





Yearly Review of Environment 2017 -Current Affairs Capsule in PDF

January 2017

'ET-like' insect species discovered

- Scientists have discovered a 100-million-year-old insect species with a triangular head and 'ET-like' appearance preserved in amber in Myanmar.
- There are about one million described species of insects, and millions more still to be discovered, but every species of insect on Earth has been placed in only 31 existing orders.

Doha amendments of Kyoto protocol

- It requires ratification from a total of 144 of the 192 parties of the Kyoto Protocol to become operational.
- India is expected to announce ratification of Doha amendments to the Kyoto Protocol on Tuesday.
- The Doha amend., made in 2012, had extended the legal obligation of developed countries to take targeted GHG's emission cuts until 2020, the year Kyoto Protocol is now scheduled to expire.

Februry 2017

• Rare butterfly varieties spotted

Ayyanarkoil Falls, which is situated within the Grizzled Squirrel
 Wildlife Sanctuary in Srivilliputhur, is also a habitat for very rare
 butterfly species.













 The Rajapalayam Butterfly Club, a wing of Wildlife Association of Rajapalayam has identified 220 species of butterflies here including the highly uncommon Silver Royal and Fluffy Tit.
 The Silver Royal is a rare species that we have spotted

• Pests eat away India"s 35% of yield

- According to Indian Council of Agricultural Research scientist, pests eat away about 30-35% of the annual crop yield in India.
- Such large-scale crop-loss is having an adverse effect on the agricultural biosafety which is paramount to food security of the count.

Olive Ridley turtles lay 3.55 lakh eggs

- o The endangered Olive Ridley turtles have laid a record 3.55 lakh eggs in the coast of Odisha within a span of one week, an official said Monday, adding the figure could touch four lakh mark this year.
- Over 3,55,000 eggs have been laid by Olive Ridley sea turtles within a
 week of mass nesting in Rushikulya river mouth of Ganjam coast, which is
 an all-time record.

• National Biodiversity Congress 2017

- The National Biodiversity Congress (NBC) 2017 was held in Thiruvananthapuram, capital of Kerala.
- NBC is one of the significant biodiversity mega events of the country. It aims to identify practical, evidence-based case studies at the regional level to support the plan of action.
- The focal theme of 2017 NBC was —Mainstreaming Biodiversity for Sustainable Development.

Tiny frog species found in Western Ghats













- Scientists exploring the forests of the Western Ghats have come across four new species of tiny frogs no bigger than a human thumbnail.
- These species are among the seven new _Night Frogs' discovered by a team of researchers from the University of Delhi and the Kerala Forest Department.
- Night Frogs belong to the Nyctibatrachus genus endemic to the Western Ghats.

• Informational cascades in honeybee

- A study has analysed the highly co-ordinated behaviour in honeybees, interpreting their communication pattern as an informational cascade process.
- The study was done by Nicole Carver & Damian Kelty-Stephen, of Grinnell
- Swarming behaviour in honeybees is unique and interesting because it is a flexible and distributed decision-making process.

Wild sanctuary to grow Muga cocoon

- The Assam government will raise a wild sanctuary to grow Muga cocoon.
- o Under this 25 lakh trees will be planted to get Eri and Muga cocoons.
- To promote products made of muga, silk and Eri, Assam government has set up Assam Silk Outreach Mission

• Centre permits Assam Govt. to use drones

- Centre has permitted the Assam government to use drones for vigilance at the Kaziranga national park.
- This step has been taken to prevent rhino poaching at the Kaziranga
 National park
- Other step taken to protect rhino poaching is appointment of 112 members
 Rhino Protection Force.













Delhi's air quality was worse in 2016

- As per pollution data shared by Union Environment Minister that the concentration of PM rose steadily in Delhi since 2014, while 2016 stands out for a rapid buildup compared to the previous years.
- The Minister informed that the Centre has notified the Graded Response Action Plan and empowered the Environment Pollution (Prevention and Control) Authority to implement it.

New species of Ghost Shark found

- Scientists have discovered a new species of Ghost Shark.
- It is the 50th species of ghost shark discovered & has rabbit-like teeth with bulky head.
- It is 3 feet in length & the second largest species of ghost shark ever discovered.
- The new discovery, now called H. Erithacus, was made between South
 Africa and Antarctica, in the Atlantic and Indian Oceans.

March 2017

Kanha tiger reserve gets official mascot

- Kanha has become the first tiger reserve in India to officially introduce a mascot — Bhoorsingh the Barasingha, a swamp deer.
- The Kanha tiger reserve, spread over Mandla and Balaghat districts, is the only place in the world where the species exists.
- The mascot aims to present the hard ground swamp deer as the spirit of the reserve and spread awareness to save it from possible extinction.

Mining banned in Uttarakhand

- The Uttarakhand High Court ordered a complete ban on mining activities in the State for four months.
- The move comes 4 days after a forest worker was allegedly killed in Ramnagar while he was chasing the mining mafia.













 The court directed the State government to refrain from granting any fresh license, mining lease, reconnaissance or prospecting license till the committee submitted its report.

• Kandi road project

- The Uttarakhand government will ensure that the wildlife at Corbett National Park is not harmed with the construction of the Kandi road which passes through it.
- The Kandi road project will reduce the distance between Garhwal and Kumaon by around 70 km.
- The Supreme Court had ordered the Public Works Department of the Uttarakhand government to prepare a new alignment of the project.

• Earth Hour 2017

- Earth Hour is the world's largest movement for the environment,
 organized by the World Wide Fund for Nature (WWF).
- The event is held annually encouraging individuals, communities, households and businesses to turn off their non-essential lights for one hour, from 8:30 to 9:30 p.m. towards the end of March.
- In 2017, it will be held from 8:30 pm and 9: 30 pm on Saturday, March
 25.

World's 1st fluorescent frog discovered

- The worlds 1st fluorescent frog has been discovered in the Amazon basin.
- In normal light the frog appears to have a dull, mottled brown-green skin with red dots, but under UV light it glows a bright fluorescent green.
- Fluorescence- the ability to absorb light at short wavelengths and reemit it at longer wavelengths- is uncommon in creatures that live on land.













• 25000 years old Ostriches found

- Though it is native to Africa, several geologists and archaeologists have over the time found ostrich egg shell pieces in India, mostly in Rajasthan.
- A DNA study of some partly fossilised ostrich egg shells was recently conducted at the Centre for Cellular and Molecular Biology.
- The carbon dating to determine the age shows that they are at least 25,000 years old,"

• New hydrocarbon exploration policy

- India has announced a new hydrocarbon exploration licensing policy which offers single license to explore oil and gas resources.
- Hydrocarbon Exploration Licensing Policy or HELP, the new policy also gives the investors the much needed freedom in pricing and marketing for crude oil and natural gas.
- The new policy will make India a business and investor friendly destination.

• 'Operation Thunder Bird'

- 'Operation Thunder Bird' is the code name for Interpol's multi-national and multi-species enforcement operation in India.
- The operation brought about a unanimous approach by the state enforcement agencies in the fight against wildlife crime in the country.
- Wildlife Crime Control Bureau has convened a species specific operation on turtles,code named 'Operation Save Kurma' from Dec15 to Jan30.

Government's biotech innovation centre

The government's nodal funding agency for the biotech industry, the Biotechnology Industry Research Assistance Council (BIRAC), will house its regional entrepreneurship centre at Bengaluru-based Centre













for Cellular and Molecular Platforms (C-CAMP), a biotechnology innovation incubator.

 "BIRAC's Regional Entrepreneurship Centre's (BREC) aim is to increase portfolio through partnerships.

WG: 57000 sq km as eco. Sensitive

- The government has finally notified nearly 57,000 square km area in the Western Ghats region as ecologically sensitive area (ESA).
- The 56,825 square km of land is spread over six states of Gujarat,
 Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu.
- The notification covers an area that is slightly less than the 59,940 sq km of area identified by a committee headed by K Kasturirangan in 2013.

April 2017

Tiger death in Madhya Pradesh

- The death of the two cubs, one on April 22 and the second on April 23, had prompted the National Tiger Conservation Authority to send a team to Bandhavgarh from Delhi.
- Days after the death of two orphaned cubs in Bandhavgarh Tiger Reserve, their third sibling succumbed to viral infection.
- o The three cubs had recently been infected by parvovirus.

• BBC banned for 5 years

- The government has prohibited the BBC from filming in India's national parks and wildlife sanctuaries for "irreparable damage done to India's reputation".
- The ministry's April 10 order upholds and extends the ban from tiger reserves to all national parks and sanctuaries.













 The ministry found that the BBC projected a negative portrayal of India's conservation success story at the Tiger Reserve.

• India, UK to setup fund for green energy

- India and UK decided to set up a 240 million pound fund to finance clean energy projects.
- o The Green Growth Equity Fund will be a sub-fund of NIIF.
- India had in 2015 set up the Rs 40,000 crore National Infrastructure and Investment Fund (NIIF) to finance greenfield as well as brownfield projects.

• Belmont Forum Secretariat

- The government has given its approval for signing of the Collaborative
 Agreement with French National Research Agency, France.
- The MoU will be signed for supporting the Belmont Forum Secretariat from January, 2015 to December, 2017 at a total estimated expenditure of 40000 Euros.
- The Forum aims to improve the environment through research and cooperation.

Tree-dwelling crab found in Kerala

- Scientists from the University of Kerala have discovered a new species of long-legged, tree-dwelling crabs named Kani maranjandu in Western Ghats of Kerala.
- o The new species named Kani maranjandu after the Kani tribe in Kerala
- \circ This is the first report of its kind to offer a record of an arboreal crab a species that lives in trees.

• 19th commonwealth forestry conference

- Scientists and experts from 49 member countries of the Commonwealth will gather here on April 3 to participate in a five-day forestry conference.
- o The conference will be held at Dehradun-based Forest Research Institute.













 The event will witness 4 plenary sessions and altogether 21 technical sessions.

Rail routes declared as Green Corridors

- The North Western Railway has declared the Barmer-Munawab and Pipad Road-Bilara rail routes in Rajasthan as Green Corridors.
- With this total number of green corridors has increased to three.
- The Green Corridor ensures zero toilet discharge on rail tracks as part of its commitment to clean environment under the 'Swachh Rail-Swachh Bharat' initiative.

May 2017

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June 2017

Environmental Impact Survey

- Mozambique, rated as one of the poorest country has topped a survey of nations with the lowest global environmental impact.
- It topped the list as all its energy use comes from green sources.
- India was placed 75th with renewable energy making up only 15.2 per cent of all energy used.
- Africa as a continent topped the charts while Trinidad and Tobago stood at the bottom.

Facebook Launches 'Disaster Maps'

- Facebook has launched disaster maps, an initiative aimed at helping humanitarian organisations save lives in emergencies.
- Maps will reflect the movements and location of people before, during and after disasters to help aid agencies work out where they should deliver food, water and medical supplies.
- Facebook is currently beta testing the product with World Food Programme, UNICEF, and IFRC.

• World Health Assembly held in Geneva.

70th edition of World Health Assembly was held from 22nd to 31st May
 2017 in Geneva, Switzerland.













- Member States elected Dr Tedros Adhanom Ghebreyesus as the new Director-General of WHO.
- From India, J P Nadda, Union Minister for Health and Family Welfare,
 addressed the plenary meeting on the theme 'Advancing the 2030
 Agenda for Sustainable Development: building better systems for health'.

• MoES to launch Deep Ocean Mission

- o MoES is all set to launch 'Deep Ocean Mission' by January 2018.
- o It will improve India's position in ocean research field.
- India has designated an area of 75,000 square km for deep sea exploration.
- This area has an estimated resource of about 100 million tonnes of strategic metals such Copper, Nickel, Cobalt besides Manganese and Iron.

August 2017

• India has 27312 elephants

- Preliminary results from the first ever synchronised all India Elephant
 Population Estimation pegs India's Asian elephant population at 27312.
- According to the report, released by the Ministry of Environment, Forests and Climate Change on Aug12, Karnataka has the highest number of elephants, followed by Assam & Kerala.
- The survey was carried out by the Asian Nature Conservation Foundation

· 2016 as warmest year on record

- Report compiled by US govt agency has confirmed that 2016 was the warmest year on record & the 3rd year in a row of record global warmth.
- Heat was the result of long-term global warming & a strong El Niño weather phenomenon.
- $_{\odot}$ Global surface & sea temperatures, sea levels & greenhouse gases levels were all at record highs.













2016 surpassed 2015 as the warmest year in 137 years of record keeping

September 2017

'Lab on boat' for analysing Brahmaputra

- A new project of Department of Biotechnology aims at starting a 'lab on boat' on Bramhaputra river for biological analysis of the river system.
- Project also proposes to have multiple mobile laboratories on the river
 & its tributaries along with providing access to local research institutions.
- Anchored by IIT-Guwahati, project is supported by Ministry of Development of North Eastern Region.

• Environment Ministry to conduct Quiz

- Ministry of Environment, Forest & Climate Change will hold a quiz on environment 'Prakriti Khoj' throughout the country.
- Quiz is planned in 5 rounds & qualifying round will begin on 25th of this month by paying tribute to Pandit Deen Dayal Upadhyaya on his birth anniversary.
- Thematic areas like climate change, biodiversity, pollution, waste management etc. have been chosen for the quiz.

· Presence of aerosol over Asia

- A joint study by ISRO & NASA which had commenced after satellite images showed presence of an aerosol layer over Asia region, has confirmed the same.
- o The study also found presence of nitrate, which is a new finding
- Aerosol are sub-micron size particles suspended in air that are produced from a variety of man-made & natural processes such as vehicle exhaust, waste-burning & wind blown dust.
- Survey to remeasure Mount Everest











- Nepal has begun remeasuring Mount Everest to check if the height of the world's tallest peak was altered by a powerful earthquake that struck the nation in 2015.
- The official height of Mount Everest is 8,848 metres (29,029 feet), first recorded by an Indian survey in 1954.
- Nepal has never measured Everest on its own although the world's highest peak lies in its territory.

• Snow leopard upgraded to 'vulnerable'

- Elusive snow leopard, long considered endangered has been upgraded to vulnerable.
- It still face serious challenges including poaching & loss of prey in their Himalayan habitat. Snow leopards had been listed as endangered since 1972.
- Endangered snow leopard is found in rugged mountains of Central Asia.
- Snow leopards are perfectly adapted to cold, barren landscape of their high-altitude home.

Augmentation Prog In Buxa Tiger Reserve

- o Tigers will roar again at Buxa Tiger Reserve in West Bengal.
- Located in Alipurduar district, the reserve, parts of which border Bhutan, has been identified for the tiger augmentation programme by the National Tiger Conservation Authority.
- Notified as a tiger reserve in 1983, Buxa consists of moist, deciduous and evergreen forests.

October 2017

Asian vulture species in protection list













- Four Asian vultures, were awarded the highest protection by the Convention on the Conservation of Migratory Species of Wild Animals, held in Manila.
- The Asian vultures that were included on highest protection list are the red-headed vulture, white-rumped vulture, Indian vulture and slenderbilled vulture.
- The whale shark, which inhabits the Indian Ocean, also got global protection.

• Rs. 2 Lakh Fine On Environment Ministry

- Supreme Court has fined of Rs 2 lakh on the Union Environment Ministry for not fixing the pollution emission standards of Sulphur Dioxide and Nitrogen Oxide for 34 categories of industries as per May 2 order.
- SC banned using pet coke and furnace oil in Delhi and the NCR to control the air pollution.
- The bench of Justice Madan B Lokur and Justice Deepak Gupta pronounced the judgement.

New species of large gecko discovered

- According to a paper published in the taxonomic journal Comptes Rendus Biologies, a team of scientists have discovered a new species of gecko (lizard) from the Eastern Ghats.
- o It was discovered at Chhattisgarh's Kanger Ghati National Park.
- The Kanger Valley rock gecko grows over eight inches long and has a distinct black-bordered beige bands right from its neck to the tip of the tail.

• 'Very poor' air quality in Delhi-NCR

 The Air Quality Index value in Delhi on 19 October was 319, terming it in very poor category.













- The Central Pollution Control Board reported that the pollution levels in Delhi are lower compared to the air quality recorded during Diwali in 2016.
- Fine particulates, PM2.5 and PM10, which enter the respiratory system and manage to reach the bloodstream, sharply rose.

• Sawfish more threatened than tigers

- The sawfish have been sighted off the Indian coast less than 10 times in over a decade and they appear to be more threatened than tigers and elephants, say marine scientists.
- They are included in Schedule I of the Indian Wildlife (Protection) Act 1972.
- A statement issued by the Central Marine Fisheries Research Institute said the sawfish may be the most endangered fish species in India.

Chhattisgarh bans PVC used in carry bags

- Chhattisgarh Government has completely banned the usage of Polyvinyl
 Chloride (PVC) carry bags in their state.
- The government also banned the manufacture, storage, import, sale, transport and use of such plastic-borne goods.
- o It is on the lines of article 48-A of the Constitution of India, which expects that every state will try to conserve and improve the environment.

• 2-day world conference on environment

- The National Green Tribunal will hold a two-day world conference on environment in the national capital from November 3.
- The conference will be held in association with the United Nations
 Environment Programme, the Asian Development Bank, the Ministry of
 Environment and Forests and the Ministry of Water Resources.
- The National Green Tribunal is headed by Chairperson Justice Swatanter Kumar.

Solar panels to light governor's house













- Maharashtra Governor Ch Vidyasagar Rao, has decided to transform all his homes in Mumbai, Pune and Nagpur, to function on solar energy.
- Raj Bhavan officials have decided to use the bhavan's six acre land to set up ground-based solar panels, capable of generating more than 15 lakh units of power annually.
- The Maharashtra Energy Development Agency (MEDA) is the nodal agency for this project.

• Madhya Pradesh loses 17 tigers in 2017

- Madhya Pradesh, once popularly known as the 'tiger state', has lost 17 big cats so far this year, as per National Tiger Conservation Authority.
- India is currently home to 70% of the world's tiger population in over 17 states and 50 sanctuaries across the country.
- At present, there are 38 tiger reserves, while 6 of them, namely Kanha,
 Panna, Bandhavgarh, Pench, Satpura and Sanjay are in MP.

• Snow leopard sighted in Arunachal

- A camera, placed by researchers in Arunanchal Pradesh has captured the first photos of the elusive endangered snow leopard.
- The presence of the big cat beyond these protected areas highlights the importance of community support for conservation.
- This perhaps is the first time that the presence of snow leopard has been reported through a camera photograph from the state of Arunachal Pradesh.

November 2017

Mock exercise on tsunami preparedness













- National Disaster Management Authority & Indian National Centre for Ocean Information Services will conduct a multi-State mega mock exercise on tsunami preparedness.
- Exercise will be conducted in 31 coastal districts across 4 States & Puducherry along the East Coast.
- It is one of the various activities planned on the occasion of 2nd World
 Tsunami Awareness Day held on November 5 this year.

· New species of parasitic flowering plant

- Scientists have discovered a new species of parasitic flowering plant that has no chlorophyll, and survives by feeding on another species of plant.
- The species, named Gleadovia konyakianorum, in honour of the Konyak tribe of Nagas, was identified this year near Tobu town of Mon district in eastern Nagaland.
- The plant was found in the semi-evergreen forest at an altitude of 1,500-1,600 metres

Road-map for 'Talanoa Dialogue'

- The UN climate conference concluded with countries putting in place a road-map for 'Talanoa Dialogue'.
- The Conference also made progress on framing rules for implementing the Paris Agreement and brought the rich nations on board to walk the talk on their pre-2020 commitments.
- It is an effort to achieve the climate goal of keeping the global average temperature rise within 2 degree Celsius.

Climate Change Performance Index 2018

- India has ranked 14th out of 56 nations and European Union on Climate Change Performance Index 2018 released by environmental organisation Germanwatch.
- This marks an improvement from its 20th rank in CCPI 2017. CCPI keeps track of countries' efforts in combating climate change.













 CCPI 2018 report was released on November 15, 2017, on the sidelines of the UN COP23 in Bonn, Germany.

• Syria signs up Paris Agreement

- On 14th November 2017, United Nations announced that Syria has officially signed the Paris Agreement on climate change.
- Syria has become the 169th of 196 countries that are members of the UN climate convention to take the legal step of ratification.
- Paris agreement on climate change is an agreement within the UNFCCC dealing with greenhouse gas emissions mitigation, adaptation and finance.

Founding Ceremony of ISA in Bonn

- A Curtain Raiser Event for the Founding Ceremony of the International Solar Alliance was held in Bonn, Germany.
- The ISA was jointly launched in 2015 by Modi & then-President of France during UNFCCC Conference.
- The ISA is a treaty-based alliance of 121 prospective solar-rich Member Nations situated fully or partially between the Tropics & aims at the development of solar energy globally.

Global climate risk Index

- India is the sixth most vulnerable country in the world in terms of facing extreme weather events, according to global climate risk index.
- Haiti, Zimbabwe, Fiji, Sri Lanka and Vietnam are at top five positions in the fresh list of nations facing climate risk.
- The ranking was released here by the Germanwatch, an independent Berlin-based development and environmental organisation.

• Gurugram to have butterfly park

 Forests Minister Rao Narbir Singh laid the foundation stone for Butterfly Conservatory Park.













- It will be developed on 15 acres in Sector 52 of Gurugram and will be the biggest butterfly park in North India.
- The park is to conserve the species of butterflies that are near extinction because of the massive urbanisation in the area.
- o The park will be developed in association with Uthaan, an NGO.

Varanasi is the most polluted city

- A report by the Central Pollution Control Board has found that the air quality of holy city Varanasi is most polluted among the 42 cities monitored recently.
- Varanasi's Air Quality Index was at an alarming 491, followed by Gurugram at 480, and Delhi at 468.
- Stubble burning by farmers in Punjab & Haryana are speculated to have added to the factors causing pollution in northern belt of India.

• Delhi govt 'defers' odd-even

- Delhi govt has called off the odd-even scheme, which was to be implemented from 13th Nov, after the National Green Tribunal ordered withdrawal of exemptions under it.
- The decision came in view of the directive by NGT, which ordered withdrawal of all exemptions, including to two-wheeler riders & womanonly vehicles.
- o Trucks and two- wheelers are the major polluters in Delhi.





