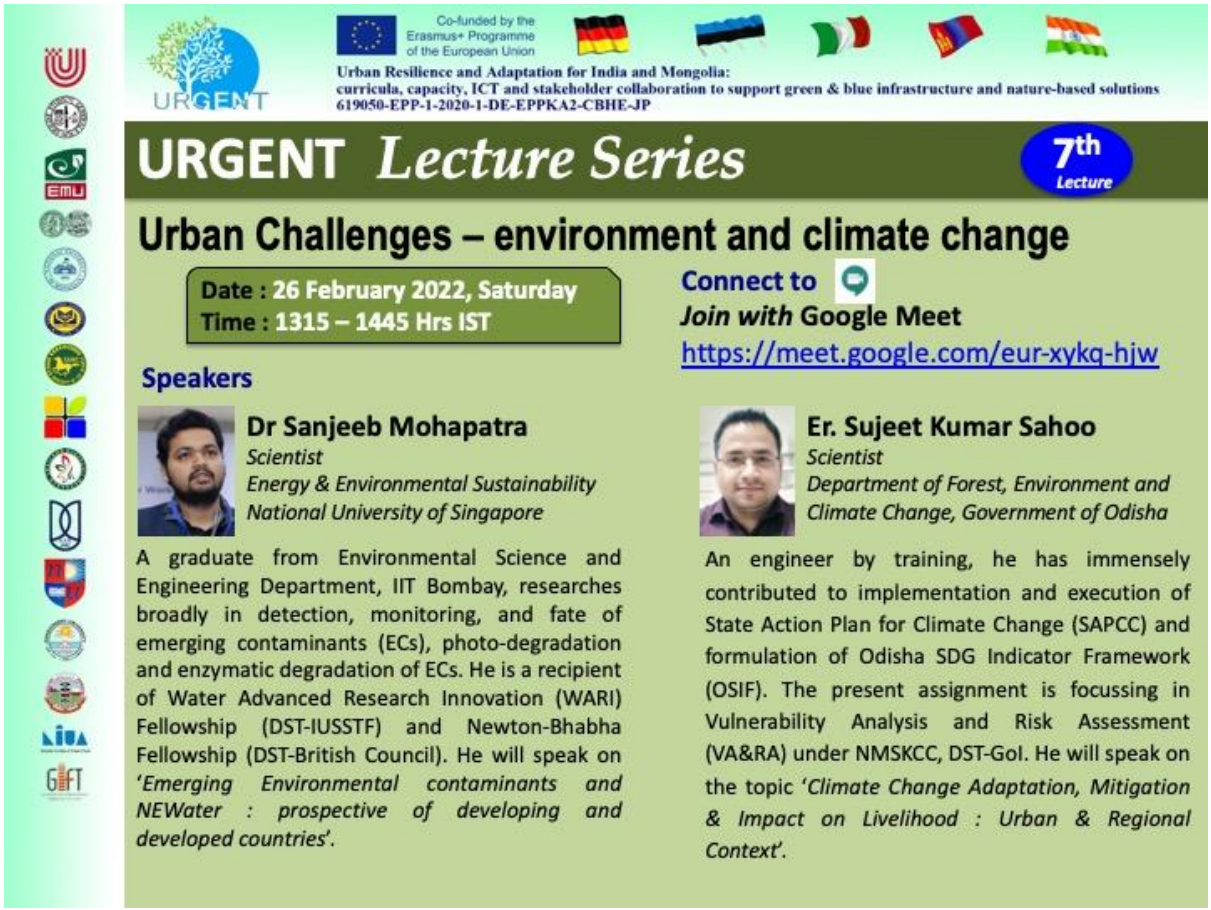



*Facilitating Institution*

**Gujarat International Finance Tec-City (GIFT)**

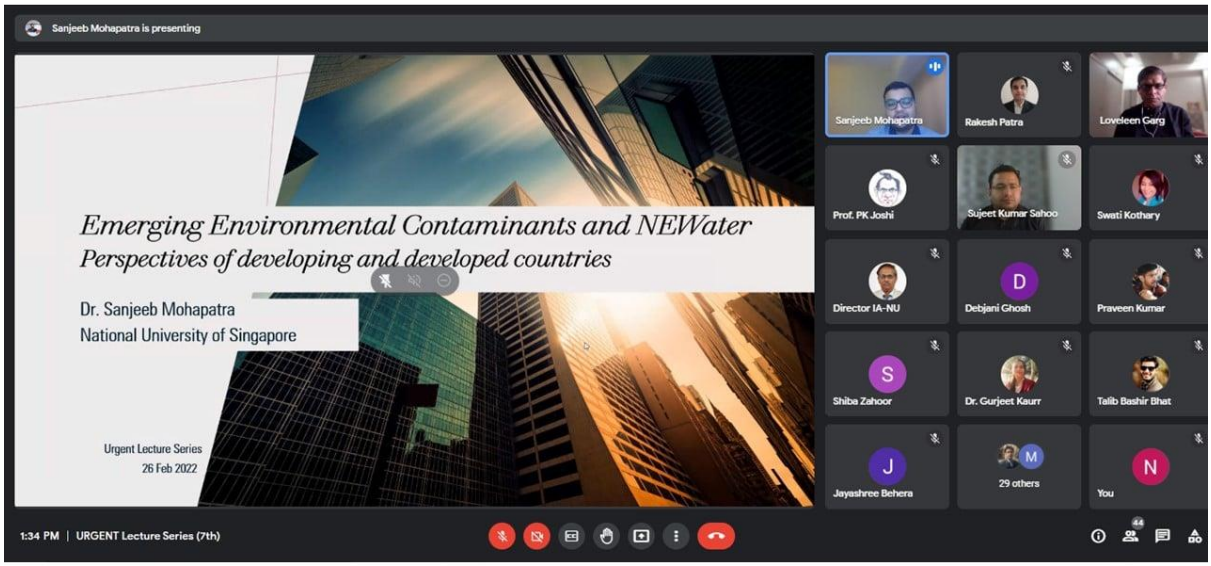
Speaker: **Dr. Sanjeeb Mohapatra**, National University of Singapore, Singapore
Topic: **Emerging Environmental Contaminants and NEWater Perspectives of developing and developed countries**

Dr. Sanjeeb's presentation focused on work planned or undertaken in Singapore towards Environmental sustainability. The talk was packaged around the topics of - Singapore Green Plan 2035; Landscaping for Urban Spaces and High-Rises (LUSH); Clean Waters (ABC Waters) Programme and NEWater (Reclaimed water). Highlighting Singapore city's future plans, he presented the following targets – for 2026 (Develop over130 ha of new parks and enhance around 170ha of existing), for 2030 (Double the annual tree planting rate between 2020 and 2030, to plant 1 million more trees across Singapore; Increase nature parks 'land area by over 50% from 2020 baseline; Every house hold will be within a 10-minute walk from a park) and for 2035 (Add 1000ha of green spaces). Next, the speaker emphasized on the concerns from emerging contaminants and how climate change effect these contaminants. For example, increase evaporation could increase the concentrations of ECs in water bodies. Following this, the ABC Water Programme (Active, Beautiful, Clean waters) was introduced. This programme envisions to transform Singapore into of "City of Gardens and Water". For this programme, multiple agencies and institutions are working together, such as Institution of Engineers Singapore (IES), Singapore Institute of Architects (SIA), Singapore Institute of Landscape Architects (SILA) etc., providing a much needed expertise from different fields of urban planning. The Key Strategies of the ABC Waters Programme (1) Development of ABC Waters Master Plan and Project Implementation (2) Promoting Adoption of the ABC Waters Concept (3)3P (People, Public, Private) Partnership Approach. Programme covers storm water management, which attributes endeavor at source; to slow the flow of runoff water with ABC strategy, followed by pathway, it enhances the conveyance capacity; and finally the receptor; it deals with measures to protect the affect where storm water end up. On-site Detention and Retention of storm water was showcased as an effective measure to reduce urban flooding through ABC's water management strategy. Examples included active green roofing and vertical gardens. Different process of storm water management such as retention, conveyance, infiltration, purification and detention were described in detail. To counter the emerging contaminants, constructed wetlands was introduced in a way that system hydraulic efficiency is optimised, healthy vegetation is sustained and a balance eco-system is maintained. Another efficient intervention introduced was - Bio retention basins or rain gardens which are vegetated land depressions designed to detain and treat storm water runoff. Lastly, the NEWater treatment plant was introduced. It involves 3 stages process: Stage 1 –Microfiltration / Ultrafiltration Stage 2 –Reverse Osmosis Stage 3 –Ultraviolet Disinfection. There are currently 5 NEWater plants in operation.
More questions pertaining to Dr. Sanjeeb's research work can be corresponded through her email- sanjeeb.or@gmail.com

Speaker: **Er Sujeet**, Scientist, Department of Environment, Forest and Climate Change, Government of Odisha, Odisha, India
Topic: **Climate Change Adaptation, Mitigation & Impact on Livelihood Urban & Regional Context**

The focus of Er Sujeet's presentation was on urban and regional context of climate change. The speaker outlined his lecture in 3 components (1) Brief introduction on Climate change and widely accepted terminology (2) Governance model adopted for addressing climate change at National and State level and (3) Climate change adaptation and mitigation case studies by Government of Odisha. The speaker introduced the basics of climate change adaptation and mitigation, including different types of adaptation such as reactive adaptation, anticipatory adaptation etc. Next, a global and Indian scenario of different natural calamities was presented. The main findings from IPCC's VI assessment report were cited to emphasize on the increased severity and frequency of different disasters. Special attention is given to the impacts in Asia and southeast Asia. Following this, major impacts of climate change and various disasters that have occurred in the state of Odisha was discussed. Specific reasons for Odisha's vulnerability were also stated. The Climate Change Action Plan (SAPCC) of the state was introduced with the adopted plan of action and the actions undertaken to combat climate change issues. This includes formation of a Climate Change Cell and a High level Coordination Committee. 12 main departments and sectors associated with SAPACC includes - Agriculture, Coast & Disaster, Energy, Fisheries & ARD, Forestry, Health, Industries, Mining, Transport, Urban Development, Water Resources, and Waste Management. To improve farmer adaptation to climate change, a Climate Smart Agriculture mobile application (CsaXpert) was showcased. Next, the key climate change activities in each sector such as agriculture, forestry, fisheries & animal resources & development sector, health etc. were discussed. Speaker narrated the case study undertaken through adopting nature based solutions. This included projects like the *Banayana project* in Odisha. The Banayana project is implemented in 14 Forest and Wildlife Divisions of the state, covering 10 districts, with the active participation of 12,000 Vana Surakshya Samitis (VSSs). The most important aspect of this project is active community engagement to transform them from resource users to resource managers. Some examples of water conservation measures such as through management of run-off in the river basin were also discussed. This was done through constriction of check-dams at strategic locations. Different examples of National Adaptation Fund for Climate Change (NAFCC) implemented projects were showcased through field photographs of on-ground implementation.
More questions pertaining to Er Sujeet's research work can be corresponded through his email-sahoo.sujeet@gmail.com.


Sujeet Kumar Sahoo is presenting
Climate Change Adaptation, Mitigation & Impact on Livelihood- Urban & Regional Context
meet.google.com is sharing your screen.
Stop sharing
Hide
Activate Windows
You
Sanjeeb Mohapatra
Sujeet Kumar Sahoo
Rakesh Patra
53 others
In-call messages
Messages can only be seen by people in the call and are deleted when the call ends.
Prof. PK Joshi 1:48 PM
@Sanjeev - A publication from Rockström (Stockholm) while referring to Planetary Boundaries and Safe Operating Space mentioned Chemical Pollution as NOT Yet Quantified. Though I do appreciated and understand the environmental contaminants, still how confident are we about its relations with climate change??
You 1:49 PM
@Dr Mohapatra....is Singapore having standards for these emerging contaminants in water resources
You 1:52 PM
In Singapore Green Plan, it is targetted to increase green area by 50% over 2020 base. What is the base area?
Prof. PK Joshi 2:05 PM
@Sanjeev - Indeed very interesting and impressive presentation. India has entered into some collaboration with Singapore for upgrading Delhi and Bangalore's water supply systems. Any idea about that and the progresses made??
Send a message to everyone
2:09 PM | URGENT Lecture Series (7th)


Sanjeeb Mohapatra is presenting
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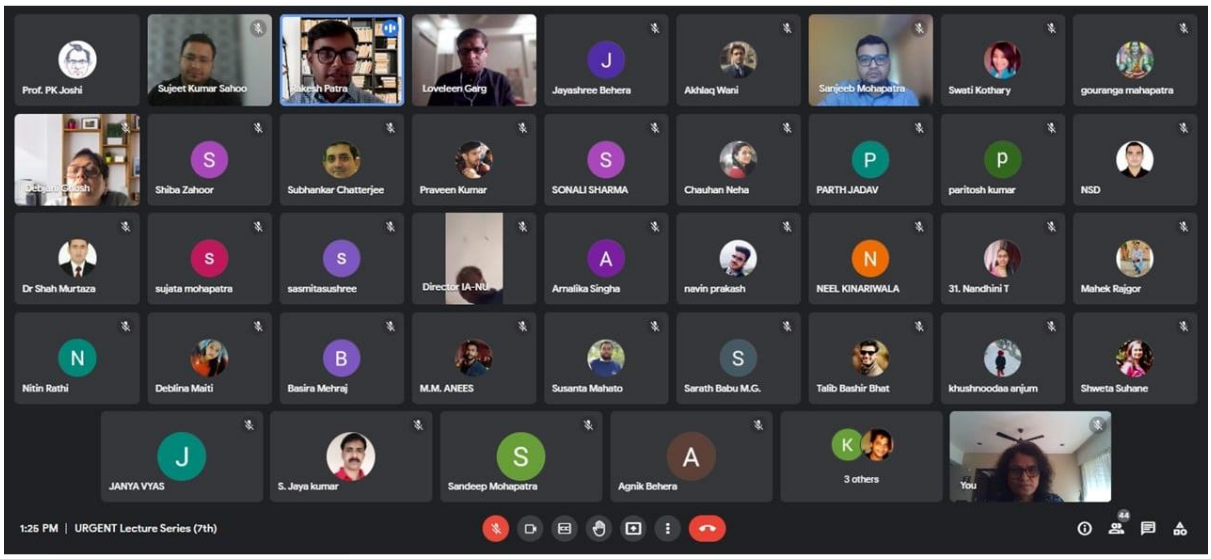
Perspectives of developing and developed countries
Dr. Sanjeeb Mohapatra
National University of Singapore
Urgent Lecture Series
26 Feb 2022
Sanjeeb Mohapatra
Rakesh Patra
Loveleen Garg
Prof. PK Joshi
Sujeet Kumar Sahoo
Swati Kothary
Director IA-NU
Debjani Ghosh
Praveen Kumar
Shiba Zahoor
Dr. Gurjeet Kaurr
Talib Bashir Bhat
Jayashree Behera
29 others
You
1:34 PM | URGENT Lecture Series (7th)




Link to Lecture

https://drive.google.com/file/d/1W0fGsnI3c3m83fRQDc8dOtuqB_sfu66e/view