

India as biodiversity champion

- The importance of our planet's biodiversity was strongly articulated at the United Nations Biodiversity Conference in Montreal, Canada.
- On December 19, 2022, 188 country representatives adopted an agreement to "halt and reverse" biodiversity loss by conserving 30% of the world's land and 30% of the world's oceans by 2030, known as the 30x30 pledge.
- India currently hosts 17% of the planet's human population and 17% of the global area in biodiversity hotspots, placing it at the helm to guide the planet in becoming biodiversity champion.
- The Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) is particularly significant because of the extraordinary importance of mangroves and coastal ecosystems in mitigating climate change.
- The Prime Minister Programme for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth (PM-PRANAM) for reducing inputs of synthetic fertilizers and pesticides is critical for sustaining our agriculture.
- Finally, the Amrit Dharohar scheme directly mentions our biological wealth and is expected to "encourage optimal use of wetlands, and enhance biodiversity, carbon stock, eco-tourism opportunities, and income generation for local communities".

Programs with potential

- In response to this call, the Union Budget 2023 mentioned "Green Growth" as one of the seven priorities or Saptarishis.
- The National Mission for a Green India aims to increase forest cover on degraded lands and protect existing forested lands.
- The Green Credit Programme has the objective to "incentivize environmentally sustainable and responsive actions by companies, individuals and local bodies".
- The recent intervention by the Ministry of Environment, Forest and Climate Change to stop the draining of Haiderpur, a Ramsar wetland in Uttar Pradesh, to safeguard migratory waterfowl is encouraging.
- New missions and programmes should effectively use modern concepts of sustainability and valuation of ecosystems that consider ecological, cultural, and sociological aspects of our biological wealth.

- The future of our wetland ecosystems will depend on how we are able to sustain ecological flows through a reduction in water use in key sectors such as agriculture by encouraging changes to less- water-intensive crops such as millets as well as investments in water recycling in urban areas using a combination of grey and blue -green infrastructure.

Steps Needed

- As far as the Green India Mission is concerned, implementation should focus on ecological restoration rather than tree plantation and choose sites where it can contribute to ecological connectivity in landscapes fragmented by linear infrastructure.
- Finally, each of these efforts must be inclusive of local and nomadic communities where these initiatives will be implemented. Traditional knowledge and practices of these communities should be integrated into the implementation plans.
- We hope that the National Mission on Biodiversity and Human Wellbeing, already approved by the Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC), will be

immediately launched by the government.

- This mission seeks to harness the power of interdisciplinary knowledge for greening India and its economy, to restore and enrich our natural capital for the well-being of our people, and to position India as a global leader in applied biodiversity science.

THE HINDU

Keeladi and Tamil civilization

- Keeladi is a tiny hamlet in the Sivaganga district in south Tamil Nadu.
- It is about 12 km south-east of the temple city of Madurai and is located along the Vaigai river.
- The excavations here from 2015 prove that an urban civilization existed in Tamil Nadu in the Sangam age on the banks of the Vaigai River.
- Keeladi could also provide crucial evidence for understanding the missing links of the Iron Age (12th century BCE to sixth century BCE) to the Early Historic Period (sixth century BCE to fourth century BCE) and subsequent cultural developments.
- The unearthed Keeladi artefacts have led academics to describe the

site as part of the Vaigai Valley Civilisation.

- The findings have also invited comparisons with the Indus Valley Civilisation while acknowledging the cultural gap of 1,000 years between the two places.
- Till now, the gap is filled with Iron Age material in south India, which serves as residual links.

What has been unearthed so far?

- The unearthing of heaps of pottery suggests the existence of a pottery-making industry, mostly made of locally available raw materials.
- Over 120 potsherds containing Tamil Brahmi inscriptions have been found.
- Keeladi, along with other Tamil Nadu sites which have over a thousand inscribed potsherds, clearly suggest the long survival of the script.

How is Keeladi linked to Sangam age?

- The Sangam age is a period of history in ancient Tamil Nadu that was believed to be from the third century BCE to the third century CE.
- The name is derived from the renowned Sangam poets of Madurai from that time.
- Spindle whorls, copper needles, terracotta seals, hanging stones of

the yarn, terracotta spheres, and earthen vessels to hold liquid suggest various stages of a weaving industry.

- There also existed a dyeing industry and a glass bead industry.
- Gold ornaments, copper articles, semi-precious stones, shell bangles, ivory bangles, and ivory combs reflect the artistic, culturally rich, and prosperous lifestyle of the Keeladi people.
- Agate and carnelian beads suggest import through commercial networks while terracotta and ivory dice, gamesmen, and evidence of hopscotch have been unearthed revealing their pastime hobbies.

THE HINDU

French troops to withdraw from Burkina Faso

- On February 19, Burkina Faso announced an official end to the operations led by France in the country.
- France had signed a military agreement with Burkina Faso in 2018 to achieve stability against the threat of Islamist militant groups

Why is France withdrawing?

- For Paris, the military governments in West Africa pose multiple challenges.

- In February 2022, while announcing the withdrawal of France and its allies from Mali, French President Emmanuel Macron said, “Victory against terror is not possible if it’s not supported by the state itself.”
- France has also been critical of Russian inroads into Africa.
- It has accused the Russian private military company Wagner Group of working closely with the military governments in West Africa.
- On January 23, Burkina Faso’s military government announced its decision to end the military agreement with France and called on Paris to withdraw its troops within a month.

Why did Burkina Faso end it?

- France was asked to withdraw its troops from Burkina Faso months after it pulled out its troops from Mali.
- The primary reason behind the withdrawal is the failure of its counter-insurgency operations in the Sahel region against Islamist groups. Islamist insurgency has surged since 2015 and fuelled two coups in Burkina Faso last year.
- The violence linked to al-Qaeda and Islamic State groups has killed thousands and forced more than two

million to flee their homes in the country.

THE HINDU

Health and voting behaviour

- Electoral accountability for the delivery of services requires responsibility.
- If voters do not think that a government is responsible for the functioning of a particular service, then they have no incentive to hold them accountable for whether that service is delivered well or not.
- Providing health facilities, whether it is good hospitals, medicines or the availability of doctors and other medical facilities is the responsibility of the State government.
- Findings from the survey indicate that most citizens are also aware that the provision of health facilities is the responsibility of the State government, even if many States do not fulfill the requirement of spending 8% of the total budget on health as laid down by the National Health Policy drafted in 2017.
- But the survey also indicates a sizeable number of people think health services are the responsibility of the Central government and some believe that it is the responsibility of all levels of government.

- This may potentially blur the lines of electoral accountability.

THE HINDU

Dickinsonia

- Fossils of an extinct species of animal that scientists reported in a sensational discovery from India's Bhimbetka Rock Shelters in 2021 have been found to be belied hope
- Dickinsonia fossil' found in Bhimbetka is an old beehive
- There, according to The New York Times, they spotted by chance what looked like a 44-cm-wide fossil of Dickinsonia, an animal that lived at least 538 million years ago, in a cave

Dickinsonia

- Dickinsonia is an extinct genus of basal animal that lived during the late Ediacaran period in a geographical area now divided into Australia, China, India, Russia, and Ukraine. The individual Dickinsonia typically resembles a bilaterally symmetrical ribbed ova.



THE HINDU

Ban of caste discrimination

- Seattle has become the first city in the U.S. to ban discrimination based on caste,
- "Caste discrimination doesn't only take place in other countries.
- It is faced by South Asian American and other immigrant working people in their workplaces, including in the tech sector, in Seattle and in cities around the country,"

THE HINDU

Heat and wheat production

- If the prevailing high temperatures continue through March, then the Rabi wheat crop will be impacted and yields will at best be on a par, or even lesser marginally, than last year's low, warns a report.
- In Uttar Pradesh, which accounts for about 30% of wheat production, the eastern part is expected to have relatively good yields due to timely sowing after the kharif paddy harvest.

A) Climatic Requirement for Wheat Cultivation:

- 1. Wheat is a temperate crop but widely adapted to varying climate conditions.
- 2. It needs cool, dry and clear climate for better growth and yield.
- 3. The optimum temperature range for growth is between 70C to 210C.
- 4. The rainfall requirement is 750 to 1600 mm/year.
- 5. Hot and humid climate is harmful because it encourages the infestation of diseases like rust, root rot etc.
- 6. In early growth stage, it requires cool temperature and dew formation which increases tillering.
- 7. Very low temperature, cloudy atmosphere and frost during grain filling stage is harmful.

WHEAT

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