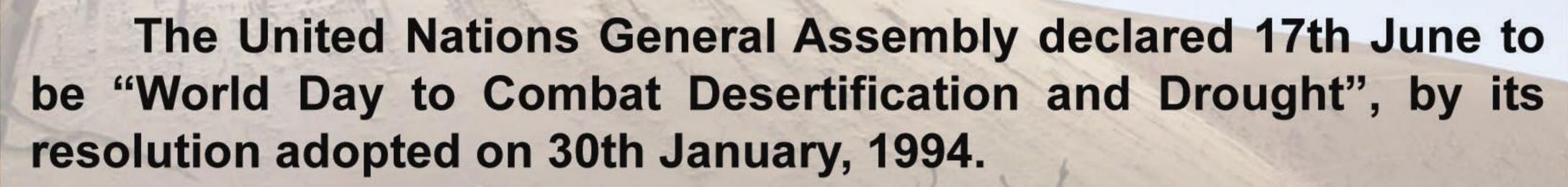
Desertification & Drought Day

17^H JUNE 2 0 2 2

Theme: "Rising up from drought together"

Introduction



The purpose of this day is to rise an awareness of the presence of desertification and drought. And to prevent desertification and recover from drought.

This year's global observation of Desertification and Drought Day will be held in Madrid, Spain.

Definition of Desertification

Desertification is defined as a process of land degradation in arid, semi-arid and sub-humid areas due to various factors including climatic variations and human activities.

Reasons for desertification and drought

Overgrazing: Overgrazing is one of the major problems for desertification. When a herd of animals are kept in one place, grasses start dying because their roots are often weakened by animals constantly stepping on them and when animals overgraze in certain spots that leads the plants to not get enough time to re-grow. This often restrains the plants to grow and multiply.

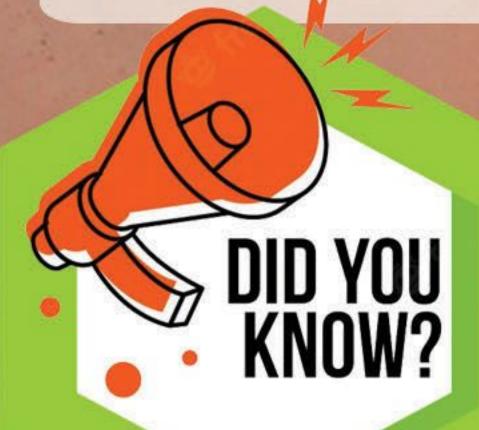
Deforestation: Deforestation is one of the leading human causes of desertification. Often trees are cut down in order to build house, to be used as fuels or to provide products that we used in our daily lives. But when the trees and vegetation are gone, there are no roots that would hold soil in place. There would be no canopy to shield the soil from heat and rainfall. Thus, resulting in drying out of soil and it becomes infertile and lifeless, leading it to drought.



Unsustainable agriculture techniques: Inconsiderate farming methods like tiling, planting of unsuitable crops and leaving soil exposed to wind and rain erosion leads to desertification. Which also leads to poor quality crops with low economic value.

Urbanization and other type of land development: Land degradation due to urbanization has affected many countries. For development purpose people tend to kill plant life. Which cause issues with the soil due to chemicals and other things that may harm the ground. And as the trend for urbanization increases, the demand for resources grows bigger, drawing more and more resources and leaving behind degraded lands that easily succumb to desertification.

Stripping of the land resources: An area of land where natural resources like natural gas, oil or minerals are available, people tend to mine it or take it out. This usually strips the soil of nutrients, resulting in killing the plants life and eventually leads to the process of becoming a desert biome.



The total forest cover in Nagaland is 12,486.40 sq. kilometres, which is 75.31% of the State geographical area.

Consequences

- According to UNESCO, one-third of the world's land surface is threatened by desertification, as it effects the livelihood of people who depend on the benefits of ecosystem that dry lands provide.
- ➤ Between 1990 and 2019, drought impacted 2.7 billion people in the world and caused 11.7 million deaths. Currently, forecast estimate that by 2050 droughts may affect over three-quarters of the world's population.
- Almost 1 billion tonnes of soil are lost every year because of erosion resulting from poor land management.

- Food production undermine, if not stopped and rehabilitated. Food yields may decline, which may result in malnutrition, starvation and calamity.
- Framing becomes impossible if the area is dry. It becomes difficult for the framers to grow substantial crops, when the land is dry. This leads the framers to sell their land.
- It decreases in crop yields, which in turn affects the livelihood of the farmers, who solely depends on farming as their single source of income.
- Flooding is also one of the major consequences of desertification and drought. Where there is no plant, flooding becomes imminent as there is nothing to stop the water from overflowing. This results in negative affect in water supply.
- Destruction of habitats and desertification contributes to loss of biodiversity. It also results in decline in population for which species may become endangered or even extinct.

How to combat desertification and drought

Planting more trees: Planting trees will reverse desertification by preventing soil erosion and providing nutrients to other plants and crops to grow. It will improve air quality by filtering harmful dust and pollutants. Trees will also reduce the amount of storm water runoff, which in turn will help in reducing erosion and pollution in our waterways. It will reduce the effects of flooding as well.

Educating workers in agricultural sector: Educating workers in agricultural sector is an incredibly important tool that needs to be utilized in order to help farmers understand the best way to use the land. By educating them on sustainable practices, more can be saved from desertification and drought.

Diversifying agricultural production: Reduction in rice and wheat production because these two consumes a lot of resources (water) for producing. That's why other agricultural products like cash crops (almond and cashew) should be an alternative option.

Less usage of chemical fertilizers: Fertilizers are costly inputs in agriculture. High rates or excess use of fertilizers manifest environmental consequences including air, water pollution and human health. Sustainable soil quality and fertility can be obtained through organic farming using alternative to traditional fertilizers. Agroforestry, mulching, intercropping, and crop rotation are some examples to reduce chemical fertilizers usage.

Building more canals: Inorder to increase arable and more sustainable place for human settlement, the canals should be constructed.

Steps taken to deflect desertification and drought by Indian Government

Nagaland Forest Management Project: This project started in the year 2017-18. The main objective of the project is to improve forest ecosystem and support income generation by rehabilitation of Jhum areas and provision of livelihood support. Thereby, contributing to sustainable forest and environmental conservation.

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS): This scheme was launched in 2005. The Act aims at enhancing livelihood security of household in rural areas. The other objective of the scheme is to strengthen natural resource management through works that address the cause of the poverty like drought, deforestation and soil erosion and encourages sustainable development.

Green India Mission, 2014: Green India Mission (GIM) was launched in 2014 and is one among the eight missions outlined under National Action Plan on Climate Change (NAPCC). The mission was proposed for 10 years. It aims at protecting, restoring and enhancing India's diminishing forest cover and responding to climate change.





Nagaland ENVIS Hub

Email: envisnagaland@gmail.com

