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MK Yadav Sir



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**Science
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विज्ञान एवं
प्रौद्योगिकी मंत्रालय
MINISTRY OF
SCIENCE AND
TECHNOLOGY

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‘Current account deficit may be lower at 3% this fiscal’

Rising software exports, remittances and a likely \$5-billion jump in foreign exchange reserves through swap deals will help rein in deficit, avers SBI Group Chief Economic Adviser Ghosh

Press Trust of India
MUMBAI

State Bank of India has pencilled in a lower current account deficit for India at 3% for this fiscal as against the minimum consensus of 3.5%, citing rising software exports, remittances and a likely \$5-billion jump in forex reserves via swap deals.

Every \$10 rise in crude prices impacts the Current Account Deficit (CAD) to the tune of 40 basis points while the same on fuel inflation is 50 bps and also results in 23 bps decline in growth, according to Sou-

Not so gloomy



- Every ₹1 fall against the dollar leads to a \$250-mn rise in software exports
- Remittances, software exports pushed down CAD by 60 bps in June quarter
- If trend continued in July-Sept, CAD for quarter would be reported at 3.5% and 3% for full year
- Even otherwise, chances of it exceeding 3.5% of GDP are minimal

myakanti Ghosh, Group Chief Economic Adviser at SBI. Exchange rate is a major contributor to software exports growth. “Every ₹1 fall against the dollar leads to an increase in software

exports by \$250 million”. This, along with an expected \$5 billion-forex reserve accrual by way of swap transactions and higher remittances, will cap CAD at 3% of GDP as

against the average lowest level projected for the year at 3.5%, Mr. Ghosh said.

Strong remittances and software exports had pushed down CAD by 60 basis points (bps) in the June quarter, he said. If the trends continued in July-September, CAD would fall below 3.5% and stand at 3% for the full fiscal. Even otherwise, the chances of it exceeding 3.5% of GDP are minimal, he added.

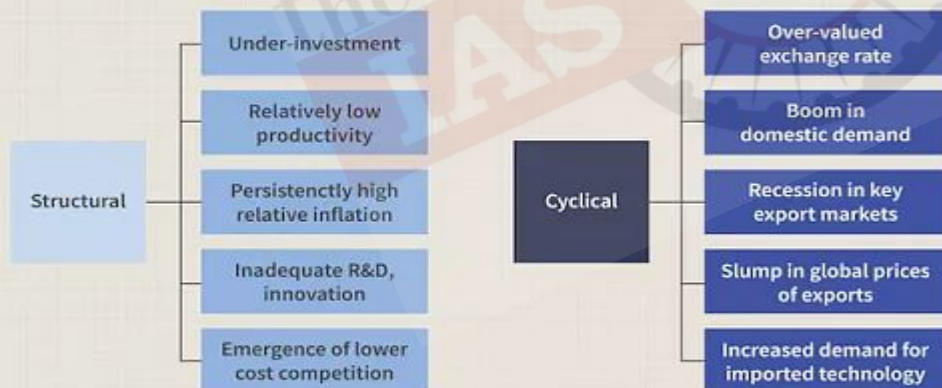
Software exports have been rising with the share of offsite mode of exports by domestic IT services firms soaring to 88.8% in FY22 from 82.8% five years earlier.

Context: State Bank of India has pencilled in a lower current account deficit for India at 3% for this fiscal as against the minimum consensus of 3.5%, citing rising software exports, remittances and a likely \$5-billion jump in forex reserves via swap deals.

Current account deficit

- **About:** It is a measurement of a country’s trade where the **value of the goods and services it imports exceeds the value of the products it exports.**
- **Current Account:** A nation’s current account **maintains a record of the country’s transactions with other nations**, it comprises of following components:
 - Trade of goods,
 - Services, and
 - **Net earnings on overseas investments** and net transfer of payments over a period of time, such as **remittances**
- **Current Account = Trade gap(Exports – Imports)+ Net current transfers + Net income abroad**
- **Different from Balance of Trade:** Balance of Trade measures only the gap in earnings and expenditure on exports and imports of goods and services. Whereas, the current account also factors in the payments from domestic capital deployed overseas.
- **Significance:** A country with rising CAD shows that it has become uncompetitive, and investors may not be willing to invest there.
- **Pitchford thesis (Consenting adults view of the current account):** It states that a current account deficit does not matter if it is driven by the private sector.

Causes of current account deficits



Mandatory: Aadhaar details to be updated once every 10 years



The Centre on Thursday amended Aadhaar regulations, advising card holders to update documents supporting their information at least once every 10 years from the date of enrolment to ensure the accuracy of the data. However, people in the know said updating documents was not mandatory but would be encouraged. The amendment made to the Aadhaar (Enrolment and Update) Regulations said users may update their documents to ensure the continued accuracy of their information in the Central Identities Data Repository. "Aadhaar number holders may, on completion of every 10 years from the date of enrolment for Aadhaar, update their supporting documents in Aadhaar, at least once, by submitting proof of identity and proof of address documents," read the gazette notification. **SOURABH LELE**

Context: To combat Aadhaar fraud, the government has asked users to update Aadhaar card details once every 10 years, according to a new notification from the Ministry of Electronics and Information Technology.

Aadhar Number

- **About:** A 12-digit unique number **issued by the Unique Identification Authority of India (UIDAI)**.
 - It contains **biometric information**, such as fingerprints and iris scans, along with demographic information, including individuals' addresses and date of birth.
- **Proof of identity:** The Aadhaar card serves as proof of identity and is **valid anywhere in India for any identification purposes**.
 - Having an Aadhaar card is **compulsory while applying for a new Permanent account number** card or filing Income tax returns.
- **Legal Basis:** The Aadhaar (Targeted Delivery of Financial and Other Subsidies Benefits and Services) Act, 2016 makes it clear that Aadhaar authentication is necessary for availing subsidies, benefits and services that are financed from the Consolidated Fund of India.
 - The requesting entity would have to **obtain the consent of the individual** before collecting his/her identity and ensure that the information is only used for authentication purposes on the Central Identities Data Repository (CIDR).
 - The Act makes it clear that confidentiality needs to be maintained and the authenticated information **cannot be used for anything other than the specified purpose**.
 - Identity information or authentication records **would only be liable to be produced pursuant to an order of the High Court or Supreme Court**, or by someone of the Secretary rank or above in the interest of national security.

UIDAI

- **About:** The UIDAI is a statutory authority established on 12th July 2016.
- **Nodal Ministry:** Works under the jurisdiction of the Ministry of Electronics and Information Technology.
 - Initially, the UIDAI was set up by the Government of India in January 2009, as an attached office under the aegis of the Planning Commission.
- **Mandate:** The UIDAI is mandated to assign a 12-digit unique identification (UID) number (Aadhaar) to all the residents of India.

Groundwater extraction this yr down 6 bn cubic metres from '20

HARIKISHAN SHARMA
NEW DELHI, NOVEMBER 10

ANNUAL GROUNDWATER extraction for irrigation, domestic and industrial uses has come down by about 6 billion cubic metres (bcm) to 239 bcm in 2022 from 2020, shows the latest groundwater assessment report released by the Ministry of Jal Shakti on Thursday.

The report — National Compilation on Dynamic Ground Water Resources Of India, 2022 — said: "The total annual groundwater recharge for the entire country as of 2022 has increased by 1.29 bcm as compared to the last assessment (2020). The total annual extractable GW resources has also increased by 0.56 bcm. The annual groundwater extraction for irrigation, domestic and industrial uses has also decreased by 5.76 bcm during this period."

"About 87% of total annual groundwater extraction i.e. 208.49 bcm is for irrigation use. Only 30.69 bcm is for domestic and industrial use, which is about 13% of the total extraction," said the report.

The decrease in annual groundwater extraction for irrigation, domestic and industrial uses is broadly in line with the similar decline in previous assessments. In fact, the annual groundwater extraction has seen a decline since 2017 when it came down 249 bcm from a record high of 253 bcm in 2013. Before 2013, the figure of annual groundwater extraction had seen an upward trend: 231 bcm in 2004, 243 bcm in 2009 and 245 in 2013.

While no specific reasons

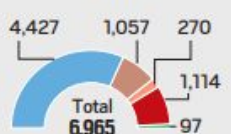
STAGE OF GROUNDWATER EXTRACTION

(in blocks, mandals and talukas)

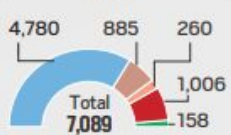
■ Safe (= 70%) ■ Semi-critical (> 70% and =90%)
■ Critical (> 90% and =100%) ■ Over-Exploited (> 100%) ■ Saline

GEOGRAPHICAL UNITS

2020



2022



have been given in the report for a sharp decline in the extraction of groundwater for irrigation, domestic and industrial uses during 2022, the report says, "These variations are attributed mainly to refinement of parameters, refinement in well census data and changing groundwater regime."

The report shows the annual groundwater recharge was assessed at around 438 bcm in 2022 — up from 436 bcm in 2020 and 432 in 2021. But this was lower than the 447 bcm annual groundwater recharge assessed in 2013.

The report also states that the monitoring of the groundwater resources was affected by the

Covid-19 outbreak in the country.

"In the years 2020 and 2021, due to the outbreak of Covid-19 throughout the country, the field activities of CGWB including monitoring of water levels have been severely affected. The water levels could not be monitored for consecutively two pre-monsoon (April/May) seasons in the years 2020 and 2021. Also water levels could not be monitored in some states during November-2020 for the same reason. Due to the unavailability of water level data for Pre-monsoon 2021, the analysis of pre-monsoon water levels has been done taking the 2022 water level data," the report said.

GROUNDWATER EXTRACTION

(Syllabus: GS Paper 3 - Env & Eco)

Context: Annual groundwater extraction for irrigation, domestic and industrial uses has come down by about 6 billion cubic metres (bcm) to 239 bcm in 2022 from 2020,

Groundwater Extraction

- **Largest user of groundwater:** India is the largest user of groundwater globally, extracting more than the United States and China put together.
 - The **UNESCO World Water Development Report, 2018** states that **India is the largest extractor** of groundwater in the world.
- **Groundwater:** The water present below the earth's surface and is a vast resource of water.
 - Almost 22 percent of water is below the surface land in the form of groundwater.
- **Regulation and control the development and management of ground water in India:** The Union Government has constituted the **Central Ground Water Authority (CGWA)** in 1997 under **Environment (Protection) Act, 1996** with objective to regulate and control development and management of ground water with jurisdiction in whole of the country.
- **Guidelines to regulate and control groundwater extraction in India**
 - **Prohibition of industries:** The guidelines prohibit new industry and mining projects in over-exploited zones and makes it mandatory for existing industries, commercial units and big housing societies to take 'no objection certificate' (NOC).
 - **Exemption:**
 - The **domestic consumers, rural drinking water schemes, armed forces, farmers and micro & small enterprises** (that withdraw upto 10 cubic metres per day) are exempted from the requirement of a no objection certificate.
 - The **NOCs are issued for a period of 2 to 5 years**, depending on the users and the category of area in which they are located (over exploited, critical, semi-critical and safe).
 - The guidelines have also **encouraged the use of recycled and treated sewage water by industries**, mentioned a provision of action against polluting industries and mandated the requirement of digital flow meters, piezometers and digital water level recorders
 - **Compensation:** It prescribes a **minimum environmental compensation** of ₹1 lakh on industrial, mining and infrastructure users for extracting groundwater without a No objection certificate (NOC).
 - **Abstraction charges:** All residential apartments/ group housing societies/ Government water supply agencies in urban areas would be required to pay ground water abstraction charges.

Centre issues e-waste management rules

Priyanka Sharma

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NEW DELHI

The government has restricted the use of hazardous substances in manufacturing electrical and electronic equipment (EEE) following deaths due to exposure to radioactive material, including of a 35-year-old man who suffered exposure in the scrap market of Mayapuri in west Delhi.

This is applicable to all electrical devices and radiotherapy equipment, nuclear medicine equipment and accessories, Magnetic Resonance Imaging (MRI), electric toys, air conditioners, microwaves, tablets, washing machine, refrigerator and iPad among others.

"The rules mandate to reduce the use of lead, mercury, cadmium among others in the manufacturing of electronic equipment that have an adverse impact on human health and the environment," said a notification.

The government notified E-waste (management) rules 2022, that will come into force from 1 April next year and apply to every manufacturer, producer refurbisher, dismantler and recycler involved in manu-



The rule is applicable to electrical devices and radiotherapy and nuclear medicine equipment.

BLOOMBERG

facturing, sale, transfer, purchase, refurbishing, dismantling, recycling and processing of e-waste or electrical and electronic equipment.

Dr Amit Shrivastava, senior consultant, Neurology, Dharamshila Narayana Superspecialty Hospital, Delhi said, "The metal in e-waste includes mercury, lead, cadmium, polybrominated flame retardants, barium and lithium, all of which are hazardous to human health.

The government notified E-waste (management) rules 2022, that will come into force from 1 April next year

Toxins' harmful health impact on humans includes damage to the brain, heart, liver, kidneys and skeletal system. They can also have a significant effect on neurological and reproductive systems, resulting in sickness and birth abnormalities. Improper e-waste disposal is highly hazardous to the global ecosystem. To reduce the

dangerous impacts of e-waste, it is critical to e-cycle goods effectively so they can be recycled, refurbished, resold, or

repurposed."

The notification said, "Manufacturer shall use the technology or methods so as to make the end product recyclable and shall ensure that component or part made by different manufacturer are compatible with each other so as to reduce the quantity of e-waste. The Central Pollution Control Board shall conduct random sampling of electrical and electronic equipment placed on the market to monitor and verify the compliance of reduction of hazardous substances provisions."

Imports or placement in the market for new electrical and electronic equipment shall be permitted only for those which are compliant with provisions laid down by the government. If a product does not comply with the e-waste management rules, the manufacturer will have to withdraw all samples from the market.

It is the responsibility of the manufacturer to collect e-waste generated during manufacture and to ensure its recycling or disposal. However, the rule does not apply to waste batteries, packaging plastics, micro enterprises and radioactive waste, as covered under the provisions of the law.

Context: The government notified E-waste (management) rules 2022, that will come into force from 1 April next year.

E-waste (management) rules 2022

- **About:** These rules apply to every manufacturer, producer refurbisher, dismantler and recycler involved in manufacture, sale, transfer, purchase, refurbishing, dismantling, recycling and processing of e-waste or electrical and electronic equipment listed in Schedule I, including their components, consumables, parts and spares which make the product operational.
- **Limitations:** It does not apply to:
 - **Waste batteries** as covered under the Battery Waste Management Rules, 2022.
 - **Packaging plastics** as covered under the Plastic Waste Management Rules, 2016.
 - **Micro enterprise** as defined in the Micro, Small and Medium Enterprises Development Act, 2006
 - **Radioactive wastes** as covered under the provisions of the Atomic Energy Act, 1962.
- **Key provisions E-waste (management) rules 2022**
 - **Coverage:** A wide range of electronic goods, including laptops, landline and mobile phones, cameras, recorders, music systems, microwaves, refrigerators and medical equipment have been specified in the notification.
 - **Collection Target:** Consumer goods companies and makers of electronics goods have to ensure **at least 60% of their electronic waste** is collected and recycled by 2023 with targets to increase them to 70% and 80% in 2024 and 2025, respectively.
 - **Extended producer responsibility (EPR) certificates:** The rules bring into effect a system of trading in certificates, akin to **carbon credits**, that will allow companies to temporarily bridge shortfalls.
 - **Non-Compliance:** Companies that don't meet their annual targets will have to pay a fine or an 'environmental compensation' but the **rules doesn't specify the quantum of these fines.**
 - Companies that fall short of the annual target can meet a year's target, even after three years.
 - Those that meet their targets with a year's delay will be refunded 85% of their fine, and 60% and 30% after the second and third year, respectively.
 - **Monitoring Authority:** The **CPCB (Central Pollution Control Board)** will oversee the overall implementation of these regulations.
 - **Role of State governments:**
 - The responsibility of earmarking industrial space for e-waste dismantling and recycling facilities and,
 - Establishing measures for protecting the health and safety of workers engaged in the dismantling and recycling facilities for e-waste.

Centre Plans to Double Loan Amount for Street Vendors

Plan is to double first tranche to ₹20,000

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New Delhi: The Centre is planning to double the loan amount for street vendors under Pradhan Mantri Street Vendor's Atma Nirbhar Nidhi scheme, a major outreach to the largely-migrant beneficiary segment.

Under the PM-SVANidhi, a special micro credit facility introduced for street vendors in July 2020 amid the first lockdown after the Covid-19 outbreak, loans are offered in three tran-

ches — ₹10,000, ₹20,000 and ₹50,000.

The government is planning to double the amount of the first tranche to ₹20,000, according to people aware of the matter. The housing and urban affairs ministry is holding discussions with banks involved in disbursing loans on how to shape the three tranches and the amounts to be loaned.

The decision is being taken as the demand for the first tranche of loan of ₹10,000 has declined. In the first year of implementation within nine months, banks had disbursed 2 million loans of ₹10,000. In the second year, 900,000 loans were given and this year till September 200,000 loans of ₹10,000 were disbursed.

"The scheme was initiated when the vendors were hit hard by Covid-19 and

were facing a severe financial crisis. A loan of ₹10,000 with the government standing as guarantor was a big amount for them. This demand has hit a plateau as vendors are not facing the same financial difficulties as in 2020," said a senior official.

After paying back the first tranche, beneficiaries become eligible for 2nd tranche

The ministry has also received representations from associations in Delhi and Mumbai to increase the first tranche loan. "Since this was the first microcredit experiment of the Centre, there are new learnings which the government is now planning to implement," said the official.

The Centre is also encouraged by the low numbers of repayment defaulters under the scheme. According to the ministry's statistics, non-performing assets under the scheme are less than 14%. In certain high-uptake states like Telangana, there are examples like Stree Nidhi Bank of Telangana where the loan recovery is 98%.

Those tapping into the scheme are largely a migrant segment. The initiative could yield dividends as could be seen in UP polls where beneficiaries became dedicated BJP voters. The ministry has taken PM-SVANidhi a step forward with the SVANidhi Se Samriddhi initiative, which connects family members of SVANidhi beneficiaries to other flagship schemes.

Salient Features of PM SVANidhi

- Vendors will be provided with an initial **working capital of up to Rs. 10000.**
- A vendor does **not have to provide any collateral security** to access the loan.
- A vendor will get an **interest subsidy at 7 per cent** at early or timely repayment of loans.
- There is a **provision of monthly cash-back incentive** on digital payments.
 - Monthly cashback in the range of Rs. 50-100.
- A vendor has the high probability to be eligible for a higher loan if he/she repays the first loan on time.

PM SVANIDHI SCHEME

(Syllabus: GS Paper 3 - Economy)

Context: The Centre is planning to double the loan amount for street vendors under Pradhan Mantri Street Vendor's Atma Nirbhar Nidhi scheme.

Pradhan Mantri Street Vendor's Atma Nirbhar Nidhi scheme

- **About:** The PM SVANidhi scheme is a **micro-credit facility** to street vendors affected due to COVID-19 pandemic.
- **Origin:** It is a **central sector scheme** launched in June 2020.
- **Eligibility:** All vendors who have been vending from or before March 24, 2020 and with a certificate of vending can avail the loan.
 - As per the **Street Vendors Act of 2014**, the Town Vending Committees (which comprises the local authorities and vendors from an area) **issue a certificate** of vending after a survey has been conducted of all the vendors.
 - **Survey is not required for this scheme.**
 - The urban local bodies can issue an **Letter of Recommendation**, or if the vendor is a member of a vendor association, he or she can apply.
 - These documents, including the identification proof, are uploaded on a special portal made for the scheme, and the loans are sanctioned by banks and disbursed, ideally, in 10-15 days.
- **Eligibility of States/UTs:** The Scheme is available for beneficiaries belonging to only those States/UTs which have notified Rules and Scheme under Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014.
- **Mandatory Documents to Access Benefits:** Aadhar Card and Voter Identity Card.
- **Implementation Partner:** Small Industries Development Bank of India (SIDBI) will be the implementation partner of the Ministry of Housing and Urban Affairs for scheme administration.
- **Lending Institutions under PM SVANidhi:** Scheduled Commercial Banks, Regional Rural Banks, Cooperative Banks, Non-Banking Financial Companies, Micro-Finance Institutions and Self Help Groups (SHG) Banks.

Why snow leopards aren't elusive anymore

Shivani.Azad@timesgroup.com

Dehradun: Snow leopards, often referred to as 'ghost of the mountains' due to its elusive nature, have of late started showing up more often.

A few days ago, one of these cats was spotted by wildlife enthusiasts from the National Conservation Foundation (NCF) in Kashmir. In Uttarakhand, a pair of snow leopards was photographed by ITBP personnel in Chamoli last Sunday.

Munib Khanyari, one of the members from the NCF team involved in monitoring of snow leopards across Jammu & Kashmir and Himachal Pradesh, said the



A 'GHOST' FREQUENTLY SIGHTED

sightings have gone up perhaps because of improved access to snow-clad terrains, habitat of the snow leopard.

It is estimated that Ladakh has at least 200 snow leopards, considering its large area of 38,000sqkm and proximity to Tibetan plateau, where the animal's presence is in abundance. Uttarakhand

—which has a nearly 13,000sqkm area that is a potential habitat — has approximately 121 snow leopards, while Himachal Pradesh, which has around 26,000 sqkm of snow leopard habitat, has nearly 51. The other two states are Arunachal Pradesh and Sikkim which have nearly

6,000sqkm and 3,000sqkm of potential habitat respectively. S Sathyakumar, senior scientist at Doon-based Wildlife Institute of India said, "In the past few years, we have invested in our workforce and mountain residents to spread awareness about snow leopards. All this is bearing results now in the form of frequent sightings."

Aparna Pandey from Secure Himalaya, an MoEF-UNDP project, said it appears that the habitat has improved. Moreover, during the pandemic, the habitat and prey base was replenished due to curbs on people's movement. This could be leading to more sightings, she said.

Context: Snow leopard, often referred to as 'ghost of the mountains' due to its elusive nature, has of late started showing up more often.

Snow Leopard

- **Scientific Name:** *Panthera uncia*
- **Top Predator:** act as an indicator of the health of the mountain ecosystem in which they live, due to their position as the top predator in the food web.
- **Habitat:** Mountainous regions of central and southern Asia.
 - **Western Himalayas:** Jammu and Kashmir, Himachal Pradesh.
 - **Eastern Himalayas:** Uttarakhand and Sikkim and Arunachal Pradesh.
- **Snow Leopard capital of the world:** Hemis, Ladakh.
 - Hemis National Park is the biggest national park in India and also has a good presence of Snow Leopard.
- **Protection Status:**
 - **IUCN-World Conservation Union's Red List:** Vulnerable
 - **Convention on International Trade of Endangered Species (CITES):** Appendix I (lists species that are the most endangered among CITES-listed animals and plants.)
 - **Indian Wildlife (Protection) Act 1972:** Schedule I (High protection)
 - **Convention on Migratory Species (CMS):** Highest conservation status

Conservation Efforts by India

- Identified the snow leopard as a flagship species for the high altitude Himalayas.
- Party to the **Global Snow Leopard and Ecosystem Protection (GSLEP)** Programme since 2013.
- **SECURE Himalaya Project**, Launched in 2017 by the Union Ministry of Environment, Forests and Climate Change (MoEFCC) in **association with the United Nations Development Programme (UNDP)**, is a 6 year project to ensure conservation of locally and globally significant biodiversity, land and forest resources in high Himalayan ecosystem spread over four states viz. **Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Sikkim.**
- **Himal Sanrakshak community volunteer programme**, to protect snow leopards, launched in October 2020.
- **National Protocol** was launched on Snow Leopard Population Assessment which has been very useful for monitoring populations.
- **Project Snow Leopard (PSL)** was launched in 2009 to promote an inclusive and participatory approach to conserve snow leopards and their habitat.
- **Snow Leopard is on the list of 21 critically endangered species** for the recovery programme of the Ministry of Environment Forest & Climate Change.

Global Conservation efforts

- **Bishkek Declaration:** In 2013, the Bishkek Declaration set a goal of protecting at least 20 snow leopard landscapes with viable snow leopard populations by 2020, and led to the formation of the Global Snow Leopard and Ecosystem Protection Program (GSLEP).
 - Since then, **October 23** is commemorated each year as **International Snow Leopard Day.**
- **GSLEP Programme:** The Global Snow Leopard and Ecosystem Protection Programme (GSLEP) was also launched in 2013 to address high-mountain development issues using conservation of the snow leopard as a flagship.

India hosted the 2nd BIMSTEC Agriculture Ministers meeting under the chairmanship of Union Agriculture Minister Shri Narendra Singh Tomar

Context: India hosted the Second Agriculture Ministerial-level meeting of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).

Key Points

- The 2nd BIMSTEC Agriculture Ministerial Meeting **adopted the Action Plan for Strengthening BIMSTEC Agricultural Cooperation (2023-2027)**.
- An MoU between the BIMSTEC Secretariat and the International Food Policy Research Institute (IFPRI) has been signed and approval has been given to bring **Fisheries and Livestock sub-sectors under the Agricultural Working Group**.
- India urged the member countries to cooperate in **developing a comprehensive regional strategy** to strengthen cooperation for the transformation of agriculture.

BIMSTEC

- **About:** The **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** is an international organisation of seven South Asian and Southeast Asian nations, housing 1.73 billion people and having a combined gross domestic product of US\$4.4 trillion (2022).
- **Origin:** It was formed on 6th of June 1997, through the **Bangkok declaration** and is headquartered at Dhaka in Bangladesh.
- **Objectives:** Technological and economical cooperation among south Asian and South East Asian countries along the coast of the Bay of Bengal.
 - **6 Focus Area:** Trade, Technology, Transport, Tourism and Fisheries.
- **Founding members:** Bangladesh, India, Sri-Lanka and Thailand.
- **Current Members:**
 - **Five Southasian nations:** Bangladesh, Bhutan, India, Nepal (Joined in 2004) and Sri Lanka.
 - **Two southeast Asian nations:** Myanmar (Joined in 1997) and Thailand.



National Fisheries Development Board awarded “India Agribusiness Awards 2022”

Context: National Fisheries Development Board was awarded “India Agribusiness Awards 2022” for the best Agribusiness Award under Fisheries Sector for the exemplary work done in fisheries sector.

- **Indian Chamber of Food and Agriculture (ICFA)**, an Indian Government body on technical collaborations with large number of national/international industrial associations and related organisations has organized “AgroWorld 2022”.

National Fisheries Development Board

- **About:** Set up in 2006, headquartered in Hyderabad.
- **Nodal Ministry:** Works under the administrative control of the Department of Fisheries, **Ministry of Fisheries, Animal Husbandry and Dairying**, Government of India.
 - The activities of NFDB are managed by a governing body under the Chairmanship of the Honourable Minister of Fisheries, Animal Husbandry, and Dairying.
- **Objectives:** To **develop the fisheries sector** through consistent and innovative methodologies and give focused attention to every sector.
 - It also focuses on the **popularization of genetically modified quality seeds**.
- **Group Accident Insurance Scheme:** It is implemented by the **National Fisheries Development Board** through Oriental Insurance Company.
 - The scheme aims to **provide insurance coverage** to the people working in the Fisheries sector of the country.
 - The beneficiaries covered in this scheme are **fish workers, fish farmers, and other categories** of people involved in fishing and allied activities.
 - Any individual (Men or Women) of **age group 18 to 70 are eligible** for this insurance coverage.
- **Fisheries and Aquaculture Infrastructural Development Fund (FIDF):** The **National Fisheries Development Board** is the nodal implementing agency of the FIDF Scheme.
 - FIDF promotes the creation of infrastructure facilities in inland and marine fisheries sectors with increased fish production.
 - It aims to augment **fish production to 20 million tonnes by 2022-23**.

Receding cryosphere: What latest WMO report warns us about

Most parts of east Africa, including Kenya, Ethiopia and Somalia, experienced 4 consecutive below-average rainfall seasons with severe humanitarian impact

By Seema Prasad

Published: Thursday 10 November 2022



World Meteorological Organisation

- **About:** A specialized agency of the United Nations responsible for promoting international cooperation on atmospheric science, climatology, hydrology and geophysics.
- **Origin:** Originated from the International Meteorological Organization, a nongovernmental organization founded in 1873 as a forum for exchanging weather data and research
- **Members:** made up of 193 countries and territories.
 - India is a member of the WMO since 1949
- **Functions:** It facilitates the "free and unrestricted" exchange of data, information, and research between the respective meteorological and hydrological institutions of its members.
- **Governance:** Governed by the World Meteorological Congress, composed of member states, which meets every four years to set policies and priorities.

Context: The cryosphere receded drastically, according to the latest World Meteorological Organisation's (WMO) Provisional State of the Global Climate in 2022 report.

Key Findings of the report

- The **global mean temperature** is currently at 1.15 degrees Celsius above pre-industrial (1850-1900) levels and the last eight consecutive years were the eight hottest years of humanity.
- **El Niño and La Niña** are the two prominent weather phenomena that influence climate change.
 - **El Niño** is the warming of the sea surface near the eastern tropical Pacific Ocean through the weakening of trade winds.
 - **La Niña** is the cooling of the central and eastern tropical Pacific Ocean through the strengthening of the trade winds.
- A rare **triple-dip cooling La Niña** was experienced for the third consecutive year in 2022, with repercussions across the world.
 - A "triple-dip" La Niña is a **multiyear cooling of the surface temperature of the equatorial Pacific Ocean**, which can cause droughts, fierce winds and heavy rainfall.
- The **Indian Ocean Dipole (IOD)** results in below-average sea surface temperatures in the Arabian Sea and above-average sea-surface temperatures in the Bay of Bengal.
 - The Indian Ocean Dipole (IOD) is defined by the **difference in sea surface temperature between two areas** (or poles, hence a dipole) – a western pole in the Arabian Sea (western Indian Ocean) and an eastern pole in the eastern Indian Ocean south of Indonesia.

Cryosphere

- **About:** Comprises **frozen parts of the earth** such as glaciers, snow and permafrost.
 - These are places on Earth that are so cold that water is frozen solid.
 - These areas of snow or ice, which are subject to temperatures below 0°C 32°F for at least part of the year, compose the cryosphere.
- **Two part of the cryosphere:**
 - **Ice and snow on land:** This includes the largest parts of the cryosphere, the **continental ice sheets found in Greenland and Antarctica**, as well as ice caps, glaciers, and areas of snow and permafrost.
 - **Ice found in water:** This includes **frozen parts of the ocean**, such as waters surrounding Antarctica and the Arctic. It also includes frozen rivers and lakes, which mainly occur in polar areas.
- **Significance of Cryosphere:** The components of the cryosphere play an important role in the Earth's climate.
 - **Snow and ice reflect heat** from the sun, helping to regulate our planet's temperature.

ARTEMIS I MISSION

(Syllabus: GS Paper 3 - Sci & Tech)

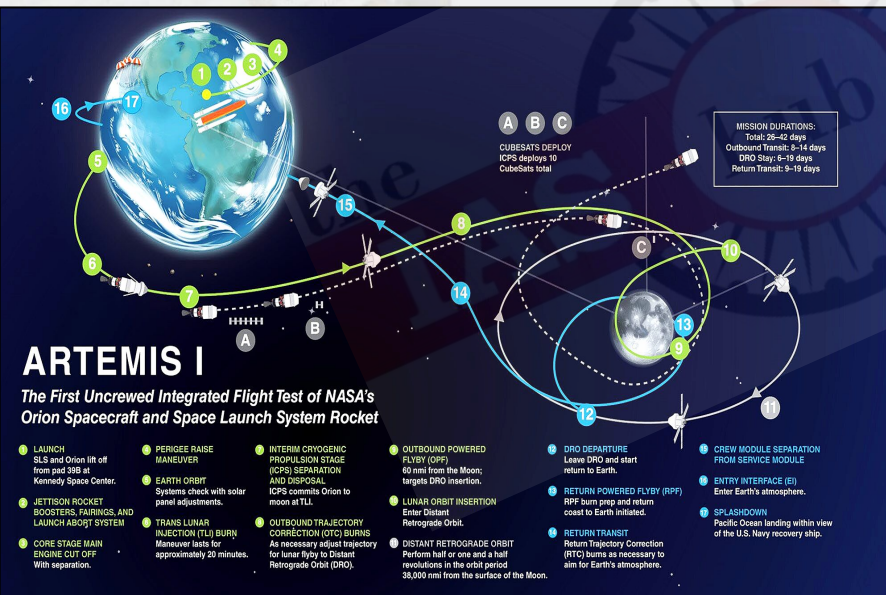
NASA reschedules long-delayed Moon rocket launch as tropical storm barrels in

Mission will get the US closer to taking astronauts to the Moon after 5 decades



NEXT NEWS >

By Arya Rohini
Published: Wednesday 09 November 2022



Context: The launch attempt of the Artemis I mission is rescheduled to November 16 as **Tropical Storm Nicole** barreled toward the east coast of Florida.

- The name Nicole has been used for four tropical cyclones and one subtropical cyclone in the Atlantic Ocean.

Artemis I mission

- About:** NASA's next-generation **lunar exploration mission**.
 - The mission is named after Artemis, **the goddess of the moon**, who is the twin sister of Apollo from Greek mythology.
 - Artemis I is an **uncrewed space mission**, which will be the first of NASA's deep space exploration systems.
- Objective:** To **demonstrate Orion's systems** in a spaceflight environment and ensure a safe re-entry, descent, splashdown, and recovery prior to the first flight with crew on Artemis II.
- Key Features:**
 - Artemis I will be **launched to test the SLS and Orion spacecraft**.
 - It will be launched on the **Space Launch System (SLS)**, which is the most powerful rocket in the world.
 - The SLS rocket was **designed for missions beyond the low-earth orbit (LEO)**.
 - It can take cargo and crew to the moon and beyond.
 - Astronauts will be sent aboard the **Orion spacecraft** from the Earth to lunar orbit.
- Other space agencies will also contribute towards the Artemis mission.**
 - Canadian Space Agency** will support by providing advanced robotics for the gateway
 - The **European Space Agency** will provide the International Habitat and the ESPRIT module, which will deliver additional communications capabilities, among other things.
 - Japan Aerospace Exploration Agency** plans to provide habitation components and logistics resupply.

THANK YOU!



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