

Special Lecture Report of Webinar

Department Of Geography

Diamond Harbor Women's University

Lecture Name: "Ecosystem Restoration"

Venue: Diamond Harbour Women's University

Date: 14/06/2021

Platform: Online mode

Delivered By: Prof. V.P. Sati

Topic: "Climate Change and Global Warming"

World Environmental Day is observed on June 5 every year to spread awareness about the importance of nature. This year, as every year, World Environmental Day is celebrated at our university, Diamond Harbour Women's University, but this year the event was conducted in online mode due to the pandemic situation. A webinar was organized at D.H.W.U to celebrate World Environmental Day from 11:00 am to 2:00 pm on 14th June.

The theme of World Environmental Day this year is "**Reimagine, Recreate, Restore**" and its focal point is **Ecosystem Restoration**. Ecosystem Restoration means Preventing, Halting and Reversing environmental damages to our Earth Ecosystem (UN).

On this occasion, **Prof. V.P.Sati, Professor, Department Of Geography and Resource Management, Mizorm University, Aizawl**, has delivered a special lecture on "**Climate Change and Global Warming**" on 14/06/21 (Monday) from 12:40 pm to the students of Geography department of D.H.W.U.

This important lecture gives us a comprehensive idea about Climate Change and Global Warming as well as a clear idea about many other environmental problems and their solution.

At the beginning of his lecture he gave a brief overview of the content and purpose of various conferences held at different times to raise awareness on climate change, such as- **Rio-De-Jeneiro Earth Summit in 1992, Climate Summit in Kyoto in 1997 (Kyoto Protocol), Johannesburg Declaration on Sustainable Development in 2002, Bali Discussion 2008 etc.** In this part of his discussion he also highlighted the inequality between climate change awareness and the steps taken by developed, developing and under developed countries.

When we talk about climate change, we usually mean global warming. However, he explained that **climate change means not only Global Warming, but also Global Cooling is equally responsible for**

climate change. Through this lecture, he also explained some of the theories related to climate change, such as –

- I) Bio-Thermostat (Carbon Sequestration, Carbon Sulfide Reflect Solar Radiation into the Space)
- II) Cloud Formation and Albedo
- III) Human forcing beside Green House Gases
- IV) Ocean Current
- V) Planetary Motion
- VI) Anthropogenic Global Warming...etc.

The combination efforts of the Atmosphere, Lithosphere and Hydrosphere have created the living world on earth. But now the increasing declination of these ‘Lives – Supporting layers’ on earth in endangering the existence of the Biosphere. In this context, he presented the topic global warming in detail to the students in a systematic manner. In this part of the discussion he has described the **salient features of Global warming, basic Causes, consequences** etc. very nicely with example.

He presents various examples from different parts of eastern and western Himalayas from his own field of research in order to enliven his discussion which gives a new dimension to this discussion.

The presence of Dr. Anuradha Mukhopadhyay, Vice Chancellor, D.H.W.U; Dr. Md. Sayeedur Rahman, Registrar, D.H.W.U and all the teachers of the Department of Geography make this webinar even more valuable. The presence of 17 research scholars and more than 70 students in the geography department of this university also help to make it a success.

IMPORTANT SCREEN SHOTS OF THE LECTURE

D. Self-Discovery 2009

- Importance of 2009 climate summit (Copenhagen Summit)
- Importance of 2009 climate summit (Copenhagen Summit)
- E. UNFCCC (Copenhagen Accord 2009)
- Emission Agreements 2009

USA and Europe Vs BRICS and Developing Countries

- What is sustainability?
- Climate India, need energy-efficient countries
- Developing countries should regulate development activities which America says no
- Agreement of the developing countries
- This implies common reduction of developed countries to match that higher than developing countries
- What will be the outcome?
- Working together

CLIMATE CHANGE THEORIES

- Bio-Thermostat
 - Carbon Sequestration
 - Carbon Sequestration - reflect solar radiation into the space
- Cloud Formation and Albedo
 - Clouds reflect solar radiation or reflected them back to the space
 - Albedo in the surface of the clouds and the rays of reflected in darkness light
- Human Forcing Besides Green House Gases
 - Urban Heat Islands
 - Aerosols and Anthropogenic Dusts
- Ocean Currents
- Planetary Motion
 - Solar Variability
 - Cosmic Rays
- Anthropogenic Global Warming

The Earth's Atmosphere

The Atmosphere

Average composition of the atmosphere up to an altitude of 25 km, % volume gas

Gas Name	Physical Volume	Relative Volume
Nitrogen	78.08%	78.08%
Oxygen	20.94%	20.94%
Argon	0.93%	0.93%
Carbon Dioxide	0.03%	0.03%
Water	0.10%	0.10%
Neon	0.0018%	0.0018%
Krypton	0.0001%	0.0001%
Xenon	0.000008%	0.000008%
Helium	0.0005%	0.0005%
Hydrogen	0.000005%	0.000005%
Ozone	0.000001%	0.000001%
Other	0.000001%	0.000001%

Characteristics of Atmosphere

- Atmosphere is made of various gases, dust particles, and water vapour
- Nitrogen and oxygen, which contain about 99%, the most abundant and life-sustaining
- The other gases are in small proportion
- Green house gases are increasing at an alarming rate with the advent of science and technology

ATTENDANCE SHEET

← About this call		← About this call	
People	Information	People	Information
KABITA MONDAL		Aaifa Parveen	
Kanai Pout		Asmita Pramanick	
Kapil Ghosh		Benozir Molla	
Khairul Islam		Bratati Halder	
Krishna mistry		Chaitali Mahato	
Madhumita Khatua		Chandrabati Sardar	
Mastura Khatun		Daliya Mandal	
Megha Modak		Debalina Banerjee	
Minati Halder		DHRITI PARI	
MOHANA DAS		dipanwita manna	
molina mondal		ekata RAHA	
Monaisha Halder		GEOGRAPHY ANGEL	
Mouli Chattaraj		Geography Department, ...	
mouli sen		Intezar Alam	
Moumita chanda		JAYITA PRADHAN	

← About this call		← About this call		← About this call		← About this call	
People	Information	People	Information	People	Information	People	Information
Ananya Kayal (You)		Simika Mal		Ananya Kayal (You)		Simika Mal	
Aditya Bhattacharjee		Smita Roy		Aditya Bhattacharjee		Smita Roy	
Akash Mondal		Sriviti Paul		Akash Mondal		Sriviti Paul	
Ananya Mukherjee		SOMNATH SARKAR		Ananya Mukherjee		SOMNATH SARKAR	
Anindya Basu		Sonal Dandapat		Anindya Basu		Sonal Dandapat	
Ankana Ganguly		Sonal Murmu		Ankana Ganguly		Sonal Murmu	
anuka mandl		Souvik Chatterjee		anuka mandl		Souvik Chatterjee	
Anuradha Mukhopadhyay		Sramana Mali		Anuradha Mukhopadhyay		Sramana Mali	
Anusree Btr		subarna bapari		Anusree Btr		subarna bapari	
Anusuya Kar		sucharita pramanick		Anusuya Kar		sucharita pramanick	
Arji Biswas		Suchelana Konri		Arji Biswas		Suchelana Konri	
Arpita Das		Suchismita Midya		Arpita Das		Suchismita Midya	
Arpita Malakar		Sujata Das		Arpita Das		Sujata Das	
Aaifa Parveen		Sukha Maji		Arpita Malakar		Sukha Maji	
		MAADIRA MALLIK jened		Aaifa Parveen		MAADIRA MALLIK jened	

Report of Webinar on the Celebration of the World Environment Day, 2021

1st Segment of the Webinar: Inaugural Session

A webinar has been organized by the Department of Geography, Diamond Harbour Women's University on 14.06.2021 (Monday) from 11.00 a.m. through online mode on the auspicious celebration of the World Environment Day, 2021. Prof. Tuhin Ghosh, School of Oceanographic Studies, Jadavpur University, Kolkata and Prof. V.P. Sati, Department of Geography and Resource Management, Mizoram University, Aizawl are invited to deliver special lecture on different thought-provoking environmental issues. The Google Meet and YouTube link of the webinar are – <https://meet.google.com/wxb-yazi-vom> and <https://you.tube.be/BTasFVFmUDO>. Total 100 participants including research scholars and students of the Department and the other guests have joined in Google Meet platform to attend the webinar. At the advent of the webinar, Dr. Anindya Basu, Assistant Professor, Department of Geography, Diamond Harbour Women's University has cordially welcomed the respected guests with an excellent overview of the programme. Then, the welcome address has been delivered by Dr. Shovan Ghosh, HoD, Department of Geography, Diamond Harbour Women's University. Dr. Ghosh has highlighted the multiple aspects of "Ecosystem Restoration", the focal theme of the World Environment Day, 2021 and the probable remedial strategies for the promotion of ecosystem restoration in his insightful welcome address. Afterward, Prof. Anuradha Mukhopadhyay, Hon'ble Vice-Chancellor, Diamond Harbour Women's University has delivered the inaugural speech of the webinar. Prof. Mukhopadhyay has mentioned the previous activities performed by the university as well as the noteworthy contribution of the Department of Geography to celebrate the World Environment Day in every year and she has conveyed heartiest congratulations to the Department for their commendable performance in this context. Then, the introductory speech has been given by Dr. Md. Sayeedur Rahman, Registrar, Diamond Harbour Women's University and in his valuable speech, Dr. Rahman has pointed out the different aspects of ecological restoration and wished a grand success of the webinar. At the ending of the inaugural session, Prof. Sujit Mandal, Dean, Faculty of Science, Diamond Harbour Women's University has delivered the special address on the context of the World Environment Day. Prof. Mandal has focused upon the degradation of the ecosystem and the mitigation measures to recover the degraded ecosystem in his informative speech. Then,

the special lecture session has been initiated with huge participation of the respected guests, faculty members, research scholars and students.

2nd Segment of the Webinar: Special Lecture by Prof. Tuhin Ghosh

In the 2nd segment of the webinar, Prof. Tuhin Ghosh, Director, School of Oceanographic Studies, Jadavpur University, Kolkata has delivered his valuable lecture on “**Environment, Society and Ecological Footprint**”. At the initiation of his lecture, Prof. Ghosh has mentioned the favourable environmental condition of the earth for the existence of the living organisms in terms of the comparison with the other planets and highlighted about the fixed amount of resource in the earth for the entire biota. In this aspect, he has elaborately explained the five security requirements for the sustainable development of the society and its future progression. Among these five security requirements, physical security, environmental security, political security, mental security, cultural security are included and all the essential strategies to promote the five securities have been discussed in detail. Beside this, the concept of seven components regarding total wellness and their inter-relationship has been thoroughly analyzed. Prof. Ghosh has broadly deliberated the different aspects of environment in relation with society. The concept of biosphere, habitat, niche, biomes, various levels of organization have been explicitly narrated. Alongside, the species extinction and its fatal impacts on the stages of the trophic structure have been excellently delivered. Prof. Ghosh has explained the living and non-living components of the environment along with the cultural components including material and non-material components. The critical issues in Environmental Science e.g., human population growth, resource and sustainable development, pollution, wastes and environmental impacts, natural disasters, hazards and risks as well as the role of ecosystem services have been intensively described in this session. Then, Prof. Ghosh has analyzed the link up and interactions between society and environment. In this context, he has thoroughly discussed how the concerns of the society affects the environment which in turn influence the society and how the society and environment are reciprocally inter-linked with each other. Moreover, the underlying problems in the inter-connectivity between environment and society have been highlighted and Prof. Ghosh has explained how disasters become an inevitable phenomenon due to these problems. Subsequently, He has focused the amplified rate of the occurrence of disasters and estimated damages during 1900-2011 and discussed the necessity of the development of

sustainable balance for a healthy environment and society. Finally, Prof. Ghosh has represented the concept of ecological footprint and its components in detail. The estimation of ecological footprint in different countries, various regions and income groups has been vividly depicted in this lecture. Furthermore, the variation of the consumption pattern among the poorest and richest section of the society has been addressed to point out the inequity of resource accessibility in the society. In this regard, Prof. Ghosh has emphasized the remedial factors for declining ecological footprints and advantages as well as disadvantages related with this issue. After the special lecture, Prof. Ghosh has clarified all questions of the faculty members and research scholars regarding different aspects of ecological footprint during the interactive session. It must be stated that the students and scholars will be extensively enriched from such an enlightening, valuable and worthy lecture of Prof. Tuhin Ghosh.