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DREAMIAS

INTERNATIONAL

THE ENEMY OF THE DEEP STATE

WikiLeaks' journey began in 2006 when the website was first established and its domain name registered by Julian Assange

In 2010, the website released a video that showed U.S. military helicopters firing indiscrimi-nately at a crowd in Iraq, killing civilians and two Reuters reporters

In 2016, the release of Hillary Clinton's aide John Podesta's emails drew flak from activists, who likened these leaks to an effort to intervene in the 2016 elections

The slow but sure process of extraditing Julian Assange, co-founder of the whistleblowing website WikiLeaks from the U.K. to the U.S. took a firm step on Friday when the British Home Secretary, Priti Patel, gave the go-ahead to the move. WikiLeaks promptly released a statement promising another legal battle to appeal the decision.

Mr. Assange is wanted in the U.S. for criminal charges, including breaking the Espionage Act for WikiLeaks' actions of leaking thousands of secret U.S. files in 2010. He could face punishment ranging up to 175 years in prison for violations of the Espionage Act. On the same day, the Assange Defense Committee, a U.S.-based coalition of media rights and human rights groups, released a statement through its co-chairs, which include the renowned linguist and public intellectual Noam Chomsky and former U.S. military analyst and whistleblower Daniel Ellsberg, that said the decision "was a sad day for western democracy". It added: "U.S. government argues that its venerated Constitution does not protect journalism the government dislikes and that publishing truthful information in public interest is a subversive, criminal act. This argument is a threat not only to journalism, but to democracy itself."

These were strong words in favour of a man who has been held in the U.K.'s Belmarsh prison ever since the Ecuador Embassy revoked his asylum and citizenship after he stayed for seven years on its premises in London. Mr. Assange initially underwent imprisonment for bail violations during his stay in the Ecuador Embassy and got a reprieve from a U.K district judge, Vanessa Baraitser, in January 2021, when she ruled that he could not be extradited to the U.S. because of concerns about his mental health and the possibility of suicide in a U.S prison with strict incarceration conditions.

U.S. prosecutors later filed an appeal, and the British High Court, this time in December 2021, ruled in favour of the U.S. following the Joe Biden administration's assurances on the terms of Mr. Assange's possible incarceration — that it would not hold him at the highest security prison facility (ADX Florence in Colorado, which houses terrorists, drug traffickers, and high-profile criminals) and that if he were convicted, he could serve his sentence in his native Australia if he requested it. Mr. Assange moved the British Supreme Court against the verdict, but on March 14, the Court refused permission to appeal.

Mr. Assange's travails have mirrored those of the WikiLeaks organisation itself. In February 2022, on WikiLeaks' website, the submission system for files (by whistleblowers, 'hacktivists', etc.) and its email server went completely offline, months after the organisation's secure chat services had stopped working in October 2021. This was no surprise.

The organisation has been inevitably linked to its co-founder, who still remains a director. Ever since his incarceration, the release of whistleblower documents have only been few and far between and much less in consequence compared to what the organisation managed to achieve between 2010 and 2019.

Origins and impact

WikiLeaks' journey began in 2006 when the website was first established and its domain name registered by Mr. Assange. While initially the website began as a disclosure portal on the lines of the Wikipedia model, with anonymous submissions being put up and edited by volunteers, it soon became a repository of anonymously sourced material. News and classified information could be uploaded on it using the anonymity software Tor, which protects the uploader's identity from being eavesdropped on any network and even by WikiLeaks itself.

Internal dissension and wrangling between WikiLeaks employees had resulted in problems with the submission system, which resulted in its suspension in 2010, but WikiLeaks relaunched the site in 2015.

One of the earliest revelations by Wikileaks was on how the U.S. government had been deploying practices at the Guantanamo Bay facility holding terror suspects, that were in violation of the Geneva Convention protocols.

Some of the most consequential leaks during the period when the site's anonymised submission system still remained active included the millions of classified files from the U.S. Defence Department on the Iraq and the Afghan invasions, besides lakhs of State Department communiques — both were released by former U.S. soldier Chelsea (then Bradley) Manning. These leaks began with a 39-minute video released on April 5, 2010 that showed gun-sight footage of two U.S. AH-64 Apache helicopters in action during the Iraqi insurgency against the U.S. occupation in 2007. The video showed the helicopter crew firing indiscriminately and killing civilians and two Reuters war correspondents. For nearly three years, Reuters had sought access to this video via the U.S. Freedom of Information Act, but had failed.

WikiLeaks promptly released the war logs, which were published by a host of media organisations and exposed human rights abuses by occupation forces, besides the increased fatality counts in Iraq. The war logs' release was followed by the publication of several news stories, including by The Hindu, based on thousands of leaked diplomatic cables that were also released by Ms. Manning, leading to significant public exposure of the ways, lifestyles and attitudes of the elite in various countries.

The WikiLeaks model — using cryptographic tools to protect sources and allowing for anonymous "leaks" of sensitive information (that could also be in public interest) to be published — suddenly brought forth a new model of extensive investigative journalism into areas that were relatively shielded from the public eye, such as the functioning of the deep state in democratic societies and the operation of power agencies in autocracies.

While initially the cables were released to five newspapers that undertook the exercise of redacting sensitive information before reporting on them and published them over a year from late 2010 to 2011, the leak of the encryption key of the full cache of files (of what was then termed "Cablegate"), resulted in the release of unredacted material, an action that was condemned by many media outlets.

The lack of an anonymised submission system between 2010 and 2015 did not deter it from publishing other files that were obtained from other hackers such as the Stratfor email leaks.

Later, WikiLeaks also published then presidential candidate (and former Secretary of State) Hillary Clinton's aide John Podesta's emails before the 2016 presidential elections. This action invited severe critique of WikiLeaks from activists and media personnel, who likened these leaks to an effort to intervene in the 2016 elections with Mr. Assange having been quoted as saying he wanted to "harm" HIllary Clinton's chances of winning the presidency and accusing WikiLeaks of obtaining this information from Russian intelligence agency hackers, something Wikileaks denied.

Later, it emerged that someone from WikiLeaks had conversed with Clinton's presidential opponent, Donald Trump's son, Donald Trump Jr., seeking to promote the leaks and even asking for favours for Mr. Assange in Twitter DM conversations.

Probe in the U.S.

Wikileaks' releases, meanwhile, resulted in reprisals from the U.S. government. The Barack Obama administration began investigation of the Manning leaks, and Ms. Manning was convicted by court martial in July 2013 for violating the Espionage Act and underwent rigorous imprisonment before her sentence was commuted in January 2017 by the President. However, the administration concluded that it would not pursue criminal charges against Mr. Assange and WikiLeaks.

The U.S. Justice Department under former President Donald Trump, however, charged Mr. Assange with collaborating in a conspiracy with Ms. Manning to crack a password on a Defense Department network to publish classified documents and communications on WikiLeaks in a sealed indictment in April 2017. These charges were unsealed in 2019.

Later, the Trump administration further charged Mr. Assange with violating the Espionage Act of 1917 — he was indicted on 17 new charges related to the Act at the U.S. District Court for the Eastern District of Virginia. In June 2020, the charges were further expanded for conspiracy with hacker groups. The Biden administration has made no attempt to reverse these charges.

How the legal case against Mr. Assange will play out will determine the future of investigative journalism of the kind that WikiLeaks represents and will also serve as a litmus test for free expression laws that allow for unhindered journalism in countries like the U.S.. While the organisation is now a shell of what it was a decade ago, its ability to harness the act of whistleblowing to shine a light on the inner workings of those in power transformed investigative journalism, even as its decisions to intervene in the U.S. polity complicated its legacy.

BIPARTISAN SUPPORT FOR GUN CONTROL LEGISLATION IS A HISTORIC MOMENT IN US POLITICS

The bipartisan support in the US Senate for the passage of the most significant gun control legislation in three decades is historic by any measure. As many as 15 Republican senators voted to override the filibuster and pass the law in the 100-member Senate. The bill is likely to sail through Congress, where the Democrats currently have a majority. Just a month after 19 students and two teachers were killed in a shooting in Uvalde, Texas, the law provides for stricter background and mental health checks and encourages states to prevent people considered as threats from possessing firearms. Given how polarising an issue the right to bear arms is in the US, the law represents a win for the Biden Administration. Yet, on the same day as the deadlock was overcome in the Senate, a verdict by the US Supreme Court and political responses to the law show that the issue is far from being laid to rest.

By a majority of 6-3, the Supreme Court struck down New York's "proper cause" requirement. Proper cause rules limit who can carry a gun in public spaces — in essence, to obtain a licence, one must demonstrate an actual need of a gun for self-defence. Versions of "proper cause", in fact, are part of gun laws in many countries, including India. The court's decision was split along political lines, with liberal judges forming the minority, dissenting opinion and conservatives upholding the absolute right to bear arms. On the other hand, the bill passed by the Senate is being called out as weak by many Democrats for failing to ban assault rifles and other military-grade weapons. That many on the right are still wary of being seen as "anti-Second Amendment" is illustrated by the fact that of the 15 Republicans that voted for the law, only three are up for re-election in November.

One of Joe Biden's assets, when he was a presidential candidate, was his record of having built bipartisan consensus in his long years as a senior legislator. The passage of the gun control law will certainly strengthen that reputation. Yet, the debate around the unqualified right to bear arms has once again underlined the divides in the US political system, including in the judiciary. Over three-fourths of all homicides in the US are a result of gun violence. The public outcry after Uvalde may have forced some concessions and compromise from the Republicans. But whether this is a political success that can be built on will likely be guided by the results of the mid-term elections, more than the compelling imperative of public safety.

WHAT IS JUNETEENTH, WHY IS IT A SIGNIFICANT DAY IN US HISTORY?

In 2021, US President Joe Biden signed a law to commemorate June 19 or Juneteenth as a federal holiday to commemorate the end of slavery after the American civil war (1861-65). But so far, only 18 US states have passed laws to make funds available to make it a paid state holiday.

Those opposing such a bill in states have been citing the cost involved in giving workers another day off as an argument against it.

While over 30 states in the US continue to hold out against following suit, Juneteenth completes a year as the first new federal holiday created in almost four decades.

What is Juneteenth?

Juneteenth– the portmanteau of June and nineteenth– is the oldest nationally celebrated commemoration of the ending of slavery in the US, observed on June 19 every year. It is also known as Emancipation Day or Juneteenth Independence Day.

On January 1, 1863, then-president Abraham Lincoln issued the Emancipation Proclamation, which declared that "all persons held as slaves" within the states in rebellion "are, and henceforward shall be free."

Even so, more than two years after Lincoln's proclamation, many slave owners continued to hold their slaves captive by hiding this information from them and keeping them for one more harvest season, as per the Congressional Research Service (CRS).

On June 19, 1865, two months after the Civil War had ended, Major General Gordon Granger, from the victorious Union side, arrived in Galveston, Texas, and issued an order to free the last enslaved people on US soil.

What is its significance?

Since Granger's announcement, Juneteenth has become a largely symbolic date representing freedom for African Americans.

What happened after Biden signed the federal law?

All 50 US states have proclamations in place to recognise and celebrate Juneteenth. But it is not a universal American holiday just yet. Texas was the first state to make it a paid holiday in 1980. Eight other states had done the same even before Biden signed the federal law in 2021. In 2022, nine more states joined the list making a total 18 US states that now give a paid holiday on the day to all state employees. But the opponents of the bill in states, according to a New York Times report, have cited the cost associated with making it a paid holiday as one of the reasons, apart from saying that not many people know about the day to make it a holiday.

A MAROONED MACRON

The story so far: President Emmanuel Macron has lost his majority in the National Assembly, the lower house of the French Parliament. In the legislative elections, which concluded on June 19, Ensemble, the centrist coalition led by Mr. Macron, could muster only 245 seats in the 577-member assembly. The number needed for an absolute majority is 289. At the same time, NUPES, the left-wing alliance led by Jean-Luc Melenchon, and the far-right National Rally of Marine Le Pen made substantial gains, finishing with 131 and 89 seats respectively. The mainstream conservatives, Les Republicains, managed to get 61 seats.

What is the significance of France's legislative elections?

Although the President's office is the most powerful of political posts in France, with scope to govern by decree, a majority in the National Assembly is still needed for passing new laws or amending the Constitution. In the 2017 legislative elections, Mr. Macron's party and his allies won an absolute majority of 350 seats, which meant he could push through whatever legislation he wanted in line with his policy goals. But this time, short of the majority needed to control the Assembly, he may be forced to make political compromises in order to cobble up the numbers.

Apart from having a say on key bills, members of the National Assembly, or 'deputies', also have the power to pose tough questions to cabinet Ministers, organise hearings, and set up enquiry committees.

How do the legislative elections work?

The legislative polls are held in two rounds, with one elected deputy for each of the 577 constituencies. The top two candidates with the most votes in the first round face off in the second round to determine the winner. But if a candidate wins more than 50% of the vote in the first round — which is rare — then she is declared elected without the need for a second round. This year, the first and second rounds were held on the 12th and 19th of June respectively. After the first round, the centrist Ensemble coalition and the leftwing NUPES were neck-and-neck with around 25% of the votes each, while the National Rally got 19% and Les Republicains, 10%.

Why did President Macron lose his majority, and which parties have gained at his expense?

Mr. Macron's pro-business policies, rising inequality, and growing discontent over inflation have been steadily eroding his support base, especially among left-leaning voters. One major factor in his comfortable win in the Presidential elections was the keenly felt political imperative to keep the far-right Marine Le Pen out of the Elysee Palace. It delivered to Macron the votes of the left parties in addition to his own. But this factor was not in play in the legislative elections where the firebrand leftist Mr. Melenchon strung together a robust alliance of all the left and green parties and ensured they were not contesting against each other. As a result, the leftwing coalition increased its presence in the National Assembly from 45 to 131. Another big gainer from the disenchantment with Macron's policies — especially his forays into pension reform — seems to be the far-right Ms. Le Pen, whose party increased its tally more than ten-fold, from eight to 89.

What are the ideological differences between Mr. Macron and his main opposition in the National Assembly?

President Macron's main Opposition in Parliament would be the leftwing NUPES coalition led by Mr. Melenchon. NUPES, or New Social and Ecological People's Union, includes communists, socialists, Greens and different shades of leftwing groups that do not necessarily agree on every issue. Mr. Macron, a former investment banker, followed classic neoliberal policies in his first term as President — he lowered corporate tax rates from 33.3% to 25%, ushered in labour reforms that cut employment benefits and enabled easier lay-offs, and did away with the wealth tax. He now wants to raise the retirement age — a move strongly opposed by the working classes and the vast bureaucracy. NUPES, on the other hand, has an agenda focused on social and climate justice. It is calling for the retirement age to be lowered from 62 to 60, the return of the wealth tax, and for the minimum wage to be hiked by 15%. While Mr. Macron already has — in the aftermath of the inflation fuelled by factors related to the Ukraine war — capped fuel and gas prices, NUPES wants a cap on the prices of all essentials. With regard to the EU, Mr. Melenchon has been speaking of France unilaterally disregarding EU treaties that interfere with its national policies, but he doesn't enjoy the support of all his coalition partners on this issue.

Lacking a majority in Parliament, what are Macron's options?

Political observers speculate that he might try to regain control of the Assembly by seeking an alliance with a broadly like-minded rival, such as Les Republicains, whose 61 seats would be enough to secure a majority. The other alternative would be to negotiate and build consensus with select parties on specific issues in order to get key legislation passed.

What does the reduced majority mean in terms of France's position with regard to the Ukraine war?

It is unlikely to matter in terms of France's foreign policy.

However, the indirect political pressure on the Macron government on account of the war's impact on the domestic economy, especially inflation, is bound to go up with a higher representation of the Opposition in the Assembly and its enhanced power to block legislations.

WHY ISRAEL IS HEADED TO ITS 5TH ELECTION IN 3 YEARS, AND WHAT NOW

Israel's fragile and short-lived coalition government announced on Monday that it would submit a bill next week to dissolve Parliament, setting the stage for a fifth election in three years, and the possible return to power of the country's longest-serving Prime Minister, Benjamin Netanyahu.

Israel's four previous elections between 2019 and 2021 were basically plebiscites on whether Netanyahu could rule while facing trial on serious corruption charges. Netanyahu, who was indicted in November 2019, has denied the allegations.

Once the bill is passed, Prime Minister Naftali Bennett, leader of the right-wing political alliance Yamina, will step down, and Foreign Minister Yair Lapid, leader of the liberal centrist Yesh Atid party, will become interim PM until a new government is formed, according to the ruling coalition's power-sharing agreement. Elections will take place in the fall, according to commentators.

The ideologically divided coalition — the most diverse in Israel's history — lost its thin majority in April following a defection by a lawmaker of Bennett's Yamina. The government faced its biggest setback on June 6, after the opposition, along with rebel coalition members, helped defeat a bill intended to renew legal protections for Israeli settlers in the occupied West Bank.

Electoral process

Israel does not have a written constitution, and according to its Basic Laws, elections to Parliament are held every four years, unless the Knesset decides by an ordinary majority to dissolve and trigger early elections.

Unlike in India, Israeli voters vote for parties, not specific candidates. All Israeli citizens aged 18 and older are eligible to vote. Palestinians living on Israeli occupied territory cannot vote.

There are 120 seats in the Knesset, and to form the government, a party needs at least 61. However, no party has ever won a majority on its own, and ruling alliances comprising 8-12 parties have been the norm. These parties represent interests of specific groups, and the constituents of a coalition may hold positions that are contradictory or competing.

After the members of the Knesset have been elected, Israel's President chooses the candidate that he believes has the best chance of forming a coalition. The candidate, often the leader of the largest party, is given 28 days, with a possible extension of a fortnight, to form the government.

EL SALVADOR'S BITCOIN BET

The story so far: The crash in the price of Bitcoin and other cryptocurrencies has put El Salvador's government in trouble. The Central American country, led by President Nayib Bukele who is a self-proclaimed fan of cryptocurrencies, had adopted Bitcoin as an official currency in September last year. The crash in the price of Bitcoin has raised concerns over the government's ability to repay its debt.

What is the problem in El Salvador?

The crash in the price of Bitcoin from around $69,000 in November last year to around $20,000 this week has caused losses to investors around the world. According to some estimates, the average cryptocurrency investor is deep in losses after the significant correction in the prices of cryptocurrencies. The crash in Bitcoin's price has not spared the government of El Salvador either. President Bukele has been using taxpayer's money to bet on Bitcoin. In fact, a lot of times when the price of Bitcoin crashed steeply, he had gone on popular social media site Twitter to announce to the world that he was 'buying the dip' (this refers to purchasing an asset after it has dropped in price). Even during the current crash, he has plunged into the market to buy Bitcoin and has urged citizens of El Salvador to be patient. It is said that the El Salvador government's investment of over $100 million in Bitcoin has lost more than half of its value till date due to the crash.

Why did El Salvador adopt Bitcoin as an official currency?

In 2001, El Salvador had adopted the U.S. dollar as its official currency. After Bitcoin was adopted as an official currency in September last year, both Bitcoin and the U.S. dollar have been used as official currencies. The El Salvador government has been trying to encourage citizens to primarily use Bitcoin for their daily transactions. It even came out with a payments wallet named Chivo which gave out for free Bitcoin worth $30 initially to encourage people to use Bitcoin in transactions.

Analysts believe that the decision to adopt Bitcoin as an official currency may have to do with the El Salvador government's inability to borrow in U.S. dollars. El Salvador's public debt has risen to over 100% of gross domestic product and its recent attempt to borrow $1 billion using bonds backed by Bitcoin failed. The government's bonds are trading at a steep discount and are classified as junk by investors. President Bukele has already had to rely on financial help from the International Monetary Fund (IMF) and the World Bank to meet his government's spending needs. It should be noted that while the El Salvador government can tax its citizens to meet its need for dollars, it could turn out to be an unpopular move among citizens. Many believe that the President has mismanaged funds received from abroad during the pandemic and this has made international organisations hesitant to lend any more dollars to his government. The IMF had also opposed President Bukele's decision to make Bitcoin an official currency.

Bitcoin offers a chance for the El Salvador government to cut down its reliance on the U.S. dollar to fund its spending. Greater adoption of Bitcoin in El Salvador will allow the government to tax and spend in Bitcoins instead of U.S. dollars. This maybe why the government is making various attempts to encourage the use of Bitcoin over U.S. dollars by its citizens. Mr. Bukele has also set up geothermal plants to power his Bitcoin mining facilities. He can use the mined Bitcoins to directly fund his government's domestic spending if Bitcoin gains greater acceptance in the country. Otherwise, he can exchange his Bitcoin for U.S. dollars and use it to repay debt or even spend it on the domestic economy since the dollar is still the most commonly accepted currency in El Salvador. This is why the fall in the price of Bitcoin is worrying analysts. A crash in Bitcoin's price against the U.S. dollar means that the government will have to sell its Bitcoin for fewer dollars, thus affecting its capacity to repay dollar debt.

How well has Bitcoin done in El Salvador?

Most citizens of El Salvador have been reluctant to adopt Bitcoin as a medium of exchange, that is, as money. Many citizens, it is claimed, registered on the payments wallet Chivo that was pushed by the government simply to sell off their free Bitcoin in exchange for $30. It should be noted that the acceptance of cryptocurrencies in general has been miniscule across the globe. This has been the case despite the fact that the supply of cryptocurrencies is limited by design, which could potentially help them maintain or increase in value over time. One big reason for the low acceptance of cryptocurrencies has been their extreme price volatility, making them an unreliable store of value. People in general are hesitant to accept something as money if they are not fairly sure about its likely value in the future.

PARADIGM SHIFT

The victory of Gustavo Petro, a former guerrilla, in Colombia's presidential election is one of the most decisive shifts in the South American country's modern history. At war with leftist guerrillas for decades until a few years ago, Colombia had never voted a leftist to power in the past. Even when a wave of leftist victories was sweeping across South America in the early 2000s, it remained a fort of centrist and conservative politics. But Mr. Petro, armed with his promises of overhauling the country's economy and governance, broke into this fort and captured power. He won 50.4% votes in Sunday's election against his rival Rodolfo Hernández's 47.3%. A host of factors, including internal political changes and economic challenges, helped him script history. In Colombia, where a decades-long civil war between the state and the Revolutionary Armed Forces of Colombia (FARC) had had a devastating impact on the public psyche, even mainstream leftist politicians had struggled to win popular support. But FARC's decision to lay down arms and join the political mainstream as part of the 2016 peace agreement widened the scope for leftist politics in the country. Mr. Petro was quick to mobilise this newly created momentum with an economic programme that broke from the Bogota consensus. He vowed to "democratise land", renegotiate free trade agreements that were inimical to the interests of Colombian farmers, expand the country's social security measures, tax the rich more and reduce Colombia's reliance on fossil fuel.

In a country where annual inflation is 10%, the youth unemployment rate is 20% and the poverty rate is 40%, Mr. Petro's promises of change helped him strike a chord with voters. Colombia, despite high economic growth, has one of the highest inequality rates in Latin America. While the civil war has come to an end, drug cartels continue to pose serious security challenges. The way ahead is not going to be easy for Mr. Petro. True, he has the presidency, but the Colombian right, which has ruled for decades, has an outsize influence over the state and Congress. Mr. Petro's leftist bloc has only 25 seats in the 188-member lower House. His promise to reduce the country's reliance on fossil fuels and shift to renewable energy could trigger opposition from the powerful oil industry, besides economic impacts. His move to hold talks with the drug cartels and end the drug wars could attract strong opposition from the U.S. Washington would not sit idly if Mr. Petro takes Colombia, the cornerstone of the U.S.'s Latin American policy, towards the left. So, he should brace for challenges emanating not just from his right-wing opponents but also from the world's most powerful country. Mr. Petro, however, should stay focused on the issues at hand and seek to unite the country that has been pulverised by civil conflict, drug wars and economic inequality.

RUSSIA'S GATEWAY TO GLOBAL WATERS

The Treaty of Küçük Kaynarca, signed on July 21, 1774 by the Russian and Ottoman Empires after the 1768-74 war between the two powers was one of the most consequential treaties for the global balance of power in the 18th century — it marked the beginning of the decline of the Ottoman Empire and the arrival of the Russians, under Catherine the Great, as a major power in the Black Sea region. As part of the treaty, Russia got access to the Black Sea through the Kerch and Azov seaports. More important, Russia gained official status as the protector of the Orthodox Christians of the Ottoman Empire, a clear signal of the waning influence of the High Porte, the Ottoman central administration, within imperial territories.

This clause also left the Crimean Khanate, which had declared independence from the Ottomans, dependent on the Russians. In 1783, nine years after the treaty was signed, Prince Grigory Potemkin, a Grand Admiral in the imperial Russian army and a favourite of Empress Catherine, annexed the Crimean Peninsula in the name of protecting its Christians amidst violent clashes between Christians and Crimean Tatars. The annexation gave Russia seamless access to the Black Sea's warm waters, helping its rise as a naval power.

One may find parallels between the 18th century annexation of Crimea by Empress Catherine and the 2014 annexation of the same region by President Vladimir Putin. If Catherine's annexation anchored Russia as a Black Sea power, Mr. Putin's move allowed Russia to retain Sevastopol, which hosts its Black Sea fleet, and turn Crimea into a platform for force projection.

Geo-economic reasons

After the invasion of Ukraine began on February 24, Russia further tightened its hold over the Black Sea. Russia has taken the entire Sea of Azov coast and more port cities in the south and south-east, including Mariupol, Berdyansk and Kherson.

The Black Sea is critical for Russia for geo-economic reasons. Russia's northern ports are in the Arctic Ocean, which restricts its outreach to the world. Its gateway to the global waters is the Black Sea, which opens into the Mediterranean Sea through the Turkey-controlled Bosphorus and Dardanelles Straits.

Currently, Russia's only naval base outside the former Soviet territories is based in Syria's Tartus in the Mediterranean Sea. While Russia sees the Mediterranean as NATO-dominated waters, it has sought to enhance its presence in the region in recent years. So, from a geopolitical point of view, it's imperative for Moscow to retain its hold over the Black Sea to remain an influential naval power. The Black Sea is also a vital economic artery for Russia to export its hydrocarbons and grains to Turkey and Asian markets.

During the Soviet period, Russia had dominated the Black Sea, which was then dubbed by many the 'Soviet Lake'. Ukraine and Georgia were Soviet republics. Bulgaria and Romania, two other Black Sea basin states, were part of the Soviet-led Eastern bloc. The only country that was out of the Soviet sphere in the Black Sea region during the Cold War was Turkey, a NATO member. Despite Turkey's control over Bosphorus and Dardanelles Straits, the 1936 Montreux Convention ensures that Russia and other Black Sea countries get access to the straits so that they can seamlessly move both commercial and military vessels in and out of the waters. (The Convention bans non-Black Sea countries' aircraft carriers and submarines from entering the waters.)

But the balance of power in the Black Sea would shift in favour of NATO after the disintegration of the Soviet Union. Bulgaria and Romania became NATO members in 2004. Ukraine and Georgia were offered membership in 2008. If they had also joined NATO, Russia would have faced an arc of NATO coast in its gateway to the global waters. But in 2008, Russia made a military intervention in Georgia, practically ending the country's NATO dream. And in 2014, by annexing Crimea, Russia did not only derail Ukraine's NATO plans, but also reasserted its hold over its southern waters. Now, with more territories under its control as the invasion grinds on, Russia is seeking to rewrite the balance of power in the Black Sea to its favour through force.

TUNISIANS OPPOSE CONSTITUTION REFERENDUM

Thousands of protesters took to the streets of Tunis on Saturday in opposition to a referendum on a new Constitution called by President Kais Saied that would cement his hold on power.

The protest led by Abir Moussi, leader of the Free Constitutional Party, reflected growing opposition to Mr. Saied since he seized executive power last year, dissolving Parliament and ruling by decree in a move opponents called a coup. Thousands marched from Bab Souika Square in the capital towards Kasbah Square, waving Tunisian flags.

Mr. Saied is seeking to overhaul the Constitution to give the presidency more powers, against the backdrop of a tanking economy and fears of a public finance crisis.

He intends to put the new Constitution to a referendum on July 25.

"Do not impose your referendum on us. We do not recognise your referendum that will be fraudulent," a woman among the protesters said.

Mr. Saied has appointed a new electoral commission, casting doubts over the credibility of any vote.

The President has also appointed a temporary judicial council and sacked dozens of judges.

His supporters say Mr. Saied is standing up to elite forces whose bungling and corruption have condemned Tunisia to a decade of political paralysis and economic stagnation.

However Tunisia's main political parties have said they will boycott the referendum, and the powerful UGTT labour union has refused to take part in talks on the new Constitution.

IN SRI LANKA, ON 21ST AMENDMENT, POLITICAL CONSENSUS MAY BE ELUSIVE AMID ECONOMIC TURMOIL

A project for structural political reform may seem like the least urgent matter on the "to do" list of the Sri Lankan leadership at a time of food and fuel shortages and economic chaos which is fast turning into a humanitarian crisis. Yet there may be no better time for such a project, especially if it addresses the demand on the street that President Gotabaya Rajapaksa must go, and promises to clean up governance. The objective of the 21st Amendment, the draft bill for which was cleared by Prime Minister Ranil Wickremesinghe's cabinet earlier this week for tabling in Parliament, is to shear the presidency of much of its executive powers. It would place more powers with the prime minister and make the government responsible to Parliament. With all power no longer concentrated in the hands of one individual in the system, it could make for more responsible decision-making on the economy. But it is far from clear if the bill, which has to be passed in Parliament by two-thirds of the members, enjoys that kind of support.

The 21st Amendment is said to hew closely to the provisions of the 19th Amendment, passed in 2015 in the months after Mahinda Rajapaksa's bid for a third term as president ended in defeat. After a decade of authoritarian Rajapaksa rule, the 19th Amendment held out the promise of good and responsible governance by the team of President Maithripala Sirisena and Prime Minister Wickremesinghe. But with the government's spectacular collapse under the weight of its own contradictions, it was only a matter of time before the Rajapaksas returned to power. One of their first acts was to rush in the 20th amendment, which reversed almost entirely the provisions of the 19th amendment, including those that ensured independent appointments to commissions for elections, public service, police, finance, human rights, procurement.

While the new Ranil Wickremesinghe government has called for political consensus on the 21st amendment, it is not only President Rajapaksa who is loath to give up the Executive Presidency. The Sri Lanka Podujana Party, which cushions Wickremesinghe in Parliament, may not back the amendment. The youngest of the senior Rajapaksas, former finance minister Basil Rajapaksa, nurses presidential ambition, but the 21st Amendment would eliminate him on grounds of his dual citizenship. Even the opposition Samagi Jana Balawegaya, whose leader Sajith Premadasa wants the presidency abolished, may not back the amendment as he believes it does not go far enough. If the bill fails to go through, it can only create more political acrimony and distract from the task of economic repair.

PAKISTAN'S ECONOMIC MUDDLING AND THE IMF CHALLENGE

The Pakistani rupee (PKR) has been falling continuously; from 150 in April 2021 to 213 against the dollar on 21 June, an all-time low. Pakistan's foreign exchange reserves have been depleting during the last one year. According to State Bank of Pakistan data, from $17.2 billion in June 2021, the net reserves with the SBP have come down to $8.9 billion in June 2022.

The new government has already increased the fuel price — in late May and early June. Besides, the new budget has proposed resuming the petroleum development levy. This would mean increased oil and electricity prices, which has the potential to bring people to the streets. Earlier this month, citing "heightened external vulnerability risk" and the "ability to secure additional external financing," the rating agency Moody's downgraded Pakistan's outlook to negative.

The government-International Monetary Fund (IMF) talks have remained complicated.

Will the IMF bail out Pakistan?

The immediate future of Pakistan's economy would depend on IMF resuming its support. Despite an intense discussion between the two, there has not been a breakthrough until now. Pakistan's relationship with the IMF has remained complicated. Though Islamabad has been negotiating with the IMF repeatedly, there has been an economic nationalism, mostly jingoistic, against approaching the IMF in recent years. Imran Khan, the former Prime Minister made statements and fuelled the sentiments against the IMF. After becoming the PM in 2018, he preferred approaching friendly countries (China and Saudi Arabia) and avoiding the IMF. The new government is now back to the IMF; it expects the IMF to release the payments, expand the support programme, and give a longer rope to repay.

The IMF is willing to support Pakistan but has some conditions regarding macroeconomic reforms. This was highlighted in the IMF statement after the last meeting in May 2022. The IMF wants Pakistan "to address high inflation and the elevated fiscal and current account deficits, while ensuring adequate protection for the most vulnerable." The IMF would also not want any deviations from what has been agreed to, especially concerning fuel and power subsidies. Besides, the IMF wants Pakistan to be transparent about its debt situation, including what Islamabad owes to China, as a part of the China-Pakistan Economic Corridor (CPEC).

Subsidies are politically sensitive; with elections ahead, it would not be an easy decision. The new budget also has proposed resuming the petroleum tax levy. With the above, the new government expects that the IMF will consider resuming its package.

The IMF may agree to support after a few more promises by the government. But the relief may be less than what Pakistan would hope for. Without macroeconomic reforms, the IMF is less likely to expand its support programme, or provide a longer rope to Pakistan, that Islamabad wants.

Will Pakistan pursue macroeconomic reforms?

This has been a million-dollar question. Economists within Pakistan and elsewhere have been arguing for macroeconomic reforms, including the independence of financial institutions. It is a political question that the successive governments led by the Pakistan Peoples Party (2008-13), Pakistan Muslim League-N (2013-18) and Pakistan Tehreek-e-Insaf (2018-22) were unwilling to address. Instead, all governments continued to borrow from global institutions and friendly countries.

The budgets have remained populist; the economic governance declined due to corruption, lack of financial institutions' independence, and the export decline. The subsidies in the energy sector — fuel, oil and electricity — remain high. With the present government led by the PML-N and PPP combine facing elections, they are less likely to take any further bold decisions. Successive governments, especially the previous one, would instead look for external bailouts and support from "friendly" countries.

Will "friendly countries" support Pakistan without preconditions?

Saudi Arabia and China have been supporting Pakistan. Immediately after becoming the Prime Minister, Shehbaz Sharif visited Saudi Arabia to secure a loan. In early May 2022, Riyadh agreed to provide $8 billion; in December 2021, Imran Khan secured a $3 billion support. A similar understanding was reached in October 2021. However, Riyadh's support was not unconditional. An editorial in Dawn in November 2021 highlighted that Riyadh can ask Pakistan "to return the money at any time if the two countries have divergent views regarding their relationship or ties with a third country, or some other issue."

China has been another significant source for Pakistan. Islamabad has been regularly seeking loans from China within and outside the CPEC projects. While the CPEC projects kept expanding and was projected as a panacea for Pakistan's economic problems, there are many questions over the hidden costs. Pakistan also had to raise the security for the CPEC projects after a series of militant attacks. Pakistan has created a Special Security Division to provide security exclusively for the CPEC projects, increasing the cost further. A larger question is whether Pakistan would divert external aid to pay its debts to China? This has been one of the questions raised by the IMF, way back in 2018, and remains relevant even today.

During the latest Financial Action Task Force (FATF) meeting, there was an understanding that Pakistan has met its requirement. The FATF has agreed to explore the possibilities of removing Pakistan from the grey list.

However, when Pakistan was on the grey list, the IMF had been holding talks with Islamabad. The big two — China and Saudi Arabia — were not constrained by Pakistan's listing in the FATF. So, the relaxation is less likely to open gates for big investments.

Will Pakistan go the Sri Lankan way?

The situation was similar in Sri Lanka — the falling value of rupee, declining foreign exchange reserves, differences with the IMF, and rising fuel prices. All of them led to public protests in Sri Lanka against the government. The economic and energy crises in Pakistan have not snowballed into a political storm as it had happened in Sri Lanka during April-May. Will there be one?

Politically, unlike in Sri Lanka, there is a coalition at the federal level; the main partners — the PML-N and the PPP — have a strong presence and control over the two big provinces, Punjab and Sindh.

To conclude, Pakistan's economic and energy situation is serious and demands bold decisions. The situation will worsen in the short term before it gets better, but this has been Pakistan's history in the last 75 years. With a relief from the IMF, after a protracted negotiation, a few band aids, and the U.S. intervention, Islamabad may muddle through this time as well, until the next crisis.

NATION

DESIGNATION FAILURE

There is a sense of déjà vu about China's decision on June 16 to block the UN Security Council designation of Lashkar-e-Taiba (LeT) deputy chief Abdul Rahman Makki as a terrorist, given that Beijing had repeatedly blocked the designation of the Jaish-e-Mohammad chief Masood Azhar until 2019, and other terror designations prior to that. Here too, the pile of evidence against Abdul Makki is considerable: that he is part of the command and control of the UNSC-designated terror group LeT, later renamed the Jamaat ud Dawa (JuD), which is also a UN-designated terror group, is in no doubt. He was not just a member of the governing body or "Shura"; he served as the head of its "foreign relations" department, and raised funding. He is also a member of LeT chief Hafiz Saeed's family (brother in law). The LeT/JuD has been prosecuted in India, the United States and even Pakistan for the 26/11 Mumbai attacks, and Makki was himself tried and sentenced by a Pakistani special court to nine years imprisonment on terror financing charges — a ruling overturned a year later. India wants him for his involvement in attacks over the past two decades, including the Red Fort attack in Delhi in 2000, and, more recently, in attacks on security forces in Jammu and Kashmir. He is on India's UAPA list of designated terrorists and also the U.S.'s Specially Designated Global Terrorists with a $2 million reward for information that would convict him. Given what India and the U.S., which forwarded the proposal to put him on the UNSC's 1267 list of terrorists linked to the al Qaeda and ISIL, have called "overwhelming" evidence, New Delhi has termed China's move to place a hold on the process (this could delay it for as much as six months) as "regrettable" and "extremely unfortunate".

While China's actions may be motivated by growing acrimony with the U.S. and India, it is necessary to analyse the situation beyond bilateral tensions. That Beijing's last-minute hold on Makki's listing came even as the Financial Action Task Force was meeting in Berlin to credit Pakistan's actions on terror financing, and begin the process to relieve it from the grey list, pending an on-site visit in the next few months, may not be a coincidence. While China defends its actions on Makki and previous designations that it blocked as "technical objections" based on "procedural" loopholes, it is clearly part of a pattern of protecting Pakistan internationally. It is also notable that as a result of China's objections or otherwise, none of the terror designations under UNSC 1267 thus far against LeT commander Zaki ur Rahman Lakhvi in 2008, Hafiz Saeed in 2009 and Masood Azhar in 2019 actually contains charges against them for any attacks carried out in India. Beyond criticism and continued pursuance of the listing, it is necessary for the Government to continue to gather evidence and systematically build its case on cross-border terrorism on the international stage that cannot be derailed by political or geopolitical considerations.

BRICK BY BRICK

The 14th BRICS Summit, which concluded on June 24, revealed much about the grouping of five emerging nations. That this bloc of five disparate countries has not only made it to its 14th summit, but has been able to demonstrate some concrete, albeit modest, outcomes of cooperation, such as the emergence of the New Development Bank (NDB), suggests there remains a strong convergence of interests amid undeniable differences. Indeed, ever since the first summit in Yekaterinburg in 2009, BRICS has had more than its fair share of naysayers, particularly in the West, and has been derided as a talk shop. In his address to the summit on June 23, which was hosted by China this year and held virtually, Prime Minister Narendra Modi described the binding glue as "a similar approach to global governance". That approach, according to the lengthy joint Beijing Declaration that followed, was premised on "making instruments of global governance more inclusive, representative and participatory".

That is certainly a laudable goal. However, the NDB, which has since its launch in 2015 funded around $30 billion worth of projects in emerging nations, still remains for the grouping an isolated example of their common interests translating into tangible outcomes. That points to another summit take-away: despite a tall agenda, the bloc remains constrained by differences. For instance, on two key issues for the grouping — UN reforms and terrorism — members India and China have found themselves on opposing sides of the debate. India and Brazil have made common cause on pushing for an expanded UN Security Council, yet China has suggested it is not in favour of a permanent seat for India. On terrorism, the recent blocking by China of an attempt by India to sanction the LeT terrorist, Abdul Rehman Makki, at the UNSC sanctions committee, served as a reminder of contrasting approaches. Indeed, those two different approaches found mention in the Beijing Declaration, which acknowledged both India's concerns on a lack of transparency at the sanctions committee and Chinese claims, seemingly driven by the desire to shield Pakistan, that these cases amounted to "politicisation". On Ukraine, the bloc affirmed a commitment to respect sovereignty, despite Russia's actions, and stopped short of condemning NATO, as Russia and China have done, reflecting different views within BRICS. These differences certainly cast doubt on the bloc's loftier goals of reorienting the global order. They do not, however, suggest that the BRICS countries cannot cooperate on issues where interests align, whether in financing projects, as the NDB has done, working on climate change, as India and China have continued to do despite the LAC crisis, or even on space cooperation, where the five countries have agreed to create a joint constellation of remote sensing satellites.

HOW KHALISTANI PROPAGANDA COST A CHANNEL ITS LICENCE IN THE UK

Khalsa Television Limited surrendered its licence to broadcast in the UK earlier this week on June 21 after an investigation by the country's media regulator found that its channel, Khalsa Television (KTV), had breached broadcasting rules with Khalistani propaganda. The channel, which has faced hefty fines for violating broadcasting regulations in the past as well, has been off air in the UK since March 31. What led to the cancellation of its licence?

What is Khalsa TV?

Khalsa TV or KTV is a television channel broadcasting largely to the Sikh community in the United Kingdom under a licence held by Khalsa Television Limited. Its tagline is 'Nidar, nidharak, hak ate sach di awaaz (Fearless, determined, voice of your rights and truth)'. It claims to broadcast in 136 countries.

KTV was officially launched in the UK with a ceremony at Guru Nanak gurdwara at Birmingham on January 22, 2017.

The card read, "Our brand new purpose built facilities will be bringing you new programmes, concepts and personalities for the Punjabi community.''

On its website, Khalsa TV, aka KTV Global, describes itself as the UK's newest and most exciting Panjabi channel catering to the Sikh diaspora and airing a range of cultural, religious, educational and entertaining programmes for audiences of all ages and backgrounds.

"We aim to deliver only the best in programming using the latest broadcast technology from our purpose-built studio setting in West Bromwich,'' claims the channel.

It also says it actively supports NHS and local charities in UK besides Pingalwara in India.

Why did KTV's licensee Khalsa Television Limited surrender its licence to broadcast in the UK?

Khalsa Television Limited surrendered its licence to broadcast in the UK on June 21 after an investigation by the country's media watchdog, Office of Communications (Ofcom), found that the KTV had breached broadcasting rules by beaming incendiary and separatist propaganda in a programme called Prime Time, which was beamed on December 30 last year. Ofcom investigation found that the show "promoted violence, including murder, as an acceptable and necessary form of action to further the Khalistani cause".

Ofcom raised the red flag early this year following three complaints about Prime Time, a 95-minute live discussion on December 30. The complainants alleged that the presenter of the programme Jagjit Singh Jeeta – a social media post describes him as the CEO of the channel – made a number of statements which, when read together, promoted violence for the cause of Khalistan.

Ofcom, in its report, said, "The presenter, Jagjit Singh Jeeta, opened the programme with a monologue regarding the progress of the Sikh secessionist cause towards the creation of an independent state of Khalistan since Operation Bluestar in 1984, during which he set out his view that the current leadership of the Sikh community lacked the courage or drive to take the necessary action to achieve this aim."

The regulator noted how time and again, he heaped ridicule on "Khalistanis" living abroad for doing nothing and exhorted them to accompany him to Punjab to attain their goal.

Ofcom sent its "Preliminary View" notice to the channel in February. The latter objected to its translation and analysis of the programme. KTV claimed that the programme did not contain any inflammatory statements, and provided an example of how words used by the presenter may have been misunderstood. But Ofcom maintained that KTV could not prove its point.

KTV went off air on March 31, when Ofcom suspended the licence held by Khalsa Television Limited.

Ofcom then sent a draft revocation notice to the channel on May 26, following which it surrendered its licence on June 21.

Is it the first time that the British media regulator has taken action against KTV?

This is not the first time that KTV has fallen foul of Ofcom regulations. An Ofcom statement said this was the third time in four years that programmes beamed by the channel had violated rules on incitement to violence.

Last year in February, the regulator had slapped a fine of £50,000 on KTV for broadcasting hateful content and a discussion programme that asked British Sikhs to commit violence and also contained a terror reference.

An Ofcom statement said the music video aired by the channel featured a man wearing a hoodie with two AK-47 rifles and an inscription that read: "Peace will come via the bullet". It included slogans glorifying Khalistan, and inscriptions promising a bloody fight for it. A drawing depicted the assassination of General Vaidya, while a caricature of former Indian Prime Minister Indira Gandhi carried the caption calling her an "evil woman". Ofcom objected to the "video's narrative of advocating violent action against the Indian state".

KTV was also fined £30,000 for broadcasting a discussion in 2019, in which participants made implicit threats to a Sikh radio presenter based in New Zealand. Ofcom also found that the programme had the potential of "legitimising the aims and actions of a banned terrorist organisation."

ATTACK ON GURDWARA IN KABUL UNDERLINES THE CHALLENGE THAT LIES AHEAD FOR DELHI'S AFGHANISTAN POLICY

The attack on the Karte Parwan gurdwara in Kabul, in which two people — a Sikh granthi and an Afghan — were killed is a grim reminder that Afghanistan remains the world's terror central. A medieval minded extremist group that makes no secret of its animosity towards minorities and women, and has bombed and killed its way to grab power over a country, is part of the problem, not the solution. This is not the first time that Sikhs have been targeted in Afghanistan. In 2018, when Kabul had not yet fallen to the Taliban, a suicide attack in Jalalabad killed 18 people of the community, and in 2020, an attack on another gurudwara in Kabul left 25 people dead. As with Sunday's attack, the two previous attacks too were claimed by Islamic State Khorasan Province.

Who is the ISIL-K, though? The Afghan chapter of the Islamic State is quite different from IS in the Levant. While ISIL-K has a floating population of several international terrorist organisations, such as Uzbek, Chechen and Uighur militants, it is hardly cut from cloth separate from the Taliban — many disgruntled Taliban are said to make up the ISIL-K, while the Haqqani group, an autonomous power elite within the Taliban, are said to have links with it. In the past, when the Taliban was still waging war against US and Afghan forces, it was alleged by the then Afghan security establishment that ISIL-K as no more than a front of the Haqqani group. The Taliban and ISIL-K were also engaged in a bloody turf war in 2018-2019, with ISIL-K emerging weaker from this. A recent report of the UN Security Council's Monitoring Team on Afghanistan flagged the presence of al-Qaeda, Jaish-e-Mohammed and Lashkar-e-Taiba in the country, and the Taliban's links with them, but said ISIL-K was a declining force. A 2020 report, however, spoke of ISIL-K's "tactical accommodation" with the Haqqani Network for some of the more spectacular attacks it has claimed. Now, Sirajuddin Haqqani, a UN designated global terrorist is interior minister in the Taliban regime. It is also no secret that the Haqqanis are close to the Pakistani establishment.

Delhi has been quick to grant emergency visas to some 160 Sikhs. They had been living in fear inside Karte Parwan since the Taliban takeover, even as many of their brethren managed to fly out. The attack comes days after an Indian team of diplomats and other officials visited Kabul and met with the Taliban foreign minister, and other high-ranking members of the regime. The attack is bound to have an impact on India's plans to engage with the Taliban and the reported proposal to undertake a limited reopening of the Kabul embassy. Delhi's Afghan policy has been in tatters since the US and Taliban began talking in 2018. The cowardly attack on the Sikhs has blindsided it once again.

WHAT WEST SETI POWER PROJECT CAN MEAN FOR INDIA-NEPAL TIES

India will be taking over an ambitious hydropower project in Nepal — West Seti — nearly four years after China withdrew from it, ending a six-year engagement between 2012 and 2018.

India's National Hydro Power Corporation (NHPC) has already begun preliminary engagement of the site in far-western Nepal following Indian Prime Minister Narendra Modi's visit to Lumbini on May 16. in fact, the groundwork and informal discussion seem to have begun much earlier when Nepal Prime Minister Sher Bahadur Deuba visited India in April. During a local bodies election campaign in early May, Deuba had declared that since India was Nepal's power market and it had a policy of not buying power from China-executed projects, West Seti would be given to India.

Four days prior to the Lumbini visit, the NHPC's intent in writing had reached the headquarters of the Investment board headed by the Prime Minister. The board is likely to clear it soon and formally ask the NHPC to handle the project.

The CWE Investment Corporation, a subsidiary of China Three Gorges Corporation, had informed the Nepal Government in August 2018 that it would not be able to execute the 750-MW West Seti Hydropower Project it had undertaken on the ground that it was "financially unfeasible and its resettlement and rehabilitation costs were too high". Prior to that, the Snowy Mountain Engineering Corporation (SMEC) had been refused renewal of its licence following its failure to begin the work "convincingly" during an entire decade from the mid-1990s. The Australian company had been given a generation licence for 30 years under a Build, Own, Operate and Transfer (BOOT) scheme.

India -Nepal power relations…

Nepal is rich in power sources with around 6,000 rivers and an estimated potential for 83,000 MW. India has formally approached Nepal on many occasions, seeking preferential rights over Nepali waters should it match offers coming from elsewhere.

India is viewed as a feasible market for Nepal, but there has been some uncertainty in Nepal over India's inability to deliver projects on time. India has undertaken to harness or expressed intent to harness major rivers in the north. An ambitious Mahakali treaty was signed back in 1996, to produce 6,480 MW, but India has still not been able to come out with the Detailed project Report. The Upper Karnali project, for which the multinational GMR signed the contract, has not made any headway for years. Also, one reason SMEC had to wind up was its failure to enter into a power purchase agreement with India.

What has helped build faith recently is India's success in executing the 900-MW Arun Three project in eastern Nepal's Sankhuwa Sabha, which is being executed by India's Sutlej Vidhyut Nigam under a BOOT scheme, and whose foundation was laid in 2018 and which is set for completion by2023. During his first visit as PM to Nepal in 2014, Modi had said India must start executing its projects timely. The company executing Arun Three is also being awarded the 695-MW Arun Four project, followed by the decision to award West Seti to NHPC.

Estimated to cost Nepali Rs 104 billion (Indian Rs 6,500 crore), the project is envisaged to provide Nepal 31.9% electricity free. Besides, locals affected by the project are being given a share of Nepali Rs 10 million plus 30 units of electricity per month free.

Nepal's Constitution has a provision under which any treaty or agreement with another country on natural resources will require Parliament's ratification by at least a two-thirds majority. That will also mean homework will be required before any hydro project is signed and given for execution.

Nepal has a massive power shortfall as it generates only around 900 MW against an installed capacity of nearly 2,000 MW. Although it is currently selling 364 MW power to India, it has over the years importing from India.

However, Dipak Gyawali, a former Energy Minister, sounded a note of caution: “Until India agrees to value Nepal’s water and the existing focus on power is not reviewed, mutual distrust will continue to eclipse the potential for progress of both sides in the long term. Once the projects are made multi-purpose — with flood control, navigation, fisheries, irrigation contributing to agricultural growth etc, giving due value to water — the cost of power will be much lower compared to existing rates, and people on both sides will have multiple benefits.”

… and diplomatic ties

After a standoff between Nepal and India led to the economic blockade of 2015, equations changed after Deuba took over last July, replacing Oli. Modi, whose popularity in Nepal had appeared to be waning, developed friendly and political relations with Deuba. Modi’s BJP and Deuba’s Nepali Congress decided to establish “fraternal ties” during Deuba’s visit to Delhi last month.

On Raksha Bandhan last year, the Nepal Prime Minister’s wife, Arzu Deuba, tied a rakhi on Vijay Chauthaiwale, in-charge of the BJP’s foreign affairs cell. The West Seti Project covers the far western Nepal region, where Deuba hails from. Completion of the project will be a gift to his electorate and the region at this advanced stage in the career of Deuba, who is now 79.

It is still not clear what changes or expansion the NHPC will propose to the project initially planned at 750 MW, but the project will be a storage scheme generating power round the year to be supplied to India, either for domestic consumption or for the trade through its national grid.

And its success is expected to restore India’s image in Nepal and give it weightage in future considerations for hydropower projects, when competition is bound to be tough. West Seti, therefore, has the potential to be a defining model for Nepal India’s power relations in future.

A CASE OF THE COURT STRAYING INTO THE LEGISLATIVE SPHERE

Recently, the Allahabad High Court, while allowing two criminal revisions pertaining to a dowry case, took cognisance of the misuse of Section 498A of the Indian Penal Code (IPC), proposed certain safeguards and directed the State authorities of Uttar Pradesh to take the necessary steps for their implementation in a given time period. The High Court expressed its concern over the growing tendency of dowry victims to rope in the husband and all his family members using general and sweeping allegations.

The directions, inter alia, include constitution of a family welfare committee in each district under the District Legal Services Authority (DLSA), handing over the first information report to such a committee immediately after its registration, and no arrest to be made by the police during this “cooling period’ of two months. As far as the High Court judgment reads, there were no allegations against the police that had dropped charges against two persons for lack of evidence and charge-sheeted only the husband and his parents based on available evidence.

Strangely enough, the High Court specifically mentioned in its judgment of taking guidance from the judgment of the Supreme Court of India in Social Action Forum for Manav Adhikar vs Union of India (2018), a case in which the Supreme Court overturned the judgment of its two-judge Bench and held constitution of similar committees and an embargo on arrest by the police for one month till the submission of report by the family welfare committee, impermissible under the scheme of the Code of Criminal Procedure (CrPC) (Rajesh Sharma vs The State of U.P., 2017). Both Court judgments also dealt with the growing misuse of dowry provisions.

It cannot be refuted that the directions issued by the High Court were inspired with noble intentions to curb the tendency of reporting cases with exaggerations and sweeping allegations in the heat of matrimonial discord. But these directions potentially fall in the sphere of legislature. The constitutionality of dowry provisions has already been established. Also, the misuse of Section 498A IPC by itself cannot be a ground to dilute it and issue directions which do not flow from any provision of the Code. Moreover, these directions might curtail the rights of a genuine victim of dowry harassment.

Possible solutions

However, in order to check false cases of dowry and avoidable incarcerations, two solutions seem plausible. First, the police must strictly enforce the Supreme Court's directions issued in Arnesh Kumar vs State of Bihar (2014) and ensure that there is sufficient reason and credible material against the accused person to necessitate arrest. The investigating officers must be imparted rigorous training with regard to the principles stated by the Court relating to arrest. At the same time, wrong-doers need to be punished departmentally.

Second, the legislature may deliberate upon and make Section 498A IPC bailable. Similarly, though the High Court (using its inherent powers under Section 482 CrPC) can quash a criminal proceeding which is not compoundable (after a settlement is reached between the opposing parties), the legislature can amend and make the offence under Section 498A IPC compoundable so that a compromise could be arrived at with or without the permission of the competent court. This will not only save cost to the parties in dispute but also the High Court's valuable time. Similarly, once the Mediation Bill, 2021 is enacted, the institutional mediation mechanism may also help in settling the matrimonial dispute through the civil route.

Till the time any such amendment is made or law is enacted, the law of the land needs to be enforced strictly by both the police and the courts, without any dilution. Any such directions which do not emanate from the provisions of law, are likely to be struck down by the Supreme Court again.

RESURRECTING A DEAD LAW

Section 66A of the Information Technology Act, 2000, which the Supreme Court had declared unconstitutional in 2015 in Shreya Singhal v. Union of India for having a "chilling effect on free speech", is back in the news. As part of the ongoing negotiations at the United Nations for a proposed international treaty on combating cybercrime, India made a formal submission for criminalising "offensive messages". The language in the submission is similar to what was used in Section 66A. Many contend that this amounts to a 'backdoor' attempt at legislation — that is, if India's submission becomes part of the proposed treaty, it would result in Section 66A springing back to life and being used by the state to curb free speech once again. However, it is not so simple.

Is international treaty binding?

First, international treaty negotiations are complex. It is premature to believe that India's suggestion of criminalising "offensive messages" will be readily accepted. The U.K. and many countries in the European Union have reportedly already contested India's submission because they see this as an undue impediment to the freedom of speech.

But suppose we assume that India's proposal is accepted, would that mean that the provision will have a direct effect on the Indian legal system? Arguably, India is a dualist state. Therefore, international law does not become a part of the domestic legal system unless it is specifically transformed into domestic law by Parliament, which will be required to enact legislation to implement the international law. This is different from the theory of monism, wherein international law is automatically incorporated into the domestic legal system of the country even without Parliament enacting an enabling legislation. However, over the years, the Supreme Court of India has moved away from this traditional dualist approach towards monism. In cases such as Vishakha v. State of Rajasthan (1997), National Legal Services Authority v. Union of India (2014), and K.S. Puttaswamy v. Union of India (2018), the court followed an approach of judicial incorporation by reading international law into domestic law in the absence of any specific prohibition in municipal law. In other words, the emerging principle is that courts will respect international law unless it can be shown that it is inconsistent with municipal law.

If we do get an international treaty combating cybercrime with a provision similar to Section 66A, the Indian courts will not read this provision as part of domestic law because of the ratio in the Shreya Singhal case. It will be a classic case of an international law being in conflict with domestic law. Thus, the Indian courts will give primacy to the domestic law, not the international treaty provision criminalising "offensive speech".

Transforming international treaty

However, things may become convoluted if Parliament enacts legislation or amends existing legislation to implement the international treaty that criminalises "offensive messages". The government may get a law passed in Parliament using Article 253 of the Constitution, which states that Parliament has the "power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention", and place a provision similar to Section 66A back on the statute book. Legally, such a law can be justified as a necessary action to comply with India's international law obligations. It will then give the executive the power to book people for alleged "offensive messages" as was the practice earlier.

But what if the constitutionality of the re-introduced version of Section 66A is challenged? The courts will then examine the constitutionality of the reintroduced version of Section 66A in light of the fact that it was enacted to comply with India's international law obligations. But the constitutional court will still strike down the re-introduced version of Section 66A because the grounds on which this law was pronounced unconstitutional will still be valid in light of the fundamental right to free speech. In other words, just because Parliament enacts a law to give effect to an international treaty obligation, that does not mean that the law so enacted will not need to meet the test of constitutionality. Therefore, the possibility of Section 66A coming back on the statute book is bleak unless a bigger Supreme Court bench overrules Shreya Singhal.

But this issue is not just about legal technicalities. The alarming point is that the Indian government proposed the inclusion of a provision in an international treaty which was struck down by its own apex court for breaching fundamental rights. This mindset does not augur well for constitutionally protected fundamental freedoms in India.

UNDERSTANDING BIRD STRIKES AND AVIATION SAFETY

The story so far: On June 19, a SpiceJet Boeing 737-800 on the Patna-Delhi sector (SG723) with 185 passengers was in the climbout phase (the period immediately after take-off during which the aircraft climbs to a predetermined cruising altitude) when it suffered a bird hit in its left engine. Ensuing visuals showed flame streaks. The engine was shut down and the flight returned to Patna about 20 minutes later. The same day, an Indigo Airbus A320N (6E-6394, Guwahati-Delhi) was taking off when it experienced a bird hit in the left engine. The aircraft returned to Guwahati about 15 minutes after its departure. In both incidents, some of the engine blades were damaged or had fractures. India's civil aviation regulatory body, the Directorate General of Civil Aviation (DGCA), has ordered an inquiry. Further, in a directive to all airport operators, it has asked all airports to "review their wildlife hazard management plans" for "within and outside the airfield". Being the monsoon season with heightened wildlife activity, this would include grass trimming, runway inspections, garbage disposal in operational areas and ensuring water drainage.

What is the data on bird strikes?

The International Civil Aviation Organization (ICAO) has been collecting bird strike data since 1965, but it was in 1979 that it requested member states to begin reporting bird strikes to aircraft into a data entry and retrieval system. The ICAO Bird Strike Information System (developed with the help of experts) has been in operation since 1980. An analysis of 62,416 verified records showed that most hits were in or near airports during the take-off and approach phases of flight. About 60% occurred at or below 30 metres or around 100 feet, according to a paper on the ICAO bird strike information system. Another paper, "Bird strikes at commercial airports explained by citizen science and weather radar data", says that in 2017, "over 14,000 bird strikes were reported only in the United States; for that year alone, the cost was $142 million". A third paper, "The costs of bird strikes and bird strike prevention", by Allan J.R., says that, globally, "the annual costs of bird strikes are an estimated $1.2 billion". Scientists from the Cornell Lab of Ornithology and partners say that information on bird movements throughout the year can help avoid aircraft damage and risk to passengers. In 2018, the Federal Aviation Administration data on civilian flights in the U.S. recorded 14,661 collisions with wildlife, which is over 40 cases a day.

A report says that in India in 2021, DGCA data has recorded over 1,400 suspected and confirmed wildlife incidents (for 20.5 lakh aircraft movements), up from nearly 840 cases in 2016 (for 22.9 lakh aircraft movements). Most of the incidents were reported from Delhi and Mumbai airports.

In India's National Aviation Safety Plan (2018-2022), which is in line with ICAO's Global Aviation Safety Plan, the DGCA has said that one of the key safety priorities (under the Safety Enhancement Initiatives of the Regional Aviation Safety Plan – Asia Pacific) is looking at "wildlife and bird strikes". It says the audits suggested by the National Bird Control Committee (NBCC) are being followed. Under Safety Performance Indicators of "Number of reported bird strikes at all Indian airports per 10,000 movements", it lists a Safety Performance Target of 4.26 for the year 2022.

How is it from a pilot's perspective?

A senior commander who flies the Airbus A320 aircraft told The Hindu that bird hits are a risk that flight crew have to be constantly ready for, especially during the take-off phase as the aircraft is fully loaded and fuel-laden. If a bird hit is suspected, the crew have to watch all parameters. There are the usual places where the crew knows the bird hit has occurred, i.e., the windshield, the belly and the engines. Damage to the engines can vary with twisted fan blades, blade separation and vibrations. This could result in an engine imbalance as well. Apart from this there can be damage to the wing surfaces (flaps, spoilers and slats) and the airframe too. This results in huge losses for the airline operator.

He added that there are crew standard/operating procedures laid down by the manufacturers and the airline company, followed by simulator checks. He said adherence to wildlife management rules is imperative within and around the airport and its vicinity.

What is the perspective from experts? What is being done to help minimise instances of bird hits?

Captain A. (Mohan) Ranganathan, a former airline instructor pilot and aviation safety adviser — he brought out a bird strike handout when he was part of the Bird Strike Committee in 2011 — told The Hindu that the recent bird hit incidents show that all areas surrounding an airport ought to be clear of slaughter houses and garbage dumping (factors which can attract wildlife and increase risks). Airports are also expected to have incinerators to dispose of garbage removed from aircraft. The expert said that airlines are supposed to have some standard operating procedures for bird strike prevention. He added that for pilots, it is important to have constant monitoring. After lift-off, the pilot flying should have his eyes on the instruments and the pilot not flying has to have his/her eyes outside to look out for birds. This has to be emphasised during training. Finally, he said, understanding bird behaviour is something crew and operators need to be familiar with. Close to the ground, the instinctive response of birds is to get away from the aircraft path. Bird strikes occur when pilots try to climb over them during the initial take-off phase. Birds get sucked into an engine as an aircraft engine's field of ingestion is quite high with take-off thrust. Over 100ft, birds tend to dive to avoid an aircraft. Therefore, it is important to understand bird behaviour.

AT THE CENTRE OF JOB CREATION

With his announcement that 10 lakh government jobs will be provided over the next 18 months on a "mission mode", Prime Minister Narendra Modi sent four messages. One, the creation of employment is indeed a problem and can no longer be hidden from the public discourse. Two, the private sector, especially modern sectors such as the service and manufacturing sectors, which are dominated by multinational companies, have not created many jobs. Even if the Information Technology sector or the modern gig economy have created jobs, these are either very high-skilled jobs or low-skilled ones. Three, the government in the Nehruvian scheme of development occupied an important place in the labour market. The National Democratic Alliance (NDA) government, whose ideology is different and which often attacks the Nehruvian model, is now ironically forced to step in as persistently rising inflation, unemployment and underemployment threaten to politically affect it. And four, the NDA government has blown the 2024 general election bugle.

Employment trends

A populist announcement made by any government needs to be critically studied. Let's look at some employment data. First, the last year for which we have information on employment in the organised sector from the Directorate General of Employment and Training is 2012. The statistics were provided under the employment market information programme. The NDA government is at present relying on the Employees' Provident Fund Organisation/National Pension System/Employees' State Insurance Scheme registrations and exits as indicators of the formal labour market. This could be misleading as companies may be increasing registrations to cross the threshold to become eligible to fall under any of these. Hence, this might be more a case of formalisation rather than employment generation. Second, media reports show that more than 85% of those aspiring for those 10 lakh jobs could be consumed by existing vacancies in Central government departments (8,72,243). In that sense, the pronouncement possibly does not indicate 10 lakh new jobs. Third, 241 central public sector enterprises (CPSEs) have been shedding jobs in recent years — jobs declined from 10.84 lakh in 2017-18 to 10.71 lakh in 2018-19 and to 9.22 lakh in 2019-20. Mr. Modi did not speak of employment creation by the CPSEs though this downward trend is a cause for concern.

The 10 lakh jobs creation also needs to be seen in the context of the labour market. Even though the labour force and workforce participation rates have increased marginally, there is a decline in the quality of jobs, viz. there is a rise in the unpaid segment of the self-employed and a rise in the share of the agricultural sector in total employment over the last three Periodic Labour Force Surveys (43% to 47%). This is a historical retrogression. This huge mass of workers contributes, thanks to low productivity, to about one-sixth of our national income, which does not augur well for a healthy economy. On the other hand, the manufacturing sector's share in national income has declined in 2020-21 (10.9%) compared to that in 2018-19 (12.1%).

Again, even though the aggregate usual status unemployment rate has slightly declined by a few percentage points (4.8% in 2019-20 to 4.6% in 2020-21), the current daily status unemployment figure (internationally used statistic) is at 7.5% for all persons in 2020-21. The educated unemployment rate (secondary school and above) in general and youth unemployment (15-29 years) in particular in the urban areas have very marginally fallen from 2019-20 to 2020-21, but they still high enough to cause concern (in double digits). Employment shares in the informal enterprises have increased — for men (71% to 75%), women (55% to 57%) and all persons (68% to 71%) from 2017-18 to 2020-21. Even though the share of regular salaried workers who did not have a formal employment contract, paid leave and eligibility for any form social security have declined for both genders, the level is still high. The government could score a point or two by showing that there is a declining tendency in several labour market variables. But an honest government would concede that the levels of several variables remained discomfortingly high even after three decades of economic reforms.

Role of private sector

Even as the Nehruvian model of development is attacked in the current dominant political discourse, we cannot avoid placing the government at the centre of employment creation beyond a certain point. The private sector creates jobs in response to market forces and while taking into consideration radically altering technological developments. We cannot rely on the projections about employment generation by the gig economy. They are estimates computed by a trade body or by consulting agencies which have vested interests. As they are political economy agents influencing government policies, their predictions need to be read with many pinches of salt. The job recovery stories, which are published from to time in the pink press, based on employment service providers such as Monster Employment Index, need to be seen in the context of a highly job-impoverished economy such as ours. Projects in the modern private sector consume a lot of capital to generate very few jobs. For instance, recently, there was a report that the Adani Group has invested ₹70,000 crore (or ₹700 million) in Uttar Pradesh to create merely 30,000 jobs. Foreign Direct Investment, which at any rate is highly capital-intensive, goes mostly into the non-manufacturing sectors.

Quantity and quality of jobs

Employment is not merely about numbers and growth figures. We need to concentrate on enabling the creation of decent work and a sustainable labour market to which India is committed as a member of the United Nations and the International Labour Organization. Wittingly or otherwise, the government's role in employment generation has entered into popular discourse and discussions on policy formation. While even one job is a miracle, we need millions. The government should play a significant role soon. A lean and mean government, which is often prescribed by the neoliberal project, often results in governance deficit. The government should re-establish its role as the principal employment generator through jobs in its ministries and CPSEs and through assured employment generation programmes like MGNREGA.

WHY IS AGNIPATH UNDER WIDESPREAD ATTACK?

The story so far: Large-scale violence by distressed youth broke out in many parts of India, notably in States such as Uttar Pradesh, Bihar, Haryana, and Telangana which contribute a sizeable manpower to the armed forces, in the wake of the Centre announcing, on June 14, a new scheme of recruitment of jawans, personnel below officer ranks (PBORs), to the three wings.

What is the scheme?

Agnipath or Tour of Duty will be the only mode of recruitment of soldiers, sailors, and airmen from now on. It envisages enlisting youths aged between 17.5 years and 21 years — the upper limit has been extended to 23 years this year after protests — for a period of just four years, also counting their training time. At the expiry of their contract, only 25% of these soldiers, to be known as Agniveers, will be re-enlisted for regular military service.

While the salary package of Agniveers will be around ₹4.76 lakh in the first year which can go up to ₹6.92 lakh in the fourth year, these short-term soldiers will also be offered a contributory severance package besides non-contributory death and disability compensation. They will not be eligible for pension or gratuity. A day after the scheme was unveiled by Defence Minister Rajnath Singh in the presence of the Service chiefs, the Union Ministry of Education said it would offer a three-year degree programme to these enlistees in order to make them employable once out of service. As protests rocked the country, the Ministry of Home Affairs, on Saturday, announced its decision to reserve 10% of vacancies in the Central Armed Police Forces (CAPFs) and the Assam Rifles to Agniveers. The Defence Minister also approved of a proposal to earmark 10% of vacancies in Coast Guard, defence civilian jobs and in the defence PSUs for Agniveers provided they meet the eligibility criteria.

What, according to its supporters, are the scheme's benefits?

Defenders of the scheme, which include the three Service chiefs, have maintained that this 'transformational' initiative will make the forces lean and much younger, with the average age of the soldier brought down to about 25 from the present 32 years. It will also ensure the availability of a larger share of budget outlay for capital expenditure for the acquisition of hi-tech equipment and platforms because the outlay for pension payout will drop considerably over time. Military training at a young age would make these men returning to the civilian world more disciplined and employable, advocates of the scheme argue.

They say that the military recruitment procedures in many countries such as the U.S., Russia, the U.K., Israel, France and Germany were extensively studied over the past two years before formulating the scheme for Indian conditions.

Why are there protests across States?

Apprehensions about Agnipath are vast and varied. Scores of veterans have flayed the scheme as an effort to scrimp and save on revenue expenditure at the expense of the forces' operational efficiency or fighting capabilities. Four years is too short a time for a conscript to acquire the skills essential for operating sophisticated systems in the technology-intensive Navy and Air Force. For the Army, which has a regimental system, it is feared to impair the unit's cohesiveness as the soldier on a short-term contract could remain 'risk-averse'.

There are also apprehensions about this path leading to the militarisation of society. Some say that it's unfair to the potential recruit as well, as the absence of a continued employment guarantee at the expiry of four years when he's still in his 20s and without the skillsets or credentials required to make the cut in the civilian/corporate world, could be demoralising. Agnipath cuts at the root of social security and dignity that have lured rural Indian youth to the military fatigue, argue the scheme's detractors.

What is the way forward?

Unmindful of the ongoing protests and reservations expressed by a chunk of military veterans — ironically, also including some habitual votaries of the government — the Centre has stated unequivocally its resolve to go ahead with the reform. The Army and the Air Force have announced their recruitment plans and the Navy is expected to follow suit. Each year, about 45,000 soldiers will be enlisted in the three Services under this scheme. It remains to be seen if amendments such as the extension of their initial service period and mandatory re-enlistment of at least 50% of Agniveers recommended by some veterans would be considered to finetune the scheme. Right now, the protests are continuing unabated. A clearer picture will emerge by the time the recruitment process gets underway.

NCERT'S TEXTBOOK 'RATIONALISATION' EXERCISE RAISES QUESTIONS OF POLITICAL INTENT, IS AT ODDS WITH PROGRESSIVE THRUST OF NEP

An investigation by this newspaper has revealed that the NCERT is set to effect sweeping changes in social science textbooks for Classes VI to XII. Described as a "rationalisation exercise", the project raises several questions and concerns. The premier education body's plans involve deleting content related, for one, to chapters in history that have acquired political overtones under the current ruling establishment — the Delhi Sultanate and the Mughal Empire. Another set of changes involve key fraught moments in the country's recent political history — the Emergency in 1975-77 and the communal violence in Gujarat 2002. The revisions will also impact how students learn about the inequities of the caste system and the impact of social and protest movements such as the Narmada Bachao Andolan. As disparate as they look, the proposed deletions and modifications appear to have a common theme – they seem motivated by the urge to protect the authority of the state from questions, arguments and criticism, and to project and promote the notion of a cohesive Hindu society.

In striking contrast with the wide-ranging deliberations undertaken by the NDA government ahead of the finalisation of the new National Education Policy, these textbook revisions are mired in opacity. The NCERT claims to have consulted social scientists not associated with it but the names of these "external experts" are not in the public domain. As this paper's investigation reveals, tables detailing the deletions were circulated – internally. The stated rationale for the exercise is to reduce the curriculum load to help students make a "speedy recovery" in learning after the disruptions brought about by the Covid pandemic. But as a number of experts have underlined, helping children to get back on their feet will require classroom-level interventions, such as empowering teachers. In any case, pandemic-related exigencies do not require making permanent deletions and attenuating the content of textbooks. The nature and content of the proposed changes and deletions run counter to the social scientist's mandate of encouraging critical thinking by presenting a complex understanding of social and political processes, with all their diversities, cleavages and inequities. A historian's task is to depict a nuanced view of the past — the history textbook changes proposed by the NCERT invite questions about political partisanship and pressure on the institution, given that "distortion" and "misrepresentation" of India's past is a common and insistent refrain of the ruling BJP.

The revision exercise will be followed by drafting of the National Curriculum Framework — one of the requirements of the NEP. In contrast to the lack of transparency in the NCERT-driven project, much of the NCF procedures are in the public domain. But it seems to be taking a partisan route, at odds with the NEP's scrupulous ideological agnosticism. As this paper's investigation has also revealed, 24 members with RSS links, some of them serving functionaries, figure in at least 17 of the 25 national focus groups working on curriculum changes. This, along with the erasures proposed by the NCERT, does not augur well for the progressive thrust of the NEP.

WHY WAS THERE A FUEL SHORTAGE IN INDIA THIS MONTH?

For much of June, several cities across the country have witnessed petrol pumps rationing supplies or shutting due to non-availability of fuel, leading to concerns about shortages and triggering panic buying among some consumers.

The situation peaked around the middle of the month, and the government intervened by asking pumps to stay open and directing oil marketing companies (OMCs) to ensure the availability of fuel. The Ministry of Petroleum and Natural Gas also assured there was enough fuel in the country.

The situation has eased since then, and the fuel availability situation is likely to start returning to normal next month.

What's behind the fuel shortage in India?

As global crude prices increased and the value of the rupee fell simultaneously, OMCs such as state-owned IOCL, HPCL, and BPCL, and private companies Rosneft-backed Nayara Energy and Reliance Industries, started to report losses on retail sales.

As the losses mounted, downstream oil companies tried to reduce supply to petrol pump vendors, which resulted in fuel shortage at pumps in multiple states. In a statement issued on June 15, the government acknowledged the problem — and said that shortages had been noticed in Rajasthan, Madhya Pradesh, and Karnataka.

The government blamed the scarcity of fuel on the surge in demand — the increase being as high as 50% in the first half of June 2022 over the corresponding period last year. It also said that the states that were seeing shortages were those in which large quantities were supplied by retail outlets belonging to private marketing companies, and where the distances from supply locations — terminals and depots — are larger.

The Centre, however, assured that the production of petrol and diesel in the country "is more than sufficient" to take care of any demand surge.

There are about 81,700 retail fuel stations in the country, some 7,200 of which are owned by private companies. Some dealers said the situation at IOCL retail pumps was better than in those owned by other companies — a situation linked primarily to the downstream retail major accessing cheaper crude. Others, however, claimed that the situation at IOCL pumps was as bad as the others.

According to industry sources, on Friday, over 409 petrol pumps were closed due to fuel shortage, which included 225 pumps of HPCL, 132 of IOCL, and 52 of BPCL. To put things in perspective, IOCL has the largest network of petrol pumps in the country at 34,000 plus; the other two OMCs have around 20,000 pumps each.

Why is the problem more acute in areas where larger numbers of retail outlets are owned by private oil marketing companies?

While prices of petrol and diesel are decontrolled — meaning, theoretically, that their rates are decided by the market — there is an invisible hand of the government in the way rates move. The price of petrol in the past three months in Delhi is a case in point — it rose 3.54 per cent in April, fell 8.24 per cent in May on account of the cut in excise duty, and has remained unchanged in June.

Rise in crude prices and the depreciating rupee during the period have led to losses to OMCs. Industry estimates suggest that at current levels, oil companies are losing Rs 25 per litre on diesel and Rs 10 on petrol, when sold through retail outlets. Many private OMCs therefore stopped sales through their retail outlets, leading to shortage.

Some public sector oil companies also reduced supply to dealers to cut their losses by discontinuing the fuel on credit offered to pump owners, thus impacting their fuel lift. However, Indian Oil has continued with the credit system.

Industry players blame the current situation on the freeze in oil prices. "It is due to the repeated intervention of the Petroleum Ministry in the working of OMCs and the freeze on the petroleum price for more than 150 days due to elections that has resulted in under recoveries," Hemant Sirohi, a member of the Empowering Petroleum Dealers Foundation and the owner of a petrol pump in Meerut, said.

When will the situation ease?

The solution lies in raising retail petrol and diesel prices to ensure oil companies do not lose money, but that may not happen soon. High fuel prices could have a cascading impact on inflation. Oil companies have raised jet fuel prices and rates for bulk purchasers, but that may not offset all their losses.

Industry experts say invoking the Universal Service Obligation (USO) may also not be enough. "Simply invoking USO will not help in availability of the product at retail outlets, since private companies have increased prices at their outlets. It will be interesting to see how BPCL/ HPCL proceed during the weekly holidays, since in the past supplies without advance payments were not released leading to a dry-out situation across states," a dealer said. The situation may start to ease from next month, as the monsoon reduces fuel requirement for sectors like agriculture.

BPCL shut half the crude processing capacity at 240,000 barrels per day (bpd) at its refinery in Mumbai from June 10 for routine maintenance. This, however, is unlikely to impact fuel availability significantly, as these maintenance runs are planned and any shortages are made up by other refiners.

An email sent to the Petroleum Ministry, and queries sent to IOCL, HPCL, and BPCL did not get a response until press time.

How much crude is India buying from Russia?

The Petroleum Ministry said last month that "energy purchases from Russia remain minuscule in comparison to India's total consumption". While Iraq remained the top supplier to India in May, Russia rose to second place, pushing Saudi Arabia down to third that month.

India has taken advantage of discounted prices offered by Moscow to ramp up crude imports from Russia at a time of surging global energy prices. Russian imports have jumped by over 50 times since April, and now make up 10 per cent of all crude bought overseas, a PTI report said on Thursday, quoting a senior government official. Prior to the Ukraine war, Russian oil was just 0.2 per cent of India's oil imports.

As much as 40 per cent of the Russian oil has been bought by private Indian refiners Reliance Industries and Nayara Energy.

WHY IS SINGLE-USE PLASTIC BEING BANNED IN INDIA FROM JULY 1?

The Centre has banned the use of 'single-use plastic' from July 1. The Ministry for Environment, Forest and Climate Change had issued a gazette notification last year announcing the ban, and has now defined a list of items that will be banned from next month.

"The manufacture, import, stocking, distribution, sale and use of following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from the 1st July, 2022,'' says the Ministry notification.

What is single-use plastic?

As the name suggests, it refers to plastic items that are used once and discarded. Single-use plastic has among the highest shares of plastic manufactured and used — from packaging of items, to bottles (shampoo, detergents, cosmetics), polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.

A 2021 report by one of the Australian philanthropic organisations the Minderoo Foundation said single-use plastics account for a third of all plastic produced globally, with 98% manufactured from fossil fuels. Single-use plastic also accounts for the majority of plastic discarded – 130 million metric tonnes globally in 2019 — "all of which is burned, buried in landfills or discarded directly into the environment", the report said.

On the current trajectory of production, it has been projected that single-use plastic could account for 5-10% of greenhouse gas emissions by 2050.

The report found that India features in the top 100 countries of single-use plastic waste generation – at rank 94 (the top three being Singapore, Australia and Oman. With domestic production of 11.8 million metric tonnes annually, and import of 2.9 MMT, India's net generation of single-use plastic waste is 5.6 MMT, and per capita generation is 4 kg.

What are the items being banned?

The items on which the Central Pollution Control Board (CPCB) have announced a ban are earbuds; balloon sticks; candy and ice-cream sticks; cutlery items including plates, cups, glasses, forks, spoons, knives, trays; sweet boxes; invitation cards; cigarette packs; PVC banners measuring under 100 microns; and polystyrene for decoration.

The Ministry had already banned polythene bags under 75 microns in September 2021, expanding the limit from the earlier 50 microns. From December, the ban will be extended to polythene bags under 120 microns. Ministry officials have explained that the ban is being introduced in phases to give manufacturers time to shift to thicker polythene bags that are easier to recycle. While manufacturers can use the same machine for 50- and 75-micron bags, the machinery will need to be upgraded for 120 microns.

According to the Plastic Waste Management Rules, 2016, there is also a complete ban on sachets using plastic material for storing, packing or selling gutkha, tobacco and pan masala.

Why these items?

Ministry officials have said that the choice for the first set of single-use plastic items for the ban was based on "difficulty of collection, and therefore recycling".

"The enemy is not that plastic exists per se, but that plastic exists in the environment. When plastic remains in the environment for long periods of time and does not decay, it turns into microplastics – first entering our food sources and then the human body, and this is extremely harmful. We have chosen these items as they are difficult to collect, especially since most are either small, or discarded directly into the environment – like ice-cream sticks. It then becomes difficult to collect for recycling, unlike the much larger items," said a Ministry official.

Satish Sinha of the environmental group Toxic Links described the items chosen as "low-hanging fruit". "Of the single-use plastic industry – the production and sale of these items is miniscule. The largest share of single-use plastic is that of packaging – with as much as 95% of single use belong to this category – from toothpaste to shaving cream to frozen foods. The items chosen are of low value and of low turnover and are unlikely to have a big economic impact, which could be a contributing reason. Having said that, we do need to start with something, and it is a beginning," said Sinha.

How will the ban be enforced?

The ban will be monitored by the CPCB from the Centre, and by the State Pollution Control Boards (SPCBs) that will report to the Centre regularly. Directions have been issued at national, state and local levels — for example, to all petrochemical industries — to not supply raw materials to industries engaged in the banned items.

Directions have also been issued to SPCBs and Pollution Control Committees to modify or revoke consent to operate issued under the Air/Water Act to industries engaged in single-use plastic items. Local authorities have been directed to issue fresh commercial licenses with the condition that SUP items will not be sold on their premises, and existing commercial licences will be cancelled if they are found to be selling these items.

Last week, the CPCB issued one-time certificates to 200 manufacturers of compostable plastic and the BIS passed standards for biodegradable plastic.

Those found violating the ban can be penalised under the Environment Protection Act 1986 – which allows for imprisonment up to 5 years, or a penalty up to Rs 1 lakh, or both.

Violators can also be asked to pay Environmental Damage Compensation by the SPCB. In addition, there are municipal laws on plastic waste, with their own penal codes.

How are other countries dealing with single-use plastic?

Earlier this year, 124 countries, parties to the United Nations Environment Assembly, including India, signed a resolution to draw up an agreement which will in the future make it legally binding for the signatories to address the full life of plastics from production to disposal, to end plastic pollution.

Bangladesh became the first country to ban thin plastic bags in 2002. New Zealand became the latest country to ban plastic bags in July 2019. China issued a ban on plastic bags in 2020 with phased implementation.

As of July 2019, 68 countries have plastic bag bans with varying degrees of enforcement.

Eight states in the US have banned single-use plastic bags, beginning with California in 2014. Seattle became the first major US city to ban plastic straws in 2018.

On July 2, 2021, the Directive on Single-Use Plastics took effect in the European Union (EU). The directive bans certain single-use plastics for which alternatives are available; single-use plastic plates, cutlery, straws, balloon sticks and cotton buds cannot be placed on the markets of the EU member states. The same measure applies to cups, food and beverage containers made of expanded polystyrene, and all products made of oxo-degradable plastic.

Vanuatu and the Seychelles have banned plastic straws outright.

WHAT EXPLAINS THE BCCI BONANZA ON IPL?

The story so far: The Board of Control for Cricket in India (BCCI) had floated a tender for awarding the media rights for IPL's broadcast from 2023 to 2027. The rights — categorised separately for the first time for television and digital platforms — were sold for a combined sum of ₹48,390 crore from the ₹17,110 crore that the previous cycle offered. While Disney Star paid ₹23,575 crore to acquire television rights for the Indian sub-continent, the Viacom 18 group shelled out ₹23,758 crore for digital rights. The rest of the world rights were split between Viacom 18 and Times Internet Ltd. for a combined sum of ₹1,057 crore.

Why have TV and digital rights been split?

Sensing that consumption of IPL on digital platforms will increase by huge numbers in future, the BCCI tried to keep ahead of the market trend to bet big on digital. The fact that the digital rights for the Indian subcontinent have fetched more revenues to the BCCI than the same through TV rights underlines that the decision to split the rights, along with that of conducting an e-auction, has turned out to be a masterstroke.

Will IPL then have more games in the next five years?

Yes. In fact, the BCCI's clarification to potential bidders about increase in the number of games also resulted in its additional revenue.

For now, the BCCI has announced that the IPL will witness 410 games from 2023 to 2027. Just like the 2022 edition, the next two years (2023 and 2024) will have 74 games. In 2025 and 2026, the IPL will stage 84 games per season, with each team playing at least 16 games, instead of the existing 14. Come 2027, and the total number of games will further increase to 94, with every team set to feature in at least 18 games.

Do broadcasting rights mean more money for teams?

The IPL revenue model is based on 50% of the central revenue pool being divided equally among the franchises. The revenue pool primarily includes the franchisee fees (for two teams), the media rights revenue and the central sponsorship revenue. The central revenue pool for the next five years is estimated at ₹60,000 crore, which tallies to ₹12,000 crore annually. It means half of it — approximately ₹6,000 crore — will be divided among the existing 10 franchises. An assured average annual revenue of ₹600 crore for franchise owners will be more than double than that for the 2022 edition, estimated to be approximately ₹275 crore.

Individual players will also get richer but not proportionately. In 2022, the IPL had a cap of ₹90 crore for each franchise to assemble a squad comprising a maximum of 25 players. The cap is set to rise to ₹95 crore in 2023 and ₹100 crore in 2024. The modus operandi of squad development in itself may change thereafter. It means that the players will definitely get richer but not as much as is anticipated.

Will IPL have more teams now?

With the BCCI set to get a longer window for the IPL from now on, besides relaxing the schedule a little bit, the scale at which the media rights have been sold has already led to murmurs within the BCCI of the need to increase the number of teams from 10 to 12 in 2027, if not in 2026.

What lies ahead?

The introduction of two separate broadcasters for IPL in India for television and digital platforms may result in increased burden on IPL fans. It will be interesting to see how the BCCI uses the additional revenue. The need of the hour is to strengthen the feeder-line for men's cricket, especially domestic cricketers, age-group cricketers, match officials and scores of State association foot-soldiers. Besides, the BCCI needs to ensure that there is a robust financial model for the women's game across levels.

The BCCI's announcement of increasing pension for those who retired before 2004 is certainly welcome. But experts say that's far from being enough.

HOW LIGHTNING KILLS, AND HOW TO BE SAFE WHEN IT STRIKES?

Seventeen people have been killed by lightning over the last two days in various parts of Bihar, Six deaths have been reported from Bhagalpur district, while three people were killed in Vaishali, and two each in Banka and Khagaria. Other deaths happened in Madhepura, Saharsa, Munger and Katihar.

Of all the atmospheric phenomena, lightning perhaps is the most dangerous and mysterious. In India, lightning kills about 2,000-2,500 people every year. Bihar is just one of the several hotspots for lightning in India, as a new atlas of lightning shows.

What is lightning?

Scientifically, lightning is a rapid and massive discharge of electricity in the atmosphere some of which is directed towards earth. The discharges are generated in giant moisture-bearing clouds that are 10-12 km tall. The base of these clouds typically lie within 1-2 km of the Earth's surface, while the top is 12-13 km away. Temperatures in the top of these clouds are in the range of –35° to –45°C.

As water vapour moves upward in the cloud, the falling temperature causes it to condense. As they move to temperatures below 0°C, the water droplets change into small ice crystals. They continue to move up, gathering mass until they are so heavy that they start to fall to Earth. This leads to a system in which, simultaneously, smaller ice crystals are moving up and bigger crystals are coming down.

Collisions follow and trigger the release of electrons, a process that is very similar to the generation of sparks of electricity. As the moving free electrons cause more collisions and more electrons, a chain reaction ensues. This process results in a situation in which the top layer of the cloud gets positively charged, while the middle layer is negatively charged. The electrical potential difference between the two layers is huge, of the order of a billion to 10 billion volts. In very little time, a massive current, of the order of 100,000 to a million amperes, starts to flow between the layers.

While the Earth is a good conductor of electricity, it is electrically neutral. However, in comparison to the middle layer of the cloud, it becomes positively charged. As a result, about 15%-20% of the current gets directed towards the Earth as well. It is this flow of current that results in damage to life and property on Earth.

Direct lightning strikes are rare but even indirect strikes are fatal given the immense amount of charge involved.

Which areas are lightning-prone?

A recently released annual report on lightning by the Climate Resilient Observing Systems Promotion Council (CROPC), which works closely with government agencies like the India Meteorological Department, includes a lightning atlas which maps vulnerability at the district level.

According to the report, Madhya Pradesh has reported the largest number of cloud to ground lighting strikes, followed by Chhatisgarh, Maharashtra, Odisha and West Bengal. Other states with high strike rate include Bihar, UP, Karnataka, Jharkhand and Tamil Nadu.

Lightning is fairly common, though it is not often realised in the urban centres. In India, well over one crore lightning strikes have been recorded in recent years. It is only over the last few years that lightning records have begun to be maintained, thanks to the efforts of CROPC and India Meteorological Department.

In 2019-20, about 1.4 crore lightning strikes were recorded, which increased to 1.85 crore in 2020-21.

In 2021-22, about 1.49 crore strikes were recorded across the country. The reduction, in line with the trend observed globally, has been attributed to the impact of the Covid-19 pandemic.

"The reason attributed to reduction in lightning is due to Covid-2019 pandemic induced reduction in aerosol level, pollution, environmental upgradation and relatively stable weather system in Indian subcontinent," the annual lightning report said.

But most of this reduction was seen in the cloud-to-cloud lightning. Of the strikes that reach the Earth, only a 2.5% reduction was observed.

How can the effects of lightning strikes be mitigated?

Lightning is not classified as a natural disaster in India. But recent efforts have resulted in the setting up of an early warning system, that is already saving many lives. More than 96% of lightning deaths happen in rural areas. As such, most of the mitigation and public awareness programmes need to focus on these communities.

Lightning protection devices are fairly unsophisticated and low-cost. Yet, their deployment in the rural areas, as of now, is extremely low.

States are being encouraged to prepare and implement lightning action plans, on the lines of heat action plans. An international centre for excellence on lightning research to boost detection and early warning systems is also in the process of being set up.

MONSOON JITTERS

The monsoon landed early in Kerala, three days ahead of the normal date of June 1. The journey upward of its western branch has since then been timely but lacking in vigour. The latest IMD figures suggest that the monsoon is running an 8% deficit. Central India, which has the largest swathe of land dependent on rainfed agriculture, has only got 52% of the rain that is due; the southern peninsula has a 22% deficit. Only India's east and north-eastern parts are battling the diametrically opposite problem of too much rain, with floods in Assam and Meghalaya submerging entire villages. The northwest of India, where the monsoon is yet to arrive, and reeling under a series of heatwaves, is battling a rainfall deficit of 33%. The monsoon rainfall is critical to kharif sowing and so a faltering June has raised concerns in several quarters. However, there is little to be worried about at this juncture. June rainfall, particularly in the first fortnight, is historically patchy and contributes less than 18% of the monsoon rainfall. Meteorologists maintain that there is no correlation of the timing and advent of the monsoon rainfall with its eventual performance. Because of the large variance inherent in June rainfall, the IMD has historically chosen not to issue forecasts for the month, unlike for July and August. The latter two are considered the key monsoon months and responsible for supplying nearly two-thirds of the monsoon rains. Episodes of drought in India and those that are linked to agricultural failures are when the monsoon fails in these two months.

In fact, the real worry that lingers over the horizon is rainfall in July and August. On May 31, as part of its updated forecast, the IMD gave an optimistic picture. The June to September rainfall over the country was likely to be 103% of the Long Period Average, and central India was likely to get "above normal" rainfall as was the southern peninsula. The monsoon core zone, which consists of most of the rainfed agriculture regions, too is expected to receive "above normal" rain. In previous years, there has been a pattern of 'normal' and 'above normal' rains being forecast only for them to dry up for large periods in July and August, followed by a sudden surge in September. This pattern may help deliver the numbers but is not always beneficial for kharif sowing. The expectations of a good monsoon are premised on the persistence of a La Niña, the converse of the El Niño and characterised by a cooling of the Central Pacific waters. However, the Indian Ocean Dipole (IOD), another index of significance to the monsoon, is expected to be negative. Whether the La Niña can compensate for the dampening of the IOD remains to be seen.

GOVT MUST HELP BUILD RESILIENCE AGAINST RECURRING FLOODS, PUT WARNING SYSTEMS, LONG-TERM MITIGATION MEASURES IN PLACE

Even as Assam becomes the site of the political turmoil in Maharashtra, people in the Northeastern state are facing the fury of the Brahmaputra, Barak and their tributaries. Nearly 100 people have lost their lives in the rain-induced landslides and floods that have engulfed 30 of Assam's 35 districts, a geographical sweep described as unprecedented by experts. The Centre and state government have commenced relief operations but the raging rivers have hobbled these activities. Assam Chief Minister Himanta Biswa Sarma has reportedly said that once the waters recede, the government will find a permanent solution to the state's flood problem. Similar statements have been made before, including in 2020, by then CM Sarbananda Sonowal. But words have rarely been matched by action.

For more than half a century, Assam has relied on embankments to stave off the swelling rivers during the monsoons. A growing body of literature shows that these walled structures — most of them have not been repaired for decades — are ill-equipped to tackle floods, especially at a time when climate change is complicating the state's hydrology. Assam's flood management data shows that it needs to take such studies seriously. Last year, the state's water resources minister, Pijush Hazarika, informed the Assam assembly that close to 1,300 cases of embankment breaches have been recorded since 2000. Reports of the state's Disaster Management Authority show that the problem has intensified in recent times. Floods ripped apart nearly 200 embankments in 2020. This year, they have destroyed nearly 300 such structures. A report of the Parliamentary Standing Committee on Water Resources last year advised the state government to strengthen flood protection structures, address soil erosion and de-silt rivers. But these measures continue to be on the to-do list of the Assam government. In fact, the state's flood management outlay has come down in the past two years.

Assam has received nearly twice its average June rainfall in the first three weeks of the month. The state's rainfall for March-May was 62 per cent more than the normal average. Destruction of natural wetlands and outmoded sewer systems in the state's cities — including in Guwahati, projected to be a smart city by 2025 — have made these urban centres susceptible to water logging. Waterbody restoration and sewer system overhaul might take time. Meanwhile, the state government would do well to build people's resistance to the elements in cities, towns and villages. Such measures include putting flood warning systems in place and shifting people and livestock to safer locations. The state's annual suffering must end.

GOA'S SAO JOAO FESTIVAL, AND WHY REVELLERS JUMP INTO WELLS AND PONDS

As in every monsoon, Catholics in Goa will celebrate Sao Joao, the feast of St John the Baptist, on Friday. The celebrations will include revellers sporting crowns made of fruits, flowers and leaves, and the major draw of the feast is the water bodies – wells, ponds, fountains, rivers – in which the revellers take the "leap of joy". Enjoyed by children and adults alike, the festival also includes playing the traditional gumott (percussion instrument), a boat festival, servings of feni, and a place of pride for new sons-in-law.

What is Sao Joao and where is it celebrated in Goa?

In Goa, Catholics celebrate all the feasts of the Roman Catholic Church, which include the feast of St John the Baptist on June 24 (John the Baptist because he had baptised Jesus Christ on the river Jordan). Traditionally, there are spirited Sao Joao festivities in the villages of Cortalim in South Goa and Harmal, Baga, Siolim and Terekhol in North Goa. However, over the years, pool parties and private Sao Joao parties in Goa have been a "complete package of merriment and joy" for tourists, according to the Goa Tourism Development Corporation (GTDC).

PROTEST AGAINST MOVE TO 'SHIFT' PROPOSED HERITAGE PARK IN MANIPUR

Members of seven youth clubs, people from all walks of life and women activists in the villages surrounding the Keibul Lamjao National Park (KLNP) in Manipur have now taken up the cudgels to ensure that the BJP-led government does not shift the proposed heritage park from the government-approved site.

The villagers took out a demonstration near the KLNP, 53 km away from Imphal in Bishnupur district, opposing the plan to shift the site elsewhere. The KNLP is home to the endangered brow-antlered deer (Sangai) in the KNLP.

Manipur CM N. Biren recently said, "The government has set aside ₹46 crore for the construction of the heritage park. There will be traditional thatched houses of the different communities in this park."

It was expected that the museum of the Indian National Army (INA), which hoisted the first Indian flag near the Loktak lake, and the heritage park will attract tourists from the country and abroad.

Spokesperson of the seven youth clubs N. Ranbir said, "It is deplorable that politics has spoilt the atmosphere. Without giving any credible and acceptable explanation, the government has decided to shift the site to a place six km away from the KLNP. The proposed site has no connection with efforts to save the endangered Sangai deer. On the other hand, the people in surrounding villages have been doing everything possible to protect the deer. Will there be any meaning now for celebrating 'Sangai festival' every year to create awareness among the people and attract tourists?"

So far, the Chief Minister and others have not commented on the issue.

Mr. Ranbir said, "The government must take a positive step in this regard by Thursday (June 23). If the government fails, all government offices around the KNLP shall be closed down by the villagers. Besides no tourist shall be allowed to enter the KLNP and nearby tourist spots."

The KLNP is the natural habitat of the brow-antlered deer, whose population is less than 300 and is listed in the red book. Wildlife enthusiasts fear the actual number of deer in the KLNF is alarmingly low since some poachers allegedly get 'complete freedom' to kill the 'dancing deer'.

Poaching threat

Some months ago, one person was caught with a sack of venison.

The government cannot ban the entry of fishermen into the Loktak lake, including the KLNP, as the villagers have been fishing there since time immemorial and have no alternative source of income. Some poachers enter the Loktak lake, the largest freshwater lake in the Northeast, masquerading as fishermen to poach the deer.

RARE DRAGONFLY SPOTTED IN KERALA FOR FIRST TIME

Dragonfly enthusiasts have recorded the presence of a rare dragonfly that was hitherto unseen in Kerala.

Afsar Nayakkan and Vibhu Vipanchika spotted the Spiny Horntail, Burmagomphus chaukulensis Joshi, Ogale & Sawant, 2022 (or B. chaukulensis), during a recent expedition to the Kottiyoor forests of Kannur. The species that is known to be endemic to the Western Ghats was discovered in Maharashtra earlier this year.

The discovery that was recorded from Kottiyoor was confirmed by Vinayan P. Nair, an odonate expert who represents the TNHS Odonata Research Group (TORG) of the Travancore Nature History Society (TNHS).

Researchers Shantanu Joshi, Dattaprasad Sawant and Hemant Ogale had spotted the species from Chaukul in Sindhudurg district of Maharashtra. Prior to their finding, the dragonfly genus Burmagomphus was represented by three species – B. cauvericus, B. pyramidalis and B. laidlawi. While B. laidlawi is found throughout the Western Ghats, B. cauvericus is more restricted in its distribution. B. pyramidalis is found in the Western Ghats as well as in Peninsular India. All other species of the genus are found in the Western and Eastern Himalayas.

The new species can be separated from its congeners by the markings on the lateral thorax and peculiar shape of anal appendages, said Mr. Nair.

According to a paper published by TORG last year, 181 odonata species have been recorded in Kerala. The addition of B. chaukulensis will take the count to 182. TORG research associate Kalesh Sadasivan said the discovery demanded more detailed studies of odonates in the areas of Kerala that forms part of the Western Ghats.

FOUR NEW CORALS RECORDED FROM INDIAN WATERS

Scientists have recorded four species of corals for the first time from Indian waters. These new species of azooxanthellate corals were found from the waters off the Andaman and Nicobar Islands.

The azooxanthellate corals are a group of corals that do not contain zooxanthellae and derive nourishment not from the sun but from capturing different forms of planktons.

They are deep-sea representatives with the majority of species being reported from depths between 200 metres and 1,000 metres. They are also reported from shallow waters unlike zooxanthellate corals that are restricted to shallow waters.

The details of the new species have been published in Thalassas: An International Journal of Marine Sciences.

The Zoological Survey of India (ZSI) scientist behind these new findings, Tamal Mondal, said all the four groups of corals are from the same family, Flabellidae.

Truncatoflabellum crassum (Milne Edwards and Haime, 1848), T. incrustatum (Cairns, 1989), T. aculeatum (Milne Edwards and Haime, 1848), and T. irregulare (Semper, 1872) under the family Flabellidae were previously found in Japan, the Philippines and Australian waters, while only T. crassum was reported with the range of Indo-West Pacific distribution.

Solitary corals

Mr. Mondal said azooxanthellate corals are a group of hard corals and the four new species recorded are not only solitary but have a highly compressed skeletal structure. "Most studies of hard corals in India have been concentrated on reef-building corals while much is not known about non-reef-building corals. These new species enhance our knowledge about non-reef-building solitary corals," he added.

Dhriti Banerjee, director of ZSI, said coral reefs are one of the most productive ecosystems in oceans. "Hard corals are the prime and intrinsic part of the coral reef ecosystem. ZSI has given special emphasis on the exploration of the coastal and marine biodiversity of India in recent times. It has come out with several new discoveries," she said.

The new species enhance the national database of biological resources of India and also define the expansion of scope to explore these unexplored and non-reef building corals, she said.

NEW SPECIES OF BAMBOO-DWELLING BAT FOUND IN MEGHALAYA

Scientists have discovered a new species of bamboo-dwelling bat in Ri Bhoi district of Meghalaya. The species, found near the forested patch of Nongkhyllem Wildlife Sanctuary, has been named Glischropus meghalayanus.

The present discovery is the first report of a thick-thumbed bat not only from India but also from South Asia.

Small in size

The scientists behind the discovery are Uttam Saikia from the Zoological Survey of India, who collected the specimen from the forested patch in the summer of 2020; Gabor Csorba of the Hungarian Natural History Museum and Manuel Ruedi of the Natural History Museum of Geneva.

Thick-thumbed bats of the genus Glischropus are currently composed of four recognised species from Southeast Asia. The newly discovered species is small in size and has a dark brown colour with sulphur yellow belly.

"Two recently collected Glischropus specimens from Meghalaya in northeastern India extend the known distribution range of the genus westward into South Asia by ca. (approximately) 1,000 km.

Morphological examination of these specimens and comparison with all known species in this genus revealed marked differences in colouration, dental characters and bacular traits. We therefore describe the Meghalaya specimens as a new species," the paper published in the peer-reviewed journal Zootaxa said.

Another species

The paper titled 'Out of Southeast Asia: A new species of thick-thumbed bat (Chiroptera: Vespertilionidae: Glischropus) from Meghalaya, north-eastern India' was published on June 15.

Mr. Saikia said that from the same forested patches outside the Nongkhyllem Wildlife Sanctuary, he found another species of disk-footed bat Eudiscopus denticulus which was a new record in India.

"In the past few years we have reported three bamboo-dwelling bats from the area which highlight the ecological significance of the region. Since the bamboo forest around the wildlife sanctuary has a rich bio-diversity there should be attempts to conserve it," he added.

Bamboo-dwelling bats are a particular kind of bats living in the internodes of bamboos with specialised morphological characters that help them to adopt to the life inside a bamboo.

With this new discovery, the total number of bat species known from India stands at 131. Meghalaya, a State with a small geographical area, harbours the highest bat diversity in the country with 67 species, which is about 51% of total bat species in the country.

Dhriti Banerjee, Director of the ZSI, said that Meghalaya, because of its unique terrain, vegetation and climate condition, was a haven for both flora and fauna.

Roosting places

She pointed out that the unique caves in the northeastern State provided roosting opportunities for a large number of bats.

Mr. Saikia also pointed out that there were a number of cave-dwelling bats species from Meghalaya, the most common being horseshoe bat and leaf-nosed bats.

The nomenclature of the newly discovered species Glischropus meghalayanus celebrates the State of Meghalaya, where the new species was found.

A few of these bat species from Meghalaya are endemic to the region.

The ZSI Director added that the northeastern States were less explored and more studies would lead to many more such discoveries.

INVASIVE WEED, 17 PLANTS STIFLING KAZIRANGA

A Vitamin D3-rich weed and a shrub with roots that wild boars love to gorge on are among the 18 invasive plants stifling the Kaziranga National Park and Tiger Reserve, the best-known address of the greater one-horned rhinoceros on the Earth.

Kaziranga has had to deal with encroachment, poaching, and annual floods for decades. But none of these has been as damaging to the health of the 1,300-sq. km tiger reserve as the green invaders that have gone under the radar until now.

Soon after taking over as the Kaziranga's Field Director a few months ago, Jatindra Sarma began identifying the invasive plants and documented 18 of them silently taking over the landscape at the cost of indigenous grasses, shrubs and trees the herbivores of the park sustain on.

The list he submitted to the Wildlife Institute of India (WII) did not contain the "usual culprits" of many protected areas in India – parthenium and lantana that threaten more than 40% of India's tiger reserves, according to a global study in 2020.

It did mention ipomoea (Ipomoea carnea) and mimosa (Mimosa himalaica) but marked them as largely controlled and not much of a worry now.

Parthenium (Parthenium hysterophorus) is believed to have come to India as contaminants in a consignment of wheat imported from the U.S. in the 1950s while lantana (Lantana camara) was brought by the British as ornamental plants from South America two centuries ago.

In a letter to the State's Principal Chief Conservator of Forest (Wildlife) a few days ago, Mr. Sarma sought permission for experimental culling, cutting, slashing, burning, uprooting and girdling of the invasive plants under the National Tiger Conservation Authority (NTCA) following discussions with the WII experts. The WII had earlier advised the Field Director to weed out the invasive plants for the indigenous Kaziranga flora to breathe easier.

"The NTCA has undertaken the management of the invasive plants in other tiger reserves but this is the first time that such species have been identified with threat estimation. Many like the Bombax ceiba and Largestroemia speciosa, trees locally called 'semul' and 'ejhar', need immediate attention to save the grasslands vital for the survival of the rhino and other herbivores," Mr. Sarma, a botanist, told The Hindu.

Invasive plants are fast clogging paths and grasslands.The herbivores usually avoid the invasive plants which regenerate at an alarming speed and threaten to edge out the indigenous flora. Some of the invasive plants have a toxic impact on the landscape after remaining underwater, which is often for two months every monsoon.

Outweighing utility

Some weeds have herbal properties, but their toxicity outweighs their utility. For instance, wild boars love to gorge on the succulent rootlets of the Leea macrophylla or 'kukura thengia' that is fast clogging the patrolling paths and grasslands.

Another one is the Cestrum diurnum or day-blooming jasmine of West Indies origin "coming up gregariously" on the Brahmaputra sandbars. The plant is otherwise a source of Vitamin D3.

"Once the modalities are finalised, this weed can be turned into a commercial crop for the people in the vicinity of the Kaziranga. Pharmaceutical companies need tonnes of dry leaves of this plant periodically," Mr. Sarma said.

BUSINESS & ECONOMICS

GOVT. SAID TO AIM TO KEEP DEFICIT AT 6.7%

Efforts to maintain fiscal discipline reflect New Delhi's concern around risks to its sovereign credit rating but will likely limit the government's firepower to check inflation and provide relief to households and businesses.

In February, the government set a fiscal deficit target of 6.4% of GDP for the year to March 2023, compared with a deficit of 6.7% in the last financial year.

The sources said that while increased spending to provide relief from inflation meant the government would miss this year's target, policymakers would seek to limit the deviation to 30 basis points.

Surging costs forced India in May to cut fuel taxes and change duty structures, hitting revenues by about $19.16 billion, while added fertiliser subsidies lifted expenditure.

The government and central bank have scrambled to contain prices through fiscal measures and monetary tightening after inflation jumped to multi-year highs.

Risks of slippage

The government is wary of the risks fiscal slippage poses to its sovereign credit ratings. Its debt to GDP ratio, which stands at about 95%, is significantly higher than the 60-70% levels for other, similarly rated economies.

That leaves the government little room to provide additional relief, as the May measures are already expected to drive up the deficit by more than 30 basis points if revenue collection does not exceed the budget target.

The government is reluctant to expand its record market borrowing programme of ₹14.31 lakh crore this fiscal, both officials said.

NEW CONSUMER EXPENDITURE SURVEY IS LONG OVERDUE. GOVT SHOULD MOVE TO DOING SURVEYS ON A MORE REGULAR BASIS

The Narendra Modi government is set to launch a new household consumer expenditure survey (CES) from July. The exercise is welcome — in fact, long overdue. The CES, covering some 1.2 lakh rural and 84,000 urban households, is supposed to be conducted every five years. The last two such nationwide sample surveys were carried out in 2011-12 and 2017-18. Unfortunately, the results of the 2017-18 survey were not released on grounds of unexplained "data quality issues". Effectively, it means there is no official data after 2011-12 for estimating poverty lines and ratios, based on consumption spending below a certain level and the percentage of households falling within that deprivation threshold. Many would rightly argue that high growth rates and government welfare programmes have little meaning, especially in a country like India, if these do not result in reducing poverty. Without data, it's difficult to gauge whether this is happening at all, leave alone at an accelerated pace.

The current data vacuum is in contrast to 2011-2, when there was a surfeit of information from the decennial Census and the Rural Development Ministry's Socio Economic and Caste Census.

The latter data was, in fact, key to the identification of beneficiaries under the Modi government's own successful schemes — be it rural housing and toilets or providing free LPG and electricity connections. Data-driven policy-making is vital to other areas as well: For instance, is consumption of foods rich in proteins (milk, pulses, eggs and meat) and micro-nutrients (fruits and vegetables) growing at the same rate as in the previous decade? Only the CES can give satisfactory answers to this question, which also matters for making future demand projections, crop planning and dietary diversification interventions. With Covid's shadow falling behind, the next one-and-a-half years or so should hopefully yield a wealth of information from both the CES and the Census to guide policymakers and researchers, currently reliant on private data providers such as the Centre for Monitoring Indian Economy (CMIE) and NielsenIQ.

While the CES's launch is timely, the government should move to doing surveys on a more regular basis. The existing quinquennial framework and waiting for "normal" years makes no sense. Such years have become increasingly rare in India, where the recent period has seen disruptions owing to demonetisation, GST, Covid and the Ukraine war-induced commodity price shock. Since government decision-making has to be dynamic and responsive to changing ground situations, the data has to keep flowing. If a CMIE can survey over 2,36,000 households thrice every year, there is no reason why the National Statistical Office cannot do a CES, which is based on a more comprehensive questionnaire, at least annually, even with a smaller sample size.

ARE THE UNEMPLOYMENT NUMBERS RELIABLE?

The story so far: On June 14, the National Statistical Office (NSO), which functions under the Union Ministry of Statistics and Programme Implementation, released the annual report on the basis of the Periodic Labour Force Survey (PLFS) conducted during July 2020-June 2021. Though conducted amid the first lockdown, the survey said unemployment rate saw a decrease from 4.8% in 2019-20 to 4.2% in 2020-21, meaning that 4.2% of adults who looked out for jobs could not get any work in rural and urban areas of the country in 2020-21. In rural areas, the rate is 3.3% while in urban areas the unemployment rate was recorded at 6.7%. This report, which also gave details of internal migration, said 11.8 people out of 100 samples migrated to other States during the period of survey.

Why does the data matter?

Historically, data collated by the Indian government agencies were well accepted globally. Though, of late, several questions have been posed on the data released by the Centre and various State governments. The country needs reasonable good data for evidence-based policies to address issues such as unemployment and farmers' distress. Governments need data to understand economic and social behaviour of the people. For example, if the survey says unemployment has decreased, there are chances that the government systems become lethargic in addressing the situation. According to researchers, even empirically, the employment and the quality of employment have come down.

What happens next?

The data is used basically for planning governmental intervention in various sectors such as agriculture, infrastructure, animal husbandry etc. For drafting any policy, data has to be used in a context. If the reality is not reflected in data, public may reject such data. In classical Keynesian terms, any rate of unemployment below 5% is not considered as unemployment. The report raised questions among experts and critics about its efficacy in formulating policies against unemployment and for creating quality employment.

THE PROBLEMS PLAGUING THERMAL POWER GENERATORS

On June 10, India's power demand touched a record high of 211 MW even as the coal shortage continued with coal stocks available only for eight days. In the last two months, as temperatures soared and the economy recovered, the power demand breached the 200 MW level on several occasions. But the coal stock position at power plants remained worrisome. Consequently, the Ministry of Power sprang into action. To bridge the gap between shortage in domestic supply and increasing demand, power-generating companies or 'gencos' were directed to use imported coal for 10% of their requirement, failing which their domestic supplies would be cut.

How did India get here?

India is the second largest producer of coal, with reserves that could last up to 100 years. Despite that, year after year, the shortage of coal supplies continues to be an issue. Why does India have a recurring power crisis? The domestic production of coal stagnated between FY18 and FY21, but revived in FY22. The power demand too surged owing to economic recovery and hotter weather conditions. In a press release published on May 27, the Ministry of Power noted that "despite efforts to increase the supply of domestic coal, there is still a gap between the requirement of coal and the supply of coal.".

Until FY20, domestic sources contributed to about 90% of the power sector's coal receipts; the remaining was filled by imports. But by FY22, the reliance on imports dwindled to 3.8% which built pressure on domestic supplies. The coal imported by power plants declined to 27 MT in FY22 from 66.06 MT in FY17. Coal imported for blending purposes by power plants that run on indigenous coal declined to 8 MT in the last financial year, from 19.7 MT in FY17. Past data show that importing coal for blending has always seen few takers. A bulk of imports was made by power plants designed for imported coal. Notably, their share of imports too saw a decline of 60% in FY22 since FY17. Out of 15 such import-based power plants in India, five had little or no coal stock as of June 15.

This dip in imports can be attributed to the skyrocketing prices of coal in the international markets. The price of imported coal is nearly 5-6 times higher than domestic supply. It is in this scenario that the Power Ministry asked the gencos to import coal. However, States are wary of using imported coal as it would raise the cost of power substantially. The shortfall in domestic supplies and the rising cost of imports have put power plants in a precarious situation. About 79 of the 150 plants that depend on domestic coal had critical stocks (<25% of the required stock) as of June 15. Eight import-based coal plants were also at critical levels.

Perennial bottlenecks

The use of imported coal will also push up the price of power supply to the power distribution companies or 'Discoms,' often dubbed as the weakest link in the power sector chain. Discoms owe long-standing dues to the tune of ₹1.16 lakh crore to the gencos. Delays in payments by discoms create a working capital crunch for generating companies which in turn inhibits them from procuring an adequate quantity of coal.

According to the 2019-20 report by the Power Finance Corporation, discoms had accumulated losses up to ₹5.07 lakh crore and were therefore unable to pay generators on time. Discoms in Tamil Nadu, Rajasthan and Uttar Pradesh are the most financially stressed.

Discoms are bleeding because the revenue they generate is much lower than their costs. This is evident from the gap between the average cost of supply and average revenue realised. Tamil Nadu, Jammu and Kashmir, and Rajasthan have the widest gap between revenues and expenses of discoms. Apart from providing power at cheaper rates, some State governments do not revise tariffs periodically. Further, the delay in getting compensation from the government also compounds the woes of cash-strapped discoms.

WHAT IS A BLACK SWAN EVENT?

A study by the Reserve Bank of India (RBI) has spoken about the possibility of capital outflows to the tune of $100 billion (around Rs 7,80,000 crore) from India in case of a major global risk scenario or a "black swan" event.

What is a 'black swan' event?

A black swan is a rare, unpredictable event that comes as a surprise and has a significant impact on society or the world. These events are said to have three distinguishing characteristics – they are extremely rare and outside the realm of regular expectations; they have a severe impact after they hit; and they seem probable in hindsight when plausible explanations appear.

When did the term originate?

The black swan theory was put forward by author and investor Nassim Nicholas Taleb in 2001, and later popularised in his 2007 book – The Black Swan: The Impact of the Highly Improbable. The Sunday Times described his work as one of the 12 most influential books since World War II.

In his book, Taleb does not try to lay out a method to predict such events, but instead stresses on building "robustness" in systems and strategies to deal with black swan occurrences and withstand their impact.

The term itself is linked to the discovery of black swans. Europeans believed all swans to be white until 1697, when a Dutch explorer spotted the first black swan in Australia. The metaphor 'black swan event' is derived from this unprecedented spotting from the 17th century, and how it upended the West's understanding of swans.

When have such events occurred in the past?

Interestingly, Taleb's book predated the 2008 global financial crisis – a black swan event triggered by a sudden crash in the booming housing market in the US. The fall of the Soviet Union, the terrorist attack in the US on September 11, 2001, also fall in the same category.

Is the Covid-19 pandemic a black swan event?

Taleb does not agree with those who believe it to be one. In an interview to Bloomberg in 2020, he called it a "white swan", arguing that it was predictable, and there was no excuse for companies and governments not to be prepared for something like this.

While the outbreak of any pandemic is difficult to individually predict, the possibility of one occurring and having a major impact on systems around the world was known and documented.

STATES MUST BRING ON THEIR BOOKS ALL OFF-BUDGET BORROWINGS, TAKE MEASURES TO REDUCE DEBT TO MORE MANAGEABLE LEVELS

Over the past few years, much of the discussion on public finances in India has revolved around the fiscal stress at the level of the central government. However, state government finances have also been under pressure. Their space to manoeuvre has been restricted by slowing revenues, a rising share of committed expenditure and higher outgoes on subsidies. Unless the GST Council decides otherwise, they will witness a further fall in revenues once the compensation period draws to a close. A recent study by economists at the Reserve Bank of India notes that 10 states — namely, Punjab, Rajasthan, Kerala, West Bengal, Bihar, Andhra Pradesh, Jharkhand, Madhya Pradesh, Uttar Pradesh and Haryana — have the highest debt burden. Of these, the five most fiscally stressed are Bihar, Kerala, Punjab, Rajasthan and West Bengal. All these states have a debt to GSDP ratio in excess of 30 per cent.

A high debt level translates to higher interest payments. According to the report, the share of interest payments in revenue receipts exceeds 20 per cent for most of these states. Coupled with allocations for pension and administrative payments, the share of committed expenditure for these states is at least 30 per cent of revenue expenditure. With such a large share of their expenditure firmly earmarked, it restricts the fiscal space to spend on more productive avenues. States have also ramped up spending on subsidies. While a distinction needs to be made between merit and non-merit subsidies, politically motivated decisions such as providing free electricity or waiving of outstanding utility bills, profligate from a fiscal view, will aggravate the stress, and distort the functioning of the market. The failure to turn around the financial position of power distribution companies and opting out of the new pension scheme — Rajasthan and Chhattisgarh have recently done so — will only exacerbate the situation.

Over the past few years, some states have also been pushing part of their borrowings off budget, circumventing their ceilings. While there is little clarity on the extent of these obligations, the central government has now taken cognisance of this. It has recently asked states to bring on its books all off-budget borrowing undertaken over the past two years. This will bring about much needed transparency in state finances, revealing their true level of indebtedness. Alongside, states also need to take measures to shore up their revenues, reduce non-merit subsidies, and bring down their debt to more manageable levels.

RBI PUTS A STOP TO CREDIT LINES ON NON-BANK PREPAID INSTRUMENTS

The Reserve Bank of India (RBI) has issued a notification disallowing non-bank prepaid wallets and prepaid cards from loading credit lines — preset borrowing limits — into these platforms.

This comes in the backdrop of a boom in credit instruments such as fintech-driven credit cards and buy-now-pay-later wallets.

What has RBI said in its notification?

The banking regulator has clarified that its master direction on prepaid payment instruments (PPIs) does not permit loading of PPIs from credit lines — a practice being undertaken by several fintech credit card companies. These companies typically tie up with banks or NBFCs and offer credit lines into their prepaid wallets.

"Such practice, if followed, should be stopped immediately. Any non-compliance in this regard may attract penal action under provisions contained in the Payment and Settlement Systems Act, 2007," the RBI noted.

What are PPIs?

The RBI defines prepaid payment instruments (PPIs) as payment instruments that facilitate the buying of goods and services, including the transfer of funds, financial services, and remittances, against the value stored within or on the instrument. PPIs are in the form of payment wallets, smart cards, mobile wallets, magnetic chips, vouchers, etc. As per the regulations, banks and NBFCs can issue PPIs.

What is a credit line?

A credit line is a preset borrowing limit that allows an individual or a business access to credit at any time, as per need. It can be tapped into by the customer till the limit offered is not exceeded. It is like a flexible loan as against a lump-sum loan where a fixed amount is borrowed.

Why has the RBI issued this notification?

With credit products infiltrating the market, there is a renewed push by the regulator to clampdown in the interest of consumer safety. While some fintechs tie up with banks like SBM Bank, RBL Bank, Federal Bank, etc. to offer these products, some tie up with NBFCs. In some cases, the credit lines are also extended by the fintech's NBFC partners. Recently, RBI Governor Shaktikanta Das had said that the regulator would soon issue norms to regulator the digital payments space.

Which are the fintechs offering credit products in India?

Today, most fintechs offer a credit product alongside their main offerings. Companies like Paytm, Amazon Pay, LazyPay, Simpl, etc offer postpaid wallets with small credit lines. Others such as Slice, Uni, Fi, OneCard, etc. offer credit cards in partnership with banks and NBFCs.

TO AVOID 'DISRUPTION', RBI EXTENDS CARD TOKENISATION DEADLINE BY 3 MONTHS

The Reserve Bank of India (RBI) on Friday extended the timeline for tokenisation of debit and credit cards by three months till September 30, 2022 "to avoid disruption and inconvenience to cardholders".

After September 30, no entity in the card transaction or payment chain, other than the card issuers and card networks, should store the CoF (Card-on-File data or storage of actual card data) and any such data stored previously will be purged, it said. The central bank had earlier fixed the due date for card tokenisation on June 30, 2022.

"On a review of the issues involved and after detailed discussions with all stakeholders, it is observed that considerable progress has been made in terms of token creation. Transaction processing based on these tokens has also commenced, though it is yet to gain traction across all categories of merchants," the RBI said in a circular to payment system providers.

"Further, an alternate system in respect of transactions where cardholders decide to enter the card details manually at the time of undertaking the transaction (commonly referred to as 'guest checkout transactions') has not been implemented by the industry stakeholders, so far," the RBI said.

Currently, many entities, including merchants, involved in an online card transaction chain store card data like card number and expiry date — Card-on-File (CoF) — citing cardholder convenience and comfort for undertaking transactions in future. While this practice does render convenience, availability of card details with multiple entities increases the risk of card data being stolen or misused, the RBI said.

"There have been instances where such data stored by merchants have been compromised. Given the fact that many jurisdictions do not mandate Additional Factor of Authentication (AFA) for authenticating card transactions, stolen data in the hands of fraudsters may result in unauthorised transactions and resultant monetary loss to cardholders," the RBI said. Within India as well, social engineering techniques can be employed to perpetrate frauds using such data.

As of now, about 19.5 crore tokens have been created. Opting for CoFT (creating tokens) is voluntary for the cardholders.

According to the RBI, the industry stakeholders have highlighted some issues related to implementation of the framework in respect of guest checkout transactions. Also, the number of transactions processed using tokens is yet to gain traction across all categories of merchants. These issues are being dealt with in consultation with the stakeholders, the RBI said,

The RBI had earlier mandated that after December 31, 2021, entities other than card networks and card issuers cannot store card data. This timeline was subsequently extended to June 30, 2022. A framework for CoF Tokenisation (CoFT) services was also issued.

Under this framework, cardholders can create "tokens" (a unique alternate code) in lieu of card details. These tokens can then be stored by the merchants for processing transactions in future. "Thus, CoFT obviates the need to store card details with merchants and provides the same level of convenience to cardholders," the RBI said.

To create a token under the CoFT framework, the cardholder has to undergo a one-time registration process for each card at every online or e-commerce merchant's website or mobile application, by entering the card details and giving consent for creating a token. This consent is validated by way of authentication through an AFA. Thereafter, a token is created which is specific to the card and online or e-commerce merchant — the token cannot be used for payment at any other merchant, the RBI said.

For future transactions performed at the same merchant website or mobile application, the cardholder can identify the card with the last four digits during the checkout process. Thus, the cardholder is not required to remember or enter the token for future transactions. A card can be tokenised at any number of online or e-commerce merchants. For every online and e-commerce merchant where the card is tokenised, a specific token will be created, the RBI said.

"The Reserve Bank encourages cardholders to tokenise their cards for their own safety. Cardholders' payment experience will be enhanced through an added layer of security by way of tokenisation," the central bank said.

According to the RBI, this extended time period may be utilised by the industry for facilitating all stakeholders to be ready for handling tokenised transactions and processing transactions based on tokens. The industry should implement an alternate mechanism to handle all post-transaction activities (including chargeback handling and settlement) related to guest checkout transactions, that currently involve storage of CoF data by entities other than card issuers and card networks.

WHAT IS THE LINK BETWEEN RISING FOOD PRICES AND CENTRAL BANKS RAISING INTEREST RATES?

Last week the US central bank — routinely called the Fed — announced that it will raise interest rates by 75 basis points (or 0.75 percentage points). The Fed is doing this to bring down inflation to its target rate of 2%. At present, inflation in the US is closer to 9%. Most commentators and observers of the US economy point out that every time the Fed has tried to reduce inflation even by as little as 2 or 3 percentage points, it has led to a recession. In other words, if the Fed remains steadfast in its resolve to bring down inflation to 2%, the US will go into a recession.

What is inflation? How does it affect you?

Inflation is the rate at which prices rise. A 2% inflation implies the general price level in April this year was 2% more than what it was in April last year. A "rising" inflation rate implies that the rate (at which the prices rise) itself is increasing. In other words, imagine a scenario where the inflation rate was 1% in March, 2% in April and then 4% in May and 7% in June.

Frankly, you don't have to imagine. This is exactly what has been happening in most economies of the world lately. Take India, for example, where the inflation rate steadily went up from close to 4% in September last year to almost 8% in April this year.

Why is inflation bad?

Well, apart from making things costly, it essentially erodes the basis on which one makes economic decisions? Should you buy a car today or six months later? Should you lend money? Should you hold back on repaying your loan? Are you sure your income will be enough to pay the bills in six months time? What raise should you ask your boss? Should you invest in starting a new business? So on and so forth.

Why is a recession bad? You might be the neighbour who loses his job!

Now, many of you might be wondering why is the Fed raising interest rates when doing so will most probably lead to a recession?

This query holds true for the RBI as well, albeit in India, the economy is not expected to go into recession but will slow down further, which, in turn, will depress incomes, lead to job losses or at the very least worsen the already worrying levels of unemployment in the country.

What makes the Fed's (or the RBI's) decision look even more bizarre is the fact that they openly say that the current inflationary spike is due to supply constraints — in particular, due to rising costs of food and fuel.

For instance, during the June monetary policy review, RBI Governor Shaktikanta Das stated the following while sharply revising the inflation forecast for the current financial year to 6.7% from just 4.5% prediction in April: "75 per cent of the increase in our inflation projection, compared to what we had made in April, is attributed to food inflation…primarily the food inflation spike is linked to external factors, namely, the war in Europe."

The US Fed Chair Jay Powell, too, stated the same thing: "The surge in prices of crude oil and other commodities that resulted from Russia's invasion of Ukraine is boosting prices for gasoline and food and is creating additional upward pressure on inflation."

So, doesn't the RBI or the Fed know they cannot bring down food and fuel prices by forcing banks to charge a higher interest rate from people wanting to buy a new car or opening a new shop or even taking an education or home loan?

Oddly enough, they know.

When a journalist bluntly asked him whether the US Fed was "trying to induce a recession" to bring down inflation, Chair Powell admitted his helplessness to bring down inflation because of "factors that are not under our control".

"Again, thinking here of the fallout from the war in Ukraine, which has brought a spike in prices of energy, food, fertilizer and industrial chemicals, and also just the supply chains more broadly, which have been larger and longer-lasting than anticipated," he stated.

The RBI is also expressing the same helplessness.

In the June Bulletin it states: "There is no doubt that the first impact of a food and fuel price shock to inflation lies outside the realm and remit of the RBI – especially with food and fuel prices constituting 60 per cent of the CPI and the food shock emanating from external sources, in this case, the war in Europe.

So, if the Fed and RBI already know that they can't reduce food and fuel price-led inflation by raising interest rates and also know that raising interest rates will bring about a recession, or at least hurt growth and employment, then why are all these central banks still trying to do this?

The answer lies in something called "inflation expectations".

Aside 3: What are inflation expectations and why do they matter?

Simply put, inflation expectations refers to people's (or households' expectation of what the inflation rate will be in the future). And they matter because this expectation is what determines people's economic behaviour.

For instance, what would you do if you expected that the car you want to buy today will cost almost 20% more next year? Especially so, when you expect your income to go up by just 10% in the meantime.

Chances are you will buy the car today when inflation has not yet eroded your purchasing power.

Another fallout of such an expectation — suppose you expect the general price level to rise by 10% over the coming year — is that you might ask your boss for a raise of 15%. That's because a 10% raise will, in your view, barely cover you for the higher prices that you will have to pay. To get a "real" increment of 5%, you need a nominal increment of 15%.

Alternatively, imagine a scenario when you think prices will actually go downing the coming year. In such a case, you might postpone buying that car, thinking why waste your money today when you can get the same car for cheaper a year later?

The net effect of these individual decisions to advance or postpone purchases or ask for higher wages etc. determine the course of a country's economy.

The crucial point here is to understand that people's expectation of inflation often determines what the future inflation will be. For example, if people expect higher inflation and advance their purchases, all of a sudden there will be a spike in demand, far in excess of the supply, thus causing higher inflation.

As such, policymakers try to gauge what is happening to inflation expectations. Gauging these is neither easy nor straightforward. Central banks conduct surveys to assess what is happening to inflation expectations.

So the question changes from: "how raising the interest rate will bring down supply-led inflation?" to "how raising the interest rate will bring down inflation expectations?"

The answer lies in understanding that inflation expectations tend to be "backward looking".

In the June Bulletin, the RBI explains what "backward-looking" means.

"(Households) tend to look at recent food and fuel prices which are salient items in the average consumption basket and they form their opinion about what inflation would be in the future, say three months or a year from now. If households believe that inflation will go up and stay up, they are in effect saying that it is better to prepare for that difficult situation."

How do they prepare for it?

These expectations start influencing and get built into "price mark-ups, wage negotiations, rents on houses, transportation costs and the prices of services more generally such as personal services like housekeeping, medical and education fees, entertainment and bus, train and auto fares".

Now, what people buy in their personal capacity is the single biggest engine of GDP growth in India, accounting for almost two-third of India's GDP in the form of private consumption expenditure. So it is understandable that when inflation becomes entrenched in the people's psyche it becomes more "persistent and generalised".

This, in turn, would lead to an adverse outlook on the economy. Business will hold back fresh investment as costs (such as wages) go up. This, in turn, hurts the country's competitiveness. People pull out money from their savings and put it into non-productive assets such as gold. In India's case since 98% of all gold demand is met from imports, this essentially implies capital going to other countries.

Even so, how does the RBI or the Fed raising interest rates bring down inflation and inflation expectations?

While high interest rates may not affect the supply side inflation, it does dampen the demand for other goods and services. By disincentivizing borrowing (because it is now costlier) a central bank reduces borrowing-led demand. This does two things. One, it reduces inflation by bringing down demand, and two, it gives time — and is expected to do so again this time — for the supply to catch up with the demand.

In short: Ensuring inflation expectations stay "anchored" is the essential goal for monetary policy. Reducing inflation is a way to achieve that goal and raising interest rates is a way to achieve lower inflation.

This is exactly what Fed Chair Powell explained when he was asked if he was trying to induce a recession.

"(No, we are) not trying to induce a recession now. Let's be clear about that. We're trying to achieve 2 percent inflation consistent with a strong labor market," he replied.

Chair Powell explained that as things stand, despite high inflation right now, the median projection for inflation (in the US) is 5.2% in 2022 and it is expected to fall to 2.6% next year and to 2.2 percent in 2024.

In other words, as things stand, inflation expectations (in the US) are still in place over the medium-term.

"I think if you look across that broad range of data, what you see is that expectations are still in the place, very much in the place, where short-term inflation is going to be high, but comes down sharply over the next couple of years. And that's really where inflation expectations are and also, as you get away from this episode, they get back down close to 2 percent. And so, this is really very important to us that that remain the case," said Chair Powell.

India's RBI is also trying to achieve the same goal: keeping inflation expectations anchored. It is another matter that in India, the target rate is 4%.

But as central banks try to achieve this goal, expect more interest rate hikes in the coming months, which, in turn, will dampen economic activity all around.

INDIA'S EMERGING TWIN DEFICIT PROBLEM

In its latest 'Monthly Economic Review', the Ministry of Finance has painted an overall optimistic picture of the state of the domestic economy. "The World is looking at a distinct possibility of widespread stagflation. India, however, is at low risk of stagflation, owing to its prudent stabilization policies," it states.

The economic growth outlook is likely to be affected by several factors owing to the trade disruptions, export bans and the resulting surge in global commodity prices —all of which will continue to stoke inflation — as long as the Russia-Ukraine conflict persists and global supply chains remain unrepaired. "However, the momentum of economic activities sustained in the first two months of the current financial year augurs well for India continuing to be the quickest growing economy among major countries in 2022-23," states the Finance Ministry report.

But, given the uncertainties, the report highlights two key areas of concern for the Indian economy: the fiscal deficit and the current account deficit (or CAD).

The report states that "as government revenues take a hit following cuts in excise duties on diesel and petrol, an upside risk to the budgeted level of gross fiscal deficit has emerged".

The fiscal deficit is essentially the amount of money that the government has to borrow in any year to fill the gap between its expenditures and revenues. Higher levels of fiscal deficit typically imply the government eats into the pool of investible funds in the market which could have been used by the private sector for its own investment needs. At a time when the government is trying its best to kick-start and sustain a private sector investment cycle, borrowing more than what it budgeted will be counter-productive.

The report underscores the need to trim revenue expenditure (or the money government spends just to meet its daily needs). "Rationalizing non-capex expenditure has thus become critical, not only for protecting growth supportive capex but also for avoiding fiscal slippages," it states. "Capex" or capital expenditure essentially refers to money spent towards creating productive assets such as roads, buildings, ports etc. Capex has a much bigger multiplier effect on the overall GDP growth than revenue expenditure.

Current account deficit

The current account essentially refers to two specific sub-parts:

* Import and Export of goods — this is the "trade account".

* Import and export of services — this is called the "invisibles account".

If a country imports more goods (everything from cars to phones to machinery to food grains etc) than it exports, it is said to have a trade account deficit. A deficit implies that more money is going out of the country than coming in via the trade of physical goods. Similarly, the same country could be earning a surplus on the invisibles account — that is, it could be exporting more services than importing.

If, however, the net effect of a trade account and the invisibles account is a deficit, then it is called a current account deficit or CAD. A widening CAD tends to weaken the domestic currency because a CAD implies more dollars (or foreign currencies) are being demanded than rupees.

The Ministry's worry is that costlier imports such as crude oil and other commodities will not only widen the CAD but also put downward pressure on the rupee. A weaker rupee will, in turn, make future imports costlier. There is one more reason why the rupee may weaken. If, in response to higher interest rates in the western economies especially the US, foreign portfolio investors (FPI) continue to pull out money from the Indian markets, that too will hurt the rupee and further increase CAD.

OPEN NETWORK FOR DIGITAL COMMERCE

The story so far: The government of India announced the launch of the pilot phase of open network for digital commerce (ONDC) in five cities in late April with an aim to "democratise" the country's fast growing digital e-commerce space that is currently dominated by the two U.S.-headquartered firms — Amazon and Walmart. The announcement was made by Commerce and Industry Minister Piyush Goyal. "After UPI, another game changing idea to democratise commerce — ONDC soft launch today to select consumers, sellers and logistics providers. Get ready for a world of choice, convenience and transparency," Mr Goyal had tweeted.

What is ONDC?

As per the strategy paper on ONDC, it is a not-for-profit organisation that will offer a network to enable local digital commerce stores across industries to be discovered and engaged by any network-enabled applications. It is neither an aggregator application nor a hosting platform, and all existing digital commerce applications and platforms can voluntarily choose to adopt and be a part of the ONDC network.

The ONDC aims to enable buying of products from all participating e-commerce platforms by consumers through a single platform. Currently, a buyer needs to go to Amazon, for example, to buy a product from a seller on Amazon. Under ONDC, it is envisaged that a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart).

The ONDC model is trying to replicate the success of the Unified Payments Interface (UPI) in the field of digital payments. UPI allows people to send or receive money irrespective of the payment platforms they are registered on. The open network concept also extends beyond the retail sector, to any digital commerce domains including wholesale, mobility, food delivery, logistics, travel, urban services, etc.

What led to formation of ONDC?

The Department for Promotion of Industry and Internal Trade (DPIIT), under Ministry of Commerce and Industries, conducted an outreach during the outbreak of the COVID-19 pandemic to understand its impact on small sellers and hyperlocal supply chain functioning. Post which, it found that there is a huge disconnect between the scale of online demand and the ability of the local retail ecosystem to participate. Following this, consultations were held with multiple ministries and industry experts and "ONDC was envisioned to revolutionise digital commerce in India," as per the strategy paper.

The paper added that ONDC has been envisaged as an entity which should be able to work without the need for day-to-day guidance and advisory from the shareholders/members. The independence of the management is linked to the financial independence of the entity, and therefore, the entity will be required to get funding independently and have a self-sustaining financial model.

What is the current status?

Presently, ONDC is in its pilot stage in five cities — Delhi NCR, Bengaluru, Bhopal, Shillong and Coimbatore — with a target of onboarding around 150 retailers.

The government has also constituted an advisory council to analyse the potential of ONDC as a concept and to advise the government on measures needed to accelerate its adoption. Its members include Nandan M. Nilekani, Non- Executive Chairman, Infosys; R.S. Sharma, CEO, National Health Authority; Dilip Asbe, Managing Director and CEO, NPCI; Anjali Bansal Founder and Chairperson, Avaana Capital; Suresh Sethi, Managing Director and CEO, Protean eGov Technologies Ltd.; Arvind Gupta Co-Founder & Head, Digital India Foundation; Kumar Rajagopalan CEO, Retailers Association of India; Adil Zainulbhai Chairman, Quality Council of India and Capacity Building Commission; and Anil Agrawal, Additional Secretary, Department for Promotion of Industry and Internal Trade.

Over the next five years, the ONDC expects to bring on board 90 crore users and 12 lakh sellers on the network, enabling 730 crore additional purchases and an additional gross merchandising value (GMV) of ₹3.75 crore. The GMV for the digital commerce retail market in India was ₹2.85 lakh crore ($38 billion) in 2020, which is only 4.3% of the total retail GMV in India.

What are the likely benefits of ONDC

The ONDC will standardise operations like cataloguing, inventory management, order management and order fulfilment, hence making it simpler and easier for small businesses to be discoverable over network and conduct business.

However, experts have pointed out some likely potential issues such as getting enough number of e-commerce platforms to sign up, along with issues related to customer service and payment integration.

INDIA BUYS MORE COAL FROM RUSSIA, AND UREA FROM THE US — DIVERSIFYING SUPPLY SOURCES IS GOOD POLICY

India's imports of Russian coal in June are reportedly expected to be the highest in at least seven and a half years. This comes alongside Russia displacing Saudi Arabia to become India's second-largest oil supplier after Iraq in May. Neither of these are unwelcome developments, nor the fact that India has, for the first time, bought a large urea consignment from the US. With Russian traders offering discounts of 25-30 per cent for thermal coal and accepting payment in rupees, it isn't surprising that bulk purchases by Indian cement and steel companies have spiked in recent weeks. The share of Russian crude processed in Reliance Industries' Jamnagar refinery has, similarly, risen to 27 per cent in May, from less than 5 per cent before April. Why should any firm forgo the opportunity of sourcing oil at significant discounts to international prices? It has, likewise, become economical now to import urea from the US, which is quoting $55-75 per tonne cheaper than that from the Middle East, notwithstanding higher freight costs and longer voyage time.

But it is not just about profit calculations of companies. Diversifying supply sources and buying at the lowest price for equivalent quality is also in national interest. India's imports of crude petroleum, coal and finished fertilisers were valued at $122.45 billion, $31.72 billion and $12.72 billion, respectively, in 2021-22, as against the previous fiscal's corresponding levels of $59.48 billion, $16.27 billion and $6.83 billion. The country's merchandise trade deficit hit a record $190.71 billion in 2021-22. A further widening of its deficits, whether external or fiscal, and uncontrolled weakening of the rupee, both external and internal purchasing value, is something it cannot afford. If importing more coal and oil from Russia or urea from the US forces existing suppliers — the likes of Australia, Indonesia, Saudi Arabia and United Arab Emirates — to lower prices, it would aid in macroeconomic stability necessary for long-term growth.

The growing trade with Russia may not be to the West's liking. While the invasion of Ukraine deserves the widest condemnation, financial sanctions and not buying from Russia don't really help. India and China purchasing more from Russia, if anything, reduces the pressure on the international oil market. Imagine where crude prices would have reached had these two Asian countries not stepped up buying from Russia. In fact, China and India are today the world's top two net crude oil importers, with Russia emerging as the former's No 1 and the latter's No 2 supplier. The economic and national interests of others overriding its geopolitical priorities is a reality that the West has to acknowledge and accept, sooner than later.

WHAT INDIA NEEDS TO DO TO REDUCE ITS FERTILISER BILL

No country has as much area under farming as India. At 169.3 million hectares (mh) in 2019, its land used for crop cultivation was higher than that of the US (160.4 mh), China (135.7 mh), Russia (123.4 mh) or Brazil (63.5 mh). With its perennial Himalayan rivers and average annual rainfall of nearly 1,200 mm – against Russia's 475 mm, China's 650 mm and the US's 750 mm – India has no dearth of land, water and sunshine to sustain vibrant agriculture. Which it has for 3,000 years and more.

But there's one resource in which the country is short and heavily import-dependent — mineral fertilisers. In 2021-22, India imported 10.16 million tonnes (mt) of urea, 5.86 mt of di-ammonium phosphate (DAP) and 2.91 mt of muriate of potash (MOP). In value terms, imports of all fertilisers touched an all-time high of $12.77 billion last fiscal.

That figure, however, presents an incomplete picture. In 2021-22, India also produced 25.07 mt of urea, 4.22 mt of DAP, 8.33 mt of complex fertilisers (containing nitrogen-N, phosphorus-P, potassium-K and sulphur-S in different ratios) and 5.33 mt of single super phosphate (SSP). The intermediates or raw materials for the manufacture of these fertilisers were substantially imported.

Take urea, whose primary feedstock is natural gas. In 2021-22, India imported 23.42 mt of liquefied natural gas (LNG) valued at $13.47 billion. As per the petroleum ministry's data, the fertiliser sector's share in the consumption of re-gasified LNG was over 41 per cent. The industry's LNG imports would have, then, been worth more than $5.5 billion.

For DAP, domestic manufacturers import intermediate chemicals, namely phosphoric acid and ammonia. Some even produce phosphoric acid by importing rock phosphate and sulphuric acid. The latter can be further made from the import of sulphur. During the last fiscal, 6.44 mt of phosphoric acid, 2.31 mt of ammonia, 9.66 mt of rock phosphate, 1.92 mt of sulphuric acid and 1.90 mt of sulphur were imported into the country.

The total value of fertiliser imports by India, inclusive of inputs used in domestic production, was a whopping $24.3 billion in 2021-22. There are two costs here. The first is foreign exchange outgo: Imports are mostly from China, Oman, UAE and Egypt (urea); China, Saudi Arabia and Morocco (DAP); Belarus, Canada, Russia, Israel and Jordan (MOP); Qatar, US, UAE and Nigeria (LNG); Morocco, Jordan, Senegal and Tunisia (phosphoric acid); Saudi Arabia and Qatar (ammonia); and Jordan, Morocco, Egypt and Togo (rock phosphate). The second cost is fiscal. Fertilisers are not only imported, but Indian farmers also pay below what it costs to import or manufacture using imported inputs. The difference is paid as a subsidy by the government. That bill was Rs 1,53,658.11 crore or $20.6 billion in 2021-22 and projected at Rs 2,50,000 crore ($32 billion) this fiscal.

Both costs are unsustainably high to bear for a mineral resource-poor country. We are feeling it, especially with global prices of urea, DAP, MOP, phosphoric acid, ammonia and LNG soaring two to two-and-a-half times in the last year (they have softened a bit of late). There was a time farmers had to be incentivised to use chemical fertilisers for boosting crop yields. Today, they have to be restrained from over-application. Farmers should know India imports half of its natural gas requirement – that will only go up – and hardly has any mineable rock phosphate, potash or elemental sulphur reserves.

There is a need, first of all, to cap or even reduce consumption of high-analysis fertilisers – particularly urea (46 per cent N content), DAP (18 per cent N and 46 per cent P) and MOP (60 per cent).

One way to do this is by incorporating urease and nitrification inhibition compounds in urea. These are basically chemicals that slow down the rate at which urea is hydrolysed (resulting in the production of ammonia gas and its release into the atmosphere) and nitrified (leading to below-ground loss of nitrogen through leaching). By reducing ammonia volatilisation and nitrate leaching, more nitrogen is made available to the crop, enabling farmers to harvest the same, if not better, yields with a lesser number of urea bags. Together with products such as liquid "nano urea" – their ultra-small particle size is conducive to easier absorption by the plants than with bulk fertilisers, translating into higher nitrogen use efficiency – it is possible to achieve a 20 per cent or more drop in urea consumption from the present 34-35 mt levels. That works out to 6.5-7 mt fewer imports, equivalent to $4.5-5 billion at current prices.

A second route is by promoting sales of SSP (containing 16 per cent P and 11 per cent S) and complex fertilisers such as "20:20:0:13" and "10:26:26". DAP use should be restricted mainly to paddy and wheat; other crops don't require fertilisers with 46 per cent P content. India can also import more rock phosphate to make SSP directly or it can be converted into "weak" phosphoric acid. The latter, having only about 29 per cent P (compared to 52-54 per cent in normal "strong" merchant-grade phosphoric acid), is good enough for manufacturing "20:20:0:13", "10:26:26" and other low-analysis complex fertilisers.

As regards MOP, roughly three-fourths of the imported material is now applied directly and only the balance is sold after incorporating into complexes. It should be the other way around. India, to re-emphasise, needs to wean its farmers away from all high-analysis fertilisers. That movement, to use more NPKS complexes and SSP, is already happening. It requires a concerted push, alongside popularising high nutrient use-efficient water-soluble fertilisers (potassium nitrate, potassium sulphate, calcium nitrate, etc) and exploiting alternative indigenous sources (for example, potash derived from molasses-based distillery spent-wash and from seaweed extract).

Finally, no plan to cap/reduce consumption of high-analysis fertilisers can succeed without farmers knowing what is a suitable substitute for DAP and which NPK complex or organic manure can bring down their urea application from 2.5 to 1.5 bags per acre. It calls for agriculture departments and universities not just revisiting their existing crop-wise nutrient application recommendations, but disseminating this information to farmers on a campaign mode.

GARLIC PRICES LOSE PUNGENCY, FARMERS IRKED IN TWO STATES

Exactly five years after a police firing claimed the lives of six garlic farmers in Mandsaur, Madhya Pradesh, during a protest demanding minimum support price for their produce, farmers in the districts on the boundary of the State and Rajasthan are up in arms against the Union and the State governments for price as low as ₹2 a kg.

They are from areas such as Kota, Ratlam, Mandsaur, Jhalawar, Baran, Neemuch and Ujjain, known as the "garlic belt" of the country, that contributes almost 50% of India's garlic production. The farmers demand that the Centre and the States immediately announce a market intervention scheme and start procuring garlic. They have decided to launch agitations under the banner of the Samyukt Kisan Morcha.

What has added to their worry is that purchase by food processing industries has come down as their products such as garlic powder, paste and sauce have not moved much in the past two years due to low demand and consumption.

Low yield

The Indian Council of Agriculture Research has taken cognisance of the low yield in garlic. “The main reason for the yield is virus load. We have recommended that the seed production cycle should be changed and fresh seeds from hilly areas such as Ooty and Himachal Pradesh should be considered. Ooty has the best-quality seeds. If one variety is continuously grown, it affects the productivity. Many farmers have replaced the seeds. We are working to remove these viruses,” said Major Singh, Director of ICAR Directorate of Onion and Garlic Research, Pune.

Mahesh Khandelwal, general secretary of the Kota Grain and Seeds Merchant Association, said the traders suffered huge losses due to the situation. “We had urged the Union and the State governments to start procurement. The market intervention scheme is approved by the Centre, but the State government hasn’t started procurement. More than one lakh tonnes of garlic was to be procured by these markets, but nothing has happened yet,” Mr. Khandelwal said. Food processing industries used to procure almost the entire “lottery quality” (small garlic) from the Kota market. “The export has also come down,” he said.

According to the Rajasthan Agriculture Department, garlic is grown on about 1.15 lakh hectares in the Kota division of Rajasthan this year. Farmers say that on one hectare, the average minimum production is 50 quintals.

“Now the rate is ₹2 to ₹15 a kg depending on the quality of garlic. Almost 25% of the total production is of ‘lottery quality’ every year. This year, it has gone up to 50% due to the early summer and heat wave,” All India Kisan Sabha leader Dulichand Borda said. Himself a garlic farmer, Mr. Borda said farmers had suffered huge losses.

“We got ₹50 a kg for good quality garlic in the last season and ₹7 to ₹8 for lottery quality. The production was slightly better last year than this year. Sixty-five quintals was the average production last time and lottery quality was also less,” he added.

The production cost is about ₹ 2.5 lakh per hectare. After the Mandsaur firings, the Centre and both the State governments had announced a market intervention scheme with a price of ₹ 3,250 for a quintal of garlic in 2018.

“Now after four years, the input cost has increased at least 50%. The Centre is learnt to have approved the scheme at a rate of ₹2,957 per quintal, but the procurement hasn’t started yet as the State government is yet to receive any proper order from the Centre.,” said Mahesh Vyas, president of Rashtriya Kisan Mazdur Mahasangh, the organisation that led the farmers’ agitation in 2017 said.

Mr. Vyas and Mr. Borda have taken up the matter with the respective State governments and with Kota MP and Lok Sabha Speaker Om Birla.

Samyukt Kisan Morcha leader Shivkumar Kakkaji said the the main issue is that garlic does not have a minimum support price.

“The government should consider a support price mechanism for essential vegetables such as potatoes, onions and garlic. Onion farmers in the area are also forced to sell their produce at a rate of ₹2 to ₹ 5,” Mr. Kakkaji said.

Mr. Vyas added that farmers are forced to destroy garlic as they are unable to meet even the transportation charges to the market.

THE 5G AUCTION PLAN

The story so far: On Wednesday, the Union Cabinet approved auction of 5G spectrum bands, and said it has reserved a portion of airwaves for captive private networks, a proposal opposed by telecom service providers. The auction of over 72 GHz of airwaves is set to be held by the end of July.

What set the ball rolling for 5G technology in India?

The world's second-largest telecom market is one of the few major countries without 5G service. The Union government's delay in auctioning off spectrum bands is a result of its rounds of consultations with various stakeholders to decide on bands that can be sold, block sizes, and the reserve price. The telecom service providers are ready to commercially roll out 5G to customers. In January, Reliance Jio said it completed next generation network coverage planning for nearly 1,000 cities in the country. A year ago, Airtel demonstrated 5G over a live commercial network in Hyderabad. Vodafone, before its merger with Idea, in 2017 said it had "upgraded entire radio network to all-IP technology, ready even for 5G".

What are captive private networks and why do they need spectrum bands?

Private wireless networks are cellular networks built specifically for individual enterprises. These networks are often deployed at a single unit, for example a factory. They can also be used in a wide-area setting, for instance to monitor a mine in real-time. Airports and ports can also have their own private 5G cellular network to process imaging data coming from surveillance cameras to manage the facility. Several enterprises around the world are working on setting up private 5G networks as they offer reliable, fast, and secure wireless communication.

According to an Economist Impact survey of 216 technology executives in Germany, Japan, the U.K. and the U.S., over half said they plan to deploy a private 5G network within six-24 months. That is on top of nearly 30% executives who have already deployed or are in the process of deploying private 5G networks in their organisations. The key reason driving this adoption is the need for greater data privacy and security. Unlike unlicensed Wi-Fi service available at several private places, licensed spectrum bands offer greater data privacy, security and faster connection speeds.

How does Industry 4.0 relate to 5G?

Cellular technology has come a long way in the last four decades. Each generation has added a layer of sophistication over another starting with voice. Over the years, three generations of cellular airwaves enabled users to text, use Internet and view live-streaming video all at the same time.

Unlike its predecessors, the latest wireless iteration opens a new paradigm in cellular connectivity. That's because the true benefits of 5G largely apply to industrial enterprises than individual users. Think about industrial AI-enabled robots on shop floors and warehouses, autonomous vehicles on the road, and mixed-reality headsets with advanced mobile applications that train workers. Each of these scenarios require high-speed computing using real-time data at low latency. This is at the core of the fourth industrial revolution where devices talk to each other to perform various tasks. Big tech firms like Google have been seeking direct allocation of spectrum to use in machine learning applications, connected devices and general AI advancement.

How does the government plan to set aside spectrum for private network operators?

The Department of Telecommunications (DoT) has said that private firms can set up a 5G network by either getting a slice of public network from a licensed telecom company, establishing an isolated on premises network from the telecom service provider's spectrum, or obtaining spectrum directly from the Department of Telecom or by sub-leasing it from telcos.

The notice inviting the offer also states that spectrum auction to private enterprises will follow after a demand study and based on TRAI's recommendation on pricing and modalities of block allocations. The telecom regulator expects its recommendations to result in increased sharing of network resources.

Is it a setback for telcos?

The Cellular Operators Association of India (COAI) is of the firm view that "there is no justification whatsoever for allocating spectrum to industry verticals for operating private captive networks." The association wrote to the Telecom Minister Ashwini Vaishnaw even before the Union Cabinet approved its 5G auction decision, requesting him to address the critical issue of private networks. It said that there will be no business case for 5G rollout in such a scenario. This stems from their concern that 5G technology has more industry use case than for individual consumers. So, telcos worry that providing industries 5G spectrum allocation to set up private networks will diminish their own revenue from the next generation of cellular services.

CRYPTO CAME TUMBLING AFTER

The precipitous downturn of the crypto market has brought cryptocurrencies back in the news. People wonder if this is the end of the crypto boom. The answer is 'no'. Cryptocurrency is not really a currency. It is an asset that allows people to keep their money outside the formal financial system and make it accessible so that it can be used anywhere in the world. In today's world, such an asset would be in great demand until some other asset innovation allows owners to achieve this objective in a more efficient way.

Price increases and decreases

Crypto assets like Bitcoin have been subject to wide fluctuations in their prices since their inception. The current downturn is not the first of its kind. There have been similar fluctuations in the past. The phenomenal rise in the price of Bitcoin in recent years has dwarfed the fluctuations in its price in the past. The popularity of Bitcoin is obvious from the price differentials with Ethereum and Litecoin. Most of the fluctuations in the price of Bitcoin are brought about by changes in the demand side as the asset's supply moves very slowly given the enormous cost of mining an additional Bitcoin at this stage.

The rise in the price of crypto assets began at the onset of the pandemic as people with excess funds parked them in crypto assets. This made sense given the lack of investment opportunities on account of the uncertainty arising from lockdowns. As the COVID-19 spread slowed down, people may have wanted to move their funds out of crypto assets and into more lucrative real investment opportunities arising from a recovering economy. This led to the eventual decline in prices. The halt in withdrawal by Celsius especially led to panic among investors as this company is supposed to be one of the biggest crypto lenders.

Notwithstanding the effects of these specific events, we must acknowledge that a crypto asset is only one of the assets in an individual's portfolio. Therefore, changes in the general availability of profitable business opportunities and movement in the prices of other assets will definitely affect the price of crypto assets. Recently, there have been changes in the price of an important class of assets: government bonds issued by the governments of developed countries. Many central banks across the developed world have been raising their policy interest rates to combat rising inflation. For example, the Federal Funds Rate was hovering around zero for most of the pandemic. The Federal Reserve raised it recently leading to a sustained rise in the Federal Funds Rate as well as the three- month Treasury Bill Secondary Market Rate.

Safe assets

Debt raised by developed country governments, especially the U.S. but also by U.K. and Germany, is an important class of assets because these are deemed as safe assets across the world. In an influential paper published in 2017, Ricardo Caballero and Emmanuel Farhi defined a safe asset as a simple debt instrument that is expected to preserve its value during adverse systemic events. As the central banks of these countries raise their policy interest rates, the rate of return is also expected to go up, motivating large institutional investors to buy more of these. Accordingly, these investors would get out of some current investments and use the newly realised liquidity to buy these safe assets.

U.S. government bonds form a large fraction of safe asset portfolios, such as the portfolios of many central banks including that of India. The world over, demand for safe assets has increased as many developing countries have grown fast and accumulated enormous foreign exchange reserves. These countries then demanded USD-denominated assets to preserve the value of their portfolios. Events like the pandemic only increased the demand further for safe assets. Unfortunately, the supply of safe assets has not kept up with this demand as the developed countries that produce these assets have grown at a much slower rate. Given that there is generally a shortage of safe assets, it is likely that the demand and prices of crypto assets will change frequently as institutions look for alternatives with slight movements in the rate of return on safe assets. For example, Celsius reportedly could not raise additional liquidity because of tightening of interest rates leading to suspension of its operations.

Overall, investors must understand the nature of crypto assets and their demand and not ignore the interconnectedness of financial markets at the global level. As crypto assets are digital assets that can be mined and transacted from anywhere in the world, the rate of return of crypto assets is more sensitive to changes in the global liquidity conditions than to local conditions.

LIFE & SCIENCE

HOW MARINE HEATWAVE FUELLED SUPER CYCLONE AMPHAN

Rising greenhouse gas emission is the primary factor for anthropogenic (human-induced) climate change. The increase in carbon dioxide concentration can trap the radiation into the atmosphere and not let it go into space. This trapping of the extra energy increases the average surface air temperature and warms the climate that we know as global warming.

As the capacity of the atmosphere to absorb the heat is very less, more than 90% of the extra heat that has been trapped in the climate system has been absorbed by the oceans since 1970, according to IPCC AR5, and IPCC AR6 reports. Due to this, oceans are warming globally from the surface to deeper depths. The warming of the oceans has severe consequences such as increasing intensity and frequency of extreme events, rising sea levels, melting glaciers, and changing the weather pattern across the globe.

Faster warming

Previous studies have shown that due to global warming, the tropical Indian Ocean, at the surface, is warming at a faster rate as compared to the rest of the global ocean. The high sea surface temperatures are more susceptible to generating extreme temperature conditions that persist over days to months and are termed as Marine Heatwaves (MHWs). This intense warming of the ocean due to MHW has severe socio-economic consequences such as fish mortality, and coral bleaching, and also has the potential to interact and modify other extreme events such as tropical cyclones.

The anthropogenic warming of the oceans and atmosphere facilitates the generation and intensification of extreme events such as MHWs and tropical cyclones. Both marine heat waves and tropical cyclones are the extreme events of the ocean-atmosphere coupled system. Our study, published in the Frontiers in Climate, is the first study conducted in the Indian Ocean that investigates the interaction between a marine heatwave and super cyclone Amphan in the Bay of Bengal in May 2020. The co-occurrence of multiple extreme events (e.g. in our case the co-occurring marine heatwave and tropical cyclone) are termed compound extreme events.

Sea surface temperature

The Bay of Bengal exhibits high sea surface temperatures (about 28°C) throughout the year and is more prone to tropical cyclones. The Bay of Bengal is home to about 5-7% of the total number of tropical cyclones occurring globally each year and this makes the North Indian Ocean vulnerable to the highest number of fatalities globally. Amphan was the first super cyclone in the Bay of Bengal in the last 21 years and intensified from category 1 (cyclonic storm) to category 5 (super cyclone) in less than 24 hours. Amphan was also the costliest tropical cyclone on record in the North Indian Ocean, with reported economic losses of approximately $14 billion in India, according to the World Meteorological Organisation and 129 casualties across India and Bangladesh. According to the latest IPCC report (AR6), Amphan was the largest source of displacement in 2020, with 2.4 million displacements in India alone, out of which around 8,00,000 was pre-emptive evacuation by the authorities. Our study investigates the reasons that made this unusual and unprecedented rapid intensification of cyclone Amphan into a devastating super cyclonic storm.

The cause

We found the presence of a strong MHW beneath the track of the cyclone with an extremely high anomalous sea surface temperature of more than 2.5°C that coincided with the cyclone track and facilitated its rapid intensification in a short period. We have also compared the super cyclone Amphan to a previous extremely severe cyclone Fani in May 2019 with a near similar trajectory. We found that the total life span of Amphan over the ocean was five days as compared to Fani which was for seven days but Fani did not turn into a super cyclone as Amphan did.

The main difference between these two cyclones was the presence of MHW in the case of Amphan, which was not there in the case of Fani. We also infer that despite short duration and unfavourable atmospheric conditions relative to Fani, Amphan turned into a super cyclone, primarily fuelled by a strong MHW on its way. Apart from the surface warming, the study also shows that ocean stratification and warming below the surface also play a crucial role during this phenomenon of compound extreme events.

Our study along with previous studies also discusses that such compound or individual extreme events are going to increase in the future due to global warming and the Indian Ocean will witness the increased intensity and frequency of such climate extremes. Hence, our study provides new perspectives on the interactions between different extreme events that could aid in improving the current understanding of compound extreme events that have severe socio-economic consequences in affected countries. We believe that our study will be very helpful for the political and scientific authorities to make better disaster management and mitigation planning for our vulnerable coastal communities from such extreme events.

DOMESTIC CHICKEN

New findings transform our understanding of the circumstances and timing of the domestication of chickens and their spread across Asia into the West. Researchers have found that an association with rice farming likely started a process that has led to chickens becoming one of the world's most numerous animals. Previous efforts have claimed that chickens were domesticated up to 10,000 years ago in China, Southeast Asia, or India, and that chickens were present in Europe over 7,000 years ago.

The new studies show that this is wrong, and that the driving force behind chicken domestication was the arrival of dry rice farming into southeast Asia where their wild ancestor, the red jungle fowl, lived. Dry rice farming acted as a magnet drawing wild jungle fowl down from the trees, and kickstarting a closer relationship between people and the jungle fowl that resulted in chickens, according to a University of Exeter press release.

This domestication process was underway by around 1,500 BC in the Southeast Asia peninsula. The research suggests that chickens were then transported first across Asia and then throughout the Mediterranean along routes used by early Greek, Etruscan and Phoenician maritime traders.

The international team of experts re-evaluated chicken remains found in more than 600 sites in 89 countries.

The oldest bones of a definite domestic chicken were found at Neolithic Ban Non Wat in central Thailand and date to between 1650 to 1250 B.C.E

INDIAN INTERESTS AT THE WTO MINISTERIAL CONFERENCE

The story so far: On June 17, member countries of the World Trade Organization (WTO) wrapped up the Ministerial Conference's twelfth outing (MC12) securing agreements on relaxing patent regulations to achieve global vaccine equity; ensuring food security, according subsidies to the fisheries sector and continuing moratoriums relevant to e-commerce, among others. Together they constitute what WTO's Director-General Ngozi Okonjo-Iweala referred to as the "Geneva Package." India saw some successes at the MC12 with respect to the above mentioned sectors.

What is the WTO's Ministerial Conference?

The MC is at the very top of WTO's organisational chart. It meets once every two years and can take decisions on all matters under any multilateral trade agreement. Unlike other organisations, such as the International Monetary Fund or World Bank, WTO does not delegate power to a board of directors or an organisational chief. All decisions at the WTO are made collectively and through consensus among member countries at varied councils and committees. This year's conference took place in Geneva, Switzerland.

What were the debates around agriculture at the MC?

The agreements on the subject are of particular significance to India. Referring to its status as a significant contributor to the World Food Programme (WFP), India had earlier stated that it had never imposed export restrictions for procurement under the programme. It put forth that a blanket exemption could constrain its work in ensuring food security back home. In such a situation, it would have to keep its WFP commitments irrespective of its domestic needs. Negotiators agreed that member countries would not impose export prohibitions or restrictions on foodstuffs purchased for humanitarian purposes of the WFP. The decision would however not prevent member countries from adopting measures for ensuring domestic food security.

Negotiators could not reach agreements on issues such as permissible public stockholding threshold for domestic food security, domestic support to agriculture, cotton, and market access. The central premise of the agreements was to ensure availability, accessibility and affordability of food to those in need, especially in humanitarian emergencies. It encouraged member countries with available surplus to release them on international markets in compliance with WTO regulations. Moreover, it instituted a work programme to come up with measures to help LDCs (least-developed countries) and NFIDCs (Not Food Importing Developing Countries) enhance their domestic food security and bolster agricultural production.

What about fisheries related agreements?

India successfully managed to carve out an agreement on eliminating subsidies to those engaged in illegal, unreported and unregulated fishing. The only exception for continuing subsidies for overfished stock is when they are deemed essential to rebuild them to a biologically sustainable level. Overfishing refers to exploiting fishes at a pace faster than they could replenish themselves — currently standing at 34% as per the UN Food and Agriculture Organization (FAO). Declining fish stocks threaten to worsen poverty and endanger communities that rely on aquatic creatures for their livelihood and food security.

Further, the agreements hold that there would be no limitation on subsidies granted or maintained by developing or least-developed countries for fishing within their exclusive economic zones (EEZ).

Have the current moratoriums on electronic transmissions been extended?

Member countries agreed to extend the current moratorium on not imposing customs duties on electronic transmission (ET) until MC13 — scheduled to take place in December 2023. 105 countries which includes the U.S. , the U.K., Australia, China and Japan among others , had sought an extension of the moratorium, with India and South Africa being in opposition.

Broadly, ETs consist of online deliveries such as music, e-books, films, software and video games. They differ from other cross-border e-commerce since they are ordered online but not delivered physically.

Proponents had put forth that the moratorium would help maintain certainty and predictability for businesses and consumers particularly in the context of the pandemic. On the other hand, India and South Africa, citing data from the UN Conference on Trade and Development (which calculates the amount of printed matter, music and video downloads, software and video games), submitted that extending duty-free market access due to the moratorium resulted in a loss of $10 billion per annum globally — 95% of which was borne by developing countries. Additionally, they had also sought more clarity on what constitutes electronic transmission.

Customs duties have been traditionally used to avert an undesired surge in imports, allowing nascent domestic industries to remain competitive. Developing countries would need to import sizeable equipment and services for upscaling their digital capabilities. Customs duties provide the necessary capital infusion for capacity building and in turn, attempt to address the digital divide — particularly high in low-income and developing countries, further exacerbated by the COVID-19 pandemic. It is in this context that India and South Africa had sought to preserve policy space for the digital advancement of developing countries by letting them generate more revenues from customs and thereby facilitate more investment.

What were the discussions on patent relaxations?

Member countries agreed on authorising the use of the subject matter of a patent for producing COVID-19 vaccines by a member country, without the consent of the rights holder. Further, it asks member countries to waive requirements, including export restrictions, set forth by WTO regulations to supply domestic markets and member countries with any number of vaccines. The agreement, however, comes too little, too late for economically poorer countries.

Several LDCs have suffered in their efforts to combat the now nearly three-year-old pandemic, owing to factors such as a stressed balance of payments situation , different levels of development, financial capabilities and varying degrees of import dependence on those products.

Within the next six months, members are expected to decide on increasing the scope of the agreement to cover the production and supply of COVID-19 diagnostics and therapeutics as well.

NO CAUSE FOR ALARM

After the third wave driven by the Omicron sub-lineage BA.2 peaked in end-January this year with over 0.33 million cases a day, there has been a small bump in the number of daily cases reported in the first fortnight of June and a slightly bigger increase in the last one week to touch over 13,200 cases on June 17. But the rate of increase has been small and restricted to a few States and some major cities. The rate of growth of active cases has also been low. While the sub-lineage BA.2 is still the dominant strain in India, BA.4 and BA.5 seem to be causing the new cases. The small increase in testing in the past week could be a reason for the more cases reported. The seven-day average test positivity rate doubled from less than 1% in early June to over 2% by mid-June and has been increasing incrementally since then to 2.7% on June 20. Increasing the number of daily tests will result in more cases being detected. But with a large percentage of the adult population fully vaccinated and a sizable percentage also infected, the focus should be more on hospitalisations and deaths and not daily infections. There has been a slight increase in hospitalisation in a few States, but there is no cause for alarm. However, there has not been any increase in daily deaths. The small bump in daily cases seen in a few States for the last three weeks therefore does not appear to mark the beginning of a new wave.

That said, the BA.4 and BA.5 sub-lineages are fast spreading to more countries in Europe with a concomitant increase in cases. The BA.5 sub-lineage has become dominant in Portugal leading to a surge in daily infections, hospitalisations and even deaths despite very high primary and booster dose vaccination coverage; the reasons for increased deaths are not known. With both BA.4 and BA.5 endowed with greater transmissibility and higher immune escape from vaccination and earlier infection, including of the BA.1 and BA.2 Omicron sub-lineages, the European Centre for Disease Prevention and Control designated them as variants of concern in mid-May; WHO too has given the same designation. On June 13, the ECDC cautioned that these sub-lineages will become dominant throughout Europe leading to increased daily cases. However, it notes that based on limited data, the two sub-lineages do not appear to be associated with increased disease severity compared with the BA.1 and BA.2 Omicron sub-variants. Given the greater transmissibility of BA.4 and BA.5 and immune escape, the sub-lineages may become dominant in India too, especially as COVID-appropriate behaviour is now poor. While the two sub-lineages may not lead to increased deaths, the risk of long-term complications even among the young and healthy when infected cannot be overlooked. Masks must be made mandatory, especially in public and closed spaces with poor ventilation.

NEW RESEARCH: STUDY FLAGS EMERGENCE OF DRUG-RESISTANT TYPHOID STRAINS

The effectiveness of antibiotics for typhoid fever is threatened by the emergence of resistant strains, according to a large genome sequencing study of the bacteria Salmonella Typhi published in The Lancet Microbe.

Typhoid fever causes 11 million infections and more than 100,000 deaths per year. South Asia accounts for 70% of the global disease burden.

Since 2000, multi-drug-resistant (MDR) S Typhi has declined steadily in Bangladesh and India, remained low in Nepal, and increased slightly in Pakistan. However, these are being replaced by strains resistant to other antibiotics, according to the study conducted by researchers from Stanford University, Christian Medical College Vellore and other institutions. The genome analysis also reveals that resistant strains – almost all originating in South Asia – have spread to other countries 197 times since 1990.

The study sequenced 3,489 S Typhi isolates from 2014-19 from people in Bangladesh, India, Nepal, and Pakistan, and 4,169 samples isolated from over 70 countries during 1905-2018. Strains were classified as MDR if they had genes giving resistance to antibiotics ampicillin, chloramphenicol, and trimethoprim/ sulfamethoxazole.

“In recent years, we have seen increasingly resistant strains that are threatening to leave us without effective antibiotics against this bacterium. We are already seeing strains for which there is only a single oral antibiotic remaining, termed XDR typhoid. Strains resistant to the antibiotic (azithromycin) have been seen in India, Bangladesh, Nepal and Pakistan… Evidence to date suggests that much of the drug-resistance in typhoid has evolved within India, so we certainly need to be concerned about the appearance of drug resistance in the country," lead author Dr Jason Andrews of Stanford University told

India's Health Ministry is considering introducing new typhoid conjugate vaccines into the national immunisation program. Two WHO-prequalified vaccines have been developed in India (by Bharat Biotech and Biological E). Study author Prof Jacob John of CMC Vellore said surveillance at 18 Indian sites during 2016-20 found typhoid was as common as it was two decades ago, especially in urban areas. "Complications and deaths are not common… However if transmission still prevails and resistance develops to commonly used antibiotics, then it is likely that there will be an upsurge in severe disease,"

DreamIAS