Prelim Bits 14-10-2022 | UPSC Daily Current Affairs

Snow Leopards in Arunachal Pradesh

Forest officials of Arunachal Pradesh are eagerly waiting for the report of its first snow leopard enumeration in the state conducted with technical support from the World Wildlife Fund for Nature (WWF).

- The WWF-India is doing the data analysis of the survey and the report is likely to be published on the International Snow Leopard Day (October 23).
- The snow leopard has never been spotted nor recorded in the Namdapha National Park and Tiger Reserve in Arunachal Pradesh.

Snow Leopard

- Snow leopards *(Panthera uncia)* have thick white-gray coat spotted with large black rosettes.
- This helps them blends in perfectly with Asia's steep and rocky, high mountains.
- Because of their camouflaging ability, they are referred as the "**ghost of the mountains**".
- **Habitat** - They are found in rugged mountainous areas or non-forested areas covering an altitude between 3200m-5200m.
- **Distribution** - Snow leopards have a vast but fragmented distribution across the mountainous landscape of central Asia.
- In India, they are distributed across different parts of the Himalayas - Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim.
- **Threats** - Poaching, shrinking habitats and declines in natural prey species.
- **Significance** - Snow leopards play a key role as a top predator.
- It is an important indicator of the impacts of climate change on mountain environments.
- **Conservation Status**
  - IUCN - Vulnerable
  - Indian Wildlife (Protection) Act, 1972 - Schedule-I
  - Convention on International Trade in Endangered Species (CITES)- Appendix I
  - Convention on Migratory Species (CMS)- Appendix I
- **Conservation efforts of India**
  - Project Snow Leopard is a centrally-supported program to conserve the species and habitats.
  - SECURE Himalaya funded by the Global Environment Facility.

Namdapha National Park and Tiger Reserve

- The Namdapha reserve bordering Myanmar has an elevation varying from 200 metres to 4,571 metres above sea level.
- The river Namdapha flows across this reserve.
- Namdapha is the known home of three other large cats - tiger, leopard and clouded leopard.
- The highly endangered and only 'ape' species Hoolock Gibbons found in India dwells in this reserve.

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Paddy Straw Torrefaction

The Union Environment Ministry announced a ₹50 crore scheme to incentivise industrialists and entrepreneurs to set up paddy straw pelletisation and torrefaction plants.

> *Torrefaction is the thermochemical conversion method to produce coal fuel (bio char) from biomass.*

- **Paddy stubble burning** is practised mainly in the Indo-Gangetic plains of Punjab, Haryana, and UP
- The farmers clear their fields for sowing the winter crop, burns straw stubble after harvesting paddy.
- The emissions from stubble burning add to the air pollution crisis in Delhi.
- The government has attempted to dissuade farmers from burning straw through penalising them as well as incentivising them.
- Some alternative methods followed are -
    - Encourage using bio-decomposer (a chemical that decomposes the straw into mulch).
    - Feed to cattle as fodder.
    - Paddy straw torrefaction and pelletisation used for co-firing in thermal power plants.
- **Scheme** - The Central Pollution Control Boards (CPCB) released guidelines for an incentive scheme for promoting establishment of paddy straw based pelletisation and torrefaction plants.
- The CPCB guidelines will bridge a crucial gap in the biomass supply chain.
- Under this incentive scheme, **one-time financial assistance** will be given to individuals and companies to set up torrefaction and pelletisation plants.

- For non-torrefied pellet plant, maximum grant of Rs. 14 lakhs per Ton/hr is being provided with an overall cap of Rs. 70 lakhs.
- For a torrefied pellet plant, maximum grant of Rs. 28 lakhs per Ton/hr is being provided with an overall cap Rs. 1.4 crore.
- This financial assistance can be availed for setting up new plants and units using only paddy straw generated in Delhi, Punjab and Haryana, and NCR districts of Rajasthan and Uttar Pradesh.

Punjab and Haryana generate around 27 million tonnes of paddy straw a year, of which around 6.4 million tonnes is not managed.

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Conference on Interaction and Confidence Building Measures in Asia

The 6th Summit meeting of the Conference on Interaction and Confidence Building Measures in Asia (CICA) held in Astana, Kazakhstan.

- The Conference on Interaction and Confidence Building Measures in Asia (CICA) is a multi-national forum for enhancing cooperation towards promoting peace, security and stability in Asia.
- The CICA was convened in 1992, at the 47th Session of the United Nations General Assembly.
- **Members and Observers** - To be a member of CICA, a state must have at least a part of its territory in Asia.
- Currently, CICA has 27 Member States and 14 observers.
- The CICA Secretariat - It is an administrative body of CICA and is located in Nur-Sultan, Kazakhstan.
- **Summit** - The highest decision making organ of CICA is the Meeting of the CICA Heads of State and Government (Summit).
- The CICA Summit is convened every four years in order to conduct consultations, review the progress of, and set priorities for CICA activities.
- **India and CICA** – India is a founding member of CICA.
- India is the coordinator of CICA's confidence building measures in combating terrorism

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Just Energy Transition Partnership

The Union Ministry of Power has opposed the G7 nations' plan of persuading India to start negotiations on a Just Energy Transition Partnership.

- The Just Energy Transition Partnership (JETP) initiative is modelled for the South Africa, to support South Africa's decarbonisation efforts.
- It aims to reduce emissions in the energy sector and accelerate the coal phase-out process.
- The JETP was launched at the COP26 in Glasgow with the support of the United Kingdom (UK), the United States (US), France, Germany, and the European Union (EU)
- Following that G7 has announced for a similar partnership in India, Indonesia, Senegal, and Vietnam.
- **India's stand** - India argues that coal cannot be singled out as a polluting fuel, and energy transition talks need to take place on equal terms.

The G7 is an informal grouping of seven of the world's advanced economies: Canada, France, Germany, Italy, Japan, the UK, the US and the European Union.

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Living Planet Report 2022

The 14th edition of the flagship publication World Wildlife Fund (WWF) The Living Planet Report 2022 was published.

- The Living Planet Report is a comprehensive study of trends in global biodiversity and the health of the planet.
- The report is based on the Living Planet Index.
- According to the report, there is an average decline of 69% in species populations since 1970.
- The report highlighted the link between the two issues - Biodiversity loss and climate crisis, for the first time.
- Unless we stop treating these emergencies as two separate issues neither problem will be addressed effectively.

- The world is facing **double emergencies** of human-induced climate change and biodiversity loss threatening the well-being of current and future generations.

Key Findings of the Report

- **Biodiversity** - The biodiversity decline around the world for different regions
  - The Latin America and the Caribbean region - 94% (highest)
  - The Africa – 66%
  - The Asia-Pacific region – 55%
- **Aquatic species** - Freshwater species populations globally reduced by 83%, confirming that the planet is experiencing a “biodiversity and climate crisis”
- Habitat loss and barriers to migration routes were responsible for about half of the threats to monitored migratory fish species.
- **Coral reef systems** - They are an indicator for healthy oceans, but we have already lost around 50% of warm-water coral reefs.
- These data shows that cycads (an ancient group of plants) are most threatened, while corals are declining fastest.
- **Mangroves** - Mangrove-loss represents loss of habitat for biodiversity and the loss of ecosystem services for coastal communities.
- Around 137 square kilometres of the Sundarbans mangrove forest in India and Bangladesh has been eroded since 1985, affecting 10 million people who live there.
- **Food production** - This has caused 70% of biodiversity loss on land and 50% in fresh water.
- It is also responsible for around 30% of all greenhouse gas emissions.
- **Threat Hotspot** - WWF identified six key threats to biodiversity — agriculture, hunting, logging, pollution, invasive species and climate change to highlight ‘threat hotspots' for terrestrial vertebrates.
- **Sustainable Global supply chain** - There is an urgent need to address the sustainability of natural resource supply chains, given the impact they have on nature and people.
- A new ambitious multi-country collaboration is linking international trade systems to social and environmental impacts to try to bend the curve of biodiversity loss at scale.
- To reverse natural loss, it requires more conservation efforts, more sustainable production and more sustainable consumption.

Living Planet Index

- The Living Planet Index (LPI) is a measure of the state of the world's biological diversity based on population trends of vertebrate species from terrestrial, freshwater and marine habitats.
- The LPI is provided by the Zoological Society of London (ZSL).
- It features about 32,000 populations of 5,230 species across the world.
- This year’s index showed that vertebrate wildlife populations are falling at a particularly staggering rate in tropical regions of the world.

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