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commissioned into Indian Navy

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Quiz of the Day



# Missile destroyer *INS Mormugao* commissioned into Indian Navy

The warship with full-load displacement of 7400 tonnes is named after the historic port city of Mormugao on the west coast; it is propelled by four powerful gas turbines, has enhanced stealth features and is equipped with BrahMos cruise missiles

**The Hindu Bureau**  
 NEW DELHI

In this era of globalisation, almost all nations are dependent on each other in the field of trade and hence rule-based freedom of navigation and security of sea lanes have become more important than ever for stability and economic progress of the world, Defence Minister Rajnath Singh said on Sunday. He was speaking in Mumbai at the commissioning ceremony of *INS Mormugao*, the second of four stealth guided missile destroyers being built under Project-15B.

Named after the historic port city of Goa on the west coast, Mormugao, the ship was commissioned on the eve of the 60th anniversary of the liberation of Goa from Portuguese rule.

"Economic, political and trade relations between countries are constantly evolving. The COVID-19 pandemic, situation in the Middle East, Afghanistan and Ukraine – it directly or indirectly impacts every country in one way or another," Mr. Singh said.

During the ceremony, the Commanding Officer, Captain Kapil Bhatia, read



**Shot in the arm:** Defence Minister Rajnath Singh at the *INS Mormugao* commissioning ceremony at Naval Dockyard in Mumbai. EMMANUEL YOGINI

out the Ship's Commissioning Warrant. Subsequently, the Naval Ensign was hoisted onboard for the first time and the Commissioning Pennant broken (unfurled) on the main mast to the National Anthem played by the Naval Band, a Defence Ministry statement said.

## Indigenous content

"With over 75% indigenous content, it [*INS Mormugao*] is a testimony to India's excellence in design and development of warships and a shining example of our growing indigenous de-

fence production capabilities. The warship will meet the present and future needs of our country and of our friendly countries," Mr. Singh said.

Stating that the country's growing economy is directly connected to increasing trade, most of which is through sea routes, Mr. Singh said India's interests are directly linked to the Indian Ocean. India being an important country in this region, the role of the Indian Navy becomes more important in its security, he added.

The 163-metre-long war-

ship has a full-load displacement of 7,400 tonnes. "The overall indigenous content of the project is approximately 75%," the Navy said.

## Construction contract

The contract for construction of four ships under Project-15B was signed in January 2011 at a project cost of about ₹29,643.74 crore. The design of the ships has been developed in-house by the Directorate of Naval Design and constructed by Mazagon Dock Shipbuilders Ltd., Mumbai. They are a follow-on of

the Kolkata class destroyers and named after major cities from all four corners of the country – Visakhapatnam, Mormugao, Imphal and Surat. *INS Visakhapatnam*, was commissioned in 2021. *INS Imphal* and *INS Surat* are at various stages of outfitting and trials.

*INS Mormugao* is propelled by four powerful gas turbines capable of achieving speeds in excess of 30 knots, the Navy said, stating that it has enhanced stealth features resulting in a reduced radar cross section.

These ships are equipped with BrahMos supersonic cruise missiles and long-range surface-to-air missiles. Some of the major indigenised equipment and systems aboard *INS Mormugao* include surface-to-surface and surface-to-air missiles, torpedo tubes and launchers, anti-submarine rocket launchers and super rapid gun mount, besides combat management system, integrated platform management system, automated power management system, foldable hangar doors, helo-traversing system, close-in weapon system, and bow-mounted SONAR, the Navy said.

01

Missile destroyer *INS Mormugao* commissioned into Indian Navy

Types of  
military ships

Aircraft  
Carriers

It is a warship that serves as a seagoing airbase, equipped with a full-length flight deck and facilities for carrying, arming, deploying, and recovering aircraft

Cruisers

They are generally the largest ships in a fleet after aircraft carriers and can usually perform several roles. These vessels are primarily designed to provide defense against enemy aircraft

Destroyers

It is a fast, maneuverable, long-endurance warship intended to escort larger vessels in a fleet, convoy or battle group and defend them against powerful short range attackers

Frigates

They are smaller ships and provide defensive capabilities when escorting other ships

Corvettes

It is traditionally the smallest class of vessel considered to be a proper warship

Submarines

It is a watercraft capable of independent operation underwater

Amphibious  
assault ships

It is a type of amphibious warfare ship employed to land and support ground forces on enemy territory by an amphibious assault





**Aircraft Carriers**



**Cruisers**



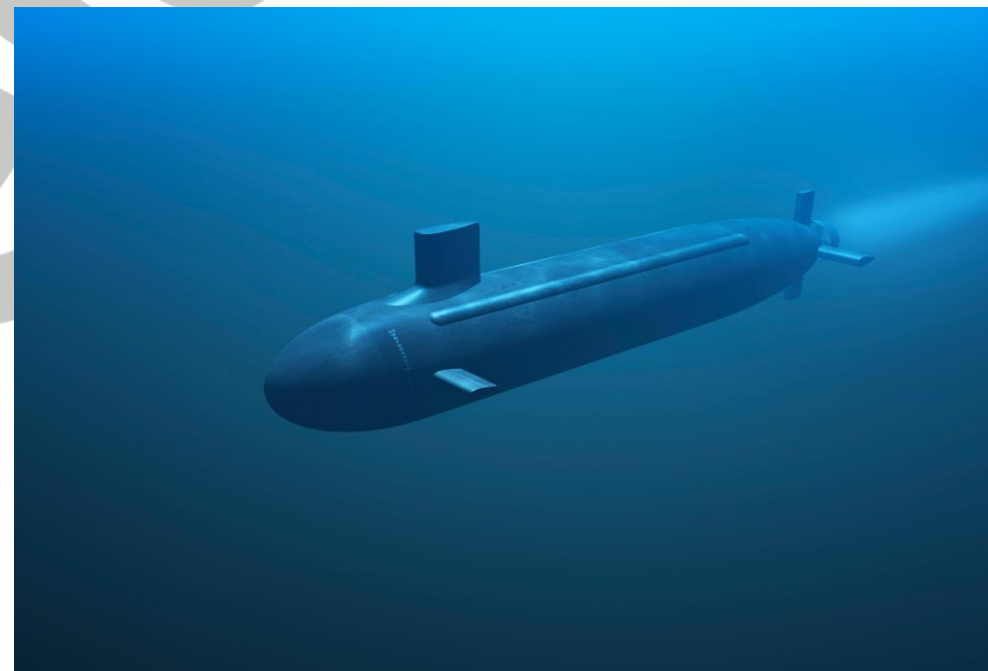
**Destroyers**



**Frigates**



**Corvettes**



**Submarines**



**Amphibious assault ships**



Types of Indian Navy  
Warships

Aircraft Carrier

INS Vikramaditya

INS Vikrant

DESTROYERS

Delhi Class

guided-missile destroyers

Rana Class

guided-missile destroyers  
and AKA as Kashin-II class

Ranvir Class

Kolkata Class

Visakhapatnam Class

indigenously developed  
missile destroyers

Types of Indian Navy  
Warships

FRIGATES

Shivalik Class

Talwar Class

Indo-Russian joint production

Teg Class

Indo-Russian joint production

Kamorta Class

indigenous component of  
about 90%

Brahmaputra Class

guided-missile frigates  
designed and built in India

CORVETTES

Kora Class

Khukri Class

Veer Class

Abhay Class

Types of Indian Navy  
Warships

Submarines

Currently, India has 15  
conventional diesel-electric  
submarines, classified as SSK

Kalvari Class

Sindhughosh Class

Shishumar Class

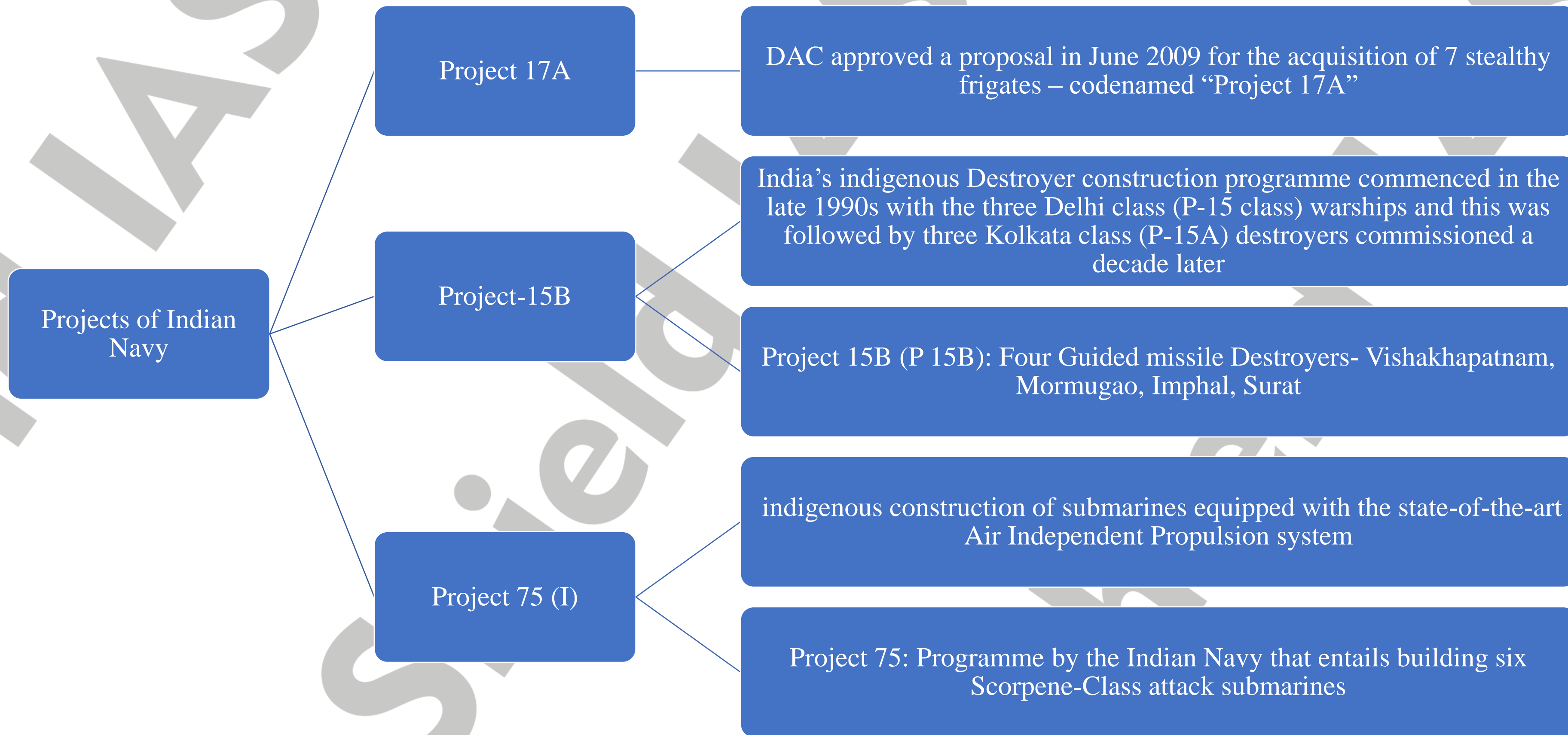
one nuclear ballistic  
submarine, classified as  
SSBN

INS Arihant

- It is a nuclear-powered  
ballistic missile submarine,  
built indigenously

INS Arighat

- an upgraded version of  
Arihant, is likely to be  
commissioned within the  
next few months





# Northeast is not last part of country but gateway for trade and ties: Modi

At Shillong, the Prime Minister highlighted that Centre has been investing heavily in the region; he inaugurated and laid the foundation stone of multiple projects estimated at over ₹2450 crore

**The Hindu Bureau**  
GUWAHATI

**P** rime Minister Narendra Modi on Sunday said the Union government had been investing heavily in Northeast India with his government's motto being "Act fast for northeast and act first for northeast".

Addressing the golden jubilee celebration of the North Eastern Council (NEC) in Meghalaya's capital, Shillong, he said the Centre was spending ₹7 lakh crore in the region now as against ₹2 lakh crore after India's Independence.

Established in 1971 and formally inaugurated in 1972, the NEC is the nodal agency for the economic and social development of the northeastern region comprising eight States.

Mr. Modi attributed the focus on the northeast to the change in the way the Centre had been looking at the region since 2014.

"For us, the northeast is not the last part of the country, but the peace and development gateway for trade and other ties with Southeast Asian countries," he said.

Slamming the previous governments for ignoring



**Grand event:** Prime Minister Narendra Modi, Union Home Minister Amit Shah and Governor Brigadier B.D. Mishra (in red) at the golden jubilee celebrations of the North Eastern Council, in Shillong. (PI)

areas along the international borders in the region, he said the government's vibrant border village programme would help develop these areas on a par with urban centres and prevent outmigration.

The Prime Minister noted that the number of airports in the region increased from nine to 16 and the number of flights increased from 900 to 1,900 in the last eight years. "Work is now under way to connect all the State capitals of the region by railway," he said.

He also underscored the 50% increase in the length of national highways in the region since 2014, insisting that the infrastructure projects gained momentum after the launch of the PM-DevINE scheme.

Mr. Modi said the government has been working on improving digital connectivity in the northeast by increasing the optical fibre network with 6,000 mobile towers being set up at a cost of ₹5,000 crore. "The Atmanirbhar 5G infrastructure will help develop the start-up ecosystem and service sector

in the region," he said.

Earlier, he inaugurated and laid the foundation stone of multiple projects worth over ₹2,450 crore. These include an integrated beekeeping development centre and 21 Hindi libraries for Mizoram, Manipur, Tripura and Assam.

Addressing the golden jubilee function of the NEC as its chairperson, Home Minister Amit Shah said the northeast had improved vastly in terms of funding, peace, development and connectivity after Mr. Modi took charge at the Centre.

02

Northeast is not last part of country but gateway for trade and ties: Modi

# Significance of North East for India

## Strategic Significance:

- North-East India is the gateway to South-East Asia and beyond. It is India's land-bridge to Myanmar.
- India's Act East Policy places the northeastern states on the territorial frontier of India's eastward engagement.

## Cultural Significance:

- North East India is one of the most culturally diverse areas of the world. It is home to over 200 tribes. Popular festivals include the Hornbill Festival of Nagaland, Pang Lhabsol of Sikkim, etc.
- The rich tapestry of cultures of Northeast is reflected in its highly developed Folk dance forms like Bihu (Assam).
- Manipur has a tradition of worshipping nature in sacred groves, called UmangLai.

## Economic Significance:

- Economically, the Region is rich in natural resources of "TOT" (Tea, Oil, and Timber).
- It is a veritable powerhouse with a potential of 50000 MW of hydroelectric power and an abundant reserve of fossil fuels.

## Ecological Significance:

- North East is a part of Indo-Burma biodiversity hotspot. It represents one of the highest avian and plant biodiversity of the Indian subcontinent.
- This area has the prestige of having all the bear species present in India.





# Way Forward

## Act-East from Northeast:

- Comprehensive implementation of Act East policy is relevant to the entire country but particularly important for the long term growth of the North East

## Potential Powerhouse of India:

- Its geo-strategic location and natural resources also makes it a potential powerhouse of India for development and progress.
- A comprehensive framework needs to be developed to make the region a preferred investment location.

## Development of Tourism:

- A key aspect of the development of the North East is tourism, which has the potential to channel the region into mainstream development.

## Enhancing Connectivity:

- Connectivity drives commerce, air links to the Northeastern states should be a priority. The development of road and railway projects should be in accordance with disaster-resilient measures.
- Japan has emerged as a major partner in our efforts for the development of the North-East and connectivity to ASEAN

## Political and Social Awareness:

- It is necessary to foster inclusivity and drive awareness campaigns to change the perceptions from being a neglected, misgoverned, tribal region into a veritable soft power.

## Development of Physical and Social Infrastructure:

- Due to lack of higher educational infrastructure in the North East, a very large number of students migrate to other parts of the country for education leading to a drain of both manpower and financial resources
- Furthermore, there is a need to extend digital connectivity and move towards digital inclusion in the North East.

## Land Record Management:

- The system of maintenance of formal land records in the North East is weak and practically absent in tribal areas.
- This prevents landholders from securing loans and also leads to a number of land-related disputes.

## Northeast- Growing Sports Powerhouse:

- North East is emerging as a sports and sporting powerhouse of India that drives some of the best sportspersons who go onto becoming icons.



# North Eastern Council (NEC)

The NEC came into existence by a Parliamentary Act called the North Eastern Council Act, 1971 to act as an advisory body for socio-economic and balanced development of the North-Eastern Areas.

The Council started its functioning in 1972.

NEC members:

- the Governors and
- the Chief Ministers of the 8 states including Sikkim,
- Chairman and 3 members who are nominated by the country's President.

Functions

- To discuss any matter in which some or all of the States represented in the Council have a common interest and advise the Central Government and the Governments of the States concerned as to the action to be taken on any such matter, particularly with regard to –
  - any matter of common interest in the field of economic and social planning;
  - any matter concerning inter-State Transport and Communications;
  - any matter relating to Power or Flood-control projects of common interest.
- To formulate and forward proposals for securing the balanced development of the North-Eastern Areas particularly with regard to –
  - a unified and coordinated Regional Plan, which will be in addition to the State Plan, in regard to matters of common importance to that area;
  - prioritizing the projects and schemes included in the Regional Plan and recommend stages in which the Regional Plan may be implemented; and
  - regarding the location of the projects and schemes included in the Regional Plan to the Central

# India pushes for new biodiversity fund

At the COP15 biodiversity conference in Montreal, the country said the developing nations bear most of the burden of implementing the targets for conservation and therefore, require adequate funds and technology transfer for this purpose; discussions also held on eliminating subsidies

Press Trust of India  
NEW DELHI

**T**here is an urgent need to create a new and dedicated fund to help developing countries successfully implement a post-2020 global framework to halt and reverse biodiversity loss, India has said at the U.N. biodiversity conference in Canada's Montreal.

The country said that conservation of biodiversity must also be based on common but differentiated responsibilities and respective capabilities (CBDR) as climate change also impacts nature. As the 196 parties to the Convention on Biological Diversity (CBD) finalise negotiations for a post-2020 Global Biodiversity Framework (GBF) — a new set of goals and targets to halt and reverse biodiversity loss — there have

been repeated calls for the inclusion of the CBDR principle in finance-related targets.

Addressing the stocktaking plenary at CBD COP15, Union Environment Minister Bhupender Yadav said the successful implementation of a post-2020 GBF would depend on the "ways and means we put in place for an equally ambitious resource mobilisation mechanism".

"There is a need to create a new and dedicated mechanism for the provision of financial resources to developing-country parties. Such a fund should be operationalised at the earliest to ensure effective implementation of the post-2020 GBF by all countries," the Minister said.

So far, the Global Environment Facility which caters to multiple conventions, including the



Union Environment Minister Bhupender Yadav addresses the stocktaking plenary at the UN Biodiversity Conference in Montreal.

UNFCCC and UN Convention to Combat Desertification, remains the only source of funding for biodiversity conservation.

At CBD COP15, developing countries have been demanding a new and dedicated biodiversity fund, saying the existing multilateral sources are not up to

the task of meeting the requirements of the GBF. Differences with rich countries on the matter had prompted representatives from developing nations to walk out of crucial financing talks last week. India said developing countries bear the burden of implementing the targets for

conservation of biodiversity and, therefore, require funds and technology transfer for this purpose.

Established as the seventh principle of the Rio Declaration adopted at the Earth Summit in 1992, CBDR is defined as states have common but differentiated responsibilities in view of the different contributions to global environmental degradation.

However, applying the CBDR principle to biodiversity conservation has not been straightforward as compared to climate negotiations, and there have been repeated disagreements between the global north and south.

At CBD COP15, the parties are also trying to achieve a consensus on eliminating subsidies that are harmful to the environment, such as subsidies for fossil fuel production, agri-

culture, forestry and fisheries, by at least \$500 billion annually and using this money for biodiversity conservation.

However, Mr. Yadav said that India does not agree on reducing the agriculture-related subsidy and redirecting the savings for biodiversity conservation, as there are many other national priorities.

Mr. Yadav said biodiversity conservation requires ecosystems to be conserved and restored holistically. It is in this context that ecosystem approaches for conservation of biodiversity need to be adopted rather than going for nature-based solutions, he said.

He said the GBF must recognise the responsibility of the developing countries towards poverty eradication and sustainable development.

03

India pushes for new biodiversity fund



# Dedicated Fund for Biodiversity Conservation

## Context

- Recently, in **COP15**, India supported a new, dedicated fund for biodiversity conservation.
- At CBD COP15, the Union Environment Minister said the successful implementation of a post-2020 **Global Biodiversity Framework (GBF)** will depend on the *"ways and means we put in place for an equally ambitious 'Resource Mobilization Mechanism.'"*
- Environment Minister further added that the developing countries bear most of the burden of implementing the targets for conservation of biodiversity and, therefore, require adequate funds and technology transfer for this purpose.

## Need for creation of a dedicated biodiversity fund:

- Need is to create a new and dedicated mechanism for the provision of financial resources to developing-country parties.
- This fund should be operationalised at the earliest to ensure effective implementation of the **post-2020 GBF** by all countries.
- Currently, the **Global Environment Facility** which caters to multiple conventions, including the UNFCCC and UN Convention to Combat Desertification, remains the only source of funding for biodiversity conservation.
- India said the developing countries bear most of the burden of implementing the targets for conservation of biodiversity and, therefore, require adequate funds and technology transfer for this purpose.

# COP of Convention on Biological Diversity

Meetings of the Conference of the Parties

COP 15 -

- Fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (Part Two)
- Montreal, Canada, 7 - 19 December 2022

COP 15 PART1 -

- Fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP-15-PART 1)
- Kunming, China, 11 - 15 October 2021

The Fifteenth meeting of the Conference of the Parties (COP 15) is held in Kunming, China and Montreal, Canada, in two phases. Phase one took place virtually, from 11 to 15 October 2021 and included a High-Level Segment from 12 to 13 October. Phase two is currently happening in Montreal, Canada, from 7 to 19 December 2022.



# Global Environment Facility (GEF)

Established on the eve of the 1992 Rio Earth Summit.

The only multilateral fund focused on biodiversity.

The GEF is a unique partnership of 18 agencies —

- including United Nations agencies,
- multilateral development banks,
- national entities and
- international NGOs

Finance:

- Financial contributions by donor countries are provided via several trust funds administered by the World Bank acting as the GEF Trustee and serviced by a functionally independent Secretariat housed at the World Bank.
- The GEF Trust Fund was established to help tackle our planet's most pressing environmental problems.

GEF funding is provided by participating donor countries and made available to developing countries and countries with economies in transition to meet the objectives of international environmental conventions and agreements.

The GEF is a financial mechanism for five major international environmental conventions:

- the Minamata Convention on Mercury,
- the Stockholm Convention on Persistent Organic Pollutants (POPs),
- the United Nations Convention on Biological Diversity (UNCBD),
- the United Nations Convention to Combat Desertification (UNCCD) and
- the United Nations Framework Convention on Climate Change (UNFCCC).

# Post-2020 Global Biodiversity Framework / Kunming Declaration

The Kunming Declaration was adopted by over 100 countries at the 15th Conference of the Parties to the United Nations Convention on Biological Diversity in China.

It calls for urgent and integrated action to reflect biodiversity considerations in all sectors of the global economy but crucial issues - like funding conservation in poorer countries and committing to biodiversity-friendly supply chains have been left to discuss later.

- It is not a binding international agreement.

It calls upon the parties to mainstream biodiversity protection in decision-making and recognise the importance of conservation in protecting human health.

- By adopting this, the nations have committed themselves to support the development, adoption and implementation of an effective post-2020 implementation plan, a capacity building action plan for the **Cartagena Protocol on biosafety**.
- The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology.

As per the declaration the signatory nations will ensure that the post-pandemic recovery policies, programmes and plans contribute to the conservation and sustainable use of biodiversity, promoting sustainable and inclusive development.

## 30 by 30 Target

- The declaration made a reference to the '30 by 30' target which is a key proposal being debated at the COP15, that would afford 30% of the Earth's land and oceans protected status by 2030.

Apart from this, the goal to halve the use of chemicals in agriculture and stop creating plastic waste is also being debated.

## Kunming Biodiversity Fund

- China has also pledged to inject USD 233 million into a new fund to protect biodiversity in developing countries. The fund is being referred to by China as Kunming Biodiversity Fund.
- It is the right step in this direction. However, some countries have reservations regarding this fund.
  - Some countries have called this fund as “a drop in the bucket” given that China is the world's biggest polluter.
  - Further, some rich country donors say a new fund for conservation is unnecessary because the United Nations' Global Environment Facility already helps developing nations finance green projects.



# QUIZ OF THE DAY

Q1. Which among the following is/are NOT part of the proposed five-fold strategy or 'Panchamrita' in CoP 26, Glasgow?

1. India will get its non-fossil energy capacity to 500GW by 2025.
2. India will meet 70% of its energy requirements till 2030 with renewable energy.
3. India will reduce its projected carbon emission by one billion tonnes by 2030.
4. India will achieve net zero by 2050.

Choose your answer from the options given below:

- a. 1 and 2 only
- b. 3 only
- c. 1, 2 and 4 only
- d. 3 and 4 only

Q2. Consider the following statements about Fuel Cell technology:

1. Fuel cell technology relies on the chemical energy of hydrogen to generate electricity in a clean manner and effectively.
2. Fuel cell vehicles are among the cleanest modes of transportations as they release no GHGs emissions.

Which of the statement/s given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of these