

UNITED NATIONS GENERAL ASSEMBLY

Prepared by **Lakshya Mutha** (Co-Chairperson), **Ridhima Dhaliwal** (Co-Chairperson), **Pranjal Sharma** (Vice- Chairperson)

Letter from the Executive Board

Dear Delegates,

Welcome to an engaging and insightful journey at the upcoming Model United Nations conference at JPHS. As we prepare to delve into the complex and pivotal agenda of "**The Role of Artificial Intelligence in Achieving the Sustainable Development Goals**", this Background Guide is designed to be your compass and roadmap throughout the conference.

Artificial Intelligence (AI) represents one of the most transformative technologies of our time, potentially accelerating progress across all 17 Sustainable Development Goals (SDGs). From improving healthcare and enhancing education to protecting our natural environment and revolutionizing our approach to economic growth, AI can reshape industries and redefine global development parameters.

The ever-changing domain of AI makes it a useful asset yet a weapon when held in the wrong hands. The dichotomy of debate over the “right” use of AI is a never-ending challenge. In our conference, we expect that you do justice to this agenda and represent your countries as ambassadors and think tanks who settle this debate. With your new ideas and sense of ethics, you can make this world a better place; you can shed light on how different sustainable goals can be solved using Artificial intelligence and similar tools.

In this guide, you will find essential information compiled by our Executive Board that outlines the intersection of AI and the SDGs. The content is structured to provide a comprehensive overview of the challenges and opportunities presented by AI, alongside practical examples of how this technology is currently being leveraged worldwide to foster sustainable development.

Regards,

Lakshya Mutha

(Co-Chairperson)

Ridhima Dhaliwal

(Co-Chairperson)

Pranjal Sharma

(Vice-Chairperson)

How to go through the Background Guide

This background guide serves as a foundation for your Model UN experience on the agenda “Role of Artificial Intelligence in Achieving the SDGs”. To use this guide effectively, you can choose to follow a 5 step approach.

Step 1: Grasping the Fundamentals: Begin by thoroughly digesting the introductory sections. Gain a solid understanding of the 17 SDGs and how AI is revolutionizing efforts to achieve them. The country-specific examples highlight the diverse applications of AI across various goals.

Step 2: Aligning with Your Assigned Country: Identify your assigned country and delve deeper into its specific SDG priorities. Research the current state of AI development in your country. Are there existing initiatives or challenges related to AI and the SDGs? How is your country’s political standpoint and existing policies answering the questions below? Consider how your country might leverage AI to address its most pressing development goals.

Step 3: Exploring the UN Landscape: Familiarize yourself with the UN's initiatives on AI for SDGs. The resources section provides links to key reports and programs. Analyse how these initiatives align with your country's priorities and identify potential areas for collaboration.

Step 4: Building Your Argument: Use the information gleaned from this guide as a springboard for further research. Consult credible sources like academic journals, news articles from reputable organizations, and official government reports specific to your country. This will help you build a strong foundation for your arguments and potential solutions during the committee sessions.

Step 5: Evaluating the agenda: AI adoption isn't without its challenges. Consider the potential ethical concerns surrounding AI, such as bias, transparency, and accessibility. How can these challenges be addressed to ensure equitable and responsible use of AI for achieving the SDGs?

Committee Overview

The General Assembly (GA) is one of the six principal organs of the United Nations, established by the Charter of the United Nations in 1946 following the aftermath of the Second World War. As a plenary body with universal membership, it includes all 193 member states of the UN, as well as several Observer States and Non-Governmental Organizations. The GA serves as a key forum for multilateral discussion of a wide array of international issues covered by the Charter, playing a crucial role in the norm-setting and policymaking of the international community.

The broad mandate of the General Assembly allows it to discuss and make recommendations on a range of issues, including those related to peace and security, economic growth, social development, and human rights. Each member state has an equal vote, reflecting the democratic ethos of the organization. The GA also takes up issues unless they are presently being addressed by the Security Council. Decisions on important questions, such as recommendations on peace and security, the admission of new members, and budgetary matters, require a two-thirds majority. Other matters are decided by a simple majority.

The GA's role is primarily that of a norm-setting body as it does not implement the resolutions it adopts; that task falls to other parts of the UN, such as the Secretariat. The GA is also the primary body responsible for the financial oversight of all UN operations and for electing the non-permanent members of the Security Council and other bodies. It meets annually under its regular session from September to December, which includes the General Debate, a high-profile event where heads of state and government present their views and discuss issues of international importance.

In its capacity as the chief deliberative, policymaking, and representative organ of the UN, the GA provides a unique platform that brings together all member states to discuss and cooperate on a broad spectrum of international law and security, economic and social progress, and human rights issues. It is pivotal in global governance, influencing international norms and policies.

Introduction to the Agenda

Artificial Intelligence (AI) is increasingly recognized as a pivotal force in shaping global development, offering both significant opportunities and notable challenges in the pursuit of the Sustainable Development Goals (SDGs). As the world aims to address complex societal issues such as poverty, inequality, climate change, environmental degradation, prosperity, and peace and justice, AI technologies present a set of tools that can accelerate progress, innovate solutions, and transform existing systems. This agenda will delve into how AI can be strategically deployed to optimise the fulfillment of the SDGs, exploring its capacity to enhance productivity, improve accessibility to services, and foster economic and social well-being.

AI's role in the context of the SDGs is multifaceted, influencing a broad spectrum of goals through applications in healthcare, education, environmental protection, and economic empowerment. For example, AI-driven solutions in healthcare, such as diagnostic algorithms and predictive analytics, can greatly expand the reach and efficiency of medical services, directly contributing to SDG 3 (Good Health and Well-being). In education, AI technologies can personalize learning and adapt resources to fit the needs of diverse student populations, advancing SDG 4 (Quality Education). Furthermore, AI's ability to process large datasets can be crucial in environmental monitoring and conservation efforts, aiding in the achievement of SDG 13 (Climate Action) and SDG 15 (Life on Land). This introduction seeks to frame the discussion around these applications and more, setting the stage for a comprehensive exploration of AI's transformative potential across various sectors.

However, the integration of AI into global development strategies is not without its challenges. Issues of ethics, governance, and inclusivity remain at the forefront of the debate on AI deployment. The risks of exacerbating inequalities, infringing on privacy, and creating dependency on technology must be carefully managed. As delegates, it is imperative to consider both the advantageous impacts and the potential unintended consequences of AI adoption. The discussions will need to navigate the complexities of technological advancement, ensuring that AI development is aligned with human rights, equity, and environmental sustainability. This dual focus on the promises and perils of AI will encourage a balanced approach to drafting resolutions that are not only innovative but also grounded in the principles of justice and inclusivity, ultimately aiming to leverage AI as a powerful ally in achieving the SDGs by 2030.

The world has seen some notable examples of artificial intelligence being used successfully to help achieve a number of SDGs. Some are as follows:

1. AI's role in preserving the Amazon Rainforest (SDG 15 - Life on Land)

The importance of preserving the Amazon Rainforest is paramount, but activities such as deforestation, conservation and protection become difficult. To curtail the impacts of deforestation, Colombian authorities employed AI to analyse satellite imagery, camera trap data, and audio recordings to monitor deforestation. This allows researchers to identify areas where deforestation is occurring and track changes over time. The information collected can be used to develop conservation plans and raise awareness about the importance of the rainforest

<https://news.microsoft.com/source/latam/features/ai/amazon-ai-rainforest-deforestation/?lang=en>

2. Rwanda's use of AI for economic growth and augmented healthcare (SDGs 3, 8, and 9)

Rwanda has adopted a national AI Strategy, designed to make it a leader in African AI Innovation. The policy aims to leverage AI to improve healthcare, education, agriculture, and trade. To achieve this, Rwanda is building expertise in AI and creating a secure data ecosystem. A challenge is ensuring everyone benefits from AI. The World Economic Forum's Centre for the Fourth Industrial Revolution (C4IR) played a key role in shaping Rwanda's AI strategy and will also help with implementation.

<https://www.weforum.org/impact/data-access-to-healthcare-in-rwanda/>

3. The view of a UN disabilities expert from OHCHR on AI's use being significantly beneficial for people with disabilities (SDGs 3 and 16)

According to Gerard Quinn, AI can improve mobility, provide personalized learning, and assist with independent living. However, AI can also be biased and exclude people with disabilities. Overall, his views highlight the importance of collaboration between governments, businesses, and civil society to ensure AI is used ethically to ensure that disabled people have knowledge about their rights and to make sure AI provides the most efficient and adequate healthcare options to them.

Definitions

1. Artificial Intelligence (AI):

A branch of computer science dedicated to creating systems that perform tasks that would normally require human intelligence. These tasks include learning (the acquisition of information and rules for using the information), reasoning (using the rules to reach approximate or definite conclusions), and self-correction. Specific applications of AI include expert systems, speech recognition, and machine vision.

2. Sustainable Development Goals (SDGs):

A collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030. These goals are broad and interdependent, yet each has a specific list of targets to achieve. They cover social, economic, and environmental development issues including poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, urbanization, environment, and social justice.

3. Machine Learning (ML):

A subset of AI that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

4. Deep Learning:

A subset of machine learning in artificial intelligence that has networks capable of learning unsupervised from data that is unstructured or unlabeled. Also known as deep neural learning or deep neural network.

5. Big Data:

Large volumes of data—both structured and unstructured—that inundate a business on a day-to-day basis. Big data can be analyzed for insights that lead to better decisions and strategic business moves

6. Algorithmic Bias:

Occurs when a computer system reflects the implicit values of the humans who are involved in coding, collecting, selecting, or using data to train the algorithm. Algorithmic bias can result in skewed outputs, reinforcing existing social prejudices and potentially leading to unfair treatment of individuals.

7. Natural Language Processing (NLP):

A subfield of linguistics, computer science, and artificial intelligence concerned with the interactions between computers and human (natural) languages, in particular how to program computers to process and analyze large amounts of natural language data.

8. Ethical AI:

Refers to the practice of designing, developing, and deploying AI with good intention to empower humanity and businesses, and fairly distributing the benefits of AI systems without discriminating against certain groups.

9. AI Governance:

An ethical framework for ensuring AI technology is well-researched and developed with the intention of positive impact on humanity, incorporating principles of accountability, transparency, fairness, and auditability.

Important perspectives from the UN

1. <https://www.un.org/en/desa/artificial-intelligence-blessing-or-curse-sustainable-development>
2. <https://www.un.org/en/un-chronicle/generative-artificial-intelligence-what-it-what-it-not-and-what-it-can-be-united>
3. <https://www.un.org/en/building-urban-development-strategies-sustainable-future-0>
4. <https://www.un.org/en/academic-impact/unai-charter-day-lecture-technology-data-and-future-un>
5. <https://www.un.org/en/chronicle/article/towards-ethics-artificial-intelligence>

Questions to consider

- How can we ensure that the use of AI in initiatives aimed at achieving the SDGs does not compromise individual privacy and data security?

- What measures can be put in place to prevent AI systems from perpetuating or exacerbating social and economic inequalities through algorithmic bias?

- How can we address the digital divide and ensure equitable access to AI technologies, particularly in less developed countries?

- What ethical guidelines should be established to govern the development and deployment of AI technologies in sensitive areas such as healthcare, education, and law enforcement?

- As AI continues to automate tasks traditionally performed by humans, what strategies should be implemented to manage the impact on employment and ensure economic stability?

- What kind of international cooperation is necessary to create unified regulatory standards for AI that respect national sovereignty but maintain global norms?

- Considering the environmental impact of developing and running AI systems, how can sustainable practices be integrated into the lifecycle of AI technologies?

- How can we ensure that diverse groups, including those from marginalized communities, have a voice in shaping AI development that impacts them?

- What mechanisms should be in place to continuously monitor the impacts of AI on the progress of the SDGs and adjust policies accordingly?

- How can we prepare for the long-term societal impacts of AI, particularly in terms of shifts in social structures, human behaviour, and interpersonal relationships?

Helpful resources

<https://www.ohchr.org/en/stories/2022/05/artificial-intelligence-and-sustainable-development-goals>

<https://www.ohchr.org/en/stories/2024/02/ai-force-good>

<https://www.ohchr.org/en/statements-and-speeches/2024/02/human-rights-must-be-core-generative-ai-technologies-says-turk>

https://www.unescap.org/sites/default/files/ESCAP_Artificial_Intelligence.pdf