Report

on

Digital Observance of

Earth Day, 2020

Organized by

ENVIS Resource Partner

on

Forest Genetic Resources and Tree Improvement

Institute of Forest Genetics and Tree Breeding

(Indian Council of Forestry Research and Education)

Coimbatore

Digital Observance of Earth Day, 2020 by ENVIS, IFGTB through Facebook Live

ENVIS Resource Partner on Forest Genetic Resources and Tree Improvement at IFGTB, Coimbatore marked the 50th anniversary of Earth Day digitally on 22.04.2020. As a precautionary measure to contain the spread of the COVID-19, the event was organized without public gathering through Facebook live. The programme has been registered with the global Earth Day Network.

The proceedings began with an invocation on Nature in Sanskrit, "Prakruti Vandanam" composed as a "Raga Malika" by Dr Kannan CS Warrier, Scientist F and Coordinator ENVIS in diverse ragas in Carnatic music. During his welcome speech, Dr Kannan CS Warrier highlighted that the first Earth Day, in 1970 is credited with launching the modern environmental movement, and is now recognized as the planet's largest civic event. From shifting weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale. Speaking on the carbon stock of India's forests based on the statistics of Forest Survey of India, he pointed out that the per hectare carbon stock at the national level is 100.03 tonnes and only 11 states and UTs could record a carbon stock above the national average. Though the southern states of Karnataka, Andhra Pradesh, Tamil Nadu and Kerala were among the four top ranked states, in terms of tree diversity, they were at 7th, 11th, 12th and 13th positions in terms of carbon stock and Kerala with 100.72 tonnes is the only south Indian state with a per hectare carbon stock above the national average. Shri. S. Senthilkumar, IFS., Director, IFGTB in his special address explained that the Earth's climate has always changed and evolved. Some of these changes have been due to natural causes but others were attributed by human activities such as deforestation, emissions from industries and burning of fossil fuels. Recent research indicates that the climate system is influenced by human activities and resulted in global warming since 1950s, he added. He explained that observance of events like Earth Day brings people closer to earth. Shri S. Senthilkumar urged all to preserve earth's natural resources by changing our daily habits, planting more trees, making efforts towards promoting the concept of cleaner production and requested all to follow 3Rs (Reduce, Reuse and Recycle). An awareness poster highlighting the theme "Climate Action" was released during the occasion. Softcopies of the poster and handouts were transmitted electronically to all the stakeholders. Hard copies will be distributed to school children and college students after reopening. Dr S. Vigneswaran, Programme Officer ENVIS proposed the vote of thanks. The event can be accessed at https://www.facebook.com/ifgtbenvisrp/videos/2493868984275191/.


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50 YEARS EARTH DAY 2020

EARTH DAY 2020

The theme for Earth Day 2020 is "Climate Action". The enormous challenge but also the vast opportunities of action on climate change have distinguished the issue as the most pressing topic for the 50th anniversary. Climate change represents the biggest challenge to the future of humanity and the lifesupport systems that make our world habitable (www.earthday.org).

THE DRIVING FORCES OF CLIMATE : The primary source of energy that drives the climate system is solar radiation. The Sun's energy travels across space as electromagnetic radiation to the earth and determines the energy available for climate. Infrared radiation, radio waves, visible light and ultraviolet rays are all forms of electromagnetic radiation.

31% of the radiation is reflected away by the atmosphere itself by clouds

20% is absorbed by the atmosphere and clouds

49% is absorbed by the Earth's surface

CLIMATE DRIVERS THAT AFFECT EARTH

NATURAL DRIVERS
-Sun's energy output.
-Regular changes in Earth's orbital cycle.
-Large volcanic eruptions that put light-reflecting particles into the upper atmosphere.

- Average global temperature increased by 0.85° celsius over the period 1880 to 2012.
- Increase in global temperature will exceed 1.5° celsius between 2030 and 2052.
- Increased concentrations and on-going emissions of greenhouse gases.
- Average sea level rise is predicted as 24 – 30cm by 2065 and 40-63cm by 2100.

HUMAN DRIVERS
-Heat-trapping emissions from burning coal, gas and oil in power plants and cars.
-Cutting down and burning forests.
-Pollution particles (aerosols).
-Black carbon pollution more commonly referred to as soot.
-Changes in land use.
-Habitat loss.

- Global emissions of carbon dioxide (CO_2) have increased by almost 50%.
- Emissions grew more quickly than in each of the three previous decades.
- Oceans have warmed, the amounts of snow and ice have diminished and sea level has risen.

SUSTAINABLE DEVELOPMENT GOAL CLIMATE ACTION

- Climate change is now affecting every country in every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow. Weather patterns are changing, sea levels are rising, weather events are becoming more extreme and greenhouse gas emissions are now at their highest levels in history. Without action,the world's average surface temperature is likely to surpass 3 degrees centigrade this century. The poorest and most vulnerable people are being affected the most.
- Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quick--ening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts. Climate change, however, is a global challenge that does not respect national borders. It is an issue that requires solutions that need to be coordinated at the international level to help developing countries move toward a low-carbon economy.

CLIMATE ACTION FOR SUSTAINABLE PLANET

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- Integrate climate change measures into national policies, strategies and planning.
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
- Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.
- Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.

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Simple Ways to Save Earth?


Grow trees


Conserve Water

Conserve energy

Drive less


Ride on bicycle


Use local produce


Avoid plastic


Recycle

Refill & Reuse


Zero-waste fashion

Saving of earth is the first and foremost responsibility of everyone, just do it!