

GREAT NICOBAR: STRATEGIC OUTPOST OR SACRED HOMELAND

TABLE OF CONTENTS

Context:.....	2
1. What is the Geography of Nicobar Island?.....	3
2. What are the various Physical Features of Nicobar Group of Islands?.....	5
3. What is the Great Nicobar Project?	10
4. What is the the vision behind the Great Nicobar Project?	11
5. What are various Core Infrastructure Components of the Great Nicobar Project?.....	14
6. Discuss the geopolitical importance of the The Great Nicobar Project for India's economic and security interests?	19
7. What is the strategic importance of the project wrt China's Malacca Dilemma?.....	22
8. What did NGT say about the Great Nicobar Project?	23
9. Will the island's forests and tree cover be adequately preserved and compensated for?	26
10. Will tribal communities be safeguarded, ensuring the continuity of their culture and rights?	27
11. What are various concerns of the Great Nicobar Project?	28
12. How do retired military officials view the Great Nicobar Project as crucial for India's maritime security and Indo-Pacific presence?	38
13. What is the relevance of the topic for UPSC CSE?	40

GREAT NICOBAR PROJECT

STRATEGIC VISION. STRONGER INDIA.

BUILDING A FUTURE-READY ANDAMAN & NICOBAR ISLANDS

“ *the Great Nicobar Island Project is of strategic, defence and national importance, it transforms the region into a major hub of maritime and air connectivity in the Indian Ocean Region.* ”

– Narendra Modi
Prime Minister of India

GLOBAL MARITIME HUB
Transshipment terminal at Galathea Bay to boost India's presence in global maritime trade.

ENHANCED CONNECTIVITY
International airport and advanced infrastructure to connect India with the world.

STRATEGIC & DEFENCE SIGNIFICANCE
Strengthens maritime security, surveillance and India's strategic interests in the Indo-Pacific.

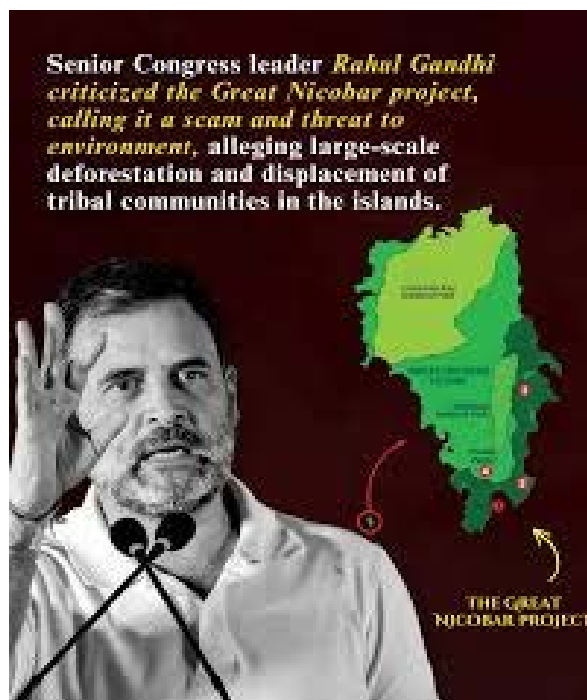
ECONOMIC GROWTH & EMPLOYMENT
Will generate jobs, promote tourism, trade and bring prosperity to the region.

SUSTAINABLE DEVELOPMENT
Environment-friendly planning with robust safeguards for a greener future.

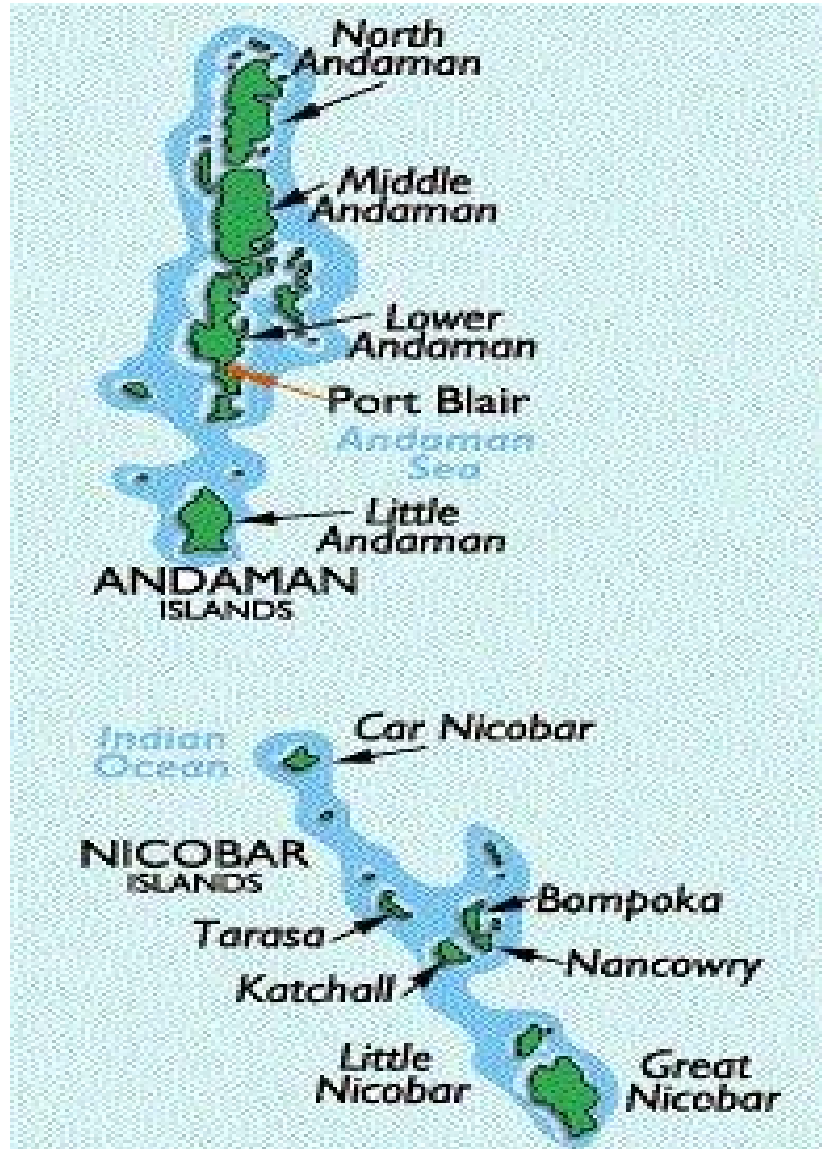
STRATEGIC LOCATION. LIMITLESS POTENTIAL. PROSPEROUS FUTURE.

Context:

- **Congress leader Rahul Gandhi** recent video about the **Great Nicobar Project** has reignited the debate around the Centre's ambitious development plan.
- While **Rahul Gandhi** argues that the project could cause "irreversible environmental damage" and "threaten indigenous communities", the government maintains it is critical for India's "long-term economic and strategic goals".



1. What is the Geography of Nicobar Island?

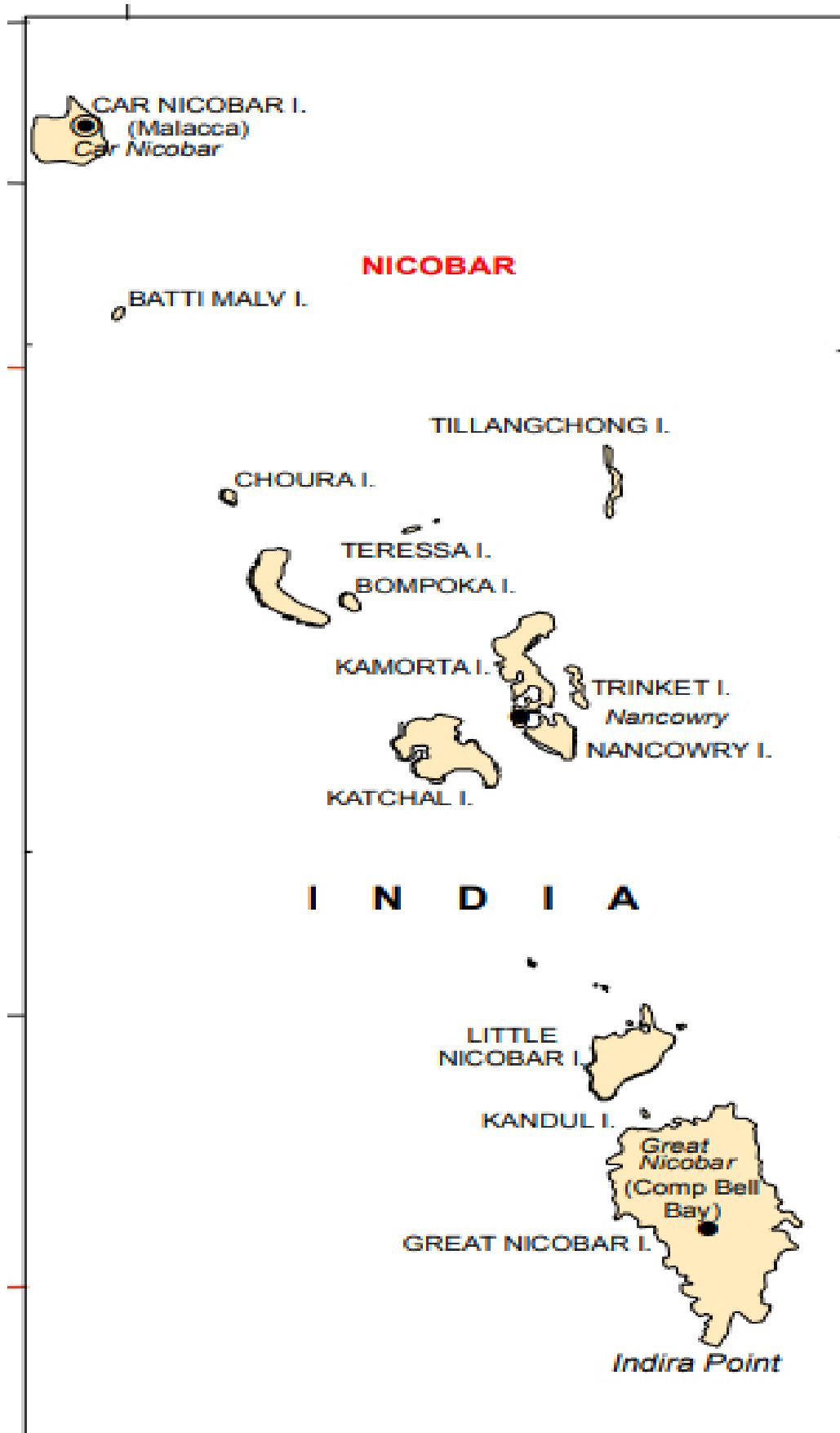


- The Nicobar Islands are situated in the South-east of the Bay of Bengal between 6 degree to 10 degree N latitude and between 92 degree to 94 degree E longitude.
- There are altogether **22 large and small islands**, out of which only twelve have inhabitants.
- The most **northerly island of the group is Car Nicobar**, which is 143 miles from Port Blair and the **ten degree channel about 75 miles separate from Little Andaman**.
- **Chowra, Teressa, Bompoka, Katchal, Kamorta, Nancowry and Trinket** form the central group of Nicobar islands; while in the southern group are Pulo Milo, Little Nicobar, Kondul, Great Nicobar and so on.

- The extreme southern point of **Great Nicobar**, previously known as **Pygmalion Point** and now **Indira Point**, is about **91 geographical miles** from **Pulo Brass** of **Achin Head** of **Sumatra**.
- The uninhabited islands in the central and southern group are **Batti Malv**, **Tileangchong** and **Meroe**, **Trak**, **Treis**, **Menchal** and **Kabra** respectively.
- The **Nicobars** stretch over **36 miles**, with an aggregate of **635 sq. miles**.

- *Falling between the sea route from South India / Sri Lanka to South East Asia and vice-vers, the voyagers referred it as “land of the naked” i.e. Nakkavar which is perhaps the direct Predecessor of the current name “Nicobar”.*
- *The medieval Arabic name ‘Lankhabatus’ is a mere mistranscription and misapprehension of “Nankakar or Nakkavar”.*
- *Lord Ram, the hero of epic ‘Ramayana’ is meant to have passed through the Islands during his period of exile (Mathur: 1967).*
- *Somdev’s ‘Kathasaritsagar’ (11th century) indicates it as ‘Narikel Dweep’.*
- *The islands have also been mentioned in the accounts of travellers like Fahien, (6th century); I-T’sing (early 7th century); Ptolemy (2nd century); Marco Polo (13th century) and Friar Oderic (early 14th century).*
- *The islands were known in China as Lo-Jan Kuo (land of the naked people) according to the writings of I-T’Sing.*
- *An inscription dated (1059 AD) of the Chola King of Tanjore indicates that these islands were used as base shelter stations for waging war and keeping control over South East Asia.*
- *The geographical names for the different islands all have obscure, complicated and interesting histories, whereas, each island has a native name too.*

2. What are the various Physical Features of Nicobar Group of Islands?



Features	Description
<p>Island Composition</p>	<ul style="list-style-type: none"> • The Nicobar group consists of 19 major islands, of which only a few are inhabited. • Important islands include: <ul style="list-style-type: none"> ▪ Great Nicobar Island. ▪ Car Nicobar. ▪ Little Nicobar. ▪ Katchal Island. ▪ Nancowry Island. <div style="text-align: center;"> <p>GREAT NICOBAR</p> </div>
<p>Geological Structure</p>	<ul style="list-style-type: none"> • Nicobar Group of Islands formed of tertiary sandstone, limestone, and shale.

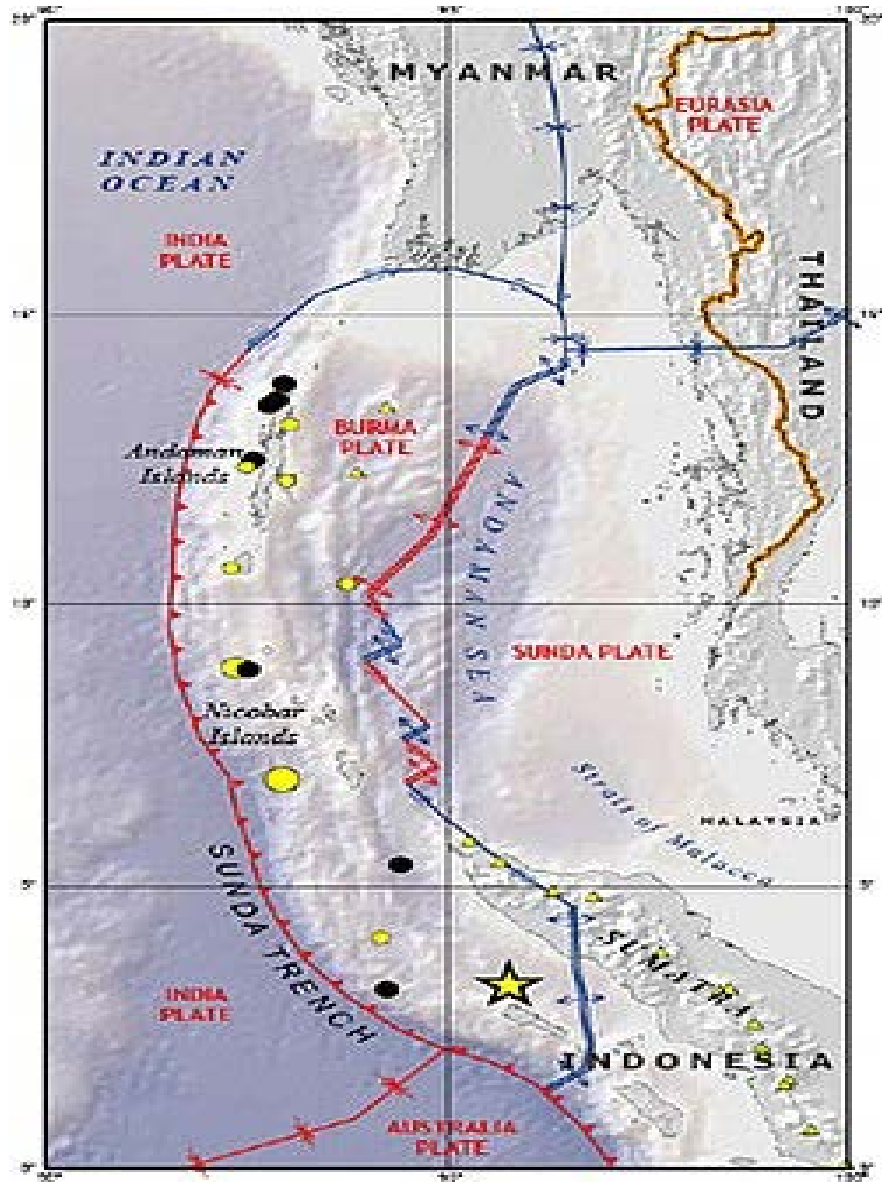
	<ul style="list-style-type: none"> • They are part of a submerged mountain chain extending from Myanmar to Indonesia. • The islands are more flat and undulating compared to the mountainous Andaman Islands
Relief and Topography	<ul style="list-style-type: none"> • Relief and Topography of Nicobar Group of Islands is characterized by: <ul style="list-style-type: none"> ▪ Low hills ▪ Rolling terrain ▪ Coastal plains ▪ Narrow valleys • The highest point is Mount Thullier in Great Nicobar Island at about 642 metres.
Dense Tropical Forests	<ul style="list-style-type: none"> • Nicobar Group of Islands is characterized by: <ul style="list-style-type: none"> ▪ Tropical evergreen forests ▪ Mangroves ▪ Littoral forests
River Systems	<ul style="list-style-type: none"> • Nicobar Group of Islands consists of Small perennial streams. • Important rivers are: <ul style="list-style-type: none"> ▪ Galathea River ▪ Alexandra River ▪ Dagmar River
Biodiversity and Ecosystem	<ul style="list-style-type: none"> • Rich in endemic flora and fauna. • Home to species such as: <ul style="list-style-type: none"> ▪ Nicobar megapode. ▪ Saltwater crocodile. ▪ Giant leatherback turtle.

- Large parts are protected under:
- **Biosphere reserves.**
 - **Great Nicobar Biosphere Reserve (UNESCO designated)** is a major protected area containing **tropical evergreen forests** and **critical habitat** for species like the **leatherback turtle**.
- **National Park**
 - **Galathea National Park:** Also on **Great Nicobar**, it is vital for the conservation of the **Leatherback Sea Turtle** and other coastal species.
- **Wildlife sanctuaries.**
- **Megapode Wildlife Sanctuary:** Established to protect the endemic **Nicobar Megapode bird**.
- **Tillanglong Wildlife Sanctuary:** Known for its rich biodiversity and endemic bird species.



Seismic and Tsunami-Prone Region

- Located in a **highly seismic zone** near the **Indo-Burmese tectonic boundary**.



- The **2004 Indian Ocean tsunami** caused major geographical changes, especially in **Great Nicobar Island** and **Car Nicobar**.
- An earthquake epicenter off the **west coast of Sumatra measuring 8.6 on the Richter scale** caused a severe tsunami to strike parts of **South-east Asia, India, Sri Lanka** on **26th December 2004**.
- Sea water inundated several coastal towns and **villages, taking over 250,000 human lives** and affecting close to five million people.

3. What is the Great Nicobar Project?



Great Nicobar Project

4 INFRASTRUCTURES

- 1 INTERNATIONAL CONTAINER TRANSSHIPMENT TERMINAL**
 Goods will be loaded onto ships at this terminal. Its capacity is 1.6 crore TEU. That means 1.6 containers of 20-foot units can be loaded per unit.
- 2 TOURISM AND RESIDENTIAL TOWNSHIP**
 A modern city and tourism centre will be built here to accommodate 6.5 lakh people by the year 2050. This will generate employment and the area will be developed as a holiday destination.
- 3 POWER PLANT**
 A 450-megawatt hybrid power plant based on gas, diesel, and solar energy will be installed. This plant will not only supply electricity to the entire island and port, but will also meet clean energy needs in the future.
- 4 GREENFIELD INTERNATIONAL AIRPORT**
 A 'civil-military' airport with a capacity of 4,000 passengers will be built here. This will ease travel for government officials and tourists. Additionally, fighter jets can also be deployed here for the security of the Indian Ocean region.

- This project will be built on approximately 18% of Great Nicobar Island's total 921 sq km land, i.e., 166.1 sq km.
- The island's 130 sq km forested area has 19 lakh trees. Of these, approximately 7 lakh trees will be cut.
- Approximately 751 sq km of the island is inhabited by tribal communities. Of this tribal reserve, 84.1 sq km will come under the project.

Source: Great Nicobar Project Report

- The **Great Nicobar Project** is a strategic project which aims to strengthen India’s presence in the **Andaman Sea and Southeast Asia**.
- The project seeks to **balance port-led growth** with calibrated **environmental safeguards and protection of indigenous communities**.
- By **combining strategic, economic, and ecological priorities**, the project seeks to ensure that development in **Great Nicobar** is **sustainable, inclusive, and aligned with national interests**.
- The project includes:
 - **International Container Transshipment Terminal (ICTT)** with a capacity of **14.2 million TEU (Twenty-Foot Equivalent Unit)**
 - **Greenfield International Airport (4000 Peak Hour Passengers-PHP)** A **450 MVA (Megavolt Ampere)** gas and solar-based power plant,
 - **A new township** spanning **16,610 hectares**.
- The development follows a **sensitive and holistic approach**.
- It considers the needs of **indigenous communities** and aims to protect the island’s ecological resources.
- The plan evaluates **social, cultural, and environmental impacts** carefully and prioritises options that balance **environmental, social, and economic goals**.

4. What is the the vision behind the Great Nicobar Project?

INDIA
BAY OF BENGAL
ANDAMAN SEA
GREAT NICOBAR
India's Southernmost Gateway to Growth and Security

GREAT NICOBAR PROJECT

STRATEGIC IMPORTANCE, SUSTAINABLE DEVELOPMENT

BUILDING A STRONGER, GREENER AND SECURE INDIA

“ A Vision for India's Future – Secure, Sustainable and Self-Reliant ”

STRATEGIC IMPORTANCE

- Strengthens India's Maritime Security in the Indo-Pacific Region
- Enhances Surveillance & Monitoring of Sea Lanes
- Proximity to Key International Sea Routes
- Bolsters India's Presence and Strategic Influence
- Supports Tri-Services Operations and Logistics

KEY COMPONENTS

- INTERNATIONAL CONTAINER TRANSSHIPMENT TERMINAL**
A major hub boosting trade and connectivity
- GREENFIELD INTERNATIONAL AIRPORT**
World-class airport connecting India to the world
- INTEGRATED TOWNSHIP DEVELOPMENT**
Planned, smart and resilient urban development
- POWER PLANT & RENEWABLE ENERGY**
Reliable power with clean and green energy
- ROAD, PORT & SOCIAL INFRASTRUCTURE**
Strong connectivity and quality living facilities

SUSTAINABLE DEVELOPMENT

- Environment-Friendly Planning with Minimal Ecological Impact
- Preservation of Biodiversity and Natural Ecosystems
- Inclusive Development for Local Communities
- Efficient Water Management and Conservation
- Commitment to a Low-Carbon and Resilient Future

TRANSFORMING GREAT NICOBAR TRANSFORMING TOMORROW

- ECONOMIC GROWTH
- EMPLOYMENT OPPORTUNITIES
- QUALITY EDUCATION & HEALTHCARE
- ENVIRONMENTAL PROTECTION
- PRESERVING LOCAL CULTURE & HERITAGE

GREAT NICOBAR PROJECT
A BALANCE OF STRATEGY AND SUSTAINABILITY
FOR A VIKSIT BHARAT

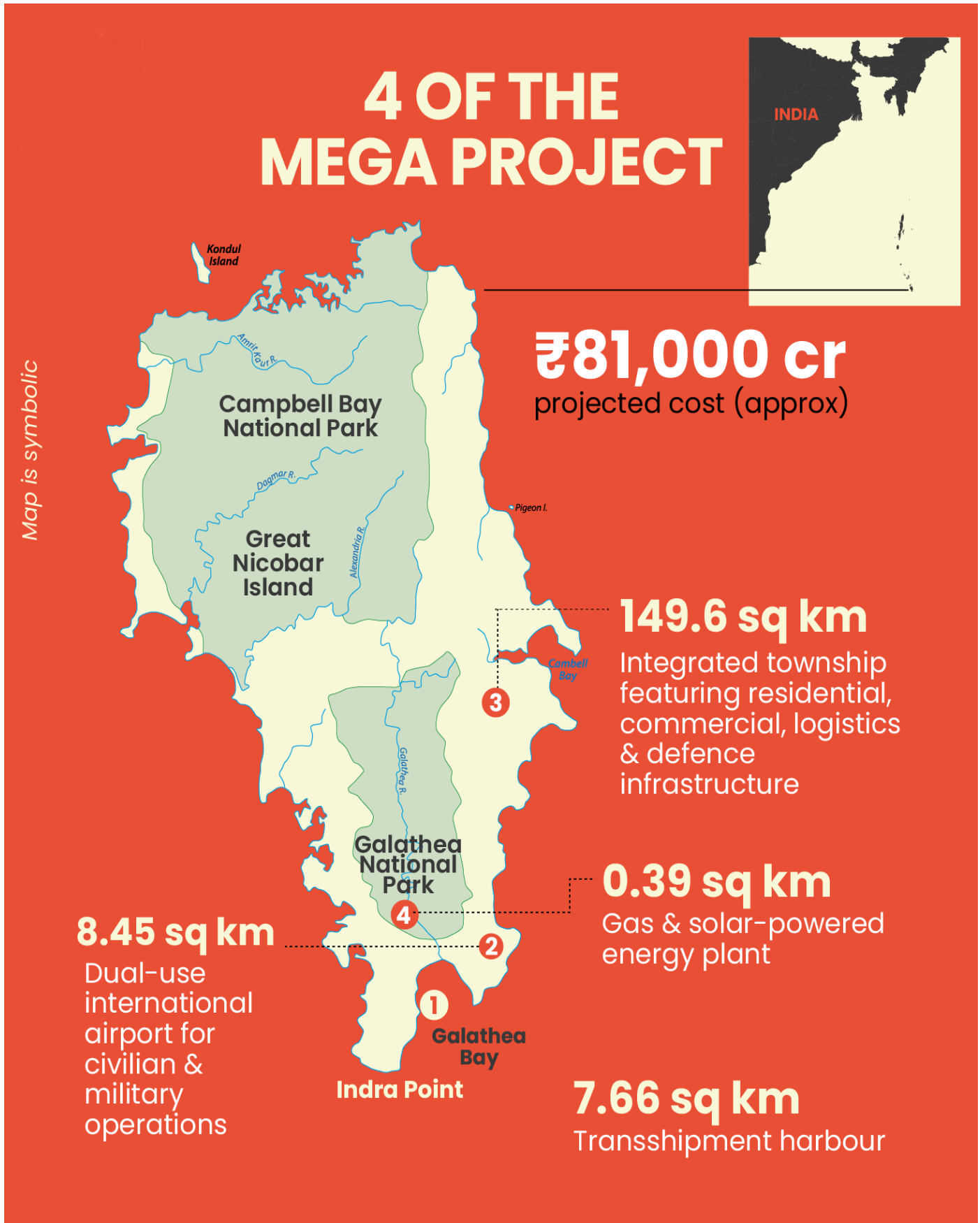
- The **Great Nicobar Project** was conceived by NITI Aayog and is being executed by the **Andaman and Nicobar Islands Integrated Development Corporation**.
- The total cost is around **₹81,000 crore**, with the port alone estimated at **₹41,000 crore in early phases**.
 - Work is planned in stages over the next **30 years**.
- The heart of the project is the **Galathea Bay International Container Transshipment Terminal**.
- Phase one will handle **4 million TEUs (twenty-foot equivalent units) by 2028**, and the **full capacity will reach 16 million TEUs**.
- **This will make it one of Asia's biggest ports**.
- Along with the port, the project includes a **greenfield international airport** that can serve both **civilian flights and military operations**, a **450 MVA power plant** that mixes gas and solar energy, and a township to support thousands of residents and workers.
- In plain terms, this is not just **building roads and buildings**.
- It is creating a completely **new economic and defence hub at India's southernmost point**.
- The island covers about **166 square kilometres of development area out of Great Nicobar's total land**.
- The project will **bring jobs, boost trade, and turn a sparsely populated area into a thriving centre**.
- Most importantly, it reduces **India's heavy dependence on foreign ports like Singapore and Colombo for transshipping goods**.
- Indian cargo ships will no longer need to **travel extra miles to unload and reload containers elsewhere**.
- This saves time, cuts costs, and keeps more **money inside the Indian economy**.

Important Maritime Routes Passing Through the Indian Ocean



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- *Indian cargo ships will no longer need to travel extra miles to unload and reload containers elsewhere.*
- *This saves time, cuts costs, and keeps more money inside the Indian economy.*

5. What are various Core Infrastructure Components of the Great Nicobar Project?





Core Infrastructure Components	Description
<p>International Container Transshipment Terminal</p>	<ul style="list-style-type: none"> • India's ports lack deep water berths for large ships. • Because of this, cargo is routed through Colombo and Singapore. • India loses substantial revenue as a result. Countries like Myanmar, China and Sri Lanka are already building deep water facilities to capture this trade. • In this context, the International Container Transshipment Port (ICTP) at Galathea Bay is being developed as part of the Holistic Development of Great Nicobar Island under the Island Development programme.

	<ul style="list-style-type: none"> • Along with the proposed airport, township, and power plant, the Galathea Bay transshipment port forms a major infrastructure component of the overall Great Nicobar Project. • The port is strategically important because it is located close to the East-West international shipping route, about 40 nautical miles away, and has natural water depth of over 20 metres. • This strategic location gives it an advantage to attract both gateway and transshipment cargo, reducing India's dependence on foreign ports like Colombo, Singapore and Klang. • The project is designed to enhance India's national security, strategic and defence presence, strengthen the islands' economic position, and accelerate holistic development in the region.
<p>Greenfield International Airport</p>	<ul style="list-style-type: none"> • The island has world class ecological resources that can attract international and Indian tourists. • An international airport is necessary to improve connectivity and open up the island to tourism. • The island is close to international tourist destinations like Senang City, Phuket Island and Langkawi Island.



India Gears Up to Build Airbase in Great Nicobar ✈️

Groundwork begins for a new airport near Galathea Bay, strengthening connectivity and India’s strategic presence.

- **Port Blair** airport currently handles approximately **1.8 million passengers annually**.
- The **new airport** is expected to handle at **least 1 million** passengers when it opens and grow to approximately **10 million passengers per year thereafter**.

Township and Area Development

- The **planned township** is intended to support the **residential, commercial and institutional requirements** arising from the port-led development of the **island**.



- It will provide **essential urban infrastructure** for personnel, service providers and associated economic activities, in **line with the overall integrated development framework**.

Power Plant

- Reliable **power infrastructure** is essential for the operation of the **transshipment terminal, airport and associated urban infrastructure**.
- Currently, diesel generating sets are the major source of energy in the **Andaman & Nicobar Islands**.
- The primary objective of the Power **Plant is to provide good quality**, reliable **electrical energy without interruptions**.
- The system is **designed to ensure continuity** of power supply even if one primary component fails.

- Renewable energy sources will also be planned for additional generation.
- An uninterrupted energy supply is a key component in increasing the GDP of the island.

6. Discuss the geopolitical importance of the The Great Nicobar Project for India’s economic and security interests?

GREAT NICOBAR ISLANDS
INDIA'S STRATEGIC EDGE
 ECONOMY. SECURITY. SOVEREIGNTY.

AT THE CROSSROADS OF TRADE, SECURITY & OPPORTUNITY

"A PORT THAT BUILDS PROSPERITY.
 — A POSITION THAT PROTECTS INDIA." —

ECONOMIC IMPORTANCE

- 1 GATEWAY TO GLOBAL TRADE**
 Strategically located near the Strait of Malacca - connects India to East Asia, Europe, Africa & beyond.
 Tap into 30-40% of global trade moving through this corridor.
- 2 TRANSSHIPMENT HUB POTENTIAL**
 Deep-draft port can become a major transshipment hub. Retain cargo within India, reduce logistics costs & improve export competitiveness.
- 3 BOOST TO BLUE ECONOMY**
 Unlocks massive potential in:
 ✓ Shipping & Logistics
 ✓ Fisheries & Marine Industries
 ✓ Tourism (Eco & Cruise)
 Driving India's vision of a Maritime-Driven Economy.
- 4 REGIONAL DEVELOPMENT**
 World-class infrastructure - airports, roads, power & smart cities.
 Generates jobs, attracts investment & transforms Andaman & Nicobar region.

STRATEGIC & SECURITY IMPORTANCE

- 1 MARITIME SURVEILLANCE ADVANTAGE**
 Proximity to the Strait of Malacca gives India unmatched vantage to monitor global shipping, submarines & strategic movements.
- 2 COUNTERBALANCE TO CHINA**
 Counters China's "String of Pearls" strategy in the Indian Ocean. Enhances naval reach & strengthens India's position in the region.
- 3 STRENGTHENING INDO-PACIFIC STRATEGY**
 Acts as a forward operating base for the Indian Navy. Boosts coordination with QUAD partners (USA, Japan, Australia). Reinforces India as a Net Security Provider in the Indo-Pacific.
- 4 DUAL-USE INFRASTRUCTURE**
 Ports, airstrips & logistics hubs to support both:
 ✓ Commercial Shipping
 ✓ Military Operations
 Economic growth with strategic readiness.

THE STRATEGIC LOCATION ADVANTAGE

INDONESIA < 850 KM | SINGAPORE < 1,150 KM | AUSTRALIA < 3,400 KM

WHERE ECONOMICS MEETS GEOPOLITICS
 The Great Nicobar Port is not just infrastructure, it is India's gateway to global trade, maritime dominance & a secure tomorrow.

PART OF A TRANSFORMATIVE VISION

INTERNATIONAL AIRPORT | POWER PLANT | SMART TOWNSHIP | INDUSTRIAL ZONE | GREEN & SUSTAINABLE

SUSTAINABLE DEVELOPMENT. STRATEGIC IMPACT. GENERATIONAL BENEFIT.

STRONG PORT. STRONG INDIA. STRONGER TOMORROW.

Great Nicobar Island sits in a perfect spot for both trade and security. It is just 130 km from the Strait of Malacca. The Andaman and Nicobar Islands as a whole guard the entrance to the Andaman Sea and the busy routes connecting the Indian Ocean to the Pacific. Nearly 94,000 merchant ships pass through the Strait of Malacca every year.

Geopolitical importance	Description
Strategic Location Near the Strait of Malacca	<ul style="list-style-type: none"> • Great Nicobar Island occupies a highly strategic location in the eastern Indian Ocean. • It lies only about 130–150 kilometres from the western entrance of the Malacca Strait, one of the busiest maritime chokepoints in the world. • Several important shipping lanes pass very close to the island, making it crucial for monitoring global maritime activity.
Gateway Between the Indian and Pacific Oceans	<ul style="list-style-type: none"> • The Andaman and Nicobar Islands act as a natural maritime gateway between the Indian Ocean and the Pacific Ocean. • The islands guard the entrance to the Andaman Sea and oversee major sea routes linking South Asia, East Asia, and Southeast Asia. • This gives India a strong geographical advantage in the Indo-Pacific region.
Importance for Global Trade and Energy Security	<ul style="list-style-type: none"> • More than 80,000–94,000 merchant ships pass through the Malacca Strait annually. • These routes carry nearly 30–40% of global trade and around one-third of the world’s maritime oil shipments. • Because of its proximity to these routes, Great Nicobar allows India to safeguard vital sea lanes of communication (SLOCs) that are essential for international trade and energy flows.

<p>Strengthening India's Defence Presence</p>	<ul style="list-style-type: none"> • The islands already host India's only tri-services military command — the Andaman and Nicobar Command, established in 2001. • Military bases such as INS Baaz enhance India's surveillance and operational capabilities through radars, aircraft, and naval deployments. • These facilities help India monitor maritime activities in the eastern Indian Ocean.
<p>Enhancing Surveillance and Maritime Domain Awareness</p>	<ul style="list-style-type: none"> • The proposed Great Nicobar Project includes a deep-water transshipment port, an international airport, and supporting infrastructure with dual civilian and military use. • These facilities would significantly improve India's maritime domain awareness by providing better monitoring of ship movements and quicker response capabilities during emergencies or conflicts.
<p>Countering Geopolitical Challenges in the Indo-Pacific</p>	<ul style="list-style-type: none"> • The island's strategic location becomes even more important amid growing geopolitical competition in the Indo-Pacific, especially the expanding presence of China in the Indian Ocean Region. • By strengthening infrastructure in Great Nicobar, India can enhance its ability to project power, protect maritime interests, and maintain a balance of power in the region.
<p>Role in India's Indo-Pacific Vision</p>	<ul style="list-style-type: none"> • Great Nicobar fits closely with India's SAGAR (Security and Growth for All in the Region) vision and Indo-Pacific strategy. • The island can emerge as a key hub for maritime trade, naval logistics, disaster response, and regional connectivity, strengthening India's position as a major Indo-Pacific power.

7. What is the strategic importance of the project wrt China's Malacca Dilemma?



THE MARITIME GREAT GAME

China has the world's largest navy with over 300 warships and submarines, and it continues to grow at a blistering pace. It has been active in the Indian Ocean since 2008, creating a network of bases, forward deploying its warships and submarines to overcome its 'Malacca Dilemma' and heavily investing in civilian port projects



WHERE IS GREAT NICOBAR AND WHY IS IT STRATEGIC?



Located close to the **Strait of Malacca** – one of the world's busiest maritime chokepoints.



A huge volume of global trade and energy movement passes through this route.



Gives India a critical strategic foothold in the Indo-Pacific amid growing regional geopolitical competition.



STRATEGIC GOAL:

Strengthen India's maritime presence, surveillance and deterrence in the Indian Ocean Region.

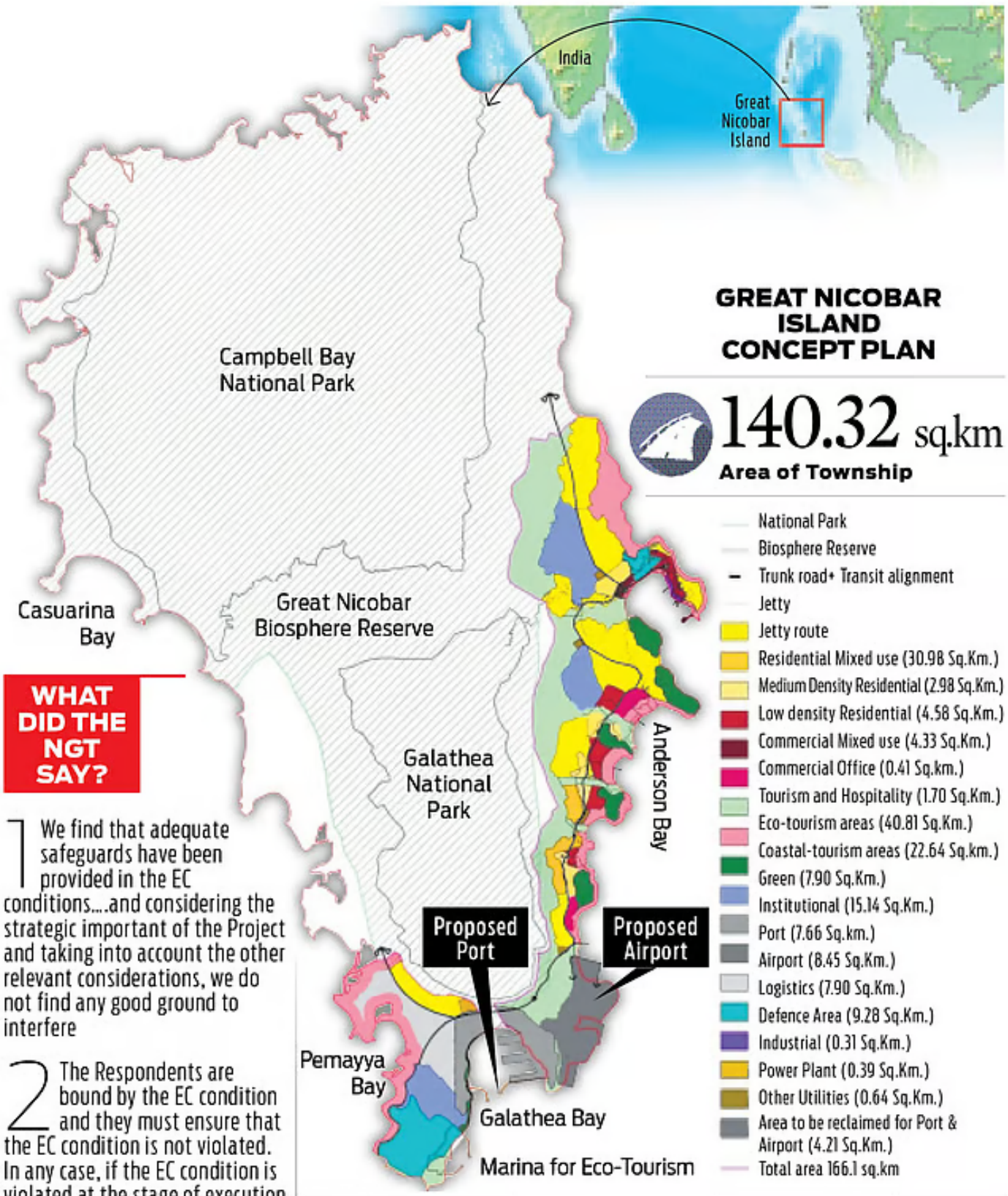


WHY IT MATTERS: The Strait of Malacca carries over 80% of China's energy imports and a significant portion of global trade. Great Nicobar gives India a vantage point to secure one of the world's most important maritime routes.



8. What did NGT say about the Great Nicobar Project?

- On February 16, 2026, the National Green Tribunal (NGT) cleared the **₹92,000-crore Great Nicobar** Island mega-infrastructure project, stating it found no grounds to interfere due to the project's **strategic importance** and adequate **environmental safeguards**.
- The NGT ruled that the Environmental Clearance (EC) was valid, provided all conditions were strictly enforced.



WHAT DID THE NGT SAY?

1 We find that adequate safeguards have been provided in the EC conditions....and considering the strategic important of the Project and taking into account the other relevant considerations, we do not find any good ground to interfere

2 The Respondents are bound by the EC condition and they must ensure that the EC condition is not violated. In any case, if the EC condition is violated at the stage of execution of the project, the same will expose the EC to challenge.

The Andaman and Nicobar archipelagos belong to Andaman-Indo-Burma and Nicobar-Sunda Biodiversity Hotspots and have vastly different geological features and species assemblage.

NGT views	Description
Strategic Importance	<ul style="list-style-type: none"> The NGT recognized the project’s critical role in national security and development.
Protection of Ecosystems	<ul style="list-style-type: none"> The Environment Ministry was directed to ensure that coastal erosion, turtle nesting sites (Galathea Bay), and coral reefs are protected.
Coral Mitigation	<ul style="list-style-type: none"> The tribunal accepted reports that no coral reefs exist in the immediate work area and that replanting/translocation plans are in place.
Committee Report Confidentiality	<ul style="list-style-type: none"> The NGT upheld that sensitive high-powered committee (HPC) reports did not need to be fully public due to the project's strategic nature.
Tribal Rights	<ul style="list-style-type: none"> The NGT noted that tribal communities were consulted, contradicting claims from some tribal members about coerced land surrender.

NGT approves Great Nicobar Project

- A six-member special bench of the National Green Tribunal (NGT) has given the go-ahead to the Rs 81,000 crore mega project
- Judgement: The bench said that there is no solid basis to interfere in the environmental clearance of the project
- Rationale: The project involves substantial 'safeguards' and its strategic importance is paramount

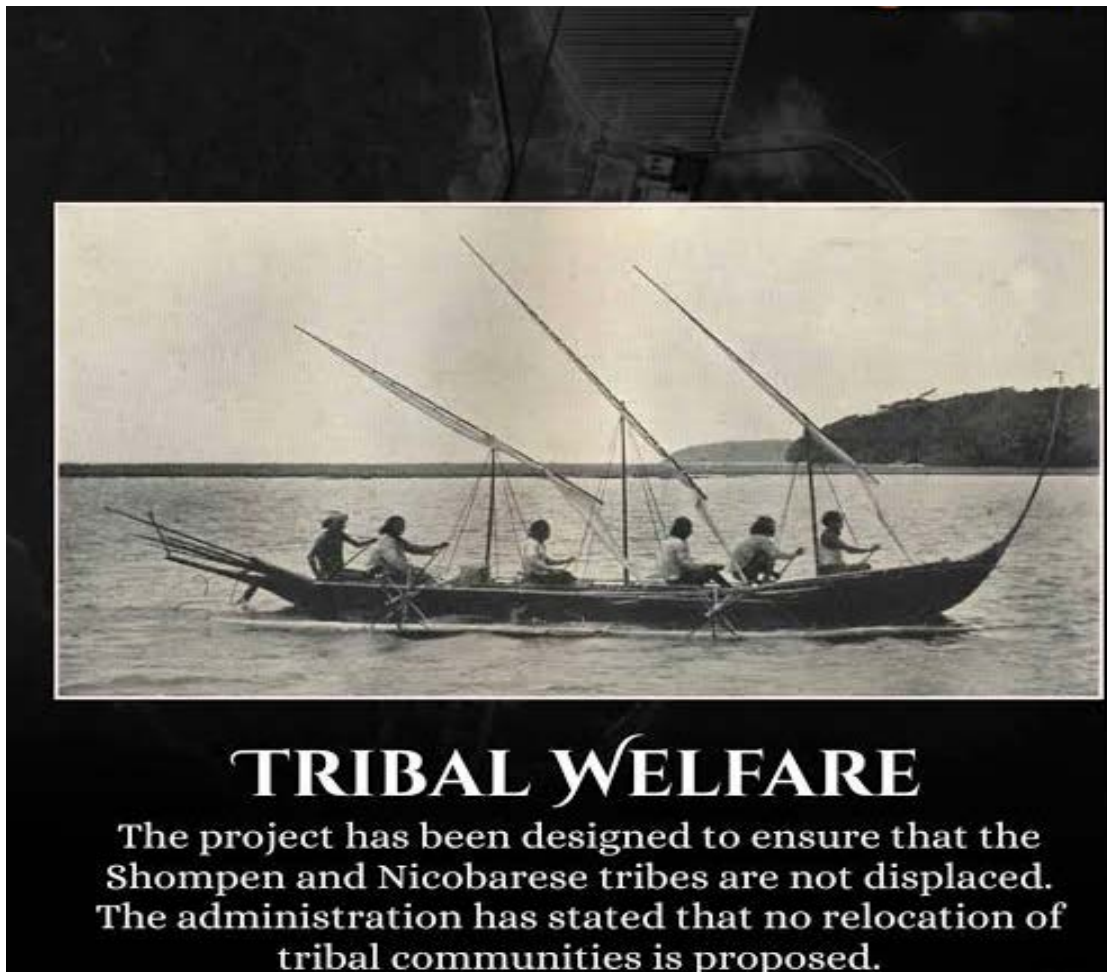


9. Will the island's forests and tree cover be adequately preserved and compensated for?

- **Only 166.1 sq. km of area** is proposed for development, which is approximately **2% of the total area of Andaman & Nicobar Islands**.
- Further, **130.75 sq. km of forest area** is proposed to be diverted for the **project** which is **only approximately 1.82%** of the total forest area of A & N Islands.
- The total estimated tree count in the **130.75 sq. km of forest land to be diverted is 18.65 lakh**.
- Of these, **a maximum of 7.11 lakh trees** are estimated to be felled in the 49.86 sq. km forest area.
- Tree felling will be undertaken in a phased manner: **2.79 lakh trees in Phase I (2025–2035), 3.41 lakh trees in Phase II (2036–2041), and 0.91 lakh trees in Phase III (2042–2047)**.
 - Further, as per the EC & FC condition, an area of 65.99 sq. km shall be retained as a green area with no tree felling.
- As per MoEF&CC Guidelines dated 22.05.2019 under **The Forest (Conservation) Act, 1980**, States/UTs with over **75% forest cover** are exempt from providing non-forest land for **Compensatory Afforestation (CA)** and such **CA** may instead be taken up in other States/UTs with available land banks.
- Since **A & N Islands have more than 75% forest cover**, CA is proposed outside the UT.
 - The diversion of **130.75 sq. km of forest land** has been offset through a comprehensive **Compensatory Afforestation (CA) plan under the Forest (Conservation) Act, 1980**.
- A total of 24,750.93 ha has been identified for **CA: 1,414.95 ha of non-forest land (equivalent to the diverted area)** and over double that extent in degraded forest land.
 - Of this, **about 17,000 ha is in Haryana and 6,320.10 ha is in Madhya Pradesh**, ensuring **adequate ecological compensation**.
- A significant portion of the **Compensatory Afforestation land identified in Haryana** comprises degraded forest areas, including **PLPA lands**, which are largely situated within the Aravalli landscape.

- These areas are earmarked for **ecological restoration** in accordance with prevailing guidelines.

10. Will tribal communities be safeguarded, ensuring the continuity of their culture and rights?



- **All statutory procedures and policy safeguards** for the protection of tribal communities have been duly complied with in the **Great Nicobar Island Project**.
- Necessary consultations were undertaken with competent authorities and domain experts, including the **Anthropological Survey of India, Ministry of Tribal Affairs**, and other stakeholders, in line with the **Jarawa Policy, 2004** and **Shompen Policy, 2015**.
- The **Empowered Committee**, comprising senior officials and eminent anthropologists, **has categorically ensured** that the interests of **Particularly Vulnerable Tribal Groups (PVTGs)**, especially the **Shompen community**, will not be adversely affected.

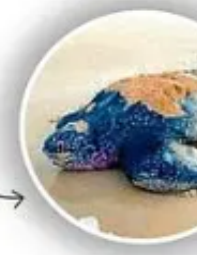
- **No displacement of tribal populations shall be permitted.**
- The project has also secured a **No Objection Certificate from the Ministry of Tribal Affairs, with due adherence to the Forest Rights Act, 2006.**
- Currently, **Great Nicobar Island has 751.070 sq. km of land** officially marked as **Tribal Reserve**. Of the 166.10 sq. km proposed for development, 84.10 sq. km overlaps with the Tribal Reserve.
- Within this portion, **11.032 sq. km has already been settled and used as revenue land since 1972.**
- The effectively remaining area of **73.07 sq. km is being de-notified for project purposes.**
- To compensate, 76.98 sq. km is being re-notified as tribal reserve, resulting in a net addition of 3.912 sq. km.
- In **Phase I, only 40.01 sq. km of tribal area is involved, of which 11.032 sq. km has been under revenue use since 1972.**

11. What are various concerns of the Great Nicobar Project?



AND THE PERILS

- **Over 8.5 lakh trees to be felled** over an area of **130 sq kms**
- Destruction of tropical rainforests in Galathea National Park, home to **648 species of flora** and **330 species of fauna**, including Nicobar's **wild pig**, **tree shrew**, the Great Nicobar crested serpent eagle, Nicobar paradise flycatcher and the Nicobar **megapode**.
- **Threat to the Shompen tribe:** Proposed project areas have been important foraging grounds for the hunter-gatherer nomadic community.
- Threat to nesting sites of iconic species like **Giant leatherback turtle** and the **Nicobar megapode**.
- **Threat to coral and marine ecosystem:** ZSI reported presence of 117 species of scleractinian corals in Galathea. But the Environment Impact Assessment of the project states that there is no coral located in the Galathea Bay region.
- Threat to **Dugongs** due to loss of seagrass meadows, rising anthropogenic activities.



DEVELOPMENT VS ENVIRONMENTAL CONCERNS:

The Great Nicobar region is known for its rich biodiversity and fragile ecosystems.

Critics, including sections of local communities, have raised concerns about **potential deforestation, habitat disruption, and ecological imbalance due to large-scale construction.**

Supporters of the project argue that infrastructure development is essential for **economic growth.**

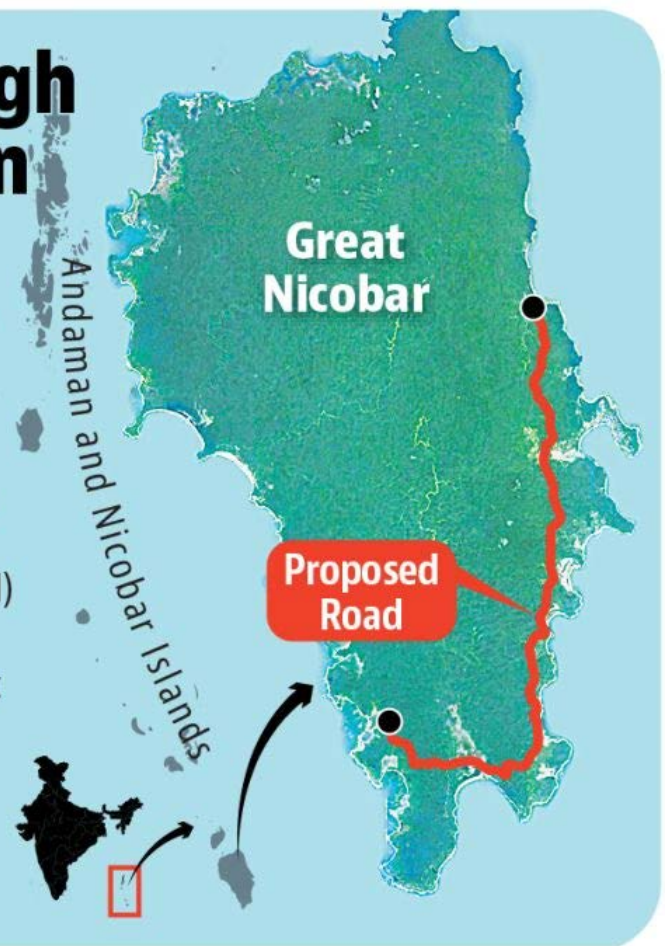
Concerns	Description
<p>Ecological and Social Cost</p>	<ul style="list-style-type: none"> • The Indian government’s push for the Great Nicobar project is driven by a strategic ambition to recapture 75% of India’s transhipped cargo currently handled by foreign ports such as Colombo, Singapore, and Klang. • The vision is to transform the island into a free-trade zone akin to Hong Kong or Singapore to attract multinational corporations. • Indonesia and India are jointly planning another transshipment port in Sabang, Indonesia, located just 190 km away, which could directly compete for the same maritime traffic and undermine Great Nicobar’s economic viability. • As Union Home Minister Amit Shah stated at the India Maritime Week 2025, the project is positioned as a major boost to India’s global trade, with a 30-year implementation timeline expected to draw nearly 400,000 people—a figure equivalent to the current population of the entire Andaman and Nicobar archipelago. • Great Nicobar is being drummed up as a deep draft and a strategically located port that could outpace its competitors. <ul style="list-style-type: none"> ▪ But this vision is fraught with logistical and economic contradictions that challenge its feasibility. • As pointed out by Retired Rear Admiral Kapil Gupta, many of India’s previous attempts to develop transshipment terminals (for instance, Vallarpadam in Kochi, Mundra in Gujarat, and Vizhinjam in Thiruvananthapuram) have not been a success in terms of their ability to attract sufficient traffic due to the draft limitations, limited hinterland connectivity, and competition from other international players.

	<ul style="list-style-type: none"> • A critical, understated factor is that Great Nicobar is fundamentally unsuitable for a major transshipment hub. <ul style="list-style-type: none"> ▪ Unlike Singapore or Hong Kong, it is an isolated, thickly forested island located more than 1,000 km from the mainland with no supporting hinterland for cargo generation or consumption. • This internal contradiction is starkly evident in the project’s own documentation. <ul style="list-style-type: none"> ▪ A 2021 technical report by M/S AECOM India Limited paints an optimistic picture of a “greenfield city” with a diverse economy. ▪ Yet, a July 2016 technical note from the same consultant to the Ministry of Shipping concluded that a Free Trade Zone and transshipment hub “may not be a favourable option due to insufficient hinterland demand and supply”. • Furthermore, the project faces stiff external competition. <ul style="list-style-type: none"> ▪ Indonesia and India are jointly planning another transshipment port in Sabang, Indonesia, located just 190 km away, which could directly compete for the same maritime traffic and undermine Great Nicobar’s economic viability.
<p>Ecological and Social Cost</p>	<ul style="list-style-type: none"> • The promoters of the Great Nicobar project systematically downplay the immense, irreversible cost of destroying natural assets and ecosystem services—a critical loss for a country already facing severe environmental degradation.

Road through green haven

80.0302
hectares of private land proposed to be acquired

- The Trunk Infrastructure Road will cut through Great Nicobar Island (GNI)
- According to the draft social impact assessment report, there was no alternative location
- Anthropologists have cautioned against the project



- India’s ambition to become a maritime leader comes at an **incredible ecological price**, threatening one of its most unique and protected landscapes.
 - ***Anthropologists and social experts unanimously argue that the project brazenly bypasses the Forest Rights Act and other legal safeguards, proceeding without the free, prior, and informed consent of the tribal communities...***
- The project area is part of a protected forest within the **Great Nicobar Biosphere Reserve**, a **UNESCO-recognised site** covering **85% of the island**. This area provides a sanctuary for approximately **24% of all local species**.
- The government’s plan to clear approximately **one million trees from this tropical rainforest** will devastate a critical ecosystem that regulates the regional monsoon cycle through evapotranspiration.

- The proposal for **compensatory afforestation** in **Haryana and Madhya Pradesh** is scientifically meaningless, as these areas cannot replicate the unique, evolved ecology of the Great Nicobar Islands.
- The proposed port at **Galathea Bay** will directly **devastate extensive coral reefs** and marine habitats.
- The **Environmental Impact Assessment (EIA)** report suggests translocating these organisms, a method with unproven success.
- This proposal is especially alarming given that **corals worldwide are at a tipping point** due to ocean warming and bleaching; **translocation would add further stress**, likely resulting in widespread mortality.
- The island's forests **host 650 species** of angiosperms, ferns, gymnosperms, and bryophytes, many of which are endemic.
- Its **unique fauna includes: 11 species of endemic mammals, 32 species of endemic birds** and seven species of endemic reptiles.

The islands' sensitive ecology
The project may impact turtle and megapode nesting sites and affect coral reefs, experts warn

9,601 of animals (3,294 terrestrial and 6,307 marine) with 1,123 endemic species have been recorded till now from Andaman and Nicobar Islands by Zoological Survey of India

CORAL REEF

- Coral reef of A&N belongs to the IndoWest pacific fauna province as Andaman Islands is located in north-west of the central area of greatest marine biodiversity referred to as the **CORAL TRIANGLE**
- All islands have high coral reef, mangrove, marine biodiversity
- Great Nicobar Island is home to several endemic species such as the Nicobar megapode as well as the Nicobar tree shrew

At least 400 coral species may eventually be found in the islands as against the 283 species identified so far according to MoEFCC

KEY NESTING SPOTS
Galathea and other beaches in Little Andaman Island are important nesting sites for leatherback turtles

- Critically, Galathea Bay is a vital nesting ground for the **globally endangered Leatherback Turtle**, whose habitat would be irrevocably lost.
- The island is home to the **indigenous Nicobari and Shompen communities**, the latter classified as a Particularly Vulnerable Tribal Group (**PVTG**) with a history spanning over **10,000 years**.

THE GREAT NICOBAR PROJECT

DEVELOPMENT FOR ADANI, DESTRUCTION FOR MANY

 **The Issue**

- ₹72,000 crore Great Nicobar Project
- Serious environmental, social, and legal concerns

 **Impact on Tribal Communities**

- Home to Nicobarese and Shompen tribes
- Risk of permanent displacement
- They may lose forests and livelihood

 **Process & Legal Concerns**

- Lack of proper consultation with tribal communities
- Safeguards and due process bypassed

 **Environmental Impact**

- Up to 160 sq km rainforest at risk
- 1 crore trees affected
- Threat to biodiversity, coral reefs, and wildlife

 **Risks & Concerns**

- Flawed environmental assessments
- High ecological and infrastructure risk

 **Questions for the Modi govt.**

- Who benefits from this development?
- At what cost to people, forests, and future?



- More than three-fourths of the 900-sq km island is designated as a tribal reserve under the **Andaman and Nicobar Protection of Aboriginal Tribes Regulation (1956)**.

- Anthropologists and social experts unanimously argue that the project **brazenly bypasses the Forest Rights Act and other legal safeguards**, proceeding without the free, prior, and informed consent of the tribal communities, thereby threatening their very survival and cultural integrity.
- This project represents not merely an **ecological miscalculation** but a profound ethical and legal failure.

Permanent Tectonic Strain

- Unlike the stable geology of Singapore and Hong Kong, the Great Nicobar Island region is under permanent tectonic strain, **rendering it highly vulnerable** to seismic activity and constant land-level changes in an area that is also predicted to witness a climatically driven sea-level rise.



- This fundamental **geological reality poses an existential threat** to any large-scale, permanent infrastructure extending out onto the sea.
- The proposed mega infrastructure, including the **International Container Transshipment Port and the new township**, would be located directly in one of the world’s most seismically active and climatically hazardous zones.

- The island is located **perilously close to Banda Aceh, Indonesia**—the epicentre of the catastrophic 2004 **magnitude 9.2–9.3 megathrust earthquake**. In response to that event, the Great Nicobar region itself experienced a **sudden coseismic subsidence of 3 to 4 metres**.
- This is not an isolated event but part of an **ongoing tectonic cycle**.
- The region undergoes a predictable yet **hazardous cycle of strain build-up and release**. GPS data show the land slowly uplifting over the years during the interseismic interval as tectonic strain accumulates. This **built-up stress is released during major earthquakes** (coseismal phase), causing the land to subside abruptly. 2
- This cyclical movement of “**slow uplift and sudden subsidence**” along an active subduction zone inherently destabilises engineered structures along the coast over the long term, making the integrity of a port, airport, and city fundamentally untenable.
- Scientific studies confirm that the megathrust fault abutting the **Sumatra-Andaman plate boundary is segmented**, with each segment capable of generating great earthquakes independently.
 - The historical record reveals a pattern of **major seismic events** affecting the region, including: the 1861 **Nias-Simeulue earthquake (M~8.5)**; the 1881 **Nicobar Islands earthquake (M 7.9)**; the 2004 **Sumatra-Andaman earthquake (M 9.2-9.3)**, and the 2007 **Sumatra earthquake (M 8.4)**.
- This history demonstrates not isolated incidents, but a **recurring pattern of great earthquakes** along various segments, confirming the high and continuous tectonic strain variability around Great Nicobar.

- The proposed mega infrastructure, including the **International Container Transshipment Port and the new township**, would be located directly in one of the world's most seismically active and climatically hazardous zones.
- The geological and climatic evidence clearly indicates that the **region poses a significant and permanent threat to the safety of any building stock, cargo, and the project itself**, challenging the very logic of its proposed location.

GREAT NICOBAR PROJECT
DEVELOPMENT FOR INDIA
OR
POLITICAL PROPAGANDA?
 India's Strategic Mega Project
 – Know Both Sides!

BENEFITS FOR INDIA

- STRATEGIC & MILITARY ADVANTAGE**
 Located near Malacca Strait – one of the busiest sea routes. Strengthens Navy, Air Force & control over Indo-Pacific.
- GLOBAL TRADE HUB**
 Transshipment port will reduce dependence on foreign ports like Singapore & Colombo. Lower logistics cost, save foreign exchange & boost trade.
- MASSIVE ECONOMIC GROWTH**
 Industrial zones, free trade zones & coastal cities will attract huge investments, boost exports & GDP.
- TOURISM DEVELOPMENT**
 Luxury resorts, cruise terminals & eco-tourism will attract international tourists & boost revenue.
- EMPLOYMENT & DEVELOPMENT**
 Creation of new cities, infrastructure & industries will generate lakhs of jobs for youth.
- INFRASTRUCTURE & CONNECTIVITY**
 International airport, power plants, smart cities, roads & world-class facilities will transform the island.
- BOOST TO BLUE ECONOMY**
 Strengthens shipping, fisheries, marine industries & sustainable use of ocean resources.
- GEOPOLITICAL ADVANTAGE**
 Enhances India's influence in Indo-Pacific & acts as a counterbalance to China's presence.

CONGRESS PROPAGANDA

- ENVIRONMENTAL DESTRUCTION**
 Claims of massive deforestation, loss of biodiversity & damage to fragile ecosystem.
- TRIBAL DISPLACEMENT**
 Alleges that indigenous tribes like Shompen & Nicobarese will lose their land, culture & identity.
- CORPORATE BENEFIT, NOT PEOPLE**
 Says the project benefits big corporates & investors, not local communities or people.
- LACK OF TRANSPARENCY**
 Alleges rushed approvals, lack of full transparency in clearances & public consultation.
- RISK TO ECO-SENSITIVE REGION**
 Claims threat to wildlife, coral reefs, forests & marine life.
- "BIGGEST SCAM" ALLEGATION**
 Rahul Gandhi calls it "one of the biggest scams" & a "crime against the nation".

A GAME CHANGER FOR INDIA'S FUTURE

DEFENCE STRENGTH | GLOBAL TRADE | ECONOMIC GROWTH | JOBS & LIVELIHOOD | GLOBAL INFLUENCE

FACT CHECK
 These are political claims & allegations. The project has been approved by the National Green Tribunal (NGT) with safeguards & is vital for India's security, trade & future growth.

“ DEVELOPMENT TODAY, A STRONGER & SELF-RELIANT INDIA TOMORROW. ”

12. How do retired military officials view the Great Nicobar Project as crucial for India’s maritime security and Indo-Pacific presence?



Military Officers	Description
<p>Former IAF chief Air Chief Marshal R K S Bhadauria (retd)</p>	<ul style="list-style-type: none"> • ACM Bhadauria (retd) has dismissed Congress’s criticism as misplaced and highlighted that the project is critically important for India's national security, economic growth and military foothold. • He emphasised its strategic location for monitoring the Malacca Strait, another chokepoint after Hormuz, in order to keep a check on China. • Roughly, 80% of China's oil imports and a significant portion of its overall cargo pass through this narrow waterway (Malacca Strait).

	<ul style="list-style-type: none"> • With China’s increasing naval presence in the Indian Ocean Region, India needs to have a strong economic and military base in the Great Nicobar island. • The Rs 92,000-crore Great Nicobar mega-infrastructure project comprises key infrastructure development such as a transshipment terminal, greenfield international airport, township, and power facilities, with limited forest diversion, compensatory afforestation, and no proposed displacement of indigenous communities. • Reacting to the opposition to the project, ACM Bhadauria (retd) said, “It is crucial to understand this from a strategic perspective, specially in light of recent events, such as the ongoing conflict (in West Asia) and developments in the Strait of Hormuz.
<p>Major General (Retd.) G S Rawat</p>	<ul style="list-style-type: none"> • Giving an example of the Gulf crisis, Major General (Retd.) G S Rawat recently said, “We need to look at this (project) from an operational and strategic perspective, including its geographic alignment and maritime positioning. • Recent global developments have shown how tactical choke points can be exploited, as seen around the Strait of Hormuz. • Similarly, the Strait of Malacca holds even greater significance in terms of global trade and maritime movement... From an operational standpoint, controlling or having a strong presence near such routes enhances strategic leverage, surveillance capability and maritime security. This is where the importance of the Great Nicobar Project lies, as it strengthens India’s position in monitoring and responding to developments across these critical sea lanes.”

<p>Air Vice Marshal P K Srivastava (Retd)</p>	<ul style="list-style-type: none"> • Air Vice Marshal P K Srivastava (Retd) said, “Whenever the govt of India undertakes a project, it consults a wide range of expert advisors from different fields. Every project is prepared after taking opinions from specialists and conducting proper on-ground surveys of the area. Such projects are not designed sitting in Delhi alone—teams visit the site and assess all aspects.”
<p>Maj Gen Sinha (Retd)</p>	<ul style="list-style-type: none"> • Calling the project a major strategic and economic win for the country, Maj Gen Sinha (Retd) said, “In the maritime domain, the Great Nicobar project has created a stir in the country. Some people do not want the country to emerge in the world.”
<p>Lt Gen (Retd.) Rajeev Chaudhry, former DG of the Border Roads Organisation</p>	<ul style="list-style-type: none"> • Cautioning about China’s moves, Lt Gen (Retd.) Rajeev Chaudhry, former DG of the Border Roads Organisation said, “If opposition leads to delays in the project—especially through international pressure citing environmental concerns—it can benefit China. Beijing is wary of such a project at Great Nicobar Island because it would enhance India’s surveillance over maritime trade and military movements in the region...China’s ‘String of Pearls’ strategy—through ports like Gwadar Port, Hambantota Port and Kyaukpyu Port—would be countered by a strong strategic and economic hub at Campbell Bay and Galathea Bay... Such opposition or negative narratives can inadvertently align with Chinese interests. This is an essential project that ideally should have been implemented much earlier.”

13. What is the relevance of the topic for UPSC CSE?

- **For Prelims:** National Green Tribunal (NGT), Great Nicobar Project, Coral Reefs, NITI Aayog, Andaman and Nicobar Archipelago, National Commission for Scheduled Tribes (NCST), Exclusive Economic Zone, United Nations

Convention on the Law of the Sea, 1982 (UNCLOS), Ten Degree Channel, Tropical Rainforest, Forest Rights Act, 2006.

- **For Mains:** Environment Impact Assessment, An overview of the Great Nicobar Island project, its strategic value, key challenges, and the path to sustainable implementation.

Some previous years prelims questions.

Q1. Consider the following statements: (2018)

1. The Barren Island volcano is an active volcano located in the Indian territory.
2. Barren Island lies about 140 km east of Great Nicobar.
3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3
- (c) 3 only
- (d) 1 and 3

Ans: (a)

Q2. Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel'? (2014)

- (a) Andaman and Nicobar
- (b) Nicobar and Sumatra
- (c) Maldives and Lakshadweep
- (d) Sumatra and Java

Ans: (a)

Some previous years mains questions.

Q1. Environmental impact assessment studies are increasingly undertaken before the project is cleared by the government. Discuss the environmental impacts of coal-fired thermal plants located at Pitheads. (2023-15 Marks)

Some questions from this year and previous years interview transcripts.

Board Sheel Vardhan sir (2025):

- What are your views about Great Nicobar project?

Board Suman Sharma mam (2025):

- How can India balance development and environment, in context of Great Nicobar Project?

Board Sanjay Verma sir (2025):

- What is your perspective on tourism and other opportunities in Andaman and Nicobar?

Board Sheel Vardhan Sir (2025):

- Mention various Andaman and Nicobar Tribes?
- How are tribes attached to their Land?
- What is Great Nicobar Island Development project?
- Mention various Approaches of Tribal development.

Some questions for QUIZ.

Q1. Consider the following tribes:

1. Shompen
2. Nicobarese
3. Jarawa
4. Sentinelese
5. Mundas
6. Andamanese

How many of the above tribes are found in the Nicobar Islands?

- (a) Only three
- (b) Only four
- (c) Only five
- (d) All six

Ans: (a)

Some questions for POLL.

- Q1. Do you think the Great Nicobar mega project will strengthen India's position in the Indo-Pacific region?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q2. Should India prioritise national security and maritime interests over large-scale conservation concerns in Great Nicobar?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q3. "Great Nicobar is more than a strategic outpost — it is a sacred homeland that must be protected." Do you agree?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q4. Great Nicobar Island should be developed as a major strategic and economic hub, even if it changes the island's traditional way of life.
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q5. Is the Great Nicobar project essential for India to counter China's growing presence in the Indo-Pacific?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q6. Can development and environmental conservation coexist in Great Nicobar?
- (a) YES
 - (b) NO
 - (c) Can't say.

- Q7. Do you support transforming Great Nicobar into a transshipment and defence hub for India?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q8. Should indigenous tribal rights have veto power over mega development projects in Great Nicobar?
- (a) YES
 - (b) NO
 - (c) Can't say.
- Q9. Should protection of indigenous communities and biodiversity take priority over infrastructure expansion in Great Nicobar?
- (a) YES
 - (b) NO
 - (c) Can't say.

