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MINISTRY OF SCIENCE AND TECHNOLOGY

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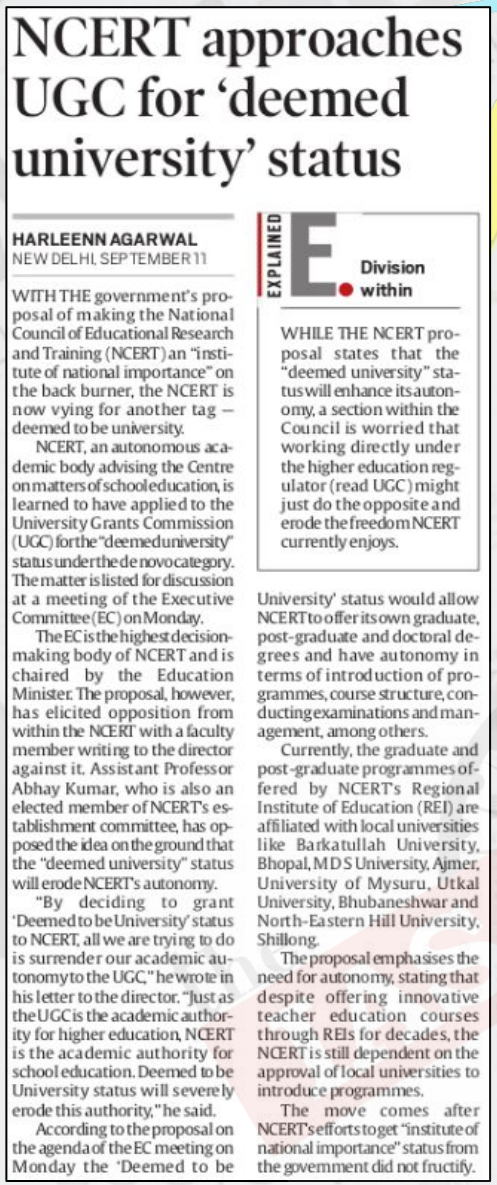
INDIAN EXPRESS

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DEEMED UNIVERSITY STATUS

(Syllabus: GS Paper 2 - Polity & Governance)

Context: With the government's proposal of making the National Council of Educational Research and Training (NCERT) an "institute of national importance" on the back burner, the NCERT is now vying for another tag - deemed to be university.



NCERT approaches UGC for 'deemed university' status

HARLEENN AGARWAL
NEW DELHI, SEPTEMBER 11

WITH THE government's proposal of making the National Council of Educational Research and Training (NCERT) an "institute of national importance" on the back burner, the NCERT is now vying for another tag — deemed to be university.

NCERT, an autonomous academic body advising the Centre on matters of school education, is learned to have applied to the University Grants Commission (UGC) for the "deemed university" status under the de novo category. The matter is listed for discussion at a meeting of the Executive Committee (EC) on Monday.

The EC is the highest decision-making body of NCERT and is chaired by the Education Minister. The proposal, however, has elicited opposition from within the NCERT with a faculty member writing to the director against it. Assistant Professor Abhay Kumar, who is also an elected member of NCERT's establishment committee, has opposed the idea on the ground that the "deemed university" status will erode NCERT's autonomy.

"By deciding to grant 'Deemed to be University' status to NCERT, all we are trying to do is surrender our academic autonomy to the UGC," he wrote in his letter to the director. "Just as the UGC is the academic authority for higher education, NCERT is the academic authority for school education. Deemed to be University status will severely erode this authority," he said.

According to the proposal on the agenda of the EC meeting on Monday the 'Deemed to be University' status would allow NCERT to offer its own graduate, post-graduate and doctoral degrees and have autonomy in terms of introduction of programmes, course structure, conducting examinations and management, among others.

Currently, the graduate and post-graduate programmes offered by NCERT's Regional Institute of Education (REI) are affiliated with local universities like Barkatullah University, Bhopal, M D S University, Ajmer, University of Mysuru, Utkal University, Bhubaneshwar and North-Eastern Hill University, Shillong.

The proposal emphasises the need for autonomy, stating that despite offering innovative teacher education courses through REIs for decades, the NCERT is still dependent on the approval of local universities to introduce programmes.

The move comes after NCERT's efforts to get "institute of national importance" status from the government did not fructify.

EXPLAINED

E Division within

WHILE THE NCERT proposal states that the "deemed university" status will enhance its autonomy, a section within the Council is worried that working directly under the higher education regulator (read UGC) might just do the opposite and erode the freedom NCERT currently enjoys.

Deemed University status

- Deemed university, also known as deemed-to-be-university, is the accreditation granted by the DHE (Department of Higher Education) to India's higher educational institutes.
- This status is granted under MHRD (Ministry of Human Resource Development) by the advice of UGC (University Grant Commission).
- The status of deemed-to-be-university is awarded in accordance with the Section 3 of the University Grants Commission (UGC) Act, 1956.
- An Institution of Higher Education, other than universities, working at a very high standard in a specific area of study, can be declared by the Central Government on the advice of the UGC as an Institution 'deemed-to-be-university'.
- In India, there are 130 deemed universities, with Tamil Nadu having the highest, i.e., 28.
- The deemed university enjoys full autonomy. It has the independence to design the course, decide the fee structure, and policies related to the admission.
- Another advantage is that they can conduct their exams and have the right to decide whether to grant the degree to the student or not.

Institute of National Importance

- According to the Ministry of Education, an institute of national importance is an institute that "serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state".
- The Central Government grants the status of 'Institute of National Importance' to premier higher educational institutions in India through an act of the Parliament.
- An Institute of National Importance receives special recognition, higher autonomy, and funding from the Government of India.
- The first reference to 'institute of national importance' is given in the Constitution of India, Seventh Schedule; 63 – which says, "The institutions known at the commencement of this Constitution as the Benares Hindu University, the Aligarh Muslim University and the Delhi University; the University established in pursuance of article 371E; any other institution declared by Parliament by law to be an institution of national importance."
- **There are 4 major subdivisions within the list of INIs:**
  - Indian Institutes of Technology (IITs)
  - National Institutes of Technology (NITs)
  - All India Institutes of Medical Sciences (AIIMS)
  - Indian Institutes of Information Technology (IIIT)

INDIAN EXPRESS

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PLACES IN NEWS (RUSSIA - UKRAINE)

(Syllabus: GS Paper 1 - Geography)

AFTER MOSCOW'S PULLBACK FROM PARTS OF KHARKIV

Ukraine push for more Russian-held areas

ANDREW E. KRAMER
KYIV, SEPTEMBER 11

A DAY after routing Russian forces in a lightning advance that seized hundreds of square miles and a strategic town in the northeast, Ukraine claimed additional territory on Sunday in an offensive that has swiftly reshaped the battlefield in the nearly 200-day-old war and left Moscow reeling.

Ukraine's rapid advances in the Kharkiv region have significantly weakened Russia's hold on eastern Ukraine, which it has used as a stronghold to wage its war since February.

Ukrainian officials said on Saturday that their troops had retaken the eastern city of Izium, a strategically important railway hub southeast of Kharkiv that Russian forces seized in the spring after a bloody, weeks-long battle.

Russia's Defence Ministry released a new map of areas it claims to control in the Kharkiv region that appeared to confirm a pullback amid the Ukrainian offensive.

The map showed Russian forces having withdrawn to the eastern side of the Oskol River, about 10 miles east of Izium, with the river appearing to represent the new front line in the region. That would indicate that Ukrainian forces have driven Russian troops from almost all of Kharkiv.

On Sunday, President Volodymyr Zelenskyy claimed that Ukrainian forces had recaptured Chkalovske, a village in the Kharkiv region that lies roughly halfway between Izium and Kharkiv city. And the Ukrainian military command described continuing combat in cities in the Donetsk region, part of the stretch of mining towns and rolling fields known as Donbas, one of Russia's main targets of the war.

In Donetsk, Ukrainian forces late on Saturday were fighting on the outskirts of the town of Lyman, the town's mayor, Oleksandr Zhuravlev, told Ukrainian media. Russian troops seized the city in May, largely destroying it.

Ukraine's rapid gains, smashing what had been a months-long stalemate, have come in part as a result of increased intelligence sharing with the United States, American officials said.

Over the summer, as they began to plan a counteroffensive in the northeast in recent days, Ukrainian officials began to offer more real-time intelligence to their American counterparts, a shift that allowed the United States to provide better and more relevant information about Russian weaknesses, officials said.

Despite heavy grey skies over Kyiv, spirits were buoyant as people tracked the news of the Ukrainian army's steady advances. Many checked their phones relentlessly for updates. "We've been waiting for this a long time," said Rumil Khabibulin, an actor. "My wife, my children, me — all of our spirits are uplifted. I think it's a big turning point in the war and Russia will fall apart." NYT



Destroyed Russian tanks on display in Kyiv on Sunday. AP



Context: Ukraine claimed additional territory in an offensive that has swiftly reshaped the battlefield in the nearly 200-day-old war and left Moscow reeling.



Important places in news

- **The city of Izium**: A strategically important railway hub southeast of Kharkiv that Russian forces seized in the spring after a bloody, week long battle.
- **Chkalovske**: A village in the Kharkiv region that lies roughly halfway between Izium and Kharkiv city.
- **Donetsk region:** part of the stretch of mining towns and rolling fields known as Donbas, one of Russia's main targets of the war.
- **Kupiansk**: A city in the Kharkiv Oblast (province) of eastern Ukraine. It serves as the administrative center of Kupiansk Raion (district).
- **Lysychansk**: A city in the Sievierodonetsk Raion of the Luhansk Oblast in Ukraine.
- **Sloviansk**: A city in the Kramatorsk district of the Donetsk region of Ukraine, the administrative center of the Slovyansk urban community.
- **Belgorod**: A city and the administrative center of Belgorod Oblast, Russia, located on the Seversky Donets River 40 kilometers north of the border with Ukraine.

LIVEMINT Page 8



Taragiri has been built using an integrated construction methodology. PTI

Stealth frigate 'Taragiri' launched

'Taragiri', the third stealth frigate of the Indian Navy's Project 17A, was launched in Mumbai on Sunday, the Mazagon Dock Shipbuilders (MDL) said.

This ship has been built using an integrated construction methodology which involves hull block construction in different geographical locations and integration and erection on the slipway at the MDL, it said in a statement.

"In compliance with the notification issued by the ministry of home affairs, declaring a state mourning on 11 September (due to the passing of Queen Elizabeth II), the event was limited to a technical launch. As the event is tide dependent, any change in the schedule was not possible," the MDL said.

The ship was named by Charu Singh, president, Navy Wives Welfare Association (Western Region), wife of vice admiral Ajendra Bahadur Singh, FOC-in-C Western Naval Command, who was the chief guest.

The keel of 'Taragiri' was laid on 10 September 2020. The ship is expected to be delivered by August 2025, the statement said. The vessel is being launched with an approximate launch weight of 3,510 tonnes. PTI

STEALTH FRIGATE 'TARAGIRI'
(Syllabus: GS Paper 3 - Sci & Tech)

Context: Taragiri, the indigenously-designed Nilgiri-class stealth guided-missile frigate constructed by Mazgaon Dock Shipbuilders Limited (MDL), was launched in Mumbai.

Stealth frigate 'Taragiri'

- Taragiri is the third stealth frigate built as part of Project 17A under which a series of such guided-missile frigates are being constructed for the Navy.
- the ship has been built using integrated construction methodology which involves construction of the hull blocks in different geographical locations and integration and erection on the slipway at Mazgaon Dock Shipbuilders Limited (MDL).
- The ship is designed by the Indian Navy's in-house design organisation, the Bureau of Naval Design.
- The 149-metre-long and 17.8-metre-wide ship is propelled by a combination of two gas turbines and two main diesel engines which are designed to achieve a speed of more than 28 knots at a displacement of as much as 6,670 tonnes.
- The steel used in the hull construction of P17A frigates is indigenously developed DMR 249A, which is a low carbon micro-alloy grade steel manufactured by the Steel Authority of India Limited.
- The indigenously designed Taragiri will have state-of-the-art weapons, sensors, advanced action information system, integrated platform management system, world-class modular living spaces, sophisticated power distribution system and a host of other advanced features.
- It will be fitted with a supersonic surface-to-surface missile system.
- The ship's air defence capability, designed to counter the threat of enemy aircraft and anti-ship cruise missiles, will revolve around the vertical launch and long-range surface-to-air missile system.
- Two 30 mm rapid-fire guns will provide the ship with close-in-defence capability while an SRGM gun will enable her to provide effective naval gunfire support.
- Indigenously developed triple tube lightweight torpedo launchers and rocket launchers will add punch to the ship's anti-submarine capability.

Project 17A programme

- The Project 17A programme was approved by the Indian Government in February 2015 to enhance the combat capabilities of the Indian Navy.
- The Project 17A programme involves the development of seven advanced guided-missile frigates, of which four will be built by Mazagon Dock Shipbuilders and the remaining three ships by GRSE.
- The programme is a follow-on of the Project 17 Shivalik-class frigates. The first six ships will be named after the older Nilgiri-class vessels, which were the updated versions of British Leander class frigates.
- The ships will be named INS Nilgiri, INS Himgiri, INS Udaygiri, INS Dunagiri, INS Taragiri, INS Vindhyagiri and INS Mahendragiri after the names of hill ranges in India.
- The first ship of Project 17A, Nilgiri, was launched on September 28, 2019 and is expected to undergo sea trials in the first half of 2024.
- The second ship of P17A class, Udaygiri, was launched on May 17 this year and is expected to start sea trials in the second half of 2024.

LIVEMINT Page 8

GULF COOPERATION COUNCIL (GCC)

(Syllabus: GS Paper 2 - International relations)

India signs deal with GCC countries

External affairs minister S. Jaishankar has held a "productive" meeting with the Gulf Cooperation Council (GCC) secretary-general Nayef Falah Mubarak Al-Hajraf during which the two leaders signed an MoU on the mechanism of consultations between India and the six-nation regional bloc.

Jaishankar arrived on Saturday on a three-day visit to Saudi Arabia to discuss ways to further strengthen relations between the two countries. It is his first visit to Saudi Arabia as external affairs minister. On the first day of his visit on Saturday, Jaishankar met GCC Secretary-General and exchanged views on current regional and global issues. "Productive meeting with @GCC secretary-general Dr Nayef Falah Mubarak Al-Hajraf. Signed the MoU on the mechanism of consultations between India and GCC. Exchanged views on the current regional and global situation and the relevance of India-GCC cooperation in that context," Jaishankar tweeted after the meeting. PTI

Context: External affairs minister has held a "productive" meeting with the Gulf Cooperation Council (GCC) secretary-general during which the two leaders signed an MoU on the mechanism of consultations between India and the six-nation regional bloc.

Gulf Cooperation Council (GCC)

- The Gulf Cooperation Council (GCC) is a political and economic alliance of six countries in the Arabian Peninsula: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.
- Established in 1981, the GCC promotes economic, security, cultural and social cooperation between the six states and holds a summit every year to discuss cooperation and regional affairs.
- The council's main headquarters is located in Riyadh, Saudi Arabia.
- All current member states are monarchies, including three constitutional monarchies (Qatar, Kuwait, and Bahrain), two absolute monarchies (Saudi Arabia and Oman), and one federal monarchy (the United Arab Emirates, which is composed of seven member states, each of which is an absolute monarchy with its own emir).
- The chief objectives of the GCC are to have integration, coordination and interconnection between the member countries in all fields.
- Although, **India is not one among six members of GCC,** it has emerged as a major trading partner of India. The India-GCC Free Trade Agreement (FTA) is under negotiation.
- India and GCC members are members of the FATF.



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SERIOUS FRAUD INVESTIGATION OFFICE (SFIO)

(Syllabus: GS Paper 3 - Economy)

‘Mastermind’ behind Chinese shell firms held

Serious Fraud Investigation Office picked him up in Bihar while trying to cross the border, enter Nepal

SPECIAL CORRESPONDENT
NEW DELHI

The Serious Fraud Investigation Office (SFIO) late on Saturday arrested a person said to be the mastermind behind a slew of Chinese shell companies operating in the country, from a remote part of Bihar while he was attempting to cross the border through the land route.

The Ministry of Corporate Affairs had conducted a simultaneous search and seizure operation on September 8 at the Gurugram and Bengaluru offices of a firm called Jillian Consultants India Private Ltd., a wholly owned subsidiary of Jilian Hong Kong Ltd.

A Hyderabad-based firm Husys Consulting Ltd. that was earlier listed on the stock exchanges was also probed in the operation. “Investigations so far have revealed the possible involvement of these shell companies in serious financial crimes detrimental to the financial security of the country,” the Ministry said.

The person arrested on Saturday, after the Ministry assigned SFIO the task of investigating Jillian Consultants and 32 other shell companies with Chinese links in India, has been identified as a board member of the firm, Mr. Dortse. He has ‘shown himself’ as a resident of Mandi in Himachal Pradesh. “Mr. Dortse is on the Board of Jillian India Ltd. and has clearly emerged as the mastermind of the whole racket of incorporating large number of shell companies with Chinese links in India and providing dummy directors on their Boards,” the Ministry said.



Evidence acquired during the search operations points to dummy directors being paid by Jilian India Ltd. to act as dummies in several shell companies, with boxes full of company seals and digital signatures of dummy directors being recovered.

“The Indian employees were in touch with the Chinese counterparts through a Chinese instant messaging app. Husys Ltd. was also found to be acting on behalf of Jilian India Ltd. Initial observations reveal that Husys Ltd. had a pact with Jilian Hong Kong Ltd.,” the Ministry said.

This operation could also be linked to the crackdown on illegal loan apps directed by Union Finance and Corporate Affairs Minister Nirmala Sitharaman earlier this week, under which the Corporate Affairs Ministry has been tasked with identifying and de-registering shell companies to prevent their misuse. The RBI is also reviewing dormant NBFCs and has been asked to cancel their licences to avoid their misuse by such app operators.

Ms. Sitharaman had asked all Ministries and agencies to take all possible actions to prevent operations of illegal loan apps that especially target vulnerable, low-income groups at high interest rates and then resort to blackmail. “Mr. Dortse and one Chinese national are the two directors in Jilian Consultants India Pvt. Ltd.,” the Ministry said. Mr. Dortse had fled from Delhi-NCR to a remote place in Bihar and was attempting to escape India and a special SFIO team was dispatched there.

Context: The Serious Fraud Investigation Office (SFIO) arrested a person said to be the mastermind behind a slew of Chinese shell companies operating in the country, from a remote part of Bihar while he was attempting to cross the border through the land route.

Shell corporation or Shell company

- It is an entity that does not have active business operations but is set up to achieve specific business objectives such as reducing tax liabilities, shielding an entity from legal risks, raising capital, and oftentimes, for illegal purposes such as laundering money, hiding beneficial ownership from law enforcement or circumventing sanctions.
- There is no specific definition of shell companies mentioned in the Companies Act, 1956, the Companies Act, 2013, or any other Indian law. However, judicial decisions (ex: Assam Company India Ltd. and Anr. Vs Union of India), definitions in foreign statutes, or literature are used to understand this term in the Indian context.
- The Organisation for Economic Co-operation and Economic Development (OECD) defines a shell company as a firm incorporated or organized or registered in the economy but does not take part in the economic operations (other than pass-through capacity)’.

Serious Fraud Investigation Office (SFIO)

- The Serious Fraud Investigation Office (SFIO) is a statutory corporate fraud investigating agency in India.
- Initially, it was set up by a resolution adopted by the Government of India on 2 July 2003 and carried out investigations within the existing legal framework under section 235 to 247 of the erstwhile Companies Act, 1956.
- Later, Section 211 of the Companies Act, 2013, accorded the statutory status to the Serious Fraud Investigation Office (SFIO).
- It is under the jurisdiction of the Ministry of Corporate Affairs, Government of India & primarily supervised by officers from Indian Administrative Service, Indian Police Service, Indian Corporate Law Service, Indian Revenue Service and other Central Services.
- The organisation has experts from various financial sector domains.
- The SFIO is mandated to conduct Multi-disciplinary investigations of major corporate frauds.
- It is a multi-disciplinary organization having experts from financial sector, capital market, accountancy, forensic audit, taxation, law, information technology, company law, customs and investigation.

THE HINDU Page 10

WPI VS CPI

(Syllabus: GS Paper 3 - Economy)

Food prices may affect Aug. inflation

Retail inflation was 7.28% in first quarter; RBI expects it to touch 7.1% in July-Sept.

VIKAS DHOOT
NEW DELHI

Cooling food prices may have helped moderate retail inflation to a five-month low of 6.7% in July, but there could be a reversal in August's inflation print thanks to concerns about the uneven progression of the monsoon through the country and other factors.

Price rise in food items had dropped to the lowest level since March 2022 at 6.75% in July, from 7.75% in June, and was seen as the key driver for bringing consumer price inflation below 7% after a three-month spell.

In recent weeks, the government has imposed curbs on external as well as internal trade of food items such as rice, *atta* (wheat flour), and tur dal, reflecting its recognition of their surging prices. Food items constitute a little over 45% of the Consumer Price Index (CPI) and the National Statistical Office is scheduled to release the August CPI on Monday.



A 50-kg potato bag is being sold between ₹600 and ₹800 at the Azadpur Mandi in Delhi on Sunday. ▪ SUSHIL KUMAR VERMA

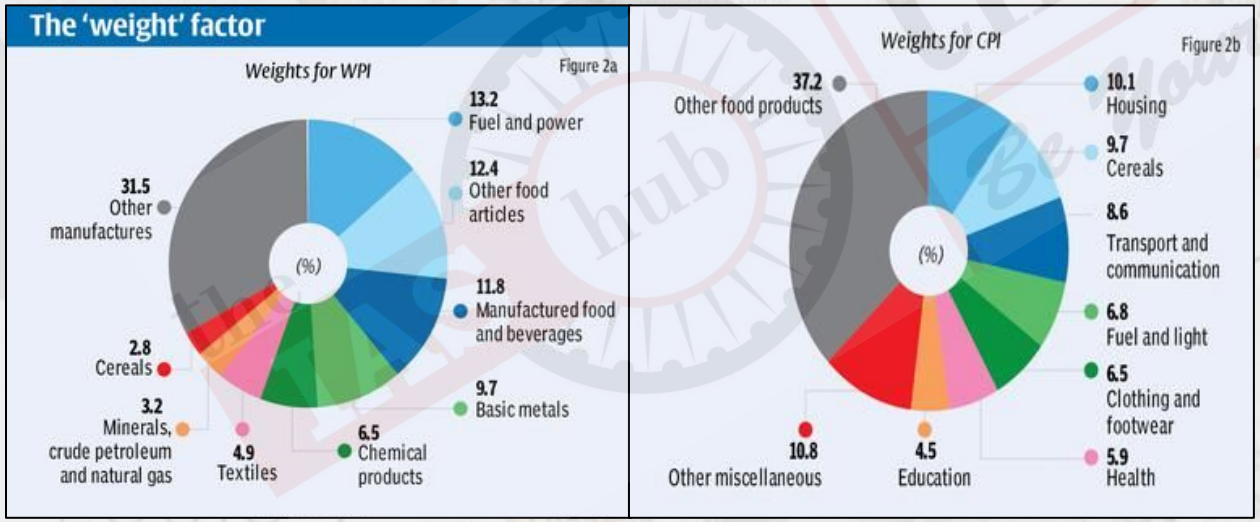
Retail inflation has averaged 7.28% in the April-to-June quarter of 2022-23, and the RBI, in August, pared its second quarter (Q2) inflation projection to 7.1% from 7.4%. Yet, July's print of 6.7% would mean higher price rise can be expected in the months of August and September. CARE Ratings expects inflation in Q2 to be "pretty much in line" with the RBI's 7.1% estimate.

Even as overall food inflation moderated in July, inflation in cereals such as wheat and rice had edged up to 6.9% due to a consistent rise in their prices on account of limited supply, noted CARE Ratings chief economist Rajani Sinha.

The base effect from August 2021, when retail inflation was 5.3% compared to 5.6% a month earlier, may also lead to a slight rise in the CPI reading. Another factor that may drive up retail food prices is that August marks the first full month of GST levies on unbranded, prepacked food items which kicked in on July 18.

Moreover, the volatility in rupee and uneven monsoon distribution continue to pose a risk to overall inflation, she emphasised.

ICRA chief economist Aditi Nayar cautioned that August and September retail inflation numbers could be "slightly" higher than July's 6.7% level due to base effects. While edible oil, vegetables, meat and fish inflation had dropped in July, fruit, eggs and cereal had recorded upticks, she said.



Context: Cooling food prices may have helped moderate retail inflation to a five-month low of 6.7% in July, but there could be a reversal in August's inflation.

WPI vs CPI

- The two most-often used inflation rates in the country are the year-on-year
  - the wholesale price index (WPI) based inflation rate and
  - the consumer price index (CPI) based inflation rate
- The former is called the wholesale inflation rate and the latter is called the retail inflation rate.
- Both WPI and CPI are price indices. In other words, these are two different baskets of goods and services.
- The government assigns different weights to different goods and services based on what is relevant for those two types of consumers.
- The CPI-based inflation data is compiled by the Ministry of Statistics and Programme Implementation (or MoSPI) and the WPI-based inflation data is put together by the Department for Promotion of Industry and Internal Trade (or DPIIT).
- The WPI is dominated by the prices of manufactured goods while the CPI is dominated by the prices of food articles.
- A key difference that must not be missed is that the WPI does not take into account the change in prices of services - say a haircut or a banking transaction. But CPI does.
- If services such as transport, education, recreation and amusement, personal care etc. get significantly costlier, then retail inflation will rise but there will be no impact on wholesale price inflation.

TIMES OF INDIA

Page 2

SARUS CRANES

(Syllabus: GS Paper 3 - Env & Eco)

Sarus stoops to conquer, seen feeding on other birds' chicks

Kushagra.Dixit@timesgroup.com

New Delhi: Ecologists have observed a peculiar behaviour in Sarus cranes, the world's tallest flying birds, in their habitats along Delhi-NCR. Sarus pairs have been predating on hatchlings of other birds, like Swamphens, as a ready source of nutrition.

The finding comes as a shock to ecologists and avid birders who say they have never noticed this in Sarus cranes before and stressed on further investigation to understand what's causing this behaviour.

Earlier this year, an over 20-year-long research showed that the Sarus, a known monogamist, had started to bring a third bird into its pair to help raise its chicks in a better way. The research held climate change and destruction of habitat as the reason for the behavioural change. However, for the latest observation, birders think more clarity would be required.

"Even after 30 years of research, the Sarus doesn't fail to surprise us. The collaboration with birder-photographer Jaswinder Waraich added a new dietary item for this omnivorous crane. We also discovered through literature searches and photographs that this behaviour is generally rare for all 15 species of cranes. Why cranes predate on waterbird chicks is a mystery," said KS Gopi Sundar, scientist, Sewa Mandir and chair of IUCN stork, ibis and spoonbill specialist group.

Sarus cranes generally feed on insects, aquatic plants and seeds. Since 1998, Gopi has never noticed such a behaviour. Waraich, who took the photographic evidence of the bird predating on the hatchling of the waterbird at Dhanauri wetland in Greater Noida and connected with the ecologist, also found this behaviour quite bizarre.

"I observed this behaviour for the first time in August 2021 and then again in April 2022. We then began searching for previous records. I was observing this bird for years, but didn't see anything like this before," said Waraich. The birder observed that the Sarus chanced upon a family of purple Swamphens (Porphyrio poliocephalus) and captured one chick.

Jaswinder Waraich



Climate change and destruction of habitat could be behind the behavioural changes among the Sarus cranes

A report highlighting the five-minute observation mentioned, "On April 15, 2022, about 100m from the first sighting in 2021, an adult was seen chancing upon a purple Swamphen family and grabbing a young chick. The adult Swamphens ran after the Sarus, which rapidly walked with the waterbird chick in its beak to its own single chick (less than 10 days of age) and partner."

"The two adults performed a small dance with open wings. After that, the Swamphen chick was shaken violently a few times and beaten with the beak by the Sarus. The Sarus chick approached closer and the adult bird broke small pieces of the Swamphen chick with violent twists and fed it to its chick. Several pieces were also eaten by both adult birds before they proceeded to preen themselves (cleaned their feathers)," added the report.

According to ecologists, tropical wetlands host a diversity of breeding birds, but there is little information on aspects like predation of chicks. The diet of omnivorous waterbirds are poorly recorded in India, especially during the breeding season when they require hunting more carnivorous foods to facilitate rapid chick growth.

"We reported on the observations of one Sarus crane pair in western Uttar Pradesh predating on chicks on of the grey-headed Swamphens, a new item in the diet of this species. Review of literature, search of photographs online and questioning of experts suggested that chicks of other birds are extremely rare in the Sarus crane diet," the report pointed out.

Ecologists said these observations provided a preliminary indication of how poorly even basic crane habits were documented and were needed for many more species and locations, especially given how habitat deterioration was altering crane behaviour and feeding habits.

REPORT SAYS

The two adults performed a small dance with open wings. After that, the Swamphen chick was shaken violently a few times and beaten with the beak by the Sarus

Context: Sarus pairs have been predating on hatchlings of other birds, like Swamphens, as a ready source of nutrition.

Sarus cranes

- Common Name: Sarus crane
- Scientific Name: Grus antigone
- The Sarus crane is the tallest flying bird in the world standing 152-156 cm tall with a wingspan of 240cm.
- It has a predominantly grey plumage with a naked red head and upper neck and pale red legs.
- It weighs 6.8-7.8 Kgs.
- It is a social creature, found mostly in pairs or small groups of three or four.
- Known to mate for life with a single partner, its breeding season coincides with heavy rainfall in monsoon.
- Nests are constructed on water in natural wetlands or in flooded paddy fields.
- Usually a clutch has only one or two eggs, which are incubated by both parents for a period of 26 to 35 days.
- The juveniles follow their parents from the day of birth.

Habitat and distribution

- The Sarus crane has three disjunct populations in the Indian sub-continent, south-east Asia and northern Australia with an estimated global population of 25,000-37,000 individuals. In the Indian subcontinent, it is found in northern and central India, Terai Nepal and Pakistan.
- It was once a common site in the paddy fields of Uttar Pradesh, Bihar, Rajasthan, West Bengal, Gujarat, Madhya Pradesh and Assam.
- Their population is now on the decline with only 15,000-20,000 found in India, a majority of which are in Uttar Pradesh.
- The Sarus crane is known for its ability to live in association with humans, inhabiting open, cultivated, well watered plains, marshlands and jheels. These areas suit them well for foraging, roosting and nesting.

Protection status

- It is listed as vulnerable on the International Union for Conservation of Nature (IUCN) red list.
- The Sarus is listed under schedule IV of the Wildlife (Protection) Act, 1972.

DOWN TO EARTH

Sept 12

PLATE TECTONICS MOVEMENT

(Syllabus: GS Paper 1 - Geography)

SCIENCE & TECHNOLOGY

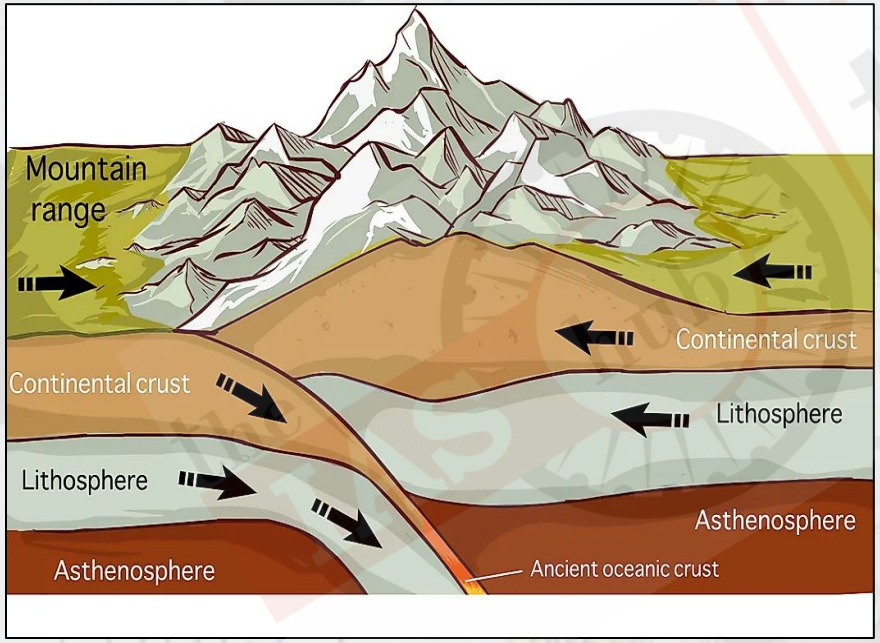
Slowdown of continental plates linked to volcanic eruptions triggered mass extinctions: Study

In the future, there is a possibility that continental plates may slow down, potentially triggering volcanic activities, according to researchers

NEXT NEWS >

By Rohini Krishnamurthy
Published: Saturday 10 September 2022





Context: Slow-moving continental plates may have triggered a series of volcanic eruptions and mass extinctions in the Toarcian Period - the warmest interval of the Jurassic Period - about 183 million years ago.

Plate tectonics movement

- Plate tectonics is a scientific theory that explains how major landforms are created as a result of Earth's subterranean movements.
- The theory, which solidified in the 1960s, transformed the earth sciences by explaining many phenomena, including mountain building events, volcanoes, and earthquakes.
- In plate tectonics, Earth's outermost layer, or lithosphere - made up of the crust and upper mantle - is broken into large rocky plates. These plates lie on top of a partially molten layer of rock called the asthenosphere.
- Due to the convection of the asthenosphere and lithosphere, the plates move relative to each other at different rates, from two to 15 centimeters (one to six inches) per year.
- This interaction of tectonic plates is responsible for many different geological formations such as the Himalayan mountain range in Asia, the East African Rift, and the San Andreas Fault in California, United States.
- Each tectonic plate is free-floating and can move independently.
- Earthquakes and volcanoes are the direct result of the movement of tectonic plates at fault lines.
- The mobile rock beneath the rigid plates is believed to be moving in a circular manner.
- The heated material rises to the surface, spreads and begins to cool, and then sinks back into deeper depths.
- This slow movement of hot, softened mantle that lies below these rigid plates is the driving force behind the plate movement.

DST

Sept 12

CENTRE-STATE SCIENCE CONCLAVE

(Syllabus: GS Paper 2 - Government Policies & Interventions)

PM inaugurates Centre-State Science Conclave in Ahmedabad via video conferencing

The Prime Minister, Shri Narendra Modi inaugurated the 'Centre-State Science Conclave' in Ahmedabad via video conferencing.

Context: The Prime Minister, Shri Narendra Modi inaugurated the 'Centre-State Science Conclave' in Ahmedabad via video conferencing.

Key points

- According to Prime Minister's Office (PMO), the first of its kind Conclave will strengthen Centre-State coordination and collaboration mechanisms - in the spirit of cooperative federalism - to build a robust science, technology and innovation (STI) ecosystem across the country.
- The two-day Conclave is being organised at Science City, Ahmedabad on September 10-11.
- It include sessions on different thematic areas including:
  - STI Vision 2047;
  - Future Growth Pathways and Vision for STI in States;
  - Health – Digital Health Care for All;
  - Doubling Private Sector investment in R&D by 2030;
  - Agriculture – Technological interventions for improving farmers' income;
  - Water – Innovation for producing potable drinking water;
  - Energy- Clean Energy for All including S&T role in Hydrogen mission;
  - Deep Ocean Mission and its relevance for Coastal States/UTs as well as country's future economy.
- The first-of-its-kind Conclave will witness the participation of Science and Technology Ministers and Secretaries of States and Union Territories, industry leaders, entrepreneurs, NGOs, young scientists and students.

PIB

Sept 12

ACHARYA VINOBA BHAVE

(Syllabus: GS Paper 1 - Personality in news)

PM remembers Acharya Vinoba Bhave on his Jayanti

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The Prime Minister, Shri Narendra Modi has paid tributes to Acharya Vinoba Bhave on his Jayanti.

Acharya Vinoba Bhave (Vinayak Narahari Bhave)

- **Date of Birth**: 11 September, 1895
- **Place of Birth**: Gagode village, Kolaba District, Maharashtra
- **Parents**: Narahari Shambhu Rao (Father) and Rukmini Devi (Mother)
- **Association**: Freedom Activist, Thinker, Social Reformer
- **Movement**: Indian Freedom Movement; Bhoodan Movement; Sarvodaya Movement
- **Political Ideology**: Right wing, Gandhian
- **Religious** Views: Egalitarianism; Hinduism
- **Publications**: Geeta Pravachane (religious); Teesri Shakti (political); Swarajya Shastra (political); Bhoodan Ganga (social); Moved by Love (autobiographical).
- **Death**: 15 November, 1982
- Founder of the Bhoodan Yajna ("Land-Gift Movement").
- In 1940, he was chosen as the first Individual Satyagrahi (an Individual standing up for Truth instead of a collective action) against British Raj by Gandhi in India.
- Bhave was imprisoned several times during the 1920s and '30s and served a five-year prison sentence in the '40s for leading nonviolent resistance to British rule. He was given the honorific title acharya ("teacher").
- In 1923, he brought out 'Maharashtra Dharma', a monthly in Marathi, which had his essays on the Upanishads.
- Established the Brahma Vidya Mandir in 1959, a small community for women, aiming at self-sufficiency on the lines of Mahatma Gandhi's teachings.
- Vinoba Bhave was the first international figure to receive the Ramon Magsaysay Award in 1958. He was awarded Bharat Ratna posthumously in 1983.

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