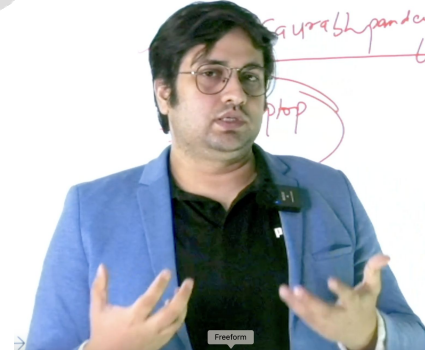


Topics - MINDS MAPS included (Daily current affairs)-- 4th October 2024



- Garba Dance
- Samagra Shiksha
- THE MUSI RIVER
- Marathi as classical language
- Agriculture scheme merger
- Sickle cell disease
- Stem cell therapy and T1D
- India and Italy relation
- Swachh Bharat Mission (SBM)
- Chagos Archipelago
- **Mains**



By saurabh Pandey



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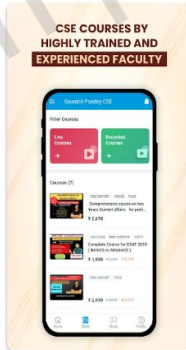
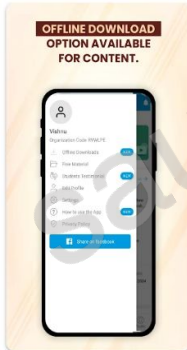
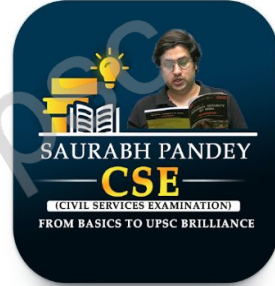
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Reign of colours



Festive spirit: A dancer performs *garba* on the first day of Navratri at the Sports Club in Ahmedabad, Gujarat, on Thursday. The nine-day festival began on Thursday and will go on till October 12. VIJAY SONEJI

Topic → Garba Dance

Overview of Garba Dance

Origin: Traditional folk dance from Gujarat, India.

Significance: Celebrated during Navratri festival

Style: Energetic, circular dance patterns.

Cultural Context

Navratri Festival:

Nine nights of worship and dance.

Celebration of Goddess Durga.



Centre's share of funds for Samagra Shiksha Abhiyan delayed; over 20,000 unpaid

Meghna M.
CHENNAI

While Union and Tamil Nadu governments continue to tussle over the implementation of the National Education Policy (NEP), 2020, funds for the Samagra Shiksha Abhiyan (SSA) are being held back from the State. More than 20,000 personnel under the scheme in the State are yet to receive their salaries.

According to the project approval board, the Union government contributes ₹2,152 crore in four instalments for the scheme, and the State, ₹1,434 crore – in a 60:40 ratio. However, the Tamil Nadu government is yet to receive the first instalment of ₹573 crore from the Centre, which should have



Left in the lurch: Over 12,000 part-time teachers are employed under the scheme in government schools. FILE PHOTO

been disbursed by June this year.

Sources said the payment of salaries depended on the disbursal of funds from the Centre. The permanent staff included Block Resource Teacher Educators (BRTEs). The other workers comprised data entry staff, special educators, physiotherapists, and part-time teachers. "It is upsetting that the salaries are yet to be disbursed. It is difficult to make ends meet. We


have raised the issue multiple times," a BRTE said.

More than 12,000 part-time teachers are employed under the SSA in government schools, at a stipend of ₹12,500 for vocational subjects. "The State government should take steps to disburse our salaries," a member of the Tamil Nadu All Part-time Teachers Federation said.


Officials in the School Education Department declined to comment.





Topic-- > Samagra Shiksha

 Comprehensive Education Program: Samagra Shiksha covers the entire school education spectrum from pre-school to class 12, aiming for equitable learning outcomes.




It subsumes the three Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE) and was launched in 2018.

 Alignment with National Policies: The program supports the implementation of NEP 2020 and the RTE Act, focusing on early childhood education and foundational literacy.

 **Increased Funding:** Enhanced budget allocations are tied to learning outcomes, with specific grants for libraries and infrastructure improvements in schools.

 **Digital Education Initiatives:** The scheme promotes ICT labs, smart classrooms, and digital portals like DIKSHA to enhance teaching and learning experiences.



-  Teacher Capacity Building: Emphasis on improving teacher quality through enhanced training and support for Teacher Education Institutions.
-  Focus on Gender and Inclusion: Initiatives to empower girls, support children with special needs, and ensure equitable access to education for all.
-  Sports and Skill Development: Integration of sports into the curriculum and vocational skills training from an earlier stage to promote holistic development.

Summary: Samagra Shiksha is a comprehensive educational initiative aimed at improving school effectiveness and inclusivity from pre-school to class 12, with a strong focus on quality, digital education, and gender empowerment.

Efforts to clear Musi river bed, buffer zones will continue, says Revanth

M. Rajeev
HYDERABAD

Telangana Chief Minister A. Revanth Reddy has asserted that the government will continue its efforts to remove encroachments from the Musi river bed as well as buffer zones and water bodies where there are rampant encroachments.

Mr. Reddy said he knew the depth of the problem and that there could be some loss politically, but “a solution has to be there in the interests of generations to come”. He launched a trenchant attack on BRS leaders K.T. Rama Rao and T. Harish Rao for “trying to obstruct the Musi River-front Development”, and said the government would not back out from its efforts.

He charged the BRS government with looting the State during their 10-year rule without caring for people’s problems and invited them for a debate on the magnitude of encroachments in the full tank level and buffer zones of different water bodies.

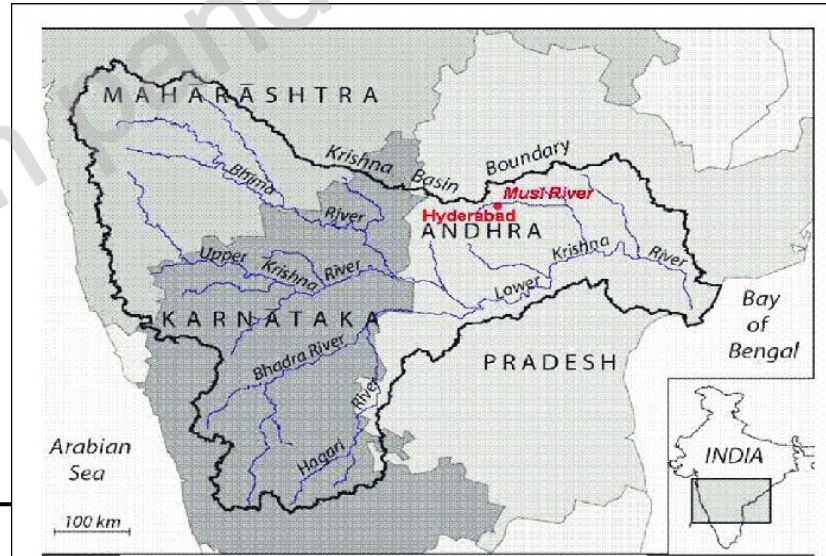
The CM expressed concern over how the polluted waters of Musi river were affecting the river water channels in Nalgonda district where people suffer because of fluoride issue. “Shall we allow people to die?” he asked.

The government adopted a compassionate approach by showing alternatives to the families being relocated from Musi riverbed and buffer zones like providing houses and

Topic→ THE MUSI RIVER



- The Musi River is a major tributary of the Krishna River in the Deccan Plateau, flowing through Telangana, India. The river's historical name is Muchukunda.
- Hyderabad stands on the banks of the Musi River, which divides the historic Old City from the new city
-



Marathi, four more languages get classical tag

The Hindu Bureau
NEW DELHI

The Union Cabinet on Thursday approved classical language status to Marathi, Bengali, Assamese, Pali, and Prakrit.

The demand for classical status for Marathi has been pending since 2013 and the approval comes just ahead of the Assembly election in Maharashtra. The approval for Bengali comes amid Durga Puja, the biggest festival in West Bengal.

India has had six classical languages till now – Tamil, Telugu, Malayalam, Kannada, Sanskrit, and Odia. Tamil was the first language to be given classical status in 2004, followed by Sanskrit in 2005.

Prime Minister Narendra Modi took to X to congratulate all speakers of the newly designated classical languages.

“Marathi is India’s pride. Congratulations on this phenomenal language being accorded the status of a Classical Language. This honour acknowledges the rich cultural contribution of Marathi in our nation’s history,” he said.

“Bengali literature has inspired countless people for years. I congratulate all the Bengali speakers all over the world on this,” the

Topic -- Marathi as classical language



The Union Cabinet approved classical language status for Marathi, Bengali, Assamese, Pali, and Prakrit.



The demand for classical status for Marathi has been pending since 2013, with approval coming just before the Maharashtra Assembly elections.



The approval for Bengali coincides with Durga Puja, the largest festival in West Bengal.



India previously recognized six classical languages: Tamil, Telugu, Malayalam, Kannada, Sanskrit, and Odia.



Tamil was the first language to receive classical status in 2004, followed by Sanskrit in 2005.

Summary: The Union Cabinet has granted classical language status to five languages, including Marathi and Bengali, with significant cultural implications and political timing

Criteria For Classical Language Status



For a language to be recognised as 'classical', it must meet the following criteria:

- The language must have a recorded history of 1500 to 2000 years.
 - The language must possess ancient texts considered valuable by generations of speakers.
 - Texts of knowledge, particularly prose works along with poetry, as well as evidence from epigraphy and inscriptions.
 - The classical language and its literature may differ from their modern forms or may not have a continuous connection with the later versions or derivatives.
-

Full List of Classical Languages in India



- **Tamil: 2004**
 - **Sanskrit: 2005**
 - **Telugu: 2008**
 - **Kannada: 2008**
 - **Malayalam: 2013**
 - **Odia: 2014**
 - **Marathi: 2024**
 - **Pali: 2024**
 - **Prakrit: 2024**
 - **Assamese: 2024**
 - **Bengali: 2024**
-

All agri sector initiatives brought under 2 new schemes; States to implement them

The Hindu Bureau

NEW DELHI

The Union Cabinet on Thursday decided to merge all Central schemes in the agriculture sector into two new schemes, Pradhan Mantri Rashtriya Krishi Vikas Yojana (PM-RKVY) and Krishonnati Yojana (KY). With a projected expenditure of ₹1,01,321.61 crore, the schemes will have a Central share of ₹69,088.98 crore and the States will have to add the remaining ₹32,232.63 crore.

The PM-RKVY, with an allocation of ₹57,074.72 crore, is aimed at promoting sustainable agriculture and the KY will address food security and agricultural self-sufficiency, with a fund of ₹44,246.89 crore. Both schemes will be implemented through the State governments.

The Centre said the rationalisation of various schemes was to avoid duplication, ensure convergence, and provide flexibility to States.

Focusing on emergent challenges of agriculture such as nutrition security, sustainability, climate resilience, value chain development, and private sector participation is also envisaged under the two schemes.

“State governments will be able to draw a comprehensive strategic plan suiting their requirements for agriculture sector. Annual Action Plan (AAP) of States can be approved in one go rather than approving them individually,” the Centre said.

Schemes such as Soil Health Management, Rainfed Area Development, Agro Forestry, Paramparagat Krishi Vikas

Yojana will be merged in the two new schemes.

Mission for edible oils

The Cabinet also approved the National Mission on Edible Oils - Oilseeds (NMEO-Oilseeds), for boosting domestic oilseed production and achieving self-reliance in edible oils.

“The Mission will be implemented over a seven-year period, from 2024-25 to 2030-31, with a financial outlay of ₹10,103 crore. The newly approved NMEO-Oilseeds will focus on enhancing the production of key primary oilseed crops such as rapeseed-mustard, groundnut, soybean, sunflower, and sesame, as well as increasing efficiency from secondary sources like cottonseed, rice bran, and tree borne oils,” the Centre said. The mission aims to increase

primary oilseed production from 39 million tonnes (2022-23) to 69.7 million tonnes by 2030-31.


India to join energy hub


The Cabinet also approved the signing of a letter of intent enabling India to join the Energy Efficiency Hub. “This move solidifies India’s commitment to sustainable development and aligns with its efforts to reduce greenhouse gas emissions,” the Centre said.


The Union Cabinet also approved payment of productivity-linked bonus of 78 days for ₹2,028.57 crore to 11,72,240 non-gazetted railway employees. The amount will be paid to various categories of railway staff like track maintainers, loco pilots, train managers, station masters, supervisors, technicians, ministerial staff and other Group C staff.


Topic-- Agriculture scheme merger




 **Merger of Schemes:** The Union Cabinet has merged all Central agriculture schemes into two new schemes: Pradhan Mantri Rashtriya Krishi Vikas Yojana (PMRKVY) and Krishonnati Yojana (KY).

 **Financial Allocation:** The total projected expenditure for these schemes is ₹1,01,321.61 crore, with a Central share of ₹69,088.98 crore and a State contribution of ₹32,232.63 crore.

 **Focus Areas:** PMRKVY will promote sustainable agriculture with ₹57,074.72 crore, while KY will address food security and self-sufficiency with ₹44,246.89 crore.

 **Implementation Strategy:** Both schemes will be implemented through State governments, allowing for comprehensive strategic planning and streamlined approval processes.

 **National Mission on Edible Oils:** The Cabinet approved the National Mission on Edible Oils - Oilseeds (NMEO-Oilseeds) with a budget of ₹10,103 crore to boost domestic oilseed production from 39 million tonnes to 69.7 million tonnes by 2030-31.

The scheme Mission Organic Value Chain Development for North Eastern Region (MOVCDNER), a component under the KY, is being modified by adding an additional component namely MOVCDNER- Detailed Project Report (MOVCDNER-DPR), which will provide flexibility to the North Eastern states to address critical challenges.

The PM-RKVY comprises of the following schemes:

- i. Soil Health Management
 - ii. Rainfed Area Development
 - iii. Agro Forestry
 - iv. Paramparagat Krishi Vikas Yojana
 - v. Agricultural Mechanization including Crop Residue Management
 - vi. Per Drop More Crop
 - vii. Crop Diversification Programme
 - viii. RKVY DPR component
 - ix. Accelerator Fund for Agri Startups
-

The war on sickle cell disease: how one hospital is making a difference

Sickle cell disease shortens life by at least twenty years. Slow-progressing organ failure is common in older patients and acute chest syndrome, a form of lung injury, is a significant cause of death among the young. The symptoms vary among patients, leading to a wide range of complications

Dawn Kuravilla

I know sickle cell disease (SCD) less from the medical textbooks and more from the suffering of patients I've treated. Over time, this disease has ceased to be just a diagnosis on a chart. It has become something I deeply despise from the core of my being. It has drawn many of my young, tender-looking patients into painful crises, causing me to cry out in desperation, hoping to see it eradicated – though I know that's just a daydream. Because it's a genetic illness with no definitive cure to date.

But desperation and hopelessness cannot be the final word. In Agatha Christie's words, "I like living. I have sometimes been wildly, despairingly, acutely miserable, racked with sorrow, but through it all, I still know quite certainly that just to be alive is a grand thing." For the sake of patients, the fight continues, no matter the adversity. We cannot lose.

The brutality of the disease

I have witnessed first hand the plight of young people afflicted by sickle cell disease at three mission hospitals. Patients come with intense pain, high fever, chest infections, or severe anaemia, needing blood transfusions. Whether in southern Odisha, north Maharashtra, or western Uttar Pradesh, the patients are almost always poor, young, rural, and from the same family.

Sickle cell disease shortens life by at least twenty years. Slow-progressing organ failure is common in older patients, and acute chest syndrome, a form of lung injury, is a significant cause of death among the young. The disease's symptoms vary widely among patients, leading to a wide range of complications from anaemia due to the destruction of blood cells to blockage of blood vessels in limbs, causing both severe pain and death due to organ failure.

Practising medicine is generally hard, but over time, you learn to trust in your skills, hoping that drugs and interventions will relieve suffering. However, sickle cell disease has the reputation of defeating even the most courageous healthcare professionals.

Doctors on the frontlines

I attribute much of my knowledge about managing this disease to Dr. Ashita Singh, with whom I worked at Chinchpada Christian Hospital in Maharashtra. She has seen this dreaded disease up close and has not shrunk back in horror, but has loved her patients, looking for ways to relieve the suffering of patients and improve their quality of life. She has dealt with several practical challenges in the management of the disease.

Since sickle cell disease is a genetic condition, its treatment is lifelong. Only gene therapy or bone marrow transplant can cure it, but these treatments are out of reach for many in India because of the costs. But Dr. Ashita, who works in a resource-poor setting, has moved mountains to introduce measures that can help control the disease's symptoms, making it bearable for the poor patients who receive treatment from her. Her hard work has upheld the health and dignity of many of her patients through various hospital initiatives that deal with the



Sickle cell patients at Health Centre Bagicha, Jashpur in Chhattisgarh. RLE PHOTO

reality of living with sickle cell disease.

Chinchpada Hospital's initiatives

One of Chinchpada Hospital's most significant initiatives is that the hospital secured State Blood Transfusion Council (SFTC) cards for around 250 of the 350 sickle cell disease patients. These took two years to procure.

The cards guarantee that patients will receive free blood transfusions across Maharashtra, a vital service that can be lifesaving for those suffering from severe anaemia.

Recognising that sickle cell disease patients are highly prone to infections like bacterial pneumonia, influenza, and meningitis, the hospital has also provided these patients free preventive vaccinations for all these diseases. This challenging but crucial task will prevent patients from developing life-threatening infections.

The hospital has subsidised the cost of hydroxyurea, a drug that reduces the defective haemoglobin entry (Hb-S) and increases normal haemoglobin by using hospital funds and donations.

Hydroxyurea is a drug that reduces the number of times a patient has worsening symptoms, decreasing their quality of life. It also minimises the need for blood transfusions. Subsidising this drug has significantly improved patient compliance, as patients can afford to take it for as long as their disease requires, increasing their quality of life. The government, too, should recognise hydroxyurea's benefits and make it cost-free.

The hospital works to enrol SCD patients in government disability schemes, ensuring they receive regular pensions and other essential benefits. With the help of donors and well-wishers, the hospital treats life-threatening infections and anaemia

Since sickle cell disease is a genetic condition, its treatment is lifelong. Only gene therapy or bone marrow transplant can cure it, but these treatments are out of reach for many in India because of the costs

episodes at low costs or even writes off bills. They also provide free food to patients and their families, thus meeting their nutritional needs during treatment, especially during extended hospital stays.

The hospital's experience in palliative care has been instrumental in providing effective pain relief and symptom management for SCD patients.

The hospital organises events like World Sickle Cell Day and sends personalised birthday cards to patients. These efforts help patients feel valued and supported, reinforcing the hospital's commitment to their well-being.

On a community basis, the hospital conducts awareness programs in villages and schools to educate the community about SCD, its symptoms, and the importance of early diagnosis and treatment. Teachers, some of whom are patients of the disease, play a vital role in identifying children with symptoms and ensuring they receive appropriate care.

The hospital opposes policies promoting the diagnosis of sickle cell disease in a fetal during pregnancy, which might lead to abortions.

A battle that is far from over

Despite these remarkable efforts, the battle against sickle cell disease is far from over. The disease remains a significant challenge, mainly where medical students and young doctors need adequate training to recognise and treat it. The lack of awareness and testing facilities further

exacerbates the problem, leading to many undiagnosed and untreated cases.

My experiences in Uttar Pradesh highlight the widespread ignorance about SCD. Many patients had been receiving iron supplements for years before being correctly diagnosed with SCD. We must work hard to educate, manage, and give hope to these lives because it's our collective pain.

This message Dr. Ashita sent me after losing a young lady to a recent SCD crisis reminds us why we can't lose.

"Twenty-year-old I had been off hydroxyurea treatment for the last few years and came to the hospital with acute chest syndrome following a severe vaso-occlusive crisis. Despite our best efforts, she passed away, joining her sister, who had died from a sickle cell crisis a few years earlier. This loss, like so many others, compels us to continue our fight against this terrible disease."

In conclusion, our experience from Chinchpada Hospital shows that our approach to tackling SCD must be comprehensive, addressing not just the medical aspects but also the socio-economic factors perpetuating suffering. We must continue to fight for the lives of those suffering from SCD because every life is worth saving, and we can't afford to lose this battle.

With inputs from **Christiane Rama Kiruba**

Dr. Dawn Kuravilla is a physician working in a secondary mission hospital at Chhann Jivoti Christian Hospital, Sonbhadra. He is passionate about bedside clinical medicine and bringing hope and relief to patients in despair (no senseless suffering).

Dr. Christiane Rama Kiruba is an internal medicine doctor with a passion for patient rights advocacy. christianecdemission@gmail.com



Topic-- > Sickle cell disease

- sickle cell disease – also called sickle cell anemia – is a group of inherited disorders that affect hemoglobin , the major protein that carries oxygen in red blood cells.
 - Normally, red blood cells are disc-shaped and flexible so they can move easily through the blood vessels.
 - In sickle cell disease, red blood cells are misshaped, typically crescent- or “sickle”-shaped due to a gene mutation that affects the hemoglobin molecule.
 - When red blood cells sickle, they do not bend or move easily and can block blood flow to the rest of the body.
-

Sickle cell disease

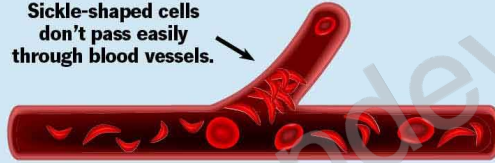


Normal red blood cells are round and flexible.



In sickle cell disease, red blood cells stiffen, changing shape into sickles (crescent-shaped).

Sickle-shaped cells don't pass easily through blood vessels.



Sickle cell disease symptoms include:

Frequent pain episodes.



Pain affects your child's chest, back, legs and arms most often.

Swelling and inflammation of their joints.

Painful swelling of their hands and feet.



Anemia, causing fatigue, paleness and weakness.



Jaundice (yellowing of skin and whites of eyes).

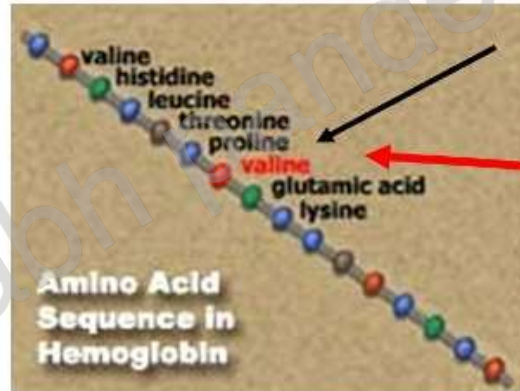


Hemoglobin & Sickle Cell Disease



Hemoglobin: a protein in red blood cells that transports oxygen via 4 binding sites. There are 2 α chains & 2 β chains.

Hemoglobin S: a variant of the protein that causes sickle cell disease.



A mutation changed the amino acid glutamine in the 6th position of the β chain to valine. When oxygen levels are low, the altered hemoglobin molecules bond together and distort the shape of the red blood cells creating abnormal sickle-shaped cells.

Although stem cell therapy does show positive outcomes in a controlled setting, there exist several challenges in achieving desired results in real-world practice. GETTY IMAGES

Stem cells to fix T1 diabetes? The Indian perspective

Nanditha Arun

Stem cell therapy is a cutting-edge development in regenerative medicine that holds the promise of a functional cure for Type 1 diabetes (T1D) by enabling the body to regenerate insulin-producing beta cells.

A report of a woman with type 1 diabetes (T1D) in China who regained her insulin production made headlines recently. She received a transplantation of reprogrammed stem cells that reportedly "reversed" the disease. It marks a significant milestone in diabetes management. This is the first ever successful breakthrough in regenerating functional insulin-producing cells through stem cell therapy. There are other such trials that are still underway.

T1D is an autoimmune condition where the immune system attacks and destroys the insulin-producing beta cells of the pancreas, resulting in diabetes. That means you are insulin-dependent to manage the ailment for life. For decades, managing T1D has relied on insulin therapy alone. In type 2 diabetes, the insulin that is produced by the body is either insufficient or ineffective, which is managed mostly by taking oral drugs.

Stem cell therapy in T1DM

The concept of stem cell therapy lies in regenerative medicine. Pluripotent stem cells that have the ability to transform into any cell type are pre-programmed into insulin-producing cells and transplanted into the human body. These pre-programmed cells will then start producing insulin and help regulate glucose. This is a potential game-changer

T1D is a condition where the immune system attacks insulin-producing beta cells of the pancreas, resulting in diabetes

in the treatment of T1D. Scientists have been making great strides in creating the cells that would mimic the pancreatic islets in functionality from different pluripotent stem cell sources.

The challenges

Although stem cell therapy does show positive outcomes in a controlled setting, there exist several challenges in achieving desired results in real-world practice. Firstly, the fact that it is an invasive procedure, and any invasive procedure carries risks. Also, newly transplanted cells are prone to rejection by the body and will require long-term immune suppression that could cause infections and cancer. Even the encapsulation technology that protects the transplanted cells from immune rejection carries a risk in the long term.

The Indian perspective

In India, there are more than 8.6 lakh people living with T1D. The costs of healthcare for a person with T1D are far higher than for a person with the more common type 2 diabetes. The day-to-day life of a person with T1D can be challenging, considering total dependence on externally administered, multiple daily insulin injections. As it occurs very early in life, there is also a likelihood of early complications. In our country, where the demand and costs are high, treatments involving stem cells are far from reality.

If successful, stem cell therapy could essentially cure the disease. However, considering the cost and scalability, more time may be required to establish stem cell therapy as a routine treatment for T1D.

Dr. Nanditha Arun is consultant diabetologist at Dr. A. Ramachandran's

Samir Pandey upsc

Topic → Stem cell therapy and T1D

 **Stem Cell Therapy:** A cutting-edge development in regenerative medicine aimed at curing Type 1 diabetes (T1D) by regenerating insulin-producing beta cells.

 **Successful Case:** A woman in China regained insulin production after receiving a transplantation of reprogrammed stem cells, marking a significant milestone in diabetes management.

 **First Breakthrough:** This case represents the first successful instance of regenerating functional insulin-producing cells through stem cell therapy.

 **Ongoing Trials:** Other trials related to stem cell therapy for T1D are currently underway, indicating ongoing research in this area.

⚠ Understanding T1D: Type 1 diabetes is an autoimmune condition where the immune system destroys insulin-producing beta cells, necessitating lifelong insulin dependence.

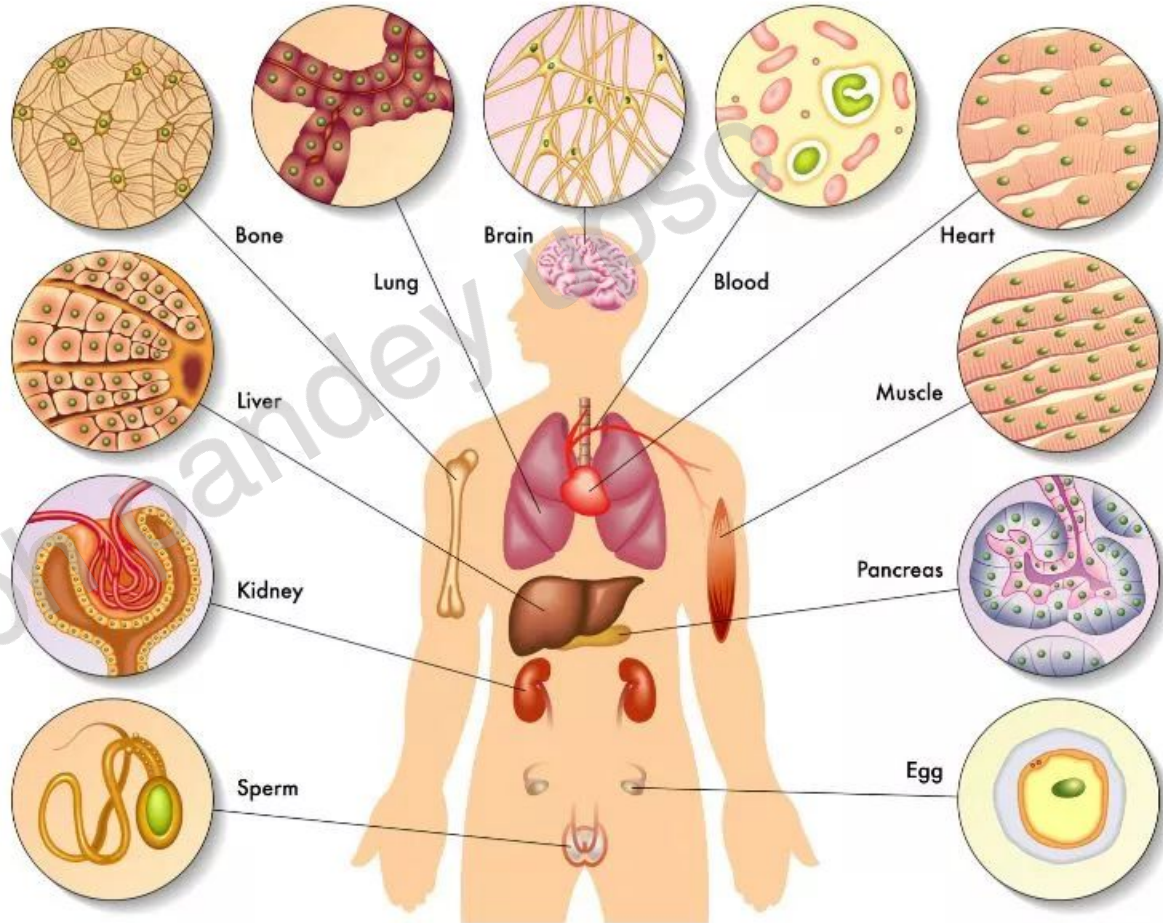
💊 Current Management: Traditionally, T1D has been managed solely through insulin therapy, contrasting with type 2 diabetes, which may involve oral medications.

📈 Future Implications: The advancements in stem cell therapy could revolutionize the treatment landscape for diabetes, potentially reducing reliance on insulin therapy.

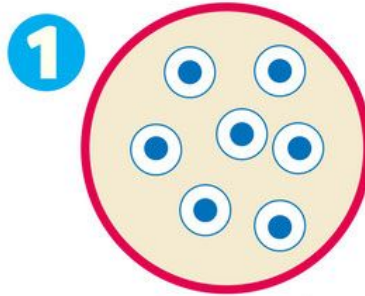
Summary: Stem cell therapy shows promise as a revolutionary treatment for Type 1 diabetes, with a recent successful case in China marking a significant breakthrough.

What Are Stem Cells?

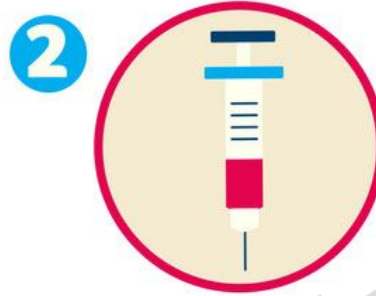
Stem cells are undifferentiated cells with the capacity to both differentiate and multiply into the 200 cells types that form a human being.



Six stages of stem cell therapy



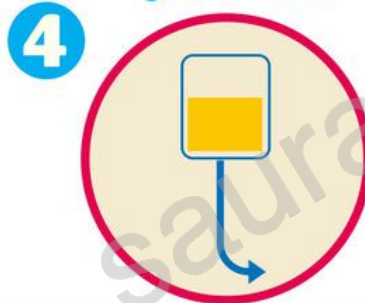
Stem cells moved from bone marrow to blood stream using chemotherapy and synthetic growth factor



Machine collects blood and separates out stem cells



Stem cells frozen ready to return to body later



More chemotherapy used to fully or partially wipe out bone marrow and immune system



Stem cells returned to body using a drip



Body recovers over a period of 3-6 months, sometimes longer

Why Italy matters to India



In this age of 'polycrisis', Italy and India share common interests but also joint challenges in the Indo-Mediterranean Sea. This region is vital for global trade, especially for Italy which ranks sixth among the world's largest exporters. It is also crucial for digital connectivity: the Blue-Raman submarine data cables will soon connect Genoa with Mumbai. Piracy in the Red Sea, the conflict in Gaza and Lebanon, and the effects of Russia's aggression against Ukraine on agricultural and oil trade require our joint efforts to ensure a free, open, and prosperous Indo-Mediterranean.

Therefore, Italy has stepped up its commitment in security and defence in the Indian Ocean Region and West Asia. Apart from joining the Group of Friends of UNCLOS in 2021, it has been the second largest contributor to the European Union Naval Force (EU NAVFOR) Atalanta and the European Maritime Awareness in the Strait of Hormuz (EMASoH). Since February 2024, Italy has been a driving force in the EU military operation, EUNAVFOR ASPIDES, to safeguard freedom of navigation in the Red Sea, the Indian Ocean, and the Gulf.

Naval presence

We have also increased our naval presence in India. After joining the Information Fusion Centre of the Indian Ocean Region in March 2023, patrol ship *ITS Francesco Morosini* visited Mumbai in August 2023. The Italian Carrier Strike Group (aircraft carrier *ITS Cavour* and frigate *ITS Alpino*) is currently in Goa. We are expecting the amazing tall ship *ITS Amerigo Vespucci* in Mumbai from November 28 to December 2. It is the training vessel of the Italian Navy. We are also planning to build an 'Italy village' that will offer cultural, fashion, and culinary events, as well as conferences and exhibitions.

ITS Cavour is a short take off and vertical landing ship constructed by the Italian naval shipyard Fincantieri and has been in the service

Antonio Bartoli

Ambassador of Italy to India

Piracy in the Red Sea, the conflict in the Middle East, and the effects of Russia's aggression against Ukraine on agricultural and oil trade require our joint efforts to ensure a free, open, and prosperous Indo-Mediterranean

of the Italian Navy since 2009. As a 'dual use' vessel, it can project maritime power, but also provide logistical autonomy and serve environmental and humanitarian interventions. We are delighted that PASSEX exercises (training exercises to develop and maintain mariner skills and strengthen interoperability) are being held during the stay. *ITS Cavour* is also hosting a workshop on defence industry cooperation. At the same time, it serves as a hospital to operate children with facial malformations: a team of Indian and Italian doctors is performing surgeries under the framework of 'Operation Smile', organised by the Smile House Foundation, Italy.

Defence ties

Bilaterally, the Italy-India defence cooperation relies on a defence agreement signed in October 2023. This document lays the basis for a further expansion of our defence ties in many fields, from research to industrial cooperation, maritime domain awareness, sharing of information, and education and environmental issues related to military activities. At the same time, our defence cooperation strongly relies on regular talks such as the Italy-India Military Cooperation Group meeting, held in March in New Delhi.

When it comes to defence production, Italy matters to India: two of our companies, Leonardo and Fincantieri, are ranked among the first 50 of SIPRI's top arms-producing and military services companies in the world (2022), while other companies, such as Beretta, Elettronica and KNDS, albeit smaller in size, possess outstanding technical know-how. Over the last few years, Italian defence companies have shown to be open to joint ventures, co-production, and joint development. Fincantieri is cooperating with Cochin Shipyard since 2020, while Elettronica signed a Memorandum of Understanding with Bharat Electronics Limited in 2019. This partnership approach is in line with India's 'Make in India' ambitions and can respond to growing

requirements by the Indian armed forces.

Italy also looks at India as a valuable partner for development of the Indian Ocean Region, from East Africa to India's shores via the Arabian Sea. Both Italy and Indian are keen promoters of Africa in international fora and jointly supported the inclusion of the African Union in the G20. During the Italy-Africa Summit in January, Italy launched a new initiative with Africa, the Mattei Plan, aimed at creating a mutually beneficial partnership to realise several important projects across the continent. This initiative mobilises Italian capabilities with €5.5 billion in public investments and the involvement of all public entities and the private sector. Among the first countries chosen for this plan, Egypt, Ethiopia, Kenya, and Mozambique are adjacent to the Indo-Mediterranean area. The ambition is to engage with other partners to realise sustainable projects which will help drive economic and social development in Africa.


At the same time, Italy has supported the India-Middle East-Europe Economic Corridor (IMEC). Amid the conflict in Gaza and the escalating tensions in West Asia, we believe that IMEC can be part of a long-term vision to ensure shared prosperity in the region. Railway connections, ports, logistics and custom systems can support peace endeavours along a trade route that is as essential for Italy as it is for India.


People-to-people ties

Italy matters to India as a friend. We host the second largest Indian diaspora in the EU. Italy is a reliable economic and defence partner, the second largest manufacturing country in Europe, and a robust security provider taking up responsibilities as a member of the EU and NATO. What persists over time are people-to-people ties. These bonds dig deep into an ancient history of contacts between our two civilizations and find new inspiration with every story of cultural exchange, integration, and business success.


Topic → **India and Italy relation**

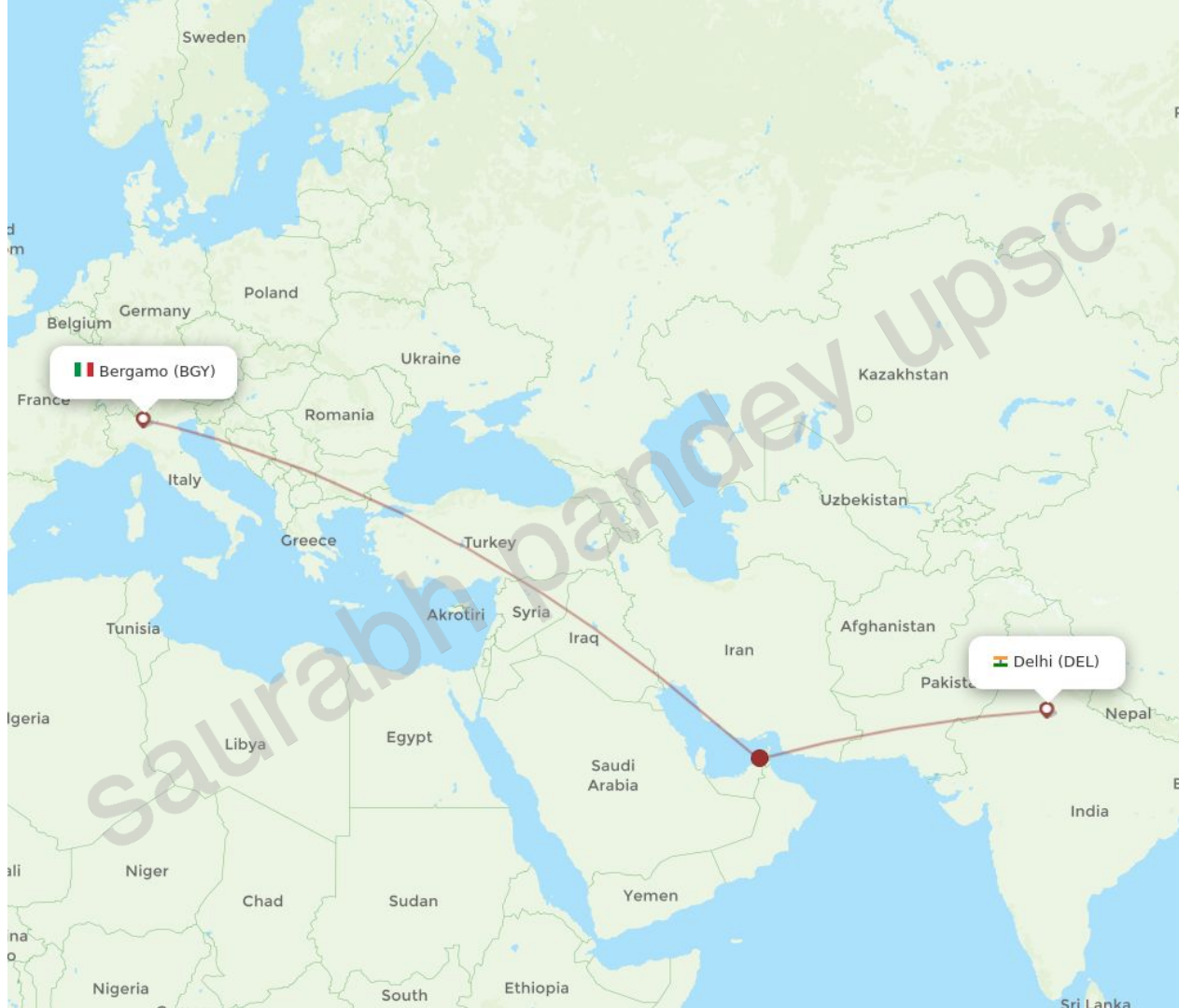



 Indo-Mediterranean Importance: Italy and India face shared challenges and opportunities in the Indo-Mediterranean Sea, crucial for global trade and digital connectivity.


 Italy's Export Ranking: Italy is the sixth largest exporter globally, highlighting its significant role in international trade.


 Digital Connectivity Initiatives: The Blue-Raman submarine data cables will connect Genoa and Mumbai, enhancing digital infrastructure.

 Increased Naval Commitment: Italy has bolstered its security and defense efforts in the Indian Ocean and West Asia, contributing to various naval operations and initiatives.





 Naval Presence in India: Italy has increased its naval presence, with ships like ITS Francesco Morosini visiting Mumbai and the Italian Carrier Strike Group stationed in Goa.


 Cultural Exchange Plans: An 'Italy village' is planned in India to promote cultural, fashion, and culinary events, alongside conferences and exhibitions.

 Humanitarian Efforts: The Italian Navy's ITS Cavour is involved in humanitarian missions, including surgeries for children with facial malformations through 'Operation Smile'.


Summary: Italy and India are enhancing their collaboration in the Indo-Mediterranean region through increased naval presence, digital connectivity, and cultural exchange, while addressing shared security challenges.


 **Defence Agreement:** Italy and India signed a defence agreement in October 2021 to enhance cooperation in various fields.


 **Military Cooperation Group:** Regular discussions, such as the Italy-India Military Cooperation Group meeting in March, strengthen bilateral defence ties.

 **Defence Production:** Italian companies like Leonardo and Fincantieri rank among the top arms producers globally, contributing to India's defence production.

 **Indian Ocean Partnership:** Italy views India as a key partner for development in the Indian Ocean Region, promoting Africa in international forums.

 **Mattei Plan:** Italy's Mattei Plan aims to invest €5.5 billion in Africa, focusing on sustainable projects in countries like Egypt, Ethiopia, Kenya, and Mozambique.

—  IMEC Support: Italy supports the India-Middle East-Europe Economic Corridor (IMEC) as a means to foster long-term prosperity amid regional conflicts.

 Sustainable Development: The partnership aligns with India's 'Make in India' initiative and aims to address the growing needs of the Indian armed forces.


Summary: Italy and India are enhancing their defence cooperation through a new agreement, focusing on joint production and sustainable development initiatives in Africa and the Indian Ocean Region.


 Italy is home to the second largest Indian diaspora in the EU.

 Italy is considered a reliable economic and defense partner for India.

 Italy ranks as the second largest manufacturing country in Europe.

 Italy plays a significant role in security as a member of the EU and NATO.

 The relationship between India and Italy is rooted in a long history of cultural exchange.

 People-to-people ties continue to inspire integration and business success.

 The bonds between the two nations are strengthened through shared stories and experiences.

What is the status of the Swachh Bharat Mission 2.0?

What are the various health and environmental risks arising from legacy waste dumpsites?

Sreeparna Chakrabarty

The story so far:

India has more than 3,000 legacy waste dumpsites, with 2,424 of them having a waste load of more than 1,000 tonnes. The Central government launched the legacy waste management project as part of the Swachh Bharat Mission (SBM) 2.0 in October 2021, for a period of five years till 2026. However, more than halfway through the time period, only 471 out of the 2,424, that is 19.43% of dumpsites have been completely remediated.

What are legacy waste dumpsites?

Legacy waste dumpsites are dumpsites that contain solid waste that have been collected and stored for years in an unscientific and uncontrolled manner. Municipal solid waste generation in India is estimated to be around 1,50,000 tonnes per day, according to the State of India's Environment 2023 report. With almost no installed facility in India for handling solid

waste, the municipal corporations, municipal councils and *nagar* (city) panchayats have traditionally opted for creating man-made garbage hills.

These dumpsites originally developed on the outskirts of the cities. However, with the expansion of cities, these sites are now often found in the heart of cities on barren land or in landfills. According to estimates of the Union Housing and Urban Affairs Ministry, approximately 15,000 acres of prime real estate is buried under nearly 16 crore tonnes of legacy waste across the country.

What are the health hazards?

Legacy waste dumpsites can pose a number of health hazards for citizens. Exposure to emissions from hazardous waste can irritate the mouth and throat. Inhaling methane from landfills can cause nausea, vomiting, and loss of coordination. Ragpickers who work at landfills can develop skin allergies from years of exposure to waste. People who live near landfills may be prone to

developing tuberculosis, asthma, diabetes, depression, cholera, malaria, and other diseases. They are also a source of greenhouse gas emissions, such as methane and carbon dioxide.

What is the Swachh Bharat Mission?

The Swachh Bharat Mission (SBM) or Clean India Mission is a country-wide campaign launched by the Central government on October 2, 2014 to eliminate open defecation and to create Open Defecation Free (ODF) villages. The mission aimed to achieve an “open-defecation free” India by October 2, 2019 coinciding with the 150th birth anniversary of Mahatma Gandhi through the construction of toilets.

In 2021, the Government launched its second edition – the five-year Swachh Bharat (Clean India) Mission-Urban 2.0 (SBM-U 2.0), committing to making all cities “garbage-free cities” by 2026, while maintaining ODF status across 4,372 Urban Local Bodies (ULBs). It also has a vision of 100% source segregation, door

to door collection and scientific management of all fractions of waste, including safe disposal in scientific landfills. The SBM 2.0 aims to remediate all legacy dumpsites and convert them into green zones. The mission has also made provisions for scientific landfills to dispose of untreated inert waste and process rejects, in order to prevent fresh dumpsites being created.

Action plans amounting to ₹3,226 crore of Central Share (CS) assistance on remediation of legacy waste dumpsites has been approved so far. An advisory has also been issued to the States/Union Territory administrations on landfill reclamation. As per financial norms of centrally sponsored schemes, State/ UT governments are required to put in a matching share from their own side, while disbursing the funds to respective ULBs.

What has been the progress so far?

According to the dashboard of the Swachh Bharat Mission website, as on September 24, out of the 2,424 dumpsites, 471 sites have been remediated, remediation in 1,226 has been approved and is on-going, and 727 sites have been untouched. As far as area is concerned, of the total 17,039.71 acres, 27 % has been reclaimed and 73% is yet to be reclaimed.

Among States, Tamil Nadu has the maximum area reclaimed from dumpsites at 837 acres (42%). Gujarat is the best performing State with 75% area (698 out of 938 acres) of landfills reclaimed.


THE GIST


▼ The Swachh Bharat Mission (SBM) or Clean India Mission is a country-wide campaign launched by the Central government on October 2, 2014 to eliminate open defecation and to create Open Defecation Free (ODF) villages.


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▼ Exposure to emissions from hazardous waste can irritate the mouth and throat. Inhaling methane from landfills can cause nausea, vomiting, and loss of coordination.


Topic-- Swachh Bharat Mission (SBM)


 Launch Date: The Swachh Bharat Mission (SBM) was launched on October 2, 2014, by the Central government to eliminate open defecation.


 ODF Goal: The mission aimed to achieve an "open-defecation free" India by October 2, 2019, coinciding with Mahatma Gandhi's 150th birth anniversary.

 SBM 2.0: In 2021, the SBM-U 2.0 was launched, focusing on making cities garbage-free by 2026 and maintaining ODF status across 4,372 Urban Local Bodies (ULBs).

 Waste Management Vision: The mission includes 100% source segregation, door-to-door collection, and scientific management of waste, including remediation of legacy dumpsites.

 Financial Commitment: ₹3,226 crore has been approved for the remediation of legacy waste dumpsites, with states required to match funding.

 Progress Statistics: As of September 24, 2023, 471 out of 2,424 dumpsites have been remediated, with 27% of the total area reclaimed.

 Top Performers: Tamil Nadu reclaimed the most area (837 acres), while Gujarat has the highest percentage of area reclaimed (75%).

Summary: The Swachh Bharat Mission aims to eliminate open defecation and improve waste management in India, with significant progress reported in reclaiming dumpsites.

U.K. to return Chagos Islands to Mauritius in historic agreement



Negotiations for this deal began under the previous government in 2022; the deal comes after 11 rounds of talks with the previous govt. and two rounds with the current govt.; India says this understanding completes 'decolonisation' of Mauritius

Dinakar Peri
NEW DELHI

The U.K. and Mauritius have reached a historic political agreement to secure the strategically important U.K.-U.S. military base on Diego Garcia and towards restoring Mauritian sovereignty over the Chagos archipelago. A treaty is now being worked out to firm up the agreement, the U.K. announced on Thursday.

“For the first time in more than 50 years, the status of the base will be undisputed and legally secure, following a political agreement between the U.K. and Mauritius,” the



Diego Garcia, a significant atoll in the Indian Ocean, is part of the Chagos archipelago and the British Indian Ocean Territory. AP

U.K. High Commission in India said in a statement. “It sees Mauritius assume sovereignty over British Indian Ocean Territory (BIOT), with the U.K. authorised to exercise the sovereign rights of Mauritius on

Diego Garcia.”

The political agreement is subject to a treaty and supporting legal instruments being finalised and both sides have committed to complete this as quickly as possible, it said.

Welcoming the agreement on the return of Mauritian sovereignty over the Chagos archipelago, including Diego Garcia, India’s Ministry of External Affairs said this “significant” understanding completes the “decolonisation” of Mauritius. “The resolution of the long-standing Chagos dispute after two years of negotiations, in compliance with international law, is a welcome development,” the MEA said in a statement.

India has consistently supported the Mauritian claim for sovereignty over Chagos, in line with its principled stand on decolonisation and support for

the sovereignty and territorial integrity of nations, as well as its long-standing and close partnership with Mauritius, the MEA noted. India remains committed to working with Mauritius and other like-minded partners in strengthening maritime safety and security and contributing to enhanced peace and prosperity in the Indian Ocean region, it added.

Negotiations for this deal began under the previous government in 2022 and this week’s deal comes after 11 rounds of negotiations with the previous government and two rounds of negotiations with the current government.



Topic-- Chagos Archipelago

The U.K. and Mauritius have reached a historic political agreement regarding the U.K.-U.S. military base on Diego Garcia.



The agreement aims to restore Mauritian sovereignty over the Chagos archipelago, including Diego Garcia.



A treaty is being developed to formalize the political agreement, ensuring the base's status is legally secure for the first time in over 50 years.



Both nations are committed to finalizing the treaty and supporting legal instruments as quickly as possible.



India has welcomed the agreement, viewing it as a significant step towards the decolonization of Mauritius and supporting its sovereignty claims.



Negotiations for this deal began in 2022, involving 11 rounds with the previous government and 2 rounds with the current government.



India emphasizes its commitment to maritime safety and security in the Indian Ocean region, in partnership with Mauritius.

Summary: The U.K. and Mauritius have reached a significant political agreement to secure the U.K.-U.S. military base on Diego Garcia while restoring Mauritian sovereignty over the Chagos archipelago.



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ASIA



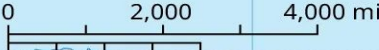
Chagos Archipelago

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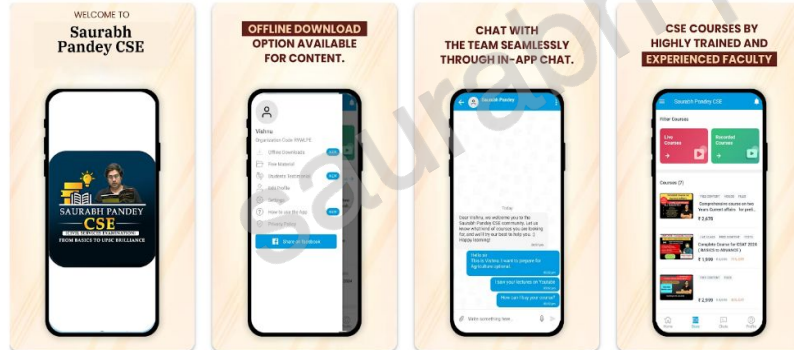
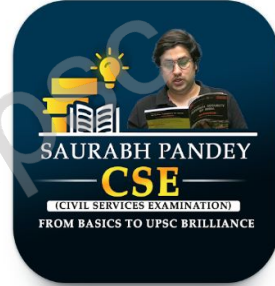
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