

## Prelim Bits 05-11-2022 | UPSC Daily Current Affairs

### National Tribal Dance Festival

*Raipur hosted the 3rd National Tribal Dance Festival as part of Chhattisgarh State Foundation Day.*

- The 3<sup>rd</sup> National Tribal Dance Festival was organised by Government of Chhattisgarh.
- The tribal festival increased the scope for the spread and exchange of tribal culture.
- More than 1,500 tribal performers from India and ten other nations performed at the event.
- **Lambadi dance** - It is a folk dance of the Banjara tribe.
- Lambadi folk dance is performed mainly by women to seek blessing from god for a good harvest.
- Lambadi is a mix of Rajasthan and Telangana cultures.
- **Banjara Tribe** - Banjara or Lambadi is a nomadic trading tribe.
- They have roots in Rajasthan but settled in several states of India.
- They speak Lambada dialect (a combination of Sanskrit, Rajasthani and Gujarati).
- **Siddi Tribe** also performed a cultural dance at the festival.
- Siddi Tribe is an African-origin tribe settled in India.
- They came to India 850 years ago.
- Siddis are found in concentrations in Karnataka and Gujarat.

### References

1. [The Hindu - A delectable India at Chhattisgarh's National Tribal Dance Festival](#)
2. [Hindustan Times - Folk artists performed the 'Lambadi dance' at the National Tribal Festival](#)
3. [Times of India - Siddi Tribe performs cultural dance at National Tribal Dance Festival](#)

### Gaia BH1

*Astronomers have discovered the closest known black hole to Earth, initially identified using Gaia Space Telescope.*

- The [Black hole](#), named **Gaia BH1** is the closest known black hole to Earth.
- It is located in the constellation **Ophiuchus**, the serpent-bearer.
- This black hole is 10 times more massive than our sun and is dormant.
- It is 1600 light-years away i.e., three times closer than the previous closest black hole.
- Gaia BH1 resides in a binary system whose other member is a sunlike star.

### Gaia Space Telescope

- European Space Agency launched Gaia Space Telescope in 2013.

- It measures the precise positions, speeds and trajectories of about 2 billion of the brightest stars in the Milky Way Galaxy.
- The telescope will be active till 2025.

## References

1. [The Hindu - Closest known black hole to Earth spotted by astronomers](#)
2. [Space.com - Record breaker! Newfound black hole is closest known to Earth](#)
3. [Science News - Astronomers have found the closest known black hole to Earth](#)

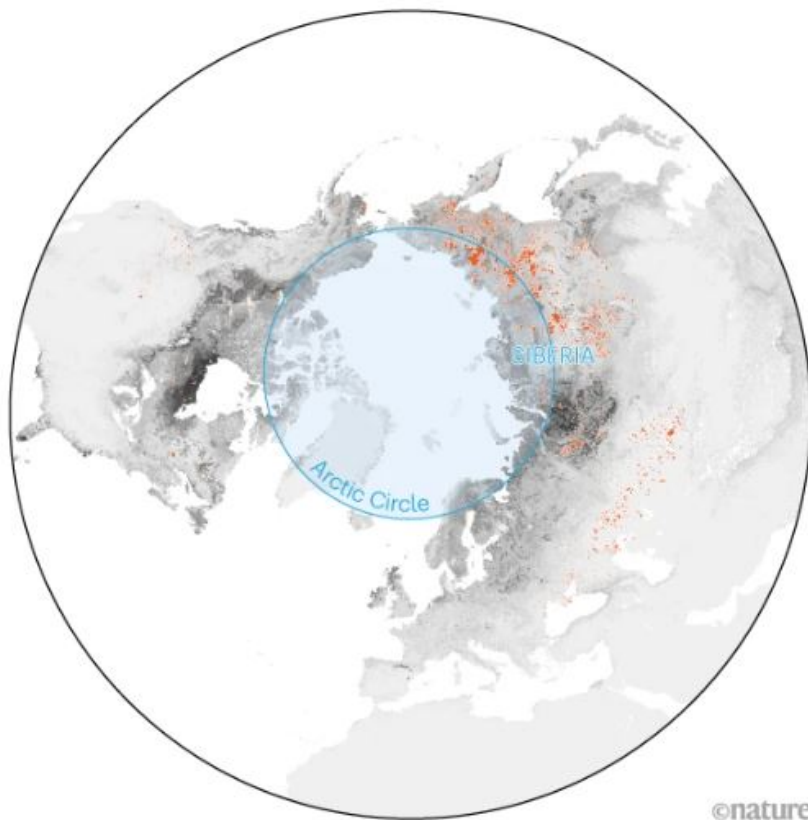
## Arctic fires

*According to a study, the fires triggered in Arctic forests by rising temperatures caused by global warming, in turn, can lead the world deeper into crisis.*

- **Arctic Fires** - Wild fires that occur in tundra and boreal forests along the Arctic Circle.
- They occur mostly in summer and are infrequent in nature.
- **Impact of global warming** - As the Arctic warms, the fire season is longer with more frequent and intense fires.
- Arctic soils store huge amounts of organic carbon, much of it in peatlands in frozen condition.
- Climate warming thaws and dries peatland soil, makes intense Arctic fires likely to happen.
- **Zombie fires** - Fires in peat can smoulder for long time and when they come back, they emit lot of smoke and are difficult to extinguish.
- They come back from dead fire like zombies, hence known as zombie fires.

*Permafrost fires releases more carbon, thus shifting Arctic from a net sink for carbon to a net source of carbon.*

■ Peatland density ■ Wildfires (June–August 2020)



*In 2019 and 2020, fires in Siberia destroyed a surface area equivalent to nearly half of that which burned in the previous 40 years.*

## Study Findings

- Recent fires in Siberia have spewed some 150 million tonnes of carbon into the atmosphere.
- The area above the Arctic Circle heats up 4 times faster than the rest of the planet and this causes abnormal fire activity.
- An association between higher temperatures, longer growing season, and greener vegetation led to fires.



## References

1. [The Hindu - Arctic fires could release catastrophic amounts of CO2: Study](#)
2. [Down To Earth - Arctic forest fires caused by global warming can jeopardise climate goals](#)

## Adaptation Gap Report 2022

The UN Environment Programme (UNEP) released Adaptation Gap Report 2022 ahead of COP27 being held at Sharm El-Sheikh, Egypt.

- Adaptation Gap Report provides an **annual** science-based assessment of the global progress on adaptation planning, financing, and implementation.
- It also explores options for enhancing and advancing national and global adaptation efforts and provides in-depth analysis of selected issues of interest.
- UNEP publishes the Adaptation Gap Report **since 2014**, with the aim to inform the climate negotiations among UN Member States.

### Report Highlights

- International adaptation finance flows to developing countries are 5-10 times below estimated needs and the gap is widening.
- Adaptation needs in the developing world are set to skyrocket to as much as \$340 billion a year by 2030.
- Implementation of adaptation actions in agriculture, water, ecosystems and cross-cutting sectors is increasing.
- Unprecedented political will and long-term investments in adaptation are urgently needed.
- The report also highlighted that the best way was to **link actions on mitigation and adaptation** in terms of planning, financing and implementation, which would provide co-benefits.
- The report suggested 4 critical ways in which the adaptation gap can be addressed.
  1. To increase **financing** for adaptation. The developed countries should **double finance for adaptation** to \$40 billion by 2025 as promised at COP 26 in Glasgow.
  2. The need for a **new business model** for turning adaptation priorities into investable projects.
  3. The availability of **climate risk data** and information which is an issue for adaptation planning in many developing countries.
  4. The implementation and operationalisation of **early warning systems** against extreme weather events and slow onset changes such as sea level rise.

### United Nations Environment Programme

- United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda.
- UNEP is headquartered in Nairobi, Kenya
- It works on 7 broad thematic areas - Climate change, Disasters and conflicts, Ecosystem management, Environmental governance, Chemicals and waste, Resource efficiency, and Environment under review
- The UNEP depend on voluntary contributions for 95% of their income.

## References

1. [Down To Earth - Adaptation Gap Report 2022 raises alarm on climate finance](#)
2. [UNEP - Press Release - Adaptation Gap Report 2022](#)

## South Asia Drought Monitoring System

*New drought monitoring tool for better preparation, mitigation at farmer level place in India and across South Asia is launched.*

- The South Asia Drought Monitoring System (SADMS) is a **satellite-based drought-monitoring tool** developed in 2014.
- SADMS was developed by the International Water Management Institute (IWMI) and the Indian Council of Agricultural Research (ICAR).
- The system has three components:
  1. Monitoring and forecasting,
  2. Vulnerability and impact assessment and
  3. Mitigation and response planning.
- **Working** - SADMS produces a **weekly map** of drought conditions and indicates the presence of drought and its **level of severity**.
- SADMS incorporate multisource information like **real-time weather updates** and open-access **satellite data**.
- It provides all the information needed to forecast, monitor and manage drought on a weekly basis.
- Thus providing authorities the maximum possible lead time to put mitigation strategies into place in India and across South Asia.
- It has been tested in India, Pakistan, Bangladesh, Sri Lanka, Nepal, Maldives, Afghanistan and Bhutan.

*As per the United Nation's 2022 - Drought assessment, India is one of the severely drought-impacted countries. Nearly two-thirds of the country suffered drought during 2020-2022.*

- **SADMS in India** - The platform is already in operation in India.
- The system is used to find right time to initiate their strategy for mitigating drought.
- The data from the drought-monitoring system is available at grid level and can be visualised up to taluk level in India.
- SADMS can be put in use to formulate district-wise contingency plans.

## References

1. [Down To Earth - New drought monitoring tool gives hope of better preparation, mitigation at farmer level](#)
2. [International Water Management Institute - South Asia Drought Monitoring System](#)
3. [IWMI - IWMI launches the South Asia Drought Monitoring System \(SADMS\)](#)



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