23rd September, 2020

NEWS JUICE

Intelligent Compilation from The Hindu, Indian Express & others along with News Background

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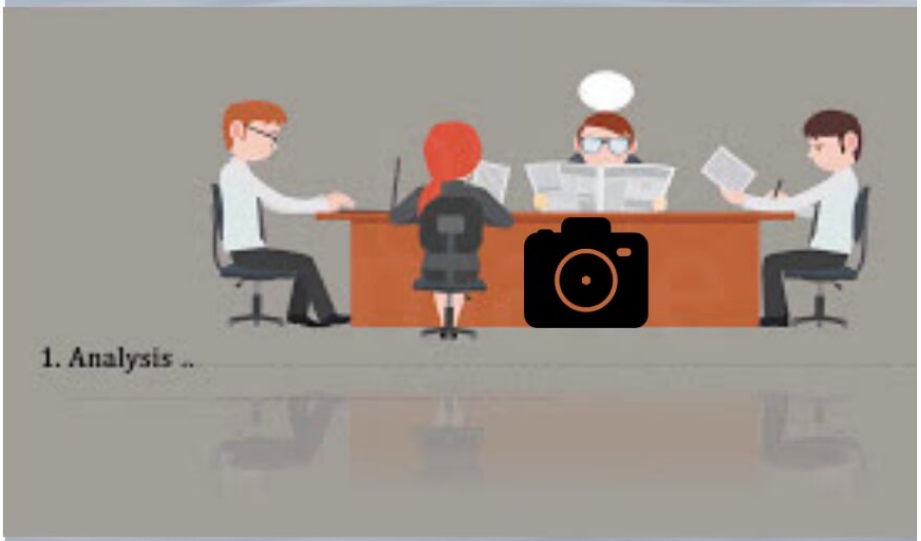
What is News Juice?

BY PREPMATE



1. India and the Abraham Accords

Relevant for GS Prelims & Mains Paper II; IOBR

The White House ceremony on September 15 marking the formal normalisation of Israel's ties with the United Arab Emirates (UAE) and the Kingdom of Bahrain has created a significant inflection point in regional history and geopolitics. Indeed, it helped ring in the Jewish New Year (Rosh Hashanah 5781) last weekend with some extra cheers!

Two new friendships

The two Gulf states have, thus, joined Egypt and Jordan which had their peace treaties with Israel in 1979 and 1994, respectively. Still, several nuances make the September 15 reconciliation different. For one, the UAE and Bahrain do not have any territorial dispute with Israel, nor have they ever been at war with it. Although formally committed to an Arab consensus over a two-state resolution of the Palestine cause, these two countries have steadily, albeit furtively, moved towards having substantive links with Israel in recent years. Hence, the 'Abraham Accords' entered with the UAE and Bahrain are 'peace-for-peace' deals without any physical quid pro quo by Israel. Multiple drivers are likely to spur the two new friendships to grow faster and deeper than the 'cold peace' Israel has had with its two Arab neighbours. Externally, Israel, the UAE and Bahrain share the common threat perception of Iran against the backdrop of the ongoing diminution of Pax Americana in the region. Internally, while all three have their respective hotheads opposing this reconciliation, these seem manageable. They are relatively more modern societies which share the overarching and immediate priority of post-pandemic economic resuscitation. They have lost no time to set up logistics such as Internet connectivity and direct flights to pave the way for more active economic engagement. If these sinews evolve, other moderate Arab countries are likely to join the Israel fan club.

Israel's detente with Egypt and Jordan did not have any major impact on India as our ties with them were relatively insignificant. However, now India has stronger, multifaceted and growing socioeconomic engagements with Israel and the Gulf countries. With over eight million Indian diaspora in the Gulf remitting annually nearly $50 billion, annual merchandise trade of over $150 billion, sourcing of nearly two-thirds of India's hydrocarbon imports, major investments, etc., it is natural to ask how the new regional dynamic would affect India.

Implications for India

Geopolitically, India has welcomed the establishment of diplomatic relations between the UAE and Israel, calling both its strategic partners. In general, the Israel-Gulf Cooperation Council (GCC) breakthrough widens the moderate constituency for peaceful resolution of the Palestine dispute, easing India's diplomatic balancing act. However, nothing in West Asia is monochromatic: The Israel-GCC ties may provoke new polarisations between the Jihadi fringe and the mainstream. The possibility of the southern Gulf becoming the new arena of the proxy war between Iran and Israel cannot be ruled out, particularly in Shia

pockets. India would have to be on its guard to monitor and even pre-empt any threat to its interests in the Gulf.

Even more important for India is to manage the economic fallout of the Israel-GCC synergy. With defence and security cooperation as a strong impetus, both sides are ready to realise the full potential of their economic complementarity. The UAE and Bahrain can become the entrepôts to Israeli exports of goods and services to diverse geographies. Israel has niche strengths in defence, security and surveillance equipment, arid farming, solar power, horticultural products, high-tech, gem and jewellery, and pharmaceuticals. Tourism, real estate and financial service sectors on both sides have suffered due to the pandemic and hope for a positive spin-off from the peer-to-peer interactions. Further, Israel has the potential to supply skilled and semi-skilled manpower to the GCC states, particularly from the Sephardim and Mizrahim ethnicities, many of whom speak Arabic. Even the Israeli Arabs may find career opportunities to bridge the cultural divide. Israel is known as the start-up nation and its stakeholders could easily fit in the various duty-free incubators in the UAE.

Israeli foray into the Gulf has the potential to disrupt the existing politico-economic architecture India has carefully built with the GCC states. India has acquired a large and rewarding regional footprint, particularly as the preferred source of manpower, food products, pharmaceuticals, gem and jewellery, light engineering items, etc. Indians are also the biggest stakeholders in Dubai's real estate, tourism and Free Economic Zones. In the evolving scenario, there may be scope for a profitable trilateral synergy, but India cannot take its preponderance as a given. It needs to keep its powder as dry as the shifting sands of the Empty Quarter.

Source: The Hindu

2. The legacy of INS Viraat, now on its final journey

Relevant for GS Prelims & Mains paper III; Science & Technology

INS Viraat, the Aircraft Carrier with the longest service in the world, commenced its towed final journey on Saturday from Mumbai, to be broken at Alang in Gujarat and sold as scrap. A look at the Grand Old Lady of Indian Navy, which was decommissioned in 2017 after 30 years of service with Indian Navy and around 27 years prior to that in British Royal Navy.

British origin

The ship was commissioned into the Royal Navy as HMS (Her Majesty's Ship) Hermes in November 1959, close to one and half decades after its keel was laid. During her service with the Royal Navy, the ship operated three fixed-wing planes and a chopper. The ship belonged to the Centaur class of light fleet carriers from the Royal Navy which were in use since World War II.

She was part of the key formation of the British forces during the Falklands War against the Argentinian forces in 1982. HMS Hermes was decommissioned within three years after the war. The Indian Navy, which was at the time operating 1961-commissioned INS Vikrant, zeroed down on Hermes and announced its purchase in 1985-86. The ship underwent a major refit and modernisation before being commissioned into the Indian Navy in May 1987 as INS (Indian Naval Ship) Viraat, which means enormous.

Service in Indian Navy

The ship's Motto was the Sanskrit phrase 'Jalamev Yashya, Balamev Tasya' which means 'who controls the sea is the powerful'. The ship was capable of a maximum speed of 28 knots and underwent three major refits and some smallers ones during its 30 years long service with the Indian Navy in addition to the one prior to commissioning. The refits which are usually long processes, include complete overhaul, renovation and many upgrades of capabilities.

The ship, during its service, operated one fixed wing aircraft British made Sea Harriers and three helicopters — Anti Submarine aircraft Sea King Mk 42B, Sea King Mk 42 C, Chetak on board. Some other helicopters including Indian made ALH Dhruv have also been operated from it during its service.

INS Viraat proved pivotal in Operation Jupiter in 1989 during the Sri Lankan Peacekeeping operation. Subsequently, the ship was affiliated with the Garhwal Rifles and Scouts of the Indian Army in 1990. The ship was also deployed during 2001-02 operation Operation Parakram following the terror attack on the Indian Parliament. She has also played a major role in calibrating the flying activities from the carrier, which proved to be of great help at the time of induction of INS Vikramaditya (previously Admiral Gorshkov), which is currently the sole aircraft carrier operated by Indian Navy. Viraat's displacement, the indirectly measured weight of the ship, was 28,700 tonnes compared to Vikramaditya's 45,500 tonnes.

At the time of its decommissioning in March 2017, the Navy had said, "Under the Indian Flag, the ship has clocked more than 22,622 flying hours by various aircraft and spent nearly 2252 days at sea sailing across 5,88,287 nautical miles or 10,94,215 kilometers. This implies that Viraat has spent seven years at sea, circumnavigating the globe 27 times. Since her inception, she has had a total of 80,715 hours of boilers running. 'Mother', as she was fondly referred to in the Navy, had been commanded by 22 captains since 1987. She was the Flagship of the Navy since her inception. Around 40 Flag officers including five Chiefs of Naval Staff were raised and groomed in her lap."

Viraat's decommissioning and what lies ahead

With mounting operating costs and age, the Navy announced the decision to decommission Viraat in early 2015. After the requisite pre-decommissioning processes at Kochi Shipyard,

the 'Grand Old Lady' was decommissioned on March 6 in 2017, in a ceremony held at Mumbai.

There were plans and even some movements by the state governments of Maharashtra and Andhra Pradesh governments at the time towards preserving the historic carrier and converting it into a museum. There were also crowdfunding efforts towards the same goal, which were unsuccessful. However, after not receiving any concrete bid towards preservation, the Centre decided to auction the ship to be broken and sold as scrap.

Since 2017, India has been operating a single carrier — INS Vikramaditya — as against the minimum essential operational requirement of having two Carrier Battle Groups — which are formations of ships and submarines with Aircraft Carriers at the lead role.

Indigenous Aircraft Carrier on the anvil

India's first Indigenous Aircraft Carrier (IAC-I) INS Vikrant which has a displacement comparable to Vikramaditya is under construction at Kochi Shipyard and is soon expected to undergo sea trials.

The Navy's Maritime Capability Perspective Plan looks at three carriers in total considering one of them requiring to be under refit.

This requirement becomes crucial considering China's aim to gain control over the Indian Ocean Region and sea routes which are key for world trade. PLA Navy's present strength is of two carriers with plans to double it by the end of 2020s.

Source: The Indian Express

3. Internet connection in the rain

Relevant for GS Prelims & Mains Paper III; Science & Technology

As the monsoon begins to officially retreat, many in India will be looking forward to some relief from a phenomenon that they have come to expect whenever it rains: Internet connections become unstable, and cell phone networks deteriorate. Why does this happen?
In the 1860s, the Scottish physicist James Maxwell predicted the existence of a new kind of 'electromagnetic' waves that travel at a speed of ~300 million metres/second. A couple of decades on, Heinrich Hertz experimentally verified Maxwell's theory and, in 1895, Sir Jagadish Chandra Bose demonstrated for the first time wireless communication with electromagnetic waves over a distance of 23 metres in Calcutta, establishing the foundation of a modern system of communication.

To understand how we communicate or send messages today via the Internet across continents – and then how this communication is disrupted – we first need to understand the fundamental nature of electrical force.

Electrons in communication

There are three fundamental building blocks, or 'Lego bricks' that nature uses to make all matter – two kinds of quarks, and the electron. For our purposes, we need to discuss only the electron.

All matter consists of many, many electrons. Like the other Lego bricks, electrons have a property called mass, which indicates how strongly the gravitational force acts on them, and is therefore directly related to their weight.

Another property of electrons called electric charge indicates how strongly the electrical force acts on them. The electron's charge also decides the strength of the electrical force they apply on other objects that, too, have a charge (like the two other Lego bricks, for instance). This force, like the force of gravity, acts at a distance. So, two electrons separated by a long distance apply electrical forces without ever making contact. Since an electron is charged, the space around it is filled with an electric field.

If you imagine that an electron lives in an ocean it creates, you can, if you wiggle the electron, initiate a wave in this ocean. This is similar to throwing a stone in a still pond, which creates ripples that travel away from it. When this wave passes by another electron that happens to be in our electron's ocean, this other electron will bounce up and down – as you might when an ocean wave washes over you.

This is how we communicate. An electromagnetic wave is initiated at some location by wiggling electrons, which then washes over electrons at some distant location. The word 'signal' specifically means electromagnetic waves. The electrons in your eyes can also respond to these waves, provided the wavelength – the distance between peaks in the wave – is within a specific range. In this particular wavelength range, electromagnetic waves are visible to us; they are light! The most basic form of long-distance communication – flashing a bright light and using Morse Code – uses the transfer of electromagnetic waves from one location to another.

Optical fibres & the rain

These concepts equip us to understand the only mode of communication that matters anymore, the Internet. This is essentially a vast network of computers across the world that can transfer electromagnetic waves to each other, and therefore communicate.

There are two primary ways to transport waves — by optical fibre, and cellular towers (via satellite link). Optical fibres are long, thin glass rods of thickness less than human hair. Light is confined in the rod due to the phenomenon of total internal reflection. When light travelling from a denser medium to a less dense one (for instance, from glass to air) hits the surface between two transparent media at a critical angle, it is entirely reflected back into the denser medium. This way, electromagnetic waves are trapped inside the fibre, and travel down the length of it. Splicing or joining hundreds of thousands of kilometres of

fibres together, and burying them underground or undersea, allows communication across the globe. The electromagnetic waves used for communication (infrared waves) are generated by lasers, and have a slightly longer wavelength than visible light, so they are invisible to us.

The optical fibre network in India was initiated by VSNL, and is currently owned and developed by Tata Communications. All Internet Service Providers connect in some way to this 'Tier 1' network, and eventually to your home. These secondary connections are not necessarily optical, and involve several electrical components. (Note: Electrical cables transfer electrons rather than electromagnetic waves, but that's a topic for another day!) Electrical components are also required along the entire optical fibre network to amplify and switch the light on and off for digital communications.

Monsoon rain might interrupt this subterranean network in many ways. The combination of water seeping into the ground and landslides can damage the various electric components in the network, or cause physical damage at locations where the fibres are spliced together.

There can also be similar damage, or power outages at intermediate locations, where your local service provider connects to the Tier 1 optical network, and then to your home. The fibre has a core, cladding, and plastic protective coating and is held in a watertight protective enclosure, so the signal transmission is least affected by rain. The coating is removed while joining two fibres. At locations where fibres begin or end (known as 'splice boxes') there is a possibility of fibres being exposed to rain water, causing a reduction in signal strength. Additionally, water molecules may find a way via micro cracks in the fibres, eventually affecting the life of the fibre.

Cell phones in the rain

When your cell phone is connected to the Internet, electromagnetic waves travel from your device through the air to a cell tower. You could think of this as a giant antenna. The electrons in this antenna bounce up and down. When they do this, they produce their own electromagnetic waves, which travel to a central location managed by your service provider. At this location, the waves get 'processed' in some way, and are sent either to the optical fibre network (the Internet) or another phone (phone call, text message, etc.).

There are various kinds of processing that might occur. For instance, one important difference between the electromagnetic waves emitted from your phone and those from the laser that travels in the optical fibre is the wavelength. The radio waves emitted from, and received by your phone, are approximately a metre long. In contrast, the infrared waves that travel through the fibre network are approximately a millionth of a metre in length. Note that neither of these wavelengths affects the electrons in your eye, since they are not visible wavelengths (around 500 billionths of a metre long).

Somehow, the message from your phone needs to be 'translated' from radio to infrared waves. If you were using Morse Code, you might imagine that the radio waves detected by your provider flash on and off, containing your message. The laser managed by your provider needs to be made to produce the same sequence of flashes that travel through the fibre network.

The reasons for interruption in this communication chain during the monsoon are different compared to the optical fibre network.

The radio waves travelling between your phone and the cell tower can make electrons in water drops wiggle, interrupting communication. The size and number of rain drops reduce the signal strength due to the scattering of the radio waves, while water vapour in the atmosphere absorbs the radio waves, converting them to heat (like in your microwave oven).

Further, heavy monsoon rain, wind, and lightning can cause damage to cell towers, resulting in interruptions in the area they cover. Note that this is also why you find yourself without any signal in some areas – there is no cell tower nearby. But perhaps the most common cause of interruption is 'jamming'. When too many people try to communicate through signal processing locations at the same time, some messages get lost.

Getting that favourite meme from its author's computer to yours is, therefore, an effort that involves electromagnetic waves travelling many thousands of kilometres. It is an extraordinary achievement of modern science, and it would seem amazing that it works at all! Perhaps this can ease your frustration somewhat the next time your Internet goes off during a rainstorm!

Source: The Indian Express

4. In labour codes, what changes for workers, hirers?

Relevant for GS Prelims & Mains Paper II; Polity & Governance

The Lok Sabha Tuesday cleared new versions of three labour codes — Industrial Relations Code Bill, 2020, Code on Social Security Bill, 2020 and Occupational Safety, Health and Working Conditions Code Bill, 2020.

While the government proposes to increase the ambit of social security by including gig workers and inter-state migrant workers, it has also proposed measures that will provide greater flexibility to employers to hire and fire workers without government permission.

What are the key proposals?

In the Industrial Relations Code Bill, 2020, the government has proposed to introduce more conditions restricting the rights of workers to strike, alongside an increase in the threshold relating to layoffs and retrenchment in industrial establishments having 300 workers from 100 workers or more at present — steps that are likely to provide more flexibility to employers for hiring and firing workers without government permission.

The Industrial Relations Code has raised the threshold for requirement of a standing order — rules of conduct for workmen employed in industrial establishments — to over 300 workers. This implies industrial establishments with up to 300 workers will not be required to furnish a standing order, a move which experts say would enable companies to introduce arbitrary service conditions for workers.

The Standing Committee on Labour, in its report submitted in April, had also suggested hiking the threshold to 300 workers, noting that some state governments like Rajasthan had already increased the threshold and which, according to the Labour Ministry, has resulted in "an increase in employment and decrease in retrenchment". "The Committee desires that the threshold be increased accordingly in the Code itself and the words "as may be notified by the Appropriate Government" be removed because reform of labour laws through the executive route is undesirable and should be avoided to the extent possible," it had said.

The Industrial Relations Code states that the provision for standing order will be applicable for "every industrial establishment wherein three hundred or more than three hundred workers, are employed, or were employed on any day of the preceding twelve months".

What are the concerns raised over the new labour codes?

Analysts say the increase in the threshold for standing orders will water down the labour rights for workers in small establishments having less than 300 workers. "The increase in the threshold for standing orders from the existing 100 to 300 is uncalled for and shows the government is very keen to give tremendous amounts of flexibility to the employers in terms of hiring and firing…dismissal for alleged misconduct and retrenchment for economic reasons will be completely possible for all the industrial establishments employing less than 300 workers. This is complete demolition of employment security," XLRI professor and labour economist KR Shyam Sundar said.

The Industrial Relations Code also introduces new conditions for carrying out a legal strike. The time period for arbitration proceedings has been included in the conditions for workers before going on a legal strike as against only the time for conciliation at present.
For instance, the IR Code proposes that no person employed in an industrial establishment shall go on strike without a 60-day notice and during the pendency of proceedings before a Tribunal or a National Industrial Tribunal and sixty days after the conclusion of such proceedings. Thus, elongating the legally permissible time frame before the workers can go on a legal strike, making a legal strike well-nigh impossible.

The IR code has expanded to cover all industrial establishments for the required notice period and other conditions for a legal strike. The Standing Committee on Labour had recommended against the expansion of the required notice period for strike beyond the public utility services like water, electricity, natural gas, telephone and other essential services.

At present, a person employed in a public utility service cannot go on strike unless he gives notice for a strike within six weeks before going on strike or within fourteen days of giving such notice, which the IR Code now proposes to apply for all the industrial establishments.

What are the other proposals for workers?

The IR Code Bill has also proposed a worker re-skilling fund, though the contributions for the fund are only detailed from the employer of an industrial establishment amounting to fifteen days wages last drawn by the worker immediately before the retrenchment along with the contribution from such other sources. The mention of 'other sources' for funding the re-skilling fund, experts said, is vague.

The other two codes have also proposed changes for expanding social security and inclusion of inter-state migrant workers in the definition of workers. The Social Security Code proposes a National Social Security Board which shall recommend to the central government for formulating suitable schemes for different sections of unorganised workers, gig workers and platform workers. Also, aggregators employing gig workers will have to contribute 1-2 per cent of their annual turnover for social security, with the total contribution not exceeding 5 per cent of the amount payable by the aggregator to gig and platform workers.

The Occupational Safety, Health and Working Conditions Code has defined inter-state migrant workers as the worker who has come on his own from one state and obtained employment in another state, earning up to Rs 18,000 a month. The proposed definition makes a distinction from the present definition of only contractual employment.

The Code, however, has dropped the earlier provision for temporary accommodation for workers near the worksites. It has though proposed a journey allowance — a lump sum amount of fare to be paid by the employer for to and fro journey of the worker to his/her native place from the place of his/her employment.

Source: The Indian Express

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