



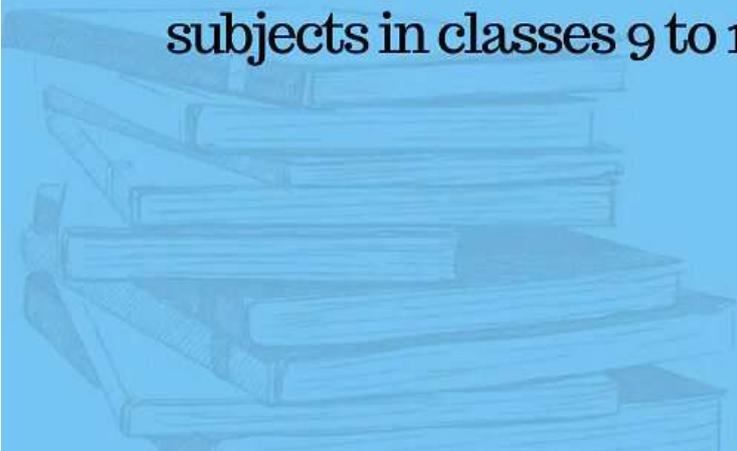
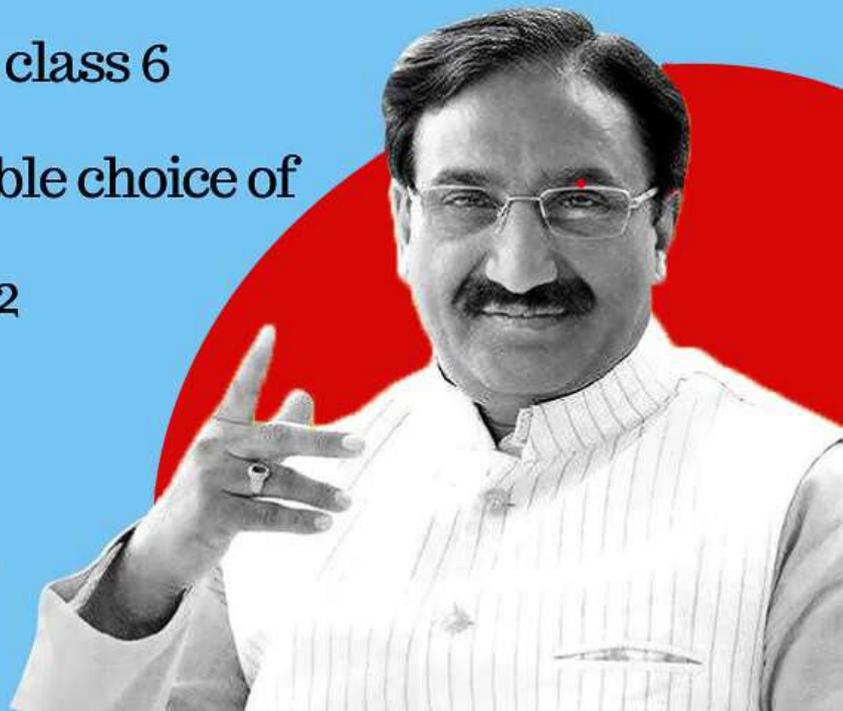
# VEDHIK

## DAILY NEWS ANALYSIS

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### New Education Policy 2020

- Emphasis on mother tongue till class 5
- Activity-based learning below class 2
- Introduction of subjects between classes 3 to 5
- Coding & internships in class 6
- Multi-disciplinary, flexible choice of subjects in classes 9 to 12



## **FOREWORD**

We, at Team Vedhik is happy to introduce a new initiative - "Daily Current Affairs\_The Hindu" compilations to help you with UPSC Civil Services Examination preparation. We believe this initiative - "Daily Current Affairs\_The Hindu" would help students, especially beginners save time and streamline their preparations with regard to Current Affairs. A content page and an Appendix has been added segregating and mapping the content to the syllabus.

It is an appreciable efforts by Vedhik IAS Academy helping aspirants of UPSC Civil Services Examinations. I would like to express my sincere gratitude to Dr. Babu Sebastian, former VC - MG University in extending all support to this endeavour. Finally I also extend my thanks to thank Ms. Shilpa Sasidharan and Mr. Shahul Hameed for their assistance in the preparing the compilations.

We welcome your valuable comments so that further improvement may be made in the forthcoming material. We look forward to feedback, comments and suggestions on how to improve and add value for students. Every care has been taken to avoid typing errors and if any reader comes across any such error, the authors shall feel obliged if they are informed at their Email ID.

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# Nobody can doubt India's feelings for Afghans, says Jaishankar on student visas

As students protest visa denial, Minister cites security concerns, trust and efficiency of visa system. Meanwhile, officials passed the buck for issuing emergency visa to Afghans to Home Ministry

**Suhasini Haidar**  
NEW DELHI

**N**o one can doubt India's "feelings" for Afghans, External Affairs Minister (EAM) S. Jaishankar said on Sunday, facing a question on the cancellation of visas to Afghan students who were pursuing their studies in India and have been unable to return since the Taliban takeover last August.

At the time, New Delhi had revoked all pre-existing visas issued to Afghan citizens, and announced a new "Emergency e-visa" (Em-X-Misc e-visa) process. However, officials say that of the tens of thousands of applications that were received last year, e-visas have only been issued to fewer than 300 Afghans, most of them Hindus and Sikhs fleeing the Taliban, while none of the 2,500 students remaining in Afghanistan have been issued any. The denial has prompted formal protests from the Afghan Ambassador in Delhi and a recent



**Festive fervour:** S. Jaishankar with Ambassadors and High Commissioners to India during Dasara celebration in Vadodara. PTI

demonstration outside the Indian Embassy in Kabul that reopened in June.

"We had a situation where we had to pull out our embassy, we did not even have a presence on the ground to verify what is what. At that time there was lot of uncertainty about whose passport was whose, whose visa was whose...these are real issues out there," Mr. Jaishankar said at a session in Vadodara on "Rising India and the world" where Afghan student Mohammad

Ali Irfan, studying in Gujarat, asked the question "on behalf" of the 2,500 stranded students.

"India's feelings for Afghan people, nobody can doubt," Mr. Jaishankar added, and asked the students "to wait for [a] level of trust and efficiency" to come up to allow visas to be restarted.

Facing pleas from the students who can't return home for fear they won't be able to return to complete their education, Afghanistan's Ambassador

Farid Mamundzay says he has raised the issue on several occasions with officials in the Ministry of External Affairs. The Afghan embassy has requested the MEA to issue visas for the female students. "We have not received any convincing reason so far," said Mr. Mamundzay.

"No Afghan citizen has ever carried out any major terror attack in another country... so these students should not be unnecessarily suspected on security grounds," he said in response to a question from *The Hindu* about New Delhi's stated concerns about security.

When asked, MEA officials said the question of the Afghan Emergency X-Misc visas is handled by the Ministry of Home Affairs. Government officials didn't respond to questions about whether the decision to only issue visas to Afghan Sikhs and Hindus was linked to the Modi government's CAA, a law that has not been implemented yet.

# The rise of the far-right in Italy

How did the Brothers of Italy, a party formed only in 2012, gain such popular support? What are the factors which led to its rise to power? How is the European Union looking at the developments in the country, known for its political volatility?

## EXPLAINER

Padmashree Anandhan

### The story so far:

On September 25, the right alliance, the left alliance, the Five-Star Movement and other traditional autonomous parties competed in Italy's snap elections. Among the four coalitions, the right alliance headed by Giorgia Meloni from Brothers of Italy with the League, Forza-Italia, and Nio Moderati emerged as the clear winner. It won with a majority of 237 seats in the Chamber of Deputies (lower house) and 115 seats in the Deputies of the Senate (upper house). The left alliance led by Enrico Letta from the Democratic Party including the Green/left alliance, Più Europa, and Impegno Civico were able to secure only 85 and 44 seats in both houses.

### Who are the Brothers of Italy?

The Brothers of Italy was founded in 2012 by Giorgia Meloni after her exit from the Former Prime Minister Silvio Berlusconi's party. It included members from the Italian Social Movement (MSI), which was created by the supporters of Benito Mussolini. Starting from 2% in the 2013 elections, the Brothers of Italy gained a quick margin of 26% by 2022, surpassing other traditional parties of Italy.

The main reason behind the rise of the party was the failure of other political parties. Mr. Berlusconi's threat to dissolve the government to pass the 2005 electoral reform, the shift of the League party to the Five Star Movement from the right alliance after the 2018 elections and a break in the coalition between Italia Viva, the Democratic Party and the Five Star Movement in 2021, damaged the credibility of these parties.

On the other hand, the Brothers of Italy, neither changed its partnership nor its identity and used the failure of other parties to its benefit. The party's main focus includes stabilising financial markets, keeping debt in check and meeting Italy's energy crisis without regional dependen-



**Quick ascent:** The leader of the Brothers of Italy Giorgia Meloni speaks at the party's headquarters, in Rome, Italy on September 26. REUTERS

cy. It has managed to keep true to its fascist roots even when it entered mainstream politics. Externally, the party focusses on transatlantic relations, siding with Europe in standing against Russia.

In power, the Brothers of Italy will now have to address two major challenges. First is Italy's economy which is heading towards contraction, besides COVID-19 induced debt, and energy crises, while the second challenge comes from within the coalition.

### What does Italy's new coalition mean for Europe?

The region as a whole is alarmed by the majority won by the Brothers of Italy party. This is mainly due to two factors, one being the party's history of being evolved from Mussolini and containing members who are known for neo-fascist origins.

Although Ms. Meloni's stance on EU's policies in terms of energy price cap, sanctions on Russia seem to be in line with the EU, Italian nationalism has always been the underlining priority. Ms. Meloni shares similar views with Hungarian leader Victor Orban with respect to the economy and issues regarding abortion, LGBTQ rights and migration, sending mixed signals for regional cooperation.

Secondly, Italy is one of the most volatile countries in the region in terms of political stability, with more than 65 governments coming to power since the end of the Second World War. The frequent breaking and making of coalition due to the misrule of Mr. Berlusconi, the shifting of the League party between coalitions, and the rain of reforms under each government has pushed Italy into a prolonged political crisis. Europe does not wish to

see yet another government coalition break nor does it want Italy becoming another Hungary. Therefore, dilemma over stability and cooperation hangs in the air for the EU.

### What is next for Italy?

In the past, most parties have concentrated more towards sustaining themselves in power by campaigning for electoral reform. They kept issues of identity, economy, and security in the backstage. The Brothers of Italy have shown that they intend to put Italy first and regional issues on the backburner. This indicates that the upcoming government will be more Italy-centric than Euro-centric.

*Padmashree Anandhan is a Research Associate at the School of Conflict and Security Studies, National Institute of Advanced Studies, Bangalore*

## THE GIST

In Italy, the right alliance headed by Giorgia Meloni from Brothers of Italy with the League, Forza-Italia, and Nio Moderati emerged as the clear winner. It won with a majority of 237 seats in the Chamber of Deputies (lower house) and 115 seats in the Deputies of the Senate (upper house).

The main reason behind the rise of the party was the failure of other political parties. The Brothers of Italy never changed its partnership or its identity. In terms of policy, Ms. Meloni has always kept Italy first. The party's main focus includes stabilising financial markets, keeping debt in check and meeting Italy's energy crisis without regional dependency. It has managed to keep true to its fascist roots even when it entered mainstream politics.

Europe as a whole is alarmed by the majority won by the Brothers of Italy party. This is mainly due to two factors, one being the party's history of being evolved from Mussolini and the other is because of the fact that Italy is one of the most volatile countries in the region in terms of political stability.

# What happened to the Nord Stream pipelines?

Why do international bodies think that the leaks to the pipelines were the result of sabotage? What are going to be the environmental effects of such a leak?

## Diksha Munjal

### The story so far:

Four leaks were reported at different points in the Nord Stream pipelines, linking Russia and Europe, since September 26. Two of the leaks were in Swedish waters while the other two were reported from Danish waters. The European Union said they suspected "sabotage" behind the leaks while the Russian Foreign Ministry said that the ruptures to the pipelines took place in territory that was "fully under the control" of U.S. intelligence agencies.

### What are the Nord Stream pipelines?

The \$7.1 (€7.4) billion Nord Stream 1 subsea pipeline has been operational since 2011, and is the largest single supply route for Russian gas to Europe. The Russian state-owned gas company

Gazprom has a majority ownership in the pipeline, and while it was running at just 20% of its capacity since the Russia-Ukraine conflict began, the company, in early September fully cut gas flows from the pipeline on the pretext of maintenance. According to *Bloomberg*, while 40% of Europe's pipeline gas came from Russia before the war, the number now stands at just 9%. The construction of the \$11 billion-worth Nord Stream 2 was completed in 2021 but never began commercial operations. Even though both pipelines were not running commercially, they had millions of cubic metres of gas stored in them.

### What is the extent of the damage?

Denmark's defence authority released footage of the bubbles forming on the surface of the sea resulting from gas seeping from the pipelines. The Danish

Energy Agency said that while half of the gas stored in Nord Stream 1 and 2 had leaked out of the ruptures, the remaining volume was expected to escape by Sunday. Both Danish and Swedish seismologists picked up undersea explosions near the locations of the first two leaks before they occurred. Bjorn Lund of Sweden's National Seismology Centre told *BBC* that there was "no doubt that these were explosions".

### What will be the impact of the leaks?

The Swiss-based operator of the pipelines, the Nord Stream AG consortium, said on Tuesday, "the destruction that happened within one day at three lines of the Nord Stream pipeline system is unprecedented. It's impossible now to estimate the timeframe for restoring operations of the gas shipment infrastructure." *Al Jazeera* quoted Eurasia Group analysts as saying,

that with the timeframe for repairs being uncertain, the pipelines were unlikely to provide any gas to Europe in the forthcoming winter months, even if the political will to resume supply was found.

European gas prices spiked after reports of the leaks emerged; European Benchmark prices rose 12% on Tuesday, while Dutch and British Prices continued to rise on Wednesday. Additionally, while analysts have not yet quantified the environmental impact of the leaks, *Reuters* quoted the commercial methane-measuring satellite firm GHGSat as saying that a "conservative estimate" based on available data suggested that the leaks together were releasing more than 500 metric tonnes of methane per hour when first breached, with the flow decreasing over time.

### What have international bodies said?

Ukraine called the leaks a "terrorist attack" and an "act of aggression towards the EU" planned by Russia. Incidentally, Russia said that the leaks were an act of "terrorism" possibly by a state-actor. While the EU and the North Atlantic Treaty Organization called the leaks acts of sabotage, they did not name a country. The U.S. also hasn't blamed any specific actor for the leaks, with National Security Advisor Jake Sullivan stating that the country would stay committed to protecting Europe's energy security.

## THE GIST

Four leaks were reported at different points in the Nord Stream pipelines, linking Russia and Europe, since September 26. Two of the leaks were in Swedish waters while the other two were reported from Danish waters.

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# '62% rural houses have tap water connections'

**Jacob Koshy**

NEW DELHI

Around 62% of rural households in India have fully functional tap water connections within their premises, according to a survey commissioned by the Union Ministry of Water Resources to assess the functioning of the government's marquee Jal Jeevan Mission.

In June, the Centre reported this figure to be 52%.

Tamil Nadu, Himachal Pradesh, Goa, and Puducherry reported more than 80% of households with fully functional connections, while fewer than half the households in Rajasthan, Kerala, Manipur, Tripura, Maharashtra, Madhya Pradesh, Mizoram and Sikkim had such connections.

**CONTINUED ON**

**» PAGE 12**

# ‘62% rural houses have tap water connections’

## Functional taps

The table shows the top five and the bottom five States and Union Territories with fully functional tap water connection in households, according to a survey commissioned by the Union Ministry of Water Resources



Top five		Bottom five	
State/U.T.	% HHs*	State/U.T.	% HHs*
Puducherry	88	Rajasthan	38
Tamil Nadu	86	Manipur	40
Himachal	82	Kerala	40
Goa	81	A & N Islands	40
Telangana	80	Tripura	41

\* Households

A fully functional tap water connection is defined as a household getting at least 55 litres per capita per day of potable water all through the year. Close to three-fourths of households received water all seven days a week and 8% just once a week. On an average, households got water for three hours every day, and 80% reported that their daily requirements of water were being met by the tap connections. The water quality in some households was tested. It revealed 95% of households to have within acceptable limits of pH values. Over 90% of village-level institutions were getting potable water. Over half (57%) of the sampled households reported purifying water before drinking.

However, the report mentions a concerning problem of chlorine contamination. Though 93% of the samples were reportedly free of bacteriological contamination, “most of the anganwadi centres and schools, had higher than the permissible range of residual chlorine and indicated inappropriate local dosing. Thus, there is a need to monitor the correct dosing of chlorine in the pipe water supply system”, the report notes.

# Telangana scoops Swachh Survekshan Gramin, 2022 award

President speaks of plans to make all six lakh villages in India free of open defecation in the second phase of Swachh Bharat Mission Gramin

**The Hindu Bureau**  
NEW DELHI

**T**elangana was ranked first for the cleanliness of its villages in the Swachh Survekshan Gramin (SSG), 2022, which looked into the sanitation status of rural areas. After Telangana, Haryana was placed second followed by Tamil Nadu in the Large States category.

The Swachh Survekshan Gramin, 2022 award ranks States and districts on the basis of their performance attained on Swachh Bharat Mission Gramin (SBM-G) parameters and engagement of the rural community in improvement of their sanitation status. Among smaller States and Union Territories, Andaman and Nicobar secured the first position, followed by Dadra and Nagar Haveli, Daman and Diu and Sikkim.

“Swachh Bharat Mis-



President Droupadi Murmu presenting the awards at Swachh Bharat Divas event in New Delhi on Sunday. PTI

sion-Gramin is a movement to bring in behavioural change in our populace. The use of toilets, the habit of washing hands with soap and having water supply through taps acted as a shield for the country during the pandemic,” said President Droupadi Murmu, while giving away the awards.

Ms. Murmu noted that since the launch of SBM-G in 2014, over 11 crore toilets

had been built and about 60 crore people had given up open defecation. The second phase of the mission, launched in 2020, aims to make all six lakh villages in India ‘Open Defecation Free Plus’, she said. “Having achieved success against open defecation, we now have to address more complex and technical problems like solid and liquid waste management,” she added.

# 'NEP prescribes no language; States can choose'

States will have the freedom to choose the language of instruction in the democratic and decentralised process laid out in the National Education Policy, 2020, says the head of the high-powered Bharatiya Bhasha Samiti, dismissing the assumption of imposition of languages

## INTERVIEW

### **Chamu Krishna Shastry**

Jagriti Chandra

The Education Ministry in November 2021 constituted a high-powered committee, the Bharatiya Bhasha Samiti, for the promotion of Indian languages, led by the Rashtriya Swayamsevak Sangh-affiliated Sanskrit proponent **Chamu Krishna Shastry**. The committee is tasked with preparing an action plan for the growth of Indian languages as prescribed under the National Education Policy (NEP), 2020, which requires the mother tongue to be the medium of instruction. He speaks on the road map being readied by the panel. Excerpts:

**The committee will soon complete one year. How much ground have you covered so far?**

We are making a study of the current situation of languages in schools, higher education institutions and other domains of language use, such as jobs. We have found that there are 35 mother tongues as mediums of instruction, and as part of the three-language formula, 160 languages and mother tongues are taught (for example, Hindi is a mother tongue and a language, while Garhwali is a mother tongue but not a language). The first roadblock in implementing NEP is providing study material, and our focus for the first year is to prepare books in the languages of the Eighth Schedule of the Constitution from Class 1 to the postgraduate level.

**What will be the key focus areas for promoting Indian**



**languages?**

Apart from textbooks, we need to prepare teachers to be bilingual. Then, there is a need to ensure employment, not just teaching jobs for language students. We have held discussions with the Chairman of the National Skill Development Corporation on incorporating languages as a qualification.

**However, there is resistance from certain non-Hindi States, which say the NEP, 2020 imposes Hindi.**

It is the first time in NEP that we are seeing a strong push for Indian languages.

No language has been prescribed. States will decide, they have the freedom to choose. It will be a democratic, decentralised process. There is no imposition.

**Under the NEP, the mother tongue will be the medium of instruction till Class 5 or preferably till Class 8. How will it be implemented, say, in Delhi, where there is a plurality of languages?**

I will answer this question in a different way. Before English, was there ever any conflict over languages? Borders of the States kept expanding or contracting, and there were new kings, but was there a dispute over language?

There are many commonalities in Indian languages – their phonology is similar, 50%-60% of the vocabulary is common, sentence structure is common, subject-object-verb pattern is

common, there is a common literary source, and similar aspiration, as a result of which people were able to understand different languages.

**Since the NEP says either mother tongue or regional language can be medium of instruction, does that mean Tamil will be the medium of instruction in Tamil Nadu as the dominant mother tongue?**

This is the image created about Tamil. Weavers in Sivakasi speak Saurashtri, the Gounder community in Coimbatore speaks Telugu. There are also Malayalam- and Kannada-speaking populations. The State's population is six crore and 30-35% of them speak other languages. Even Tamil has 12 or 13 different dialects. But for some special reasons, Tamil Nadu has only promoted Tamil. Now they will

face problems [in implementing NEP] for only learning Tamil. Tamil is also on the wane in the State. In 2010, there were 75% Tamil-medium students in Class 12, and in 2020, this figure is down to 55%. Tamil is [on the decline] because of their policy. They have to change mindset.

**What plans do you have for promoting the Hindi and Sanskrit languages?** Hindi needs to be promoted just like all other Indian languages. Nearly 50% of citizens speak Hindi, so that is an advantage. Where there is English medium, it should be replaced with Hindi. There should be a desire or intent to learn Hindi, which will unify the country.

Sanskrit so far has been taught through either English or Hindi, and the big push in NEP is for teaching Sanskrit through Sanskrit. (Full interview on <https://bit.ly/3dW8ybp>)

## Boxed in

### As high prices restrain consumption, inflation control must be top priority

**T**he Reserve Bank of India's rate decision on Friday was ultimately inevitable. Monetary policymakers were left with little choice but to raise interest rates by 50 basis points, as a bout of extreme volatility in international financial markets combines with persistently high domestic retail inflation to threaten macroeconomic stability, globally and in India. RBI Governor Shaktikanta Das cited the 'aggressive monetary policy actions and even more aggressive communication from advanced economy central banks' as a third shock -- following the pandemic and Russia's invasion of Ukraine -- which he said had thrust the 'global economy into the eye of a new storm'. "Emerging market economies, in particular, are confronted with challenges of slowing global growth, elevated food and energy prices, spillovers from advanced economy policy normalisation... and sharp currency depreciations," Mr. Das explained, elaborating on the external challenges confronting emerging economies, including India. The rupee too has been under pressure, weakening by more than 7% against the dollar since the start of the current fiscal year in April. And this has added upward pressure to price stability by way of imported inflation. The RBI's September issue of the Monetary Policy Report in fact pertinently observes that the 'second-round effects of low growth and high inflation globally could keep domestic inflation at elevated levels even beyond eight quarters, necessitating appropriate monetary actions to anchor inflation expectations'.

The central bank's own projections, in fact, do not anticipate a slowing in India's retail inflation below its upper tolerance threshold of 6% till the January-March quarter. And Mr. Das was right to point out the multiple factors that could upend the RBI's inflation outlook. These include the likelihood of higher pass-through of input costs by service providers on increased demand, as well as upside risks to food prices from both the lower *kharif* output of rice and pulses, and the unseasonably excess spells of rainfall in some regions that have pushed up the prices of vegetables. The surfeit of liquidity or cash in the banking system, which is expected to be buoyed by enhanced government spending in the coming months, could also threaten price stability and the RBI Governor was at pains to note that the policy stance of a calibrated 'withdrawal of accommodation' had become an imperative. Specifically, he pointed out that 'even as the nominal policy repo rate had been raised by 190 basis points since May, the rate adjusted for inflation still trailed the 2019 levels'. With the RBI's latest surveys of households' inflation expectations and consumer confidence too signalling that price pressures will continue to restrain consumption, inflation control will have to remain the top policy priority.

# The race to provide exhaustive satellite broadband services in India

While satellite communication companies can help in addressing the need of the market for fibre-like connectivity in the remotest parts of the country, one will also have to deal with slow Internet speeds and limited satellite bandwidths because of the distance the signals will have to travel

Abhishek Chatterjee

**T**he race for providing satellite broadband connectivity in India is heating up as companies like Jio, OneWeb, Hughes and Tata-backed Nelco are preparing to provide these services.

Satellite communication has been gaining prominence globally and is seeing a lot of interest, investments, and innovations. The two biggest developments in the global satellite communication space are the emergence of LEO (low-earth orbit constellations) that promises to provide truly global coverage and lower latency service, and HTS (High Throughput Satellites Service) which offers unprecedented capacity and flexibility. India is quickly catching up with global trends and we are optimistic about India's prospects in the global satellite communication market, Shivaji Chatterjee, executive vice president, Hughes Communications India (HCI) said to *The Hindu*. Although the satellite broadband industry in India is still at a nascent stage, the growing demand for connectivity and Internet – the Digital India drive – calls to connect all unserved terrains and this is what satellite broadband players like Hughes can do, he added.

However, different reports indicate that although India is about to see the roll out of 5G services, infrastructure woes like inadequate tower fibrisation questions the success of 5G in connecting different parts of the country which do not have even 4G access till now.

## Different satcom players

Different players offering satellite broadband services are preparing to start operations in the country.

Jio has received approval from the Department of Telecommunication (DoT), in the second week of this month, to provide satellite broadband services in India. Earlier, in February this year, Jio Platforms Ltd, the digital arm of Reliance Industries (RIL), and Luxembourg's SES, formed a joint venture, Jio Space Technology Ltd to provide satellite-based broadband services in India. The DoT has granted the Letter of Intent for global mobile personal communication by satellite (GMPCS) services to the company that the firm had applied for earlier this year. The licences are for a period of 20 years and include voice and data services via satellite.

Parallely, in January this year, satellite communication companies, OneWeb and Hughes Network Systems, announced a six-year agreement, to bring low Earth orbit (LEO) connectivity services in India. OneWeb will then bring these solutions to enterprises, governments, telcos, airline companies and maritime customers. However, the ongoing Russia-Ukraine crisis forced OneWeb to cancel the planned launch of 36 satellites on Russia's Soyuz rockets after Russia cancelled its agreement with the Bharti-backed U.K. based company. This led the satellite major to delay the commercial launch of its satellite communication services in India to early 2023.

OneWeb has also partnered with NewSpace India Limited (NSIL), the



ISTOCKPHOTO

commercial arm of Indian Space Research Organization (ISRO) and Elon Musk's SpaceX to resume its satellite launches. The pending release of the new Spacecom policy by the Department of Space brings a layer of uncertainty over the launch of commercial services in India. The policy is supposed to lay out the guidelines on which the newly liberalised space sector will operate.

## Satcom companies reckon that satellite broadband services can connect the most remote parts of the country which are otherwise difficult to connect through fibres

Satellite service provider Hughes Communications India, (HCI) and Bharti Airtel announced a joint venture in January to provide satellite broadband services in India. The joint venture was created after the agreement, announced in May 2019 and received all statutory approvals, including those from the National Company Law Tribunal (NCLT) and Department of Telecom. Last week, HCI also announced the commercial launch of India's first HTS broadband service to deliver high-speed broadband across the country, including to the most remote areas beyond the reach of terrestrial networks. HTS provides more throughput than conventional communication satellites. Higher-throughput refers to higher data processing and transfer capacity than conventional satellites, while using the same amount of orbital spectrum.

Tata-owned satcom company Nelco, and Canada's Telesat have also successfully conducted the first in-orbit demonstration of high-speed broadband connectivity in India in May this year. Telesat services will deliver significant benefits for applications like 4G/5G

backhaul, mobile hotspots, telemedicine, village connectivity and more, P. J. Nath, Managing Director and Chief Executive Officer of NELCO said in a press release. Telesat will also help accelerate 4G and 5G expansion, and set new levels of performance for enterprise, telecom, mobility and government broadband connectivity on land, air and sea, Glenn Katz, Telesat's Chief Commercial Officer said in a release.

## Changing the Internet landscape

Satcom companies reckon that satellite broadband services can connect the most remote parts of the country which are otherwise difficult to connect through fibres. Satellite broadband services can, therefore, help in addressing the need of the market for fibre-like connectivity in the remotest parts of the country with high reliability and flexibility, Mr. Nath said. Mr. Chatterjee also echoed the sentiment by stating that the rollout of satellite broadband communication services can close the digital divide in India.

For example, Hughes India has partnered with Bharat Broadband Nigam Limited (BBNL) and Telecommunications Consultants India Ltd. (TCIL), as part of BharatNet, to provide high-speed satellite connectivity to 5,000 remote gram panchayats. These panchayats are located in northeastern States, including Manipur, Meghalaya, Tripura, Mizoram, Arunachal Pradesh, and the Galwan Valley in Eastern Ladakh – places that lack terrestrial connectivity like fibre or cable. With the Bharatnet project, India aims to better facilitate e-governance applications like telemedicine, access to land records, treasury, police stations, Internet access, and many other services in rural India. "We are going to see a very open market space where there is going to be, foreign operators, In Flight and Maritime Connectivity (IFMC) providers,

Very Small Aperture Terminal (VSAT) service providers, all of them being able to provide connectivity and, they will all be able to service this whole ecosystem of mobility on land, on water and in the air," Mr. Chatterjee said.

## Challenges ahead

Satellite data transfer provides very slow Internet speeds and limited satellite bandwidth because of the distances the signals have to travel and all the potential obstacles in between, according to Resilio, a technology company. Connection times can also be impacted by your surroundings, the length of your message, and the status and availability of the satellite network.

However, if the user is located under trees with light or medium foliage it might take over a minute to send a message, while the same message takes 15 seconds to be sent in ideal conditions with a direct view of the sky and the horizon. Users might not be able to connect to a satellite at all if they are located under heavy foliage or surrounded by other obstructions, Apple said in a blog earlier this month. The Emergency SOS via satellite might not also work in places above 62° latitude like northern parts of Canada and Alaska.

Additionally, satellite Internet latency can be a significant problem. This can be a matter of only a second or two, but a delay on that scale can seriously affect real-time applications like video chats. Unlike terrestrial communications, minor changes in weather can have a massive impact on both the speed and latency of satellite data, according to Resilio. Because satellite networks are complex, satellite Internet providers like Hughes often charge based on throughput. This along with the complex equipment like satellite dishes being used to avail these services makes the service expensive, the company added.

General Studies Paper I	
A	History of Indian culture will cover the salient aspects of art forms, literature and architecture from ancient to modern times;
B	Modern Indian history from about the middle of the eighteenth century until the present-significant events, personalities, issues;
C	Freedom struggle-its various stages and important contributors / contributions from different parts of the country;
D	Post-independence consolidation and reorganization within the country;
E	History of the world will include events from 18 <sup>th</sup> century such as industrial revolution, world wars, re-drawing of national boundaries, colonization, decolonization,
F	Political philosophies like communism, capitalism, socialism etc.-their forms and effect on the society
G	Salient features of Indian Society, Diversity of India;
H	Effects of globalization on Indian society;
I	Role of women and women's organization;
J	Social empowerment, communalism, regionalism & secularism
K	Salient features of world's physical geography;
L	Geographical features and their location- changes in critical geographical features (including water bodies and ice-caps) and in flora and fauna and the effects of such changes;
M	Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc.
N	Distribution of key natural resources across the world (including South Asia and the Indian subcontinent);
O	Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India);
P	Population and associated issues;
Q	Urbanization, their problems and their remedies
General Studies Paper II	
A	India and its neighbourhood- relations;
B	Important International institutions, agencies and fora- their structure, mandate;
C	Effect of policies and politics of developed and developing countries on India's interests;
D	Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
E	Indian Constitution, historical underpinnings, evolution, features, amendments, significant provisions and basic structure;
F	Comparison of the Indian Constitutional scheme with other countries;
G	Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein; Inclusive growth and issues arising from it;
H	Parliament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these;
I	Structure, organization and functioning of the executive and the judiciary, Ministries and Departments;

J	Separation of powers between various organs dispute redressal mechanisms and institutions;
K	Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional bodies;
L	Statutory, regulatory and various quasi-judicial bodies;
M	Mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections;
N	Salient features of the Representation of People's Act;
O	Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential;
P	Citizens charters, transparency & accountability and institutional and other measures;
Q	Issues relating to poverty and hunger,
R	Welfare schemes for vulnerable sections of the population by the Centre and States, Performance of these schemes;
S	Issues relating to development and management of social sector / services relating to education and human resources;
T	Issues relating to development and management of social sector / services relating to health
General Studies Paper III	
A	Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment;
B	Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth;
C	Inclusive growth and issues arising from it;
D	Infrastructure Energy, Ports, Roads, Airports, Railways etc. Government budgeting;
E	Land reforms in India
F	Major crops, cropping patterns in various parts of the country, different types of irrigation and irrigation systems;
G	Storage, transport and marketing of agricultural produce and issues and related constraints;
H	e-technology in the aid of farmers; Technology Missions; Economics of Animal-Rearing.
I	Issues of buffer stocks and food security, Public Distribution System- objectives, functioning, limitations, revamping;
J	Food processing and related industries in India – scope and significance, location, upstream and downstream requirements, supply chain management;
K	Issues related to direct and indirect farm subsidies and minimum support prices
L	Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology;
M	Indigenization of technology and developing new technology;
N	Developments and their applications and effects in everyday life;
O	Issues relating to intellectual property rights
P	Conservation, environmental pollution and degradation, environmental impact assessment
Q	Disaster and disaster management
R	Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security;
S	Money-laundering and its prevention;

T	Various forces and their mandate;
U	Security challenges and their management in border areas;
V	Linkages of organized crime with terrorism;
W	Role of external state and non-state actors in creating challenges to internal security;
X	Linkages between development and spread of extremism.
<b>General Studies Paper IV</b>	
A	Ethics and Human Interface: Essence, determinants and consequences of Ethics in human actions;
B	Dimensions of ethics;
C	Ethics in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators;
D	Role of family, society and educational institutions in inculcating values.
E	Attitude: Content, structure, function; its influence and relation with thought and behaviour;
F	Moral and political attitudes;
G	Social influence and persuasion.
H	Aptitude and foundational values for Civil Service , integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker sections.
I	Emotional intelligence-concepts, and their utilities and application in administration and governance.
J	Contributions of moral thinkers and philosophers from India and world.
K	Public/Civil service values and Ethics in Public administration: Status and problems;
L	Ethical concerns and dilemmas in government and private institutions;
M	Laws, rules, regulations and conscience as
N	sources of ethical guidance;
O	Accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding;
P	Corporate governance.
Q	Probity in Governance: Concept of public service;
R	Philosophical basis of governance and probity;
S	Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
T	Case Studies on above issues.