

TOGETHER FOR CLEAN AIR IN JHARKHAND

INTERNATIONAL DAY OF CLEAN AIR FOR BLUE SKIES

06 September 2023 Ranchi



INTRODUCTION

The Jharkhand State Pollution Control Board (JSPCB) and Centre for Environment and Energy Development (CEED) hosted a stakeholder conference "Together for Clean Air : Ensuring Blue Skies in Jharkhand" on September 6, 2023 in Ranchi to promote awareness and united efforts to safeguard air quality in the state. The theme of this year's International Day of Clean Air for Blue Skies, 'Together for Clean Air' encourages collaboration, partnerships, and shared responsibility for reducing pollution, emphasizing the importance of clean energy practices, reduced emissions, and sustainable transportation.

Air pollution is one of the most pressing challenges of our time, affecting not only human health but also exerting a profound impact on the climate, the economy, and the overall environment. The United Nations General Assembly adopted a resolution in 2019 to establish the International Day of Clean Air for Blue Skies highlighting global awareness on air pollution and the need for robust actions to improve air quality.

The "Together for Clean Air: Ensuring Blue Skies in Jharkhand" initiative aimed to maintain Jharkhand's clean air through technological innovations, green infrastructure, and public awareness campaigns.



INAUGURAL SESSION

The inaugural session was graced by the presence of several eminent speakers who shared their valuable insights and expertise. The session began with a welcome address by Shri Y.K Das (IFS), Member Secretary, Jharkhand State Pollution Control Board. The session was addressed by Dr. Manish Kumar, Director, Research & Development, Centre for Environment and Energy Development (CEED), Dr. D.K Saxena (IFS), APCCF cum Chairman, Air Quality Monitoring Committee (AQMC), GoJ, Shri N.K. Singh (IFS), APCCF-Development, Department of Forest, Environment and Climate Change, Jharkhand, Dr. Sanjay Srivastava (IFS), PCCF – HoFF, DoFECC, GoJ. The keynote address was given by Shri Arun Kumar Singh (IAS), Development Commissioner & Additional Chief Secretary, Department of Health, Family Welfare and Medical Education, GoJ.



Key Highlights

- The air quality management faces challenges due to rapid urbanization, increased emissions, resource scarcity, and cultural barriers. Adopting eco-friendly technologies requires government policies, community engagement, and private-sector collaboration. The initiative emphasizes the collective effort of government, businesses, and communities to ensure a sustainable environment.
- Jharkhand is actively participating in the National Clean Air Program, and as per the mandates, preparation of the Clean Air Action Plan (CAAP) for 3 cities Dhanbad, Ranchi and Jamshedpur, identified as non-attainment cities and million-plus cities has been done and the its implementation is underway.

- In addition to this, preparation of Clean Air Action Plans for six cities not covered under NCAP, namely Hazaribagh, Ramgarh, Chaibasa, Dumka, Sahibganj, and Pakur is being done by focusing on emissions reduction, monitoring, public awareness, and policy interventions.
- The state of Jharkhand is implementing strict standards for emissions control, waste management, and sustainability, emphasizing environmental protection and sustainable industrial growth.
- Air pollution is a significant issue, with domestic sources contributing 18-19% of emissions and open burning accounting for 7-8%. To address this, stakeholders from various sectors should unite on a common platform, fostering a holistic understanding of pollution sources and formulating targeted strategies for emission reduction and enhanced air quality.
- A global air quality study is using advanced satellite technology to create extensive datasets, providing broad coverage and evidence-based decision-making for environmental policies and public health initiatives.
- The United Nations and the World Bank have initiated a program for eight Indian states in the Indo-Gangetic Plain to address regional level pollution challenges.

Key Recommendations

- Air pollution is a significant issue, with domestic sources contributing 18-19% of emissions and open burning accounting for 7-8%. To address this, stakeholders from various sectors should unite on a common platform, fostering a holistic understanding of pollution sources and formulating targeted strategies for emission reduction and enhanced air quality.
- Climate change is driving a focus on fostering behavioural change and promoting clean air, aiming to protect public health and the environment.
- Achieving clean air requires partnerships among stakeholders, substantial investment in air quality improvement, and active participation from individuals, communities, industries, and governments.
- Youth participation in awareness campaigns and sustainable initiatives is crucial for combating air pollution. The UN program in Jharkhand is strengthening data governance for informed policy formulation and decision-making.
- Climate governance and adaptation efforts are addressing climate change challenges, with initiatives promoting sustainable practices.
- A comprehensive approach to air quality management involves critical evaluation, monitoring, source apportionment studies, hotspot zone identification, improved response systems, and capacity building.
- Increased funding will expand ground-based monitoring stations and integrate advanced modeling tools.

NOTABLE SPEAKERS



"The State government has prioritized the reduction of air pollution at the forefront of the climate agenda. Government agencies have embarked on commendable initiatives to combat air pollution, and the vital participation of citizens and civil society organizations is imperative to formulate localized, grassroots solutions. To achieve this, we must unite with a mission-driven approach, aligning our efforts with Sustainable Development Goals while ensuring the convergence of actions needed to ensure cleaner air and blue skies in the state."

Shri Arun Kumar Singh (IAS)

Development Commissioner and Additional Chief Secretary-Department of Health, Family Welfare, and Medical Education, Jharkhand



"We need to strengthen climate governance in the state to meet the goals of the Nationally Determined Contributions. Implementing best practices to combat climate impacts is our shared responsibility, hence everyone's effort counts. We are actively implementing the state climate action plan, developing visionary roadmaps for climate resilience, and strengthening a bottom-up approach of planning and implementation to ensure a sustainable environment."

Dr. Sanjay Srivastava (IFS)

Principal Chief Conservator of Forest and Head of Forest Force, Department of Forest, Environment and Climate Change, Jharkhand



"Active citizen engagement plays a paramount role in galvanizing the momentum required for science-based, solution-driven measures. Informed actions grounded in scientific understanding are key to achieving sustainable air quality improvements. It is important that government agencies, communities, and various stakeholders align with shared values so that we can ensure air quality for all."

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Dr. D.K. Saxena (IFS)

APCCF cum Chairman, Air Quality Monitoring Committee, Jharkhand



"The community-driven climate actions are key for achieving environmental sustainability. It is in our hands to safeguard the environment, and together, we can create a sustainable future where clean air and a healthy planet are secured for generations to come. We should envision a future for a healthier, more sustainable tomorrow."

Shri N.K. Singh (IFS)

APCCF-Development, Department of Forest, Environment and Climate Change, Jharkhand



"Our relentless commitment to cleaner air is evident through formulation and implementation of the Clean Air Action Plan for nine cities under the National Clean Air Program. We have taken stringent control measures to combat air pollution, prioritizing public health. Our mission extends to promoting knowledge sharing, offering health advisories, and fostering a healthier, and more informed society."

Shri Y.K. Das (IFS)

Member Secretary, Jharkhand State Pollution Control Board



"The science-based planning, comprehensive emission inventories, and source apportionment studies are essential tools for designing effective air quality management. Effective data governance keeps the public informed and engaged, fostering a collective commitment for cleaner air. CEED is committed to support government agencies through data-driven research and raising public awareness on key environmental issues."

Dr. Manish Kumar

Director-Research and Development, Centre for Environment and Energy Development (CEED)

FELICITATIONS OF **ULB**



The conference also featured felicitation of commendable works undertaken by urban local bodies (ULBs), particularly **Dhanbad Municipal Corporation, Jamshedpur Notified Area Committee, a**nd other agencies on better air quality management.



TECHNICAL SESSION

HOLISTIC APPROACHES TO AIR QUALITY IMPROVEMENT: INNOVATIONS, CHALLENGES, AND COLLABORATIVE SOLUTIONS

Overview

The session focused on holistic approaches to air quality improvement in Jharkhand, with four experts discussing key initiatives and measures needed to ensure blue skies. The discussion was moderated by Dr. Manish Kumar, Director of the Research and Development Centre for Environment and Energy Development, and included industry and Chief Scientific Officer (CSO') led initiatives.

The key speakers included, Shri P.C. Jha, Chief Manager (Environment), Central Mine Planning and Development Institute Ltd (CMPDI), Shri Somen Mondal, Head-Environment, Bokaro ,Thermal Power Supply, Dr. Atri Gangopadhyay, Pulmonologist & Governor East Zone, Chest Council of India, and Dr. Brajesh Kumar, State NSS Officer, Jharkhand. The experts shared valuable insights and perspectives on ensuring blue skies efforts in Jharkhand and beyond.

Key Highlights

- India's coal production in Jharkhand is projected to peak by 2045, despite the country's 2070 net zero target. To reduce its environmental impact, India can use advanced technologies like satellite data and drones for air quality monitoring.
- The four pillars of air quality management include monitoring, modeling, mapping, and mitigation. Road transportation, particularly coal transportation, largely contributes to air pollution in mining areas.
- Thermal power plants in India are installing Limestone-Gypsum Dry Flue Gas Desulfurization (LGD) systems to reduce SOx emissions. This technology involves injecting limestone slurry into the flue gas, which reacts with the SOx present in the gas and converts them into gypsum. The gypsum is then collected and can be used in the construction industry, thereby reducing waste. The LGD system has proven to be an effective and efficient solution for reducing SOx emissions from thermal power plants in India.
- Air pollution in Jharkhand is causing a rise in health issues like asthma, chemical pneumonitis, and hypersensitivity pneumonitis, leading to severe complications. Asthma is now a sporadic health concern, and COPD diagnoses are now 10-12 years earlier than in the general Indian population. Children under 5 years have seen a 30% increase in respiratory diseases.
- The National Service Scheme (NSS) in Jharkhand has 44,000 volunteers and operates in 126 schools. It follows the 6R principle to minimize single-use plastic use. NSS plans to follow initiatives like 'Meri Mati Mere Desh' and encourages youth involvement in preserving trees and planting new ones.

Key Recommendation

- Jharkhand's rapid urbanization has led to increased vehicular emissions and industrial pollutants. Implementing advanced technologies and green infrastructure requires significant financial resources and cultural changes.
- The challenges can be overcome through collaboration between government, grassroots movements, and the private sector, promoting sustainable practices and reducing carbon footprints.
- The National Emission Inventory for mining industry air pollutants needs to be established and a 2 to 5% reduction target set. Startups, MSMEs, and SSIs can lead in manufacturing windbreak panels and Vertical Greenery System structures.
- Handheld air monitors can provide immediate insights into pollution levels. Transporting coal directly to railway sidings could reduce road transportation emissions and introduce a 'green belt' in mining areas.
- Implementing Flue Gas Desulfurization systems, Selective Catalytic Reduction systems, and low NOx burners can significantly reduce SOx and NOx emissions from thermal power plants. Switching to cleaner fuels, regular equipment maintenance, and energy efficiency measures can contribute to a cleaner environment.
- The National Medical Council should reinstate respiratory medicine in the MBBS curriculum, introduce postgraduate courses in Jharkhand medical colleges, and foster collaboration between health professionals, environmental scientists, social workers, and media to raise awareness about air pollution's health impacts.
- Jharkhand's National School System (NSS) recommends establishing Ecoclubs in universities and schools, reducing plastic waste by using fabric or jute bags, and planning ahead for implementation.

NOTABLE SPEAKERS

AIR QUALITY MANAGEMENT IN JHARKHAND: NEW DIRECTIONS AND INNOVATIONS IN COAL SECTOR



"The four pillars of air quality management are monitoring, modelling, mapping, and mitigation. With robust monitoring data, we can model and map pollution hotspots, enabling targeted mitigation to enhance air quality."

Shri. P.C Jha

Chief Manager (Environment), Central Mine Planning and Development Institute Limited

CLEAN TECHNOLOGIES AND BEST PRACTICES FOR REDUCING EMISSIONS FROM THERMAL POWER PLANTS



"Air pollution is hampering socio-economic development. The Ministry of Environment and Climate Change has introduced specific environmental and technological norms to combat this issue. Electrostatic precipitator (ESP), DENOX Burner, Flue-gas desulfurization are the new technologies that have been adopted in thermal power plants, to prevent air pollution at a much faster rate."

Shri Somen Mondal

Head - Environment, Bokaro Thermal Power Supply

HEALTH IMPLICATIONS OF POOR AIR QUALITY AND HOW THE HEALTHCARE SECTOR CAN RESPOND TO MITIGATE THE HEALTH RISKS



"In Jharkhand, air pollution is causing a significant rise in health issues, including conditions like asthma, chronic obstructive pulmonary disease (COPD), chemical pneumonitis, and hypersensitivity pneumonitis. These can lead to severe complications such as lung fibrosis, cor pulmonale, and even cancer. A compressive health impact study is urgently required to assess the causes and remedies for better public health management in the state."

Dr. Atri Gangopadhyay

Pulmonologist & Governor East Zone, Chest Council of India



YOUTH'S ROLE IN FOSTERING PUBLIC AWARENESS AND ACTION FOR IMPROVED AIR QUALITY



"Preserving existing trees and planting new ones can help to reduce the levels of hazardous chemicals in the atmosphere, which can have a positive impact on the environment. To encourage youth contribution, plans are required to establish Eco-clubs in universities and schools in Jharkhand."

Dr. Brajesh Kumar

State Head, NSS, Jharkhand



"To maintain pristine skies over Jharkhand, a comprehensive approach to air quality Improvement is imperative. This entails proactive measures, including the adoption of cutting-edge technological solutions such as the deployment of sophisticated air quality monitoring systems and the integration of advanced pollution control technologies."

Dr. Manish Kumar

Director, Research and Development, Centre for Environment and Energy Development (CEED)

CREATIVE ACTIVITIES AND PUBLIC ENAGAGEMENT



The volunteers of the National Service Scheme (Jharkhand) performed a skit to raise awareness of air pollution. The event drew the enthusiastic participation of key representatives from prominent civil society organizations, academic institutions, medical professionals, research think tanks, citizen groups, and students across the state. The act seems to have been a beautiful combination of dance and dialogue, conveying a meaningful message reflecting the negative impact of air pollution.

During the event College and University students were also felicitated for taking part in competitions and campaign-related activities.



GLIMPSE OF CAMPAIGN ACTIVITIES



During the weeklong campaign (01 -07 September), JSPCB and CEED successfully managed to run a digital awareness campaign across Ranchi, and through help of various departments, agencies and education institutions organised several outreach activities on the occasion of International Day of Clean Air for Blue Skies.

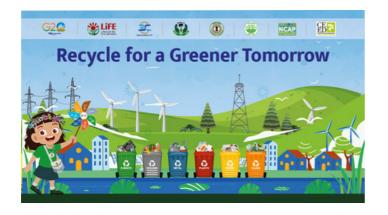




International Day of Clean Air for Blue Skies

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AWARENESS DRIVE IN PUBLIC SPACE









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MEDIA COVERAGE

सन्मार्ग राजधानी स्वच्छ हवा व स्वस्थ पर्यावरण से सुदृढ़ होगा झारखंड में सततशील विकास

सरम वहु एर नैते आसमन के तिर वेडानेक समयन, जालकठा तुरं सहा प्रदर आराज्य मंग्रावरण पे दे राज्य प्रदर आराज्य पे दे राज्य प्रदर आराज्य पे दे राज्य के जेक स्वीर एस भाष्य स्वा का अलेक सिर्ण भाष्य (जेक्स कीचे) और देन पा स्वा क्या के स्वा का अलेका स्वा मंग्रावर प्रदार की कास्परि (सी) प्रत मंग्राव का दे साम जाने की संवीर प्रत पाय करीन स्वा मार्गना के जावा का करिता की सीता

माना. 19 मुंगु के ... राज मुंगु का स्वार्थना ... देगरा मुंगु प्राव्य करेता में स्वार्थना ... देगरा मुंगु प्राव्य के दिन पर के सिंह प्रावरिया, मेलाज कर्मु प्रावर से स्वार्थना पर की ता संविध, प्राव्य कर्मु प्रावर से स्वार्थना पर की ता स्वार्थना स्वार्थना स्वार्थना स्वार्थना ... स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना ... स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना ... स्वार्थना स्वार्थना स्वार्थना स्वार्थना ... स्वार्थना स्वार्थना स्वार्थना स्वार्थना स्वार्थना ...



रेका ताह (अदारपर), एरवेसाइन उंकारपर) पुर प्राथंन के उपायंत्र प्रायंत पा जेता दिवा और का कि उपायंत पा जेता दिवा और का कि उपायंत कर पातिल पर प्रायंत्र के उपायं के स्वर्ग यातिल पर प्रायंत्र (अदीएसएस), स्वारम नेवार, के अपायंत कर पातिल पर प्रायंत्र (अदीएसएस), स्वारम नेवार, के अपायंत के ताह राज्य के निर्वाध का अद्रुपरार्थ्य कि स्वर्थ के कि लिए प्रायंत्र कर कि ताह के कि लिए प्रायंत्र के ताह राज्य के निर्वाध का अद्रुपरार्थ्य कि स्वर्धिक के लिए अद्रुपरार्थ्य कि स्वर्धिक के लिए के कि स्वर्धक के लिए के कि स्वर्धक अपायंत्र के कि लिए के कि स्वर्धक के लिए के कि स्वर्धक अपायंत्र के कि लिए के कि स्वर्धक अपायंत्र के कि कि स्वर्धक के निर्वाध कर्मक के प्रायंत्र के कि कि स्वर्धक के कि स्वर्धक के स्वर्धक के कि कि स्वर्धक के कि



कार्यशाला का उदघाटन करते विकास आयक्त

वरीय संवाददाता, रांची

विकास आयुक्त अरुण कुभेग सिंह ने कहा कि इस देव में व्यवंस्था बिगाइने की जिम्मेदरी एम लोगों ने ले रखी है. प्रदूषण वाली गाड़ी पलानी हो या बिना सड़लेंसर वाला वारट, पेड़ काटने और तही लगाने में भी इम लोगों को अवळा लगाता है. दूसरे कई देशों में इसके लिए फड़न का प्रावधन के लिए कभी-कभी कड़ी भी बरतना पड़ता है. ऐसा करना भी चाहिए. श्री सिंह राज्य प्रदूषण नियंत्रण पर्द (जेएसपीसीबी) और सेंटर फर के तत्वावधान में इंटरनेशनल डे ऑफ कलीन एयर फॉर ब्लू स्काइज से संबंधित कार्यशाला में बोल रहे थे. इसका आयोजन पलाश कम्युनिटी हॉल, डोरंडा में किया गया. वन वीभाग के पोसीसीएफ हॉफ संजय श्रीवास्तव ने कहा कि वायु प्रदूष्ण के कारण हर साल करीब 65 लाख लोगी की मौत पूरे विश्व में होती है. जो वी वाइबडी है, इंसाड ते की अपर प्रयान मुख्य बन संरक्षक (विकास) एनके सिंह ने कहा कि

आज पर्यावरण में जो भी गड़बड़ी दिख रही है, इंसान ने किया है. अभी भी कर रहे हैं. मौके पर मनीष कुमार, डीके सक्सेना,वाइके दास ने विचार रखे.

स्वच्छ हवा व स्वस्थ पर्यावरण विकास का आधार : अरुण

रांची, संवाददाता।इंटरनेशनल-डे ऑफ क्लीन एवर फॉर ब्लू स्काइज के मौके पर झारखंड राज्य प्रदूषण नियंत्रण पर्षद (जेएसपीसीबी) व सेंटर फॉर एनवायरनमेंट एंड एनर्जी डेवलपमेंट (सीड) ने बुधवार को एक साथ राज्यस्तरीय 'दुगेदर फॉर क्लीन एयर' कार्यशाला का आयोर्जन किया।

वायु गुणवत्ता विषय पर वैज्ञानिक समाधान के अनुरूप सामूहिक प्रयासों को बढ़ावा देना इसका उद्देश्य था। मौके पर विकास आयुक्त अरुण कुमार सिंह ने कहा कि स्वच्छ हवा व स्वस्थ पर्यावरण सततशील विकास का आधार स्तंभ है। हमें मिशन-संचालित दृष्टिकोण के साथ अपने प्रयासों को विकास लक्ष्यों और जलवायु समाधानों के साथ सम्मिलित करना होगा, जिससे स्वच्छ हवा और नीले आसमान को हासिल राज्यस्तरीय 'टुगेदर फॉर क्लीन एयर' पर कार्यशाला आयोजित
विकास आयुक्त अरुण कार्यक्रम

में हुए शामिल

करने में मदद मिलेगी।

बॉटम-अप प्लानिंग व क्रियान्वयन की महत्वपूर्ण भूमिका; क्लाइमेट गवर्नेस व स्टेकहोल्डर्स के बीच कंवर्जेस पर जोर देते हुए प्रधान मुख्य वन संरक्षक डॉ संजय श्रीवास्तव बोले, वन विभाग द्वारा जलवायु परिवर्तन के प्रभावों से निपटने के लिए बेस्ट प्रैक्टिसेज, सक्सेस स्टोरी का ठोस क्रियान्वयन किया जा रहा है। पर्यावरणीय चुनौतियों से निपटने के लिए समुदाय आधारित बॉटम-अप प्लानिंग एवं क्रियान्वयन की महत्वपूर्ण भूमिका है।

पर्यावरण को बचाने के लिए पौधे लगाने के साथ उन्हें बचाना होगा: अरूण सिंह

इंटरनेशनल डे ऑफ क्लीन एयर फॉर ब्लू स्काईज पर कार्यशाला मन्ना प्रमायेस

सका एकाउसा रांधी: स्वास्थ्य विभाग के अपर मुख्य सचिव सह विकास आयुक्त अरुण कुमार सिंह ने कहा कि आज वायु प्रदूषण की स्थिति क्राफो गंधीर है। यह हालत इंसानों के द्वारा लाई यई है। इसके समाधान के

भिक्ते क्या तार्ष यहे है। इसके समायान के होत के द्वारा तार्ष यहे है। इसके समायान के हो लिए कम करना होगा पौंधों को सिर्फ तलाना है करने को जरूरत है। चीते 50 सालों में हमने प्रयोवरण को जितना नुकसान पर्दुपाया है, उतना तो हजार स्वाल में नरी पद्धों है। जी सिंह बुधवार को डोरोड़ा स्थित प्लाल कम्युनिटी होत में प्रारखेंद राज्य प्रदुष्ण निर्वजंग पर्युद व सेंटर पर्यार एसवायर्ग्सर (ए इएनडी डेजर्म्सर्ट) (स्रार्थ)



के संयुक्त अप्रयोधन ने जावाकों के स्वराता के बतीर मुख्य अंतिषि यो तो र दें। के वर्षताला का विषम इंटरोकाला के अफि क्लीन एमर भंदे ख्यू स्वर्क्षेज था। इस अवसर पर कलाग्रेट गवनेंस और स्टेकोल्डाइर्डा के बीच क्लाउंनेना पर और देते हुए जी. संजव श्रेवास्तव (आईएफस्स), प्रधा मुख्य बन संसंखक और यन बहु मुझ्य, ब., झारछंड ने कहा कि यन विष्मच की ओर से जलवाय परिवर्तन के प्रभवों से निघटने के लिए बेस्ट प्रैविटसेज, सरसंस सरटीर का ठोरा क्रियनव्यन किया जा रहा ही कार्वक्रम के ठैरान एसीसोसिएफ सह अप्रप्रक्ष, एस ब्वलिटी मन्दिरीय कमिटी, आरखेट विद्यान-आप्रति, सामायान-केंद्रि ग्रायते को लापू करने में आप ग्रायते को सहभागिता अनियाते हैं। एक सिंह (अर्डीएफस), एसीसोसिएफ (देवलपस्ट) ने एक साहर्कि अप्रियान की प्रावन पर जोर दिवा और कठा कि जनवायास्त्र पर्व पर्यादएक संवर्धी को

गोग(को को सारुणांशी अलयव हो। आधार पर परणां (उंग्रलफ सी, एंग्रलेस्प्रस), एंग्रलेसीसेएक जोत (पल्मेनेश्लीजिस्ट) भावना पर जोत दिया और कठा कि जनस्यास्थ्य पर्य पर्यावरण के पारसारिक संबंधों को हेल्ब इम्बेस्ट स्टह प्रायमिकता देते हुए समुदायों को सकत करना फैलाने पर भागिका खतु गुणवता प्रबंधन के उपायों के बारे (सीएमरीडीआई), सं वाइकि द्वस (आईएफरस), सदस्व-सचिव, धर्मल) आदि ने 1 जे स्वरिक प्रदेश हो का कि प्राराष्ट्री क्रमवा जन्म (सीएमरीडीआई).

कार्यक्रम के तात राज के के खतरों के लिए स्वया वातु कार्य योडना के निर्माल और कार्याव्यक के लिए हम प्रतिबंध हो। जेएससेंसी संख्य वातु मुणवता के लिए वैज्ञालिक अध्ययक, बेध दा प्रविश्वेय का अनुयातन, विव्रत्म रेट्रेस्स चेटेल एवं लोये के प्रति मुनिय से क्रिक्ता से जोड़ने के लिए निर्दात प्रकाशित है (सा अवसा पर तो, ने प्रभाव) वातु गुणवत्ता प्रवंधन के लिए विद्यान-आधारित योजना और डाटा यवन्सि के आधार पर परिणामोन्सुवी पाना तेयर करने पर जोस दिया। डॉ. अजी गर्गाचाप्यता (परिणनेलाजिस्ट) ने खयु प्रदृश्च से जुड़े जान संख्य की सामयायों पर रोडालो हालते हुए हेल्थ इन्सेस्ट स्टरी करने और उन-जारसक्जा (सीएममीडीआई), सोमेन बिस्वास (क्रेक्स) धर्मवीक पालत और कल्डानेवो पर बात रखी।

SPEAKER'S **PROFILE**



Shri Arun Kumar Singh, IAS

Development Commissioner & Additional Chief Secretary Department of Health, GoJ Shri Arun Kumar Singh is an eminent officer of Indian Administrative Service of the 1988 batch. He has vast experience serving in the Department of Mines, Industry Regulations and Safety, Forest, Environment and Climate Change Department, and Water Resource Department. His career in implementing several policy measures has been exemplary.

Sh.Singh is the recipient of numerous awards and accolades which include "Swachh Survekshan 2018" for achieving the bestperforming state under Swachh Bharat Mission (Urban), "National Swachhata Awards 2018", Ramachandran Award for urban decentralization in Jharkhand, AMRUT Award 2015-16 for urban reform and Krishi Karman Award 2011-12 and several others. An avid believer in sustainable development, Sh. Singh is widely celebrated for incorporating sustainable developmentapproaches in policy planning.



Dr. Sanjay Srivastava, IFS PCCF-HoFF DoFECC, GoJ



Dr. D.K. Saxena, IFS APCCF cum Chairman Air Quality Monitoring Committee (AQMC), GoJ

Dr. Sanjay Srivastava is an officer of the Indian Forest Service of the 1989 batch and presently working as Principal Chief Conservation of Forest (PCCF) cum Executive Director of Wasteland Development Board in the Government of Jharkhand. Dr Srivastava has an illustrious career in natural resources conservation and he has made substantial contributions to the Climate Change work in the state of Jharkhand. He has presented many papers and participated in various international and national academic conferences. He is an avid

believer in participatory approaches to forest protection and regeneration. An outstanding officer of the State, Dr Srivastava represented Govt. of Jharkhand in COP-24 and COP-14. His interests include

analysis of institutional and policy issues and socioeconomic impacts of resource policies.

Dr. D. K. Saxena is an officer of the Indian Forest Service of the 1992 batch. He has an illustrious career in the field of forest& and biodiversity conservation and wildlife. He has been instrumental in taking farsighted steps in forest area policy and planning, climate adaptation, and mitigation measures in the state of Jharkhand. Dr. Saxena is currently the chairman of the Air Quality Monitoring Committee overseeing the overall air quality management of the state.





Shri Nand Kishore Singh, an officer of the Indian Forest Service (IFS), currently serves as the Additional Principal Chief Conservator of Forest Development, in the state of Jharkhand. In this role, he holds a significant position responsible for overseeing and leading initiatives related to forest and biodiversity conservation, wildlife management, and sustainable development in Jharkhand's rich natural environment. Shri Singh's career exemplifies his dedication to environmental protection and sustainable resource management, making him a key figure in advancing the state's conservation and development efforts.

Nand Kishore Singh, IFS APCCF-Development, Jharkhand



Shri Y. K. Das is an officer of the Indian Forest Service of the 1994 batch. Mr. Das has an illustrious career in the field of forest & biodiversity conservation and wildlife management of about three decades. Studied at premier institutes of India, including IIT-Delhi, he has been briefly active in academia by teaching at Delhi University. He has been instrumental in taking farsighted steps in forest area policy and planning, climate adaptation and mitigation measures in the state of Jharkhand.

Shri Y.K. Das (IFS) Member Secretary, Jharkhand State Pollution Control Board



Dr. Manish Kumar Director-Research and Development, Centre for Environment and Energy Development (CEED)

Dr. Manish Kumar leads the interdisciplinary research on ambient air quality, energy transition, and climate change issues in India and South Asia. He has been deeply instrumental in investigating the sources of air pollution over the Indo-Gangetic Plain (IGP) and understanding the contributions from the underlying value chain. He has more than 10 years of experience in environmental research over a wider set-up, including government, industry, and academia. Dr. Kumar has completed his post-doctoral research on air pollution in India and the potential for air quality improvement using science and sustainability applications jointly with the Stockholm Resilience Centre (SRC) and the Stockholm University, Sweden. Dr. Kumar has also served as a visiting scientist at the Max Plank Institute for Chemistry, Germany. He has published more than 30 peer-reviewed articles in various national and international journals.



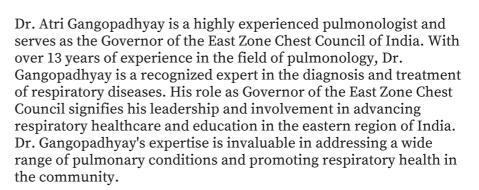
Shri. P.C Jha Chief Manager (Environment) Central Mine Planning and Development Institute Ltd (CMPDIL)



Shri Somen Mondal Head - Environment Bokaro Thermal Power Supply



Dr. Atri Gangopadhyay Pulmonologist & Governor East Zone Chest Council of India





Dr. Brajesh Kumar State Head, NSS, Jharkhand

Dr. Brajesh Kumar is an esteemed professional known for his significant State NSS Officer contributions to the National Service Scheme (NSS) in India. Currently serving as the Programme Coordinator for NSS at Ranchi University, Ranchi, he also holds the pivotal position of State NSS Officer (In-Charge). Dr. Kumar;s career is marked by his unwavering commitment to youth development, community engagement, and social service.

Shri. P.C. Jha is a seasoned environmental expert with extensive experience in air quality modeling, environmental monitoring, and clean energy promotion. As Chief Manager of Environment at CMPDI, his contributions are pivotal in enabling the development of the green hydrogen ecosystem in Jharkhand and leveraging its opportunities.

Shri Somen Mondal is the Head of the Environment Department at

Bokaro Thermal Power Supply. He oversees and manages environmental matters related to the power supply industry. In this role, he plays a crucial part in ensuring compliance with environmental regulations and implementing sustainable practices within the power generation sector. His expertise contributes to the company's efforts in maintaining a balance between power generation and environmental protection.

International Day of Clean Air for Blue Skies

AGENDA



Together for Clean Air: Ensuring Blue Skies in Jharkhand 06 September 2023 I 11:00 AM - 02:45 PM Palash Community Hall, Doranda, Ranchi

Draft Agenda		
10:30 AM - 11:00 AM	Registration of Delegates	
Inaugural Session		
11:00 AM -12:00 AM	Lighting of Lamp	
	Welcome and Context Setting	
	Shri Y.K Das, IFS	
	Member Secretary Jharkhand State Pollution Control Board	
	Need for cross-sectoral collaboration among various stakeholders to address air quality challenges	
	Dr. Manish Kumar Director, Research & Development	
	Centre for Environment and Energy Development (CEED)	
	Special Guest Address	
	Shri Satyendra Kumar	
	Municipal Commissioner Dhanbad Municipal Corporation, GoJ	
	Special Guest Address	
	Shri Amit Kumar, IAS	
	Director, SUDA, Jharkhand & CEO, Ranchi Smart City	
	Special Guest Address	
	Dr. D.K Saxena, IFS	
	APCCF cum Chairman Air Quality Monitoring Committee (AQMC), GoJ	
L	An Quarty Montoring committee (AQMC), doj	

	Special Guest Address
11:00 AM -12:00 AM	Shri Shashikar Samanta, IFS
	Chairman Jharkhand State Pollution Control Board
	Special Guest Address
	Dr. Sanjay Srivastava, IFS
	PCCF - HoFF DoFECC, GoJ
	Guest of Honour
	Shri. L. Khiangte, IAS
	Additional Chief Secretary DoFECC, GoJ
	Chief Guest
	Shri Arun Kumar Singh, IAS
	Development Commissioner & Additional Chief Secretary
	Department of Health, GoJ
12:00 PM- 12:15 PM	Award distribution to: 1. ULBs under Swachh Vayu Survekshan
	2. NSS Students
12:15 PM- 12:30 PM	Nukad Natak by NSS
12:30 PM- 12:45PM	Tea Break
Technical Session:	
Holistic Approaches to Air Quality Improvement: Innovations, Challenges, and Collaborative Solutions	
	Moderator
12:45 PM-01:45 PM	Dr. Manish Kumar
	Director, Research and Development Centre for Environment and Energy Development (CEED)
	Air Quality Management in Jharkhand: New Directions and
	Innovations in Coal Sector
	Shri. P.C Jha Chief Manager (Environment)
	Central Mine Planning and Development Institute Limited (CMPDIL)
	Clean Technologies and Best Practices for Reducing Emissions from Thermal Power Plants
12:45 PM-01:45 PM	Shri Somen Mondal
	Head - Environment Bokaro Thermal Power Supply
	Health implications of poor air quality and how the
	healthcare sector can respond to mitigate the health risks
	Dr. Atri Gangopadhyay
	Pulmonologist & Governor East Zone Chest Council of India
	Youth Role in Fostering Public Awareness and Action for improved air quality
	Shri Brajesh Kumar Head, NSS, Jharkhand
01:45PM- 01:50 PM	Q & A Session
01:50 PM- 02:00 PM	Vote of thanks
	Shri Sanjay Srivastav
	Assistant Scientific Officer Jharkhand State Pollution Control Board
02:00 PM-02:45 PM	Lunch





Jharkhand State Pollution Control Board

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Centre for Environment and Energy Development

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