

# “World Environment Day, 2021”

## “Climate Change and Ecosystem Restoration”

Date & Time: 5<sup>th</sup> JUNE 2021, 6-8 PM

Start Time: 6:00pm

End Time: 8:55pm

The poster features logos for Amity University, Reimagine Recreate Restore, World Environment Day, and UN Environment Programme. It lists the following roles and names:

- CHIEF PATRON:** Dr. Ashok K. Chauhan, Founder President RBEF, Amity Education Group
- PATRONS:** Dr. Atul Chauhan, President, RBEF, Chancellor, Amity Universities; Dr. Aseem Chauhan, Addl. President RBEF, Chancellor, Amity Universities
- PROGRAM CHAIR:** Prof. (Dr.) Tanu Jindal, Director, AIETSM, Group Addl. Pro VC (R&D)
- ADVISORS:** Dr. Balvinder Shukla, Vice Chancellor, Amity University, Noida; Dr. Dilip Kumar Bandyopadhyay, Chief Advisor FPO / Chairman ALSs, Amity University, Noida
- DISTINGUISHED GUEST SPEAKERS:** Smt. Uma Bhamidipati, Additional Secretary, MOEFCC; Dr. Chander Shahi, Dean Faculty of Graduate Studies, Lakehead University, Ontario, Canada; Dr. Dharma Hagare, Associate Dean International (South Asia), School of Engineering, Western Sydney University, Australia; Dr. Subimal Ghosh, Professor & Head, Department of Civil Engineering, IIT, Bombay; Dr. W. Selvamurthy, President, ASTIF DG, ADSI, Chancellor, Amity University Chhattisgarh; Ms. Manisha Chaudhary, Programme Officer, UNEP, India; Dr. Setya Sunder Bhattacharya, Assistant Professor, Tezpur University, Assam; Mr. Tashi Morup, Project Director, Ladakh Arts & Media Organisation, Ladakh; Dr. Vir Singh, Former Professor, GB Pant University of Agriculture & Technology

Event Link: <https://amityuni.live/82399688736>

Joining Support: +91 8510006337; +91 8368604885; +91 9891939388

“Save earth to bring worth for the new birth”

The International webinar was organized on World Environment Day. The event was collaborated with the **United Nations Environment Programme (UNEP)** and **Ministry of Environment, Forests and Climate Change (MOEFCC)**. The webinar began at **6:00pm**, with the welcoming of the Dignitaries and guests by **Dr. Abhishek Chauhan**, Senior Scientist, Amity Institute of toxicology safety and management.

### 6:05pm: Introduction to the theme by Prof. Tanu Jindal

**Prof. Tanu Jindal**, Group Additional Pro Vice Chancellor (R & D), Director, Amity Institute of Environmental Toxicology, Safety and Management, welcomed the dignitaries and introduced this year’s theme for the World Environment Day, Climate Change and Ecosystem Restoration. Dr. Tanu Jindal gave a welcoming speech with highlighting the theme and by introducing Amity University, its role in environmental field, its status of being in the second

position of filing the largest no. of patents after IITs in India and gave the glimpse of Amity Institute of Environmental Sciences through a video.

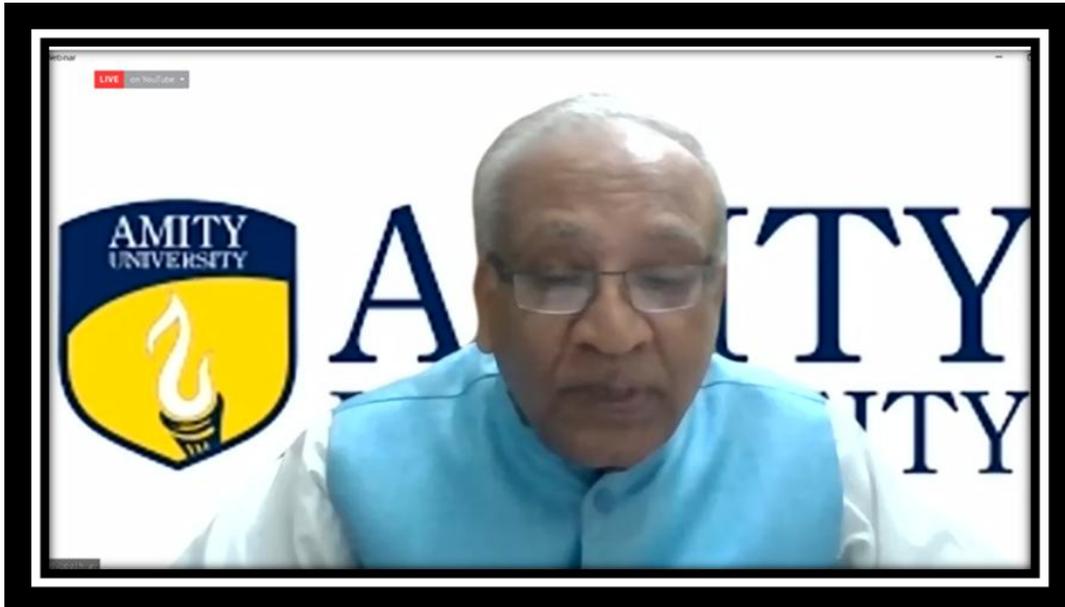


The entire event was jointly hosted by **Dr. Richa Dave Nagar, Assistant professor, AIES** and **Dr. Abhishek Chauhan, Senior Scientist, Amity Institute of toxicology safety and management.**



### **6:10pm: Address by Prof. D. K. Bandyopadhyay**

An inspirational message was addressed by **Prof. D.K. Bandhopadhyay, Chief Advisor FPO/Chairman of Amity Law School, Mentor at Amity Institute of Environmental Sciences, Amity University, Uttar Pradesh.** He addressed the gathering, with highlighting the theme slogan of the year ‘Reimagine. Recreate. Restore’. He talked about how Amity University has always been paralleled with the restoration concept. He listed many cases of environmental degradation and talked of how restoration can help it. “The entire world is facing severe challenges, climate emergency, food, and health security. Prevent the degradation of environment. Drive for restoration is important for sustainable future. World Environment Day provides a unique opportunity to meet the needs of the 21st century. Climate change and future pandemics can be prevented by restoration.” He focused on the halt of degradation of ecosystem. He beautifully mentioned about the Environment Day is celebrated to show development between the relationship between us and nature.



Presentations were given by –

**1. Dr. Dharma Hagare**

Associate Dean International (South Asia)  
School of Engineering Western, Sydney University

**2. Prof. Satya Sunder Bhattacharya**

Assistant Professor  
Soil and Agro-Bio Engineering Lab, Dept. of Environmental Science  
Tezpur University

**3. Mr. Tashi Morup**

Projects Director, Ladakh Arts & Media Organization, Ladakh

**4. Prof. Subimal Ghosh**

Professor in the Department of Civil Engineering, IIT Bombay  
Head, Interdisciplinary Programme in Climate Studies

**5. Ms. Manisha Chaudhary**

Programme Officer, UNEP

**6. Smt. Uma Bhamidipati**

Additional Secretary, MOEFCC

**7. Prof. Vir Singh**

Former Professor of Environmental Science, GB Pant University

**8. Prof. Chander Shahi**

Dean, Faculty of Graduate Studies, Lakehead University, Canada

**Speaker wise discussion points (as per programme flow):**

**1. Dr. Dharma Hagare– ‘Environmental and Sustainability Issues of Today’**

- 1.1 Discussion on the plastic production and pollution
- 1.2 Circular economy of Nutrients
- 1.3 True sustainable solutions
- 1.4 Zero waste processes/systems
- 1.5 Application of circular economy principles
- 1.6 Population strategy
- 1.7 Government policies and funding

**2. Prof. Satya Sunder Bhattacharya- “Soil health restoration: A tryst with sustainability”.**

- 2.1 Discussions on conservation of agricultural farming and food security
- 2.2 Balancing of carbon compounds in the soil
- 2.3 Rapid mineralization and organic farming
- 2.4 Organic and synthetic fertilizer

**3. Mr. Tashi Morup-“Climate change, floods in Ladakh and biodiversity restoration”**

- 3.1 Discussion on disappearing water sources of LEH
- 3.2 Discussion on Indus valley, Sankoo Suru valley, Kargil, Phugtal river
- 3.3 Discussion on Phutse and Nangtse Glaciers
- 3.4 Discussion on the 2010 Flood- 257 declared dead and 27 went missing, 1447 houses damaged
- 3.5 Future risk reduction & restoration

**4. Prof. Subimal Ghosh– “Feedback from land to atmosphere in Indian monsoon”**

- 4.1 Discussion on Role of vegetation in the water cycle
- 4.2 Lots of moisture comes from the oceanic region
- 4.3 China is the first highest contributor to global greening
- 4.4 India is the second-highest contributor to global greening
- 4.5 High recycling ratio in the Ganga basin and northeast India
- 4.6 Discussion on the role of Western Ghats forests

**5. Ms. Manisha Chaudhary– “Role of youth in ecosystem restoration”**

- 5.1 Discussion on ecosystem services, livelihood and economy
- 5.2 Urgent need to decouple economic growth from environmental destruction
- 5.3 Marine plastic pollution has increased tenfold since 1980
- 5.4 Youth will play an important and a positive role in the realization of sustainable development

**6. Smt. Uma Bhamidipati- “Biodiversity conservation and climate change”**

- 6.1 Discussion on Reimagine, Recreate, Restore and Regeneration
- 6.2 Focused on the prevention and combating desertification
- 6.3 Restoration of land is essential since it provides environmental security
- 6.4 Government of India and other International Treaties helps in the protection of biodiversity and land

**7. Prof. Vir Singh- “Ecological renaissance for a climate smart planet”**

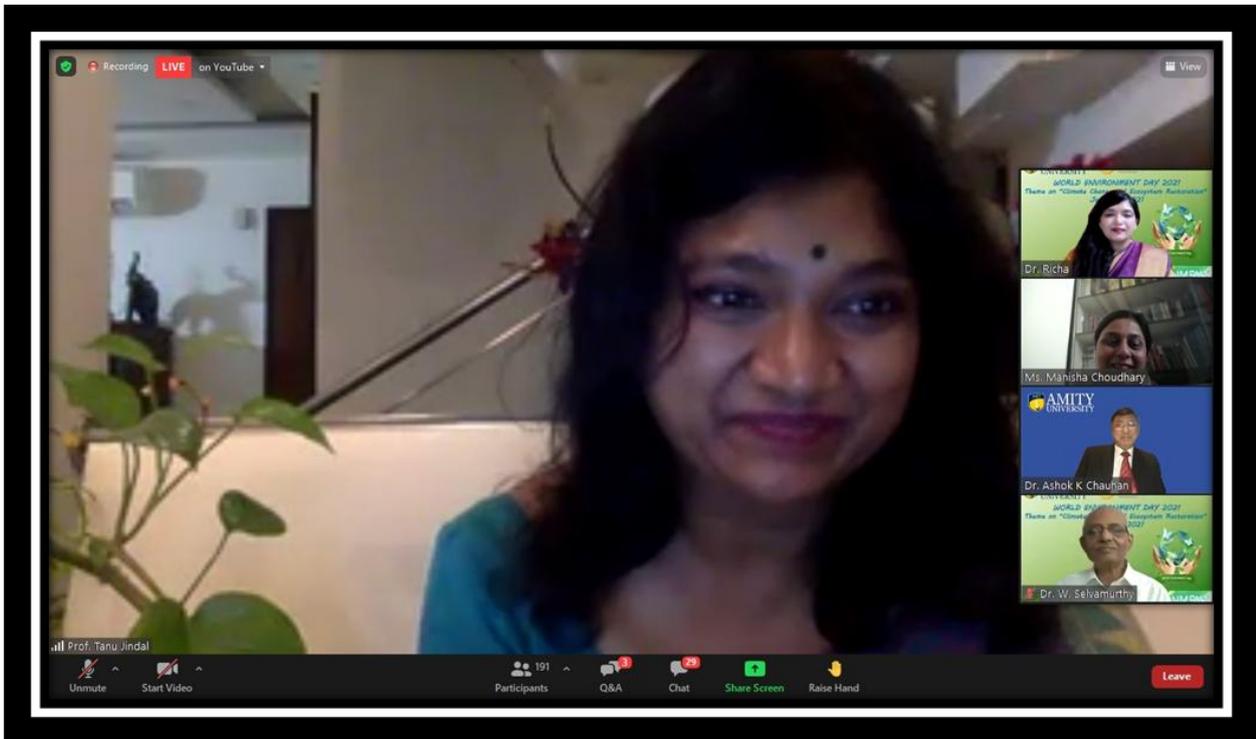
- 7.1 Discussion on Eco-philosophical elements
- 7.2 Every living individual of every species loves to be loved
- 7.3 Roots of ecology, canopies of cosmology
- 7.4 There are three phenomena that create, manage, enrich and sustain life on Earth: photosynthesis, chemosynthesis, nitrogen fixation.
- 7.5 Ecological renaissance of the planet is imperative for our own destiny

**8. Prof. Chander Shahi- “The effect of climate change on the health and livelihoods of rural and remote communities”**

- 8.1 Discussion on the effect of the climate change on the health
- 8.2 Rural and tribal communities
- 8.3 All the fishes and food have been contaminated due to nuclear waste
- 8.4 Climate change adaptation, as well as realizing co-benefits from climate change mitigation
- 8.5 Climate change can reduce the availability of local natural resources

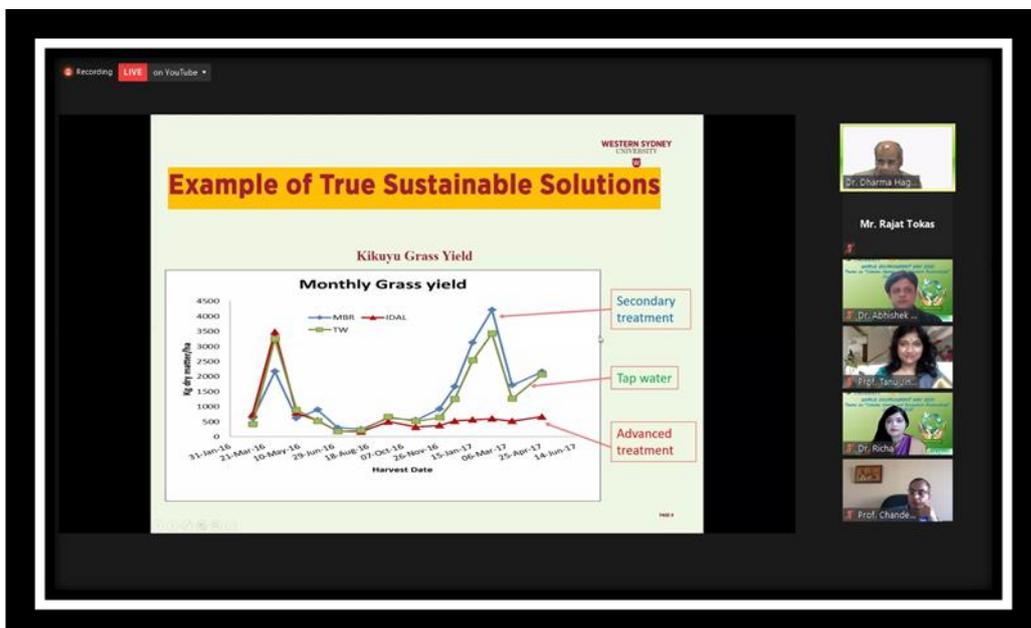
**Summary of the session (200 words):**

The session focused on climate change and ecosystem restoration. The introduction of the session was given by the Prof. Tanu Jindal and addressed by Prof. D. K. Bandyopadhyay. Speakers presented their view on climate change with their different thought. They also gave the solutions for ecosystem restoration. Founder, president sir “Dr. Ashok K. Chauhan” delivered his thought on the World Environment Day 2021 and release of magazine “Amity Environmental Education & Research”. In the last, Dr. W. Selvamurthy sir, president of Amity Science, Technology & Innovation Foundation (ASTIF), Dr. Rajiv Sharma, and Dr. Nutan Khaushik also delivered their wonderful thoughts on this session. A vote of thanks was given by Dr. Abhishek Chauhan.



**6:20pm: “Environmental and Sustainability Issues of Today” Dr. Dharma Hagare, Associate Dean International (South Asia), School of Engineering, Western Sydney University and Senior Lecturer - Water, Waste and Sustainability Engineering, Australia**

With Dr. Richa Dave Nagar hosting the program, the first speaker of the day Dr. Dharma Hagare talked on the theme ‘Environment and Sustainability Issues of Today’ starting with some of the current issues like climate change, plastic production and pollution, etc. He is an Associate Dean International (South Asia), School of Engineering, Western Sydney University and Senior Lecturer – Water, Waste and Sustainability Engineering, Australia. He spoke about the climate change issues we are facing today, and the factors involved are increasing population, leading to carbon emissions contributing to climate change. Plastic production and pollution are a big issue and specifically the micro and nano plastic pollution, which is highly toxic to humans and animals. There were several possible solutions mentioned which can be adopted and implemented on a day-to-day basis.



## Reasons –

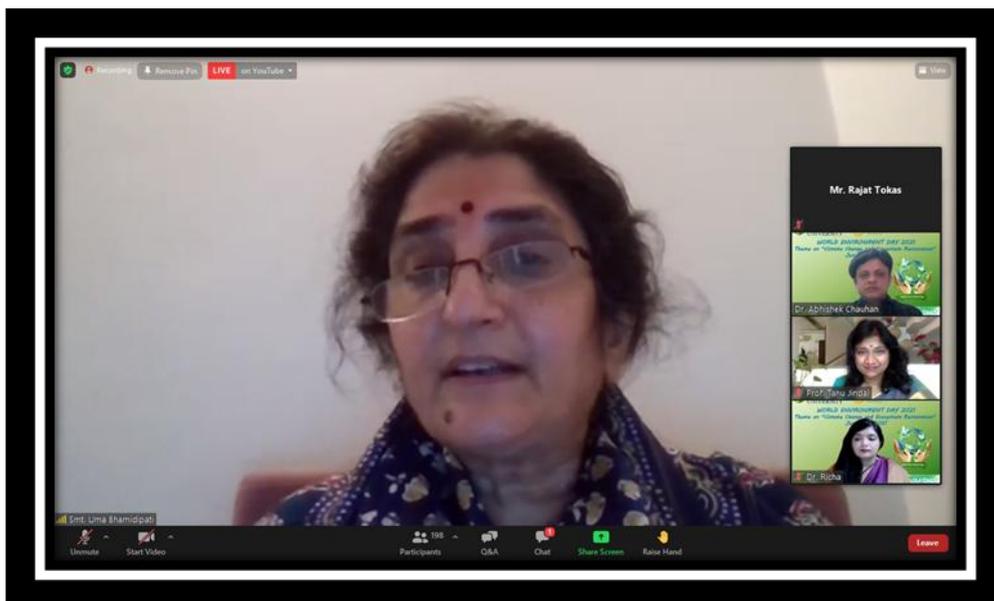
- Increase in population leads to more CO2 production
- Plastic production and pollution
- Food waste production
- Domestic and industrial activities

## Solutions -

- True sustainable solutions
- Zero waste processes
- Circular economy principles (Recycling the nutrients that are wasted)
- Govt policies and funding
- Education of the citizens
- Population strategies

### **6:30pm: “Biodiversity Conservation and Climate Change” Guest of Honour- Smt. Uma Bhamidipati, (IFS) Additional Secretary, MOEFCC**

After his informative speech, Smt. Uma Bhamidipati (IFS) Additional Secretary, MOEFCC talked on ‘Climate Change and Biodiversity Conservation’, was the Guest of Honor, and she addressed on the topic, Biodiversity Conservation and Climate Change. She began with introducing the theme of Environment Day this year, REIMAGINE, RECREATE, RESTORE AND REGENERATION. Her insight focused on the prevention and combating desertification. Restoration of land is essential since it provides environmental security. She mentioned the contributions by the Government of India and various International Treaties which are helping protect the biodiversity and land. The main goal is restoration of 26 million hectares of land by 2030. Planting native plants and introducing the useful microorganisms are the solutions to combat desertification.



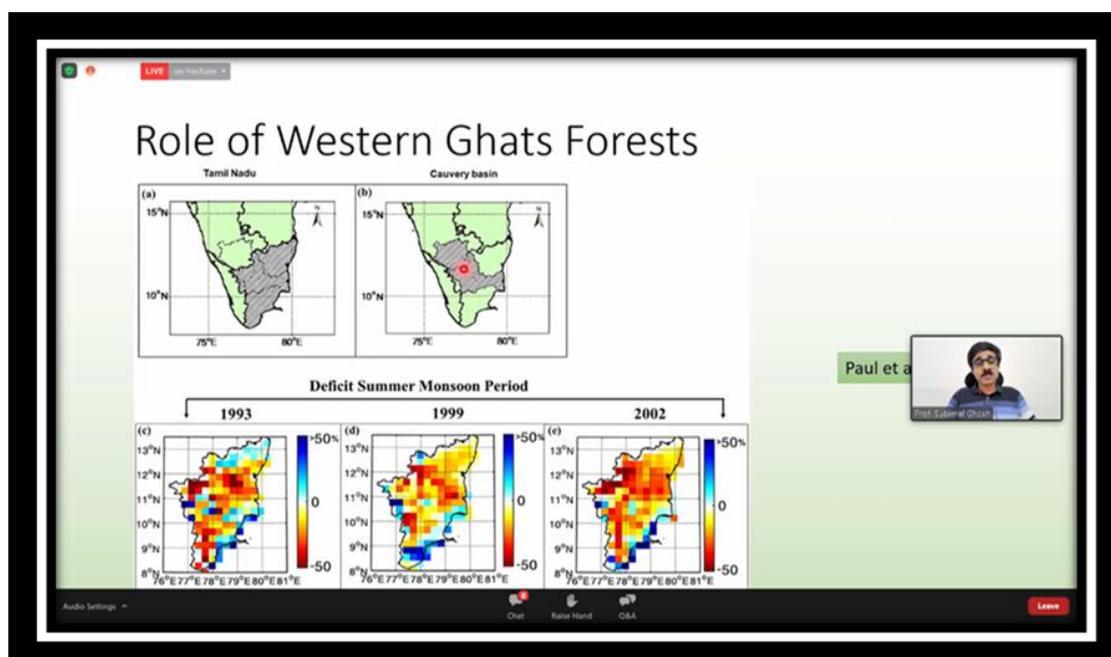
**6:30pm: “Soil health restoration: A tryst with sustainability” Prof. Satya Sundar Bhattacharya, Assistant professor, Soil and Agro-Bio Engineering Lab, Department of Environment Science Tezpur University (A Central University),**

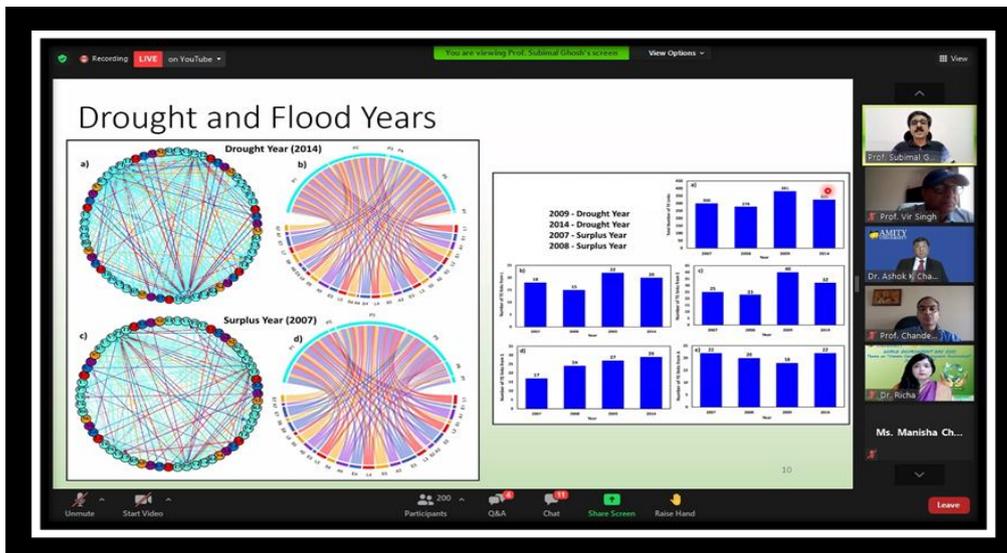


He gave a wonderful insight on Soil Health restoration: A tryst with sustainability. He focused on loss of soil carbon leading to deterioration of soil health, with talking about how the aim to increase the production of crops has led to soil degradation. Soil health can be restored by adopting practices like conservation of agriculture farming, organic farming with proper irrigation, also spoke on integrated nutrient management practice, food security to all. Integrated nutrient management, soil quality can be improved without less production, correct combination of the nutrition and microbes has to be done, Carbon sequestration can be done over time.

He highlighted the benefits of organic farming especially with the use of vermicomposting, this reduces toxic chemicals from the soil.

**7:00pm: “Feedback from Land to Atmosphere in Indian Monsoon” Prof. Subimal Ghosh, Professor in the Department of Civil Engineering, IIT Bombay and Head, Interdisciplinary Programme in Climate Studies**



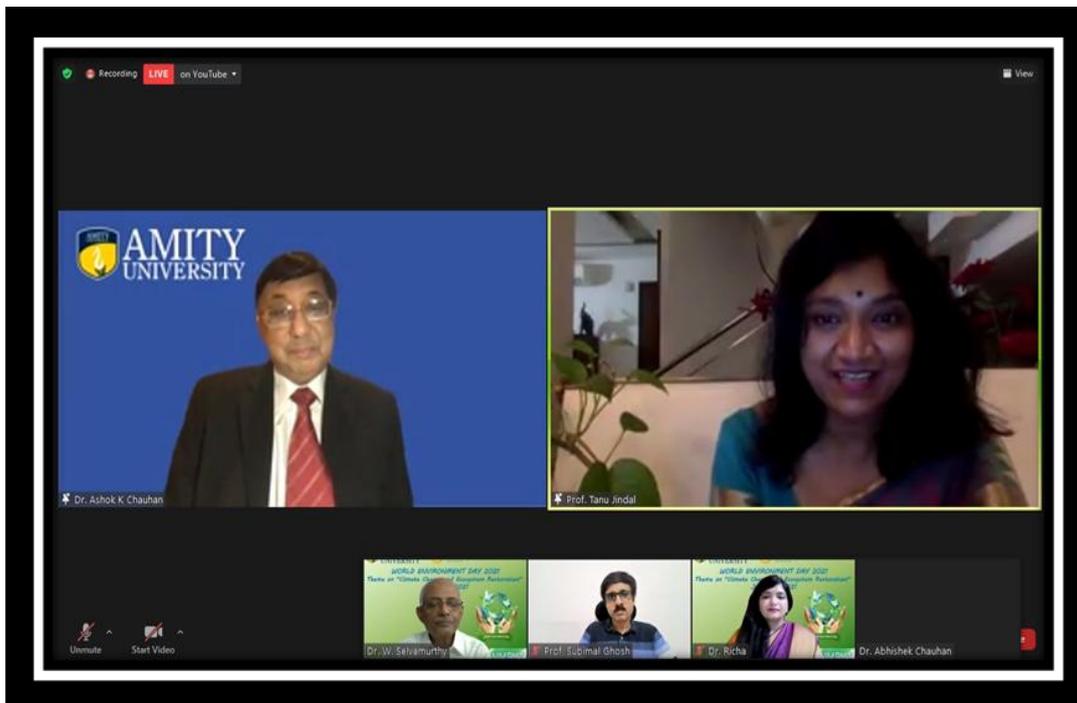


He mentioned that land ecosystem plays a major role. Vegetation is playing a role of a water pump. He also discussed the principle of Recycle precipitation. The role of India in carbon sequestration is that India is the 2nd highest contributor to global greening. He explained that how significantly vegetation contributes to the rainfall. He described the northeast monsoons and how forests in Western Ghats are responsible for the rainfall in other side of it like in Tamilnadu. He also gave an idea of the drought and flood conditions caused by changes in vegetation pattern, ocean moisture absorbed by vegetation then that water is again given back by transpiration, the monsoon occurred majorly because of the ocean moisture but the land moisture or the recycling precipitation was completely ignored, more green plants more transpiration, initial monsoon due to ocean moisture but monsoon was sustained by the recycle rainfall and India has a major role in the global rainfall and carbon sequestration.

**7:20 pm: Few thoughts and release of magazine “Amity Environmental Education & Research” by Honourable Founder President, Dr. Ashok K. Chauhan, RBEF and Amity Education Group**

After this informative speech, our honourable Founder President Dr. Ashok K Chauhan gave his speech on the importance of such webinars in saving our mother earth and appreciated the previous speakers. He also said that they can be united on a mission, and finally encouraged everyone to take a pledge for committing ourselves in this field of environment.





**7:40pm (The effect of Climate Change on the Health and Livelihoods of Rural and Remote Communities) Prof. Chander Shahi, Dean, Faculty of Graduate Studies, Lakehead University, Canada**

He spoke about the rural and tribal communities who are worse affected by the climate change. The physical, emotional, intellectual well-being are affected. All the fishes, berries and the food have been contaminated due to nuclear waste. The question is raised that how we can uplift the underprivileged communities. He highlighted how human beings lived in initial period and how the changes in it over the time has degraded the environment.





**8:00pm: “Role of Youth in Ecosystem Restoration” Ms. Manisha Chaudhary Programme Officer, UNEP,**

Then, Ms. Manisha Choudhary talked on ‘Role of Youth in Ecosystem Restoration. She talked of the importance of thinking in a different way and taking a step at an individual level and encouraged the youth to be the generation of restoration. She ended up with various ways of contributing to restoration. She spoke about the importance of ecosystem such as the ecosystem services which are provided to us in our livelihood and economy. The damage caused to the ecosystems, is irreplaceable and irreversible. She reminded the youth to take responsible action and innovate. Youth are key stakeholders and changes should be made at individual levels. Nature has its own regenerative capacity. She asked the youth to join the #Generationrestoration. A beautiful slogan was raised to follow, “Don’t plant a tree, raise a tree.”





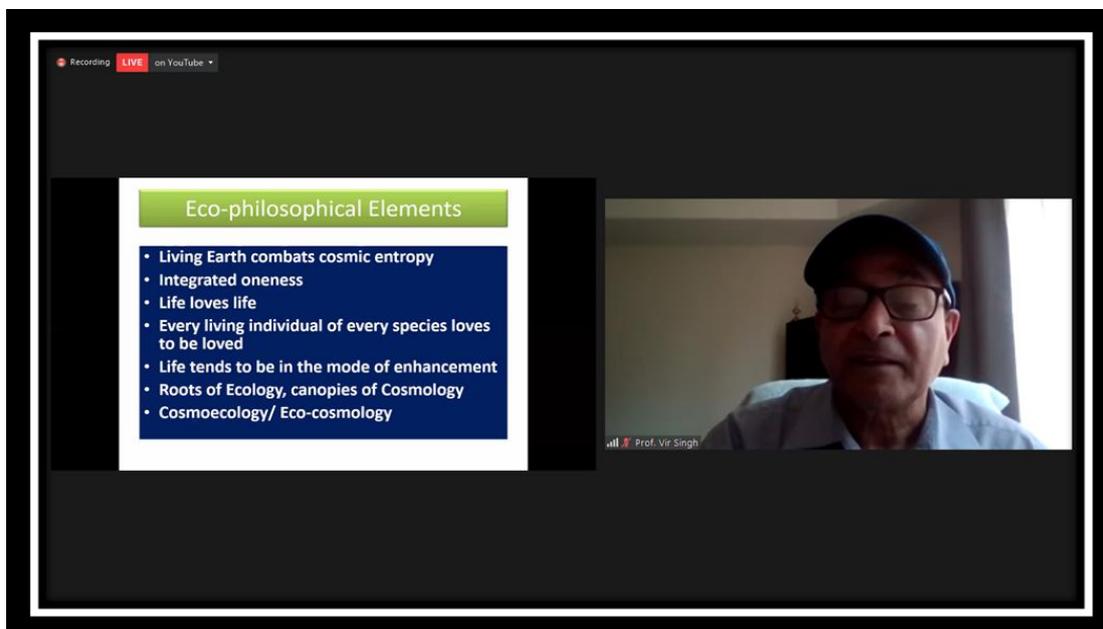
**8:10pm: “Climate Change, Floods in Ladakh and Biodiversity Restoration” Mr. Tashi Morup, Projects Director , Ladakh Arts & Media Organization, Ladakh**

He discussed some of the cases of flood in Ladakh. He gave an idea of irrigation system there, in historical times and mentioned some disappearing water sources, ending with some restoration methods. He shared his experiences about Climate Change, Floods in Ladakh and Biodiversity Restoration. Glaciers recession has been witnessed. The settlements on the sides of Indus river have been dry and the greenery is just because of the contributions by the people of the past generations. The history of floods in Ladakh were discussed. There were thunder showers each year and 2010 witnessed devastating floods and consecutively every year. Phutse and Nangste Glaciers are the key water sources of Leh which have started disappearing. He shared some solutions like the ice stupa that can act as the artificial glaciers. Prediction of floods and cloudbursts should be the priority.

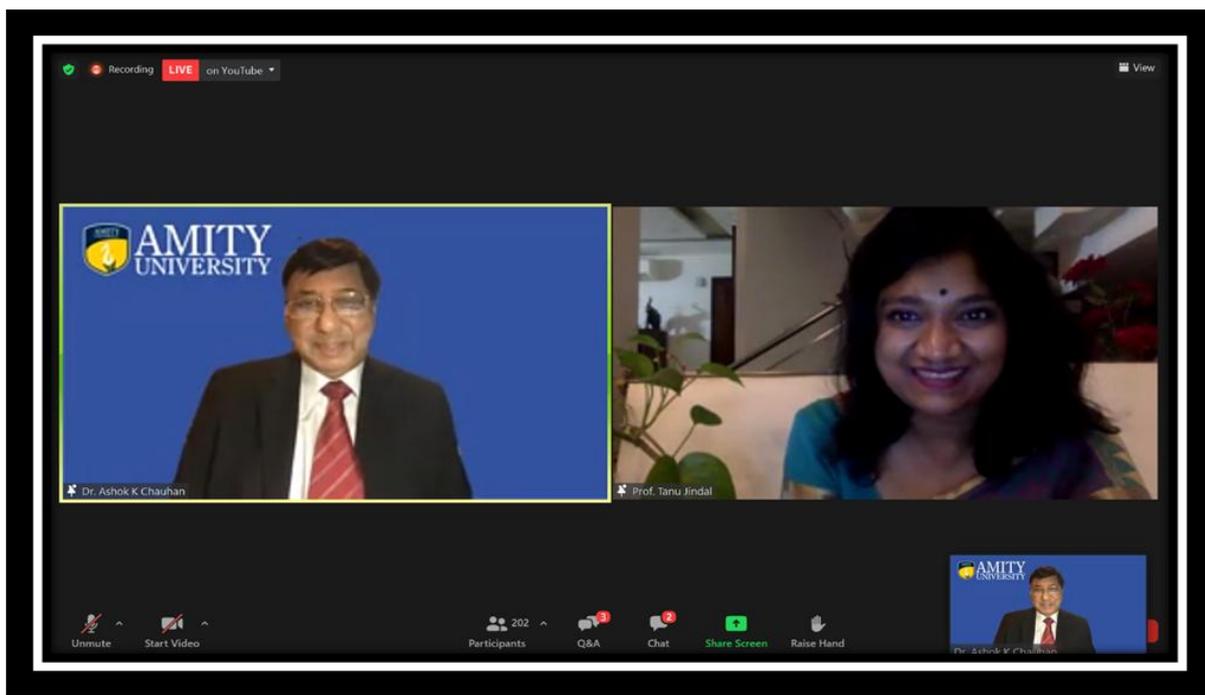


**8:30pm: “Ecological Renaissance For A Climate Smart Planet” Prof. Vir Singh, Former Professor of Environmental Science at GB Pant University of Agriculture & Technology and Environmental Writing and free-lance journalism**

He said about the main three phenomena enriching and sustaining the nature and talked of how man is responsible for saving the environment. The concept of Bonsai mind was introduced. We need a simple living for a sustainable future.



**The magazine Amity Environmental Education & Research was released by Honorable Founder President, Dr. Ashok K. Chauhan, RBEF and Amity Education Group. The Founder President praised and appreciated the respected dignitaries and encouraged everyone with inspirational words. He motivated the audience to protect our mother who is hurt, our Mother Earth, as she has been cherishing us throughout. He said, “Take a pledge and make a mission of your life, to contribute towards global warming and climate change during your lifetime. Crusade global warming and climate change should be our aim.” He asked the audience to devote their time, brain, mind, and energy towards environment.**



### **7:40pm: Views by Dr. W. Selvamurthy, President - Amity Science, Technology & Innovation Foundation (ASTIF)**

Then, Dr. W. Selvamurthy gave his views on how we are a part of the environment and appreciated the efforts of Amity University in caring the environment. He also listed the ways in which we can contribute to the environment more productively and enlightened the role of man in this field. He emphasized the importance of mass awareness and public participation in this era. He discussed the concept of Advaita and Panchabhutas. We must conserve environment and conserve ourselves. Right policies and practices, goals and strategies, technologies and people's participation and behavioural changes, environmental audit and accountability and looking at a consortium are the keys for a better sustainable future.



After that some more speakers gave their view for the theme and some of the initiatives by Amity University for the environment were shown through a video. Dr. Rajiv Sharma, Dr. Nutan Kaushik and Dr. Qamar Rahman shared their valuable insights.





Finally, at 8:50p.m. Dr. Abhishek Chauhan ended the session with a vote of thanks.



## **DISTINGUISHED GUEST SPEAKERS**



**Smt. Uma  
Bhamidipati, (IFS)  
Additional  
Secretary,  
MOEFCC**



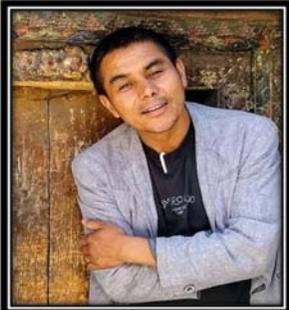
**Ms. Manisha  
Chaudhary  
Programme  
Officer, UNEP**



**Dr. Dharma  
Hagare  
Associate Dean  
International  
(South Asia),  
Western Sydney  
University**



**Dr. Satya Sundar  
Bhattacharya  
Assistant  
Professor  
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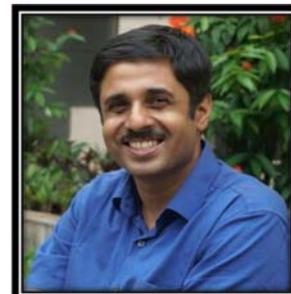
**Tashi Morup  
Projects Director  
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Leh**



**Prof. Vir Singh,  
Former Professor of  
Environmental  
Science  
GB Pant University of  
Agriculture &  
Technology  
Environmental  
Writing and free-  
lance journalism**



**Dr. Chander  
Shahi  
Dean, Faculty of  
Graduate Studies  
Lakehead  
University,  
Canada**



**Prof. Subimal Ghosh  
Head of  
Interdisciplinary  
Program in Climate  
Studies  
Professor in the  
Department of Civil  
Engineering, IIT  
Bombay**