

# IndiaWilds®

## Newsletter

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### Cover Page Photograph:

Tusker by Sabyasachi Patra

## Smog Tower not a Holistic Sustainable Solution

India for the first time got a smog tower when the Union Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav virtually inaugurated one tower in Anand Vihar, Delhi on 7<sup>th</sup> September 2021. A smog tower is a structure designed as large/medium scale air purifiers to reduce air pollution, usually by forcing the air through filters.

The smog tower at Anand Vihar is 20 meter high and is of downdraft type. Polluted air come in from the top of the tower and passes through a filtration system and as a result clean air comes out of the bottom. The filtration system used in the tower has been designed by University of Minnesota. They claim that the filtration system would have an efficiency of 90%. To ensure the air flow, 40 fan units have been installed to provide a design airflow rate of 1000 m<sup>3</sup>/sec. This filtration system is supposed to capture particulate matter and the resulting cleaner air is released back so that the overall air in the area is going to become better for humans.

We humans fancy our ability to create technological solutions to our problems. This has resulted in creating this concept of Smog towers. While designing and setting up smog towers makes the authorities claim that they are working hard to reduce the overall level of pollution that has engulfed our cities, the question no one is asking is whether this technological solution is enough.

Nature has a unique design with different species bound with each other on a complex web of



Global surface temperature change relative to 1850-1900. (a) Change in global surface



interdependencies. The oxygen that is present in the air that we inhale is key for our survival. We give back carbon dioxide while breathing out. This carbon dioxide is used up by the plants and trees and algae. Plants take up water through their roots and using the chlorophyll in the leaves they absorb the blue and red light waves from the sunlight and convert the carbon dioxide in air to glucose and store it. They release the oxygen as a byproduct. There are also plants that fix the nitrogen from the air. The dust and particulate matter in the air is trapped by the leaves and the overall air becomes cleaner.

Research has shown that roads lined with trees have a big impact on trapping the particulate matter and reducing the pollution. Unfortunately, these days we believe cutting down trees and concretising the land makes it look neat and tidy. Our ever growing vehicle numbers and the traffic congestion also results in road expansion and the inevitable cutting down of old hard growth trees. Our aesthetic sense has also changed. We are aping the British habit of creating lawns by clearing the undergrowth and cutting trees. Offices as well as individual houses and apartments also prefer to cut down trees and bushes and replace it with concrete or lawns. As a result our urban areas have become devoid of trees. Since we have killed trees that used to act as Nature's air cleansing mechanism, the air pollution in our urban areas remain unchecked.

Meanwhile, from next month onwards, Delhi will start choking due to the farmers burning paddy stalk in Punjab and Haryana. There have been many solutions proposed and even the Hon'ble Supreme Court has given various directives. Despite that, we are still struggling to control the paddy stalk burning and find a sustainable solution. Clearly, we have other priorities in mind else a country which could send spacecraft to Mars at a fraction of the cost of other countries could have easily shown leadership to resolve the air pollution issue.

The Government doesn't have any intention to right the wrongs and solve the core issues of air pollution. It is content in creating technological solutions which are easier to show case. Technological solutions also means creating projects with hefty budgets, awarding of contracts to parties and historically politicians have been accused of benefitting from awarding contracts to parties of their choice.

MoEF&CC (Ministry of Environment, Forests and Climate Change) has initiated a National Clean Air Programme (NCAP) in the country since 2019 and has set targets to achieve 20 to 30 % reduction in Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) concentrations by 2024 across the country.

City-specific action plans for improving air quality for 132 Non-attainment cities (NACs)/ Million Plus Cities (MPC) targeting city specific air polluting sources (Soil & Road Dust, Vehi-

cles, Domestic Fuel, MSW Burning, Construction Material and Industries) have been prepared and are already being implemented. So far, 375.44 crores have been released to 114 cities during FY 2019-20 & 2020-21 for initiating actions under city action plan. Further, 4400 cores have been released to 42 cities with million plus population as per recommendations of 15th Finance Commission report for FY 2020-21. This is in addition to funds available through various Central and State government schemes.

The citizens of this country also know that they have to somehow manage with this air pollution. They know that there are not enough green areas that can act as a barrier against the air pollution. A sense of fatality has sunk in with respect to lack of green areas in our cities. So increasingly people are buying indoor air purifiers to help purify the air inside their house. Hence, it is easier to setup Smog towers which are being projected as viable technological solution to air pollution and make an impression that the Government is doing its job. Sadly the Government never tells how many such smog towers are needed to make the air of Delhi pure. One can easily guess the reason.

Clean Air is intricately linked to a host of benefits for the human beings. Every year the incidence of diseases like asthma, bronchitis, cancer etc are increasing. Air pollution is one of the major cause of such diseases. Air pollution is causing telomere shortening in kids and adolescents. With such genetic changes happening to our youngsters due to air pollution, we are creating a weaker India. With rise in diseases there is impact on productivity of our workforce. It would impact our economy as well. Unfortunately, there is no effort by the Government to rethink the way our cities are structured, along with transport, roads, green areas and polluting industries and adopt a sustainable lifestyle for citizens. Unless the Government actively links all policy approaches to give paramount importance to conserve public goods like water, air and Earth, the future of India's civilization would be at stake. History will not be kind to us, if we don't immediately rethink our wasteful ways and adopt a sustainable lifestyle.

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## **Conservation News -**

### **Two more Indian Beaches get coveted International Blue Flag Certification**

The coveted International eco-label "Blue Flag", has accorded the Blue Flag Certification for 2 new beaches this year – Kovalam in Tamil Nadu and Eden in Puducherry beaches.

Foundation for Environment Education in Denmark (FEE) which accords the globally recognized eco-label - Blue Flag certification, has also given re-certification for 8 nominated beaches Shivrajpur-Gujarat, Ghoghla-Diu, Kasarkod and Padubidri-Karnataka, Kappad-Kerala, Rushikonda- Andhra Pradesh, Golden-Odisha and Radhanagar- Andaman and Nicobar, which were awarded the Blue Flag certificate last year.

One of the initiatives under ICZM approach of the Ministry of Environment, Forest and Climate Change is the flagship program Beach Environment & Aesthetics Management Services (BEAMS) which has the objective of protecting and conserving the pristine coastal and marine ecosystems through holistic management of resources.

This was aimed for achieving the globally recognized and the coveted International eco-label "Blue Flag", accorded by International Jury comprising of members from IUCN, UNWTO, UNEP, UNESCO etc. FEE Denmark conduct regular monitoring & audits for strict compliance of the 33 criteria at all times. A waving "Blue Flag" is an indication of 100% compliance to these 33 stringent criteria and sound health of the beach.

The objective of BEAMS program is to abate pollution in coastal waters, promote sustainable development of beach facilities, protect & conserve coastal ecosystems & natural resources, and seriously challenge local authorities & stakeholders to strive and maintain high standards of cleanliness, hygiene & safety for beachgoers in accordance with coastal environment & regulations. In the last 3 years or so, our Ministry have achieved commendable results in environmental management of these 10 beaches and some of them are enumerated below:

Sand dune restoration and nourishment of 95,000 Sqm (approx.) with native plantation.

1. Reduction in marine litter by 85 % and 78% in marine plastic in last 3 years.
2. Scientific & responsible disposal of 750 tonnes of marine litter.
3. Improvement in cleanliness level from "C" (poor) to "A++(outstanding) through scientific measurement system
4. Saving of 1100 ML/year of municipal water through recycling
5. 3 years' database on regular testing of bathing water quality (physical, chemical and biological contamination) and health risk monitoring.
6. Approx. 1,25,000 beach goers are educated for responsible behaviour in the beaches
7. Increase in footfall for recreation activities by approx. 80% leading to economic development.
8. Alternate livelihood opportunities for 500 fishermen families through pollution abatement, safety & services.

The Ministry is further committed to develop and deliver 100 more beaches under its ICZM initiative in the ensuing 5 years of Ministry's vision agenda.

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While we become happy hearing about these tags, one needs to be cautious that any concrete structures and plantations in the beach for beautification has got its own adverse ecological effects. Too often aesthetics trump over ecological fragility. Lights in the night leads to light pollution which the authorities are not aware of. No study has been done about it. So we need to conduct long term ecological studies of the impact of our beautification efforts in these beaches before moving ahead in the so called development of beaches.

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## **India reiterates Renewable energy and Energy efficiency as its key pillars Climate Change strategies**

India's Minister of Environment, Forest and Climate Change, Shri Bhupender Yadav held a meeting with H.E. Dr Sultan Al Jaber, UAE Climate Envoy and Minister of Industry and Advanced Technology virtually today and discussed issues relating to COP 26, renewable energy and other related matters.

Dr Sultan Al Jaber, UAE Climate Envoy and Minister of Industry and Advanced Technology sought support of India for the UAE Initiative on Agriculture Innovation Mission for Climate (AIM-C) along with US and UK to be launched at COP26 to be held in Glasgow later this year.

India's environment minister Shri Bhupender Yadav stated that renewable energy and energy efficiency are among the key pillars of Indian climate change strategies. India has worked to make sure that renewable energy, particularly solar energy, becomes cheaper than energy from fossil fuels.

The Minister further mentioned that India has already installed about 151GW of non-fossil fuel installed capacity with 39 percent of the total capacity installed and going ahead, India has declared an aspirational target of installing 450 GW of renewable energy by 2030.

The Environment Minister also mentioned about India's Hydrogen Energy Mission, global initiatives such as International Solar Alliance (ISA), Coalition of Disaster Resilient Infrastructure (CDRI) and leadership group for Industry Transition (LeadIT) and underlined the need for prioritizing the concerns of developing countries, particularly in areas of implementation support including finance and technology.

The world over, countries have started shifting away from polluting fossil fuel to solar energy. Unfortunately, in some states in India, there is an effort to still set up coal-fired thermal power plants. Due to political pressure certain state governments are allowing setting up of these coal-fired thermal power plants and state electricity boards forced to get into costly power purchase agreements. This will burden the state electricity boards and consumers with costly power for a long time along with the pollution that comes with these coal-fired thermal power plants. Hope the Union Government seriously bans setting up of any new coal-fired thermal power plants in India.

## **Conservation News -**

### **The world needs rapid, sustained, and deep emission cuts in this decade rather than distant targets says India at the Major Economies Forum on Energy and Climate**

**17 September, 2021**

Representing India at the Major Economies Forum on Energy and Climate (MEF) convened virtually by US President, Joe Biden, on September 17, 2021, the Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav stated that combating climate change is a shared global challenge and our response must be based on the fundamental principles of equity and common but differentiated responsibilities and respective capabilities.

The Minister in his remarks mentioned that though India's share of world population is 17% but the country's share in cumulative historical emissions is just 4% and even the current annual emissions are only 5.2% of the global emissions and the per capita emissions are about a third of the global average. "It is clear that we are not a part of the problem, but we want to be a part of the solution to the climate crisis." emphasised the Minister at the meeting which aimed at facilitating candid dialogue among major emitters countries, both developed and developing, to garner political leadership to advance climate action.

Expressing India's ambitious goals under the Paris Agreement, the Environment Minister highlighted India's target of 450 GW of Renewable Energy by 2030 and mentioned that India's solar capacity, drawing on the collaborative spirit of member countries through the International Solar Alliance, has increased fifteen times in the last six years.

The Minister of Environment concluded his remarks by echoing global sentiments for collective intent and concrete actions in tackling climate change. "The world needs rapid, sustained, and deep emission cuts in this decade rather than distant targets" said Shri Bhupender Yadav underscoring collaborative and cohesive global efforts to keep the Paris Agreement temperature goal within reach.

The virtual meeting built on the Leaders' Summit on Climate conducted in April 2021 and was aimed at enabling dialogue and discussion and building consensus before COP26, which will set a precedent for climate efforts in the years to come.

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### **COP26 should focus on climate finance in scope, scale and speed and transfer green technologies at low cost demands India at UN**

**20 September 2021**

Representing India virtually at the UN Secretary General's meeting with select leaders on Climate Change on 20th September, 2021 convened by H.E. António Guterres, United Nations Secretary General and H.E. Boris Johnson, Prime Minister of United Kingdom, the Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav underlined the need for upholding the principles of UNFCCC process, for any successful outcome in any climate change negotiations including

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the upcoming COP 26.

In the Meeting, crucial climate actions on finance, mitigation and adaptation required for tackling the climate crisis were discussed.

The Environment Minister mentioned that in light of the recent IPCC findings and the latest UNFCCC Synthesis Report, and that the developed countries have collectively emitted more than their estimated emission allowances in 2008-2020 period, they should take greater action on mitigation and provide financial support to developing countries.

Shri Yadav stressed that even at the UNFCCC there is a very urgent need for giving due importance to adaptation and discuss whether the scale of resources is commensurate with the scale of the needs of developing countries.

The Minister also underlined that ambitious climate action in developing countries is dependent on ambitious support from developed countries under the Paris Agreement, and called upon the developed countries to fulfil their promise of the USD 100 billion per year goal made in 2009. COP26 should focus on climate finance in scope, scale and speed and transfer of green technologies at low cost.

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## **First India-Japan High Level Policy Dialogue on Environment held today.**

The First India–Japan High Level Policy Dialogue was held virtually on 7th September 2021 between Mr. Bhupender Yadav, India's Minister of Environment, Forest and Climate Change and Mr. Bhupender Yadav and Japan's Minister of the Environment, Mr. KOIZUMI Shinjiro. Air Pollution, Sustainable Technologies and Transports, Climate Change, Marine Litter, Fluorocarbons, COP 26, etc were the issues discussed during the meeting.

In meeting, Mr. Bhupender Yadav acknowledged the importance of Indo-Japan bilateral cooperation on environment and appreciated efforts made by Japan in bringing new technologies in India. He also highlighted the achievements made India in tackling climate change.

Mr. Yadav stated that India and Japan may explore strengthening bilateral cooperation especially on circular economy and resource efficiency, low carbon technology, green hydrogen, etc. Given Japan's expertise and technology on low carbon technology, the Environment Minister also requested Japan to consider joining the Leadership Group for Industry Transition, a global initiative spearheaded by India and Sweden.

Mr. KOIZUMI Shinjiro, Minister of the Environment of Japan mentioned that both countries can strengthen bilateral co-operation through the Joint Credit Mechanism (JCM), Coalition for Disaster Resilience Infrastructure (CDRI) and may also explore collaboration in areas endorsed by the G20, especially on climate, environment and energy.

Both sides agreed to further strengthen the bilateral cooperation on environment, and also to take forward the discussion



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on Joint Credit Mechanism (JCM).

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### **Environment Minister says COP 26 should ensure a balanced outcome**

**10<sup>th</sup> September**

Union Minister for Environment, Forest and Climate Change Shri Bhupender Yadav met with Danish Minister for Climate, Energy and Utilities, H. E. Dan Jorgensen to discuss on general bilateral cooperation between India and Denmark in the areas of environment and climate change. Minister Dan Jorgensen is on five days' visit to India with a business delegation.

In the meeting, Mr. Bhupender Yadav acknowledged the historical and friendly ties between the two countries and highlighted the contributions of Denmark in the 'White Revolution' in India, because of which, today India is the largest producer of milk in the world.

Mr. Yadav also appreciated the contributions of Denmark in setting up of the Clean and Wind energy hub in Tamil Nadu and the companies from Denmark that have made significant investments in India in diverse sectors.

Both the Ministers' held discussion on Green Strategic Partnership (GSP) and upcoming COP 26 meeting.

Reinstating the findings of the IPCC Physical Science Summary for Policy Makers (SPM) released recently, Shri Yadav highlighted that the world must recall about the forgotten phrases 'Equity, CBDR-RC, and National Circumstances' that are the bedrock of UNFCCC and its Paris Agreement and emphasized that COP 26 should ensure a balanced outcome with equal treatment to all agenda items like adaptation, finance, response measures, etc.

The Environment Minister's also discussed on the Joint Action Plan to take forward the Green Strategic Partnership (GSP) in the environment sector. Mr. Yadav stated that India and Denmark may explore strengthening bilateral cooperation especially on climate change, clean energy, circular economy, and resource efficiency, etc.

Both sides agreed to further strengthen the bilateral cooperation on environment, and also to take forward the discussion on GSP and COP26.

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### **India and Germany discuss to deepen partnership on Energy and Climate**

**10<sup>th</sup> September, 2021**

A bilateral meeting was held between Union Minister of Environment, Forest and Climate Change, Shri Bhupender Yadav and Mr. Norbert Barthle and Dr. Maria Flachsbarth, Parliamentary State Secretaries, German Federal Ministry for Economic Cooperation and Development (BMZ) today at Indira Paryavaran Bhawan in New Delhi.

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Both sides discussed at length on a wide range of environmental issues covering areas such as climate change, water scarcity, marine & air pollution, circular economy etc.

In the meeting, Shri Yadav acknowledged the importance of Indo-German bilateral cooperation on environment and appreciated efforts made by Germany in bringing new technologies in India. He also highlighted the India's efforts in renewable energy front which will help in reducing the impact of climate change.

Both sides stressed on the importance of information exchange in bilateral programs keeping climate and SDG indicators in focus-Agro-Ecology, Solar Partnership Inter resilience.

India's environment minister stated that India and Germany may explore strengthening bilateral cooperation especially on circular economy - treatment of solid waste (solar panels, batteries), wastewater among others.

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## **India and US launch the Climate Action and Finance Mobilization Dialogue (CAFMD)**

**13 September, 2021**

India and the United States of America (USA) launched the "Climate Action and Finance Mobilization Dialogue (CAFMD)". The CAFMD is one of the two tracks of the India-U.S. Climate and Clean Energy Agenda 2030 partnership launched at the Leaders' Summit on Climate in April 2021, by Prime Minister Shri Narendra Modi and US President Mr. Joseph Biden.

The dialogue was formally launched by Union Minister of Environment, Forest and Climate Shri Bhupender Yadav and Mr. John Kerry, U.S. Special Presidential Envoy for Climate (SPEC), at an event held in New Delhi.

Speaking at the launch, Shri Yadav said that the dialogue will not only strengthen India-US bilateral cooperation on climate and environment but will also help to demonstrate how the world can align swift climate action with inclusive and resilient economic development, taking into account national circumstances and sustainable development priorities.

"India and the United States are natural partners with shared values and our agenda encompasses all major pillars of our strategic priorities - including defence, security, energy, technology, education and healthcare," said the Environment Minister emphasizing on the deep ties shared by the two mature and vibrant democracies.

Speaking at the launch of Climate Action and Finance Mobilization Dialogue (CAFMD), Mr. Kerry applauded Prime Minister Shri Narendra Modi for setting an ambitious target of achieving 450GW renewable energy by 2030 and congratulated India for already achieving 100 GW.

The US Climate envoy lauded India's leadership role in demonstrating how economic development and clean energy can go hand in hand and stated that urgent Global Climate Action is the need of the hour. He stressed that India and US are work-

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ing towards speedier deployment of clean energy.

The launch was preceded by a bilateral meet where both sides discussed at length a wide range of climate issues relating to COP26, Climate Ambition, Climate Finance, Global Climate Initiatives including International Solar Alliance (ISA), Agriculture Innovation Mission for Climate (AIM4C).



**Reaching ‘net zero’ alone is not enough; need of the hour is deeds and not plain words to deal with climate change: Shri Bhupender Yadav**

Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav today said that the need of the hour is ‘deeds’ and not ‘plain words’ to deal with climate change and that reaching ‘net zero’ alone is not enough, emphasising that the Intergovernmental Panel on Climate Change (IPCC) report published recently is a clarion call for the developed countries to undertake immediate deep emission cuts and decarbonize their economies.

The Union Minister who was speaking at the LEADS (Leadership, Excellence, Adaptability, Diversity and Sustainability) event organized by FICCI under the theme- “Future of Partnerships”, highlighted the key issues of climate justice and sustainable lifestyle which have been prioritized by Prime Minister Shri Narendra Modi.

Shri Yadav informed the gathering about the initiatives taken by India in the last few years, both nationally and globally for promoting renewable energy noting that the country’s renewable power capacity is currently the 4th largest in the world.

Speaking on India’s ambitious targets and futuristic initiatives, the Environment Minister said, “Prime Minister Shri Narendra Modi has further announced the aspirational target of increasing our renewable energy capacity to 450 GW and India has also announced Hydrogen Energy Mission 2021-22 for generation of hydrogen from green power sources”, emphasising on the important and vital role of clean energy derived especially from renewable.



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The Minister further said that the energy transition in different parts of the world will be different and India has much to offer and share in terms of its experience with other countries embarking on a similar journey to address energy access issues, while also addressing the growing energy demand with renewable energy.

Listing green partnerships between India and European nations, Shri Yadav said that India and Europe remain key economic partners who are all set to scale up their cooperation in years to come and expressed confidence that India and Europe will further take forward their partnership in a lot many emerging sustainable technologies, such as Battery Storages, Green Hydrogen, Off Shore Wind Energy installation challenges or commissioning, Solar Photovoltaic, Solar Thermal, Waste to Energy/Bio Energy, Wind Energy, Hydrogen and Fuel Cells , Energy Storage, Tidal Energy, Geothermal Energy ,etc.

The Minister stated that developed Countries, however, should also provide lead markets for products of green technologies and drive down costs, such that these can be deployed in developing economies at scale.

India has engaged in bilateral engagements with Germany, UK, and Denmark in the energy sector in the European Region. As a result of these engagements, many significant achievements could be made in the area of sustainable and green technologies.

Speaking on the role of the private sector in creating low-carbon sustainable economies, Shri Yadav said that the private sector companies should be encouraged to develop voluntary roadmaps for the transition towards low carbon pathways and urged Indian companies especially in the hard to abate sectors like steel, cement, shipping, etc. to join “Leadership Group for Industry Transition” which is a global initiative spearheaded by India and Sweden.

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## **The world needs rapid, sustained, and deep emission cuts in this decade rather than distant targets says India at the Major Economies Forum on Energy and Climate**

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The Minister in his remarks mentioned that though India’s share of world population is 17% but the country’s share in cumulative historical emissions is just 4% and even the current annual emissions are only 5.2% of the global emissions and the per capita emissions are about a third of the global average. “It is clear that we are not a part of the problem, but we

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want to be a part of the solution to the climate crisis.” emphasised the Minister at the meeting which aimed at facilitating candid dialogue among major emitters countries, both developed and developing, to garner political leadership to advance climate action.

Expressing India’s ambitious goals under the Paris Agreement, the Environment Minister highlighted India’s target of 450 GW of Renewable Energy by 2030 and mentioned that India’s solar capacity, drawing on the collaborative spirit of member countries through the International Solar Alliance, has increased fifteen times in the last six years.

The Minister of Environment concluded his remarks by echoing global sentiments for collective intent and concrete actions in tackling climate change. “The world needs rapid, sustained, and deep emission cuts in this decade rather than distant targets” said Shri Bhupender Yadav underscoring collaborative and cohesive global efforts to keep the Paris Agreement temperature goal within reach.

The virtual meeting built on the Leaders’ Summit on Climate conducted in April 2021 and was aimed at enabling dialogue and discussion and building consensus before COP26, which will set a precedent for climate efforts in the years to come.

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## **India observes the 27th Global Ozone Day**

**16 September, 2021**

The Minister of State for Environment, Forest and Climate Change Shri Ashwini Kumar Choubey today said that India has successfully phased-out production and consumption of several major Ozone Depleting Substances (ODS) and met all the obligations of the Montreal Protocol so far, by accessing technical and financial assistance from the financial mechanism of the Montreal Protocol.

The Minister was chairing an event organized to observe the 27<sup>th</sup> Global Ozone Day in New Delhi today.

Shri Chowbey said, one of the reasons to India’s success in phasing out of the Ozone Depleting Substances is the involvement of key stakeholders both at the planning as well as implementation levels. He said, Industries, research institutions, line Ministries, consumers etc. have been contributing significantly to the Ozone Depleting Substances phase out programme of the Montreal Protocol in India.

Referring to the Kigali Amendment to the Montreal Protocol, which was recently ratified by the Government of India, the Minister said, issues relating to minimizing industrial obsolescence and adverse economic impacts should appropriately be addressed while developing a Hydrofluorocarbon phase down strategy for implementing it.

World Ozone Day is celebrated on 16<sup>th</sup> September each year to commemorate the signing of the Montreal Protocol, an international environmental treaty for phasing out of production and consumption of Ozone Depleting Substances, that came into force on this day in 1987. The Day is celebrated every year to spread awareness among people about the depletion of

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Ozone Layer and the measures taken/ to be taken to preserve it. The Ozone Cell, Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India has been celebrating the World Ozone Day since 1995 at the National and State levels.

The theme World Ozone Day 2021 is “***Montreal Protocol - Keeping us, our food and vaccines cool***”.

MoS Shri Choubey released the Action Plan for implementing recommendations of the India Cooling Action Plan (ICAP) for the thematic Area Space Cooling in Buildings. The Action Plan has been developed after mapping of the recommendations given in the ICAP and after detailed discussions with various stakeholders including line departments and Ministries.

The India cooling action plan (ICAP), the first of its kind in the world to be developed by the MoEF&CC, addresses cooling requirement across sectors and lists out actions which can help reduce the cooling demand through synergies in actions for securing both environmental and socio-economic benefits. The ICAP aims to reduce both direct and indirect emissions.

The Minister also released a Study Report on Cold Chain sector in India for Promoting non-ozone depleting substances and Low- global warming potential Refrigerants and another Study Report on Public Procurement Policies for Refrigeration and Air-Conditioning Equipment using non-Ozone Depleting Substances based refrigerants.

He also released the Winning Entries of Poster and Slogan Competitions held on the occasion across various schools in India. More than 3900 Students participated in the competition.

Secretary of the Ministry of Environment, Forest and Climate Change Shri R P Gupta, Shri Atul Bagai, Head of UNEP in India, Ms Shoko Nada Resident Representative of UNDP in India and various representatives of Industries, Industrial Organisations, various stakeholders and over 3000 School Children participated in the event held virtually.

### **Background**

## **India's achievements in implementation of Montreal Protocol**

India, as Party to the Montreal Protocol since June 1992, has been successfully implementing the Montreal Protocol and its ozone depleting substances phase out projects and activities in line with the phase out schedule of the Protocol. India has phased out Chlorofluorocarbons, Carbon tetrachloride, Halons, Methyl Bromide and Methyl Chloroform for controlled uses in line with the Montreal Protocol. Currently Hydrochlorofluorocarbons are being phased out as per the accelerated schedule of the Montreal Protocol. Hydrochlorofluorocarbons Phase out Management Plan (HPMP) Stage-I has been successfully implemented from 2012 to 2016 and Hydrochlorofluorocarbons Phase out Management Plan (HPMP) Stage-II is currently under implementation from 2017 and will be completed by 2023.

During the on-going HCFC phase out Implementation, as a part of the long-term vision, India has consciously chosen a path for environment friendly and energy efficient technologies. India, as one of the first amongst developing countries, has been able to achieve the complete phase out of HCFC 141b, one of most potent ozone depleting chemicals used as a blowing agent in manufacturing of rigid foam.



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Preparation of Hydrochlorofluorocarbons Phase out Management Plan (HPMP) Stage-III will be commenced shortly, which shall address phase out of use of HCFC-22, a refrigerant used in Refrigeration and Air-conditioning manufacturing and the servicing sectors.

Adequate attention has also been given to synergize the Refrigeration and Air-conditioning servicing sector training under the Hydrochlorofluorocarbons Phase out Management Plan (HPMP) with the Skill India Mission of the Government of India, to multiply the impact of skilling and training. The skilling and certification of service technicians will not only significant environmental benefits, but also have a positive influence on their livelihoods.

The Kigali Amendment to the Montreal Protocol, finalized by the Parties during 2016, shall gradually reduce the consumption and production of hydrofluorocarbons (HFCs), introduced as non-ozone depleting alternative to Hydrochlorofluorocarbons (HCFCs), which have high global warming potential ranging from 12 to 14000.

Government of India has recently decided to Ratify the Kigali Amendment to the Montreal Protocol, once again demonstrating to the global community, India's commitment towards protection of climate and the environment. The Ministry will be working towards developing a National strategy for phase down of Hydrofluorocarbons, after required consultation with all the industry stakeholders. Implementation of Hydrofluorocarbons phase down under the Kigali Amendment through the adoption of low-global warming potential and energy-efficient technologies will achieve energy efficiency gains and carbon dioxide emissions reduction - a "climate co-benefit." In addition, synergies with on-going government programmes and schemes of the Government of India will be promoted with the objective to maximize the economic and social co-benefits, besides environmental gains.

Energy efficiency is a major driver for technology choice under the Kigali Amendment. India has been actively pursuing in the Montreal protocol meetings to incentivize energy efficiency in use of new refrigerants and technology under the Hydrofluorocarbons phase down. There is a need to build facilitative frameworks, strengthen institutional capacity and design effective implementation models to move towards enhancing energy efficiency of equipment while lowering global warming potential of refrigerants.

The initiative of the Ministry of Environment, Forest and Climate Change (MOEF&CC) to develop an India Cooling Action Plan (ICAP), the first of its kind in the world, is to look for synergies in actions having the potential to provide socio-economic and environmental benefits related to reduced refrigerant use, climate change mitigation and Sustainable Development Goals. The India Cooling Action Plan (ICAP) recommends synergies with ongoing government programmes and schemes such as housing for all, the Smart Cities Mission, Doubling Farmers Income and Skill India Mission, to maximize socio-economic co-benefits. The Ministry has taken steps to operationalize the recommendations given in India Cooling Action Plan (ICAP) along with concerned line Ministries and Government Organizations, Industry and think tanks and Academia. Space cooling in buildings has been addressed on priority in implementation of the recommendations and the Ministry has come out with action points relating to implementation of the recommendations.

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World Ozone Day reminds us that not only is ozone crucial for life on Earth, but that we must continue to protect the ozone layer for future generations.

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### **MoU signed between ZSI and the Natural History Museum London**

**25<sup>th</sup> September, 2021**

The Zoological Survey of India (ZSI), Kolkata and the Natural History Museum (NHM), London have been working together over many years on mutually beneficial projects focused on the study of the fauna of India, and to recognize this long-standing relationship, and to promote its continuance for many years into the future Memorandum of Understanding between the two great Institutions, was formally signed by the Director of ZSI and Director, NHM, London today on a virtual platform.

The MoU was signed between Dr. Dhriti Banerjee, the first lady Director of ZSI and Dr. Douglas Gurr, Director, Natural History Museum London in the presence of Dr. David Gower, Head of Vertebrates Division Department of Life Sciences at the Natural History Museum London and Dr. John Jackson, Head of Science, Policy and Communication and Rosalind Glass, Executive Assistant to the Director and Board of Trustees of the Natural History Museum, London.

Terming the MoU as historic, Dr. Dhriti Banerjee, Director of ZSI said that this MoU was long overdue and the NHM, London and ZSI, Kolkata are going to be mutually benefited on the faunal diversity research through scientific exchange between the two great institutions and long standing relationship. ZSI is the umbrella institute for Biodiversity studies in India headquartered in Calcutta and has 16 Regional Centres instituted to cater to the faunal diversity of the various biogeographic areas of India. ZSI has around 5 million animal collection holding, 20,000 type collections and around 450 scientists and scientific staff work towards curatorial and research on the vast animal collections present in ZSI.

Dr. Douglas Gurr, Director, NHM, London while thanking the Government of India for agreeing into this MoU with them expressed his gratitude to ZSI and said that ZSI and NHM, London look forward for joint research activities by both and since share a joint passion on natural history collections and accelerate towards better science. This collaboration will not only benefit both institutions, the millions of vital collections present in NHM, London and ZSI including type materials are important nationally and across the world for understanding and conserving the biodiversity, curing natural resource loss and sustainable management of bio-resources as well as impact of climate change.

Through this MoU both the institutions are committed to implementing the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Fauna ("CITES"), the 1992 Convention on Biological Diversity ("CBD") and relevant national and regional laws and regulations concerning biodiversity including laws relating to access to faunal specimens, associated benefit sharing and traditional knowledge.

The NHM, London and ZSI will be working together to collect, study and conserve faunal specimens for science and to create and exchange associated data and images. There are plans for conducting of joint fieldwork expeditions, transfer of

## **Conservation News -**

duplicate animal material and associated data and images by ZSI, Kolkata to NHM, London, and vice versa, capacity-building in the areas of Systematic Zoology and Conservation to ensure greater long-term conservation of animal genetic resources in India. Nevertheless, all faunal material and information exchange would be subject to all relevant extant domestic regulations of the participants as well as international laws to which either of the participants is a party. This MoU will be for a period of five years.

The MoU is expected to bring together practicing taxonomists, conservation biologists, biodiversity managers, policy makers and other stakeholders of both the country for discussing, networking and identifying gap areas to formulate the strategies for long term scientific documentation as well as conservation of faunal diversity through international exchange.

India has only 2.4% of the world's land area but the species diversity in India is 8.1 percent which makes India one of twelve mega diversity countries of the world. There are average 350-400 species new to science from India are being discovered by ZSI scientists and others working on natural history and conservation. India is one of the megadiverse countries in the world with 45,000 species of plants and more than 100,000 of the animals have been recorded in India. The identified Megadiverse Countries are: United States of America, Mexico, Colombia, Ecuador, Peru, Venezuela, Brazil, Democratic Republic of Congo, South Africa, Madagascar, India, Malaysia, Indonesia, Philippines, Papua New Guinea, China, and Australia.

While many of the natural history collections from India are available in the NHM, London before Independence, India started housing its own collections in ZSI since 1947 independently and as a result of which, ZSI is the largest repository of Fauna in the entire south and Southeast Asia region. With more than 100,000 species of animals known to occur in India, it is the Zoological Survey of India (ZSI) that brought to the knowledge of scientific communities about many of them as the new and endemic species. ZSI is the premier institution on animal taxonomy in India under the Ministry of Environment, Forests & Climate Change of Government of India.

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## Equipment Discussions -

### GoPro launches Hero10 Black camera with 5.3K 60p video

GoPro has launched the Hero10 Black action camera with an improved GP2 processor which helps deliver 5.3K 60p video. The 4K video can now be shot at 120p and 2.7K video at 240 frames per second. The video stabilization has also been improved with the introduction of HyperSmooth 4.0. The still photo resolution has also been increased to 23 megapixels. The low light ability has been further improved. So even though the new GoPro Hero10 Black looks similar to its predecessor, there have been all round improvements.



If you want to use several GoPro cameras as PoV cameras in vehicles and record action sequences, it earlier used to be a big headache due to battery draining fast and connection to its app dropping. Even today the battery of the GoPro cameras drain fast. However, when used within its limitations, the GoPro cameras shine.

GoPro has been down financially and have pulled through after failed venture into drone space. It was rumoured that GoPro would be bought over. There have been many competitors in action cameras including cheap Chinese companies. Sony too has offerings in action cameras. Nevertheless, GoPro seems to have found back its competitiveness and still remains the undisputed king of action cameras.

The cloud subscription is in tune with the focus of all companies moving into the cloud space and earning money from service. Incremental amounts of revenue per month in form of subscription can form a neat chunk of money.

There are also some interesting features like duration capture, schedule capture etc. So you can schedule at what time your Hero10 Black will start recording. The duration capture allows the the length of video that needs to be captured. The Hind-

## **Equipment Discussions -**

sight feature allows upto 30 seconds worth of footage to be captured before you hit the record button. The live burst mode records 45 frames 1.5seconds before and after you clicked.

The form factor of the GoPro Hero10 Black remains similar. It also comes with a host of accessories.

There are also various Mods that can be added to the Hero10 Black at an additional cost. If you need an extra large screen for Vlogging or flipping it up, then it can be had with the Display Mod. You can add a directional mic with the Media mod. With the Light Mod you can have wide, smooth and even light. It has 4 levels of brightness and upto 200 lumens. It is also waterproof upto 33 feet. CRI is 90+. With many of these lights, one can also selectively create nice effects in the set.

Even if you are not an adventure person, having this camera in the bag can often help in getting some unique shots.

### **PRESS RELEASE**

## **GoPro's New HERO10 Black Camera Delivers Breakthrough Image Quality and 2X Speed with Ease**

*Powerful New GP2 Processor Delivers 2X Faster Video Frame Rates and Next Generation Image Quality*

*Stunning 5.3K Video at 60 Frames Per Second Provides 91% More Resolution Than 4K*

*Higher-Performance 4K Video at 120 Frames Per Second and 2.7K Video at 240 Frames Per Second*

*Upgraded HyperSmooth 4.0 Video Stabilization Resets the Bar, Once Again*

*Higher 23 Megapixel Photo Resolution*

*Cloud-Connected: HERO10 Black Uploads Footage to the Cloud While Charging*

**SAN MATEO, Calif., Sept. 16, 2021 /PRNewswire/** -- Today, GoPro (NASDAQ: GPRO) announced its new flagship camera, HERO10 Black, which features the company's new high-performance GP2 processor. GP2 delivers breakthrough image quality and blistering video frame rates that enable HERO10 Black to capture life-like 5.3K video at 60 frames per second, 4K video at 120 frames per second and 2.7K video at an incredible 240 frames per second. The new processor also enables HyperSmooth 4.0 video stabilization, setting a new bar once again and all but ensuring HERO10 Black captures the smoothest shake-free video you've ever seen from any camera, regardless of price.

Hero10 Black boasts higher resolution 23 megapixel photos, improved low-light performance and a significantly snappier user interface—all thanks to the increased performance of the camera's new GP2 processor.

HERO10 Black is also cloud connected—when plugged in to charge, the camera will automatically upload recently captured

## Equipment Discussions -

footage to your GoPro cloud account. This feature, along with unlimited cloud backup of your GoPro footage at original quality, is available for GoPro subscribers for \$4.99 a month or \$49.99 a year.



Hero10 Black is available at GoPro.com for **\$399.98** with an included one-year GoPro Subscription or **\$499.99** MSRP without a subscription.

Existing GoPro subscribers can purchase a value-added HERO10 Black + Accessory Bundle at subscriber-exclusive \$399.99 pricing on GoPro.com, representing subscriber savings of \$150. The accessory bundle includes an extension grip with tripod, a magnetic clip mount, a spare battery plus a 32GB SD card.

“HERO10 Black is one of the most impressive cameras in the world, regardless of price,” said Nicholas Woodman, GoPro founder and CEO. “Congratulations to our product and engineering teams on creating such a worthy 10th edition of our beloved HERO camera.”

### **Breakthrough Image Quality and Video Stabilization**

Hero10 Black’s all-new GP2 processor combines with an ultra-high resolution 23.6 megapixel sensor to enable shockingly life-like image quality. The camera’s highest video resolution of 5.3K delivers 91% more resolution than 4K and 665% more resolution than 1080p HD at an impressive 60 frames per second—allowing for fluid playback and 2X slow motion. 4K video can be captured at 120 frames per second (4X slow motion) and 2.7K video can be captured at 240 frames per second



## **Equipment Discussions -**

(8X slow motion).

The new GP2 processor also enables improved video algorithms featuring local tone mapping (LTM) and 3D noise reduction (3DNR) that capture finer detail, more realistic textures and better contrast—even in low light.

In addition to 23 megapixel photos, HERO10 Black enables 19.6 megapixel video stills to be pulled from 5K 4:3 video at 30 frames per second and 15.8 megapixel video stills from 5.3K video at 60 frames per second—ideal for capturing amazing still images of sports and fast-paced activities.

GoPro's shockingly good in-camera video stabilization gets an upgrade to HyperSmooth 4.0, ensuring that HERO10 Black smooths out even your most shake-laden experiences. HERO10's in-camera horizon leveling feature benefits from an increased tilt limit of 45° in high-performance settings, up from 27°, making even your most chaotic video footage look professionally smooth and steady.

### **Faster Access to Your GoPro Content**

HERO10 Black offers three ways to conveniently access your photos and videos, including:

1. Auto uploading your most recent footage to your GoPro cloud account while the camera is charging
2. Wireless offloading from the camera to the Quik app at speeds up to 30% faster than HERO9 Black
3. A new USB wired offload option that transfers content from the camera to the Quik app on your phone at speeds up to 50% faster than wireless

### **Plastic-Free Packaging with Reusable Case**

GoPro is committed to environmentally conscious, plastic-free packaging for all of its products. HERO10 Black's packaging isn't even packaging per se, rather it's a high-quality, durable travel case that's designed to fit additional GoPro mounts and accessories.

"We're as committed to reducing GoPro's impact on the environment as we are to producing the world's most versatile cameras and imaging software solutions," said Woodman.

### **HERO10 Black Features:**

- All-New GP2 Processor
- Video: 5.3K60, 4K120, 2.7K240
- Video Stills: Up to 19.6 megapixels
- Photos: 23 megapixels
- Improved Low Light Performance
- Local Tone Mapping (LTM) and 3D Noise Reduction (3DNR)
- Next-Gen HyperSmooth 4.0 Video Stabilization

## Equipment Discussions -

- Increased 45° Horizon Leveling Tilt Limit in 4K60, 2.7K120 and 1080p120 Video
- Front Color Display with Higher Frame Rates for Smoother Live Preview of Your Shots
- Faster, More Responsive Rear Touch Display with Touch Zoom
- Faster Content Transfer
- 3 Ways to Transfer Content: Cloud Upload, Wireless Offload and New Wired Transfer to Your Phone
- New Protective Lens Cover with Hydrophobic, Water-Shedding Design
- Removable, Rechargeable 1720mAh Battery
- TimeWarp 3.0 featuring Real Speed and Half Speed
- 1080p Livestream featuring HyperSmooth 4.0. Video Stabilization
- 1080p Webcam Mode
- Power Tools: HindSight, LiveBurst, Scheduled Capture and Duration Capture
- SuperPhoto + HDR
- Night Lapse Video
- RAW Photos
- Digital Lenses Providing Ultra-Wide (SuperView), Wide, Linear and Narrow Perspectives
- Voice Control with 13 commands in 11 languages + 6 accents
- 3 Microphones with Advanced Wind-Noise Reduction
- Stereo + RAW Audio
- Custom Presets + On-Screen Shortcuts
- Built-in Folding Mounting Fingers for Attaching the Camera to GoPro Mounts
- Rugged + Waterproof to 33ft (10m)
- Fast-Charging Compatible
- Compatible with Media Mod, Display Mod, Light Mod and Max Lens Mod (support coming in post-launch firmware update)

## HERO10 Black Million Dollar Challenge

For the fourth year in a row, GoPro is challenging its users to create the launch highlight reel for its new flagship camera. Open exclusively to owners of HERO10 Black, the Million Dollar Challenge will award an equal share of \$1,000,000 to entrants whose video clips are chosen for the HERO10 Black Million Dollar Challenge video that will be released in December 2021.

Beginning today, HERO10 Black users are invited to capture and submit their video clips for consideration to the Million Dollar Challenge on <https://gopro.com/en/in/awards/million-dollar-challenge>

Submissions close Dec. 1 at 11:59PM PT.

## Subscribing to GoPro

With a GoPro Subscription, customers enjoy the ultimate HERO10 Black experience:

- Auto upload to the cloud while the camera is charging

## Equipment Discussions -

- Unlimited cloud backup of your photos and videos at original quality
- Unlimited use of the Quik app, including Premium Editing Tools
- No-questions-asked camera replacement
- Discounts on new camera purchases
- Up to 50% off GoPro mounts, accessories and lifestyle gear at GoPro.com
- Premium quality 1080p live streaming to a subscriber's account at GoPro.com

The GoPro subscription is available for \$49.99 annually or \$4.99 a month.



## Global Availability

Hero10 Black is available at GoPro.com for \$399.98 with an included one-year GoPro Subscription or \$499.99 MSRP without a subscription.

Existing GoPro subscribers can purchase a value-added HERO10 Black + Accessory Bundle at subscriber-exclusive \$399.99 pricing on GoPro.com, representing subscriber savings of \$150. The accessory bundle includes an extension grip with tripod, a magnetic clip mount, a spare battery plus a 32GB SD card.

GoPro's other cameras include its dual-lens 360° Max camera at \$399.98 with an included one-year GoPro subscription or \$499.99 MSRP without a subscription; Hero9 Black at \$349.98 with an included one-year GoPro subscription or \$399.99 MSRP without a subscription; and Hero 8 Black at \$279.98 with an included one-year GoPro subscription or \$299.99 MSRP without a subscription.



## Equipment Discussions -

### Canon Officially announces specs of EOS R3 camera

Canon has finally announced the full specifications of the EOS R3 Camera. Packed with latest technology this would be a camera of choice for sports and wildlife photographers.



#### Salient Specifications:

**Sensor:** 35mm Full frame (36 mmx24mm)

**Lens Mount:** Canon RF mount

**Sensor resolution:** 24.1 Megapixels (effective)

**Still image file format:** JPEG, HEIF, Raw

**Bit depth:** 14 bits

**Image stabilization:** Sensor shift, 5 axis in body IS.

**ISO sensitivity:** 100 – 102400 (expandable : 50 to 204800). Auto ISO.

**Still photo shutter speed:** In mechanical shutter you can shoot 1/8000 to 30 seconds, bulb mode. In electronic shutter, 1/8000 to 30 seconds in aperture priority and program mode.

**Continuous burst speed:** 24.1 megapixel at 12 fps for 1000 frames (raw or jpeg) in mechanical shutter mode. 24.1 MP at 30 fps upto 150 raw shots or 540 jpeg shots.

**Timer:** self timer and intervalometer present.

**Video:** 6K 12 bit raw upto 60fps. DCI 4k or UHD 4K upto 120 fps at 4:2:2 10 bit. Also 120fps in DCI 4K or UHD 4K at 4:2:0 8 bits in you need smaller files.

Video can be externally recorded at either DCI 4K or UHD 4K at 4:2:2 10 bits.

## Equipment Discussions -

**AF:** 1053 Phase detection AF points

**Media:** slot 1 CF Express type B and Slot 2 SD/SDHC/SDXC (UHS II)

**I/O ports:** HDMI D (micro), USB C (USB 3.1), 3.5mm headphone jack, 3.5mm microphone, RJ45, PC sync socket.

**Dimension:** 5.9 inch x 5.6 inch x 3.4 inch

**Weight:** 1015 gms with battery and memory card (without lens).

**Price:** 5999 USD

**B&H Link:** <https://www.bhphotovideo.com/c/produ...990/KBID/13252>

### The EOS Revolution Continues: Canon Officially Announces the Company's Most Technologically Advanced Full-Frame Mirrorless Camera, the Professional-Grade EOS R3

Building on the success of the EOS R camera series, Canon U.S.A. Inc., a leader in digital imaging solutions, today an-



nounced the next leap forward in full-frame mirrorless cameras - the professional-grade Canon EOS R3. The new camera leverages the advancements in technology that Canon has developed since the original EOS R launch in 2018 and bridges the gap between the immensely popular EOS R5 and the world-renowned Canon flagship EOS-1D X line. The EOS R3 is the first “3” series camera from Canon since the widely used EOS-3 film camera launched in 1998.

The EOS R3 camera’s features greatly emphasize superb AF performance and speed with fast-moving subjects. It was designed to meet the reliability and durability demands of professionals, even when working in some extremely challenging conditions.

“The launch of the EOS R3 sets a new benchmark for the Canon EOS R camera system. Canon listened carefully to the voices of professionals when developing a camera to meet their standards,” said Tatsuro “Tony” Kano, executive vice president and general manager of Canon U.S.A.’s Imaging Technologies & Communications Group. “The EOS R3 is a monumental evolution in digital imaging technology. I look forward to seeing the camera in action on the sidelines of sporting events and in the hands of nature and wildlife photographers across the globe.”

## **Equipment Discussions -**

The core of the EOS R3 features a Canon designed and manufactured 24.1-megapixel back-illuminated stacked CMOS sensor. The sensor is the first of its kind from Canon, and when combined with the DIGIC X processor, delivers a high-speed readout allowing for continuous blackout-free shooting<sup>1</sup> at up to 30 fps in electronic (silent) shutter mode and up to 12 fps in mechanical shutter, with minimum rolling electronic shutter distortion. The combination also increases the high sensitivity, light-capturing efficiency of a native ISO range of 100-102400, expandable up to 204,800 for still images. Like the EOS R5 and R6, the camera features the improved Dual Pixel CMOS AF II with 1,053 AF Points and evolved EOS iTR tracking down to EV -7.5 for subjects such as eye, face, head, animals<sup>2</sup>, and select cars and motorcycles. In addition, the camera features up to 8 stops<sup>3</sup> of in-body image stabilized (IBIS) shake correction.

Leveraging technology and performance feedback from the popular EOS R5 and EOS R6 cameras, the EOS R3 uses Deep-Learning technology to further enhance eye and body detection for even better performance during portrait and action-type shooting. Featuring a new 5.76-million-dot and 120fps blackout-free<sup>1</sup> Electronic Viewfinder, the EOS R3 camera will provide photographers with the ability to select the initial area for AF tracking by simply looking directly at the viewfinder location where they want to begin AF. With Eye input AF<sup>2</sup> and Servo AF activated, the camera will focus on and track moving subjects at that location in the frame. When Face Detect + Tracking is active, the camera will continue to follow moving subjects around the entire active AF area.

The EOS R3 camera doesn't just capture spectacular still images, it also packs impressive video specs as well. The camera is capable of shooting 6K 60p RAW and 4K 120p 10-bit uncropped video with Canon Log 3 support, in addition to the possibility for oversampled 4K and RAW movie internal recording. Canon Log 3, which is frequently used in cinema production, helps to reduce the possibility of highlight blowouts. What's more, the features such as industry standard BT.709, BT.2020 color gamuts, and cinema gamut help to maintain color and tonal consistency. Coordinated 5-axis IBIS helps to correct operator motion or shaking providing dependent video capturing even when using a lens without built-in Optical IS.

### **Additional features of the EOS R3 Full-Frame Mirrorless Camera include:**

Canon's next-generation Multi-Function Shoe that is compatible with a variety of accessories including the Speedlite EL-1, and new accessories such as the ST-E10 Speedlite Transmitter, External Mic and Smartphone Link Adapter

- One-piece magnesium alloy design, integrating the body with a vertical grip section
- Weather and dust resistance equivalent to EOS-1D camera models.
- Mobile File Transmitter application for iOS® and Android® devices allows photographers to transfer their images quickly and easily without the need for wired LAN equipment
- Built-in Wired LAN, 5GHz Wi-Fi®, USB and Bluetooth® technology
- Dual-card slots, supporting one CF express and one UHS-II SD

The Canon EOS R3 Full-Frame Mirrorless Camera is scheduled to be available in November 2021 for a suggested retail **price of \$5999.00\***

## Natural History -

### **COUNTRY NOTEBOOK: Thuggery in the treetops: M.Krishnan:- 19-10-1952**

**The Sunday Statesman (shared by Shri. Saktipada Panigrahi)**

"FOR the past month. I have been hearing the thin, high, petulant "Ki-kiyu" of the SHIKRA and occasionally I have seen the bird in the dazzling midday sky- whirring along on quick, blurred pinions, then sailing in an ascending circle on still, round wings, the long tall spread like a half-shut banded fan. There are two of these hawks about that call and answer in the same querulous tone, though they seem to keep a certain distance apart. By these tokens they are a courting pair that will later nest somewhere near, probably in the clump of mangoes a quarter mile away.



Ordinarily, the shikra is not given to high jinks and public appearances, for it lives by thuggery and thugs do not proclaim themselves. It lurks in obscuring foliage, waiting for the unsuspecting victim to approach before pouncing down on it, and when it goes from tree to tree- its passage announced by shrill twitters of little birds and alarmcheeps of squirrels- it keeps low and flies direct and fast. Even when it goes coasting the fields, as it does at times, it hugs the contour of each dip and hollow and takes good care to keep below any line of trees so that it may arrive unexpectedly at the next field. It is capable of determined pursuit and speed over a short distance, but furtive means and attacks from ambush are what it favours.

But just before it pairs and breeds, it takes freely to the air and goes soaring on high. Its harsh, grating voice then changes to a high frequent "K-kiyu", a call that is exchanged all day from the wings and even from perches between the courting pair. To human ears, few bird calls are more expressive of tantalised impatience at a slow, tedious progress of love imposed by nature! However, the call is used at other times. I have heard an angry shikra, attacking crows, repeatedly indulge in this call- it seemed louder and less plaintive then, with a challenging ring in it, but this was probably because I heard it from so near/ When the sun sinks behind the trees and night is imminent, sparrows and other small birds flock to their roosts and the shikra is well aware of this opportunity.



It lies in wait, huddled in some thick-leaved trees, and if a little bird alights nearby it makes its plunge, flinging itself bodily through twig and leaf. Often enough the quarry escapes, and then the hawk may fly swift and low to another tree, or lurk on in the same ambush. There is no rule governing its behaviour on such occasions, except that it fails quite frequently in its dusk hunting. One February evening I followed a shikra from 6.25 p.m till close on 7 O'clock- it made three attempts to snatch its dinner in that time and, having failed, flew away over the horizon when it was almost dark.

The shikra is capable of fine courage, too, when there is need for courage. It can tackle mynahs and birds almost as big as itself, as the old-time falconers knew well, and it will fight even larger birds on occasion. Once I was watching a shikra eating a bloodsucker on the branch of a neem, when first one jungle-crow and then another came up and settled on a branch close by. The hawk resented their covetous glances and their sidling closer, and abandoning its prey it flung itself at the intruders with a torrent of "Ki-kiyus" - I was amazed at this onslaught, for the crows were larger birds and by no means incapable of fighting, moreover there were two of them.

So impetuous was the attack that all three birds came tumbling down in a frantic ball of black and barred feathers, that rolled about on the ground below for a moment before resolving itself into two crows that fled for dear life and an angry, open-beaked hawk. Both crows must have been grabbed simultaneously, one in each taloned foot, for this to have happened, but incredible as it may seem, it did happen.

I would much like to tell you how the victor returned to the hard-won meal and consumed it in triumph, but in fact this incident ended more like a story. For while the hawk was routing its enemies, a third crow made an unobtrusive appearance on the scene, by a rear entrance, and flew away with the dead lizard, even more unobtrusively!"

- M. Krishnan

## **Wildlife Photography -**

### **Gaur Mother and calf Shyamala Kumar**

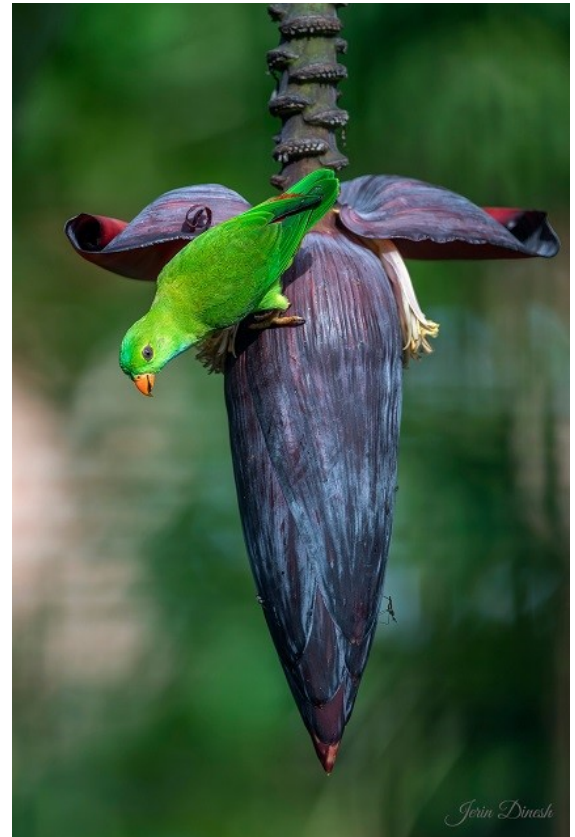


### **Black Bucks at Bidar by Vineet Shrivastava**





**Wildlife Photography -**  
**Vernal Hanging Parrot by Jerin Dinesh**



**Kestrel by Mrudul Godbole**



## **Wildlife Photography -**

### **Crab Spider and Ant by Arun Acharjee**



### **Tricolour Flat by Prajwal Ullal**





## Spare a Thought



This is the 153rd issue of IndiaWilds. An image of a wild tusker adorns the cover page of this issue.

Wild tuskers with their glistening tusks evoke fear and awe in us. This giant was not happy when accidentally our paths crossed and I had to quickly reverse and give way. Nevertheless, these gentle giants are not prone to wanton destruction as some people believe. Despite their huge size, elephants are intelligent and sentient beings. When left undisturbed they graze peacefully. At times when closer to human habitations, they feed on crops as well as feed from fruit bearing trees when they chance to come across. Unfortunately, people disturb these giants when feeding and the conflict starts. Elephants need a huge range of undisturbed forests so that they can move and forage to satisfy their hunger. Nature has designed these mega herbivores in such a manner that they pass on partially digested vegetable matter and help many different types of seeds to germinate in places far off from where the elephant had fed. So it increases biodiversity.

Unfortunately, with increase in human population we have decimated forests and the migratory corridors of elephants are fragmented. Most of the elephant habitat falls outside the ambit of protected area network. Increasingly our greed as well as ignorance has led to less tree and undergrowth in many areas. The forests have lost their biodiversity. So there are no fruits throughout the year. Many of the plants that elephants feed also have vanished. As a result, elephants have no way but to raid crops. Increasing forest and tree cover and reestablishing corridors among wildlife sanctuaries will help these mega herbivores survive. It will also help us in fighting the vagaries of air pollution and climate change.

If we need to lead a healthy life, then we need to help our forests regenerate. We need to ensure that our biodiversity is protected and wildlife thrive. When Nature is at its best mankind thrives. We can change our wasteful ways and help reverse the toxic impact of humans on Nature and wildlife. We have the unique opportunity to turn Heroes. Together we can.

### Touche.

I look forward to your inputs and support in preserving the last tracts of wilderness and wildlife of our beautiful country. For other interesting articles and images check - <http://www.indiawilds.com/forums/>

To post in the IndiaWilds forums, you can register free of cost using your Full Name as user id at -

<http://www.indiawilds.com/forums/register.php>

If you are already a member of IndiaWilds and have forgotten your user id and/or password you can mail [administrator@indiawilds.com](mailto:administrator@indiawilds.com)

Regards,

**Sabyasachi Patra**

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