

NATIONAL CADET CORPS

Recently, the National Cadet Corps (NCC) celebrated its 75th Anniversary on November 26, 2023



About the National Cadet Corps:

- It is a **Tri-Services organisation**, comprising the Army, Navy and Air Force, engaged in grooming the youth into disciplined and patriotic citizens.
- It came into existence under the **National Cadet Corps Act XXXI of 1948** under the **Ministry of Defence (MoD)**.
- It is a voluntary organisation that recruits **cadets from high schools, colleges, and universities all over India**.
- The cadets are given basic military training in small arms and parades. They are given preference in military service over normal candidates during selections.

Aims

- To **develop qualities of character, courage, comradeship, discipline, leadership, secular outlook, the spirit of adventure and sportsmanship and ideals of selfless service among the youth to make them useful citizens.**
- To create a **human resource of organised, trained, and motivated youth to provide leadership in all walks of life, including the Armed Forces, and be always available for the service of the nation.**
- To create a suitable environment to motivate the youth **to take up a career in the armed forces.**
- It is **headed by the Director General (DG)**, an Army officer of the rank of Lieutenant General.
- **Headquarters:** New Delhi.

NASA TO TRAIN AN INDIAN ASTRONAUT FOR ISS MISSION

Why in news?

- US space agency NASA will train an Indian astronaut for a mission to the International Space Station by the end of 2024.
- This was revealed by the organisation's administrator Bill Nelson during his Delhi visit.
- He also said another major programme emerging from India-US collaboration would be the NISAR satellite, which is to be launched in the first quarter of 2024.

Indian Space Station

- **About**
 - India's planned space station is called the **Bharatiya Antariksha Station**.
 - It will be built by India and operated by the Indian Space Research Organisation (ISRO).
 - The station is expected to be completed by 2035.
 - Recently, PM Modi called on ISRO scientists to set up an Indian Space Station by 2035 and send an Indian to the moon by 2040.
- **Features**
 - The Indian space station will be smaller than International Space Station (ISS).
 - It will have a mass of 20 tonnes (ISS - 450 tonnes and Chinese Tiangong Space Station - 100 tonnes) and will be used for microgravity experiments.
 - It will orbit Earth at an altitude of around 400km.

NASA-ISRO Synthetic Aperture Radar (NISAR)

- **About**
 - NISAR, or NASA-ISRO Synthetic Aperture Radar, is a joint project between NASA and ISRO.
 - When it is launched, NISAR will be the **first radar imaging satellite** to use dual frequencies.

- The mission will survey all of Earth's land and ice-covered surfaces every 12 days. It has a three-year duration.
 - **Aim**
 - The main aim of the NISAR satellite is to observe the most complex natural processes of the planet, including ecosystem disturbances, ice-sheet collapse, as well as earthquakes, volcanoes and landslides.
 - **Functions**
 - NISAR is a Low Earth Orbit (LEO) observatory that will measure Earth's changing ecosystems, dynamic surfaces, and ice masses.
 - It will also gather information related to biomass, natural hazards, sea level rise, and groundwater.
 - **Working**
 - NISAR will use two distinct radar frequencies: **L-band and S-band**.
 - This will enable it to measure changes on Earth's surface with precision, down to less than a centimeter.
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[INTERNATIONAL SUGAR ORGANISATION \(ISO\)](#)

India, the largest consumer and second-largest producer of sugar globally, was recently named the Chair of the International Sugar Organisation (ISO) for the year 2024.



About the International Sugar Organisation (ISO):

- ISO is an inter-governmental body completely devoted to **improving conditions in the world sugar market.**
- Its **87 member states** represent **87% of global production**, 64% of consumption, 92% of sugar exports, and 34% of sugar imports.
- ISO is **based in London.**
- The ISO exists to **administer** the internationally negotiated **1992 International Sugar Agreement (ISA)**, the objectives of which are:

- to **ensure enhanced international cooperation** in connection with world sugar matters and related issues.
 - to **provide a forum for intergovernmental consultations** on sugar and on ways to improve the world sugar economy.
 - to **facilitate trade** by collecting and providing information on the world sugar market and other sweeteners.
 - to **encourage increased demand for sugar**, particularly for non-traditional uses.
 - To fulfil these objectives, the ISO **undertakes many distinct activities**, including **workshops, seminars**, and its long-established and **widely-recognized statistical and analytical work**.
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GLOBAL BIODIVERSITY FRAMEWORK FUND

Recently, experts said that the world's new biodiversity framework fund lacks any real financial commitment to meet conservation targets.



About the Global Biodiversity Framework Fund:

- It was created to ramp up investment in nature restoration and renewal.
- It has been designed to mobilise and accelerate investment in the conservation and sustainability of wild species and ecosystems, whose health is under threat from wildfires, flooding, extreme weather, and human activity, including urban sprawl.
- The fund was **established at the 7th Assembly of the Global Environment Facility** in Vancouver, Canada.
- It will help countries **achieve** the 23 targets set under the **Kunming-Montreal Global Biodiversity Framework (KMGBF)**.
- The framework was adopted at the 15th Conference of the Parties (COP15) to the UN Convention on Biological Diversity last December.
- It will be **managed by the Global Environment Facility (GEF)** and raise funds through private, philanthropic, and government investments.

- This is a departure from GEF, which relied on just 40 donors for finance.
- It will also have access to funds earmarked for biodiversity conservation under GEF.
- The facility has a cumulative budget of \$5.25 billion for 2022-26, of which 36 percent is **earmarked for biodiversity**.
- The remaining budget is for projects on climate change, pollution, land and ocean health.
- The GBF Fund Council will be open to **representation by the following members**,
 - 16 Members from developing countries
 - 14 Members from developed countries
 - 2 members from the countries of central and eastern Europe and the former Soviet Union.
- **Decisions** of the GBF Fund Council are to be **taken by consensus**, along the lines of the GEF Instrument.

UTTARAKHAND TUNNEL COLLAPSE: A MOUNTAIN MOVED, 41 RESCUED



Why in News?

- The multi-agency operation to rescue 41 workers trapped inside the **Silkyara tunnel** in Uttarkashi finally succeeded after days of ups and downs, when all of them were safely brought out.
- The massive effort, unprecedented in its magnitude and ambition, ended an ordeal that **lasted 17 days** and had the entire government machinery (including the PMO) putting its might behind the evacuation exercise.

Challenges Faced by the Rescue Teams:

- A **minor earthquake** on November 16 caused the debris to shift 3 inches inside the tunnel.
- There was a **possibility of the tunnel face collapsing**, which could pose a significant setback to the entire operation.

- **Most of the trapped workers recorded high BP** which was attributed to anxiety, having been in such a situation for so long.
- **The biggest setback was the breakdown of the auger machine** used in drilling an escape passage through the debris.

Key Factors that Worked in Favour of Rescue Teams:

- **It included access to electricity, water, and ample space** for the trapped workers. Subsequently, when the supply line was established, the situation became more manageable.
- The "miracle" that everyone was looking for was realised by a group of workers known as "**rat-hole**" miners.
 - They were brought in to manually **dig through the last stretch of debris** - around 12 meters after the auger machine parts were cleared from the escape passage.
 - Once that was done (in less than 24 hours), **rescue personnel were able to push inside 800mm pipes**, welded together, which served as an escape tunnel through which the stranded workers eventually came out.

INDIAN OCEAN TUNA COMMISSION

The Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, is organizing the 19th Working Party on Data Collection and Statistics (WPDCS19) of the Indian Ocean Tuna Commission (IOTC) from 28th November to 2nd December 2023.



About the Indian Ocean Tuna Commission:

- It is an **intergovernmental organisation** mandated to sustainably manage highly migratory (tuna and tuna-like) fisheries **resources in the Indian Ocean.**

- The Agreement for the Establishment of the Indian Ocean Tuna Commission was adopted by the **Food and Agriculture Organisation of the United Nations** at the 105th Session in Rome on 25 November 1993.
 - The objective of the IOTC is to **promote cooperation amongst contracting members** to ensure, through appropriate management, the **sustainable use of fishery resources**.
 - The Indian Ocean is the second-largest tuna fishery in the world.
 - The IOTC currently has **31 contracting parties** who are members of the IOTC and two cooperating **non-contracting parties, Liberia and Senegal**.
 - Membership of the IOTC is open to:
 - Indian Ocean coastal countries
 - countries, or regional economic integration organisations, that are members of the UN
 - countries that are members of UN special organisations
 - countries that fish for tuna in the Indian Ocean
 - **India is a member** of this organisation.
 - **Headquarters:** Victoria, Seychelles
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NOLAMBA DYNASTY

Ancient inscriptions, hero stones, and idols of Shiva Linga and Nandi have been unearthed during recent research about the history of Nolamba Pallavas.



About the Nolamba Dynasty:

- They were one of the significant political **powers in South India**.
- The Nolambas **ruled from the 8th to the 12th centuries C.E.** over an area traditionally called Nolambavadi, which extended over **south-east Karnataka** and **parts of Tamil Nadu and Andhra Pradesh**.
- They ruled **first as feudatories to Pallavas, Chalukyas of Badami, Gangas, and Rashtrakutas, and later to Chalukyas of Kalyani**.

- Nolambas commonly referred to themselves as **Nolamba Pallava** in several inscriptions.
- Their earlier capital was **Chitradurga**, which they later shifted to **Hemavati in modern Andhra Pradesh**. Hemavathi was the capital between the 8th and 10th centuries AD.

Origin:

- **Mangala Nomabathi Raja (735–785 A.D.)** was considered the **founder of the Nolamba dynasty**.
- Inscriptional evidence suggests that they **came into existence as governors when the Pallavas and Chalukyas were supreme powers**.
- The **Nolambas**, who were perhaps related to the Pallava family, **governed the region adjacent to these lands of Pallava feudatories**, namely the Banas and Vaidumbas.
- Sometime later, during the rule of Vikramaditya I, the **Chalukyas regained their lost territories**. The **Banas and Vaidumbas** thus had to **change their political relationship back to the Chalukyas**.

Decline: Nolambas were **overrun by the Ganga king Marasimha**, who boasts of having destroyed the Nolamba family **and had the title Nolambakulantaka**.

- **Three grand temple complexes** that are **attributed to this dynasty's glory** are the **Kalleshwara Temple** in Aralaguppe, the **Bhoganandishwara Temple** in Nandi, and the **Ramalingeshwara Temple** in Avani.
- The Nolambas were **Shaivites**, and the temples they built were dedicated to Lord Shiva.

TUNGABHADRA RIVER



About the Tungabhadra River:

- It is a major river **in the south Indian peninsula**.

- It is a major **tributary of the Krishna River.**
- **Origin:**
 - It is formed by the **union of two rivers, Tunga and Bhadra**, hence the name.
 - **Both the Tunga and Bhadra Rivers originate on the eastern slopes of the Western Ghats.**
 - The two rivers **merge at Koodli in the Shimoga district of Karnataka**, giving birth to the Tungabhadra River.
- **Course:**
 - It flows in a more or less **northwest direction** before **joining the Krishna River at Sangamaleshwaram in Andhra Pradesh.**
 - The Krishna River **finally ends in the Bay of Bengal.**
- The river has a **total length of 531 km** and a catchment area of 28,000 sq. km.
- It flows through the **states of Karnataka and Andhra Pradesh.**
- It is **influenced chiefly by the South-West monsoon.**
- **Major Tributaries: Varada River and Hagari (Vedathy) River.**
- The river has several dams and reservoirs built on it, including the **Tunga Anicut Dam**, the **Bhadra Dam**, the **Hemavathy Dam**, and the Tungabhadra Dam.

History:

- The Hindus consider this river sacred, and there is a **mention of the river in Ramayana**, where it is **referred to as Pampa.**
- In historical times, the Tungabhadra River was **known as the Varada River.**
- The river was an **important source of water for the Vijayanagar Empire.**
- The **city of Hampi**, which was the capital of the Vijayanagar Empire, was **located on the banks of the river.**