Sri Lanka Model United Nations

United Nations Enviroment Program

Study Guide

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UNITED NATIONS ENVIRONMENT PROGRAMME

The United Nations Environment Programme (UNEP) was established in 1972. It functions as the representative voice for the environment within the United Nations. The UNEP works as a catalyst, advocate, an educator, and facilitator to promote sustainable development goals, to promote the wise usage of existing resources and the protection of the global environment. The headquarters is based in Nairobi, Kenya along with extra regional and liaison offices.

The UNEP is further divided under different criteria such as Early Warning and Assessment, Environmental Policy Implementation, Technology, Industry and Economics, Regional Cooperation, Environmental Law and Conventions, Communications and Public Information and the Global Environment Facility Coordination. Given that it is the leading global environmental institution with regards to environmental conservation, responsibilities include;

- Promoting international cooperation and recommending policies with regards to environmental issues
- Monitoring the status of the global environment and gathering, compiling information.
- Assisting in the creation of regional programmes for environmental sustainability.
- Aiding environment ministries/authorities in all nations who request assistance, to formulate and implement environmental policies.
- Providing country-level environmental capacity building and technology support.
- Developing international environmental law, and providing expert advice on conservation, resource management and any environmental issues.

The UNEP rose into particular prominence in recent years as the need to address the challenges of Climate Change rise, the issues of developing technology with side effects which can damage the environment, as well as diminishing, non-renewable natural resources increasing the importance of efficient and balanced resource management.

THE AGENDA

Conference Topic: Marine Life and Ocean Pollution

Practice Debate Topic: Renewable Energy and future Energy Demand

CONFERENCE TOPIC: MARINE LIFE AND OCEAN POLLUTION

BACKGROUND

Land-based sources (such as agricultural run-off, discharge of nutrients and pesticides and untreated sewage including plastics) account for approximately 80% of marine pollution, globally. Marine habitats worldwide are contaminated with man-made debris. Oil spills remain a concern, though actual spills have decreased steadily for several decades.

The United Nations Environment Programme (UNEP), particularly through its Regional Seas Programme, protect oceans and seas and promote the environmentally sound use of marine resources. The Regional Seas Conventions and Action Plans is the world's only legal framework for protecting the oceans and seas at the regional level.

The United Nations Educational, Scientific and Cultural Organization (UNESCO), through its Intergovernmental Oceanographic Commission coordinates programmes in marine research, observation systems, hazard mitigation and better managing ocean and coastal areas.

The International Maritime Organization is the key United Nations institution for the development of international maritime law. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

To ensure that shipping is cleaner and greener, IMO has adopted regulations to address the emission of air pollutants from ships and has adopted mandatory energy-efficiency measures to reduce emissions of greenhouse gases from international shipping. These include the landmark International Convention for the prevention of pollution from ships of 1973, as modified by a 1978 Protocol (MARPOL), and the 1954 International Convention for the Prevention of Pollution of the Sea by Oil.

CASE STUDY

Human activities on land are the biggest sources of marine pollution. These include the dumping of waste along coastlines, littering on beaches, and the breaking down of ships. Floods and other storm-related events flush this waste into the sea, where it sinks or is carried away by currents. The major sea-based sources of marine pollution include discarded fishing gear, shipping activities, and legal and illegal dumping.

All of this pollution causes serious economic losses. Coastal communities are facing increased expenditures on beach cleaning, public health and waste disposal. The shipping industry is impacted by higher costs associated with fouled propellers, damaged engines, and managing waste in harbours.

Marine pollution also causes biodiversity loss and hampers ecosystem functions and services. Discarded fishing gear can entangle and kill marine life and smother wildlife habitats. Pesticides and other toxins adhere to tiny particles of discarded plastics (microplastics), which can be accidentally ingested by small aquatic life. Once ingested, the toxins bio-magnify as they move up the food chain, accumulating in birds, sea life and possibly humans. Litter can accumulate in huge floating garbage patches or wash up on the coasts. Light, resistant plastics float in the Ocean, releasing contaminants as they break down into toxic micro-particles that animals mistake for food.

UN Environment’s Global Programme for the Protection of the Marine Environment from Land-Based Activities, which has been active since 1995, aims to provide guidance to national and regional authorities on how to prevent, reduce, control and eliminate marine degradation from land-based activities.

Excessive nutrients from sewage outfalls and agricultural runoff have contributed to the increasing incidence of low oxygen (hypoxic) areas known as dead zones, where most marine life cannot survive, resulting in the collapse of some ecosystems. There are now close to 500 dead zones with a total global surface area of over 245,000 km², roughly equivalent to that of the United Kingdom. The excess nitrogen can also stimulate the proliferation of seaweeds and microorganisms and cause algal blooms. Such blooms can be harmful (HABs), causing massive fish kills, contaminating seafood with toxins and altering ecosystems.

As the world saw in 2010, the Gulf of Mexico deep-water oil spill had a devastating effect on the entire marine ecosystem, as well as the populations that depend on the marine areas for their livelihoods. Smaller oil spills happen every day, due to drilling incidents or leaking motors, and cause the death of birds, marine mammals, algae, fish and shellfish.

POINTS TO CONSIDER

1. Impact of stricter regulations on industries and manufacturing at national level and taking into account, the existing laws enacted by the Environmental Protection Agency
2. Measure such as implementing renewable energy sources, such as wind or solar power and limiting off-shore drilling
3. Evaluating the benefits of implementing organic farming and eco-friendly pesticide use.
4. Proper sewage treatment and exploration of eco-friendly wastewater treatment options
5. Measures that could be taken to cut down on industrial/manufacturing waste and contain landfills so they don't spill into the ocean

FURTHER RESEARCH

https://www.nrdc.org/stories/ocean-pollution-dirty-facts

http://www.noaa.gov/resource-collections/ocean-pollution

https://www.smithsonianmag.com/smart-news/study-shows-deepest-parts-ocean-are-polluted-plastic-180969049/

PRACTICE DEBATE TOPIC: RENEWABLE ENERGY AND FUTURE ENERGY DEMAND

BACKGROUND

Globally, energy consumption is growing at a rapid rate. The World Energy Outlook predicts that in the next 25 years, energy consumption will increase by 60 percent with the bulk of this growth to occur in developing countries. Under a business as usual scenario, fossil fuels will continue to dominate the energy mix, with enormous environmental, health, economic, and energy security consequences. The share of renewable energy, though growing in absolute terms, will remain largely unchanged (14 percent, of which the bulk today is traditional biomass and hydropower). Further, despite these growth rates, 1.4 billion people will be without electricity in 2030 and a comparable amount will continue to rely on traditional biomass for heating and cooking needs. Clearly, this is an unsustainable path for the world to follow, particularly given rising fossil fuels prices that are projected to remain high into this decade and beyond.

Renewable energy—including biomass, geothermal, hydropower, solar, wind, tidal, and wave— offers tremendous benefits for meeting global energy needs. Building on a foundation of hydropower, biomass combustion, and geothermal power pioneered during the industrial revolution in the late 1800s, new forms of renewable energy began to be developed and commercialized, including solar, wind, and several forms of advanced bioenergy.

Today, these renewable energy technologies are the fastest growing energy technologies (particularly wind and solar) and are cost competitive in a variety of grid, off-grid, and remote applications worldwide. They utilize locally available resources, offsetting the need for costly fuel imports; are environmentally beneficial, without the harmful emissions of conventional energies; provide diversification to a country's energy mix; and create local job and income opportunities.

CASE STUDY

Energy is an essential factor for sustainable development and poverty eradication. Nevertheless, it is estimated that in 2015 still about 2.8 billion people have no access to modern energy services and over 1.1 billion do not have electricity. Furthermore, around 4.3 million people are dying prematurely every year due to indoor pollution resulting from cooking and heating with unsustainable fuels. The challenge lies in finding ways to reconcile the necessity and demand for modern and sustainable energy services with its impact on the environment and the global natural resource base in order to ensure that sustainable development goals are realised.

The complex challenges of energy and sustainable development were highlighted at the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992. Energy was discussed throughout Agenda 21. Agenda 21 highlighted the fact that current levels of energy consumption and production are not sustainable, especially if demand continued to increase and stressed the importance of using energy resources in a way that is consistent with the aims of protecting human health, the atmosphere, and the natural environment.

Nevertheless, energy was not explicitly considered in the Millennium Development Goals, but at the 9th session of the Commission on Sustainable Development (CSD-9), held in 2001, countries agreed that stronger emphasis should be placed on the development, implementation, and transfer of cleaner, more efficient energy technologies and that urgent action was required to further develop and expand the role of alternative energy sources.
The Johannesburg Plan of Implementation (JPOI), adopted at the World Summit on Sustainable Development in 2002, addresses energy in the context of sustainable development.

Actions so far:

In 2004, UN-Energy was created in response from a call of the 2002 World Summit on Sustainable Development for a more coordinated and coherent programme on energy activities by UN agencies. CSD-14 and CSD-15 in 2006 and 2007 focused on a cluster of thematic issues, which included energy for sustainable development.

In 2011, the Sustainable Energy for All initiative was created by the UN Secretary-General to pursue three major objectives by 2030: ensuring universal energy access to modern energy services, doubling the global rate of improvement in energy efficiency and doubling the share of renewable energy use in global energy.

In 2012, the resolution by the UN General Assembly declaring 2012 as the International Year of Sustainable Energy for All was successfully implemented with many activities and commitments promoting a sustainable energy future. Also, in the outcome of the 2012 Rio+20 Conference on Sustainable Development (The Future We Want), Member States: (1) recognize the critical role that energy play in the development process; (2) emphasize the need to address the challenge of access to sustainable modern energy services for all; and (3) recognize that improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies are important for sustainable development.

In 2014, the resolution by the UN General Assembly declaring 2014-2024 the United Nations Decade of Sustainable Energy for All entered into effect with many activities and commitments and with the establishment of several technical hubs around the world to accelerate the objectives of this SG's initiative.

In 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs), which include a dedicated and stand-alone goal on energy, SDG #7, calling to "ensure access to affordable, reliable, sustainable and modern energy for all". As a result, the issue of sustainable Energy now stands at the centre of global efforts to induce a paradigm shift towards low-carbon energy systems, green economies, poverty eradication and ultimately sustainable development.

POINTS TO CONSIDER

1. How to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services
2. Recognize that energy services have positive impacts on poverty eradication and the improvement of standards of living
3. Means to develop and disseminate alternative energy technologies with the aim of giving a greater share of the energy mix to renewable energy and, with a sense of urgency, substantially increase the global share of renewable energy sources
4. Issues to diversify energy supply by developing advanced, cleaner, more efficient and cost-effective energy technologies
5. Combine a range of energy technologies, including advanced and cleaner fossil fuel technologies to meet the growing need for energy services
6. Accelerate the development, dissemination and deployment of affordable and cleaner energy efficiency and energy conservation technologies
7. Take action, where appropriate, to phase out subsidies in this area that inhibit sustainable development

FURTHER READING

http://www.world-nuclear.org/information-library/energy-and-the-environment/renewable-energy-and-electricity.aspx

https://www.sciencedirect.com/science/article/pii/S2214629617303900