the IAS hub
Be Your Dream.

November
28

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
सत्यमेव जयते
विज्ञान एवं प्रौद्योगिकी मंत्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY

Table of Contents

1. Indian Ocean Region Forum
2. China Plus One Strategy
3. Pradhan Mantri Mudra Yojana
4. Microfinance Institutions
5. Austra Hind 22
6. Indian Olympic Association
7. Small Modular Reactors
8. PSLV C54 Mission
9. Triple Dip La-Nina
10. Southern White Rhino

THE HINDU Page 16

INDIAN OCEAN REGION FORUM

(Syllabus: GS Paper 2 - International Organisations

Did not attend Indian Ocean meet held by China, say Australia, Maldives officials

Ananth Krishnan
BEIJING

Australia and the Maldives said on Sunday that they did not participate in the recently held Indian Ocean Region Forum convened by China, which the organisers had claimed brought together representatives from 19 countries in the region, except for India.

Both countries clarified there was no official representation at the China-backed forum.

According to a statement from the organisers, the China International Development Cooperation Agency (CIDCA), which is Beijing's new development aid agency, the forum in Kunming had brought together "high-level representatives" from 19 countries: Indonesia, Pakistan, Myanmar, Sri Lanka, Bangladesh, Maldives, Nepal, Afghanistan, Iran, Oman, South Africa, Kenya, Mozambique, Tanzania, Seychelles, Madagascar, Mauritius, Djibouti, and Australia.

No representative from India was invited for the meeting.

'No govt. presence'

The Maldives Foreign Ministry in a statement said it had noted the CIDCA statement and would "like to clarify that the Government of Maldives did not participate" and "there was no official representation", stressing that "participation by individuals" did not constitute official representation.

Australia's High Commissioner in Delhi, Barry O'Farrell, said in a post on Twitter that "no Australian Government official attended the Kunming China-Indian Ocean Forum on Development Cooperation".

Former Maldives President Mohammed Waheed Hassan and former Australian Prime Minister Kevin Rudd were reported to have virtually joined the meeting, and both were attending in their individual capacity, not representing their governments.

Context: Australia and Maldives they did not participate in the recently held **Indian Ocean Region Forum** convened by China, which the organisers had claimed brought together representatives from 19 countries in the region, except for India.

Indian Ocean Region Forum

- **About**: The forum is **China's latest effort** to reach out to countries dotting the Indian Ocean Region.
- **Organised by:** The forum was organised by the **China International Development Cooperation Agency (CIDCA)**, a government agency headed by former vice foreign minister and Chinese ambassador to India.
- **Theme**: The meeting was held in a hybrid manner under the theme of "**Shared Development: Theory and Practice from the Perspective of the Blue Economy**".
- **Participating countries**: Indonesia, Pakistan, Myanmar, Sri Lanka, Bangladesh, Maldives, Nepal, Afghanistan, Iran, Oman, South Africa, Kenya, Mozambique, Tanzania, Seychelles, Madagascar, Mauritius, Djibouti, Australia and representatives of 3 international organisations were present.
  - **India was not invited.**
- **Key Proposals:**
  - China proposed to establish a **marine disaster prevention and mitigation cooperation mechanism** between China and countries in the Indian Ocean region.
  - China expressed its willingness to provide necessary **financial, material, and technical support** to countries in need.

BUSINESS STANDARD
Page 3

CHINA PLUS ONE STRATEGY

(Syllabus: GS Paper 3 - Economy)

Context: A Combination of one of the lowest labour costs and a large surplus workforce, which will continue to grow until 2031, is one of the key competitive edges that India is leveraging to challenge its rivals in Southeast Asia in the race for a China Plus One strategy.

China Plus One: Low labour costs and growing workforce give India the edge

SURAJEET DAS GUPTA
New Delhi, 27 November

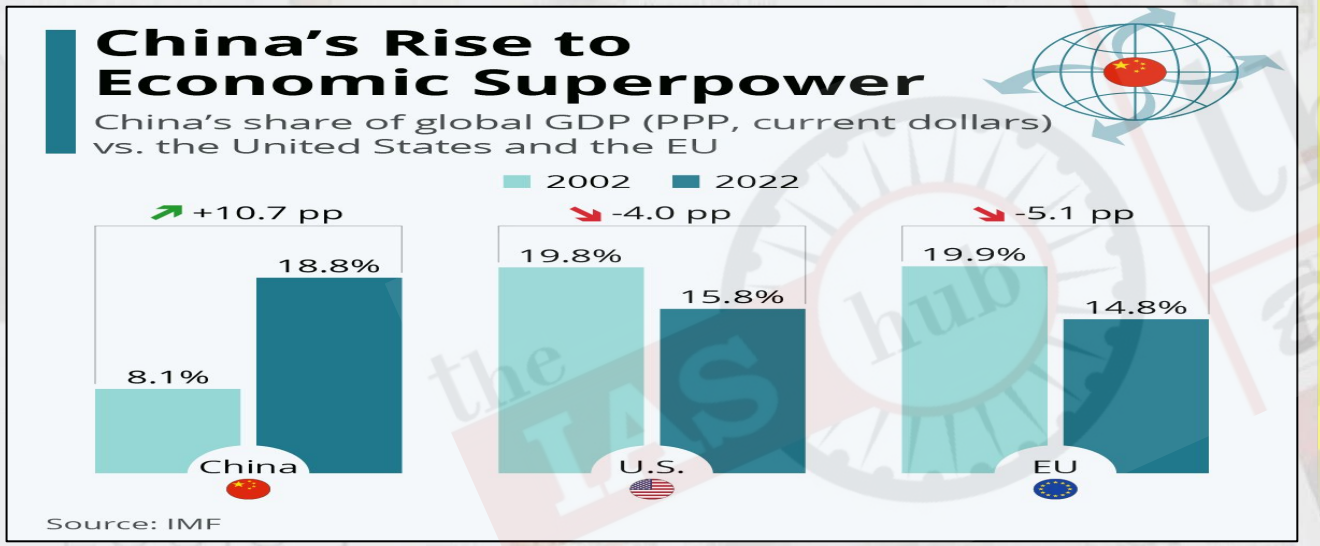
A combination of one of the lowest labour costs and a large surplus workforce, which will continue to grow until 2031, is one of the key competitive edges that India is leveraging to challenge its rivals in Southeast Asia in the race for a China-Plus-One strategy. Apart from India, the countries in the race to woo global companies that manufacture in China, as well as the supply chains to their country include Thailand, Indonesia, Malaysia, the Philippines, and Vietnam.

On the labour front, India is a clear winner. Data from Euromonitor, the World Bank, the ILO (International Labour Organization), and UNIDO (United Nations Industrial Development Organization), analysed by Morgan Stanley, shows that India has the lowest manufacturing wage cost in the region: At $0.8 an hour, it is 20 per cent lower than Indonesia, nearly half of Vietnam and the Philippines, around a third of Thailand, and a sixth of Malaysia.

Contrary to earlier perception, China's manufacturing labour costs have risen to quite high levels — $7.1 per hour, far higher than India and other southeast Asian countries, and much closer to Taiwan's $11.7 per hour. Turn to Page 6



'CHINA PLUS ONE' STARTS TO BENEFIT INDIAN API PLAYERS P2



China Plus One strategy

- **About:** Also known as Plus One, is the **business strategy** to avoid investing only in China and diversify business into other countries.
- **Origin**: It was coined in 2013 as a **global business strategy.**
  - The China-U.S. trade war and the COVID-19 pandemic laid bare the need for companies to **diversify supply chains outside of China.**
  - This has given rise to the "China plus one" strategy, in which multinational firms are moving to other countries, in addition to China.
- **Driving factors**: Many overseas companies once moved operations to China due to the **low cost of labor**, but companies are now reevaluating their setup in this country and diversifying their manufacturing strategies.
  - The driving factors range from China's cost advantage diminishing in recent years to growing geopolitical distrust between China and the West.
- **Recent developments:** In 2021, a **grouping of 18 economies,** including India, the US, and the European Union, unveiled a roadmap for establishing collective supply chains that would be resilient in the long term.
  - The roadmap also included steps to **counter supply chain dependencies and vulnerabilities.** This can be seen as a part of the overall China-plus-one strategy.
- **Implications**: Clear winners of the China-plus-one model have been the **EU, Mexico, Taiwan, and Vietnam**, across sectors such as machinery, automobiles, and transport and electrical equipment.
  - **India did not significantly benefit** from this trade diversion.

INDIAN EXPRESS

Page 1

PRADHAN MANTRI MUDRA YOJANA

(Syllabus: GS Paper 3 - Economy)

PRIVATE BANKS FARED BETTER THAN STATE-OWNED ONES

Small is good: Mudra loan NPAs at just 3.3% in 7 yrs

Banking sector NPAs higher than 6% over previous 6 years

SHYAMLAL YADAV
NEW DELHI, NOVEMBER 27

YOUR RIGHT TO KNOW
AN EXPRESS RTI APPLICATION

IN OVER seven years since launch, borrowers of Mudra loans – essentially micro and small enterprises – have paid their EMIs (equated monthly instalments) to banks. Non-performing assets of banks for Mudra loans – including those extended during the Covid-19 pandemic when small enterprises were the worst hit – are lower than the average NPAs of the sector as a whole, data obtained under the Right to Information Act reveals.

Bad loans under the Pradhan Mantri MUDRA Yojana for all banks (public, private, foreign, state cooperative, regional rural and small finance) since the launch of the scheme on April 8, 2015, added up to Rs 46,053.39 crore as on June 30, 2022. This is just 3.38 per cent of the total disbursements of Rs 13.64 lakh crore under the scheme during the period, almost half of the banking sector as a whole which stood at 5.97 per cent for the year-ending March 31, 2022.

The gross NPAs of the banking sector in the previous six years was much higher than in 2021-22; it was 7.3 per cent in 2020-21, 8.2 per cent in 2019-20, 9.1 per cent in 2018-19, 11.2 per cent in 2017-18 and 9.3 per cent in 2016-17 and 7.5 per cent in 2015-16).

CONTINUED ON PAGE 2

Stage	Maximum amount	Particulars
Sishu	₹50 thousand	This stage caters to entrepreneurs who are about to start their business, or are in the first stages of the business.
Kishor	₹5 lakh	Caters to business owners requiring funds between ₹50 thousand to ₹5 lakh. Those who have been already running their business for some time and now requires funds for further expansion, would come under this category.
Tarun	₹10 lakh	Subject to the meeting of the eligibility criteria, a business owner can apply for a maximum loan of up to ₹10 lakh. Suitable for those who want to carry out a major expansion in their business.

Context: In over seven years since launch, borrowers of Mudra loans - essentially micro and small enterprises - have paid their EMIs (equated monthly instalments) to banks.

Pradhan Mantri Mudra Yojana

- **About**: Launched in April **2015** by the Prime Minister, the Mudra Yojana aims to enable Micro Finance Institutions (MFIs), Non-Banking financial institutions/Companies (NBFCs), Small Finance Banks, RBRs, Commercial Banks, Cooperative Banks, etc. to **provide Low Rate Loans to eligible entities.**
- **Eligibility:** To avail of the benefits of the PMMY Scheme, the person **should be a citizen of India**. The loans are basically for people having a business plan in a Non-Farming Sector with Income generating activities like the following:
  - Manufacturing
  - Processing
  - Trade
  - Service Sector
  - Or any other fields whose credit demand is less than ₹10 lakhs.
    - The Indian Citizen seeking MUDRA Loans under the PMMY Scheme will **have to approach either an MFI, Bank or NBFC to avail it**.
- **MUDRA**: It stands for **Micro Units Development & Refinance Agency Ltd.** which is a financial institution set up by the Government.
  - It provides **funding to the non-corporate small business sector** through various last-mile financial institutions like Banks, Non-Banking Financial Companies (NBFCs) and Micro Finance Institutions (MFIs).
  - It **does not lend directly to micro-entrepreneurs/individuals.**
- **Types of Loans**: MUDRA has created three products i.e. 'Shishu', 'Kishore' and 'Tarun' as per the stage of growth and funding needs of the beneficiary micro unit.
  - **Shishu**: Covering loans up to Rs. 50,000.
  - **Kishore**: Covering loans above Rs. 50,000 and up to Rs. 5 lakh.
  - **Tarun**: Covering loans above Rs. 5 lakh and up to Rs. 10 lakh.
- **Key Features:** Loans under this scheme are **collateral-free loans.**

LIVEMINT Page 6

MICROFINANCE INSTITUTIONS

(Syllabus: GS Paper 3 - Economy)

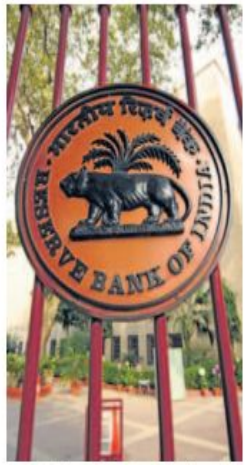
MFIs tap secured asset classes

FROM PAGE 1

Narayanan said, loses around 15% of its customers annually, and 5-6% of them tend to move to other institutions because the microfinancier cannot meet their growing demand. In five years, it expects to build a non-microfinance book of ₹5,000-6,000 crore, most of which will be secured loans.

"I am sourcing a fresh customer and then giving it to somebody else. That is not something we want to do," he said.

Others are in the fray as well. Fusion Microfinance, which made its public trading debut recently, wants to drive a secured business but only target small businesses, news agency *Press Trust of India* reported on 30 October. As of 30 June, its total assets under management were at ₹7,389 crore, and it had 2.9 million active borrowers. Devesh Sachdev, founder and chief executive of the microlender, was cited by *PTI* as saying that Fusion has been lending to small businesses for some time now and currently has ₹200 crore of such assets. The lender wants to scale this loan book and hive it off as a non-banking financial company.



An RBI circular in March allowed MFIs to lend 25% of total assets in non-microfinance loans. MINT

Experts said there used to be a huge concentration of non-collateralized assets on the book of MFIs, and increasing secured loans would help them diversify. In addition, loan ticket sizes under the secured categories would be more than what microfinance allows and in products that MFIs cannot venture into otherwise.

MFIs had a concentration of non-collateralized assets, and more secured loans may help them diversify, some analysts said

While the Reserve Bank circular has been beneficial to an extent, industry experts said that there are some areas that microlenders have approached the regulator about.

Although the ceiling on the non-microfinance loan book has been increased to 25% from 15% earlier, there is a catch.

"Earlier, MFIs had to take into account net assets—total assets adjusted for cash—while calculating the amount of loan qualifying as microfinance, but this has now been changed to total assets. That is one of the grievances of the microfinance industry that we have taken up with the Reserve Bank," said Jiji Mammen, executive director and chief executive of microfinance institutions' industry body Sa-Dhan.

According to Mammen, the new definition does not allow microlenders to fully reap the benefits of the increased limit for non-MFI loans. Every MFI, he said, tends to hold some cash, especially at the end of the financial year.

Context: A clutch of micro financiers is venturing into secured asset classes such as mortgages and gold loans to diversify their portfolio and balance the risk of unsecured microlending with loans that require collateral.

Microfinance institutions (MFIs)

- **About**: Microfinance institutions (MFIs) are financial companies that **provide small loans to people** who do not have any access to banking facilities.
- **Definition**: In India, a **microfinance loan is defined as a collateral-free loan** given to a household having an annual income of up to Rs 3 lakh. (**Recently revised by RBI. Earlier it was Rs 1 Lakh**)
  - Some government banks also offer microfinance to the eligible categories of borrowers.
- **Example of MFIs:** Bandhan Bank Limited, Ujjivan Small Finance Bank, Annapurna Finance Pvt. Ltd, Muthoot Microfin Limited, CreditAccess Grameen Limited, Sonata Finance Private Limited etc.
- **Different types of institutions that offer microfinance are:**
  - Credit unions
  - Non-governmental organisations
  - Commercial banks
- **Groups Organized by Microfinance Institutions in India:** There are s**everal types of groups organised by microfinance institutions** for offering credit, insurance, and financial training to the rural population in India: Joint Liability Group (JLG), Self Help Group (SHG), Grameen Model Bank, Rural Cooperatives etc.
- **Regulations for MFIs:** The **Reserve Bank of India (RBI)** shall regulate the microfinance sector; it may set an upper limit on the lending rate and margins of Micro Finance Institutions (MFIs).
  - A microfinance bank will be **required to adhere to all banking regulations** like traditional banks.
  - Cooperatives and NGOs will not be expected to comply with the same regulations. However, they may be regulated by similar oversight authorities.

ECONOMIC TIMES Page 2

AUSTRA HIND 22

(Syllabus: GS Paper 3 - Internal Security)

BILATERAL EXERCISE

'Austra Hind 22' to Start Today

NEW DELHI: A bilateral training exercise between armies of India and Australia will kick-start in Rajasthan from Monday, the defence ministry here said. The 'Austra Hind 22' exercise will be conducted till December 11. The ministry said it will be a yearly event that will be conducted alternatively in India and Australia. "Bilateral training exercise 'AUSTRA HIND 22' between contingents of the Indian Army and the Australian Army is scheduled to take place at Mahajan Field Firing Ranges (Rajasthan) from 28 November to 11 December 2022," the ministry said – PTI

Context: A bilateral training exercise between armies of India and Australia will kick-start in Rajasthan from Nov 28.

Austra Hind 22

- **About:** The **bilateral training** exercise "AUSTRA HIND 22" between contingents of the **Indian Army and the Australian Army** is scheduled to take place at Mahajan Field Firing Ranges (Rajasthan).
  - This is the **first exercise in the series of AUSTRA HIND** with participation of all arms and services contingent from both armies.
- **Objectives**: To **build positive military relations,** imbibe each other's best practices and promote the ability to operate together while undertaking multi-domain operations in Semi deserts terrain under a UN peace enforcement mandate.
- **Annually**: AUSTRA HIND" will be a **yearly event** that will be conducted **alternatively in India and Australia.**
- **Significance**: The joint exercise, besides promoting understanding and interoperability between the two armies, will further help in **strengthening ties between India and Australia.**

Other military exercises with Australia

- **Malabar**: It is a **multilateral wargaming naval exercise** that was started in 1992.
  - It began as a bilateral exercise between the navies of India and the United States.
  - Japan and Australia first participated in 2007, and since 2014, India, the US and Japan have participated in the exercise every year.
  - In 2020 **Australia joined the Malabar Exercise o**n India's request in order to contain China in the Indo-Pacific region.
- **Exercise Pitch Black 22**: Organised by the **Royal Australian Air Force (RAAF),** Exercise Pitch Black this year included air forces from 17 countries **including India,** and saw participation of 100 aircraft and 2,500 personnel operating primarily from RAAF Bases in Darwin, Tindal and Amberley.
- **Ausindex**: AUSINDEX, a **naval exercise between India and Australia,** was conducted to share a comprehensive strategic partnership to build and maintain a strong and stable military cooperation between the two nations.

TIMES OF INDIA

Page 1

PT Usha set to be first woman IOA president

Legendary sprinter P T Usha (58) is set to become the first woman and the only Olympian and international medallist to head the Indian Olympic Association (IOA). She is the lone candidate to have filed the nomination for the president's post of the 95-year-old organisation, **reports Sabi Hussain**. Usha, who will be elected unopposed, is also one of the eight 'Sportspersons of Outstanding Merit' selected by IOA's Athletes Commission. **P18**



INDIAN OLYMPIC ASSOCIATION

(Syllabus: GS Paper 1 - Sports & Awards)

Context: Legendary sprinter P T Usha (58) is set to become the first woman and the only Olympian and international medallist to head the Indian Olympic Association (IOA).

Indian Olympic Association (IOA)

- **About:** The governing body for the **Olympic Movement and the Commonwealth Games in India.**
- **Origin**: Indian Olympic Association (IOA) was **established in 1927** as a **Non-Profit Organisation** under Societies Registration Act, 1860.
  - The creation of the Indian Olympic Association was related to India's participation in the 1920 and 1924 Olympics.
  - In 1923–24, a provisional **All India Olympic Committee** was formed, and the All India Olympic Games (that later became the National Games of India) were held in Feb 1924.
  - This gave impetus to the development and institutionalization of sports in India, and, in 1927, the **Indian Olympic Association (IOA)**, was created.
  - It was **officially recognised by the International Olympic Committee** as India's national Olympic organisation.
- **Affiliation**: An affiliated member of the **International Olympic Committee (IOC),** Commonwealth Games Federation (**CGF**), Olympic Council of Asia (**OCA**) and Association of National Olympic Committees (**ANOC**).
- **Nodal Ministry**: It is an autonomous body recognised by the Ministry of Youth Affairs and Sports.
- **Institutional Framework**: The members of IOA include **National Sports Federations, State Olympic Associations, IOC Members** and other select multi-sport organisations.
- **Governance**: The Indian Olympic Association is **currently governed by a 32-member Executive Council.**
  - The election for the Executive Council is h**eld once in every 4 years.**
- **Functions**: Administers various aspects of **sports governance and athletes' welfare in the country.**
  - Oversees the representation of athletes or teams participating in the Olympic Games, Commonwealth Games, Asian Games and other international multi-sport competitions of IOC, CGF, OCA and ANOC.

PIB

Nov 28

SMALL MODULAR REACTORS

(Syllabus: GS Paper 3 - Sci & Tech)

Union Minister Dr Jitendra Singh says, India taking steps for development of Small Modular Reactors (SMR), with up to 300 MW capacity to fulfill its commitment to Clean Energy transition

Context: India is taking **steps for development of Small Modular Reactors (SMR),** with up to 300 MW capacity to fulfill its commitment to Clean Energy transition.

Key Points

- Small Modular Reactors (SMR), with up to 300 MW capacity by nature are f**lexible in design and require smaller footprint.**
- Being **mobile and agile technology**, SMR can be factory-built unlike the conventional nuclear reactors that are built on–site
- An impressive number of measures have been taken to promote renewable energy in the country and **India today stands at number four in the RE installed capacity** across the world, after China, Europe and United States.
- India, comprising 17% of the world population has seen its primary energy growing at rate of 4% during the last decade, almost double the global growth rate of 1.3%.
- However, by historical standards, **India's share in global emissions is less than 5%.**

Small Modular Reactors (SMR)

- **About**: Nuclear fission reactors which are **smaller in size than mainstream nuclear reactors.**
  - The main difference between these two processes is that fission is the **splitting of an atom into two or more smaller ones** while fusion is the fusing of two or more smaller atoms into a larger one.
- **Capacity**: These are high tech nuclear reactors with power capacities of up to 300 MW(e) per unit, or roughly one-third of the power capacity of conventional nuclear power reactors. SMRs, which can generate a large quantity of **low-carbon energy, are as follows:**
  - **Small** – a fraction of the size of a traditional nuclear power reactor.
  - **Modular** – making it possible for systems and components to be factory assembled and transported as a unit to a location for installation.
  - **Reactors** – use nuclear fission to generate heat, which is then converted into energy.
- **Types of Small Modular Reactors**
  - **Thermal-Neutron Reactors:** Thermal-neutron reactors utilise a **moderator to slow neutrons** and typically use Uranium – 235 (U – 235) as a fissile material. This is the case for the vast majority of conventionally operating reactors.
  - **Fast Reactors**: Moderators are **not used by fast reactors.** They instead depend on the fuel to absorb faster neutrons.
- **Technologies**
  - **Cooling the Reactor**: Water is used as a coolant in conventional reactors. SMRs c**an be cooled with water, liquid metal, gas, or molten salt**
  - **Power Generation**: Rather than boiling water, several gas cooled reactor designs propel a **gas powered turbine.** Thermal energy could be used directly without the need for conversion.
  - **Load Adjustment**: SMR designs c**an either provide constant power or tweak** their output based on demand. Another option is to use cogeneration, which maintains consistent output while diverting otherwise unnecessary power to an auxiliary use.
  - **Nuclear waste:** Small modular reactors, **long touted as the future of nuclear energy,** will actually generate more radioactive waste than conventional nuclear power plants, according to research from Stanford and the University of British Columbia.
- **Operational small modular reactors**: Until 2020, no truly modular SMRs had been built. Only in May 2020 the f**irst prototype of a floating nuclear power plant** with two 30 MWe reactors type KLT-40 started operation in Pevek, Russia. This concept is based on the design of nuclear icebreakers.

PIB

Nov 28

PSLV C54 MISSION

(Syllabus: GS Paper 3 - Sci & Tech)

PM congratulates ISRO and NSIL on successful launch of PSLV C54 mission

Context: The Prime Minister has congratulated ISRO and NSIL on the successful launch of the PSLV C54 mission.

Key Points

- **Launch vehicle:** This is the **56th flight of the PSLV and the 24th flight of the PSLV-XL** version that took off from the Satish Dhawan Space Centre (SDSC), SHAR, Sriharikota.
  - The PSLV is an expendable medium-lift launch vehicle designed and operated by the ISRO.
  - It was **developed in 1993** to allow India to launch its Indian Remote Sensing (IRS) satellites into sun-synchronous orbits.
  - PSLV can also launch small size satellites into **Geostationary Transfer Orbit (GTO)**.
  - Some notable payloads launched by PSLV include India's first lunar probe *Chandrayaan-1, India's first interplanetary mission - Mars Orbiter Mission (Mangalyaan)* and India's first space observatory - Astrosat.
  - PSLV-XL is the **upgraded version of PSLV** which uses larger strap-on motors (PSOM-XL or S12) to achieve higher payload capability up to 1,800 kg (4,000 lb) to Sun-synchronous orbit.
- **Satellites**:
  - **8 nano satellites**: It includes **ISRO Nano Satellite-2 for Bhutan** (INS-2B), Anand, Astrocast (four satellites) and two Thybolt satellites.
  - **Earth Observation Satellite (EOS-06)**: It is the **Oceansat** series' 3rd-generation satellite envisaged to observe ocean colour data, sea surface temperature and wind vector data to use in oceanography, climatic and meteorological applications.
- **Separation of the satellites:** The primary satellite (EOS-06) was separated in Orbit-1 and subsequently, orbit was changed by using two **Orbit Change Thrusters (OCTs)** introduced in the Propulsion Bay Ring of the PSLV-C54.
  - Later, all the **7 commercial satellites** from NewSpace India Limited (NSIL) were deployed successfully.
  - Astrocast, a 3U spacecraft from Spaceflight Inc, US, was separated.
  - The Thybolt, a **0.5U spacecraft** bus with a communication payload to enable rapid technology demonstration and constellation development from Dhruva Space, was then placed in the intended orbit.
  - The **Anand three axis** stabilised nano satellite, a technology demonstrator from Pixxel, India was also placed in the orbit.

India-Bhutan Satellite

- **Joint mission**: The INS-2B satellite, a joint mission between **India and Bhutan.**
  - India provided **capacity building assistance f**or the development of this mission.
  - Bhutanese engineers were provided **hand-on training** at the UR Rao Satellite Centre, in Bengaluru to build and test satellites as well as process and analyse satellite data.
- **Two payloads:** It contains two payloads:
  - NanoMx, a **multispectral optical imaging payload** developed by Space Applications Centre (SAC), and
  - APRS-Digipeater, **built collaboratively by DITT-Bhutan and URSC.**
- **Significance**: This newly launched satellite will **provide high-resolution images to Bhutan** to help the country effectively manage its natural resources.

DTE

Nov 28

TRIPLE-DIP LA NINA

(Syllabus: GS Paper 1 - Geography)



El Nino

- **About**: El Nino means 'little boy' or 'Christ child' in Spanish.
  - The phenomenon was thus named because it was first recognised by South American fishermen in the early part of the 17th century.
- **Warm of the Pacific Ocean:** The events, i.e., warm waters in the Pacific Ocean, tended to occur in December, hence, the name was chosen.
- **Impacts**: El Nino refers to the large-scale ocean-atmosphere climate interaction linked to periodic warming in sea surface temperatures across the central and east-central Equatorial Pacific.
  - It is associated with high pressure in the western Pacific.
- **Impacts of Indian monsoon**: El Nino adversely impacts the Indian monsoons and hence, agriculture in India.

Context: The **La Niña weather phenomenon**, which entered its third year in September this year, is unlikely to continue through 2023, forecasts suggest.

- Instead, there is a **likelihood of a neutral or El Niño phase** emerging next year, according to forecasts from the Columbia Climate School Research Institute for Climate and Society.

Key Points

- Since 1950, the Earth has witnessed a tr**iple La Niña thrice,** including the current one.
- A La Niña phase **four years in a row** has not been recorded so far.
- At this stage, the **possibility of La Niña continuing** into 2023 is low.
- Generally, El Nino and La Nina **occur every 4 – 5 years.**
- El Nino is **more frequent** than La Nina.
- Typically, the episodes **last for nine to twelve months.**

La Nina

- **About**: La Nina means **'little girl'** in Spanish and is also known as El Vie**jo or 'cold event'.**
  - **Here, the w**ater temperature in the Eastern Pacific gets colder than normal.
  - As a result of this, there is a **strong high pressure** over the eastern equatorial Pacific. Now, there is low pressure in the Western Pacific and off Asia.
- **Impacts**: La Nina **causes drought in Peru and Ecuador**, heavy floods in Australia, high temperatures in Western Pacific, Indian Ocean, off the Somalian coast and good monsoon rains in India.
  - A La Nina is actually **beneficial for the Indian monsoon.**
- **Triple-Dip La Nina:** A "triple-dip" La Nina is a **multiyear cooling of the surface temperature of the equatorial Pacific Ocean**, which can cause droughts, fierce winds and heavy rainfall.
  - According to World Meteorological Organization, the current La Nina is projected to span three consecutive northern hemisphere winters. It began in September 2020.
  - If it **continues for the next six months,** it will be the first "triple-dip" La Nina event of the 21st century.
  - It is exceptional to have three consecutive years with a La Nina event.
  - Its cooling influence is temporarily slowing the rise in global temperatures – but it will not halt or reverse the l**ong-term warming trend.**
  - La Nina's occurred **several times between 1903 to 2010 and 2010 to 2012.**

DTE

Nov 28

SOUTHERN WHITE RHINO

(Syllabus: GS Paper 3 - Env & Eco)



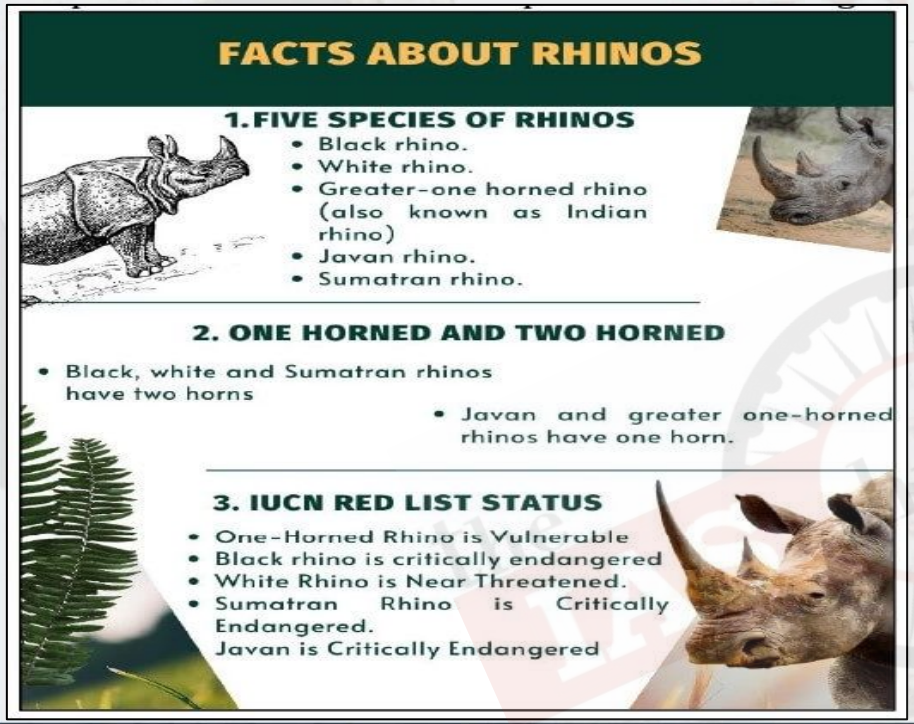
AFRICA

Poaching on the rise, but CITES COP19 downgrades status of southern white rhino

Despite the setback, the parties at COP19 rejected the proposal made by Eswatini to reinstate trade in rhino horns

By Himanshu Nitnaware

Published: Friday 25 November 2022



Context: In a major setback to rhino conservation in Africa, the proposal to **downgrade the status of southern white rhino from Appendix I to Appendix II** was accepted at the 19th Conference of Parties (COP19).

Key Points

- **Degraded the status:** The COP19, organised by Convention on International Trade in Endangered Species (CITES) in Panama City, accepted the proposal by **Botswana and Namibia** to degrade the status.
  - Wild animal species listed in **Appendix I include those threatened with extinction.**
  - The animals named under **Appendix II may not necessarily be threatened with extinction**, but trade of such species should be controlled to ensure it does not threaten their existence.
- **Population**: Namibia's white rhino population is estimated to be around 1,237 individuals.
  - As many as **57 white rhino were reported poached** in Namibia between 2013 and 2020. An additional 12 were acknowledged in 2021.
  - Some 48 rhinos were recorded to be poached in Namibia through August 2022, which included 32 black and 16 white animals.
- **Threats**: The **poaching** of the wild animal species continues to frustrate preventive dehorning campaigns
  - **King Mswati III International Airport** in Eswatini is a hub for rhino horns imported illegally from South Africa and other southern African countries.

White Rhino

- **About**: The **second largest land mammal after the elephant.**
  - White rhinos are also **known as the square-lipped rhinoceros** due to their square (not pointed) upper lip.
  - The IUCN Status of White Rhino is Near Threatened.
- **Two species**: Two **genetically different subspecies exist,** the northern and southern white rhino and are found in two different regions in Africa. The IUCN status of its subspecies is as follows:
  - **Northern White Rhino:** Critically Endangered
    - The northern subspecies has very few remaining individuals, with only two confirmed left in 2018 (two females: Fatu, 18 and Najin, 29), both in captivity.
    - Sudan, the world's last known male Northern white rhinoceros, died in Kenya on 19 March 2018 at age 45.
  - **Southern White Rhino**: Near Threatened
- **Distribution**:
  - **Southern white rhino**: The southern white rhino lives in Southern Africa. About 98.5% of white rhinos live in just five countries (South Africa, Namibia, Zimbabwe, Kenya, and Uganda).
  - **Northern white rhino (Ceratotherium simum cottoni)**: Range over parts of northwestern Uganda, southern Chad, southwestern Sudan, the eastern part of Central African Republic, and northeastern Democratic Republic of the Congo (DRC).

THANK YOU!

t.me/theiashub

/mkyadav

www.theiashub.com/daily-quiz

9560082909