Topics

- Fishes using Tools ,Sea urchins
- Hard vs soft corals
- coral bleaching
- History of voting
- FI In green bonds
- Mains

By saurabh pandey sir

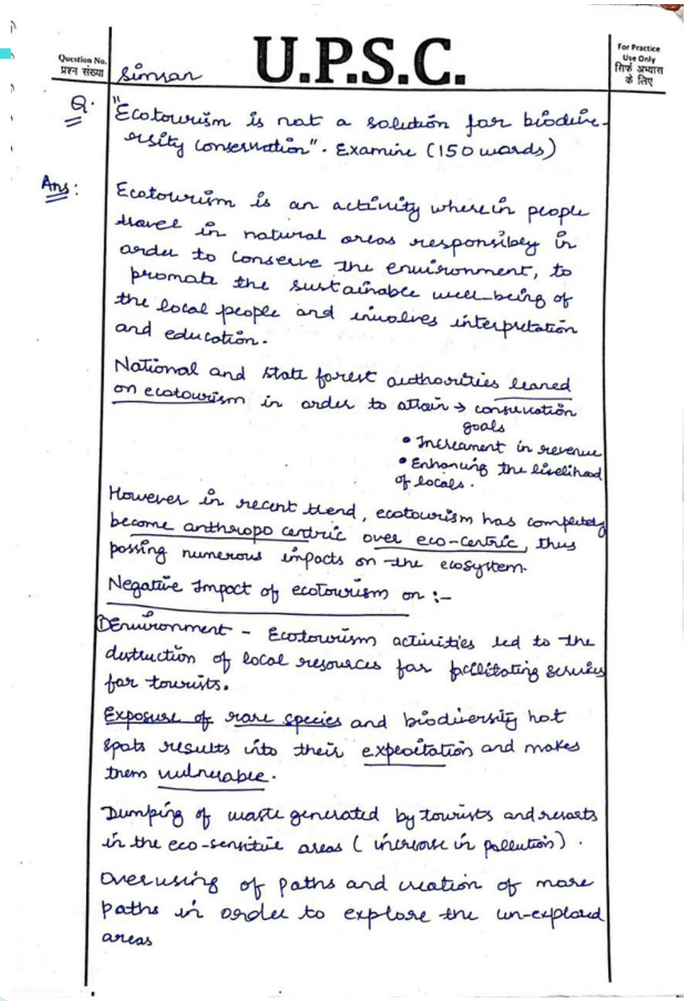
Target Mains 2024/25- Essay

Q“ Democracy depends on trust on democratic procedure . Does application of technology bring mistrust ?? Explain in the context of controversy around Evm.

Q" लोकतंत्र लोकतांत्रिक प्रक्रिया पर विश्वास पर निर्भर करता है। क्या प्रौद्योगिकी का प्रयोग अविश्वास लाता है ?? ईवीएम से जुड़े विवाद के संदर्भ में बताएं।

send your answer - Saurabh pandey upsc telegram channel

Answer review



Question No. प्रश्न संख्या | U.P.S.C. | For Practice Use Only निर्माण अभ्यास के लिए

Sinnar

Q. "Ecotourism is not a solution for biodiversity conservation". Examine (150 words)

Ans:

Ecotourism is an activity wherein people travel in natural areas responsibly in order to conserve the environment, to promote the sustainable well-being of the local people and involves interpretation and education.

National and State forest authorities leaned on ecotourism in order to attain → conservation goals
- Increament in revenue
- Enhancing the livelihood of locals.

However in recent trend, ecotourism has completely become anthropo centric over eco-centric, thus posing numerous impacts on the ecosystem.

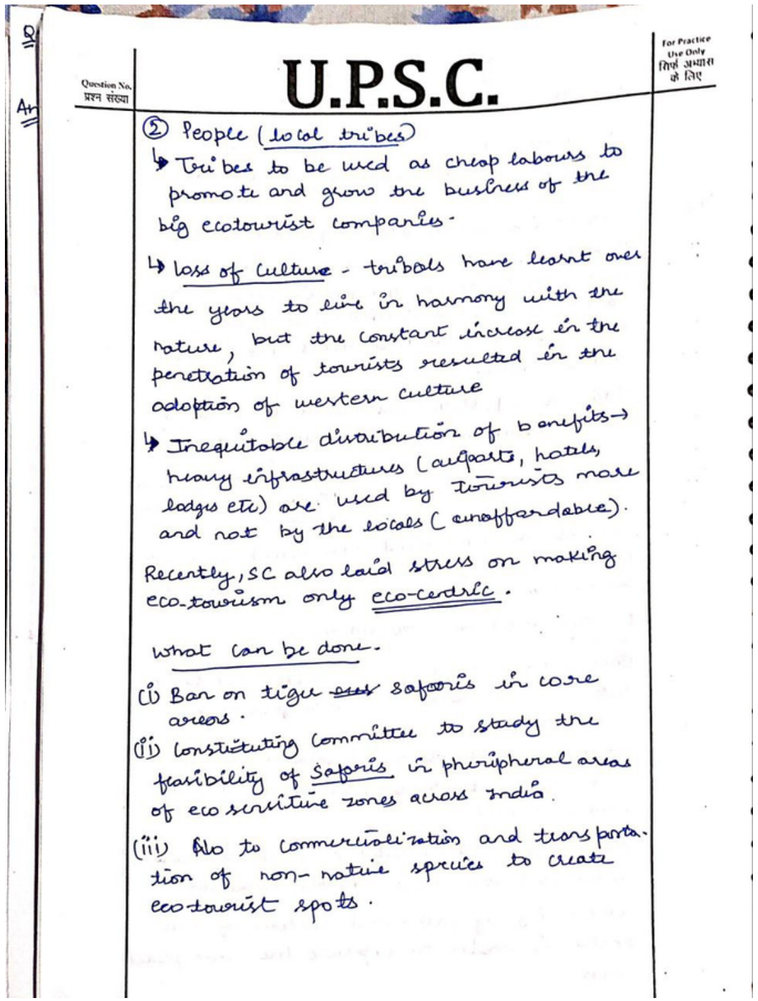
Negative impact of ecotourism on :-

① Environment - Ecotourism activities led to the destruction of local resources for facilitating services for tourists.

Exposure of rare species and biodiversity hot spots results into their exploitation and makes them vulnerable.

Dumping of waste generated by tourists and resorts in the eco-sensitive areas (increase in pollution).

Overusing of paths and creation of more paths in order to explore the un-explored areas



Question No. प्रश्न संख्या | U.P.S.C. | For Practice Use Only निर्माण अभ्यास के लिए

② People (local tribes)

↳ Tribes to be used as cheap labours to promote and grow the business of the big ecotourist companies.

↳ loss of culture - tribals have learnt over the years to live in harmony with the nature, but the constant increase in the penetration of tourists resulted in the adoption of western culture

↳ Inequitable distribution of benefits → heavy infrastructures (airports, hotels, lodges etc) are used by tourists more and not by the locals (unaffordable).

Recently, SC also laid stress on making eco-tourism only eco-centric.

What can be done.

(i) Ban on tiger ~~safaris~~ safaris in core areas.

(ii) Constituting committee to study the feasibility of safaris in peripheral areas of eco sensitive zones across India.

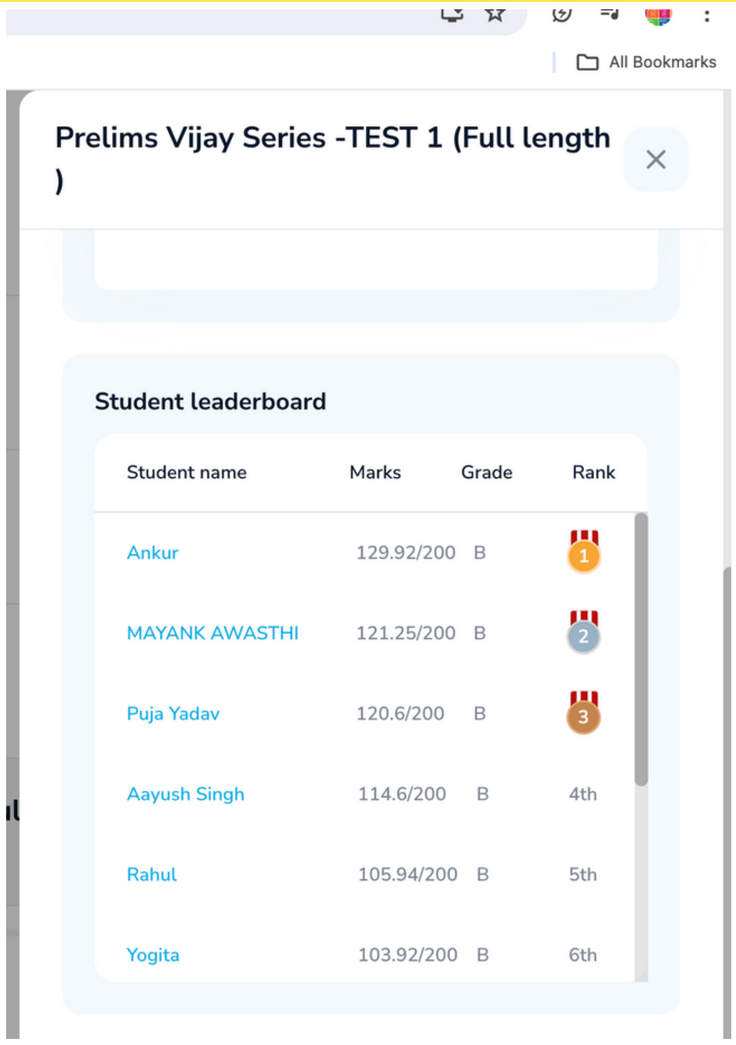
(iii) Ban to commercialization and transportation of non-native species to create eco-tourist spots.

TOPERS FIRST FULL LENGTH TEST (PRELIMS VIJAY SERIES)

Ankur -129.92

Mayank - 121.26

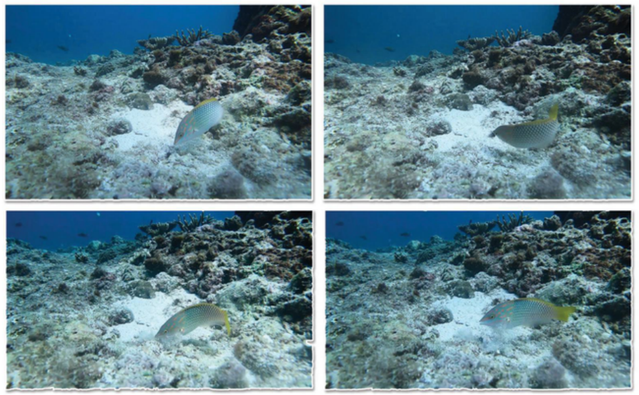
Puja Yadav-120



Three new fish species spotted using tools in the Laccadive Sea

Reports of animals like chimpanzees using straws to draw water and crows fashioning leaves to extract insects from crevices are well known whereas reports of aquatic animals using tools have been less common. This is partly because they are more difficult to observe and a perception that fish are 'less intelligent'

Siddhi Jaishankar
Rohan Arthur



(Clockwise from top left) A checkerboard wrasse at Kavaratti Island, Lakshadweep, using the reef platform as an anvil to break the sea urchin's test and prey on it. SIDDHI JAISHANKAR, ROHAN ARTHUR/SPECIAL ARRANGEMENT

THE GIST

Three fish species in the Laccadive Sea have been found to be capable of using tools. They used live or dead coral structures as anvils to break the hard shells of sea urchins so they could get to the edible bits inside

Unlike primates, birds, otters, octopuses, and many other animals that scientists know are capable of wielding tools, fish have no hands, claws, or tentacles. Being able to grasp and manipulate objects are key requirements for using tools

As naturalists spend more time in the water, they are observing more tool-use in fish. Documenting them is critical so we can ask larger questions about habitat use by fish, the development of animal intelligence, and predator-prey interactions

Three fish species that live in the Laccadive Sea, off the southwest corner of the Indian coast, are capable of using tools, we recently found.

All three species used live or dead coral structures as anvils to break the hard shells of sea urchins so they could get to the edible bits inside. The Jansen's wrasse (*Thalassoma jansenii*) and the checkerboard wrasse (*Halichoeres hortulanus*) have never been reported using tools before, and this is the first documented instance of the moon wrasse (*Thalassoma lunare*) using tools in the wild.

Our study was published in the journal *Coral Reefs* in February. It adds to the growing number of reports of tool-use in animals. While the sophistication of human tool use, from flints to computers, distinguishes us from other animals, the use of tools itself is more common than scientists first imagined.

Reports of animals like chimpanzees using straws to draw water and crows fashioning leaves to extract insects from crevices are well known whereas reports of aquatic animals using tools have been far less common. This is partly because they are much more difficult to observe and because of the perception that species like fish are 'less intelligent'. So scientists have thought they are less likely to be capable of complex cognitive tasks.

Why do fish need tools?

As with many scientific discoveries, our observations were accidental. We were diving off the western coast of Kavaratti, Lakshadweep, to study the burrowing sea urchin (*Echinostrephus molaris*). These small urchins are an important agent of reef erosion. They dig deep burrows into the structure of a reef, weakening its overall framework. And they are abundant in Kavaratti.

We were interested in identifying if the urchin had any natural predators that could help regulate its population. To identify these predators, we placed multiple underwater cameras at different points in the reef to observe them undisturbed.

As we expected, few fish were able to prey on the urchin. *E. molaris* like most sea urchins is covered in an armour of spines. It also has a hard skeleton called a test that protects its internal organs, making it difficult for fish with unspecialised mouth parts to prey on it.

Yet in multiple instances, we found the Jansen's, checkerboard, and moon wrasses were using makeshift tools around them to break open urchin tests, like people might break open a walnut shell. The cameras recorded most of these scenes when we weren't actively watching them, although we were able to observe the last few in person.

How did the wrasses use tools?

Unlike primates, birds, otters, octopuses, and many other animals that scientists know are capable of wielding tools, fish have no hands, claws, or tentacles. This presents an obvious challenge for tool use, since being able to grasp and manipulate objects are key requirements for using tools.

Some fish have found innovative ways of using water itself as a tool. The archer fish, for example, spouts jets of water through its specialised mouth to shoot down prey above the surface. To achieve this, especially with moving prey, the fish needs to have a sense of the angle and force of the jet and maintain perfect timing.

The three wrasses in our study don't have specialised mouthparts like the archer fish. They make do instead with a series of specialised behaviours.

Eating a burrowing sea urchin presents two difficulties. The first is the pincushion of long, sharp spines that a fish has to navigate if it doesn't want to get a mouth full of venomous jabs. The second is the hard test itself. In instance after instance, we observed how the three species of wrasses tackled these challenges.

> While the sophistication of human tool use, from flints to computers, distinguishes us from other animals, the use of tools itself is more common than scientists first imagined

Upon finding an urchin, a wrasse would skilfully approach it from the side and use its snout to gingerly turn the urchin over with a series of pushes and jabs. The underside of the urchin has fewer and softer spines, allowing the wrasse to safely pick it up in its jaws. With the prize in its mouth, the wrasse would swim to a nearby hard coral and strike the urchin against it, dusting off the prickly spines. Even more strikes would break open the test as well.

Once the shell was cracked, the wrasse could eat the soft bits inside. In this task, the wrasses used the same coral reef as a tool to achieve two different purposes.

Why does the finding matter?

Scientists have previously observed anvil use in only about 18 fish species around the world, all belonging to the same family of wrasses, *Labridae*. The three wrasses in our story also belong to this family. Their prey includes invertebrates like crabs, clams, and urchins, and vertebrates like baby sea turtles. The fish's sizes, methods of approach, handling of prey, and geographical locations vary, however.

These commonalities and differences raise the question: why is such tool-use so (relatively) common only in the *Labridae* family of wrasses? As with primates, does this ability depend on brain size? Or is it simply the case that we don't have enough observations from other families of fish?

Our study raises but doesn't answer these questions. What it does, however, is reinforce the need for more rigorous observations of the natural world. As naturalists spend more time in the water, they are observing more tool-use in fish. Often these observations are incidental, yet documenting them carefully is critical so we can ask larger questions about habitat use by fish, the development of animal intelligence, and predator-prey interactions, among others.

(Rohan Arthur is a senior scientist working with the Oceans and Coasts Programme of the Nature Conservation Foundation. Siddhi Jaishankar is a research assistant at the same programme, working on coral reef erosion by sea urchins in Lakshadweep, and other projects involving seagrasses and dugongs in the Andaman Islands.)

Fishes using Tools

- Three Fish species that live in the Laccadive Sea, of the southwest corner of the Indian coast, are capable of using tools.
- All three species used live or dead coral structures as anvils to break the hard shells of sea urchins so they could get to the edible bits inside.
- The Jansen’s wrasse (Thalassoma jansenii) and the checkerboard wrasse (Halichoeres hortulanus) have never been reported using tools before, and this is the first documented instance of the moon wrasse (Thalassoma lunare) using tools in the wild

- Unlike primates, birds, otters, octopuses, and many other animals that scientists know are capable of wielding tools, fish have no hands, claws, or tentacles.
- This presents an obvious challenge for tool use, since being able to grasp and manipulate objects are key requirements for using tools. Some fish have found innovative ways of using water itself as a tool.
- The archer fish, for example, spouts jets of water through its specialised mouth to shoot down prey above the surface

- urchin, a wrasse would skilfully approach it from the side and use its snout to gingerly turn the urchin over with a series of pushes and jabs.
- The underside of the urchin has fewer and softer spines, allowing the wrasse to safely pick it up in its jaws.
- With the prize in its mouth, the wrasse would swim to a nearby hard coral and strike the urchin against it, dusting of the prickly spines. Even more strikes would break open the test as well

Sea urchins

- Sea urchins are spiny, globular echinoderms in the class Echinoidea.
- About 950 species of sea urchin are distributed on the seabeds of every ocean and inhabit every depth zone from the intertidal seashore down to 5,000 meters.
- The spherical, hard shells of sea urchins are round and covered in spines.

The Hindu analysis by saurabh pandey sir

Hard corals vs soft corals

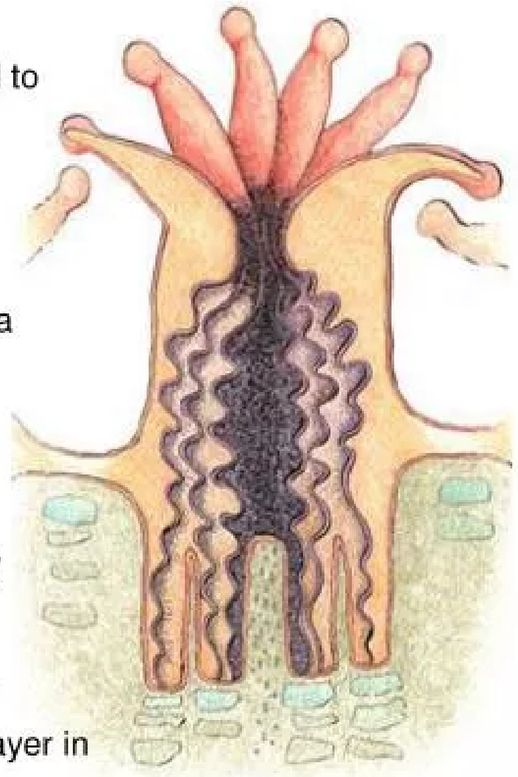
Coral Reefs

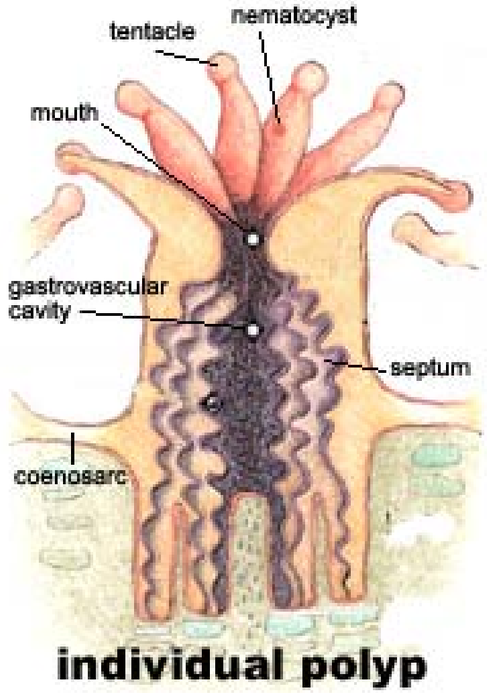
-Are produced by the organisms that live on them
-Are produced by a soft bodied polyp similar to and related to an anemone
-Very diverse ecosystem

Coral Anatomy & Growth

-Reef forming corals secrete $CaCO_3$
-Are members of the Phylum Coelenterata, Class Anthozoa
-Are radially symmetrical
-Subclasses:
-Soft Corals- sea fans, sea pens, sea whips
-Hard Corals- stony corals (make the reefs)
-Are carnivores, tentacles have nematocysts to capture prey and bring it into the digestive cavity

-Most corals live in colonies
-Each polyp sits in a hard limestone cup called a corallite
-Which is made by their epidermis
-The polyp grows by drawing itself up a secreting a new layer in the bottom of the cup
-All the polyps are connected over the top of the calcium cup by a thin tissue layer called a cenosarc, so touching and tearing this tissue can injure the coral and let infections in.





individual polyp

The Hindu analysis by saurabh pandey sir

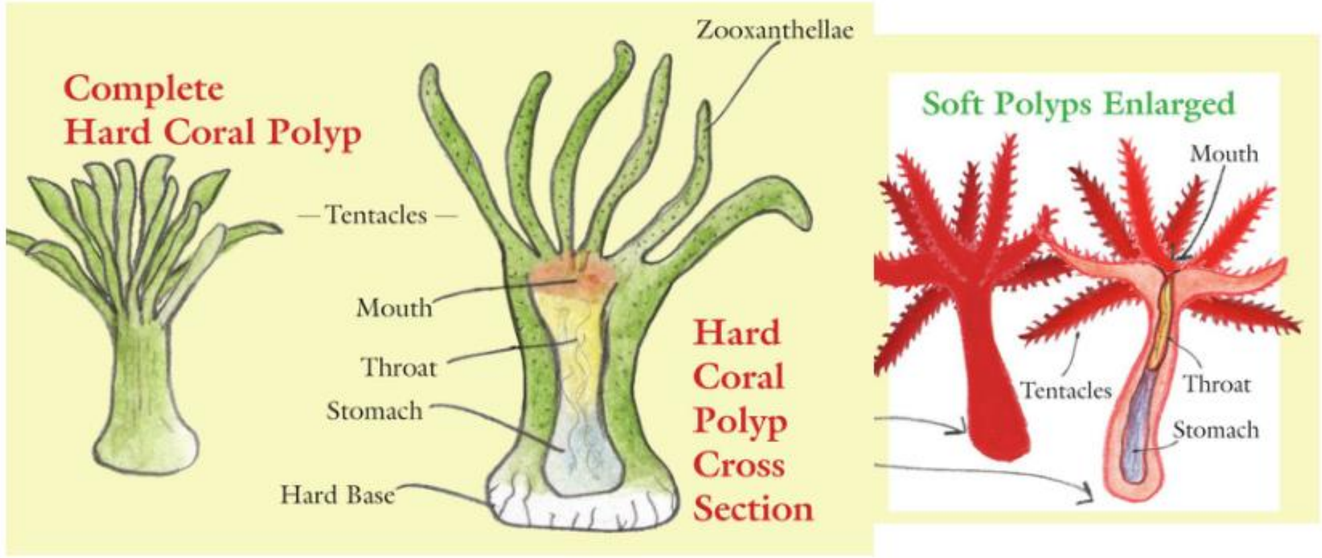
Hard corals vs. Soft corals

Hard corals

- Reef builders.
- Rigid skeleton made of calcium carbonate ($CaCO_3$)
- Secrete calcium cabonate

Soft corals

- No skeleton
- No calcium carbonate secretions



The Hindu analysis by saurabh pandey sir

- **Appearance: Hard corals have tentacles in multiples of 6, while soft coral tentacles form in multiples of 8. Hard corals closely represent rocks, while soft corals look like underwater plants.**
- **Growth characteristics: Hard corals deposit calcium carbonate skeletons that remain behind after they die, forming the base of coral reefs. Soft corals have internal structural support known as spiracles.**
- **Defense Mechanisms: Polyps of hard coral can retreat into their skeletons for protection, while soft corals rely more on chemical defense**

The Hindu analysis by saurabh pandey sir

BIG SHOT

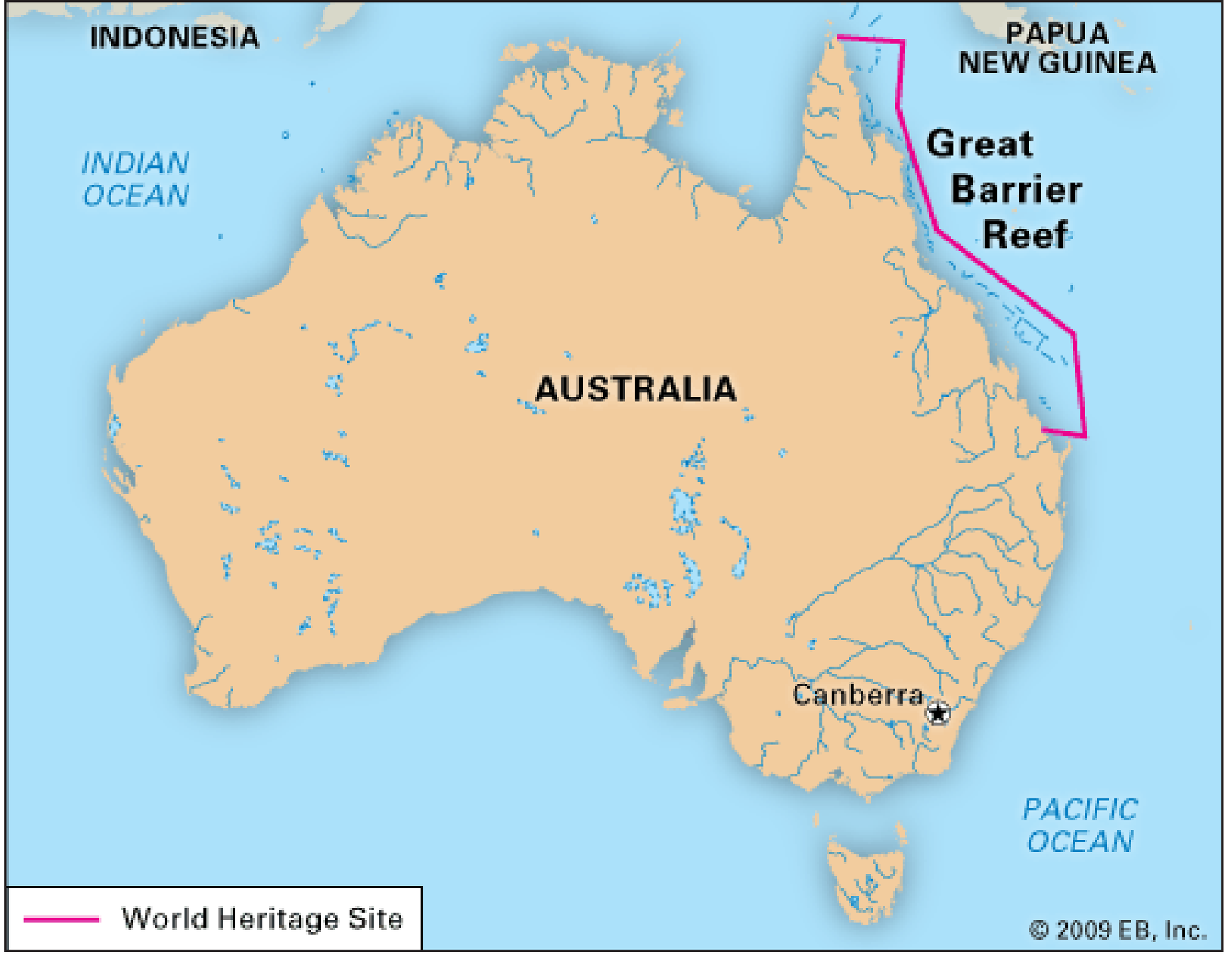
Bleached and dead coral around Lizard Island on the Great Barrier Reef, located 270 km north of the city of Cairns. Australia's famed Great Barrier Reef is teetering on the brink, suffering one of the most severe coral bleaching events on record – and the fifth in eight years – leaving scientists unsure of its survival. AFP

Coral bleaching

- Bleached and dead coral around Lizard Island on the Great Barrier Reef, located 270 km north of the city of Cairns.
- Australia’s famed Great Barrier Reef is teetering on the brink, suffering one of the most severe coral bleaching events on record – and the fifth in eight years – leaving scientists unsure of its survival.

BIG SHOT

The Hindu analysis by saurabh pandey sir

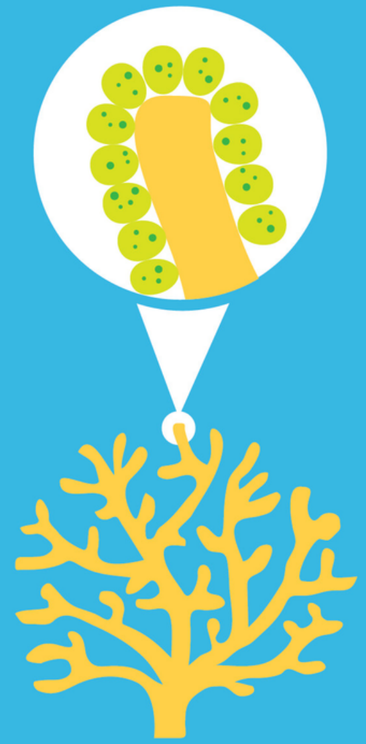

INDONESIA
PAPUA NEW GUINEA
INDIAN OCEAN
Great Barrier Reef
AUSTRALIA
Canberra
PACIFIC OCEAN
World Heritage Site
© 2009 EB, Inc.

CORAL BLEACHING

Have you ever wondered how a coral becomes bleached?

HEALTHY CORAL

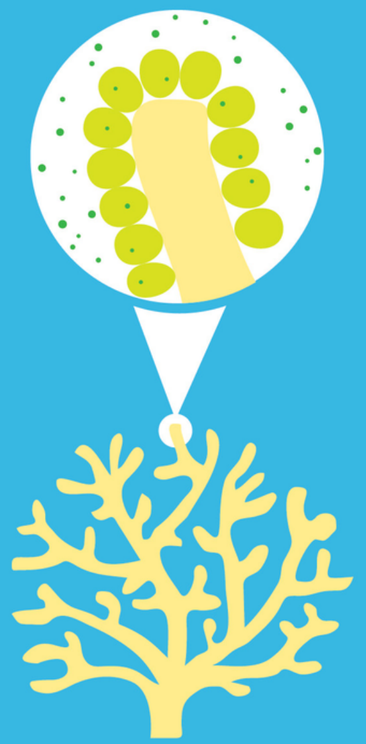
1 Coral and algae depend on each other to survive.



Corals have a symbiotic relationship with microscopic algae called zooxanthellae that live in their tissues. These algae are the coral's primary food source and give them their color.

STRESSED CORAL

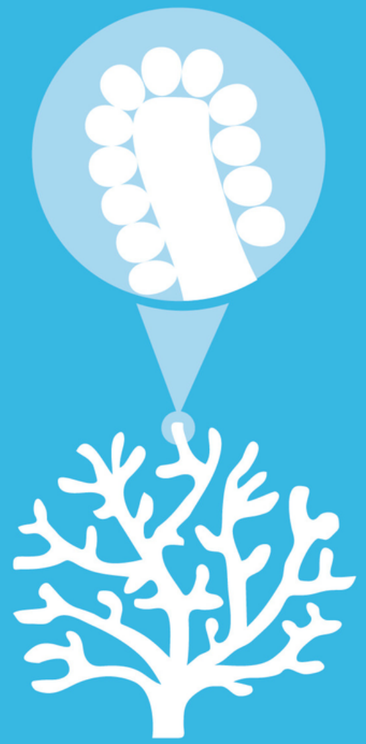
2 If stressed, algae leaves the coral.



When the symbiotic relationship becomes stressed due to increased ocean temperature or pollution, the algae leave the coral's tissue.

BLEACHED CORAL

3 Coral is left bleached and vulnerable.



Without the algae, the coral loses its major source of food, turns white or very pale, and is more susceptible to disease.

WHAT CAUSES CORAL BLEACHING?

Change in ocean temperature
Increased ocean temperature caused by climate change is the leading cause of coral bleaching.

Runoff and pollution
Storm generated precipitation can rapidly dilute ocean water and runoff can carry pollutants — these can bleach near-shore corals.

Overexposure to sunlight
When temperatures are high, high solar irradiance contributes to bleaching in shallow-water corals.

Extreme low tides
Exposure to the air during extreme low tides can cause bleaching in shallow corals.

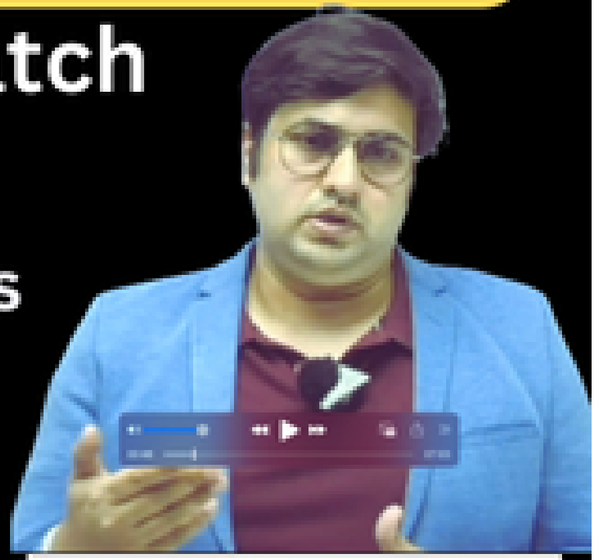
NOAA's Coral Reef Conservation Program
http://coralreef.noaa.gov/

LAST MILE BATCH

"LAST MILE" BATCH For Prelims 2024

C-GESIA Batch

- PT 730- 2yrs current
- International relations
- Agriculture for GS
- 10 Full length Tests
- Advance Geo, environment and science



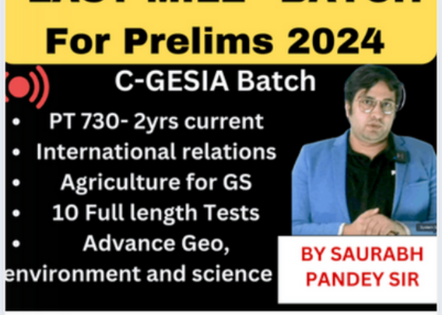
BY SAURABH PANDEY SIR

ONE COURSE ALL SUBJECTS

Rs 3897

CONNECT WITH SIR

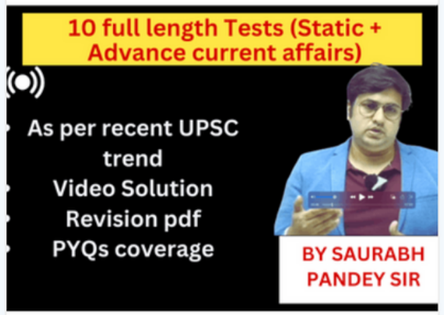
9057921649



Last Mile Batch For UPSC Pr elims 2024. (C-GESIA BAT...

Created by: You(Owner)

5 months



Prelims Vijay Series - 10 Ful l length Tests For upsc pre...

Created by: You(Owner)

4 months

International relations (Basi cs and current affairs)

Created by: You(Owner)

6 months Live

Agriculture for General stud ies

Created by: You(Owner)

6 months Live

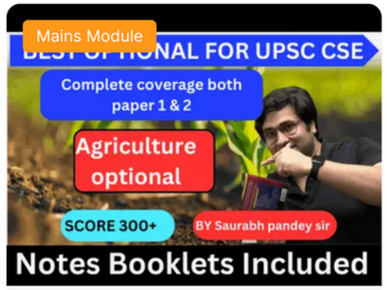
Popular Courses

See More →

"PT 730" PANDEY JI ADVANCED CURRENT...

Admin

Start Learning



Complete Agriculture Optional For IAS/IFoS (...

Admin

Start Learning

Summary With Explanation Of...

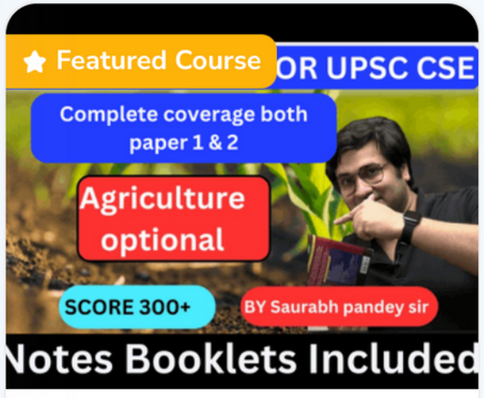
Admin

Start Learning

Prelims Vijay Series – 10 Full Length Tests For...

Admin

Start Learning



Complete Agriculture option al For IAS/IFoS (Batch-2)

Created by: You(Owner)

8 months

Reforms needed in the voting process

When were Electronic Voting Machines (EVMs) first introduced? What have been the concerns raised by activists about EVMs? What are the voting practices in other countries? How can the process of voting be made more robust?

EXPLAINER

Rangarajan. R

The story so far:

The Supreme Court has decided to hear petitions seeking 100% cross-verification of the Voter Verifiable Paper Audit Trail (VVPAT) slips with the vote count as per Electronic Voting Machines (EVMs).

What is the history of voting process?

In the first two general elections of 1952 and 1957, a separate box was placed for each candidate with their election symbol. Voters had to drop a blank ballot paper into the box of the candidate whom they wanted to vote for. Thereafter from the third election, the ballot paper with names of candidate and their symbols was introduced with voters putting a stamp on the candidate of their choice.

The EVM was introduced on a trial basis in 1982 in the Assembly constituency of Paravur in Kerala. They were deployed in all booths during the Assembly elections of Tamil Nadu, Kerala, Puducherry and West Bengal in 2001. The Supreme Court in various judgments has upheld the validity of using EVMs in elections. In the 2004 general elections to the Lok Sabha, EVMs were used in all 543 constituencies. In *Subramanian Swamy versus Election Commission of India* (2013), the Supreme Court ruled that a paper trail is an indispensable requirement for free and fair elections. The 2019 elections had EVMs backed with 100% VVPAT in all constituencies.

What are international practices?

Many western democracies continue to have paper ballots for their elections. Countries like England, France, The Netherlands and the U.S. have discontinued the use of EVMs, for national or federal elections, after trials in the last two decades. In Germany, the Supreme Court of the country declared the use of EVMs in elections as unconstitutional in 2009. Some countries like Brazil, however, use EVMs for their elections. Among our neighbours, Pakistan does not use EVMs. Bangladesh experimented in a few constituencies in 2018 but reverted to paper ballots for the general elections in 2024.

Ensuring transparency: An official marks an EVM at a distribution centre in Coimbatore on April 11. AFP

What are the features of EVMs?

EVMs bring significant benefits to the electoral process. First, the EVM has virtually eradicated booth capturing by limiting the rate of vote casting to four votes a minute and thus significantly increasing the time required for stuffing false votes. Second, invalid votes that were a bane of paper ballots and also a bone of contention during counting process have been eliminated through EVMs. Third, considering the size of our electorate which is close to one billion, the use of EVMs is eco-friendly as it reduces the consumption of paper. Finally, it provides administrative convenience for the polling officers on the day of the poll and has made the counting process faster and error-free. There are mechanisms to uphold the integrity of EVM and VVPAT process. These include random allocation of EVMs to booths before polls; conduct of a mock poll to display the correctness of EVMs and VVPAT before commencement of the actual poll; and the serial number of EVMs along with total votes polled shared with agents of candidates to verify the same at the time of counting of votes.

Despite its advantages, there have been doubts raised about the functioning of EVMs by various political parties and civil society activists from time to time. The most repeated allegation is that EVMs are susceptible to hacking as it is an electronic device. The ECI has time and again clarified that it is a standalone device like a calculator with no connectivity to any external device and hence free from any kind of external hack. The sample size for matching of the EVM count with VVPAT slips at present is five per assembly constituency/segment. This is not based on any scientific criteria and may fail to detect defective EVMs during counting. The present process also allows for booth-wise polling behaviour to be identified by various parties that can result in profiling and intimidation.

What can be the way forward?

In a transparent democracy, each citizen must be able to comprehend and verify the steps in the election process without any special technical knowledge. The 100% use of VVPAT has enabled the voters to verify that their votes are 'recorded as cast'. However, few additional steps need to be adopted to make the entire process more robust and ensure that the votes are 'counted as recorded'. 100% match of EVM count with VVPAT slips would be unscientific and cumbersome. The sample for matching of EVM count and VVPAT slips should be decided in a scientific manner by dividing each State into large regions as suggested by experts. In case of even a single error, the VVPAT slips should be counted fully for the concerned region and form the basis for results. This would instil a statistically significant confidence in the counting process. Further, in order to provide a degree of cover for voters at the booth level, 'totaliser' machines can be introduced that would aggregate votes in 15-20 EVMs before revealing the candidate-wise count.

Rangarajan. R is a former IAS officer and author of 'Polity Simplified'. He trains civil-service aspirants at 'Officers IAS Academy'. Views expressed are personal.

THE GIST

- The EVM was introduced on a trial basis in 1982 in the Assembly constituency of Paravur in Kerala.
- Despite its advantages, there have been doubts raised about the functioning of EVMs by various political parties and civil society activists from time to time. The most repeated allegation is that EVMs are susceptible to hacking as it is an electronic device.
- In a transparent democracy, each citizen must be able to comprehend and verify the steps in the election process without any special technical knowledge.

What is the history of voting process?

- In the first two general elections of 1952 and 1957, a separate box was placed for each candidate with their election symbol.
- Voters had to drop a blank ballot paper into the box of the candidate whom they wanted to vote for.
- Thereafter from the third election, the ballot paper with names of candidate and their symbols was introduced with voters putting a stamp on the candidate of their choice.
- The EVM was introduced on a trial basis in 1982 in the Assembly constituency of Paravur in Kerala. in all constituencies.

- They were deployed in all booths during the Assembly elections of Tamil Nadu, Kerala, Puducherry and West Bengal in 2001.
- The Supreme Court in various judgments has upheld the validity of using EVMs in elections.
- In the 2004 general elections to the Lok Sabha, EVMs were used in all 543 constituencies. In Subramanian Swamy versus Election Commission of India (2013), the Supreme Court ruled that a paper trail is an indispensable requirement for free and fair elections.
- The 2019 elections had EVMs backed with 100% VVPAT

Why has India allowed FIIs to invest in its green bonds?

What are Sovereign Green Bonds? How will investments by Foreign Institutional Investors in green government securities accelerate India's transition to a green economy?

Kunal Shankar

The story so far:

On April 5 the Reserve Bank of India (RBI) green lighted investments in the country's Sovereign Green Bonds (SGrBs) by Foreign Institutional Investors (FIIS) – investors such as insurance companies, pension funds and nation-states' sovereign wealth funds. SGrBs are a kind of government debt that specifically funds projects attempting to accelerate India's transition to a low carbon economy.

How does it help in green transition?

Allowing FIIs to invest in India's green projects widens the pool of capital available to fund the country's ambitious 2070 net zero goals, ensuring 50% of India's energy comes from non-fossil fuel based sources and to reduce the carbon intensity of the nation's economy by 45%, as pledged by Prime Minister Narendra Modi at COP26 in Glasgow 2021.

The RBI had issued SGrBs worth ₹16,000 crore in two tranches in January and February last year with maturities in 2028 and 2033. While in both instances the bonds were oversubscribed, the main participants were domestic financial institutions and banks, narrowing the avenues from where the government could borrow. Moreover, these green Government-Securities (G-Secs) were classified under the Statutory Liquidity Ratio (SLR), a liquidity rate fixed by the RBI that financial institutions must maintain with themselves before they lend to their customers.

SGrBs yield lower interest than conventional G-Secs, and the amount foregone by a bank by investing in them is called a greenium. But central banks and governments the world over are encouraging financial institutions to embrace greeniums to hasten the transition to a greener future. Climate finance experts believe India would gain from allowing FIIs in green G-Secs. They say FIIs are also looking to diversify their pool of green investments, as there is considerable regulatory support particularly in developed countries. And so this is an opportunity for them to invest in India's green g-secs. Ashim Roy, Energy Finance lead at World Resources Institute, India said FIIs might also be looking to gain green credentials when such investments may not be available in their home markets, and because India has successfully addressed greenwashing fears with the Sovereign Green Bonds Framework in late 2022.

What is the green taxonomy gap?

In the 2022-23 Union Budget, Finance Minister Nirmala Sitharaman announced the government's decision to issue SGrBs to accelerate funding government projects such as harnessing offshore wind, grid-scale solar power production, or encouraging the transition to battery operated Electric Vehicles (EVs). But the RBI had not created a green taxonomy, or a way to assess an investment's environmental, or emissions credentials to ensure the project is not an attempt at greenwashing, that is, faking green credentials to secure funding.

To address this gap, the Finance Ministry released India's first SGrB Framework on November 9, 2022 detailing the kind of projects that would receive funding through this class of G-Secs. These included "investments in solar/wind/biomass/hydropower energy projects (under 25 MW) that integrate energy generation and storage; supporting public lighting improvements (e.g. replacement with LEDs); supporting construction of new low-carbon buildings as well as energy-efficiency retrofits to existing buildings; projects to reduce electricity grid losses." The list goes on to include promoting public transport, subsidies to adopt EVs and building charging infrastructure. The government also sought Norway-based validator Cicero's opinion comparing India's SGrB Framework with International Capital Market Association's (ICMA's) green principles. Cicero rated India's framework as "green medium" with a score of "good governance". WRI's Ashim Roy said, "it would be crucial to identify new green projects with credible audit trails and high impact to optimally deploy the proceeds, especially ones that has received limited private capital like Distributed Renewable Energy and clean energy transition finance for MSMEs."

THE GIST

- Allowing FIIs to invest in India's green projects widens the pool of capital available to fund the country's ambitious 2070 net zero goals.
- In the 2022-23 Union Budget, Finance Minister Nirmala Sitharaman announced the government's decision to issue SGrBs to accelerate funding government projects such as harnessing offshore wind, grid-scale solar power production, or encouraging the transition to battery operated Electric Vehicles.
- The RBI had issued SGrBs worth ₹16,000 crore in two tranches in January and February last year with maturities in 2028 and 2033.

- in April 5 the Reserve Bank of India (RBI) green lighted investments in the country’s Sovereign Green Bonds (SGrBs) by Foreign Institutional Investors (FIIS) — investors such as insurance companies, pension funds and nation-states’ sovereign wealth funds.
- SGrBs are a kind of government debt that specifically funds projects attempting to accelerate India’s transition to a low carbon economy.

How does it help in green transition?

- Allowing FIIs to invest in India’s green projects widens the pool of capital available to fund the country’s ambitious 2070 net zero goals, ensuring 50% of India’s energy comes from non-fossil fuel based sources and to reduce the carbon intensity of the nation’s economy by 45%, as pledged by Prime Minister Narendra Modi at COP26 in Glasgow 2021.

- these green Government-Securities (G-Secs) were classified under the Statutory Liquidity Ratio (SLR), a liquidity rate fixed by the RBI that financial institutions must maintain with themselves before they lend to their customers.
- SGrBs yield lower interest than conventional G-Secs, and the amount foregone by a bank by investing in them is called a greenium.
- But central banks and governments the world over are encouraging financial institutions to embrace greeniums to hasten the transition to a greener future.
- Climate nance experts believe India would gain from allowing FIIs in green G-Secs.
- They say FIIs are also looking to diversify their pool of green investments, as there is considerable regulatory support particularly in developed countries.

GETTY IMAGES

Imported inflation: how import costs can increase the prices of goods and services

The Asian Development Bank recently warned that India could face imported inflation as the rupee could depreciate amid the rise in interest rates in the West. A rise in interest rates in the West tends to cause the currencies of developing countries to depreciate

Prashanth Perumal

Imported inflation refers to the rise in the prices of goods and services in a country that is caused by an increase in the price or the cost of imports into the country. It is believed that a rise in input costs pushes producers to raise the price they charge from their local customers, thus boosting inflation.

A fall in the rupee

A depreciation in the value of a country's currency is generally seen as the most important reason behind imported inflation in an economy. This is because when a country's currency depreciates, people in the country will have to shell out more of their local currency to purchase the necessary foreign currency required to buy any foreign goods or services, which in turn means that they will effectively be paying more for anything that they import. The Asian Development Bank recently warned that India could face imported inflation as the rupee could depreciate amid the rise in interest rates in the West. A rise in interest rates in the West tends to cause the currencies of developing countries to depreciate against western currencies, which in turns can lead to higher import costs for these countries.

A rise in import costs even without depreciation in the value of a country's currency is also believed to lead to import inflation. So a rise in international crude oil prices due to fall in oil output, for instance, is expected to cause prices to rise across an economy which imports oil to produce goods and services. The idea of imported inflation, it should be noted, is simply a variant of cost-push inflation which states that a rise in the cost of inputs can lead to an inflation in the prices of final goods and services.

Consumers decide prices

Critics of the proposition that rising import costs can lead to a rise in inflation believe that it is a fallacious economic idea. They state that it might seem commonsensical to believe that input costs determine price, and hence that higher costs should lead to higher prices for goods and services. After all, it is common to see a lot of businesses in the real world raise the price of their products when their input costs rise. It may thus seem true, from an individual business' point of view, that costs determine prices.

However, the critics state, it is simply not true that costs determine price when seen from an economic point of view. Instead, they state that it is the prices that customers are willing to pay for the final goods and services that ultimately determine the cost of all inputs that go into making products.

It should be carefully noted that producers are willing to pay for various inputs based on what price they believe they can sell their final output for to their customers. So, if the cost of inputs were set at a price that is higher than what producers are willing to pay (based on final consumer demand), this would cause the available supply of inputs to go unsold as producers are unwilling to purchase the inputs. This, in turn, would cause the price of inputs to drop in accordance with final consumer demand.

Stated simply, value is imputed backwards from final consumer goods and services to inputs that go into making these final goods and services. The idea of imputation of value from final consumer goods and services to the various factors of production was elaborated famously by Austrian economist Carl Menger in his 1871 book *Principles of Economics*.

It can be further argued that even when import costs rise due to a depreciating currency, the rise in costs is still ultimately driven by the demand for the final output among consumers. To understand this, it should be noted that the value of a currency depreciates against a foreign currency when its supply becomes relatively more abundant than the foreign currency in the forex market. In other words, the exchange rate of a currency depreciates to reflect the greater demand for the foreign currency in terms of the local currency. So, the resulting rise in import costs due to depreciation itself can be seen simply as a reflection of a change in the nominal demand for inputs.

Stated simply, it is not currency depreciation that is causing input costs and the prices of final goods to rise; rather, the currency depreciation is simply a reflection of higher nominal demand for imported goods from final consumers.

Imported Inflation

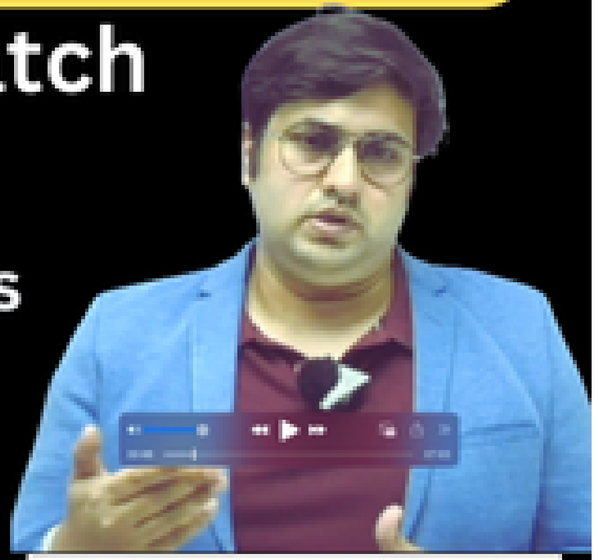
- Imported Inflation is inflation that occurs when there is an increase in the prices of goods and services imported into a country.
- The surge in prices may be due to several reasons like increased taxes on imports, a weaker domestic currency, or inflation in the exporting country

LAST MILE BATCH

"LAST MILE" BATCH For Prelims 2024

C-GESIA Batch

- PT 730- 2yrs current
- International relations
- Agriculture for GS
- 10 Full length Tests
- Advance Geo, environment and science



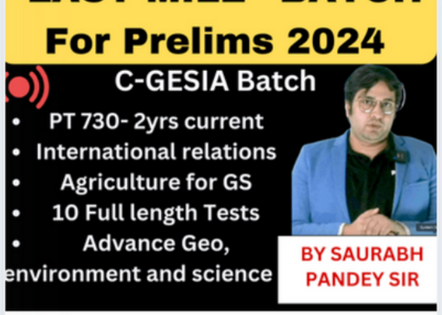
BY SAURABH PANDEY SIR

ONE COURSE ALL SUBJECTS

Rs 3897

CONNECT WITH SIR

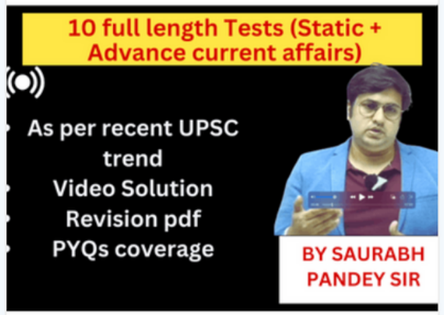
9057921649



Last Mile Batch For UPSC Pr elims 2024. (C-GESIA BAT...

Created by: You(Owner)

5 months



Prelims Vijay Series - 10 Ful l length Tests For upsc pre...

Created by: You(Owner)

4 months

International relations (Basi cs and current affairs)

Created by: You(Owner)

6 months Live

Agriculture for General stud ies

Created by: You(Owner)

6 months Live

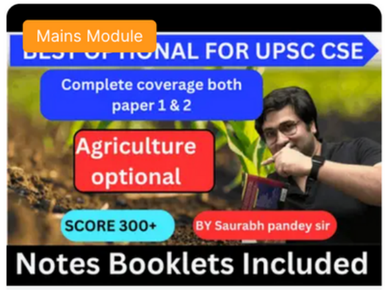
Popular Courses

See More →

"PT 730" PANDEY JI ADVANCED CURRENT...

Admin

Start Learning



Complete Agriculture Optional For IAS/IFoS (...

Admin

Start Learning

Summary With Explanation Of...

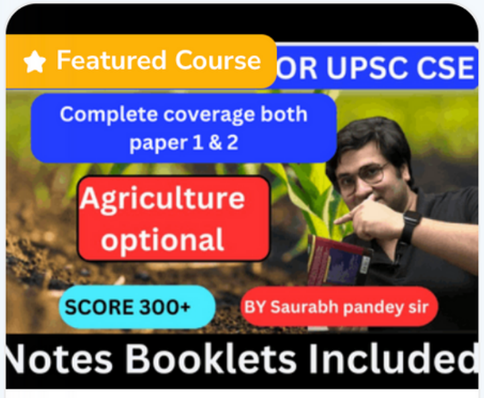
Admin

Start Learning

Prelims Vijay Series – 10 Full Length Tests For...

Admin

Start Learning



Complete Agriculture option al For IAS/IFoS (Batch-2)

Created by: You(Owner)

8 months

Google Play Games Apps Movies & TV Books Kids

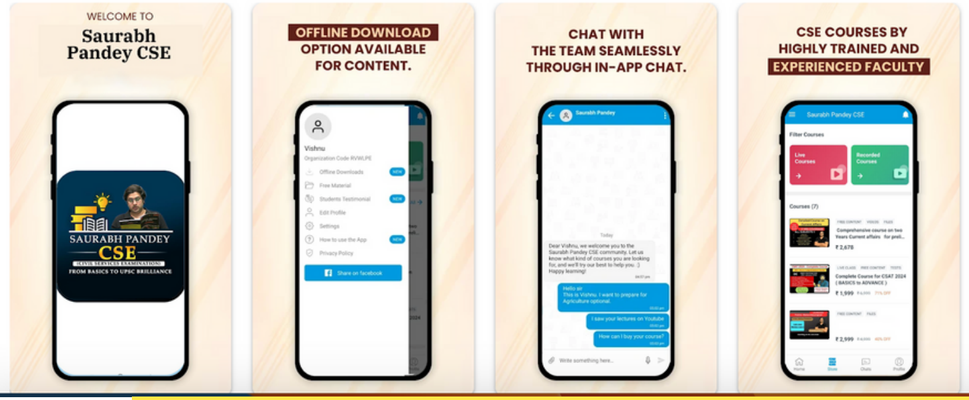
Saurabh Pandey CSE

Saurabh Pandey CSE

4.8★ 73 reviews | 1K+ Downloads | Everyone

Share | Add to wishlist

You don't have any devices



App support

For any query msg-

9057921649

40 PER OFF IN ALL COURSES
LINK IN DESCRIPTION BOX

For any query msg-
9057921649

visit saurabhpandeyupsc.com

SAURABH PANDEY CSE (CIVIL SERVICES EXAMINATION) FROM BASICS TO UPSC BRILLIANCE

Categories

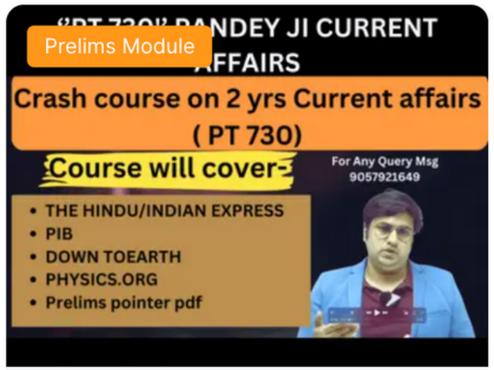
Search for anythings...

Login

Home | Courses | Pages | More | About UPSC Exam | Current-Affairs Pointers | YouTube Channel | All Courses

Popular Courses

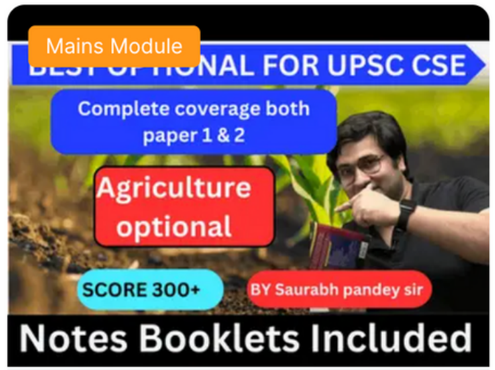
See More →



"PT 730" PANDEY JI ADVANCED CURRENT...

Admin

Start Learning



Complete Agriculture Optional For IAS/IFoS (...

Admin

Start Learning

Summary With Explanation Of...

Admin

Start Learning

Prelims Vijay Series – 10 Full Length Tests For...

Admin

Start Learning

Target Mains 2024/25- Essay

Q“ Democracy depends on trust on democratic procedure . Does application of technology bring mistrust ?? Explain in the context of controversy around Evm.

Q" लोकतंत्र लोकतांत्रिक प्रक्रिया पर विश्वास पर निर्भर करता है। क्या प्रौद्योगिकी का प्रयोग अविश्वास लाता है ?? ईवीएम से जुड़े विवाद के संदर्भ में बताएं।

send your answer - Saurabh pandey upsc telegram channel