

## **Report on Global Sustainability Summit**

### **Day 1**

**24<sup>th</sup>-26<sup>th</sup> September 2024**

#### **1. Prof Tanu Jindal**

Prof. Tanu Jindal welcomed all the esteemed speakers. She is happy to announce the planting of 100 trees for carbon footprinting. The second day will begin with an ideathon for sustainability. Professor Jindal welcomed all dignarities and said that selected entries of students for ideathon would be awarded. She said that no power can stop you if God is there with you. She talked about the Global warming cluster. She discussed different projects, patents and installed air pollution equipment and sensors for air monitoring calibration and discussed the Leaching of surfactants in Lysimeter and drains of Delhi.



#### **2. Prof. Balvinder Shukla**

She welcomed all dignitaries, students and other members. Talked about religion values and said that water is life. Without Forest and clouds, humans can't have water. River Pollution impacted rain and brought floods and destruction which is harmful for societies. She talked about tree plantation and creating environmental awareness among youth is important. She highlighted how India becomes Vishwa guru and values of Sanathan. Took alumni of various countries and leading globally.



### 3. Dr. Manisha Chaudhary

She talked about opportunities of economic growth. Material consumption has been increased from Earth resources than production of Earth. Nearly 50% of Greenhouse gas emissions is due to the way we consume and produce. This is the time to act on it and youth have important part to play on it. There will be 131% increase in Greenhouse emission by 2050 and also talked on the tourism sector and focussed on the 9 principles of circularity.



#### 4. Dr. Alok Sharma

Dr. Anil highlighted on net zero emission goal and Vikshit Bharat. He added that we import 80 percent of crude oil and 15% of coal. IOCL is one of the largest companies and energy efficiencies play a critical role. He emphasized on Electric vehicles (EVs) and biofuels (renewable source of energy) that is going to play an important role. Further, he added aviation fuel will play a critical role through sustainable route from 2027.

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#### 5. Mr. Anshul Alagh



Mr Anshul thanked Prof Tanu Jindal and all dignitaries. To create better environment in that phase of environment, we need to work together. In terms of sustainable agriculture, we must adopt practices like organic farming, 3Rs practice (reduce, recycle and reuse of materials) to landfill waste, sustainable transportation and EVs.



#### 6. Prof. Gurinder Singh

He highlighted Dr Ashok Chauhan vision to create sustainability. He congratulated and complimented all faculty members for their achievements in the areas of research and education. He also added to plant 100 trees on each Director's birthday



#### 7. Dr. Ved Prakash Mishra

He touched issues of environment, and their role is well-defined. It should be all citizens' common responsibilities to protect the environment. There should be balanced approach and achieve net-zero emission. Our footprint should be minimum. He opposed hazardous chemicals and talked about food security. Vikshit and sustainable Bharat should be achieved. He further added that we are in the transition stage right now for affecting environment and should cooperate ministry and Government.



#### 8. Dr. Gopal Arya

He talked about two stories and Dr. A.P.J Kalam for patriotism. He also discussed Amrita Devi for protecting plants and trees; Shipra Pathak for protecting Narmada River. We as a citizens can protect environment, not technology. 0.01% of humans activity is destroying nature. He talked about green revolution, white revolution, digital and AI revolution. He mentioned protecting trees and nature safety.



#### 9. Dr. D.K Bandyopadhyay

He introduced pollution of the environment, river pollution and toxic contaminants. He also emphasized how to create a balance between people and profit, We should try to create awareness among youth and talked about the Namami River Project, Ganga rejuvenation program, ESG (Environment and Sustainable Governance program). He congratulated and wished all the dignitaries present.



#### **10. Dr Manish Joshi**

Agenda is Mitigating Air Pollution. He appreciated Prof Tanu Jindal and Dr Sagnaik Dey. Dr Dey who is an Associate Editor and Collaborator was awarded with the Fulbright Nehru Fellowship and many other prestigious awards and fellowships.

#### **11. Dr. Sagnik Dey**

He presented on 'Air Pollution Mitigation for Sustainable Development in a warming climate'. He spoke about the environment health pathway and PM 2.5 exposure. He further added discussed the highly polluted Indo-Gangetic plains. He showed the seasonal pollution cycle of 23 years which can link with different indicators. He also talked about the sustainable development goals and deaths attributable to air pollution (which is nearly 1.67 million across the world). Air pollution negatively impacts the crop productivity, calorie intake and metabolism.

#### **12. Dr. Harsh Ramesh Salve**

He talked on air quality and health: Concerns and guidelines. He listed the levels of environmental risk factors, such as air pollution, unsafe drinking water and sanitation.



PM is the major concern in the cities and there is an urgent need to take mitigating steps. He talked about the different effects of air pollution on human beings including mortality.



### 13. Shri SK Gupta

He presented on 'Air Pollution Monitoring and Characterization through dust samples'. He spoke about the localized effects of air pollution that is governed by the local meteorology. Air is vital for humans. He discussed about the health impact of air pollution on humans, vegetation, ground water and livestock. He also discussed about dust sampler for air quality monitoring that helps us to monitor two pollutants – dust and harmful gases. Gravimetric technique is one of the most reliable methods for monitoring air pollution.

### 14. Panel Discussion

Dr.S.N.Tripathi; Dr. Harshal Ramesh Salve; Dr. Namita ;Dr. Ganjanan Mali ;Dr SK Tyagi

Shri SK Gupta; Dr.Tanmoy Mukherjee

Main points of discussion included the following:

- a. Indian air quality standards do not meet the international air quality standards.
- b. Unregulated burning sources will be taken into the GSS program. Dr. Sagnik Dey also introduced ENCAP program.
- c. There is a need for a joint effort and collaboration between the health sector organizations and the MoEF (and other Ministries).
- d. We should move forward in multidirectional and a sustainable manner at an academic and program level.
- e. ENCAP is doing good in different cities. Health sector needs to be prioritized.
- f. Dr. Namita talked about Granular data is needed to better understand the local challenges.
- g. Low-cost sensors are coming up and large networks of air monitoring stations can be built in cities.
- h. Dr. Namita developed 700 sensors in the rural areas of UP and Bihar.

- i. Dr Mali highlighted issues of global importance, global warming and various environmental risk factors. Media should highlight these issues.
- j. Dr Tanmoy discussed introduction of super block system of Barcelona (restricting vehicles in the city downtown), promoting public transportation and initiatives to reduce air pollution.
- k. Dr Gupta mentioned that monitoring air pollution should be economical and sustainable.

## Day 2

### 1. Dr. R.B. Lal

Dr. Lal thanked Prof. Tanu Jindal for this task. He presented on Legislative Framework for EIA in India and EIA Notification 2006-PARIVESH: Centralised processing Centre\_Green.

He covered different topics including major environment regulations such as Forest act, Air pollution Act, Water Act etc.; Green Approvals emerging from EPA 1986; overview of EIA notification 2006, environment clearance and Parivesh CPC- Green.

MOEF was established in Sept 1985, and it emphasizes on health safety, number of pollutants generated by different industries and Pollution.

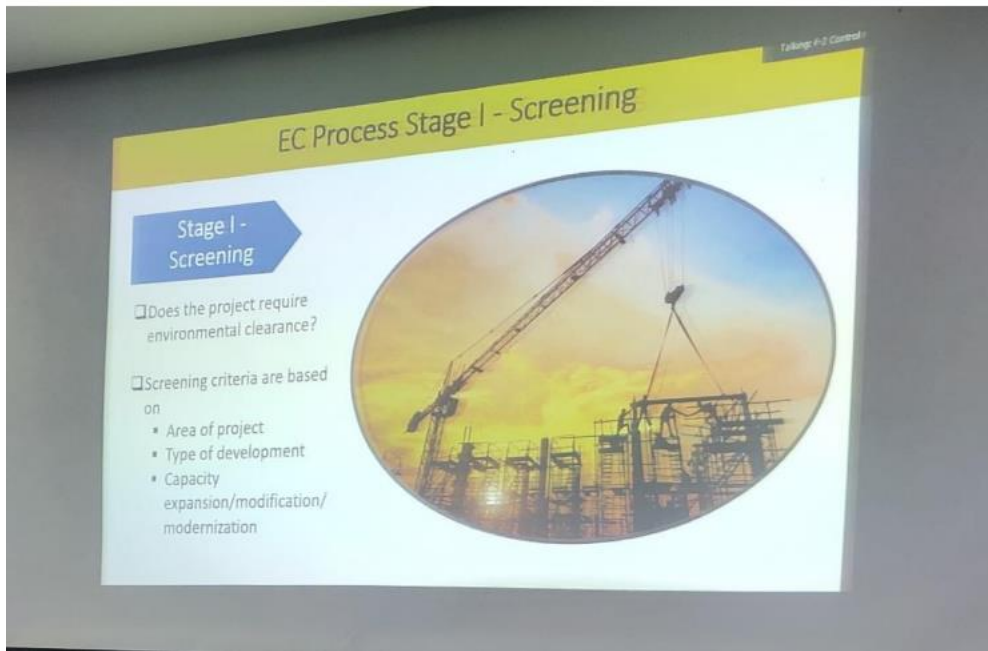
He also focussed on EC process stages such as I-screening criteria, II-Scoping, III-Public Consultation, Stage IV- Appraisal.

He discussed LG Polymers case India plant occurred on 7<sup>th</sup> May 2020.

All toposheets and data are generated in Parivesh CPC-Green.







## 2. **D. Khalid Hussan**

He welcomed all esteemed speakers and discussed on protection issues. He is working on sustainable solution for mankind. He said that number of people have migrated to different countries. He focussed on developing forums and providing supports to police, corps like information. He also provides coordination to U.N for inter-community issues.



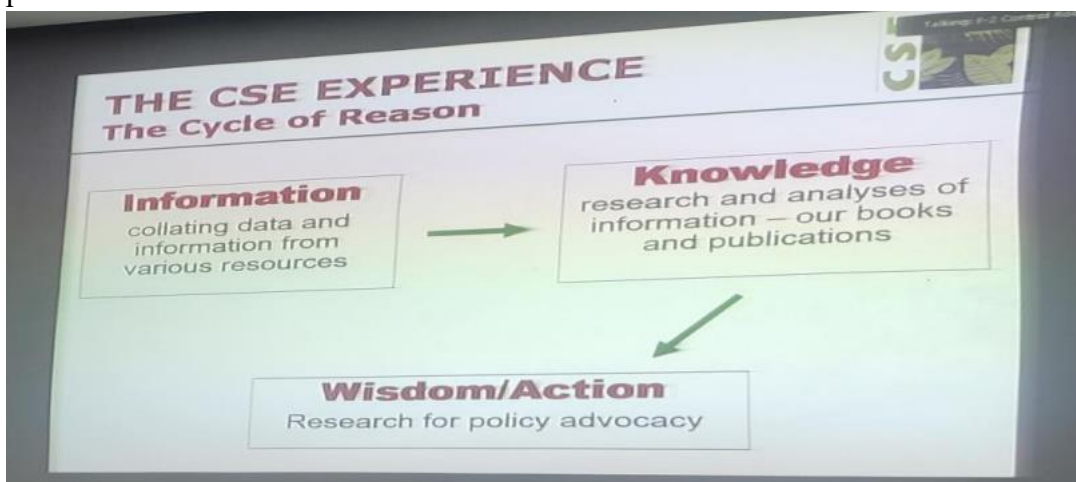
## 3. **Dr. Neha Gupta**

“Purpose life is to be happy”. How to integrate Sustainable Development Goal into daily life. She discussed example of Mount Everest of Nepal and talked about goal setting, refuse to give up and break it down. She discussed about waste management and segregation of dry and wet waste. She asked to reduce toxic things like single use plastic, Plant trees on Birthday, wedding and anniversaries. Eat more plant-based meals and reduce energy consumption.



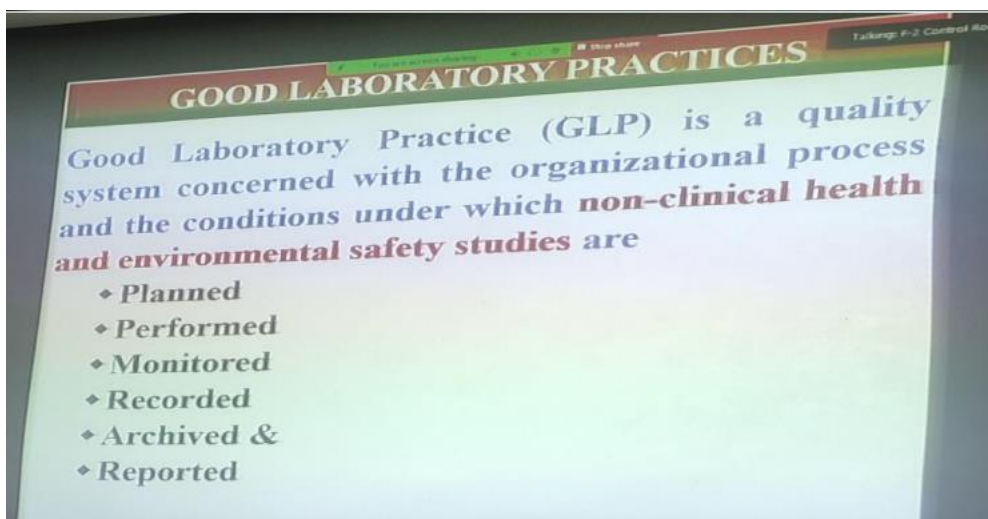
### **Dr. Souparno Banerjee**

He Presented on the Power of the written word: How publication and communication can drive home the message of sustainability. He has a talk on publication ethics, silent spring, upholding integrity for a Greener Future and sustainable development. He talked on campaign which resulted in world's first and largest public transport runs on CNG. He also discussed on the book known as "Slow Murder"- deadly story of vehicular pollution in India. He further added issues of soft drinks-hard truths due to pesticide contamination.



### **Dr. Ajay Kumar Tyagi**

He presented on "Good Laboratory Practices and Sustainable Science & Technology Systems". He talked on TTW Health Managing Professional company, technology and its need, science and technology system, R &D achievements, good lab practices and contribution towards "Mother Earth". Technology is developed to create wealth, enhancing national security, improving the quality of life of the people of rural and urban areas. Technology can create wealth and catalyse development. Successful technology development must be backed by Good Laboratory Practices and R&D efforts that are beneficial for science and society. He talked about on-going project of "P2P Sustainability" worked on 200 sapling plantations along the boundaries of agriculture fields of farmers.



**Ideathon for Sustainable Earth**

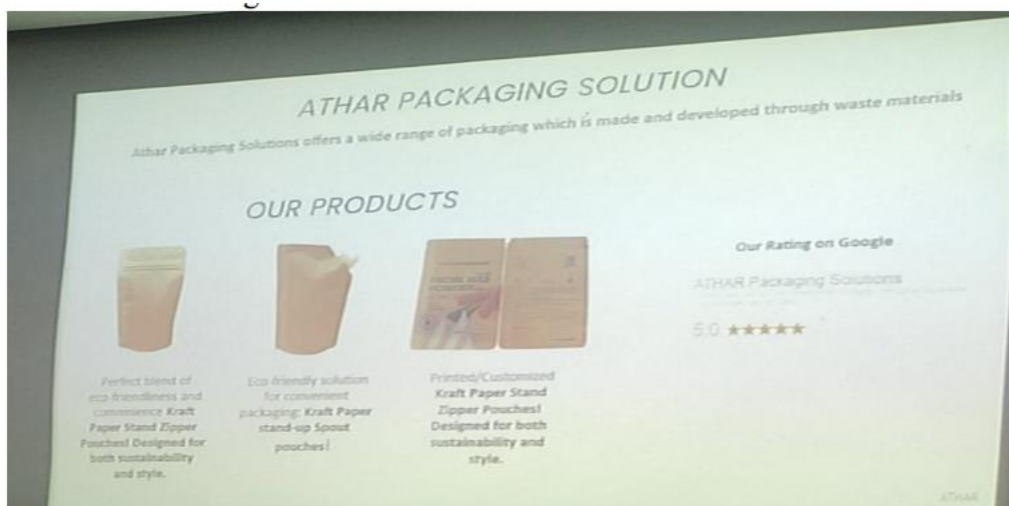
50 participants registered and 25 online and offline participants are selected. Prof Tanu Jindal discussed marine litter of the ocean and proposed project of fuel and other challenging problems.

Ms Priyanka Stress-relief Yoga mudra where she has made people to inhale oxygen rejuvenating every cell of the body and exhaling oxygen.

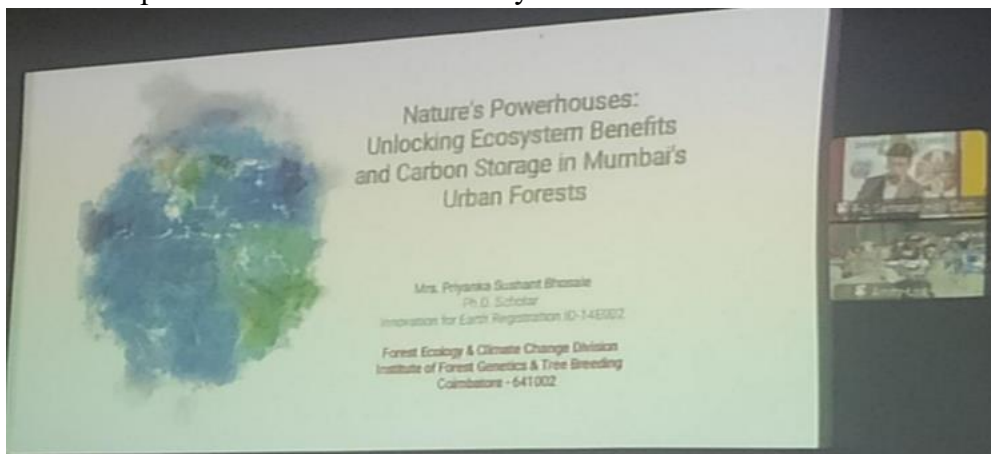
Ms. Tanvi Bhasin, a learner at Teri SAS" overarching policy. The best way to predict the future is to create it. The problems we are facing extreme climate events, rapid urbanization, climate change, and pollution. The sustainability revolution will, hopefully, be the third major social and economic turning point in human history-moving from hunter-gathering to farming-and the Industrial Revolution.

Ms. Kritika Mishra, presented slide of life-cycle assessment (LCA), embodied energy. She showed climatic regions of India. The objective was to integrate traditional practices into modern architecture through policy development and research, promoting sustainable design solutions that enhance material efficiency, cultural relevance, and longevity while minimizing embodied energy.

Mr Suhail, Founder and CEO of That Packaging Solutions. His company converts the waste into packaging material. The solution he created is 90 percent waste and 5% virgin plastic (biodegradable). He has onboarded 600 companies.



Ms Priyanka presented on Nature's Powerhouses: Unlocking Ecosystem Benefits and Carbon Storage in Mumbai's Urban Forests. She discussed on carbon sequestration of Mumbai's potential urban area and ecosystem services.





Mr Ujjwal and Madhur Agrawal presented on Advancing Sustainable Urban Development. With growing energy demands and environmental concerns, the need for sustainable energy storage is greater. He discussed the challenges of current energy storage technologies and Lithium industries. He focussed on Bio-based materials that are sustainable alternatives and derived from cellulose and proteins. Applications in urban sustainability are EVs, Portable Electronics, Smart cities, and infrastructure.

Mr Ayush Raj and Hasan Abbas presented on Waste Wise Exchange- A sustainable part using circular economy structure. It aims to educate the public on sustainable practices and promote a culture of reuse and repair by facilitating the share of knowledge and practice. He discussed the key components of driving sustainable change: Circular economy principle, community engagement, and platform Functionality.

Ms Ashmita Patro discussed constructed wetlands and their drawbacks. The drawback is high operation and maintenance and non-sustainable. She discussed multistage engineered wetlands, and the expected outcome is the reduction of harmful conventional and emergent pollutants, production of organic manure, and utilization of environmental waste products.

Md. Sajid presented Rooftop vertical farming for enhancing environmental wellness in Delhi and automatic organic and vertical farming using Raspberry Pi and AI.

Mr. Piyush Prabhakar and Vineet Yadav presented the Contribution of GDP of various sectors and AI-driven precision agriculture uses advanced technologies to overcome the challenge.

Ms Yashika, Nikita Utpal and team presented sustainability for food and agriculture. Sustainable agriculture is the innovative way countries are revolutionizing farming to ensure crop productivity. She discussed Good environmental stewardship, home hydroponics and mono cropping.

Mr Sharon Melhi presented on Blue Economy. It is the sustainable use of ocean resources for economic growth improved livelihoods and job creation while ensuring the health of marine ecosystems. He discusses climate change that threatens the blue economy by altering ocean conditions and impacting fish populations.

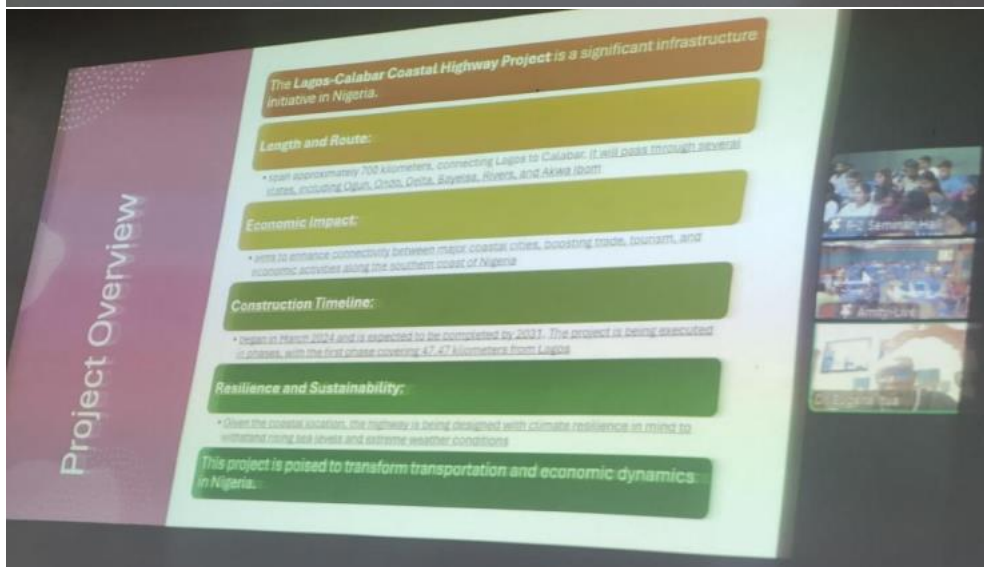
Mr Trilochan presented on Paving the way towards Sustainability: Concrete Pavers enriched with PET Plastic. He talked about the problem of loss of soil fertility, disease spread.

Ms Nitika Saroj addresses the present issues on reviving our roots: sustainable solutions for water and soil quality. Also discussed the solutions and sustainable interventions strategies. Educate farmers and communities on sustainable practices that enhance agricultural productivity.

## Day 3

### Dr. Eugene Itua

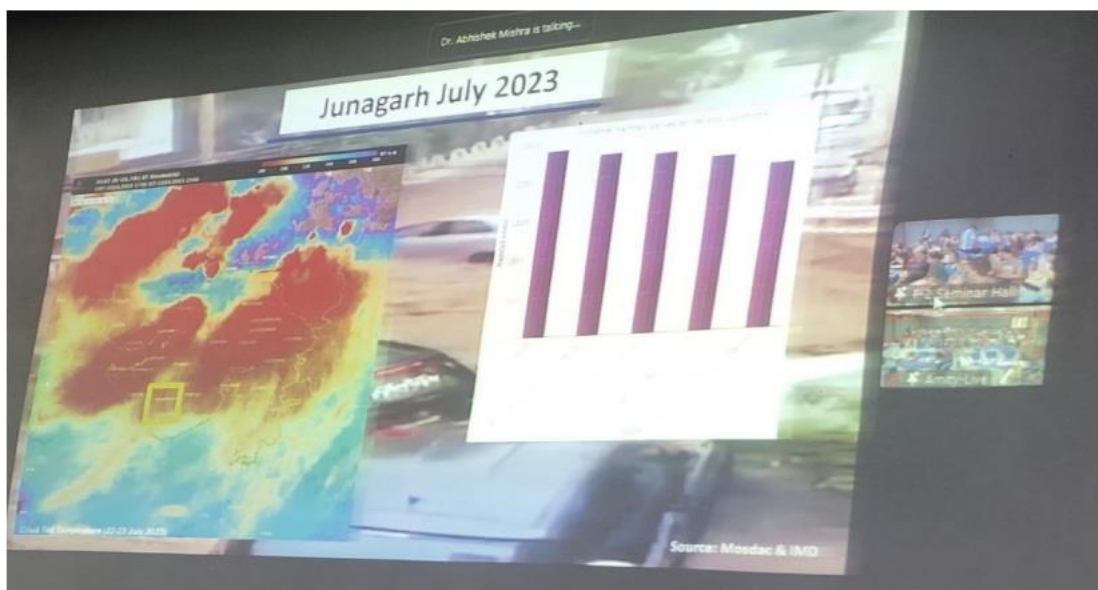
Dr Eugene Itua presented on the importance of Moving towards climate-resilient infrastructure with Infra Tech Solutions using the Lagos-Calabar Coastal Road as a Case study. He discussed the critical need for immediate and sustained efforts to mitigate climate change and protect vulnerable infrastructures. He talked about the vulnerability of the Project Location. Coastal Erosion poses a significant threat to coastal road infrastructure. InfraTech is about integrating digital and non-digital technologies into infrastructure technologies to achieve social and economic benefits and sustainability. By adopting Infra Tech solutions, the Lago-Calabar Coastal Road project can serve as a model for other infrastructure projects in Africa and beyond.



### Dr. Abhishek Kumar Mishra

Dr. Abhishek Kumar Mishra presented on Measurements and Modelling of Extreme Weather Events in Bihar. Extreme events are occurrences of unusually severe weather or climate conditions that can cause devastating impacts on communities and agricultural and natural ecosystems. He discusses the agrarian economy, river systems,

geographical challenges, and urbanization trends of Bihar. He discusses the WRF Modelling System and WRF Simulation of the Extreme Rainfall Event.



### Mr. Sagar

Mr. Sagar told us about the sky workshop (S plus workshop) that charges the mind and will facilitate the soft skills in Amity from 1<sup>st</sup> week of October.

### Dr. Rekha Singh

Dr Rekha Singh presented career opportunities in Environment, Sustainability, and ESG. Dr. Singh discussed the growing demand for sustainability professionals and emerging trends and technologies including green technology, Data Analytics, and Modeling, Collaboration and Partnerships as wells as Environmental education and awareness. Sustainability consulting firms advise businesses and organizations on integrating sustainability into their operations, strategies, and investments.



### Dr. Atul Tripathi

He discussed eco-friendly products. Palu is the brand mascot of Uneako products. Polar bears are the first facing the impact of climate change. Uneako is an amalgamation of unique and eco means that provide eco-friendly and sustainable products. His vision is to make the planet happy.







### **CS Mayank Bharadwaj**

CS Mayank Bharadwaj presented on starting a startup in steps and challenges. He discussed understanding the process of setting up a startup journey. Implementation is the key to the startup journey. Regulatory complexity, secure funding, hiring and retaining talent, compliance and legal issues, and sustainability are the challenges in setting up a Startup journey. AIM (Atal Innovation Mission) is a department promotion industry.



### **Dr. D.N. Pandey**

Dr. D.N. Pandey talked about biodiversity, and it should be conserved where we live and work. He discussed Lactobacillus bacteria. He discussed the Book titled "Ghar se Van Tak". A large number of species of wilderness should come into urban areas.

### **Dr. Anil Kumar Jain.**

With an increasing population, the use of industries' resources increases. He discusses cement production which is the graft of any country. It is equivalent to water consumption which is essential for the growth of any country. He talked about air purifiers and everything that was low-cost in 1990 as compared to today. Net zero is the new sustainability for any business. The cement industry consumes limestone, coal, water, and power and is aligned with SDGs.



### **Dr. Sunita Mantri**

Dr. Mantri appreciated Tanu Jindal and complimented the GSS conference in 2024.

### **Dr. Suyash Awasthi**

Talk on Climate change and sustainability. He talked about the climate change scenario and the mechanism of climate change. Many initiatives have been taken into account in this accountability. Mitigating solutions have also increased. He talked about the Paris Convention, SDGs, and ESG. India is the 3<sup>rd</sup> emitter of GHG. The highest number of resources are under the USA. Talk on Climate change and sustainability. He talked about the climate change scenario and the mechanism of climate change. Many initiatives have been taken into account in this accountability. Mitigating solutions have also increased. He talked about the Paris Convention, SDGs, and ESG. India is the 3<sup>rd</sup> emitter of GHG. The highest number of resources are under the USA.



### **Validatory session**

#### **Dr. Mithilesh Kumar**

Dr Mithilesh talked about R&D 0.7% GDP R&D in India. The challenges of loss of diversity are due to habitat destruction and global climate warming. Centre of Excellence is IIT Kanpur, IIT Delhi, and other institutes. Young students are the future of any organizations

#### **Dr. Shyam Prandey**

He talked about a sustainable conference focusing on challenges of sustainability in the Himalayas region. The coming conference will be held in Gangtok of Sikkim. For him, sustainability is ingrained in our culture. He talked about the four Vedas of Mahatma Gandhi and the non-exploitation of nature. Knowledge is limited and imagination is not. He talked about creativity, artisans, and Kutch is the land of handicrafts.

#### **Positive Rishi Kumar**

Positive Rishi Kumar talked about insights into sustainability. He thanked Prof. Tanu Jindal for the GSS conference. Sustainability is when you have resources but don't have the right contact. How u build your habit to make life sustainable by keeping happy and great around you.

#### **Vote of thanks by Dr Abhishek Chauhan**

Dr. Abhishek kumar thanked all the speakers, all the faculty members including the staff and Ph.D scholars for their contribution and support.