

Forum:	Environmental Committee
Issue:	Combatting Desertification in Countries Experiencing serious Drought and Desertification
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Introduction

On a global plane, the issue of desertification was first discussed at the UN Conference on Desertification held in Nairobi, Kenya in 1977. But due to a lack of support, both administrative and financial attempts to efficiently tackle the problem of desertification were crippled. Drought and desertification are closely related phenomena. Persisting over months or years, drought can affect large areas and may have serious environmental, social and economic impacts. In extreme cases in drylands, this is called desertification. It is now the duty of the Environmental Committee to tackle these problems.

Definition of Key Terms

Law on Soil Protection and Prevention of Desertification

The soil protection law includes measures to prevent desertification caused by intensifying agriculture, mining, road construction, urban land use, and climate change.

The law guides to facilitate a safe and healthy environment for the population, prevent soil damage, and lower soil fertility from overgrazing and desertification. It also provides systems to prevent soil erosion.

Besides, the law contains measures to establish accountability in environmental protection along with more elaboration on soil degradation, desertification gradation criteria, and soil assessment methodology.

World Overview of Conservation Approaches and Technologies (WOCAT)

Founded in 1992 and based in Switzerland, WOCAT is a global network of specialists in soil and water conservation. WOCAT supports innovation and decision-making processes in Sustainable Land Management. WOCAT was officially recognized by the United Nations Convention to Combat

Desertification in 2014 as the most highly recommended database for Sustainable Land Management best practices.

Subsistence agriculture

Subsistence agriculture occurs when farmers grow food crops to feed themselves and their families. In subsistence agriculture, farm output is targeted to survival and is mostly for local requirements with little or no surplus trade.

Population Pressure

The sum of the factors (as the increase in numbers or excessive food consumption) within a population that reduce the ability of an environment to support the population and that therefore tend to result in migration and expansion of range or extinction or decline of the population.

Desertification

Desertification is the spread of desert-like conditions as a result of a combination of climatic fluctuations and human impacts, is a form of land degradation that occurs in and around the world's drylands.

Drought

Drought is a natural phenomenon, whose impacts can be caused by human activities that are not adapted to the local climate.

Land Degradation

Land degradation is the process of turning fertile land into less or non-productive land.

Background Information

General Overview

There are considerable debates surround the speed, nature, and causes of desertification, but it undoubtedly has a series of health implications. One group of these is associated with indirect human impacts of the phenomenon, including mass migrations, poverty, food and water shortages, and conflict over land and water resources.

Another group of health problems is associated with reductions in water quality, whether in terms of availability or, more importantly, in terms of salt and particulate loadings. Possibly the most pervasive health consequences of desertification are reductions in air quality caused by the buildup of dust particles in the air. Among the human health considerations associated with dust (mineral aerosol) in the

atmosphere are respiratory problems, heart disease, silicosis, conjunctivitis, meningococcal meningitis, and coccidioidomycosis (Valley Fever).

Major Countries and Organizations Involved

The FAO (Food and Agricultural Organization of the United Nations)

Action Against Desertification (AAD) is a program that supports local communities, governments and civil society in six African countries - Burkina Faso, Ethiopia, the Gambia, the Niger, Nigeria, and Senegal – as well as in Fiji and Haiti, to sustainably manage and restore their drylands and fragile ecosystems affected by desertification, land degradation, and drought.

Israel

Among Israel's areas of expertise are water recycling, water management, irrigation, agriculture in arid environments, soil erosion, salinization, mitigation and adaptation to climate change, and afforestation. Extensive R&D and decades of hands-on experience in coping with drylands conditions enable Israel to help other countries.

Israel works closely with the UN Convention for Combating Desertification (UNCCD) and its Executive Secretary to match its major efforts in the area to the UNCCD's goals, plans, and framework. As a signatory to the UNCCD, Israel transfers to the affected countries in Africa, Central Asia, and Latin America the technologies that were developed and tested in the extreme conditions of the Negev desert.

Argentina

The project works with groups of producers to restore salinized and sodic soils by reducing the use of inputs and implementing afforestation measures that use adapted species to minimize the wind impact and reduce evapotranspiration. The project also offers training on more efficient irrigation techniques needed for soil recovery.

Netherlands

Common-land Foundation presented one of its partner projects that engages local farmers, land users and experts to transform highly degraded landscapes of the Western Australian Wheatbelt into productive farms and healthy eco-systems connected by biodiversity and cultural corridors.

U.S.A

The U.S. Brings together many countries and organizations to form the Save the Earth Green Corps. The "Save the Earth Green Corps" exhibition was organized by Future Forest Initiative, the World

Federation of United Nations Associations (WFUNA), the United Nations Convention to Combat Desertification (UNCCD) and the Korea Foundation.

Egypt – SEKEM

The SEKEM initiative has received the Land for Life Award for its outstanding commitment to combating soil erosion and protecting soil fertility by advancing sustainable agriculture practices in Egypt. The articles call attention to the pressing need for environmental education and research in the country where the rapidly growing population makes the problem of land degradation and its effects on the availability of natural resources particularly urgent.

Belarus

Approximately 10 percent of degraded peatlands have been restored in Belarus to date, reflecting the results of the country's strategy to combat land degradation, as well as to advance conservation and the sustainable use of peatlands.

Belarus has become one of the pilot countries to implement projects in land restoration to achieve Land Degradation Neutrality by 2030, reversing the processes of land degradation and raising soil fertility, and productivity.

China

China's Law of Prevention and Control of Desertification is the world's first integrated law dedicated to combating desertification. It provides a legal framework to support the implementation of China's National Action Program to Combat Desertification and a host of projects aimed at rehabilitating and revegetating land at risk, from the vast Three-North Shelterbelt "Great Green Wall" Program to local tree planting initiatives.

The Green Wall Initiative

The Global Mechanism of the UNCCD is implementing a flagship initiative under the Great Green Wall called FLEUVE – *The Local Environmental Coalition for a Green Union*. The project is financed by the European Commission to the tune of Euro 7 million and is being implemented from 2014-18.

FLEUVE aims to strengthen the capacities of local communities to help boost investments in land restoration and create employment opportunities or 'green jobs.' The project is driven by local people themselves to strengthen community resilience to land degradation, drought, and climate variability.

Micro-investment projects are currently being implemented under FLEUVE in 23 communities across five Sahel countries - Burkina Faso, Chad, Mali, Niger and Senegal. The project is complemented by regional-level activities on capacity building and the dissemination of good practices on sustainable land management and innovative financing.

The project is led by the Global Mechanism, with the support of the Food and Agricultural Organization of the United Nations (FAO) and three networks of community-based organizations - RESAD, RADD0, and Drynet.

Asia Soil Conservation Network for the Humid Tropics (ASOCON)

Formed in 1989 with the support of the United Nations Development Program (UNDP) and the FAO, ASOCON strives to assist member countries in developing and disseminating soil and water conservation practices for small-scale farmers. It is composed of a coordinating unit at the Ministry of Forestry in Jakarta and National Coordinating Committees established by China, Indonesia, Malaysia, Papua New Guinea, Philippines, Thailand, and Vietnam. Hosting regional workshops and training, ASOCON helps small-scale farmers to be more sustainable and productive. ASOCON has also worked on the Conservation of Lands in Asia and the Pacific project.

Soil Science Society of America (SSSA)

Founded in 1936 and based in Madison, Wisconsin, SSSA is made up of thousands of members and certified professionals who are dedicated to advancing the soil science field. SSSA provides information about soil topics such as ecosystem sustainability, waste management, and wise land use. The Society is also part of the Alliance of Crop, Soil, and Environmental Science Societies.

Timeline of Events

Date	Description of event
17 th /Jun./1994	United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (UNCCD) was created.
10 th /Oct./1997	The UN Convention to Combat Desertification has established a Committee on Science and Technology (CST). Its mandate and terms of reference were defined and adopted during the first session of the Conference of the Parties in 1997.
22 nd -24 th /Jan./2008	Beijing International Conference on Combating Desertification
12 th -15 th /Nov./2012	Fourth International Conference on Drylands, Deserts and Desertification: Implementing Rio+20 for Drylands and Desertification
2017	The International Conference on Drylands, Deserts, and Desertification (DDD) emerged as an international organization to aid agencies and other stakeholders

from over 60 countries concerned about land and environmental degradation in drylands and living conditions in and around them, as well as their sustainable use and development.

UN Involvement

On January 10th, 2010, the United Nations released a report regarding plans and ideas for the organization. It is as follows:

With more lands around the world facing increasing deterioration and degradation, the United Nations General Assembly declared the United Nations Decade for Deserts and the Fight Against Desertification, which runs from January 2010 to December 2020 to promote action that will protect the drylands. The Decade is an opportunity to make critical changes to secure the long-term ability of drylands to provide value for humanity's well-being.

The goals and objectives of the Decade flow directly from the General Assembly's resolution. The motivation for this resolution was the Parties' concern about the deteriorating situation of desertification in all regions, which has far-reaching implications for the attainment of the Millennium Development Goals, particularly the eradication of poverty and ensuring environmental sustainability.

In this regard, the resolution mandates the pursuit of three objectives, which are:

- *organizing activities to observe the Decade to raise awareness of (a) the causes of and (b) solutions to ongoing land degradation and desertification in the framework of the ten-year strategic plan and framework to enhance the implementation of the Convention (2008-2018);*
- *mobilizing financial and technical support to the Convention Secretariat, to support special initiatives in observance of the Decade as well as other observance events and activities worldwide; and*
- *monitoring and reporting on progress in preparation of the Secretary General's Report to the General Assembly at its 69th Session on the status of implementation of the resolution.*

Relevant UN Treaties and Events

There are no known Treaties formed by the UN that is relevant to the topic, although Delegates are not discouraged from continuing research on their own as new information is always added and updated.

Possible Solutions

International Aid Systems and Co-operations

Delegates, it is highly recommended to promote diplomatic relations with other nations that are sharing your views on how to tackle such global phenomena. Furthermore, it is suggested that countries that have either already or will soon solve the problem offer their resources and technology with LEDCs (Less Economically Developed Countries), which may be struggling with the issue. The reason is that countries like Israel are already sharing their successive methods of combatting desertification with other neighboring countries (such as water recycling, water management, irrigation, etc.).

Establishing Ordered Public Systems Operated by Officials;

This is both to promote public awareness, and help officials find out the true problems in their regions/nations, and therefore help create better-suited solutions. Each district holds an officially decided meeting (consisting of farmers, citizens, and certain officials) to discuss problems and solutions, and the report will be forwarded to the city representatives. Who in turn will hold their meeting according to the problems and alter the solutions if required and pass on to province officials and so forth? In this way, a country could have a full report originating from the source of the problems.

Research Organizations

While certain problems require action more than planning, delegates are also encouraged to focus on the development of new technologies in agriculture as the FOA (Food and Agricultural Organization of the United Nations). So certain **R&D Organizations** within every country to help create a backbone for the 'active' organizations already existing.

Previously decided Goals/Projects

Delegates are also encouraged to use the following list of actions to prevent Desertification:

- *Integrating land and water management to protect soils from erosion, salinization, and other forms of degradation.*
- *Protecting the vegetative cover, which can be a major instrument for soil conservation against wind and water erosion.*
- *Integrating the use of land for grazing and farming where conditions are favorable, allowing for a more efficient cycling of nutrients within the agricultural systems.*
- *Applying a combination of traditional practices with locally acceptable and locally adapted land use technologies.*

- *Giving local communities the capacity to prevent desertification and to manage dryland resources effectively.*
- *Turning to alternative livelihoods that do not depend on traditional land uses, such as dryland aquaculture, greenhouse agriculture and tourism-related activities, is less demanding on local land and natural resources, and yet provides sustainable income.*
- *Creating economic opportunities in dryland urban centers and in areas outside of drylands.*

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