theIAShub

the IAS hub
Be Your Dream.

MARCH
2

CRUX 10

10 News. 10 Sources. One Place

THE HINDU
ET
BS
TOI
The Indian EXPRESS
livemint
pib
DownToEarth
FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH
Science Reporter
विज्ञान एवं प्रौद्योगिकी मन्त्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY



Table of Contents

1. Study on Elephant
2. India-Myanmar Relations
3. GDP-GVA
4. Biological Invasion
5. VSHORADS
6. Indian semiconductor Mission
7. NUCFDC
8. Exercise Samudra Laksamana
9. Project ODISERV
10. India Meteorological Department

THE HINDU Page 10

STUDY ON ELEPHANT

(Syllabus: GS Paper 3 – Env and Eco)

Elephants take dead calves to be buried in untrodden paths: study

Rahul Karmakar
GUWAHATI



Strong bond: Elephants taking the carcass of an elephant calf for burial. SPECIAL ARRANGEMENT

Elephants in the eastern Himalayan floodplains bury their calves in a 'legs upright' position, a new study has found. Through long-term observation, the researchers also found that elephant herds tend to avoid the paths where the carcasses were buried and take parallel routes.

"We aimed to understand the peri-mortem strategy and post-mortem behaviour of the Asian elephants. The major findings reflect that the carcasses were carried by trunks and legs for a distance before being buried in a 'legs upright' position," researchers said in the study published in the latest issue of the *Journal of Threatened Taxa*.

Rampant environmental changes and forest destruction push Asian elephants (*Elephas maximus*) and their African counterparts (*Loxodonta africana*) to explore human spaces to fulfil their dietary and ecological requirements, leading to 'novel' elephant behaviours in shared spaces.

While elephant calf burial is mentioned in African literature, it has hardly been documented in the Asian context. Parveen Kaswan, an Indian Forest Service officer posted in Alipurduar of West Bengal and Akashdeep Roy of the Indian Institute of Science Education and Research in Pune studied five such cases in the northern Bengal landscape.

The study area covered fragmented forests, tea estates, agricultural lands, and military establishments in the vicinity of the Gorumara Wildlife Division and Buxa Tiger Reserve. It explains the burial strategy of elephants in the irrigation drains of the tea estates.

Marks on the bodies of the calves – the youngest weighing 160 kg was three or four months old while the oldest was about 12 months and weighed 350 kg – suggested the elephants dragged them from a distance to be buried at preferred locations.

The locations were irrigation drains of the tea estates where many elephants are born too, the study said.

The "strange" positioning of each carcass with the legs upright could be because one or more members of a herd needed a better grip to hold and lay the calf delicately in the trench.

"This strategic behaviour also reflects the care and affection of the herd member(s) towards the deceased. The behaviour suggests that in a situation of space crunch, the herd member(s) prioritise the head for the burial before the feet," the study said.

Context: Elephants in the eastern Himalayan floodplains bury their calves in a 'legs upright' position, a new study has found.

Study of Journal of Threatened Taxa

- **Novel Elephant Behaviours in Shared Spaces**: Rampant environmental changes and forest destruction force Asian and African elephants into human territories to meet their dietary and ecological needs.
- **Unearthing Elephant Calf Burials**: Elephant calf burial, previously mentioned in African literature, has been documented in the northern Bengal landscape by Parveen Kaswan and Akashdeep Roy.
- **Habitat Challenges and Conservation Concerns**: With only 5% of their historic home range remaining globally, elephants face habitat fragmentation and land-use challenges.
    - India, hosting over 60% of the Asian elephant population, confronts conservation issues due to substantial dietary requirements and habitat loss outside protected areas.
- **Northern Bengal**: Northern Bengal districts, including Darjeeling, Kalimpong, Jalpaiguri, and Alipurduar, accommodate over 500 elephants, highlighting the significance of the region for elephant conservation.

Asian Elephant: Key Facts

- **Current Global population:** 50,000 – 60,000, of which **more than 60%** are in India.
- **Indian States with Highest Population:** Karnataka (6000+), followed by Assam (5,700+) and Kerala (3,000+)
- **Threats:** Poaching, Habitat loss, Human-Elephant conflict, and mistreatment in captivity.
- **Gestation:** they have the longest pregnancy of any living mammal (22 Months).
- **Conservation status: IUCN:** Endangered, **Wildlife (Protection) Act, 1972:** Schedule I, **CITES:** Appendix I, **CMS:** Appendix I.
    - **Elephant declared as the national heritage animal** by GoI in 2010.
- **World Elephant Day**: 12 August

African Elephant

- **About:** They are slightly larger than Asian Elephants and can be identified by their larger ears. (Asian elephants have smaller, rounded ears)
- **African Savanna (or bush) elephant**: IUCN Red List: Endangered
- **African Forest Elephants**: IUCN Red List: Critically Endangered

INDIA-MYANMAR RELATIONS

(Syllabus GS Paper 2 – IR)

Rethink decision to seal India-Myanmar border, Nagaland urges Centre

SUKRITA BARUAH
GUWAHATI, MARCH 1

THE LEGISLATIVE Assembly in Nagaland, where the Nationalist Democratic Progressive Party and the BJP are in power in a coalition government, Friday unanimously passed a resolution urging the Centre to reconsider its decision to seal the Indo-Myanmar border. Earlier this week, the Mizoram Assembly had passed a similar resolution.

In February, the Union government announced its decision to end the Free Movement Regime (FMR) agreement with Myanmar and fence the entire length of the border. The FMR agreement had allowed tribes living along the border on either side to travel up to 16 km inside the other country without a visa and stay up to two weeks.

The Indo-Myanmar border is 1,643 kilometres long and runs along Arunachal Pradesh, Mizoram, Nagaland and Manipur. While the Manipur and Arunachal Pradesh governments welcomed the decision to scrap FMR, civil society groups and the governments in Mizoram and Nagaland have opposed it.

In the Nagaland Assembly, the resolution against the decision was moved by Deputy Chief Minister Y Patton, who is from the BJP. This represents the strongest stance taken by the Nagaland government on the issue. Both Mizoram and Nagaland have extensive ethnic ties to Myanmar. The Mizos of Mizoram and the Chins of Myanmar are of the same ethnicity, and Myanmar also has a sizeable population of Nagas, mostly in the Naga Self-Administered Zone in Myanmar's Sagaing region.

The Nagaland Assembly resolution states that the end of the FMR and the fencing of the border would not only cause "hardship and inconvenience", but also "agony to the Naga people living in the Indo-Myanmar border areas due to the fact that the traditional land holding system straddles across the international border in many areas, and people have to cross the international border on a daily basis for their normal cultivation activities".

It also stated that these measures would "seriously disrupt the age-old historical, social, tribal, and economic ties of the Naga people living on both sides of the international border".

The resolution urged the Centre to reconsider its decision, and called for a consultative process to work out regulations for the movement of people across borders, involving the people living along these borders and the village council authorities concerned.

During the discussion in the Assembly, Nagaland's other Deputy Chief Minister, T R Zeliang, said the Nagas on both sides of the border "lived as free people without any artificial borders until the Treaty of Yandabo in 1826 which established the current India-Myanmar boundary". The decision to seal the border has been premised on security concerns such as the influx of illegal immigrants, drugs, and free movement of insurgents seeking shelter in Myanmar.

Context: Recently, the Legislative Assembly in Nagaland unanimously passed a resolution urging the Centre to reconsider its decision to seal the Indo-Myanmar border, following a similar resolution passed earlier this week by the Mizoram Assembly.

India–Myanmar Border

- **About**: It is the international border between India and Myanmar (formerly Burma).
- **Length**: 1,643 kilometres (1,021 mi) in length and runs from the tripoint with China in the north to the tripoint with Bangladesh in the south.
- **The border between India and Myanmar runs along four states**: Mizoram, Manipur, Nagaland and Arunachal Pradesh.
- **Capital city**: Naypyidaw

India Myanmar Relations

- **Historical, Ethnic, and Cultural Ties:** India and Myanmar share deep historical, ethnic, cultural, and religious connections.
- **Strategic Relations:** Myanmar's strategic location makes it a bridge between South Asia and Southeast Asia. India and Myanmar have engaged in cooperation to counteract drug trafficking and insurgent groups along their shared border.
- **Economic Relations**: India and Myanmar are members of BIMSTEC, SAARC, and the Mekong-Ganga Cooperation, which have facilitated closer ties and increased influence among Southeast Asian nations.
- **Trade Relations**: Bilateral trade has been growing steadily to reach US$ 2178.44 million (2016-17), of which Indian exports amounted to US$ 1111.19 million and India's imports to US$ 1067.25 million.
    - India is the fifth largest trading partner of Myanmar but trade remains below potential.

GDP-GVA
(Syllabus: GS Paper 3 – Economy)

GDP-GVA disparity due to lower subsidy

Rhik Kundu
rhik.kundu@livemint.com
NEW DELHI

The divergence in gross domestic product (GDP) and gross value added (GVA) data for the third quarter of FY24 could be attributed to lower fertilizer subsidy disbursements, said a senior government official.

India's GDP spiked to a six-quarter high of 8.4% during Q3 FY24, beating estimates, while GVA growth was at 6.5%, showed data from the statistics ministry. "The government operates on cash basis, not accrual, accounting for cash payments," Madan Sabnavis, chief economist at Bank of Baroda explained. "With actual spending on food and fertilizer subsidies totalling 70-75% of the revised estimates, it suggests the government has not fully disbursed subsidies, causing the disparity between GDP and GVA."

In the revised budget estimates for FY24, the government increased the allocation for fertilizer subsidy to ₹1.89 trillion from the initially budgeted ₹1.75 trillion. GVA quantifies value of goods and services produced in a country, deducting cost of inputs and raw materials. It adjusts GDP by factoring in subsidies and taxes on products.

In the April 2023-January 2024 period, the Centre provided about ₹1.71 trillion as fertilizer subsidy, according to a parliamentary submission by Bhagwanth Khuba, minister of state for chemicals and fertilizers, last month.

In the April 2023-January 2024 period, the Centre provided about ₹1.71 trillion as fertilizer subsidy

However, budgeted estimates for fertilizer subsidy, at ₹1.64 trillion, for FY25 is lower than the revised estimates for FY24.

The government revised the fiscal deficit target for FY24 to 5.8% of GDP, from 5.9% estimated earlier, following higher-than-expected tax collections, and higher dividends by public sector banks (₹98,000 crore in the first three quarters of FY24) and Reserve Bank of India (a record ₹87,416 crore). "The Centre is trying to meet its revised fiscal deficit target for FY24," the official said.

Context: A senior government official recently attributed the divergence in gross domestic product (GDP) and gross value added (GVA) data for the third quarter of FY24 to reduced fertilizer subsidy disbursements.

- India's GDP spiked to a six-quarter high of 8.4% in Q3 FY24, surpassing estimates, while GVA growth stood at 6.5% during the same period, according to data from the statistics ministry.

Gross Domestic Product (GDP)

- **About**: The GDP is the total market value of all final goods and services in an economy.
- Country performance can be evaluated by comparing GDP figures from one year to another and by comparing them to other nations.
- **Types of GDP**
  - **Growth of GDP**: It can be either due to increase in actual production or due to increase in prices of goods and services or combination of both the above two factors.
  - **Nominal GDP**: It is the value of GDP at the current prevailing prices.
  - **Real GDP**: It is the value of GDP at some constant set of prices.
- **Factors**: Land, Labour, Capital and Management within the domestic boundaries of a country.
- **Formula:** GDP = Consumption + Investment + Government Spending + Net Exports.

Difference between GDP-GVA and their Utility

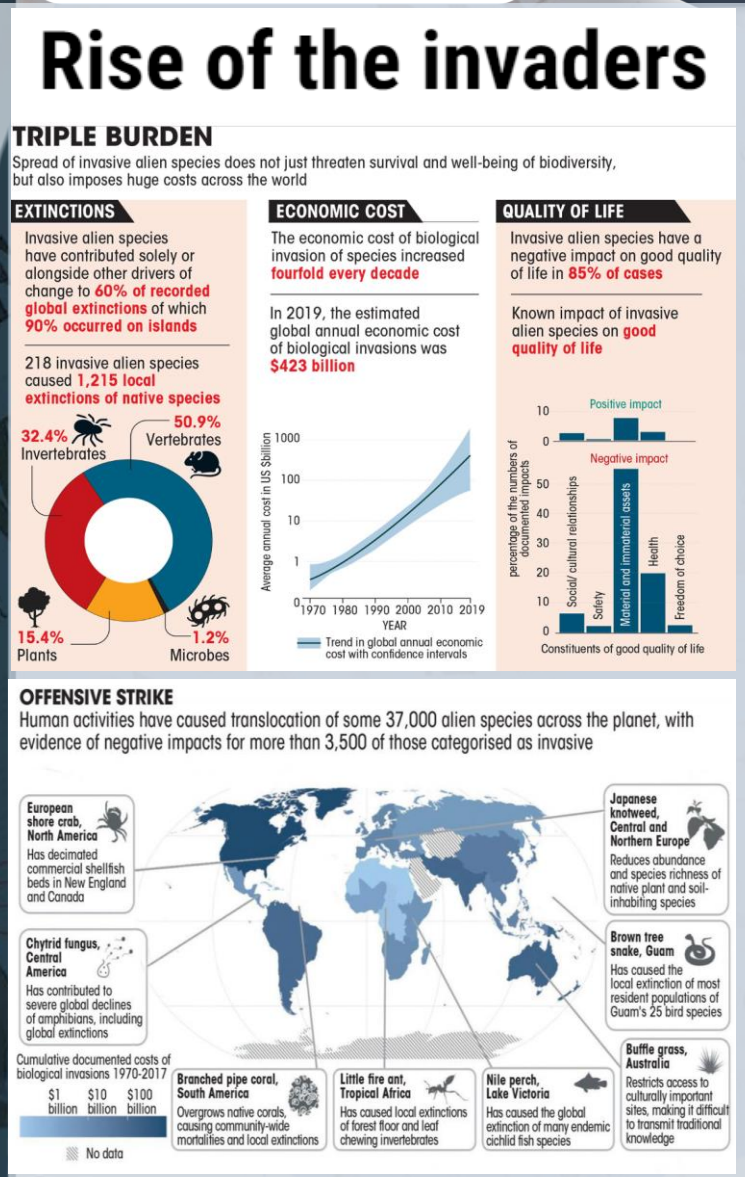
Parameter	Gross Domestic Product (GDP)	Gross Value Added (GVA)
Definition	GDP is the **market value of all final goods and services** produced within the territorial boundaries of a country for a given period.	GVA is the **total value of goods and services produced** within a country after deducting the cost of inputs and raw materials.
Measurement	It is measured by the **output, income,** and **expenditure approaches**.	It is measured by **output reach** and used as a **proxy** for GDP.
Technical Relationship (difference) between GDP and GVA: GDP = ΣGVA + Net taxes on Products – Net Subsidies on Products.		
Purpose	GDP is an **internationally accepted measure of overall economic growth** in a country	GVA is used to **measure sector-wise details of economic activity** from the production side.

DTE

Mar 1

BIOLOGICAL INVASION

(Syllabus: GS Paper 3 – Environment)



Context: In recent news, the phenomenon of biological invasion has gained attention as plants and animals increasingly move across habitats and ecosystems, either through human intervention for profit or inadvertently during global shipments.

Biological Invasion

- **About:** They are a significant force driving change across various dimensions of life on Earth.
- **Global Status of Invasions**: Invasions occur when species colonize new, isolated geographic regions, and globally, alien species rank among the top five major drivers of change alongside land- and sea-use change, direct exploitation, climate change, and pollution.
- **Extinction Threat**: No place on Earth remains untouched by biological invasion, leading to the extinction of thousands of species, with at least 218 invasive species causing over 1,200 local extinctions.
- **Negative Impact on Native Species**: Approximately 85% of the effects of biological invasions on native species are detrimental, as highlighted in the IPBES assessment report.
- **Rising Economic Burden**: The economic cost of biological invasions has been increasing fourfold each decade since 1970, indicating a growing challenge for global economies.

Invasive Alien Species

- **About**: It stand as one of the five primary direct drivers causing biodiversity loss worldwide, alongside land and sea use change, direct organism exploitation, climate change, and pollution.
- **Continuous Rise in Alien Species**: The number of invasive alien species has been on a continual ascent for centuries, affecting all regions and ecosystems across the globe.
- **Dominance of Water Hyacinth**: The water hyacinth holds the title of the world's most widespread invasive alien species on land, underscoring its significant impact on various ecosystems.

VSHORADS
(Syllabus: GS Paper 3 – Sci and Tech)

DRDO completes flight tests of Very Short-Range Air Defence System

Context: The Defence Research and Development Organisation (DRDO) successfully conducted two flight tests of the Very Short-Range Air Defence System (VSHORADS) missile.

Very Short-Range Air Defence System (VSHORADS)

- **About:** It is a man-portable air-defence system developed indigenously by Research Centre Imarat (RCI) in collaboration with other DRDO laboratories and Indian industry partners.
- **Technological Advancements:** The missile features advanced technologies such as a miniaturised reaction control system (RCS) and integrated avionics, successfully demonstrated during tests.
- **Purpose and Design**: VSHORADS is a fourth-generation Man Portable Air Defence System (MANPAD) specifically crafted to counter low-altitude aerial threats over short distances.
    - These systems are characterized by their short-range, lightweight, and portable nature, suitable for individual or small group operation.
- **Indigenous Development**: DRDO's Research Centre Imarat (RCI), Hyderabad, spearheaded the indigenous design and development of VSHORADS, collaborating with other DRDO facilities and Indian industry partners.
- **Features**:
    - **Protection and Defense:** It is tailored to provide short-range air defense capabilities, safeguarding ground forces and critical assets from aerial threats, including helicopters and low-flying aircraft.
    - **Operational Range**: The system boasts a range of up to 6 kilometers, effectively covering short distances to intercept incoming threats.
    - **Technological Components**: The missile integrates several cutting-edge technologies such as a Dual-band IIR Seeker, a miniaturized Reaction Control System, and integrated avionics.
    - **Propulsion and Mobility**: Propelled by a dual-thrust solid motor, the missile and its launcher are designed for portability, facilitating quick deployment even in challenging terrains.

NEW INDIAN EXPRESS

Page 6

INDIAN SEMICONDUCTOR MISSION

(Syllabus: GS Paper 3 – Sci and Tech)

Leap for chip mission

The approval to a domestic fabrication unit among many others is a big fillip to India's semiconductor ambition

NEARLY TWO YEARS after the government first rolled out the ₹76,000-crore incentive scheme for developing a domestic ecosystem for semiconductor manufacturing, the results are visible. As communications and IT minister Ashwini Vaishnaw told this newspaper, with the approval of four projects totalling ₹1.49 trillion, the entire chip value chain—design, packaging, and fabrication—has made its presence felt in the country. While the first chip project that got approved in June 2023 was of US-based Micron Technology for assembly, testing, marking, and packaging (ATMP), it's noteworthy that the first proposal to get approved for domestic fabrication is from a domestic firm—Tata Group—in partnership with Taiwan's Power Semiconductor Manufacturing Corp. Another of Tata Group's projects is for packaging. From a point where no domestic firm was present in the chip manufacturing chain two years ago, the country will now have a domestic firm having a presence in fabrication as well as packaging. If one looks at Tata Group's earlier acquisition of Taiwan's Wistron to manufacture iPhones in the country, it can be safely concluded that domestic manufacturing in the electronics space has yielded fruitful results.

The semiconductor incentive scheme was formulated to fill a gap which existed in the ecosystem. India always had talent, expertise and orders for semiconductor design but these then flowed outside the country for fabrication, so the manufacturing link was missing. Since semiconductors are today used in all manufacturing units—from mobile phones, electronics products, automobiles—it's essential that the manufacturing base is spread across geographical locations than be concentrated in some areas. The Russia-Ukraine war brought this to the fore very clearly.

The initial hiccups in the policy taking off the ground could have been due to the skewed incentive structure which was corrected in September, 2022, by making the fiscal support of 50% of project cost uniform across all technology nodes for setting up semiconductor units. Initially, the government had provided for financial support of up to 50% of project cost for at least two semiconductor and two display fabs for a minimum of six years. For others, like compound semiconductors, sensor fabs etc, fiscal support of 30% was offered.

There were initial doubts regarding the viability of domestic units as chances of them getting global orders seemed challenging. This got dispelled, perhaps, with Micron's decision to set up a packaging unit in the country. It manufactures wafers, which is the raw form, at its Japan and China units. These would be brought to the India unit, where they would be processed into chips, packaged and then transported globally to industries which use semiconductor in their products. This model seems to have clicked with global majors because India also offers comparatively cheap, trained labour.

With three more projects getting approved and several in the evaluation stage, an ecosystem for manufacturing as well as ancillary industry seems to be developing in the semiconductor value chain much like the automobile sector. The cabinet's approval for the projects is a major fillip to India's semiconductor ambitions. The next step is to demonstrate that the units being set up in the country are viable and do not suffer from any policy or regulatory glitches. Since domestic manufacturing of smartphones and now semiconductors have taken concrete shape, the timing is right for the government to focus on an incentive-linked component manufacturing scheme to shore up domestic value addition and check trade deficit.

Context: Nearly two years after the government initially launched the 76,000crore incentive scheme aimed at fostering a domestic ecosystem for semiconductor manufacturing, the results are becoming evident.

Indian semiconductor Mission

- **About**: ISM has been setup as an Independent Business Division within Digital India Corporation to formulate strategies for developing semiconductors and display manufacturing facilities.
- **Nodal Ministry**: Ministry of Electronics & IT.
- **Objective**:
  - Formulate a comprehensive long-term strategy for developing sustainable semiconductors and display manufacturing facilities.
  - developing trusted semiconductor supply chain, including raw material
  - facilitate indigenous Intellectual Property (IP).
  - encourage, enable and incentivize Transfer of Technologies (ToT).
- **SemiconIndia Programme**
  - The Union Cabinet had approved the comprehensive Semicon India programme with a financial outlay of INR 76,000 crore for the development of a sustainable semiconductor and display ecosystem in 2021.
  - ISM has been working as nodal agency for the Schemes approved under Semicon India Programme.

Semiconductors

- **About:** Semiconductors are materials with electrical conductivity between that of conductors and insulators. silicon (Si) and germanium (Ge).
- **Relation with temperature:** Resistance decreases with increasing temperature and vice-versa.
- **Types**: Intrinsic semiconductors are pure semiconductors, while **extrinsic** are doped with impurities to enhance conductivity.
- **Reason for vast applications**: The electrical conductivity of a semiconductor device can be controlled over a wide range.

PIB Feb 29

NUCFDC

(Syllabus: GS Paper 3 – Economy)

Union Home Minister and Minister of Cooperation, Shri Amit Shah to launch National Urban Co-operative Finance and Development Corporation Limited (NUCFDC), the Umbrella organization for the Urban Cooperative Banks (UCBs) on Saturday in New Delhi

Context: Union Home Minister and Minister of Cooperation will launch **National Urban Co-operative Finance and Development Corporation Limited (NUCFDC).**

NUCFDC

- **Formation**: NUCFDC serves as the central entity for Urban Cooperative Banks (UCBs), streamlining their operations and regulatory interactions.
- **Objectives:**
  - **Modernization and Strengthening**: Its primary goal is to modernize and fortify the Urban Cooperative Banking Sector in India, fostering mutual benefits for banks and customers.
  - **Facilitating Communication**: NUCFDC acts as a platform to enhance communication between banks and regulators while addressing sector-specific challenges.
- **Capital Target**: NUCFDC aims to raise a capital of Rs. 300 crores, providing a robust financial foundation.
- **Regulatory Approval:** It has obtained the Certificate of Registration (CoR) from the RBI, authorizing its operation as a Non-Banking Finance Company (NBFC). Additionally, it will function as a Self-Regulatory Organization (SRO) for the sector.
- **Services Offered by NUCFDC:** NUCFDC plans to establish a shared technology platform for UCBs, expanding their service offerings while minimizing operational costs.
- **Consultancy and Fund Management**: Besides liquidity and capital support, NUCFDC can provide consultancy services and efficient fund management solutions.

Significance of NUCFDC

- It aligns with the national objectives of 'Sahakar se Samriddhi' (Prosperity through Cooperation) and 'Aatma Nirbhar' Bharat (Self-Reliant India), contributing to the economic growth and resilience of the nation.

Urban Co-operative Banks (UCBs)

- **Definition**: Urban Co-operative Banks (UCBs) are primary cooperative banks situated in urban and semi-urban areas, although lacking a formal definition.
- **Evolution**: Until 1996, UCBs were restricted to lending exclusively for non-agricultural purposes, a policy that has since been overturned.
- **Community-Centric Origins**: UCBs historically revolved around specific communities, localities, and workplace groups, serving as integral financial institutions for small borrowers and businesses.

Exercise Samudra Laksamana
(Syllabus: GS Paper 2 – IR)

India-Malaysia bilateral naval exercise underway in Vizag

Context: Exercise Samudra Laksamana is underway from 28 Feb - 02 Mar 24 at/ off Visakhapatnam.

Exercise Samudra Laksamana

- **About**: It is a joint naval exercise between the navies of India and Malaysia.
- **Aim:** To strengthen bonds and enhance interoperability between the two forces.
- **Participant of India**: Indian Naval Ship Kiltan
- **Participant of Malaysia**: Royal Malaysian Ship KD Lekir.
- **Two Phase of Exercise**:
- **During the harbour phase**, professional interactions, official calls, social engagements, visits by the local populace, and various sports events will take place.
- **The Sea Phase** of the exercise aims to refine the skills of both navies to enhance interoperability, ensuring peaceful and secure seas for all.

INS Kiltan

- **About**: It is a formidable anti-submarine warfare corvette serving the Indian Navy as part of Project 28, marking a significant advancement in naval capabilities.
- **Third Kamorta-class Corvette**: Among the four Kamorta-class corvettes, INS Kiltan stands out as the third, showcasing India's prowess in naval construction and modernization efforts.
- **Localization Endeavors**: With a remarkable feat of localization, INS Kiltan incorporates approximately 90% of its content sourced from within India, underlining the nation's drive towards self-sufficiency and indigenous defense production.

PIB Mar 1

PROJECT ODISERV
(Syllabus: GS Paper 2 – Social Issues)

Shri Dharmendra Pradhan launches Project ODISERV

Context: Union Minister of Education and Skill Development & Entrepreneurship, launched Project ODISERV in Sambalpur to prepare young graduates of Odisha for employment opportunities in the financial services sector.

Project ODISERV

- **About**: This Project aims to empower the youth of Odisha, making them more employable and helping them fulfill their aspirations.
- **Training Impact**: Already, 1100 students in Odisha have received training under Project ODISERV, enhancing their readiness for the job market.
- **Skill Enhancement Program**: A 100-hour training program is set to equip Odisha's youth with essential skills needed in the banking, finance, and insurance industries, enhancing their competencies and employability.
- **Contribution to Entrepreneurship**: Project ODISERV's launch is significant as Odisha strives to become a hub for entrepreneurship and start-ups, especially through initiatives like the 100 Cube initiative.
- **Expansion of Certification Program**: Project ODISERV plans to introduce the Certificate Programme for Banking Finance & Insurance (CPBFI) in 60 colleges across 11 cities and 10 districts in Odisha, including Sambalpur, Dhenkanal, Angul, Cuttack, Khordha, Balasore, and Puri.

National Skill Development Corporation (NSDC)

- **About**: NSDC stands as the principal architect of the skill ecosystem in India.
- **Nodal Ministry**: Ministry of Skill Development & Entrepreneurship (MSDE), Government of India.
- **Implementation Partner**: NSDC acts as the strategic implementation partner to the Skill India Mission.
- **Youth Empowerment**: NSDC's goal is to empower India's youth through efficient vocational training initiatives.
- **Futuristic Skill Development**: NSDC focuses on offering opportunities in futuristic skills to the potential workforce.

INDIA METEOROLOGICAL DEPARTMENT

(Syllabus: GS Paper 3 – Env & Eco)

India may see warmer summer this yr: IMD

AGENCIES
1 March

India is likely to experience a warmer summer this year with El Nino conditions predicted to continue at least until May, the India Meteorological Department said on Friday.

More heatwave days than normal are predicted over northeast peninsular India — Telangana, Andhra Pradesh and north interior Karnataka — and many parts of Maharashtra and Odisha, it said.

The country is likely to record above-normal rainfall in March (more than 117 per cent of the long-period average of 29.9 mm).

India is likely to see above-normal maximum and minimum temperatures in most parts of the country in the March to May period, IMD Director General Mrutyunjay Mohapatra said at a press conference.



SWEATY DAYS AHEAD

- The hotter-than-normal temperatures until May can pose a threat to crops, which may increase the risk of curbs on grain exports to continue
- Maximum temperatures are expected to be above normal in most parts of the country
- In March, temperatures may be higher than average over many areas of southern, northeast, central and northwest regions
- The prediction poses fresh challenges to the govt, which is trying to keep food prices under check by restricting shipments of wheat, rice and sugar

Heatwave conditions are not expected over north and central India in March, he said.

Lok Sabha polls are likely to be held in April-May.

Mohapatra said the prevailing El Nino conditions — the periodic warming of waters in the central Pacific Ocean — will continue through the summer season and neutral conditions are likely to develop thereafter. La Nina conditions — generally associated with good monsoon rainfall in India — are likely to set in by the second half of the monsoon season. The IMD chief also said that India recorded an average minimum temperature of 14.61 degrees Celsius in February, the second highest in the month since 1901.

A total of eight western disturbances — cyclonic storms originating in the Mediterranean region and beyond — affected the weather in western Himalayan states in February. Of these, six were active western disturbances that led to rain and hailstorms over the plains in north and central India.

Context: India is likely to experience a warmer summer this year with El Nino conditions predicted to continue at least until May, according to the India Meteorological Department.

Key Points of IMD

- **Heatwave Prediction**: More heatwave days than normal are predicted over northeast peninsular India, including Telangana, Andhra Pradesh, north interior Karnataka, as well as many parts of Maharashtra and Odisha.
- **Above-Normal Rainfall**: The country is likely to record above-normal rainfall in March, exceeding 117 percent of the long-period average of 29.9 mm.
- **Above-Normal Temperatures**: India is likely to see above-normal maximum and minimum temperatures in most parts of the country from March to May.
- **Absence of Heatwave Conditions:** Heatwave conditions are not expected over north and central India in March.
- Prediction of La Nina: La Nina conditions, generally associated with good monsoon rainfall in India, are likely to set in by the second half of the monsoon season.
- **February's Record Minimum Temperature**: India recorded an average minimum temperature of 14.61 degrees Celsius in February, the second highest in the month since 1901.

India Meteorological Department

- **About:** It is a principal government agency for meteorology and related matters.
- **Historical Background:** Devastating cyclones in 1864 and severe drought in 1866 highlighted the lack of a systematic meteorological monitoring system.
- **Nodal Ministry:** Ministry of Earth Sciences (MoES)
- **Headquarter**: New Delhi
- **Functions:**
  - Conducts a series of surface and glacial observatories.
  - Conducts Upper Air altitude observations.
  - Processes data received from India's constellation of satellites.
  - Utilizes satellites such as Kalpana-1, Megha-Tropiques, and instruments on board the IRS and the INSAT series of satellites.
  - Collaborates with agencies such as the Indian Institute of Tropical Meteorology.
  - Collaborates with the National Institute of Ocean Technology for advanced prediction.
  - Responsible for setting up monitoring centres at key locations for earthquake monitoring and measurements.

FREE Download PDF

Login to theiashub.com

- Aaj Ka Quality Enrichment (Toppers' Favourite PDF)
- News-CRUX-10 (10 News. 10 Sources. One Place)
- Monthly Editorials (The Hindu & Indian Express)
- Daily Quiz (Prelims)
- Government Schemes & Ministry Wise Year End Review
- Free Enrichment PDFs (Tailor Made Crisp Study Material)



Log On To Our Unique
Free Answer Writing Sessions with Toppers (FAST) Portal
& Start Practicing!

SCAN HERE

9560082909

t.me/theiashub

/mkyadav

www.theiashub.com

www.theiashub.com