

विश्व पर्यावरण दिवस -2021



ECOSYSTEM RESTORATION

REIMANGINE. RECREATE. RESTORE



CENTRAL POLLUTION CONTROL BOARD
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**CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE (BENGALURU)**

**Report on World Environment Day Celebration held on June 5, 2021 at Regional
Directorate (Bengaluru)**

World Environment Day (WED) is celebrated globally on 5th of June every year. It is one of the largest mass awareness campaign organised annually by the United Nations to create awareness and encourage actions for protection of natural environment and ecosystems. WED offers a global platform for inspiring positive change towards environment. It motivates the individuals to adopt eco-friendly lifestyle, industries, manufacturers and service sectors to innovate and practice greener business models, farmers to produce more sustainably and governments to invest and implement environment protection programmes.

Since 1974, every year WED is organized around a theme that focuses attention on a particular pressing environmental concern. The Theme for World Environment Day, 5 June 2021 is “Ecosystem Restoration” and the host country is Pakistan. Ecosystem restoration means preventing, halting and reversing the environmental damage to go from exploiting nature to healing it. On this occasion UN Decade on Ecosystem Restoration (2021-2031) is launched to revive billions of hectares, from forests to farmlands, from the top of mountains to the depth of the sea.

To mark the importance on the UN theme ‘Ecosystem Restoration’, Regional Directorate, Bengaluru celebrated the WED on June 5, 2021 by organising following programmes:

1. Plantations of saplings and watering plants by officials and their families at their respective stay places.
2. Organised WED 2021 celebration through Webinar on 5th June 2021 by presentations from officials on various topics related to ecosystem restoration.
3. Hosted online environmental literacy quiz on 5th and 6th June 2021.

4. Organised WED 2021 celebrations through Webinar in association with Prakriti Institute of Environmental Science (PIES) and Nagarjuna College of Engineering and Technology on 4th and 5th June, 2021. In this programme officials of RD, Bengaluru delivered presentations on various topics of ecosystem restoration.
5. Regional Director participated as a guest in the national level programme WED-2021 Launch of UN Decade of Ecosystem Restoration” organised by Seeds of Sustainability on 5th June, 2021. The programme was inaugurated by Sri Suresh Prabhu, Honourable MP & India’s Sherpa for G7 and G20.

1. Plantations of saplings and watering plants by officials of RD, Bengaluru

Appreciating the importance of the theme ‘Ecosystem Restoration’, Regional Director, Bengaluru encouraged its officials for plantation of saplings at their respective stay place considering the lock down situation in the Karnataka state. As the famous saying, “one who saves the tree is saved by the tree”, plantation of diverse species of saplings and protecting them leads to ecosystem restore. Due to prevailing Covid 19 pandemic, following the Covid appropriate behaviour guidelines, officials of RD, Bengaluru along with their family members planted saplings and watered plants at their respective locations. The photographs of plantation of saplings are shown below:







Plantation of saplings by the officials of RD, Bengaluru

Sri Seenivelu, SLA planted a sapling of African baobab tree (*Adansonia digitate*) in the office premises at Nisarga Bhawan on the occasion in WED 2021. African baobab tree is called the tree of life and can live for more than a thousand years and provide food livestock fodder, medicinal compounds and raw materials. This species is found throughout the drier regions of Africa and features a water-storing trunk that may reach a diameter of 9 metres (30 feet) and a height of 18 metres (59 feet).



Plantation of sapling of African baobab tree in office premises

2. Webinar on WED -2021 organised by CPCB RD Bengaluru:

CPCB, RD Bengaluru organised WED 2021 celebration through Webinar on 5th June 2021 at 12.00 PM by presentations from officials on various topics related to ecosystem restoration. The invitation of the WED - 2021 programme organised by RD Bengaluru was widely circulated and publicized. Officials of RD Bengaluru and other RDs, representatives from industries, professors from institutions and panel advocates attended the programme. The webinar was recorded and uploaded in YouTube.

**CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE, BENGALURU**

In pursuit of clean environment

CELEBRATION OF WORLD ENVIRONMENT DAY 2021

All are cordially invited for celebration of World Environment Day -2021 on 5th June 2021. Owing to the Covid-19 Pandemic times it is planned to celebrate virtually through video conferencing based on theme - "Ecosystem Restoration". The theme of World Environment Day 2021 is 'Reimagine. Recreate. Restore.' as this year marks the beginning of the United Nations Decade on Ecosystem Restoration.

Zoom Meet Link
<https://us05web.zoom.us/j/89837464608?pwd=cjBoYTlWRzdsYkx3elVQc1lWVjNCsm1zZz09>
Meeting ID: 898 3746 4608
Passcode: hLXTW3

Schedule

 12.00 P.M.-12.10 P.M. Introductory remarks by Regional Director	12.10 P.M.-12.20 P.M. Video presentation of Plantation and watering the plants	 12.20 P.M.-12.35 P.M. Presentation by Dr. B.S. Anupama, Sc C' on theme Ecosystem Restoration
 12.35 P.M.-12.55 P.M. Presentation by Smt. Anjana Kumari V, Sc D' on Restoration of Water Bodies	 12.55 P.M.- 01.15 P.M. Presentation by Smt. P.K. Selvi, Sc D' on Restoration of contaminated sites & reclamation of closed common TSDF	 01.15 P.M.- 01.20 P.M. Vote of Thanks Smt. Sowmya D, Sc.D.

The Regional Directorate of Central Pollution Control Board, Bengaluru is conducting online environmental literacy quiz. Test your knowledge with CPCB quiz and lead from the front for Recreating, Reimagining and Restoring our ecosystems/ environment. All participants are awarded e-certificates. Link & timings is given below:
Date: 5th & 6th June, 2021
Day: Saturday & Sunday
Timings: 00.00 hrs. of 5th June, 2021 to 23.59 hrs of 6th June, 2021
Quiz link : <https://form-timer.com/start/480a9e6e>


Dr. Deepesh V, Sc.C
Coordinator for Quiz

Invitation of the WED - 2021 programme organised by RD Bengaluru

Smt. Sowmya D, Scientist D welcomed the participants and moderated the programme. The Regional Director gave the introductory remarks and explained the importance of ecosystem restoration, overview of environmental protection in the Country and measures taken by CPCB in restoring ecosystems. He emphasized measures implemented by CPCB for restoration of the ecosystems in Country through formulation and implementation of various Acts, Rules, policies, effluent and emission standards, guidelines, monitoring and restoration programmes. He also gave an important message to all the officials about their duties and role in restoring ecosystem.



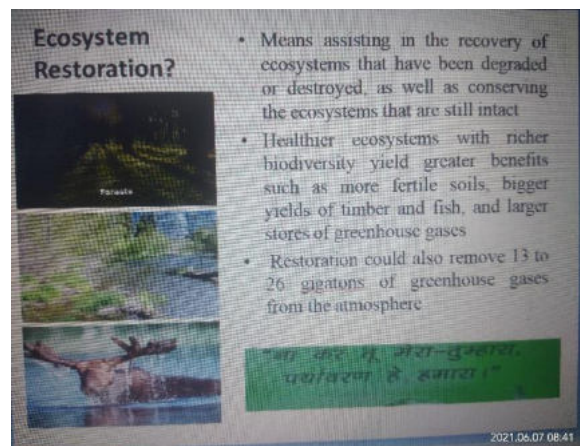
Introductory remarks by Sri S. Suresh, Regional Director

Then the video and photographs of plantations carried out by officials and their family members was displayed. Subsequently, the video of messages given by the children of officials about importance and protection of environment on the occasion of WED was displayed. Recently, Sri R. Mahendra Kumar, Administrative Officer was demised due to Covid 19. As a remembrance and tribute a video on his achievements in office was displayed.





The presentations were begin with Dr. B S Anupama, Scientist ‘C’ discussing on the importance of WED celebration highlighting the theme “Ecosystem Restoration”- focusing on resetting the country's relationship with nature. She also emphasized the necessity to restore Ecosystem quoting examples of different types of ecosystems existing in nature and their present status. She also threw light on the causes for ecosystem damage and explained how each one of them can contribute to restore the ecosystem and conserve it.



Presentation by Dr. B S Anupama

Ecosystem restoration heals the planet and water is fundamental to life to exist. It is prime duty to prevent degradation and restore water bodies. Smt V Anjana Kumari, Scientist D delivered a detailed presentation on “Restoration of water Bodies”. She explained that CPCB

has been taking immense measures to Restore Water bodies and conserve them and has developed Guidelines on Restoration of Water Bodies. She also explained in detail about the status of water bodies in the Country, guidelines, various methods and steps to be followed for restoration of water bodies. She also shared the success story of Chilka lake in Orissa and various lakes in Bengaluru which have been restored with the aid of self-help groups and associations for Environment Protection. The videos of success stories of restoration of lakes in Bengaluru was displayed.

Smt Selvi P K, Scientist D spoke about the importance of land conservation and reversing them to prevent extinction of endangered species, climate change etc. She informed that this would also have a great impact on attaining other Sustainable Development Goals of the United Nations viz., Clean Water and Sanitation, Good Health and Well-being. She explained about the status of contaminated sites in the country and the need for restoration of the same. Further, she added the fact that at present those Hazardous Waste Sanitary Landfills in 18 States/UTs will be closed by 2030 and therefore there is an urgent action required from the authorities of State Government to explore the possibility for reduced generation of Hazardous Wastes and enhance recyclability of the same.

WASTE & CONTAMINATION

- Waste does lead to soil contamination when it negatively affects soil or groundwater or other environmental features. Most often, this is due to uncontrolled dumping or lack of timely suitable remediation measures.



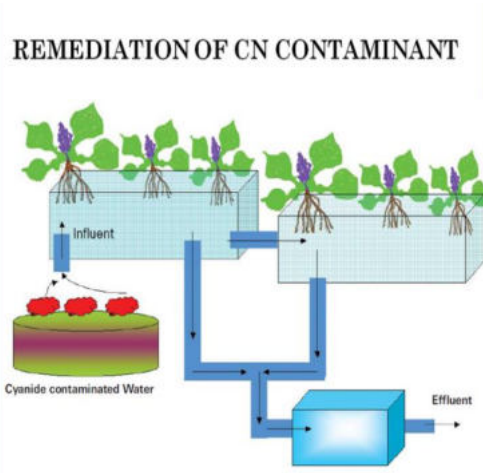


Figure I-1.1: coloured tap water, indication of contaminated ground water

REMEDIATION OF CN CONTAMINANT



The diagram illustrates a remediation process for cyanide (CN) contaminants. It shows a cross-section of the ground with cyanide-contaminated water. This water is drawn into a tank where plants are growing. The plants absorb the cyanide from the water. The treated water then flows into another tank and finally into an effluent discharge point.

Presentation by Smt Selvi P K

Prof. G Sriniketan, Former Professor in chemical engineering at NITK, Suratkal also participated in the programme and he addressed all the participants and shared his valuable experience in implementation of ecosystem restoration when he was chairman of SEIAA in Karnataka.

The programme ended with taking pledge and vote of thanks.

World Environment Day Pledge

“On this Day, / I solemnly affirm that / I will rededicate to the cause of protection of environment / and will do my best to observe rules, / regulations and procedures / and develop attitudes and habits / conducive for achieving these objectives.

I fully realise that / use and disposal of non-Eco friendly materials / will result in / general degradation of environment. I will use Eco-friendly products. / I will not use disposable Plastic products / like cups, small covers or carry bags. / I will follow reuse culture. / I will use public transport / as far as possible. / I will meet vehicle emission standards. / I will avoid use of air horns. / I will segregate / waste generated at home. / I will support community based waste management. /

I will do everything possible / for the protection of environment / in the interest of self, my family, my community / and the nation at large.”

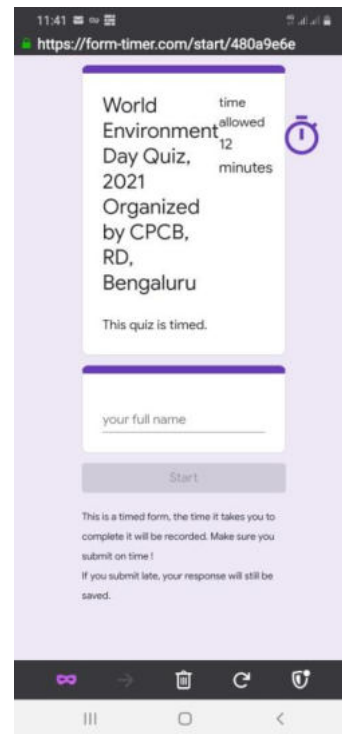
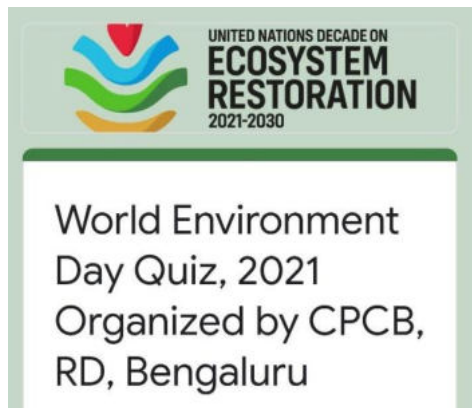
Pledge on World Environment Day 2021

3. Online environmental literacy quiz programme

The Regional Directorate, Bengaluru hosted online environmental literacy quiz on 5th and 6th June 2021. The link of online quiz <http://form-timer.com/start/480a9e6e> was widely published. The quiz was for 100 marks and participants were supposed to answer 20 questions with 5 marks each in 12 minutes. The quiz activity received 204 responses and e-certificates were issued to all participants.



Invitation of Quiz programme



Snapshots of the quiz portal

4. WED 2021 organised in association with Prakriti Institute of Environment Science (PIES) and Nagarjuna College of Engineering and Technology

RD, Bengaluru Organised WED 2021 celebrations through Webinar in association with PIES and Nagarjuna College of Engineering and Technology on 4th and 5th June, 2021. In this programme Smt V Anjana Kumari, Scientist D and Smt Selvi P K Scientist D of RD, Bengaluru delivered presentations on Water Conservation and Restoration of Lakes and Restoration of Contaminated Sites / Reclamation of Closed Landfill Sites respectively. Regional Director, Bengaluru in his inaugural speech explained about the ways and means to enhance Ecosystem Restoration and Conservation viz., Growing trees, rejuvenation of lakes, River clean ups, Planting rain gardens, Pollution mitigation and rotating agricultural crops.

National Seminar on Ecosystem Restoration
on the account of **World Environment Day- 2021**

Since 1974, World Environment Day has been celebrated every year on 5 June, engaging governments, institutes and citizens in an effort to address pressing environmental issues. The theme laid out by UNEP this year is "Ecosystem Restoration" for the next 10 years. Ecosystem restoration is preventing, halting and reversing the damage – to go from exploiting nature to healing it. This World Environment Day is a global mission to revive billions of hectares, from forests to farmlands, from the top of mountains to the depth of the ocean.

Date : 4th & 5th June, 2021
Time : 10am onwards

Workshop Highlights

Special address from CPCB and PIES
Address by Chief Guest Shri. Rameshkumar B N, Chairman, PIES

4th June

Topic: Inaugural Introductory Remarks
S Suresh, Regional Director, CPCB
Time: 10.00am-10.30am

Topic: Methodologies of Sampling
Radhesham Balaji, Additional Director, CPCB
Time: 10.30am-11.30am

Topic: Inference of Analysis result
Dr. Nagappa, Former Senior Scientific Officer, KSPCB
Time: 11.30am-12.30pm

5th June

Topic: Restoration of Water Bodies
Smt. Anjana Kumari V, Scientist D, CPCB
Time: 10.00am-10.30am

Topic: Restoration of contaminated sites & reclamation of closed common TSDF for further land use
Smt. Selvi. P.K, Scientist D, CPCB
Time: 10.30am-11.00am

Topic: Ecosystem Restoration
D R Kumaraswamy, Director, PIES
Time: 11.00am-12.00pm

Associate Partners

Prakruti Institute of Environmental Studies Nagarijuna College of Engineering and Technology Eco Green Solution Systems Pvt. Ltd

SPEAKERS

Ramesh Kumar B N
Chairman, PIES,
Former Chief Environmental Officer,
KSPCB

D R Kumaraswamy
Director, PIES,
Former Chief Environmental Officer,
KSPCB

S Suresh
Regional Director, CPCB,
Bengaluru

Dr. B Nagappa
Former Senior Scientific Officer,
KSPCB

Radhesham Balaji
Additional Director (R),
CPCB, Bengaluru

Smt. Selvi. P.K
Scientist D, CPCB, Bengaluru

Smt. Anjana Kumari. V
Scientist D, CPCB,
Bengaluru

Mr. Rachith K
Co-ordinator, Asstt. Prof.
Department of Civil Engineering, NCE

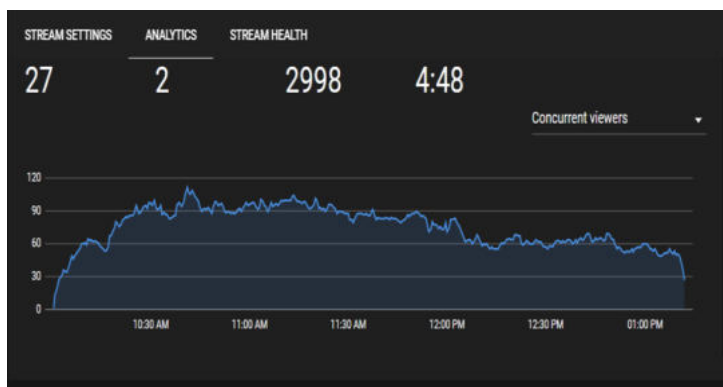
Ms. Vidyaashree M. G
Co-ordinator, Asstt. Prof.
Department of Civil Engineering, NCE

Dr. D. L. Venkatesh Babu
Professor and Head
Department of Civil Engineering

Dr. Jilendranath Mengara
Principal, NCE

Invitation of the programme

The programme was streamed live on youtube to create mass awareness. On analysis, it was observed that students from colleges, representatives from industries, state boards and general public were attended the programme. The event was very successful with 2998 participants & viewers. The youtube link of two days programme is as follows:



Day-1 YouTube Link 04-06-2021- <https://youtu.be/FHsCT9nLqvU>

Day-2 YouTube Link 05-06-2021- <https://youtu.be/dCXddgqXSXU>



Online quiz programme was conducted on both the days after presentation sessions. Around 70 participants participated in quiz programme on both the days.

Three top scores on each quiz contest shortlisted for prize distribution

5.Participation in National level programme “WED-2021 Launch of UN Decade of Ecosystem Restoration”

The Regional Director participated as a guest in the national level programme “WED-2021 Launch of UN Decade of Ecosystem Restoration” organised by Seeds of Sustainability on 5th June, 2021. On the eve of World Environment Day 2021, Sri Suresh Prabhu, Hon’ble MP and India’s Sherpa for G7 & G20, launched “Ecosystem Restoration Connect” – a platform to discuss imminent environmental issues the planet is facing. The platform conceptualised by Seeds of Sustainability with support of Institutions, Industry and Community. Karnataka State Pollution Control Board (KSPCB), Regional Directorate of Central Pollution Control Board Bangalore (CPCB), Institutions like Council for Scientific and Industrial Research (CSIR), Central Food Technology Research Institutions (CFTRI), National Environmental Engineering Research Institute (NEERI), Global Society of HSE Professionals, Rotary Club Vizag, Lions Club South India, and ISHRAE Vizag Chapter, represented during launching of the Platform.





Invitation of the programme

Smt Keerthi D Souza, Director, Seeds of Sustainability, organised the event. She welcomed the representatives and emphasised the need of such platform in the current times stating the need of understanding and collaborative approach in dealing with local issues to understand global event. The current Pandemic is one such event which has highlighted need of cross-section dialogue over ecosystem restoration.

Sri Suresh Prabhu, Honourable MP in his inaugural address also emphasised of such collaborative approach in ecosystem restoration. He said there is symbiotic relation between all living creatures. They all are interconnected. He cited example of Tiger conservation. Tiger cannot be conserved in isolation. It needs thick forest and its food. These forests help in restoration of ecosystem in all its forms. He cited one example of Nagarahole forest in Karnataka. He said, if one day, Tigers disappeared from Nagarahole forest then it would be clear indication that there is some serious problem with local ecosystem which needs to be addressed. Moreover, the Nagarahole forest is the part of global ecosystem, which also get disturbed. Our ecosystem is more interdependent and integrated to global ecosystem starting from Brazil's Amazon Forest to Africa Savanna grassland to Australia forest to oceanic ecosystem. We need to get lessons from past what we lost or degraded due to human activities. We now have to put effort, in order to ecosystem restoration & not to lose any more from current ecosystem. He said that it is an urgent task that can be achieved only by collaborative approach. It can only be done through bringing all stakeholders on to one forum. The current platform can be important step in this direction and can be emulated in other parts of the country.

Sri S Suresh, Regional Director of CPCB, spoke at length about role of Ministry of Environment and Forest and Climate Change (MoEFCC) and CPCB in ecosystem restoration while controlling pollution. He said that the National Afforestation and Eco-Development Board is responsible for the ecological restoration and Eco-Developmental activity in the country. The National Green Tribunal has made CPCB as nodal agency in many ongoing legal cases to keep check on environmental pollution and as well as restoration. The CPCB is regularly monitoring air & water quality through manual and continuous monitoring stations. The results are utilised for preparation of action plans. Besides engaged in river rejuvenation activities through checking of industrial and domestic effluents entering into water bodies and also involved in online emission and effluent monitoring programme which helps in taking action against defaulters. He also elaborated on roles of responsibilities of MOEF&CC, CPCB

and SPCB in the protection of the environment and available constitutional provisions i.e., A21,48A,51A(G), A21. He also discussed about various Acts and Rules and calculation of environmental compensation (EC) existing for environment protection in the country. It was opined that all these requires to be used for effective management of environment.

The Experts Empanelled by Ecosystem Restoration Connect were launched

1. Mountain - **Dr. Anil Joshi**, Padma Bhushan Awardee the Mountain man Founder of Himalayan Environmental Studies and Conservation Organisation (HESCO)
2. Forest - **Shri Manoj** - Former Member Secretary KSPCB, IFS.
3. Lakes and Rivers - **Prof. Dr. Sandeep Narayan Mudaliyar**, Sr. Principal Scientist, CSIR-CFTRI and CSIR-NEERI
4. Ocean and Coasts - **Dr. Neelamani** – Senior Research Scientist, Coastal Management Program, Kuwait Institute for scientific research
5. Farmland - **Mr. Mehamood Khan**, a visionary social entrepreneur.
6. Grassland and Savannahs – **Dr. Jayashree Ratnam**, Director, Wildlife Biology and Conservation Program
7. Peatland - **Ashok Galrapatti**, Vice Chairman GSHP, Fellow ASSP, Edgar Awardee, Kuwait
8. Urban Areas - **Dr. Kamal Soi**, Member -NRSC, Ministry of Road Transport & Highways, GOI, President Global Society of HSE Professionals.

Dr. B.M Prakash, Regional Environmental Officer, KSPCB Mysore, expressed his gratitude for all the members who joined hands and applauded that greater success has been seen in such objectives in the past through community participation approach. He also expressed that this platform is one of the unique initiatives in the country, a decade as a good opportunity to connect, collaborate and work together on Ecosystem restoration program.

Sachin Joshi, Policy Director, at Business 20 during the G20 Presidency of Saudi Arabia in 2020 gave away five-point recommendation which included Finance, Valuation, Circular or regenerative economy, People-centric approach and Collaboration. He said that the core of recommendation was to stop financing of projects and activities that negatively affect the natural ecosystems and invest in transition to a circular or regenerative economy with people's centric approach.

Mr. Jitu C Patel, Chairman GSHP, Arizona USA, represented the non-profit's voice quoting example of collaborative efforts in the industry and how it could set an example for this platform. He deliberated that collaboration work well when its honored, respected and built on trust. He expressed support from GSHP in the endeavors of the platform.

Shri Ashok Garlapati, Expert on Peatland, Dr. Kamal Soi, Expert on Urban Areas, Dr. Neelamani, Expert on Ocean and Coastland, Shri. Mehmood Khan, Expert on Farmland were some of the experts available on call who expressed their wishes on the World Environment Day and about the areas they were planning to work on.

The programme was also published in youtube. The youtube link is as follows:

<https://youtu.be/Fxmj5A0CBtY> - Shri Suresh Prabhu, Hon'ble MP & Ex- Minister of Environment and Forests, Govt. of India - Inaugural address

<https://youtu.be/oFAa1C7UZtE> - Shri, Suresh, Regional Director, CPCB