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 3rd 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 Artic from a net sink for carbon to a net source of carbon.

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 C02: 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)

