

# IndiaWilds®

## Newsletter

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## Plastics, Pollution & Way Forward :

India's wildlife has been facing an existential crisis. On one hand their habitat is usurped by Government for infrastructure creation and industrial promotion and on the other hand the remain few wildlife are hunted down by people.

India was the host country of this years World Environment Week celebrations. The theme was Stop Plastic Pollution. As per the theme, there were tweets galore from India's environment minister, HRD minister and many celebrities. This raised awareness, though primarily among netizens, about the harmful use of single use plastic. The question that immediately comes to our mind is about the role of Government and people. What is the Government doing and what are people going to do to stop single use plastic. Are we serious to eliminate this problem of plastics which has assumed monstrous proportions? Do we have processes and thinking in place to really stop single use plastic?

The situation is not as simple as is being portrayed in online campaigns. Take the case of single use plastic for eg. the milk pouch. In Delhi, I stopped buying milk from the local doodhwala who used to bring milk in cans and give it to people. Looking at the milk it was clear that the milk was not pure and contained impurities. So despite not liking plastics, I am forced to procure milk packets from the supermarkets. If you buy from a neighbouring pan shop, then the shop owner will give you the milk pouches in polythene bag though those are banned in Delhi. After cutting open the milk pouch it goes to the dustbin which is later in the day given to the guy who collects 'kuda' or household waste. Unfortunately, despite segregating bio-degradable



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### Cover Page Photograph:

Cheetal chewing wafers packet  
by Sabyasachi Patra



and non-biodegradable wastes into two different bins, the garbage collector mixes those into one big polythene bag that he brings. So everything is mixed up.

As you can see, we lack systems and processes to segregate single use plastic. The increase in single use plastic is ironically because of quality issues and due to ease of use. Unless there is a big improvement in the packaging industry, we will continue to have single use plastics. The fact is companies don't have any incentive or disincentive to not use single use plastic in their product packaging. So you find all kinds of polythene pouches used for products. The producer doesn't have a responsibility for the pollution that they are causing by using single use plastic. The Government is silent on that front lest they be called out as anti-industry.



There was a time in our childhood days when we used to go with cans to get the morning milk. If Amul and other dairy companies set up chain of cold storages in various localities, then people can just walk down with their bottles and fill the milk. Since those are company managed and sealed and hopefully inspected regularly, the chances of mischief would be avoided.

And people who want non-plastic but durable packaged milk, they should have the option to avail from the neighbouring supermarket.

People can be made to discard polythene bags by forcing them to buy cloth bags, as is the norm in some retail chains like Spencers and other such supermarket chains in Bangalore and other cities. May be people can start carrying bags from home like we used to do in our childhood days while going to market. People drop a habit when it pinches. So forcibly spending money to buy cloth bags everytime makes them start using their bags.



These are already being done in many places but haven't become prevalent because of lack of enforcement. Simply banning polythene bags has no effect as can be seen in Delhi where everyday you can buy those thin polythene bags from any vendor in the streets.

The present Union Government to its credit has created Swatch Bharat campaign and some people have become aware about not littering. However, there is not much budget allocation to the Swachh Bharat Campaign. Mere sloganeering will take us nowhere. The impact of propaganda wears out soon and the stark reality is that we have become a Garbage Nation. Where ever we look at we find garbage. Wild India's heart, lungs and stomach are getting choked with plastic.

During a trek in Mudumalai, I found an elephant had swallowed a polythene and it had come out in the dung along with blood. Fortunately, it was a single polythene. More of that would have been fatal as was found in site near Ayappa pilgrimage. Lesser animals swallow and die a painful death. Often their carcass gets devoured by scavengers and we don't get to know about the death and its cause.



Packaged drinking water or mineral water bottles are thrown everywhere in the country side along with big bottles of Coke and Pepsi. There was a time we used to fill our water bottles from stations. Gone are those days as water is contaminated everywhere and we are forced to buy bottled water. These days there is massive trust deficit. A tea vendor in a train was recorded in video using toilet water. So it is obvious that people will continue to buy bottled water during travel. However, when we are in decent hotels and in Star hotels, why do they use bottled water? Can't they provide us with clean drinking water? When they shove service charges down our throat, providing clean water is a minimum thing that they should do and ban bottled water. They should not use bottled water as an avenue to make a quick buck as five star hotels are known to charge hefty premium on bottled water.

I hope all the star hotels take this as a social and environmental responsibility to ban bottled water and mineral water bottles from their hotels and provide clean drinking water. Government too should ban bottled water in their offices and ensure clean water be served and dispensers to fill bottles. Ofcourse knowing that many of the Government employees are just there making up numbers and their motivation levels are low, especially in the junior grades, officers may not be too keen on this move. Nevertheless the situation is really urgent as the Minister for MoEF&CC Dr. Harsh Vardhan pointed out that 25, 000 tonnes of plastic waste is generated every day. So we have to act fast.



Beer Can found by the 3780 meters deep at Enigma Seamount in Mariana Trench. Photograph: NOAA office of Ocean Exploration

Several State Governments have banned plastics but those bans are rarely implemented. Recently the Government of Maharashtra has banned single use plastics and in the last few days many officers are conducting raids on malls, shops and other outlets and collecting fines. Many sellers are not aware about the ban and hence are immediately angry. The plastic manufacturers lobby is as usual quick to point out that this move by the Maharashtra Government will result in huge financial losses as well as job losses. Many people are working behind the scenes to stop this order. Whether the Government will buckle under pressure from powerful lobbies is to be seen. However, time has come to fully enforce the ban else people won't try to find solutions.

Unless there is pressure on the producers it would be difficult to stop at the consumer end. A recent road trip through 8 states and 3800 kms later I discovered the difficulties as a consumer in refusing single use plastics. Every roadside tea stall uses plastic cups or paper cups to give tea and the plastic and paper cups are then dumped on the roadsides which choke the drains and pollute the countryside. The glass and steel cups have vanished from the shops. I still could coax some tea sellers to find their old cups and get those washed and give me tea. However, there was language barrier in many states and lot of stalls simply have moved on to complete plastic mode. The plastic cups are convenient because the shops face tremendous water shortage. The restaurants place a thin plastic sheet over plates and serve snacks like idly, dosa etc. Later the plastic



sheet is discarded and another plastic sheet is placed over the plate for a fresh serving. The consumers are not aware about the impact on health due to the hot snacks served on plastic sheets. It is time to accept that we have failed in raising awareness levels among the consumers. It is tough for us and activists to raise funds for campaigns. So the Government has to step in to set up hoardings and TV ad campaigns highlighting the problems caused by plastics. Only then the consumers can be made aware and the small shops will stop using those. However, that means the Government has to allocate funds for Swachh Bharat campaigns. That brings us to Square One.

Many years ago, when Lallu Yadav was the railway minister he re-introduced 'Kulhar' or earthen tumblers for serving tea in Indian railways. At that time it was seen as a gimmick. However, now that we are already drowning neck deep in plastics the humble kulhar can make a comeback. There was only one place on the outskirts of Agra that I found a roadside tea stall serving me tea in kulhar or earthen tea cup. It was because I said no to paper cup. These kulhars can simply be discarded as they are environment friendly.

The problem of single use plastics is also with big chains. A Café Coffee Day outlet in Delhi insisted on serving me coffee in a paper cup. The reason given was that there is no one to clean the porcelain cups. When I offered to wash it myself, the attendant felt ashamed and went to wash the cups. So some amount of persistence is required by the consumer as well. Now along with my reusable water bottle I am also carrying cups in my car just in case I need to use those in some of the smaller roadside stalls in smaller towns. You can do that too. Be the change agent.



Each small step by us can go a long way in changing a very bad habit of plastic use in our daily life.

## **Conservation News -**

### **16 states have Uranium contaminated ground water:**

16 states in India have their groundwater polluted by Uranium. This is likely to cause kidney failure and other major diseases. This was found by a study titled “Large-Scale Uranium Contamination of Groundwater Resources in India.” (Rachel M. Coyte, Ratan C. Jain, Sudhir K. Srivastava, Kailash C. Sharma, Abedalrazq Khalil, Lin Ma, and Avner Vengosh, Environmental Science & Technology Letters 2018 5 (6), 341-347, DOI: 10.1021/acs.estlett.8b00215)

This study was conducted by experts from Nicholas School of the Environment at Duke University, USA, Gujarat water resources development corporation, Central Ground water Board, Ground water department of Govt. of Rajasthan. During the study the team took groundwater samples from 226 locations in Rajasthan and from 98 locations in Gujarat.

Though the uranium contamination is natural, the depletion of ground water due to excessive withdrawal for irrigation purposes and the pollution due to nitrogenous fertilisers is compounding the problem. And the problem has gone unnoticed because Bureau of Indian Standards doesn't mention uranium as a contaminant for monitoring water quality. So the BIS Specifications need to be urgently modified.

Aquifers in as many as 16 States in the country are contaminated by uranium, whose presence in drinking water has been linked to chronic kidney disease by several studies, a recent study has shown. More importantly, uranium doesn't figure on the list of contaminants monitored under the Bureau of Indian Standards' drinking water specifications.

One in every three wells in Rajasthan contained uranium level that exceeded the WHO's safe drinking water standards of 30 parts per billion. Prof. Avner Vengosh has said in a statement that “One of the takeaways of this study is that human activities can make a bad situation worse. The results of this study strongly suggest there is a need to revise current water-quality monitoring programmes in India and re-evaluate human health risks in areas of high uranium prevalence.”

Rachel Coyte, a PhD student in Vengosh's lab said that over-exploitation of groundwater for irrigation may contribute to the problem. Many aquifers are composed of clay, silt and gravel carried down from Himalayan weathering by streams or uranium-rich granitic rocks. “When over-pumping of these aquifers' groundwater occurs and the water levels decline, it induces oxidation conditions that, in turn, enhance uranium enrichment in the shallow groundwater that remains”.

India also needs to work on development of remediation technologies which can adequately address the problem. However more than remediation, it is important to nip the problem in the bud ie implement preventive management practices to address the problem of uranium contamination in the ground water.

The problem is widespread in 26 districts in Northern India, particularly in states of Punjab and Haryana. The impact of indiscriminate use of synthetic nitrogenous fertilisers is now showing up in Punjab and Haryana where waters have become toxic and cancer cases have gone up drastically. It is high time our Government as well as people understand that we can mess up with environment at the cost of our own well being.

## **Conservation News -**

### **State Environment Ministers Conference Inaugurated in the run-up to World Environment Day**

Urging all stakeholders at the national and international level to work towards betterment of environment, Union Minister for Environment, Forest and Climate Change, Dr. Harsh Vardhan has said that “Beat Plastic Pollution” is not merely a slogan, but India means business about it. He also added that environment protection is not merely a technical, but a moral issue. Delivering the inaugural address of the State Environment Ministers Conference in the run-up to World Environment Day, Dr. Harsh Vardhan pointed out that 25, 000 tonnes of plastic waste is generated every day. He opined that the developed world must provide the technology, funds and share their research on environmental issues. He asserted that there is no waste which cannot be transformed into wealth. Dr. Vardhan cited the example of Kashipur plant, where 10 tonnes of biomass has been converted into 3000 litres of ethanol. The Environment Minister underlined the need to use Earth’s finite resources judiciously, so that we can move back to our glorious past. He said “If every Indian adopts one Green Good Deed per day, a revolutionary change can be brought about in the nation”. He also urged the State Environment Ministers to inspire people to take up Green Good Deeds and build small, social movements and said that if all work collectively with heart and soul, India can be taken to the top of every parameter in the field of environment.

In his address on the occasion, Minister of State, Dr. Mahesh Sharma expressed concern over the pollution caused due to plastic use in India and how it can create problems for future generations. Recalling the Gandhian thought of ‘Cleanliness is Godliness, Dr. Sharma said that this is the spirit behind the theme of “Beat Plastic Pollution”. Advocating the implementation of the Prime Minister’s ‘mantra’ of 6 Rs – Reduce, Recycle, Reuse, Retrieve, Recover, Redesign and remanufacture to eliminate single use plastic, Dr. Mahesh Sharma stressed the criticality of a collaborative role of all the stakeholders from the States in dealing with plastic menace.

Addressing the gathering, Executive Director, United Nations Environment pointed out that in India, Mr. Erik Solheim stated that in India, efforts are needed not only from the Government’s side, but also from the people. Strongly advocating recycling of all the plastic used, he suggested that plastic used for avoidable purposes such as straws must be refused. “We need to make environment a citizen’s issue”, Mr. Solheim said. The senior UN representative felt that universities should form rules and regulations for students to follow environment norms. He assured that UN’s leadership is here to help take Indian practices to the world.

Quoting several examples from India, Mr. Solheim said that solar efficiency of Kerala should be adopted everywhere. He also cited the example of the use of electrical vehicles in Maharashtra and Telangana, stating that they should be used in all other states. He praised the organisation of various events at this year’s World Environment in India and expressed the view that such conferences are important to delineate ongoing pressing issues pertinent to environment.

In his address, Deputy Chief Minister of Bihar, Mr. Sushil Kumar Modi raised several issues pertaining to environment. He suggested the adoption of ‘Zigzag technology’ to reduce carbon emissions from burning of bricks in brick kilns. The CAMPA Fund’s rules should be notified at the earliest, so that the funds can be used by the State governments.



## **Conservation News -**

### **Andhra Pradesh Plans for Chemical Free Agriculture by 2024**

The Government of Andhra Pradesh has launched a plan to shift all the 60 lakh farms and farmers to 100% chemical-free agriculture by 2024. This is to cover 80 lakh hectares of land from conventional synthetic chemical agriculture to Zero-Budget Natural Farming (ZBNF) by 2024, making Andhra Pradesh India's first 100 per cent natural farming state.

The launch event of this initiative was attended by more than 8000 farmers and dignitaries. Erik Solheim, Head of UN Environment was also present in the event. He said "This is an unprecedented transformation towards sustainable agriculture on a massive scale, and the kind of bold change we need to see to protect the climate, biodiversity, and food security. We're pinning a great deal on the Zero Budget Natural Farming programme, which I hope will inspire the widespread adoption of a natural farming scheme. It's a better deal for farmers, consumers, and the planet."

"The success of climate-resilient, Zero Budget Natural Farming in Andhra Pradesh will not only help India in meeting its SDGs but it can also inspire and transform the lives of millions of farmers across the developing world," said, Chief Minister of Andhra Pradesh, Chandrababu Naidu.

Considering its impressive scale, an effective shift to a 100% natural farming state with 8 million hectares free of chemical contamination will achieve transformative impacts in India. In addition, it will provide a blueprint for an inclusive agricultural model, which takes into account diversity of people along with agro-climatic conditions and can be adapted to varying global contexts to reduce vulnerabilities to climate change. Moreover, as 14 out of the 17 Sustainable Development Goals are dependent on the status of natural resources, the health of communities, access to secure nutrition, and empowerment of women, Zero-Budget Natural Farming (ZBNF) constitutes an effective cross-sectoral strategy for achieving SDGs targets.

"ZBNF builds on agroecological principles, that are at the heart of sound integrative, systems science, with the promise of resilient and productive landscapes that offer the kinds multiple benefits for society and ecology that our Planet sorely needs today from all of its landscapes. It, therefore, sets the pace and the agenda for all of us", says Tony Simons, Director General of the World Agroforestry Centre.

Despite the tall noises made in this massive launch programme, it should be noted that the end date is six years away. We have a poor rate of implementation in this country. The five-year planning programme for India that was launched during Nehru's time was marked by poor implementation as well as time and cost overruns and finally the five-year planning model was scrapped. And one should also note that Government's come and go. This programme which has been initiated by Chandrababu Naidu may not get much resources and attention by the next Government. Nevertheless, it is a good initiative if it gets implemented and if other states too implement it.

To get the 'organic' tag one needs to scrupulously adhere to chemical free farming model and use only natural fertilisers and pesticides for a long time. It takes a decade or so for the soil to lose all traces of synthetic substances that have been pumped into it for ages since the advent of green revolution. With more and more consumers realising the negative impact

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of synthetic fertilisers and pesticides, the demand for organic farming is going to increase. So farmers may be tempted to go back to organic farming. However, the huge fertilizer and pesticide lobby as well as MNC seed companies are going to create hurdles. Nevertheless, we hope and wish all luck to the success of this programme.

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### **Nagaland Plans to be Plastic Free by December 2018**

Nagaland plans to be free from Plastic Waste by December 2018 said Mr Neiphiu Rio, Chief Minister. Addressing a gathering on the World Environment Day, the Chief Minister talked about the harmful effects of plastics and set a deadline of December 2018 and called upon the people to reaffirm their commitment to create a plastic-free state. He urged the people to stop using plastic bags and cutleries and replace those with eco-friendly products.

The CM also said that as per the promise made in their election manifesto, the People's Democratic Alliance Government in Nagaland will soon launch a 'Clean and Green Nagaland' campaign. 48,000 saplings will also be planted.

The North-East states still have a lot of greenery and act like the lungs of our Country. It is important that the people in north-east don't chase the so-called model of development which is cutting off all trees and concretising the landscape. Apart from their role in carbon sequestration, there is lot of evapo-transpiration from trees and it leads to rainfall in other places. So India needs to ensure that the aspirations of people of North-East are met without sacrificing greenery and exploiting the environment.

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### **World Environment Day Celebrations: Three-Day Campaign for Blue Flag Certification of One Blue Flag Beach in 13 Coastal States/UTs Kickstarted**

Society of Integrated Coastal Management (SICOM) under the Ministry of Environment, Forest and Climate Change has embarked upon a programme for Blue flag certification of one Blue Flag beach in each of the 13 coastal States /UTs under the World Bank-assisted Integrated Coastal Zone Management Project (ICZMP).

SICOM conceived an integrated coastal management scheme named BEAMS (Beach Management Services). The main objective of BEAMS programme is to reduce pollutants, promote sustainable development and strive for high standards in the areas of (i) environmental management (ii) environmental education (iii) bathing water quality (iv) safety & security services scientifically. A "Clean" beach is the primary indicator of coastal environmental quality, management and economic health of beach tourism. However, coastal regions in India are highly susceptible to litter and other pollution.

A team of SICOM carried out extensive field research work to assess gaps with regard to Blue Flag requirements, in consultation with local authorities and stakeholders in the 13 nominated pilot beaches. These 13 beaches include - Shivrajpur

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(Dwarka) Gujarat, Ghoghla (Diu) Daman & Diu, Bhogve (Sindhudurg) Maharashtra, Miramar (Panjim) Goa, Padubidri (Udupi) Karnataka, Kappad (Kozhikode) Kerala, Emerald (Karaikal) Puducherry, Mahabalipuram Tamil Nadu, Rushikonda (Vishakhapatnam), Andhra Pradesh, Chandrabhaga (Puri) Odissa, Tajpur (Purbi Midnapur) West Bengal, Radhanagar (Havlock) Andaman Nicobar and Bangaram, Lakshdweep.

With “I AM SAVING MY BEACH” (Intensive Beach Cleaning & Environment Education) campaign, MoEFCC has kickstarted the journey towards certifying these beaches for Eco-label at par with Blue Flag beaches in the world. This campaign was undertaken by team of SICOM-MoEFCC at these beaches concurrently for an extensive cleaning & environment education drive, coinciding with the World Environment Day celebrations.



Hundreds of volunteers joined these drives, coming from local communities, fishermen society, school children, scouts, and officials from Coast Guard, Navy, officials from tourism, environment & forest departments, offices of District Collectors, Gram Panchayat, as well as municipalities and cleaned their respective beaches with tools, equipment made of environment friendly materials and collected, segregated and recycled tons of littered garbage (majority of which was plastic) in these beaches. The team of SICOM also conducted sessions on environment education on topics such as (i) Coasts, their importance in bio-diversity & our responsibilities (ii) Environmental Ecosystems & their importance in our life and (iii) Pollution - how it happens & its ill-effects on bio-diversity.

I#AM#SAVING#MY#BEACH is a national level campaign that will be undertaken periodically in these nominated pilot beaches for “Blue Flag” certification journey.

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“BLUE FLAG” has very stringent 33 criteria to be complied based on which a beach is certified and permitted to hoist their flag in these beaches. The moment a “BLUE FLAG” is hoisted in a beach, the mention is made in the global headquarters of Foundation for Environment Education (FEE) in Copenhagen, Denmark and thereby on the World Tourism Map. FEE-nominated representatives will conduct regular monitoring & audits for compliance and thus, concerted efforts are required to qualify for Blue Flag Certification.

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### **74 Rare Plants seized from Rahara in Kolkata**

Eight pitcher plants that are found in the Khasi Hills of Meghalaya and two varieties of orchid were seized from a house in Rahara last week.

Stocking or cultivating these outside the wild is banned under the wildlife protection act.

The Orchids seized are Blue Vanda and Ladies Slipper.

Seventy-four plants were seized from Bappa Mandal's house in a raid on Thursday, an official of the Wildlife Crime Control Bureau (WCCB) said.

Of the 74, there were eight pitcher plants, 49 Blue Vanda and 17 Ladies Slipper, the official said.

All these plants are protected under Schedule VI of the wildlife protection act. So trading or keeping them in the house without permission from the Government is illegal. Generally people understand that wild animal species are protected under law but they are not aware that they cannot keep these plant species at their home. According to law, one can only possess these plants for research and educational purposes and that too after due permission from the Chief Wildlife Warden of the State. In the instant case, Bappa Mandal was fined Rs. 25000/- for possessing them without any license.

It is said that he wanted to make commercial use of these plants. After the seizure the plants are being sent back to the wild with the orchids sent to Buxa tiger reserve and the pitcher plants to Khasi hills in Meghalaya.

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### **Environment Ministry, Teri, and UNEP strategize the roadmap for ‘Urban Sustainability’ in the run-up to World Environment Day**

**03 JUN 2018**

India as well as the world is witnessing a continuous rural-urban migration and population growth with more than half of the world's population now living in urban settlements. By 2050, cities are expected to house as much as two-thirds of the global population, making urbanisation one of the twenty-first century's most transformative trends.

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While cities are centres for economic activity, innovation and growth, urban population impacts the environment significantly through their consumption of food, water and energy. Forty per cent of the Indian population is expected to live in urban settings by 2030. By 2050, India's population is expected to grow to 1.7 billion, adding further pressure on the country's urban capacity. With these numbers, it is imperative to devise smart urban solutions that can help achieve the New Urban Agenda (NUA) and Sustainable Development Goals (SDGs). So recently the environment ministry, TERI and UNEP met to strategise on a roadmap for urban sustainability.

Highlighting the importance of sustainable smart cities, Mr. Hardeep Singh Puri, Minister of State (Independent Charge), Housing and Urban Affairs, India said that India will succeed in achieving its SDGs. Addressing a multi-stakeholder meet to strategize the roadmap for environmentally sustainable urban development in Indian cities, as part of the ongoing thematic sessions in the run-up to World Environment Day here, Mr. Puri said, "Today, we are witnessing a behavioural paradigmatic shift and we need to support that through skill upgradation. Our workers in the building sector need to be trained so that their choice of raw materials is sustainable." **To truly build smart cities, we also need to strengthen the city transport that can support the mass traffic**", Mr. Puri added. "Further, ULBs need to be empowered, and we need a dedicated and trained municipal cadre for the same," the Minister pointed out.

Speaking on the occasion, Director General, TERI, Dr Ajay Mathur, said, "Protection of the environment is the call of the day. With urban growth impacting the environment significantly, there is a need to create a stable policy framework for development of infrastructure and integrated spatial planning at all levels: national, state and city. With support from the Government, we continue to create impact in emerging urban areas such as Amravati, the new capital city of Andhra Pradesh. We hope to bring together other stakeholders in our bid to creating more liveable cities".

Addressing the gathering, Executive Director, United Nations Environment Programme, Mr. Erik Solheim, said, "Today, 50% of humans are living in the cities. More than ever, there is a need to build strong urban infrastructure that can support the rising population. For smart, sustainable cities, it is essential to have a greener architecture, robust city transport, and good waste management policies."

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## **Govt. bypasses its own law by breaking down 900km roadbuilding project into 52 parts**

There was a time when the headlines in Economic Times was that Reliance Industries had not paid any tax as it used a loophole in the law. There are many such instances where companies as well as individuals have found loopholes to bypass the law. However, if you thought only the private sector and individuals use loopholes to bypass the law then you are wrong. The Government has proved that it also knows and also has the will and moral depravity to illegally bypass the law.

The Government has divided the 900km chota-chardham road connecting project which is to connect Gangotri, Yamunotri, Kedarnath and Badrinath into 52 parts to bypass the environmental clearances. This project of 12,000 crores is ex-

## Conservation News -

pected to fell over 25,000 trees in a fragile ecosystem. Perhaps the Government has forgotten the flash floods and landslides of 2013 in Uttarakhand. Or perhaps the Government doesn't care.

The total road length of 900 kms was initially divided into 14 parts and then later further divided into 52 parts to keep the road length below 100kms each and avoid EIA. The Government's action is in complete violation of the EIA (Environment Impact Assessment) rules. The case is with National Green Tribunal which has reserved its order. However, given that Government uses national security as a plank, activists expect that the NGT will cave in and allow the project.

The petition in NGT was filed by Shri Hemant Dhyani of Ganga Avahan, an NGO which is working to save the fragile ecosystem of the area. He says *"The government has taken forest clearance only for a particular stretch of a forest area on the National Highways. So the focus of the Forest Advisory Committee and other experts is only on that particular fragment (stretch of the highway) and on the comparatively less number of trees that will be cut in that fragment. The concerned authorities and experts have therefore not considered the cumulative impact of destruction of trees, slope cutting, destruction of catchment area etc. which will be huge"*.

The petitioner Shri Hemant Dhyani hearing about the massive tree felling on different areas of the roads connecting Rishikesh to Gangotri and Kedarnath and Badrinath, Yamunotri to Dharasu realized that this is part of the Chardham Mahamarg Vikas Pariyojna. Though this project was advertised a lot purposefully there is no information provided in the websites or anywhere else. The tree cutting started in December 2017 following which the petitioner approached NGT.

This ploy by the Government has worked and the Stage I & II forest clearance approvals have been obtained based on smaller parts of this large project. The petitioner Hemant Dhyani said *"Through this technical manipulation and subterfuge by dividing this massive project into unrelated segments, the government is not only causing the massive damage to the sensitive ecology of this disaster-prone terrain, but is actually institutionalising corruption in the system through such practices."*

Himalaya is a comparatively younger mountain range unlike the tabletop mountain range in South Africa. According to geologists Himalaya is even younger than some of the rivers like Bhagirathi, Alakananda, Brahmaputra etc. The Himalaya has risen about 5000 feet or more since the middle Pleistocene. Himalaya hasn't yet reached its so-called maturity and some of the mountains in this range are still growing. So these mountains are structurally and ecologically fragile. Blasting and hacking off these mountains for road building work and cutting of trees which hold the soil and the rocks of these mountains will increase the structural weaknesses and incidences of landslides. Since the Government is illegally bypassing its own laws to cut across these mountains for road building, it is very clear that the massive 2013 landslides have become a distant memory and doesn't serve as a waking up call. It will only be the Narendra Modi led Government which will be blamed when nature hits back with even greater fury than what it did during the 2013 devastation. Unfortunately it is we the people who will bear the brunt as History has an uncanny knack of repeating itself. For more on 2013 devastation and its cause please check "The Wrath of Rudra: IndiaWilds Newsletter Vol. 5 Issue VI, June 2013 :- <https://www.indiawilds.com/diary/indiawilds-newsletter-vol-5-issue-vi/>.



## Equipment Discussions -

### Canon Launches new 70-200 f2.8 and f4 version lenses:

Canon has launched the EF70-200 f2.8 L IS III USM lens and EF 70-200 F4L IS II USM lenses. The 70-200 f2.8 L IS II USM lens was already a great lens which I have used in many wildlife as well as sports and corporate filming events. So the news of an updated version is very exciting.



According to Canon the new EF 70-200 f2.8 L IS III USM lens has got Air Sphere coating on its elements which reduces backlight flaring and ghosting when faced with strong backlights and the contrast is very good. The minimum focusing distance is 3.94 feet. This lens has got one fluorite element and 5 Ultra low dispersion glass elements which will increase the colour fidelity, reduce colour fringing and reduce chromatic aberration.

The front element filter thread remains the same at 77mm.

The diaphragm has got 9 blades and rounded to give a smooth bokeh. The previous version had 8 blade diaphragm.

## **Equipment Discussions -**

The image stabilisation is rated at 3.5 stops.

The weight of this lens is 1.44 kg.

**B&H link:** <https://www.bhphotovideo.com/c/produ...252/KBID/19990>

**Price:** \$2099 US dollar. This will be available by August end. Canon EF 70-200

### **f4 L IS II USM lens The Canon EF 70-200 f4 L IS II**

f4 L IS II USM lens The Canon EF 70-200 f4 L IS II lens is a big improvement over the previous version of f4 lens.

The image stabilisation is now rated at 5 stops. So that is great for handholding. So some people may prefer this lighter lens over the costlier and heavier 2.8 III version.

The EF 70-200 F4 L IS II USM lens has Super Spectra coating for greater contrast and colour fidelity. There is one Fluorite and two UD (Ultra-low dispersion) glass elements for good contrast and colour and reduced CA.

This lens has a minimum close focusing distance of 3.3 feet. It has 9 blade diaphragm. The tripod mount ring is optional. Front filter thread is 72mm. The weight is 779.6 grams.

**Price:** 1299 US Dollars.

**B&H link:** <https://www.bhphotovideo.com/c/produ...252/KBID/19990>

**Availability:** End June 2018.

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## Equipment Discussions -

### **Parrot has launched ANAFI, pocket sized 4K HDR drone**

Increasingly quadcopters are becoming smaller in size due to development in electronics and this has made it easier for us to carry quadcopters in the field along with other equipment. Now Parrot has launched a pocket sized 4K HDR capable quadcopter which can fold and fit in a pocket.



This quadcopter shoots 21MP still images.

This is the only quadcopter that can shoot in 4K HDR. It records DCI 4K (4096x2160) in 10bits @24fps. Unfortunately, that means we in PAL land have to be forced to use UHD and not DCI 4K.

It also shoots in UHD 4k (3840x2160) at 24, 25 and 30fps. In HD mode it shoots upto 60fps.

The ANAFI can also use digital zoom to take the benefit of the 21MP sensor which can shoot at 5344x4016 pixels. So one can zoom in upto 1.4x while shooting in DCI 4k without any visible loss in quality. ANAFI can tilt at 180 degrees.

The flight time is 25mins which is good. This is attributed to the use of a smart battery which can also be charged from a

## Equipment Discussions -

power bank. The copter will return and land at the point it had taken off if the battery is low. One should remember that in high wind situations the battery will discharge fast. So if you are flying over water or from a boat then if the battery is low then the copter will fly back to the point where it had taken off and that means landing in water. So one has to be very careful about battery life. I prefer to always use a fresh battery for a fresh take.

ANAFI has integrated GPS and GLONASS positioning systems.

ANAFI is claimed to be quiet. Its motors can resist strong winds upto 31mph. The copter can reach speeds of 33mph. So if the subject is at a distance then one can quickly reach it due to high speed and then start filming.



ANAFI is powered by a quad-core Ambarella image signal processor. All images are processed by a dedicated ISP, letting you create slow-motion and hyperlapse videos. ANAFI also includes vision positioning sensors and microSD card slot.

ANAFI's frame is reinforced by carbon fibers charged with empty glass microbeads. The patented double-hinge system lets ANAFI unfold in less than 3 seconds. Each of the drone's legs contains a dual-band antenna (2.4GHz & 5GHz) that extends the flight range up to 2.5mi.

**Availability:** 2<sup>nd</sup> July 2018

**Pricing:** \$699 US Dollars.

## Equipment Discussions -

### Sony Introduces 400mm f2.8 G master prime lens

Sony today announced the highly anticipated FE 400mm f2.8 GM OSS large aperture super-telephoto prime lens (model **SEL400F28GM**).

The product of extensive research and testing, Sony's new **FE 400mm F2.8 GM OSS** lens is the first large aperture super-telephoto prime to join the E-mount line-up. This exciting new lens produces brilliant image quality, extraordinary focusing speed and precision while also boasting the lightest weight in its class[i] and an extremely balanced design. It's the ideal choice for professional sports, wildlife and nature photographers, and a perfect complement for Sony's extensive line-up of high-speed E-mount bodies including **α9**, **α7R III** and more.



### World's Lightest 400mm F2.8 Prime with Ideal Balance for Monopod or Handheld Shooting

Weighing in at only 2897g, the new FE 400mm F2.8 GM OSS lens provides a level of portability and handheld manoeuvrability that has never before been achieved in a lens of its class. The remarkably light weight of this lens is achieved through an innovative optical design that includes three fluorite elements, with a reduced number of elements deployed at the front of the barrel, as well as the liberal usage of durable magnesium alloy components.

Additionally, repeated field tests and evaluation by professional photographers across the world have led to a lens design



## Equipment Discussions -

that is not front-heavy, reducing moment of inertia that resists rotation by up to 50% as compared to the **SAL500F40G**.<sup>[ii]</sup> This ensures that quicker, more precise panning is available, whether shooting handheld or on a monopod.

### Fast, Precise Autofocus

To best take advantage of the rapidly evolving shooting and focusing speeds of Sony's latest cameras, the **FE 400mm F2.8 GM OSS** lens features two newly developed high-speed XD (extreme dynamic) Linear Motors that drive the lens' focus group, achieving up to a 5x improvement<sup>[iii]</sup> in moving-subject tracking performance. These motors are supported by specially developed motion algorithms to minimise lag and instability and control noise levels, resulting in exceptionally quick, accurate and quiet autofocus performance. This allows the lens to capture dynamic, fast moving athletes or wildlife with ease.

### G Master Image Quality and Bokeh

A member of the Sony's flagship G Master Series lenses, the new large aperture super-telephoto prime lens features an incredible level of image quality and detail, with outstanding contrast and resolution maintained all the way to the corners of the image. The unique optical design includes three fluorite elements that help to minimise chromatic aberration and suppress any amount of colour bleeding. The lens has also been coated with Sony's original Nano AR coating to suppress any unwanted reflections, glare, or ghosting.

In addition to the impressive resolution, the lens features an 11-blade circular aperture mechanism that allows it to produce extremely natural and beautiful background defocus or bokeh'. Each lens is also individually tested and adjusted at manufacturing stage to achieve maximum image quality and 'bokeh'.

The new **FE 400mm F2.8 GM OSS** is compatible with Sony's 1.4x and 2.0x E-mount tele-converters, producing outstanding imaging performance at extended focal lengths<sup>[iv]</sup> while maintaining fast, precise AF performance.

### Durability, Reliability and Control

To withstand the harsh conditions of sporting events and wildlife photography, Sony's new **FE 400mm F2.8 GM OSS** is built with a durable magnesium alloy and a strong, lightweight carbon fibre hood. The lens is also dust and moisture resistant<sup>[v]</sup>, and its front element is coated with fluorine to resist dirt and fingerprints.

There is also an ample amount of hard controls on the lens, including a 'Full-Time DMF' switch to immediately engage manual focus at any point, customisable focus hold buttons in four different locations on the lens barrel - allowing easy access of an Eye AF for example, and a focus ring that features Linear Response MF for fine, responsive manual focus. The new lens also features built-in optical stabilisation for dynamic sports action and three different 'Mode' settings, including a brand new Mode 3<sup>[vi]</sup> setting with an advanced algorithm that ensures easier framing when following moving subjects. The new model includes a function ring with selectable 'Preset' and 'Function<sup>[vii]</sup>' settings, further adding to the customisability, a first for any Sony lens.

The **FE 400mm F2.8 GM OSS** includes a drop-in filter slot<sup>[viii]</sup> that accepts ø 40.5mm ND and other filter types, as well as the optional VF-DCPL1 Drop-in Circular Polarising Filter. The VF-DCPL1 filter can be rotated to achieve the desired po

## Equipment Discussions -

larisation while installed in the lens.

### **α9 System Software Update to Support FE 400mm F2.8 GM OSS[ix]**

The latest system software update (Version 3.00) for **α9** (ILCE-9) provides support for the new **FE 400mm F2.8 GM OSS (SEL400F28GM)** lens to optimise optical image stabilisation performance and enables continuous shooting with auto focus tracking even when aperture is greater than F11.

The update also provides added option to input camera serial number to the Exif data, a feature that has been strongly requested by professional sports photographers and photojournalists. Additionally, several other updates to the **α9** camera have been implemented with the new firmware, including improved auto focus speed in low light conditions, enhanced continuous AF performance when tracking a moving subject, and reduced release time lag when shooting with flash.

### **Pricing and Availability**

Built to order, the new **FE 400mm F2.8 GM OSS** will ship in Europe in September 2018, priced at approximately €12,000. The optional Drop-in Circular Polarising Filter (model **VF-DCPL1**) will ship in Europe in December 2018, priced at approximately €480.

[i] Compared to 400mm F2.8 lenses for 35mm full-frame format cameras, as of June 2018, Sony survey

[ii] When mounted on the α9 with VG-C3EM grip. Compared to the α99 II + SAL500F40G, Sony tests

[iii] When mounted on the α9. Compared to the SAL300F28G2 mounted on the α9 (via LA-EA3),

Sony tests

[iv] Maximum aperture with the 1.4x (SEL14TC) and 2.0x (SEL20TC) tele-converters is F4 and F5.6, respectively

[v] Not guaranteed to be 100% dust and moisture proof

[vi] α9 software must be updated to the latest version to activate Optical SteadyShot MODE 3 when this lens is used with the α9. Refer to the Sony support site for camera body compatibility information

[vii] Functions can be assigned via a camera body menu. Power Focus is assigned by default. APS-C/Full Frame Select can be assigned by updating α9 software to the latest version. Refer to the Sony support site for up-to-date function and camera body compatibility information

[viii] A normal filter is initially installed in the filter slot. The filter is part of the lens's optical system, and either the normal filter or circular polarizing filter should always be in place when using the lens.

Be sure that filter is installed before memorising the focus point for the preset focus function

[ix] System software update for α9 is scheduled soon. For more information, please visit Sony support site :-

<https://www.sony.co.uk/electronics/s...ce-9#downloads>

## Natural History -

### **COUNTRY NOTEBOOK: M.Krishnan: An Elephantine Inhibition - 19 February 1968**

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

#### **AN ELEPHANTINE INHIBITION**

"SOME YEARS AGO I saw, in a cinema house, a documentary on a kedah, showing the elephants soon after they have been impounded in the stockade. I like wild Elephants too much to care for the sight of them milling around in a panic, bewildered and trapped but an incident in the documentary roused my anger, though it seemed comic to everyone else in the auditorium. A little calf, separated from its mother in that melee was shown approaching a grown cow, which promptly sent it flying with a kick and the commentator said something about the myth that elephants are considerate to all young of their kind.



Well that is no myth and that man said what he did out of ignorance. Anyone who has watched elephants closely will know that never, even when moving in a tight-packed crowd and in a hurry, do the huge adults trample on an infant or kick it accidentally. Such care in social animals is usually instinctive and not the result of an intelligent realization of their responsibilities by the weaker members of the herd. Sometimes such behavior is induced or guided by instinctive reactions to colours.

The phrase "a red rag to a bull", conveys the immediacy of an animal's response to colour, though it has no basis, for bulls are colour-blind and see red only as a shade of grey. Crows as is well known react strongly to something black. On a recent tree-photography trip I used a view camera and the usual square of black cloth a photographer throws over his head to focus on the ground-glass. The crows were so violent in their response to my black cloth that I had to get it covered with a



square of thin khaki after which they left me in peace.

Elephants on the other hand, seem to instinctively avoid contact with anything black. I think they are not able to see things right under them very well and believe that quite a few men who have fallen while running away from a charging wild elephant, or dived into cover and crouched owe their lives to this inability of elephants. In a herd, it is likely that the adults are not able to see an infant that is right beneath or besides them clearly except perhaps as a dark blurred mass and I think the dark colour of the little one serves to save it from being trampled accidentally.

Wild elephants uproot and damage milestones posts and similar things when they are left or painted, white or some light colour but usually leave them alone if painted black - this is further evidence of the theory. An experienced electrical engineer once told me that the bases of the pylons carrying the power-lines through elephant jungles are invariably painted black to save them from being damaged by the great beasts.

An even more interesting example of this instinctive reaction to black is provided by the pilgrims who undertake the climb up Sabarimala in Kerala to the shrine of Aiyappan they wear black shirts and black dhoties not out of regard for any religious convention but out of prudence - they have to traverse through several miles of elephant forests, and believe they are less prone to attack if dressed in black.

At first sight this simple dodge might seem the complete solution to the problems of people living near or right inside elephant jungles. Wild elephants are undoubtedly the animals they dread the most and hostile brushes between the great beasts and men are much more frequent than is generally thought - not all cases of men killed by elephants are reported. It may be thought that in such places all that people have to do to secure immunity from attack by wild elephants is to wear black and tar their shed and dwellings.

I think such a practice will definitely lessen the risk to humanity from wild elephants but not eliminate it. I am thinking of the calf that got kicked in that documentary and also of the fact that animals are often moved by instincts that are mutually opposed, and go by what dominates them at the moment. An elephant may well attack something black when driven by fear or anger as everyone knows, elephants do fight among themselves at times.

In deep hill-jungles where men have not yet occupied their terrain, elephants tend to run away from humanity. But where they have been constantly disturbed and harassed by men who have invaded and occupied their homes and occasionally shot at, they develop a lasting hatred towards humanity. It would be quite necessary to stop the disturbance of the elephants and bar cultivation inside the jungles, before the inhibiting potential of black can be exploited effectively, and that would be an exceedingly difficult thing to do in India today."

M.Krishnan

This was first published on 19 February 1968 in the Sunday Statesman

## **Wildlife Photography -**

### **Tiger in Bandhavgarh by Sabyasachi Patra**



### **Rhino in Manas by Samrat Sarkar**



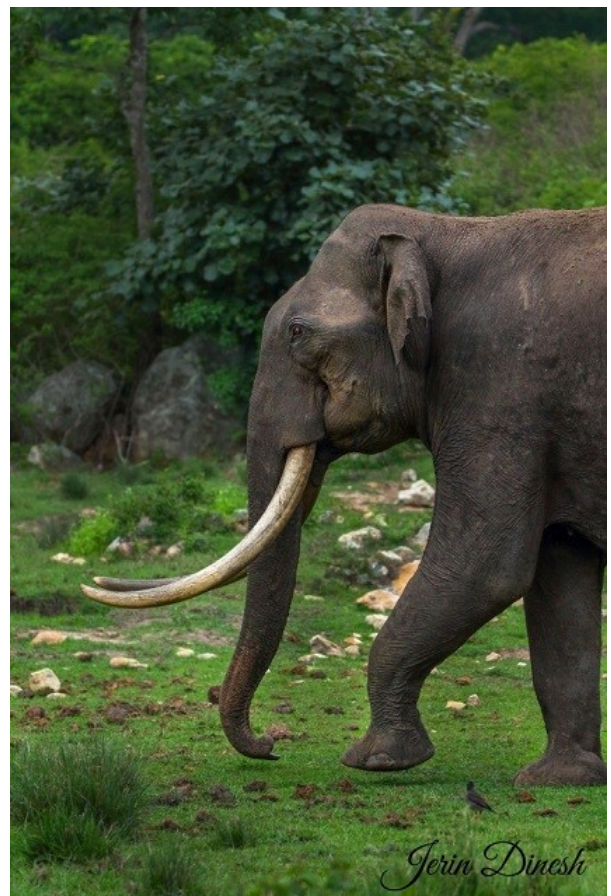


## **Wildlife Photography -**

### **Jackal by Shyamala Kumar**



### **Tusker by Jerin Dinesh**





## Wildlife Photography -

### Red billed Leiothrix by Jitendra Katre



### Lynx spider by Prajwal Ullal





This is the **114th Issue** of IndiaWilds. The photo of a spotted deer chewing a wafers packet adorns the cover page of this issue. This is the first time we have broken our rule of not featuring any image that has been substantially digitally altered. The plight of earth and its denizens due to the insensitive manner in which we are dumping plastic waste needs to be understood by our people. We hope our readers can rise up to the occasion and help in raising awareness among the masses so that we can change our behaviour and hence control and eradicate the plastic menace. Hope flows eternal in human breast. Together we can.

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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**Publisher's address: -**  
**Plot No. 1, Akarpuri Colony,**  
**Near Vaithal Temple, Old Town,**  
**Bhubaneswar, 751002**  
**Odisha**  
**Mobile - +919910900446**

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