic technologies.(National Cancer Institute, n.d.)Additionally, genomic technologies have supported the diagnosis of certain genetic disorders, helping reduce the time needed to reach a diagnosis and allowing earlier medical attention in some cases. (National Library of Medicine, n.d.)

What needs to be considered?

The implementation of genomic medicine must take into account several challenges, including the high cost of technology, the lack of specialized infrastructure, and the marginalization of developing countries. Ethical considerations are also essential, as genomic data is unique to each individual and, without proper regulation, it may be misused for discrimination or unauthorized identification. (HO, 2024) Furthermore, the rapid development of gene-editing technologies requires global consciousness to prevent misuse and to ensure that these tools are applied responsibly, particularly for medical purposes. (Pan American Health Organization, n.d.)



Existing organizations and policies.

International organizations and global initiatives have expanded the use of genomics, reaching multiple countries through training programs and collaborative research. The World Health Organization plays a leading role through its Science Council, which in 2022 emphasized the need to prioritize equitable access to genomic technologies. (WHO, n.d.) Other organizations, such as UNESCO, established the Universal Declaration on the Human Genome and Human Rights to prevent misuse of genetic information. (UNESCO, n.d.) Key policies include the Global Genomic Surveillance Strategy (2022–2032), which aims to standardize how countries track viral pathogens.

In addition, the Global Alliance for Genomics and Health develops frameworks for the secure sharing of genetic data, while initiatives like GISAID have improved pandemic response by providing open access to viral sequences. These efforts are complemented by the Nagoya Protocol, which promotes the fair and equitable sharing of benefits derived from genetic resources. (National Institutes of Health, n.d.)

Risks and Challenges of Genomic Research

Genomic research has had a wide range of impacts. In healthcare, it has contributed to more personalized treatments and faster diagnosis of certain rare diseases, as well as a better understanding of susceptibility to different conditions. At the same time, there are important risks and limitations. Genomic instability, caused by DNA damage and mutations, can contribute to the development of diseases such as cancer and other long-term health conditions. Beyond medicine, genomic technologies have also influenced agriculture by enabling the development of crops with improved resistance and nutritional value, while contributing to the study of biodiversity and evolution. However, these advances raise ethical and social concerns. The increasing use of genetic databases creates risks related to data privacy, potential misuse of information, and genetic discrimination. In addition, genomic variation plays a key role in heredity and evolution, but it can also be linked to the transmission of inherited disorders, which highlights the need for careful and responsible use of these technologies.





Barriers to implementation

The use of genomic technologies in healthcare is still limited by several practical barriers. One of the main challenges is cost. Sequencing technologies and data analysis can be expensive, which makes them difficult to implement in low- and middle-income countries. Another important limitation is the lack of infrastructure. Many healthcare systems do not have the laboratories, equipment, or digital systems needed to store and analyze large amounts of genetic data. In addition, there is a shortage of trained professionals who can interpret genomic information and apply it in clinical settings (World Health Organization, n.d.).

Data management also represents a challenge. Genomic data is complex and sensitive, and countries may lack clear regulations on how to store, share, and protect this information. This creates risks related to privacy and can reduce public trust in genomic programs (World Health Organization, 2024). Finally, unequal access to genomic technologies continues to widen the gap between countries. While some nations are able to integrate genomics into their healthcare systems, others struggle to meet basic health needs, making it difficult to prioritize these technologies. Addressing these barriers is essential to ensure that genomic medicine can be applied more equitably worldwide.



Guide questions

1. *How can the global community prevent genomic data from reinforcing global inequality, particularly when most data and infrastructure are concentrated in developed nations?*
2. *To what extent should countries regulate the collection and export of their citizens' genetic data to prevent exploitation while still promoting scientific collaboration?*
3. *Is it ethically justifiable for pharmaceutical companies to develop high-cost treatments using publicly shared genomic data, and should international regulations limit this practice?*
4. *How can governments balance the need for genomic surveillance in preventing pandemics with the protection of individual genetic privacy?*
5. *Should developing countries invest in genomic technologies while still facing basic public health challenges, and how should priorities be determined?*
6. *What role should the World Health Organization play in regulating technologies such as CRISPR, and should global limits on human genetic modification be enforced?*
7. *Should patents on life-saving genomic treatments be restricted during global health emergencies to ensure equitable access?*

Topic B

The long-term effects of famine in Palestinians due to the war in the Middle East.

Context

On August 22 of 2025, Famine was officially confirmed in the Gaza Governorate of Palestine by the Integrated Food Security Phase Classification. Ever since the actual conflict that started on October 7 of 2023, over half a million people in the Gaza Strip are facing catastrophic conditions characterized by starvation, destitution and death. With almost 3 years of conflict, Palestina's infrastructure has been devastated, including electrical services, clean water supplies, sanitation, and healthcare, deepening food insecurity and severe shortages of essential supplies, leaving many people without necessary nutrients.

This is also referred to by some media as the "calorie collapse": In Gaza, for example, 500 trucks sustained the city daily, but during the conflict, this dropped to an average of 19 trucks a day which represents a 96 percent reduction. Water availability has also plummeted from 84 liters per person to just 3 liters during the siege, and by August 2025, 90 percent of agricultural production was systematically destroyed. Numerous international organizations, such as UN Agencies or local NGOs have intervened to try to mitigate famine, but Israeli authorities have limited the border crossing for humanitarian help.



Importance

Its importance is essential due to the profound ongoing humanitarian crisis, with far-reaching geopolitical, legal, and social impacts which continue. Famine is predictable and a human-made catastrophe that is part of this humanitarian crisis, and quarter of the population are experiencing catastrophic levels of starvation. The UN Secretary-General Antonio Guterres describes it as; “Man-made disaster, a moral indictment — and a failure of humanity itself”. (UN News, 2025)

It is also being used as a weapon against Gaza, which is a direct violation of international humanitarian law, making it a critical issue to uphold international humanitarian rights and protect them for every single individual suffering due to the famine.





Consequences

As mentioned, Food insecurity has reached unprecedented levels, with about 98% of households experiencing severe food insecurity according to HFIAS (standardized survey tool used to measure the severity of food insecurity), while 100% experienced different levels of food insecurity. On September 5 of 2025, 361 Palestinians have died due to malnutrition, including 130 children. (WHO, 2025). Palestine is experimenting soaring rates of infectious diseases that ,the body can fight easily, but a weakened body will struggle to do so, and it increases the mortality rate in the country.

In children, malnutrition during the first 1,000 days of life can cause permanent brain damage, leading to learning disabilities and behavioral problems, while physically it can lead to metabolic disorders, growth deficits and organ/structural damage and increasing the vulnerability of the body.

What has been done about it?

The World Food Program (WFP) has expanded operations, reaching over 1 million people each month through food parcels, bread bundles, hot meals, and school meals. (WFP, 2026).

400,000 meals are served daily via 45 community kitchens that have been operating since 2023-2024. Meanwhile, The Global Sumud Flotilla (GSF) is an international, civil society-led nonviolent maritime mission aimed to break through Israeli naval blockade of the Gaza Strip to deliver humanitarian aid to provide food and medical supplies.





What needs to be considered?

It's important to consider that famine can be made through a combination of man-made factors, such as conflict, economic collapse and climate shocks that end up destroying local food systems or blocking access to food. There's multiple shortages of basic products in Palestine, including the obstruction of food entering the country and the destruction of agricultural infrastructure, leading to food insecurity.

Impact in the healthcare system

Medical facilities have experienced critical shortages of essential supplies, medications, and specialized equipment. The healthcare system has also been significantly degraded by multiple attacks over the last years, with hospitals or other medical facilities suffering damage, making it impossible to treat patients with the sanitation requirements, leading to other clinic problems. Medical staff have also suffered a significant shortage, and they themselves are starving, and are unable to help other people that are in their same condition.

Over the years of this conflict, only 7,802 patients were allowed to leave Gaza to access treatment elsewhere, and there are currently even more patients in need of evacuation due to need of treatment and healthcare.

Involved organizations and movements

Action Against Hunger (ACF) are active in Gaza and the West Bank by providing hot meals, hygiene kits and have assisted over. The World Central Kitchen (WCK) has provided massive food aid in Gaza, serving over 100,000 million meals and reaching up to 1 daily hot meal, they have a mobile bakery that produces over 3,000 loaves of bread per hour and they employ local Palestinians in community kitchens to deliver food.

Medical Aid for Palestinians (MAP) is a non-governmental organization that provides essential health services and medical supplies, it's in the occupied West Bank and Gaza, they operate mobile clinics and support hospitals that are unable to attend due to the amount of people.

The Global Sumud Flotilla (GSF) is an organization that includes humanitarians, doctors, students, union workers, and seafarers uniting across continents to uphold human dignity. Their main goal is to break through Israel's marine blockade on the Gaza Strip to deliver food and aid.

Guide questions

1. How has the Middle East conflict shaped the access of food and aid products?
2. What role does lack of food and sanitation play in worsening health outcomes?
3. To what extreme does a country have to go before it is considered to be experiencing famine?
4. Why is famine a product of this conflict?
5. What happens when healthcare systems cannot treat malnutrition?
6. Is there any global plan to intervene in the prolongation of famine?
7. Is the entry of food and humanitarian products negotiable?
8. What are the potential risks that Palestinians can experience in the next few years?



LIST OF MEMBER STATES

- Israel
- Palestine*
- Argentina
- Australia
- Brazil
- Chile
- Canada
- China
- South Korea
- Democratic Republic of the Congo
- Denmark
- Finland
- Germany
- Hong Kong
- Iceland
- Indonesia
- India
- Japan
- Namibia
- Malaysia
- Mexico
- Netherlands
- Poland
- Qatar
- Russia
- Saudi Arabia
- Singapore
- South Africa
- Sudan
- Somalia
- Spain
- Switzerland
- Sweden
- United Kingdom of Great Britain and Northern Ireland
- Yemen

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