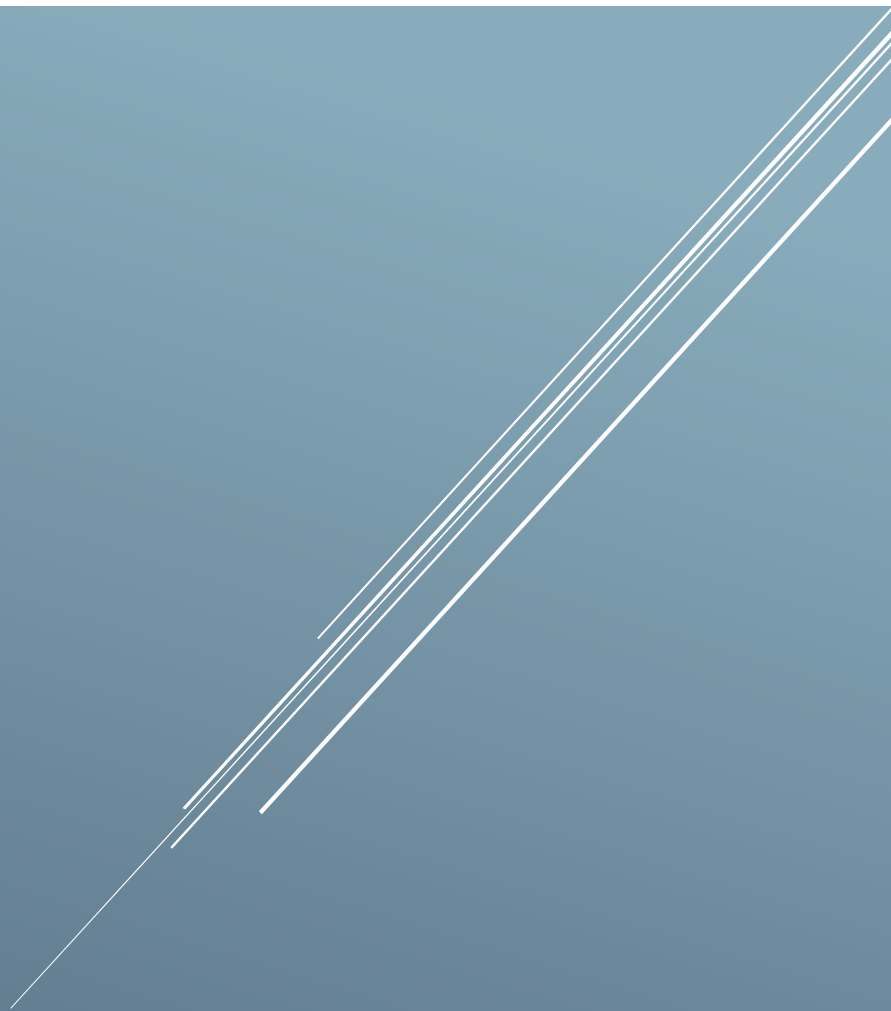




CURRENT AFFAIRS FOR UPSC

2nd to 8th April 2023



INTERNATIONAL

THE INDICTMENT AGAINST DONALD TRUMP

The story so far:

A New York grand jury has indicted former U.S. President Donald Trump on charges relating to the case of hush-money paid to porn actress Stormy Daniels in 2016, prior to Mr. Trump entering the Oval Office. The formal indictment is still under seal, creating ambiguity around the specific charges and the extent of evidence against Mr. Trump. However, media reports and comments by Mr. Trump's attorney suggest that he will be in the dock for passing off the \$1,30,000 payment to Ms. Daniels as a business expense, potentially in violation of campaign finance laws.

What is the hush-money case?

In 2006, Stormy Daniels, whose real name is Stephanie Clifford, is said to have had a consensual sexual encounter with Mr. Trump, who was married to his wife Melania at the time. In 2011, when Mr. Trump was said to be considering the idea of running for president, Ms. Daniels apparently tried to go public with the story of Mr. Trump's extramarital affair with her. However, that story got suppressed after Mr. Trump's attorney, Michael Cohen, threatened to sue. When he actually ran for office in 2016, Ms. Daniels again attempted to approach the media with her story. This time Mr. Cohen reportedly worked out a deal, whereby he paid Ms. Daniels \$1,30,000 for her silence and was subsequently reimbursed \$4,20,000 in what was written into the books as "legal expenses".

Later, in his congressional testimony, Mr. Cohen, who admitted a guilty plea in August 2018 for violating federal campaign finance laws said, "Mr. Trump directed me to use my own personal funds from a home equity line of credit to avoid any money being traced back to him that could negatively impact his campaign. I did that." Also involved in reimbursing funds to Mr. Cohen from the Trump Organization was its Chief Financial Officer Allen Weisselberg, who is presently in prison for tax fraud. In this backdrop, the hush-money case would essentially seek to directly link Mr. Trump with the false bookkeeping entries, and then charge him with falsification of records.

However, under New York state law this would only be a misdemeanour, not a felony, which implies a far lighter sentence for the accused if convicted.

How strong is the case?

In order to prosecute Mr. Trump for a felony, Manhattan District Attorney (DA) Alvin Bragg would have to not only prove that Mr. Trump was culpable for falsified bookkeeping but also show that the business records in question were falsified to cover up an entirely different — and serious — crime. Reports suggest that the crime that will be examined for this charge will be the violation of campaign finance laws, even if there is still a sense of doubt that pervades whether Mr. Trump could be found guilty of this.

In the wake of Mr. Cohen's claim that he had paid Ms. Daniels at Mr. Trump's request, investigators did look into the question of whether Mr. Trump would be criminally liable under federal campaign finance laws. These regulations require that monies received as campaign donations be disclosed transparently and be subject to predefined legal limits. A federal investigation into this matter was closed in 2019, and this suggests that the evidence required to successfully prosecute Mr. Trump in this case might not have been forthcoming at the time.

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What are the other options that prosecutors could follow?

Assuming that the Justice Department would take its cues from the Democrat-controlled White House and Senate, and if the latter are keen to attack Mr. Trump politically before he stands for election again in 2024, it is not the hush-money case that appears to be the obvious line of enquiry to pursue in this regard. Far more serious issues exist, which cast doubt upon whether the 45th president behaved in a legal manner or acted within the framework of the U.S. constitution. This includes Mr. Trump's role in inciting the January 6, 2021 insurrection, the financial dealings of the Trump Organization and Mr. Trump's act of withholding classified information after demitting office. The problem is that investigations conducted into these potential violations do not appear to have found a smoking gun or evidence that would be compelling enough for an indictment and a successful prosecution of Mr. Trump.

Meanwhile, unsurprisingly, Mr. Trump has sought to capitalise politically on what he has described as "political persecution" and a "witch hunt" by Democrats. In truth, the case has significant potential to be politically polarising and is viewed by many Americans as a partisan exercise of power. Unless Democrats find compelling evidence in the more serious allegations against Mr. Trump, they may pay a heavy price at next year's elections if they persist with ambiguities of the hush-money indictment.

WHY IS JAPAN CIRCUMVENTING SANCTIONS ON RUSSIAN OIL?

The story so far:

Japan has been purchasing oil from Russia at a price above the \$60 per barrel price cap imposed by the West, according to reports this week. This has led to speculation that Japan may be breaching an agreement reached last year to cap the price of Russian oil.

Why is there a price cap on Russian oil?

The G-7 countries, the EU, and Australia imposed a \$60 per barrel price cap on oil purchased from Russia starting in December. The move was part of the wider economic sanctions imposed by the West to punish Russia following its invasion of Ukraine. The West wants to restrict the amount of money that Russia can make by selling its oil, but without severely affecting global oil supply. Since Russia contributes about 10% of global oil supply, any significant reduction in Russian oil supplies could send oil prices soaring. It is estimated that it costs Russia about \$20-\$45 to produce a barrel of oil. So, the West believes that, at \$60 per barrel, Russia would still keep its oil output steady.

Why is Japan breaking ranks with the West?

In the first two months of the year, Japan purchased about 750,000 barrels of oil from Russia at a price of about \$70 per barrel. Japan's oil import contributes very little to Russia's overall oil production, which was about 10.7 million barrels per day last year, and thus does not significantly subvert the West's efforts to restrict the Kremlin's oil revenues. However, Japan's decision to purchase oil above the price cap once again brings to the fore the strong incentives facing countries to subvert the West's \$60 per barrel price cap. It should also be noted that, even when the price cap was first imposed last December, Japan had won an exception to purchase Russian oil from Sakhalin-2 in Russia's Far East to protect its energy security.



Will more countries follow Japan?

Japan is not the only country that is undermining the West's \$60 price cap on Russian oil. Countries such as India, for instance, are believed to be paying more than \$60 per barrel to purchase oil from Russia. As oil prices rise, the chances of a rift developing even among signatories to the oil price cap arrangement grow higher. When buyers are willing to pay more than \$60 per barrel to secure supplies, oil traders will likely be happy to subvert sanctions and deliver supplies from Russia. Critics of the oil price cap had warned that implementing the price cap may be difficult because it works against strong economic incentives and because it may be impossible to keep track of all shipments in such a large, opaque oil market.

Will rising oil prices threaten the West's price cap?

On Monday, OPEC and Russia decided to cut their oil output by 3.66 million barrels per day, sending oil prices soaring 6%. Russian urals, the flagship crude oil sold by Russia, also soared above \$60 per barrel, thus breaching the West's price cap. When the West first imposed its price cap, it had no effect on Russia's oil output or revenues as Russian urals were trading well below \$60 per barrel. But now with urals trading above \$60 per barrel, things might turn out to be different. The West would hope that its price cap would keep Russia's oil revenues in check despite rising oil prices. Russia, which has seen its oil revenues drop due to subdued oil prices and the West's ban on Russian oil, will be hoping to turn the corner by bypassing Western sanctions and selling oil above the price cap. This will test the West's ability to effectively implement its price cap.

A BALANCING ACT

Sanna Marin, one of Finland's most popular politicians, has been praised for helping her country navigate through the COVID-19 pandemic and for her decisive response to Russia's Ukraine invasion. Her personal approval rating remains at 64% (69% among women). Yet, the centre-left-green coalition she was leading was voted out of power on Sunday in an election that was largely dominated by economic issues. In the final results, the conservative National Coalition emerged as the largest party with 20.8% vote share, while Ms. Marin's Social Democrats ended up third (19.9%), after the anti-immigrant, populist Finns Party (20.1%). In Finland's proportional representation system, the Social Democratic Party was expected to improve its tally to 43 seats from 40 in 2019, but Ms. Marin's coalition partners, including the Centre Party, the Left Alliance and the Green League suffered major setbacks. Petteri Orpo, leader of the National Coalition, would be given the first chance to form the government. But the National Coalition, which is projected to have 48 seats, should show the support of at least 101 legislators in the 200-member Parliament to form the next government.

When Ms. Marin, 37, became Prime Minister in 2019, heading a coalition of five women-led parties, she was one of Europe's youngest leaders. Her predecessor, Antti Rinne, a former trade unionist, was in office for only six months. Sceptics doubted Ms. Marin's ability to keep the coalition together; her term was also rocked by the pandemic and the Ukraine invasion. But she made difficult decisions without losing the confidence of her allies. She stepped up borrowing and expanded social spending and investments to cushion an economy that was battered by the pandemic. For Finland, Russia's 2022 invasion of Ukraine brought back grim memories of the 'Winter War', the 1939 Soviet invasion of Finland. Even though Finland lost territories, the country remained neutral throughout the Cold War. But the Ukraine war changed the strategic calculus of its leaders and Ms. Marin rallied public opinion on NATO membership. Yet, the economic costs of



the Ukraine war partly led to her downfall. Amid surging inflation and high borrowing, Mr. Orpo attacked Ms. Marin's handling of the economy, while the Populist Finns slammed the country's immigration rules. The economic uncertainties, which were accentuated by the war, allowed both parties to make gains. Mr. Orpo, a seasoned politician, will now have to decide whether he should go with the Social Democrats or the populists. Either way, he will find it hard to find a balance between parties with different ideas while tackling defence and economic challenges.

THE DEMAND FOR SCOTTISH INDEPENDENCE

The story so far:

Last week, British Prime Minister Rishi Sunak was quick to reject a call from the new First Minister of Scotland and leader of the governing Scottish National Party (SNP), Humza Yousaf, to hold a second referendum for Scotland's independence from the U.K. Mr. Yousaf took over the party's reigns on March 28 after an intense in-party contest prompted by the resignation of Nicola Sturgeon, the influential leader who led the party's independence push for nearly a decade.

Since when has Scotland been demanding independence?

The independent Kingdom of Scotland was formed in the 9th century and went on to fight wars to remain independent from the Kingdom of England. In 1603, the two kingdoms entered a personal union and were then ruled by the same monarchs. In 1707, due to economic and political vulnerabilities prevailing on both sides, the British and Scottish Parliaments passed the Acts of Union, entering into a political union under the name of Great Britain.

While Scotland could retain some of its decision making powers it did not get equal representation in the united Parliament, and longstanding cultural and political differences remained. Demands for self-governance soon began to sprout, eventually leading to two referendums in 1979 and 1997, resulting in the formation of a new devolved Parliament of Scotland in 1999. This Parliament was given the mandate to form legislation on devolved issues such as health, transport, education, and so on, while the power to legislate on defence, foreign policy, trade, immigration, and currency was reserved. The last referendum for independence took place in 2014, where 55% of Scots voted to stay in the three-centuries-old union while 45% voted to walk out.

A large proportion of Scots see independence from the U.K. as question of self-determination and identity. Scotland accounts for 8% of Britain's population and economy and one-third of its landmass.

What role has the SNP played in the pro-independence movement?

The Scottish National Party was formed in 1934 with the merger of two parties who had been demanding the devolution of powers — the National Party of Scotland and the Scottish Party. The SNP won its first seat in the British Parliament located in Westminster in a by-election but the MP refused to take up his seat. The party then began circulating petitions for the creation of a devolved Parliament and came to national prominence in 1967 with Winnie Ewing taking the Hamilton seat from the Labour Party.

While a major political victory was still elusive, it was in the 1970s, after oil was discovered in the North Sea, that SNP ran a popular campaign in line with its central ideology of independence. With the iconic slogan "It's Scotland's Oil", the party argued that if not for Britain's control over reserved



matters, proceeds from the oil would have benefited the Scottish economy and consequently the Scots. The party managed to get 11 MPs elected to British Parliament in the 70s.

In the 2007 elections to Holyrood, as the Scottish Parliament is known, the SNP won more than 30% of the vote and formed a minority government with Alex Salmond as its leader. As it lacked a majority then, the SNP had to ditch its planned Independence Referendum Bill due to disagreements with other parties. The Bill was finally passed when Mr. Salmond led the Party to a landslide win in 2011 as for the first time in the history of the Scottish Parliament, a majority government was formed.

Touting this as a “once-in-a-generation” moment, the SNP asked David Cameron’s British Government to grant it a Section 30 order — a technical term for a provision that temporarily allows the Scottish Parliament to pass a law on an issue otherwise reserved for Westminster.

The U.K. granted its consent which led to a formal national referendum for independence in Scotland in 2014 which saw an 85% turnout. However, amid concerns over how an independent Scotland would actually function without British assistance and other details left to be worked out, pro-independence voters lost to those who voted to stay. A disappointed Mr. Salmond resigned from SNP leadership and Nicola Sturgeon stepped in.

She reinvigorated the party’s demand for independence, especially after the 2016 Brexit vote in the U.K., when she began campaigning for a second referendum or “indyref2”. Ms. Sturgeon argued that Scotland had once again been robbed of its right to self-determination as Britain decided to walk out of the European Union despite the fact that 62% of the Scottish people voted to remain in the alliance. She has since made repeated attempts at getting the U.K. to consent to a referendum. After SNP won another Scottish election in 2021, joining hands with the Greens party which also demands independence, Ms. Sturgeon sent another appeal for a Section 30 order. However, then British PM Boris Johnson rejected it, saying that it should not happen for another 40 years.

Why the demand for independence?

The SNP government says that people who live in Scotland should have the right to decide if they want to be an independent country. To relinquish doubts over the future of Scotland after independence, the SNP has been coming out with White Papers on its vision for “building a new Scotland”. It currently gets a bloc grant from the British government for a large part of its annual expenditure which it plans to substitute with oil revenues from the North Sea once it gets independence. It says that instead of using the North Sea oil revenues to invest in future generations, the U.K. is using them to fund its current expenses, which undermines the interests of Scots. It also plans to rejoin the EU, to expand its trade in the bloc, and to receive other associated benefits. The SNP also plans to keep using the British pound Sterling as its currency after independence.

It also argues that Scotland is different from the U.K. in that its electoral system is already fairer and more proportionally represented than the U.K. It says it stands for different things — more open immigration policies, a faster push for green transition, free university education and geriatric care, taxation on higher earners, and inclusion of the LGBTQ community. It also believes that the U.K. could make other decisions like Brexit in the future that would undermine Scottish interests.



What is the U.K.'s stand?

The British government believes that the SNP has failed to give a clearer picture on how issues of pensions and healthcare would work in an independent Scotland. It has also warned Scotland that if it rejoins the EU, it would lead to the creation of a hard border between Scotland and Britain. Before the 2014 referendum, the Economic Affairs Committee of Westminster had highlighted that the retaining of the sterling as Scottish currency would be problematic as the Monetary Policy Committee of the Bank of England, which forms policy for the U.K., could not entertain the interests of a separate country. It also said that Scotland would find it difficult to assume its share of U.K.'s public debt, which runs into billions. Besides, the decommissioning of North Sea Oil would also have economic and trade implications for Britain.

Aside from impacts on the Defence and trade strategy, former British civil servant Philip Rycroft pointed out to the London-based think tank Chatham House that perhaps the "biggest impact" of Scotland leaving the centuries-old Union in the current geopolitical environment, would be on "perceptions of Englishness among the English themselves, who make up 85% of the U.K.'s population, and the projection of Englishness as a national identity" to the world.

What lies ahead?

After Mr. Johnson's rejection of her demand for British consent, Ms. Sturgeon had planned to hold in 2023, a "consultative plebiscite" — a non-binding referendum in Scotland without a green light from Westminster.

In November 2022, however, the U.K.'s top court ruled that such a referendum could not take place. Refusing to give up her party's push for independence, Ms. Sturgeon declared a new strategy — that her party will make the next British general election or the Scottish Parliamentary election as a "de facto referendum" for independence, where SNP would stand on the sole issue of independence.

After her shock resignation this February, the new First Minister Mr. Yousaf is left with the difficult task of realising the party's central vision of independence. He has expressed that he is not wedded to the idea of the "de facto referendum". His priority is to first build support for independence among Scottish citizens. Recent polls show that the support for a 'yes' vote on independence has dropped to 39% in the country, less than it was during the 2014 referendum.

WHY HAS ISRAEL PAUSED JUDICIAL REFORM PLAN?

The story so far:

On the night of March 27, Israel's Prime Minister Benjamin Netanyahu announced that he would delay his government's plan to overhaul the country's judiciary by a month. The government's plan had triggered massive protests and strikes by the opposition, civil society as well as unions who accused the government of weakening the judiciary. Mr. Netanyahu, who came to power late last year with the support of ultra-orthodox and far-right parties, says he will not step back from the plan but seek to build consensus before pushing to pass it in the Knesset (Israel's Parliament).

What is the government's plan?

The judicial reform plan has a set of proposals which, together, will strengthen the government's hand over the country's courts. Currently, the Supreme Court can strike down any law passed by



the Knesset. The government proposal seeks to curtail judicial review over legislation and then empower Parliament to override court decisions with a simple majority of 61 votes (out of 120). Another proposed change seeks to abolish the “reasonability test”— the Supreme Court will no longer be able to judge the reasonability of Knesset legislation, government decisions or appointments. The government also seeks to take control of judicial appointments. Under the current set-up, judges are chosen by a nine-member committee — three Supreme Court judges (including the court President), two members of the Israeli Bar Association, two members from the Knesset and two from the government (Ministers). According to the proposed reforms, the members of the Bar Association would be replaced by two “public representatives” picked by the government, which means the government will have a majority of votes in the committee.

Why is the government pushing these Bills?

Over the years, Israel’s polity has shifted towards the extreme right. The current government, composed of Likud (right-wing), United Torah Judaism and Shas (ultra-Orthodox) and Religious Zionist and Jewish Power, is the most right-wing government in the country’s history. The far-right and religious parties have argued that Israel has lost its balance between the judiciary and the executive and the legislature. They are essentially saying that the judiciary is controlled by liberals and leftists, while the polity has shifted to the right. The government wants to give mass exemption from conscription to religious Jews. They have also passed a law preventing legal authorities from removing the Prime Minister from office terming him “unfit to rule” (only the Knesset and the Cabinet can remove the leader from office). But the government fears that the Supreme Court can strike down these plans unless the judiciary’s powers are clipped. So for right-wing parties, the existing judicial structure is an impediment for their push to remake the Israeli state.

Why did Mr. Netanyahu back off?

The government’s move to table the Bills in the Knesset triggered immediate protests. The protesters said that the Bills would weaken the judiciary and destroy the checks and balances in the system. Mr. Netanyahu himself is facing multiple charges and the Attorney General had asked him to stay away from the judicial overhaul. Earlier this year, the Prime Minister had to drop one of his ultra-Orthodox colleagues from the Cabinet after the Supreme Court said the appointment of Aryeh Deri, leader of the Shas, as a Minister, was “highly unreasonable”. They said the reforms, if passed, would give the government unchecked powers over the courts. Mr. Netanyahu initially dismissed the protests, while Itamar Ben-Gvir, the far-right leader of Jewish Power, warned the Prime Minister against “surrendering to the anarchists”. But the protests only grew in strength, drawing in criticism from abroad as well. The turning point was Defence Minister Yoav Gallant breaking ranks with the Prime Minister. Mr. Gallant, a former Major General and a member of the Prime Minister’s Likud party, asked the coalition to delay the judicial overhaul, citing security concerns. Opposition to the Bills had spread to Israel’s reservists as well as its diplomatic community. Some of the military reservists, in protest, failed to report, mounting pressure on the defence establishment. Mr. Netanyahu fired Mr. Gallant, but it only made matters worse. Spontaneous protests broke out across the country on Monday and Israel’s largest union, with some 8,00,000 members, struck work, grounding flights, shutting government officers, universities and public places. Faced with unprecedented public anger, Mr. Netanyahu decided to delay his plans.



What happens next?

For now, Mr. Netanyahu, despite the setback, has managed to keep his right-religious coalition together. But Israeli media have reported that to get Mr. Ben-Gvir's approval for the delay, the Prime Minister has agreed to form a new security body called the national guard under Ben-Gvir's National Security Ministry. Mr. Ben-Gvir and other allies have supported the delay for now, but they have not backtracked from their push to reform the judiciary. Mr. Netanyahu plans to build consensus with main opposition parties Yesh Atid and Blue and White before pushing for the Bills. But it's not clear how much compromise Mr. Netanyahu's allies would accept. Even if a compromise formula emerges, how will the Prime Minister sell it to the public as the protests were not driven by opposition parties alone. Mr. Netanyahu, who first came to power in 1996, has seen many a rise and fall. From every challenge, he has emerged stronger. But this is perhaps the biggest political challenge he is facing in his career.

MYRIAD WOES

Myanmar's military did it again. On Tuesday, the junta, notorious for its attacks on civilians, carried out air strikes on an opposition gathering in the rebel-held Sagaing region, killing over 100, including women and children. The National Unity Government (NUG), the parallel administration formed by opposition groups, as well as witnesses, said a fighter jet and a combat helicopter bombed the gathering, which was celebrating the opening of an administrative office of the NUG; the regime, led by Gen. Min Aung Hlaing, calls it a "terrorist entity". The junta later confirmed the strike, but said most of those killed were resistance fighters. The strikes actually show the junta's growing vulnerabilities rather than strength in the country's ongoing civil war. In the past, the main opposition that the military regimes had faced was the non-violent democratic movement led by Aung San Suu Kyi. But after the February 2021 coup, which toppled an increasingly popular Ms. Suu Kyi (her National League for Democracy had won back-to-back elections), the country slipped into a civil war between the regime and the NUG. The NUG and its armed wing, the People's Defence Force (PDF), have joined hands with ethnic militias to oust the military. The military has lost swathes of territories, mostly sparsely populated rural and jungle areas. Unable to recapture lost land, it has relied on air strikes to weaken the opposition.

The junta faces pressure from the resistance groups, but it still controls most of the country's population centres. The current approach of the generals is to hold on to territories under their control while continuing to use disproportionate force against opposition fighters and civilians in rebel-held areas. With the tacit support of Russia and China and silence from India, Gen. Min Aung Hlaing does not face any regional pressure either. The Association of Southeast Asian Nations (ASEAN) had earlier proposed a five-point peace plan, urging an end to hostilities and starting inclusive dialogue. But the generals have refused to talk to the opposition and are not ready to share power. The status quo, however, is unsustainable. Regional powers cannot look away when a thuggish regime keeps killing its people with impunity. A peaceful resolution in Myanmar is essential for the stability of Southeast Asia, and, hence, ASEAN and regional powers such as Russia, China and India should not see the civil strife as an internal problem of Myanmar. They should use their economic and political clout to force the generals to stop the violence and enter into talks with the opposition. The only sustainable, long-term and just solution for Myanmar's myriad woes is the restoration of its democracy under a federal constitutional order. The first step to achieve this goal is to end the violence.



NATION

SUBSTANCE, SUBTEXT

Bhutan's fifth king, Jigme Khesar Namgyel Wangchuck's visit to India this week had both substance and subtext. After talks with Prime Minister Narendra Modi and President Droupadi Murmu, the joint statement detailed cooperation in many areas. India has agreed to support Bhutan's next development plans and extend additional standby lines of credit. Hydropower, the "cornerstone" of India-Bhutan ties, also received a boost, with the government agreeing to consider Bhutanese requests for expediting long-delayed projects (Sankosh and Punatsangchhu), revising upwards the tariff on Chhukha, the oldest project, and buying power from the Basochhu power project. New infrastructure projects include an integrated checkpoint for trucks at Jaigaon, a checkpoint for third country nationals and a cross-border rail link from Kokrajhar to Gelephu. Future partnerships could include space research, skilling, startups and STEM education, and a new Internet gateway for Bhutan, in keeping with the Bhutanese king's new "Transform Initiative". The Bhutanese government is also worried about the number of Bhutanese migrating overseas as youth unemployment in 2021 reached 21%. India too needs to pay more attention to this brain drain, as, in the past, Bhutan's elite would have been educated in India. India stands to lose its edge in Bhutanese policy making and public narrative, and thus the projects outlined stand to benefit Delhi and Thimphu in keeping the talent within.

However, it is the visit's subtext — after recent comments by Bhutan's Prime Minister Lotay Tshering indicating progress in China-Bhutan boundary talks — that must cause concern. In an interview to a European paper, he had said that Bhutan and China hope to agree on demarcating their northern boundary dispute in the next "1-2 meetings". This must set alarm bells ringing as China has offered this demarcation as part of a "package deal" with Doklam, the area near the trijunction with India, and strategically sensitive given its proximity to India's Siliguri corridor. While Bhutan is clear that all talks about the trijunction would be "trilateral", India's concerns extend to any change in the area surrounding it, so there needs to be full clarity on the issue. New Delhi must also not allow hyper-nationalism and its antagonism with China to pressure Bhutan. India's time-tested ties with Bhutan have been predicated on not seeing each other in terms of the difference in their size but in counting each country's prosperity as a win-win for both. More importantly, they have always anticipated the other's interests before taking any step that could affect their long-cherished partnership.

OPEN JUSTICE

The Supreme Court verdict setting aside the denial of broadcasting permission to Malayalam channel MediaOne is one that protects the media against arbitrary action and bars the use of undisclosed national security considerations as a pretext to shut down an outlet. The Court has struck a blow for media freedom by ruling that the government could not term critical coverage or airing of critical opinions as "anti-establishment", and so initiate action. It said: "The use of such a terminology... represents an expectation that the press must support the establishment." The denial of security clearance to a media channel on the basis of views it was entitled to hold "produces a chilling effect on free speech and particularly on press freedom". The Bench also cited substantive grounds to allow MediaOne's petitions: that security clearance cannot be denied based on its alleged anti-establishment stance or a bald claim that its shareholders have links with the Jamaat-e-Islami. The Court has rightly found fault with the approach of the Kerala High Court, which had accepted material in a sealed cover on why the Home Ministry denied security

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clearance to the channel. It expressed surprise that the High Court did not explain how it felt the denial of security clearance was justified even after noting that the gravity of the issue was not discernible from the files.

A significant aspect of the judgment is that it seeks to end the casual resort to 'sealed cover procedure' by courts by suggesting an alternative approach to state claims of immunity from publication in public interest. Drawing upon both Indian and foreign jurisprudence, the Bench has said it is now an established principle of natural justice that relevant material must be disclosed to the affected party, ensuring that the right to appeal can be effectively exercised. It acknowledges that confidentiality and national security could be "legitimate aims for the purpose of limiting procedural guarantees". However, a blanket immunity from disclosure of all reports could not be granted and that the validity of the involvement of such considerations must be assessed by the use of relevant tests. It could be ascertained if there is proof that non-disclosure is in the interest of national security and whether a reasonable person would come to the same inference from it. In a bid to balance the public interest in non-disclosure with the one in ensuring a fair hearing, the Court has mooted alternatives such as redacting sensitive portions and providing a gist of the material given to the affected party. The Court could also appoint an amicus curiae, who could be given access to the material whenever the state claims immunity from disclosure.

WHAT THE SC SAID ON BAIL AFTER 'UNDUE DELAY' IN TRIALS, EVEN FOR STRINGENT LAWS SUCH AS NDPS

Giving weight to the right to a speedy trial, the Supreme Court last week held that "undue delay" in a trial can be a ground for granting bail to an accused even under stringent special legislation such as the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985. The ruling is significant because the bar for bail otherwise is quite high under the law, similar to the standards in anti-terror legislation.

What was the case?

On 28 March, a bench of Justices Ravindra Bhatt and Dipankar Datta directed that an undertrial booked under the NDPS Act nearly seven-and-a-half years ago for possession of cannabis be released on bail.

NDPS is an exception to the ordinary rules for granting bail. Under Section 37 of the Act, for a court to grant bail it has to be satisfied that "that there are reasonable grounds for believing that he is not guilty of such an offence" and that upon release, "isn't likely to commit any offence." This high bar, requiring the accused to prove innocence at the time of seeking bail, ensures getting bail under the law is virtually impossible for certain offences.

Now, the SC has said that the condition seeking the court's satisfaction to the extent that an accused is not guilty of an offence "has to be interpreted reasonably."

In a 2008 verdict in 'Vaman Narain Ghiya v. State of Rajasthan', the Supreme Court has upheld the stringent bail provisions under NDPS by "balancing two competing values, i.e., the right of the accused to enjoy freedom, based on the presumption of innocence, and societal interest."

"They are, at the same time, upheld on the condition that the trial is concluded expeditiously," the present ruling said.



What does undue delay mean in law?

In the current case, the SC recorded that the accused Mohammad was in custody “for over 7 years and 4 months” and the progress of the trial had been at a snail’s pace, “with 34 witnesses remaining to be examined still”.

The Court said that the stringent conditions under Section 37 of the NDPS Act cannot override the general law for granting bail for undue delay in the trial.

Section 436A of the Code of Criminal Procedure requires an accused to be granted bail if the trial is not concluded within specified periods. Moreover, the expression “reasonable grounds” used in Section 37 is not defined in the statute, thereby widening the scope of judicial interpretation.

Section 436A of the CrPC provides, “Where a person has, during the period of investigation, inquiry or trial under this Code of an offence under any law (not being an offence for which the punishment of death has been specified as one of the punishments under that law) undergone detention for a period extending up to one-half of the maximum period of imprisonment specified for that offence under that law, he shall be released by the Court on his personal bond with or without sureties.”

However, this is subject to the fact that the court may, after hearing the Public Prosecutor and for reasons given in writing, order the continued detention of the accused for longer than one-half of the said period or release him on bail.

Section 436A also requires that no person shall be detained during the period of investigation, inquiry, or trial for more than the maximum period of imprisonment provided for the offence.

In the landmark 1979 ruling in ‘Hussainara Khatoon v. State of Bihar’, the SC recognised the right to a speedy trial as “implicit in the broad sweep and content of Article 21”. “No procedure which does not ensure a reasonably quick trial can be regarded as “reasonable, fair or just” and it would fall foul of Article 21,” the court had said. In the current ruling, the court also spoke of the dangers of “unjust imprisonment” which puts the inmates at risk of “prisonisation”, a “radical transformation” by which a prisoner loses his identity.

When bail is exception, not rule

Legislations which prescribe an alternate criminal law framework, such as the NDPS Act, Unlawful Activities Prevention Act and the Prevention of Money Laundering Act make bail the exception, rather than the rule.

In its 2021 decision in ‘Union of India v. K. A. Najeer’, a three-judge bench led by Justice NV Ramana had granted bail to an accused facing incarceration for an extended period “with little possibility of early completion of trial” under the UAPA. Section 43-D of UAPA, reverses the burden of proof on the accused and says that a court can reject bail if a prima facie case exists against the accused.

EXPRESS VIEW: ACQUITTAL OF MALIANA AND A CYCLE OF IMPUNITY

On May 23, 1987, a mob, allegedly accompanied by personnel of the Uttar Pradesh Armed Constabulary (PAC), surrounded Maliana village on the outskirts of Meerut and opened fire. Sixty-eight Muslims were killed in the violence that followed. The wheels of justice moved painfully slow for riot survivors and families of the victims. After nearly 36 years and more than 800 court

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hearings, their battle for a closure of sorts ended in dejection last week — on March 31, a district court in Mathura acquitted all the 41 accused in the case. The verdict shows the investigation processes in the case in poor light and raises questions over the competence and commitment of the law enforcement agencies to bring the guilty to book.

That May, riots had rocked Meerut over the opening of locks of the Babri Masjid. On May 22, a day before the violence in Maliana, a PAC team rounded up over 40 men, all Muslims, from neighbouring Hashimpura, and shot them. Here too, the trial dragged on for close to 30 years, and the prosecution failed to prove its case in the first attempt — in front of a trial court in 2015. It was later revealed that the PAC's general diary had been withheld from the courts by the investigating agencies — this allowed the Delhi High Court to pin the crime on the accused in 2018. In Maliana, too, the prosecuting team's shoddy homework was writ large during the trial. The Mathura court flagged several defects in its case, including contradictions in witness testimonies. The prosecution flouted even the court's basic paperwork protocol — it submitted photocopies of crucial documents, such as post-mortem reports, making them inadmissible as evidence. The court pointed out that some of the accused were dead before the incident and the police had contrived to include their names in the voters' list. The prosecution did not complete the cross-examination of the investigating officer.

Maliana is illustrative of the continued insensitivity of the agencies and processes of the justice system towards riot victims from minority communities — this has been framed in the tortuous trajectories of cases such as the anti-Sikh riots in Delhi 1984, or Gujarat 2002. NCRB data show that less than 30 per cent of riot cases in the past five years have resulted in convictions. In November last year, a court in the country's capital pulled up Delhi Police for presenting "irrelevant witnesses" in a 2020 Northeast Delhi riots case. The failure to secure justice is not always because of the want of efficiency. Very often, state agencies and the political establishment collude to subvert due process. In Hashimpura, the Delhi High Court flagged the "institutional biases of law enforcement agencies". The cry for justice in Maliana should not go unheeded.

CLOSE TO HALF CASES IN HCS PENDING FOR OVER FIVE YEARS

As on January 2, 2023, close to half the cases in Indian High Courts were pending for over five years. In the Allahabad (Uttar Pradesh) and Calcutta (West Bengal and A&N Islands) High Courts, over 63% of cases were pending for over five years. Whereas High Courts in north-eastern India including Tripura, Sikkim and Meghalaya had less than 10% cases pending for over five years, according to the recently released India Justice Report 2022.

The pendency of cases in courts is a demand and supply problem. The number of cases filed in courts is increasing each year while the number of judges presiding over those cases are either stagnant or not increasing in tandem with the rise in cases.

The total number of active cases in various High Courts increased from over 41 lakh in 2014 to 53 lakh in 2022. However, as of December 2022, there were unfilled judge positions in High Courts throughout all major States. From a minimum of 16% vacancy for High Court judges in Jharkhand to a maximum of 48% vacancy in Rajasthan, the availability of judges was inadequate. In Gujarat, Madhya Pradesh, and Rajasthan more than 40% of High Court judge positions were vacant as of December 2022. Overall judicial vacancy in Indian High Courts stood at 29.8% and High Court staff vacancies were at 25.6%.



This demand-supply imbalance meant the case clearance rate of High Courts suffered. The case clearance rate is the number of cases disposed of in a year, measured against the number of cases filed in that year. If courts resolve fewer than 100 out of every 100 cases they receive, the deficit contributes to the backlog, which in turn increases their pending caseload.

KYC VERIFICATION FOR SIM CARDS TO SOON GO FULLY DIGITAL

The department of telecommunications (DoT) is planning an overhaul of know-your-customer (KYC) norms to tackle the issues of fake SIM cards and financial frauds, according to people aware of the matter.

Key highlights of the upcoming KYC norms include reduction in the number of SIM cards issued on a single ID to five from the current nine, complete use of digitally-verified documents for issuance of SIM cards, penalties and imprisonment on misuse of SIM cards and fake documents given by consumers, among other things.

The new KYC norms will be notified within six months by the Artificial Intelligence and Digital Intelligence Unit (AI & DIU) wing of DoT in consultation with a national working group, which includes the Reserve Bank of India (RBI), ministry of electronics and information technology (MeitY) and other government representatives.

Apart from overhauling the KYC norms, DoT is also planning to launch the Telecom Analytics for Fraud management and Consumer Protection (TAF-COP) portal pan-India within two months. The portal, which is currently active in states like Andhra Pradesh, Kerala, Rajasthan, Telangana and Jammu & Kashmir, among others, will help subscribers check the number of mobile connections working in their name, and take necessary action if there are any additional mobile connections in their name without their knowledge.

“The discussions are currently ongoing with regard to finding out robust KYC mechanism by making digital document verification mandatory to tackle the issue of fake IDs,” a government official said, adding that the plan is to strengthen the TAF-COP portal and Central Equipment Identity Register (CEIR) portals.

CEIR portal acts as a central system for the telecom operators to share blacklisted mobile devices so that devices that are blacklisted on one network will not work on other networks even if the SIM card in the device is changed. Using the portal, the users can also check the authenticity of the devices and can also report stolen mobile devices.

The CEIR portal, which was launched in 2019, was made available to all subscribers in the country last month. In order to identify fraud SIM cards and block them, solutions powered by AI and facial recognition for telecom SIM subscriber verification (ASTR) is also being implemented by the government pan-India.

ASTR, which was started as a pilot programme in Haryana's Mewat, uses subscriber images provided by them in their customer acquisition forms (CAFs) and compares the same to similar images using facial recognition technology. Simply put, a lot of SIM cards which are being provided on forged documents and in the name of a third party are used to carry out cybercrimes and the same becomes difficult to detect. Using ASTR, the system detects the same image used by a subscriber under different names using forged documents. It also checks the address and other KYC details.



A MAJOR TOOL FOR POLITICAL PARTIES

A volunteer in a social media team of a major political party said, “WhatsApp access and engagement time is far more than other social media platforms. We have more than 2,000 WhatsApp groups and are targeting to reach over 5,000.”

Meanwhile, the Election Commission is monitoring political advertisements on social media and also fake news. All political advertisements on social media will require pre-certification from the Media Certification and Monitoring Committees at the district and State levels.

Provisions of the model code of conduct will also apply to the content being posted on social media by candidates and political parties. Any violation can lead to action by the EC. Candidates are also required to furnish details of their social media accounts at the time of filing nominations, and their activities on Facebook, WhatsApp, Twitter, and Google would be under the EC’s close scrutiny. The platforms will also deploy appropriate fact-checkers to scan fake news and abuses on social media.

On Thursday, the Election Officer of Madikeri Assembly constituency issued a show-cause notice to one of the WhatsApp group admins for allegedly circulating a politically motivated video clip on groups. The incident happened in Kushalnagar in Kodagu. The commission has appointed Social Media Nodal Officers for escalation of MCC violation or any other commission’s instructions/provisions of the law and court’s orders in matters related to the election on social media platforms.

ON TWITTER’S OPEN-SOURCE PROMISE

The story so far:

Elon Musk has partly delivered on his promise of making Twitter’s algorithm open source. On April 1, the micro-blogging site’s recommendation code was made public. Developers can now modify and make improvements to the code. Mr. Musk’s long-awaited decision has brought him both boos and cheers from different corners of the developer community.

What does Twitter’s algorithm do?

At the heart of Twitter’s business model is the recommendation algorithm. It is a set of rules that enables the platform to deliver content based on users’ interests and preferences. It is with the help of this system that advertisers promote their brands. Content flows into a user’s timeline through two channels. One pipeline channels content posted by people that the user follows and the other is filled with posts flowing from accounts that could potentially interest the user.

The latter timeline, called ‘For You’, acts as a predictive tool to suggest feeds that a user may be interested in. It helps the micro-blogging site find answers to questions like — what is the probability a user will engage with another user in the future, what communities on Twitter might a user be interested in and what tweets are trending within them. Answers to such questions help the platform recommend relevant content.

How does the algorithm work?

Twitter’s recommendation algorithm runs on a three-step process. First, it fetches tweets from multiple recommendation sources. The platform calls this process ‘candidate sourcing’. After



sourcing these tweets, a machine learning model ranks them. After ranking, tweets are filtered to remove those that a user may have blocked, or has already seen.

At the sourcing stage, the algorithm mixes tweets that eventually flow into a user's 'For You' timeline. To mix, it picks 'candidates' from people a user follows, and from those they do not. It calls these two sources as 'in-network' and 'out-network', and together they make up 50/50 of the mix. Twitter says that for each request it attempts to extract the top 1,500 tweets from a pool of hundreds of millions. The in-network part is quite easy to build as information is picked in real-time from people a user follows. But out-network sourcing is trickier as the platform must pick content from candidates the user does not follow.

To do this, Twitter uses what it calls social graph and embedded spaces. The former creates a stream of candidates based on what content followers of a user engage with. And the latter matches the profile of a user with a cluster that exhibits similar interests and preferences as the user. Once this is done, using a 48M parameter neural network that is continuously trained on tweet engagement, the platform starts ranking feeds.

What has been the reaction?

After Twitter open sourced its recommendation algorithm, many people flocked to GitHub to view the code. Some see this reveal as "a step in the right direction for the future of humanity." Others note that the code does not reveal much about how it is used by the platform. They also highlight that important bits of information have been left out. For instance, the absence of information on the data it uses to build these pipelines prevents one from having a complete picture of the platform's recommendation system. A report by Fortune, citing a former Twitter executive, points out that open sourcing any algorithm requires its training set to be open sourced as well. And that is impossible for Twitter to do. "Every effort in open-sourcing the algorithm without the data is completely dishonest," the executive said.

Why did Musk open the source code?

Mr. Musk is no philanthropist. He is gradually building Twitter as a place for privileged users who can pay for verification tick marks and get additional features, including a higher ranking in the feeds. Additionally, he is making these changes at a time when he has fired most of the company's technical staff.

Social media platforms need experienced developers to keep building new features and deploying them successfully. So, perhaps, Mr. Musk thinks opening the source code to external developers could potentially solve the human resource bottleneck. But it will be a tough road as Mr. Musk has damaged Twitter's reputation in the open-source community. As Will Norris, Twitter's former open-source lead told ZDNet, "They've lost all credibility as a serious engineering organisation, I don't care how much you call yourself "hardcore." Open-source communities are built on relationships and trust, and now Twitter has neither with these groups. They've lost any ability to participate meaningfully in those communities."

WHAT IS THE OPEN-SOURCE SEEDS MOVEMENT?

The story so far:

Farmers have innovated and shared seeds without any intellectual property rights (IPR) for centuries. They also haven't sought exclusive rights over seeds and germplasm to prevent others



from innovating on the seeds. However, with the emergence of the global IPR regime over plant varieties, there was a dire need to 'open-source' seeds.

What are plant-breeders' rights and patents?

The advent of hybrid seeds, scientific plant-breeding, and some other factors conferred developers of new varieties with the so-called plant breeders' rights (PBR) and patents, particularly in the U.S. In this regime, rights-holders could demand royalty on seeds and legally enforce IPR. In some national IPR regimes, rights-holders can also restrict the unauthorised use of seeds to develop new varieties. In 1994, the establishment of the World Trade Organization cast a global IPR regime over plant varieties. The Trade-Related IPR Agreement (TRIPS) required countries to provide at least one form of intellectual property (IP) protection. This consolidation of rights in the seeds sector raised concerns about the freedom to innovate. Unlike the Green Revolution, which was spearheaded by public-sector institutions, the genetic revolution in agriculture was led by the private sector, with seeds mostly availed as hybrids or protected by strong IPRs.

How is IP protected in agriculture?

There are two major modes of IPR protection in agriculture — plant-breeders' rights and patents. Together, they restrict farmers' rights and the freedom to develop new varieties using germplasm from IP-protected varieties, and have thus increased the number of IP-protected plant varieties. The high prices of genetically modified seeds and IP claims triggered many problems and issues, including the State's intervention in Bt cotton seeds in India. As public sector breeding declined and the private sector began to dominate the seed sector, the need for alternatives became keenly felt. This is when the success of open-source software inspired a solution. In 1999, plant-breeder named T.E. Michaels suggested an approach to seeds innovation based on the principles of open-source software.

What are 'open-source seeds'?

In 2002, Boru Douthwaite and I (independently) proposed an open-source model for seeds and plant varieties and scholars and civil-society members built on it. The German NGO Agrecol followed with a similar initiative in Europe. In Agrecol's model, the user agrees inter alia to not patent seeds bought under the open-source licence. In the U.S., the open source seeds initiative opted for a pledge based model for sharing seeds.

In India, the Centre for Sustainable Agriculture (CSA), Hyderabad, developed a model that included an agreement between CSA and the recipient of the seed/germplasm. It is trying to use this approach through three farmer producer organisations engaged in seed production. Under India's Plant Variety Protection and Farmers' Rights Act 2001, farmers can register 'farmer varieties' if they meet certain conditions, and have the right to reuse, replant, and exchange seeds. However, they can't breed and trade in varieties protected under the Act for commercial purposes.

One potential application of the open-source approach is to use it in farmer-led seed conservation and distribution systems. There are many traditional-variety conservation and sharing initiatives in India involving farmers. Many of them focus on traditional varieties that are unique to specific regions or sites and/or have specific features. The model can also be used to promote farmer-led participatory plant-breeding exercises. Traditional varieties often lack uniformity and aren't of excellent quality for seed development and breeding purposes. Open-source principles can help overcome these two challenges by facilitating testing, improvisation, and adoption.



All of these will ultimately be beneficial to India's food security and climate resilience.

1930 HELPLINE STANDS BETWEEN ONLINE FRAUDSTERS AND GULLIBLE CUSTOMERS

Ravinder Malhotra, 55, a Gurgaon-based government employee working in Delhi, got an SMS last November, saying he had an electricity bill of ₹12 due to be paid. His son Ayush, 22, told The Hindu that though he usually pays the power bills from Pune, Mr. Malhotra decided to pay the amount. On the landing page link in the SMS, there was a phone number for guidance.

"He called them and they asked him to download an app," Mr. Ayush said. The SMS was from a scammer, and the app allowed them to remotely control Mr. Malhotra's phone. As the ₹12 transaction kept supposedly failing, Mr. Malhotra received other one-time passwords from his bank, all of which the scammer was able to see. Within minutes, he had lost ₹3,28,000 from two bank accounts.

Even as the police in Delhi and Haryana disagreed on the jurisdiction, Mr. Ayush said the payment gateway used by the scammer froze a large part of the money that was siphoned off Mr. Malhotra's account after he made a call to 1930. Mr. Malhotra was able to recover over half of what was stolen.

Mr. Malhotra is among 1.33 lakh people across the country who were able to get stolen money back after reporting the fraud on the toll-free helpline number 1930.

Integrated helpline

The helpline, launched in 2021 by the Union Home Ministry to help victims of financial fraud, is integrated with State police control rooms.

The extent of the financial fraud can be gauged from the fact that during 2021 when the helpline was launched, ₹51 crore was blocked by banks on the request of the police and agencies across the country, but the total amount saved since the launch has risen to ₹306 crore. In Assam, for example, over 10,000 complaints were received over the past 21 months, involving fraudulent transactions worth ₹41 crore. "In around 2,800 cases, we were able to freeze ₹7.1 crore of the money cheated from people, one of the highest recovery rates among other States," Director-General of Police G.P. Singh told The Hindu.

If the affected person makes a call within the golden hour (that can range from immediately to 24 hours), the possibility of getting back the money increases. Home Minister Amit Shah said on March 28 that 250 financial institutions and wallets had been linked to 1930, helping recover the money faster.

It usually takes up to ten days for the money to be returned to victims' accounts.

Mr. Shah said that the helpline should be popularised to stop cyber frauds in the country. "Some frauds are of very low value, people do not want to register FIRs. We cannot force them. Some complaints cannot be converted to FIRs. But this helps in curbing such crimes because the modus operandi is analysed, the loopholes that were exploited to commit the crime are further plugged. Even a fraud involving ₹25 is important to us," the Minister said.

If prompted in time, law enforcement agencies can freeze the SIM card and the bank account involved in the crime, and provisions are also being made to freeze mobile handsets, Mr. Shah said.



The Home Minister made these remarks while briefing a group of journalists after he reviewed the working of the Indian Cyber Crime Coordination Centre (I4C) at Jai Singh Road in Delhi.

One of the key components of I4C is the 1930 helpline and the portal — cybercrime.gov.in. — where people irrespective of jurisdiction can register complaints. While 1930 is specifically meant for financial frauds, the portal can be used to register cases of sexual harassment and crimes against children too. Since its launch in January 2020, more than 20 lakh cyber-crime complaints have been registered on the portal, out of which 40,000 were converted to FIR.

ISRO'S REUSABLE LAUNCH VEHICLE LANDING TEST SUCCESSFUL

The Indian Space Research Organisation (ISRO) on Sunday successfully carried out the landing experiment of the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme at the Aeronautical Test Range in Challakere, Chitradurga.

An Indian Air Force (IAF) Chinook helicopter was used to drop the RLV-TD from an altitude of 4.5 km and the ISRO executed the landing experiment of the RLV-TD as planned.

"The RLV took off at 7.10 a.m. by a Chinook helicopter of the IAF as an underslung load and flew at a height of 4.5 km. Once the predetermined pillbox parameters were attained, based on the RLV's Mission Management and Computer command, the RLV was released mid-air, at a down range of 4.6 km," the ISRO said. Release conditions included 10 parameters covering "position, velocity, altitude and body rates".

It added that the release of the RLV was autonomous as it performed approach and landing manoeuvres using Integrated Navigation, Guidance and Control System and completed the landing on the airstrip at 7.40 a.m.

The ISRO also said that for the first time in the world, a winged body has been carried to an altitude of 4.5 km by an helicopter and released for carrying out autonomous landing on a runway.

The Indian Air Force said that its trial team, which participated in the mission, was headed by a woman officer from the Bengaluru-based Aircraft Systems and Testing Establishment.

According to ISRO, the configuration of RLV-TD is similar to that of an aircraft and combines the complexity of both launch vehicles and aircraft.

"The experiment is successful and it meets almost all the objectives of the landing experiment that we had defined long back. We will have a few more landing experiments with different conditions to prove the ruggedness of the algorithm and the hardware that we put in. These are steps which takes us closer to having India's own reusable launch vehicles," ISRO Chairman S. Somanath said.

He added that the ideation of this project started almost 20 years ago and that it has taken many years to grow from the initial stage to this.

During this mission the vehicle landed on a hypothetical runway over the Bay of Bengal.

SCIENCE FOR ALL

The Union Cabinet's approval to set up a gravitational-wave detection facility in Maharashtra, a ₹2,600 crore project, is one that will consist of a detector called the Laser Interferometer

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Gravitational-wave Observatory (LIGO), to be built in the image of the twin LIGO instruments already operational in the U.S. Their detection of gravitational waves, in 2016, launched a new era of astronomy. A third detector is being built in India as part of the LIGO-India collaboration in order to improve the detectors' collective ability to pinpoint sources of gravitational waves in the sky. The Cabinet's approval throws up two opportunities: first, India could become a global site of gravitational physics research, aiding training and the handling of precision technologies and sophisticated control systems, ultimately, cementing a reputation for successfully running an experimental Big Science project. The starting requirement here is the timely release of funds for construction, followed by issuing the allocated resources without delay.

Second, LIGO-India can demonstrate an ability to reckon intelligently with Indian society's relationship with science, using the opportunities that Big Science affords. India has had a contested relationship with such projects, including, recently, the Challakere Science City and the stalled India-based Neutrino Observatory (INO). They need large land tracts, with inevitable implications for land-use change. Contests over land rights, against the backdrop of the sustainable use of natural resources, carbon sequestration targets, just transitions, and human rights, recall the interplay between the history of science and settler colonialism — an example is Hawaii's Thirty Meter Telescope, to be built on land the locals hold sacred. One contention there was that the land had been rendered physically inaccessible, and that "science had become an agent of colonisation", to quote science historian Leandra Swanner. A similar criticism has trailed experimental Big Science undertakings, including the INO, in the economically developing world: that they are far removed from the concerns of the majority. Shakier though this latter argument may be, such undertakings still have a responsibility to define their public value, beyond benefits to national industry and research. This is the second opportunity LIGO-India has, amplified by the context of the present moment: to build a facility that contributes to the communities from which it requires sustenance and knowledge, engage in good faith on concerns about access to land and other resources, and conduct public outreach on a par with the international LIGO Scientific Collaboration. The starting requirement is to contemplate what all LIGO-India can do for India.

BEYOND CUSTOMS

For the state, there can be no rest; vigil should be constant, and the endeavour should be to address issues relating to the public's welfare continually. A classic exposition of this principle is the Centre's announcement providing full exemption from basic customs duty for all drugs and food imported for treatment of rare diseases listed under the National Policy for Rare Diseases (and anti-cancer drug Pembrolizumab). This adds benefits, beyond those already incorporated in the policy (originally formulated in 2017) finalised just under a year ago. In order to avail this exemption, the individual importer must produce a certificate from specified authorities. Medicines generally attract basic customs duty of 10%, while some categories of lifesaving drugs/vaccines get concessions or exemptions. Exemptions have already been provided to specified drugs for the treatment of Spinal Muscular Atrophy or Duchenne Muscular Dystrophy. Rare diseases are a group of diseases that occur infrequently in the community and as such patients are disadvantaged by the lack of volumes that usually spur pharmacological companies into producing life-saving medicines. While some of these diseases do not have any described treatment methodologies, wherever treatment exists, the drugs have to be imported and costs are prohibitive, putting it out of the reach of most people. The NPRD estimates that for a child weighing 10 kg, the annual cost of treatment for some rare diseases may vary from ₹10 lakh to more than ₹1 crore per year, with treatment being lifelong and drug dose and costs increasing with age and weight. The duty exemption will lead to substantial savings for patients.



Organisations lobbying for support for patients with rare diseases have welcomed the move which will grant much needed relief to patients and their families; a ray of hope in an otherwise bleak treatment scenario.

While rare diseases are defined by their infrequent occurrence in the population, the sheer number of diseases (estimated between 7,000-8,000 conditions; 450 of them have been reported from hospitals in India), and the number of people with some form of rare diseases in India (an estimated 100 million) make it a problem that cannot be ignored. When the NPRD was released, it underlined the magnitude, and specified that demands could only be considered in the context of the available scarce resources that would have to be used judiciously. While striking a note for the goal of affordable health care, the government must ensure that its directions are followed in full, besides staying the course to innovate solutions for this category of patients.

HOW AGE-SPECIFIC SCREENING CAN HELP DETECT CANCER EARLY

A 65-year-old gentleman came to see us with Stage 4 lung cancer with no prior history of smoking or second-hand smoke. His son broke down, fearing he wouldn't survive. He was also anxious about his future, being a smoker and a social drinker. "Is there any way of early detection and prevention?" he asked.

Cancer has become a public health concern in India and has touched most families. In spite of the best efforts, most cancers are diagnosed at advanced stages leading to adverse outcomes. There is growing evidence about the proven role of preventive strategies to minimise the risk of cancer and screening methods to detect cancer at an early stage for better survival.

It is always advisable to consult a doctor in case you notice these signs and symptoms.

Breast cancer: Breast lump or thickening, redness, pitting, or any other changes to the skin over breast, nipple discharge and nipple retraction.

Cervical cancer: Vaginal bleeding in between periods or after menopause, vaginal discharge, pain in the pelvic area and back.

Lung cancer: Persistent cough, blood in sputum, chest pain, shortness of breath.

Head and neck cancer: Non-healing oral ulcer, white or reddish patch in the mouth, enlarged neck nodes, difficulty and pain during swallowing, change in voice, inability to open your mouth.

Colorectal cancer: Alternating diarrhoea and constipation, blood in the stool, abdominal cramp or pain, unexplained weight loss.

Prostate Cancer: Frequent urination, weak urine flow, difficulty urinating, difficulty emptying the bladder, pain or burning during urination.

Vaccines are available for the hepatitis B virus, which can reduce the risk of liver and cervical cancers, respectively. HPV (Human papilloma virus) vaccines reduce the risk of cervical and other cancer types. Cervarix, Gardasil and Gardasil 9 are the currently available HPV vaccines. WHO now recommends a one or two-dose schedule for girls aged between nine and 17 years, a one or two-dose schedule for girls and women aged between 15 and 20 years, and two doses with a six-month interval for women older than 21 years. Gardasil 9, which covers nine subtypes of HPV and gives 100 per cent protection, is recommended at 0, 2 and 6 months (three doses) for all eligible age groups. It is highly recommended that you go for HPV vaccination as the virus is a risk factor for



five cancers in women which are preventable. Early diagnosis and prevention is possible through screening, which refers to the use of simple tests across a healthy population without symptoms to identify the disease early. It is now a proven life-saver for cancers of the breast, cervix, lung, and colorectum. Following are the age group wise recommendations:

21-39 years: Persons with a family history of breast or colon cancer are recommended to start screening early if the risk is higher than average. Cervical cancer screening is suggested at 25 years with Primary HPV testing every five years or co-testing with HPV DNA + Paps test every five years or Paps tests every 3 years.

40-65 years: Those with an average risk can start screening for colon cancer by 45 with annual stool-based tests, colonoscopy every 10 years and sigmoidoscopy every five years. Annual mammography is recommended for women in the 45-54 year age group, then it is every two years for breast cancer screening. Cervical cancer screening must begin with Primary HPV testing every five years or co-testing with HPV DNA + Paps test every five years or Paps tests every three years. Lung cancer screening for persons with a smoking history of 20 pack years by low dose CT scan recommended after 50 years.

More than 65 years: Colon cancer screening for up to 75 years. Cervical cancer screening till negative results for 10 years with regular testing. Lung cancer screening must be done for up to 80 years.

Cancer screening is an important public health strategy that ensures better outcomes, but many people do not even try to approach health facilities.

Health promotion approaches for cancer prevention

- Don't use tobacco products (cigarettes, beedi, zarda and paan masala)
- Make sure your home and workplace are smoke-free and avoid going to smoky places
- Try to maintain a healthy body weight through regular exercise and a healthy diet
- Be physically active in everyday life
- Have a healthy diet (low in fat, sugar, and salt)
- No alcohol intake as any amount of alcohol is bad for health

WHY INDIA SHOULD CUT DOWN ON ITS SALT INTAKE

The seemingly innocuous act of consuming salt can have dangerous repercussions when taken in excess. Excessive sodium intake contributes to the rise of hypertension, heart disease, and stroke. The dangers often lurk undetected, warranting urgent attention and a revaluation of our dietary choices. An average Indian's sodium consumption is more than double the physiological need and dramatically exceeds the World Health Organization's (WHO) recommended daily intake of <5 g of salt for adults.

The WHO recently published the 'Global Report on Sodium Intake Reduction,' which sheds light on the progress of its 194 member states towards reducing population sodium intake by 30% by 2025. Regrettably, progress has been lethargic, with only a few countries making considerable headway towards the objective. Consequently, there is a proposal to extend the deadline to 2030.



India has enacted voluntary measures to decrease sodium in food supply and promote healthier food choices. The WHO devised a sodium score, ranging from 1 (least implementation) to 4 (highest implementation), for each member state based on factors such as the extent of implementation of sodium reduction and other related measures. India's score of 2 signifies the presence of at least one voluntary policy, emphasising the need for more rigorous efforts to address this health concern.

But why is it essential for India to reduce its sodium intake? First, empirical evidence highlights the strong correlation between reduced sodium intake and decreased blood pressure. As per a seminal paper in the *The BMJ*, lowering sodium intake by 1 gram per day (2.5 grams of salt) leads to a 5 mm Hg reduction in systolic blood pressure (BP) for individuals aged 55, causing an estimated 22% decrease in stroke incidence and a 16% decrease in myocardial infarction incidence. This evidence suggests that salt reduction is a cost-effective and practical approach to preventing cardiovascular disease.

LIVES AT STAKE

The scourge of murders, where cattle traders or transporters have been attacked by self-styled "cow vigilantes", has surfaced again in Karnataka — on Saturday, a 39-year-old assistant driver of a van transporting cattle was allegedly tortured and killed by a right-wing activist and his associates. The incident must be seen as one among recurring murderous acts across States, but predominantly in the north of India. From the murder of Pehlu Khan in Rajasthan, who was transporting cattle, to Mohammad Akhlaq in Dadri, Uttar Pradesh, on the suspicion of storing cow meat — it was proven to be false — to two tribal men lynched by alleged activists of the Bajrang Dal in Seoni, Madhya Pradesh, and scores of such incidents, the venality of those committing the murders has been matched by the acuity by law enforcement agencies in implementing cattle slaughter laws to find a pretext for these acts while not bringing those responsible to book. That the murderers of Pehlu Khan were acquitted for the lack of prompt police action is emblematic of this trend. The recurrence of these acts is also a consequence of the emboldening of these right-wing activists, who show little regard for human lives as opposed to their perceived religious beliefs on cow slaughter. Another common factor that is more often the case is that these acts recur in States ruled by the Bharatiya Janata Party (BJP), and are generally condoned by its fellow travellers in the Sangh Parivar.

The Opposition in Karnataka has rightly sought to put the government in the dock and to highlight how this could foster communal disharmony. Any dilly-dallying by the Karnataka police in bringing the guilty to book will be a signal that this is a repetition of the injustices that were committed against Pehlu Khan and others. More so, the repeated nature of these acts calls into question the outcome of recent jurisprudence on cattle slaughter, the 2005 judgment by the Supreme Court in particular which banned cattle slaughter based on an expansive interpretation of the Directive Principles of state policy, besides Articles 48, 48A, and 51(A) of the Constitution. This judgment had overturned an earlier ruling in 1958, which had limited the ban only to "useful" cattle engaged in agriculture and husbandry. The judgment's interpretation resulted in States, mostly led by the BJP, to come up with stringent laws on cow slaughter, and the stigmatisation of Dalits, Muslims and tribals for their dietary habits and dependence on cattle products for a livelihood, besides allowing for impudent behaviour by so-called "vigilantes". It is not enough to condemn these acts; it is time, yet again, for a judicial rethink on legislation over cow slaughter.

**PURGED FROM NCERT TEXTBOOKS: HINDU EXTREMISTS' DISLIKE FOR MAHATMA GANDHI, RSS BAN AFTER ASSASSINATION****Key deletions on Mahatma Gandhi's assassination in NCERT class 12 texts**

* He (Gandhi) was particularly disliked by those who wanted Hindus to take revenge or who wanted India to become a country for the Hindus, just as Pakistan was for Muslims...

* His steadfast pursuit of Hindu-Muslim unity provoked Hindu extremists so much that they made several attempts to assassinate Gandhiji...

* Gandhiji's death had an almost magical effect on the communal situation in the country... The Government of India cracked down on organisations that were spreading communal hatred. Organisations like the Rashtriya Swayamsewak Sangh were banned for some time...

These sentences that have been taught to Class 12 students for more than 15 years as part of their Political Science curriculum now stand deleted from NCERT textbooks.

So does the reference to Gandhi's assassin Nathuram Godse as "a Brahmin from Pune" and "the editor of an extremist Hindu newspaper who had denounced Gandhiji as 'an appeaser of Muslims'" from a Class 12 History textbook.

References to Gujarat riots purged from social science books for Classes 6-12 Among key deletions on Gandhi's assassination in NCERT class 12 texts are these lines.

Significantly, the above deletions did not figure in the "list of rationalised content" officially released by the National Council of Educational Research and Training (NCERT) in June last year.

However, the above sentences and references are missing from the new textbooks (with rationalised content) that hit the market recently, a scrutiny of the reprinted books by The Indian Express has revealed.

Last year, NCERT had rationalised textbooks for all subjects to reduce curriculum load further to help students make a "speedy recovery" in learning, which has been hit by Covid-19 disruptions. The changes were announced via a booklet that was uploaded on the Council's official website and also formally shared with all schools. The textbooks (with rationalised content) were not reprinted last year due to shortage of time. The new books, however, have now hit the market and are available for the new academic year 2023-24.

When asked why changes pertaining to Mahatma Gandhi's assassination did not make it to NCERT's official document released in June 2022, but directly introduced in the reprinted textbooks, NCERT director DS Saklani insisted "there is nothing new" this time. "Rationalisation happened last year. We have not done anything new this time," he told The Indian Express. His colleague and head of NCERT's Central Institute of Educational Technology, AP Behera said, "It is possible some bits may have been left out of the table due to oversight but no new changes have been made this year. This all happened last year."

Consider some of the most glaring changes introduced in the reprinted textbooks this year that were missing from NCERT's "list of rationalised content" released in June 2022:

* The third and last reference to the Gujarat riots in NCERT textbooks has been dropped from the Class 11 Sociology textbook titled 'Understanding Society'. NCERT has deleted a paragraph that



talks about how class, religion and ethnicities often lead to segregation of residential areas and it then cites the communal violence in Gujarat in 2002 to illustrate how communal violence furthers ghettoisation.

The deleted paragraph reads: "Where and how people will live in cities is a question that is also filtered through socio-cultural identities. Residential areas in cities all over the world are almost always segregated by class, and often also by race, ethnicity, religion and other such variables. Tensions between such identities both cause these segregation patterns and are also a consequence. For example, in India, communal tensions between religious communities, most commonly Hindus and Muslims, results in the conversion of mixed neighbourhoods into single-community ones. This in turn gives a specific spatial pattern to communal violence whenever it erupts, which again furthers the 'ghettoisation' process. This has happened in many cities in India, most recently in Gujarat following the riots of 2002."

among key deletions on Gandhi's assassination in NCERT class 12 texts are these lines: Book: Politics In India Since Independence

With the removal of the above paragraph, all NCERT social science textbooks for Classes 6 to 12 have been purged of all references to the Gujarat riots.

The Council had officially announced deletion of two references to the Gujarat riots from the last chapter of the Class 12 political science textbook titled 'Politics in India Since Independence and the Class 12 sociology textbook 'Indian Society' in its "list of rationalised content" released in June last year.

* In the first chapter of the Class 12 Political Science textbook 'Politics in India since Independence', NCERT has removed sentences on how Hindu extremists particularly disliked Mahatma Gandhi and had made several attempts to assassinate him. This was mentioned under the subheading 'Mahatma Gandhi's sacrifice'.

"He (Gandhi) was particularly disliked by those who wanted Hindus to take revenge or who wanted India to become a country for the Hindus, just as Pakistan was for Muslims. They accused Gandhiji of acting in the interests of the Muslims and Pakistan. Gandhiji thought that these people were misguided. He was convinced that any attempt to make India into a country only for the Hindus would destroy India. His steadfast pursuit of Hindu-Muslim unity provoked Hindu extremists so much that they made several attempts to assassinate Gandhiji," the deleted passage reads.

NCERT has also dropped the reference to the government's ban on the Rashtriya Swayamsewak Sangh following Gandhi's assassination.

The deleted sentences read, "Gandhiji's death had an almost magical effect on the communal situation in the country. Partition-related anger and violence suddenly subsided. The Government of India cracked down on organisations that were spreading communal hatred. Organisations like the Rashtriya Swayamsewak Sangh were banned for some time. Communal politics began to lose its appeal."

However, the remaining content under the subheading 'Mahatma Gandhi's sacrifice' mentions Gandhi's visit to Kolkata on August 15, 1947, which was torn by Hindu-Muslim riots at that time and his subsequent efforts to persuade Hindus and Muslims to give up violence. It also briefly describes his assassination.



“Finally, on 30 January 1948, one such extremist, Nathuram Vinayak Godse, walked up to Gandhiji during his evening prayer in Delhi and fired three bullets at him, killing him instantly.”

* In the Class 12 History textbook titled ‘Themes In Indian History Part III’, the Council has dropped a “Brahmin” reference to Godse and that he was “the editor of an extremist Hindu newspaper”.

The paragraph pertaining to Gandhi’s assassination in the chapter titled “Mahatma Gandhi and the Nationalist Movement” earlier read: “At his daily prayer meeting on the evening of 30 January, Gandhiji was shot dead by a young man. The assassin who surrendered afterwards, was a Brahmin from Pune named Nathuram Godse, the the editor of an extremist Hindu newspaper who had denounced Gandhiji as ‘an appeaser of Muslims.’”

The revised paragraph now reads: “At his daily prayer meeting on the evening of 30 January, Gandhiji was shot dead by a young man. The assassin, who surrendered afterwards, was Nathuram Godse.”

DELETIONS IN TEXTBOOKS GUIDED BY ‘DIVISIVE MOTIVES’, SAY HISTORIANS

Around 250 historians from leading Indian and foreign universities have issued a public statement against changes made in the textbooks issued by the National Council of Educational Research and Training (NCERT), which include dropping entire chapters on history of Mughal courts, references to the 2002 Gujarat riots, the Naxalite movement, and mention of Dalit writers.

The institutes include Indira Gandhi National Open University, Jadavpur University, Delhi University, University of Hyderabad, Columbia University, and Princeton University.

“The recent decision of the NCERT to drop entire chapters from the history textbooks for Class 12, as well as from other classes and to delete statements from other textbooks is a matter of deep concern,” the historians said.

“In the revised version, while the chapter on the Mughals has been deleted, the chapter on the Vijayanagara Empire has been retained. The exclusion exposes the wider communal undertones, based on an inaccurate assumption about India’s past — that the religion of the rulers was the dominant religion of the times. This leads to the deeply problematic idea of a ‘Hindu’ era, ‘Muslim’ era, etc. These categories are uncritically imposed on what has historically been a very diverse social fabric.”

“The chapters deleted from the history textbook are precisely those which do not fit into the pseudo-historical schema of the ruling dispensation,” they said. “We are appalled by the decision of the NCERT to remove chapters and statements from the history textbooks, and demand that the deletions from the textbooks should be immediately withdrawn. The decision of the NCERT is guided by divisive motives,” the historians said.

EXPRESS VIEW ON TEXTBOOK DELETIONS: THEY GO AGAINST THE SPIRIT AND PROMISE OF NEP

In the academic year that has just commenced in most parts of the country, secondary and senior secondary school students have been introduced to a revised set of social science textbooks. Curriculum reforms should be par for the course in history, sociology and political science — they are necessary to update the student with shifts in the polity and society. These changes should



reflect new thinking in the disciplines and also remove past blind spots and blinkers. History textbooks have, for instance, been too big-empire-centric. They don't have enough on the new historiography of different regions — the Northeast, for example — or on the archaeological finds that have changed understandings of the Indus Valley civilisation. Political science textbooks have yet to take proper note of the rise of, among other things, the new kinds of mobilisations being enabled and fostered by social media. But the latest revisions do not address such gaps and deficits. Instead, they excise content related to chapters in history that have acquired political overtones under the current regime — the Delhi Sultanate and the Mughal Empire. Another set of changes pertains to key fraught moments in Independent India's political history — Mahatma Gandhi's assassination, Emergency and Gujarat 2002. Yet another set of deletions could come in the way of the student engaging with important questions of caste, class and religion and their relationship to power.

An investigation by this newspaper last year had revealed that the pruning exercise was conducted without adequate consultation with experts. This is in marked contrast to the wide-ranging conversations undertaken by the same government before framing the National Education Policy 2020. The NCERT has justified the deletions as a part of its periodic "rationalisation" endeavours to reduce the curriculum load on students. But making knowledge more attractive and accessible hinges on several pedagogic interventions, including empowering the teacher. The NEP, too, underlines the importance of such an approach and lays store on developing the student's critical faculties. The social scientist should be a key facilitator in this process by introducing the student to the complexities of social and political structures, with all their diversities, cleavages and inequities. This hasn't always happened in India — even earlier textbook development committees have been fettered by government control over curricula. The recent revisions, however, invite the charge that not only does the government wish to escape unpalatable facts, but it also wants to ensure that the students do not engage with social and political realities with a critical attitude.

The Gujarat riots-related erasures betray an anxiety to paper over the faultlines and institutional failures that continue to inflict pain and injustice on minorities. The removal of sentences on communalism and the RSS in the passage on Gandhi's assassination indicates discomfiture with a turning point that continues to resonate in the India story. The deletion of the section on protest movements curtails in crucial ways the student's view and imagination of citizenship in an argumentative democracy. The NEP had taken an ideologically-agnostic route to educational reform. The revisions in the social science textbooks do a disservice to the process it initiated, and threaten to undo one of the most progressive aspects of its approach.

NO IDOLS, NO ARMS: THE PATTANAM MYSTERY

In the serene village of Pattanam in central Kerala lies the only multicultural archaeological site on the southwestern coast of the Indian subcontinent. Often referred to as the 'first emporium' of the Indian Ocean, Muziris — of which Pattanam is part — is an example of the Greco-Roman classical age coming into direct contact with an ancient South Indian civilisation.

Excavations so far, that have unearthed less than 1% of the site, point to a startling fact: there is no evidence that institutionalised religion existed in ancient Pattanam. There was certainly no indication of the graded inequality embodied in the caste system that has characterised contemporary Kerala and most of the rest of India.



The technological, metallurgical, literary, and artistic advances of this phase bear witness to rigorous cultural and commercial exchanges. The Pattanam excavations have unearthed over 45 lakh sherds (ceramic fragments); these include approximately 1.4 lakh belonging to the littoral regions of the Mediterranean, the River Nile, the Red Sea, the western and eastern Indian Oceans, and the South China Sea. Recent findings include the seal of a sphinx, native to the ancient Greek city of Thebes.

This wide span of locations confirms the existence of a thriving urban centre from the 5th century B.C. till the 5th century A.D., with its peak phase from 100 B.C. to A.D. 300.

SUMMER RESOLUTION

It is not exactly surprising when the India Meteorological Department (IMD) says that the summer months will be searingly hot. Last week, it proclaimed that most parts of the country are expected to experience above normal maximum temperatures during the “hot weather season” (March-May), barring parts of peninsular and northwest India, which would see normal or even below normal ‘maximum’ temperatures. This does not mean that northwest India, which sees temperatures well over 45°C, will be comfortable. ‘Above normal heatwave days, characterised by temperatures 4°-5°C above what is usual for that time in a region, are likely to occur over most parts of central, eastern and northwest India during the hot weather season,’ its forecast notes. A seasonal outlook issued by the IMD in March, on probable summer temperatures, too was on similar lines. However, what has changed in the last month is a greater certainty of an El Niño, or a warming of sea surface temperatures in the Equatorial Central Pacific, that is strongly associated with reduced rains over northwest India. Many El Niño years also see reduced monsoon rainfall during June to September and are often associated with drought-like conditions. The IMD’s official outlook says that ‘neutral’ (neither El Niño, or its converse, a cooling La Niña) conditions are persisting in the Pacific. The World Meteorological Organization’s outlook says that the chances of El Niño developing gradually increase from 15% in April-June, to 35% in May-July, and rise to around 55% during June-August. Later this month, the IMD is expected to announce its first forecast for the monsoon and this will hinge on the El Niño-La Niña development.

The purpose of forecasts is to give lead time to States to prepare. The National Disaster Management Authority has been issuing guidelines to States on preparing Heat Action Plans since 2016. Many States have prepared documents that detail measures and methods to deal with heat-related contingencies, that, as reports from the Intergovernmental Panel on Climate Change warn, are only poised to get worse. But, many of these recommendations are only on paper. An analysis by researchers at the Centre for Policy Research of such heat action plans found that most of them are not made to capture local context. For instance, only dangers from unusually high temperatures are evaluated and almost none from humidity and warm nights. Several plans are under-funded and lack legal backing. Heat wave forecasts should be taken as seriously as monsoon forecasts, and the Centre as well as State governments must play a more coordinated role in implementing these plans.

IN A FIRST, ERAVIKULAM NATIONAL PARK GETS A FERNARIUM

The Eravikulam National Park (ENP) in Kerala, the natural habitat of the Nilgiri tahr in Munnar, has a new attraction — a fernarium set up inside the park. According to officials, this is the first time such a fern collection is being set up in the hill station.



“Ferns are part of the Epiphytic family. They grow naturally in a soilless condition. The plants obtain water and nutrients through leaching from trees. A large number of ferns are on the trees inside the park,” said Dr. Augustine.

Meanwhile, after the calving season of the Nilgiri tahrs, the ENP opened for the public on Saturday.

HIMACHAL CONSIDERING LEGALISING CULTIVATION OF CANNABIS, SAYS CM

Himachal Pradesh Chief Minister Sukhvinder Singh Sukhu on Friday said the State government was considering legalising the cultivation of cannabis.

The Chief Minister said the State government was cautious about the potential increase in drug use and had formed a five-member committee of MLAs. “The committee will conduct a thorough study about each and every aspect related to cannabis cultivation in the State. The committee will visit areas where illegal cultivation of cannabis takes place, and submit a report within a month. Only on the basis of the report will the government take a decision,” he said.

Mr. Sukhu said cannabis cultivation had been kept under the legal purview in several States. “Neighbouring Uttarakhand became the first State in the country to legalise cannabis cultivation in 2017. Controlled cultivation is being done in some districts of Gujarat, Madhya Pradesh and Uttar Pradesh. Similarly, controlled cultivation of cannabis has been permitted in several countries such as Uruguay, Canada, the U.S., Austria, and Belgium,” he said.

The Chief Minister said the government would consider all aspects, including regulatory measures, and will study the models followed by other States that have legalised cannabis cultivation before taking the final call.

POOR TESTING OF PASHMINA SHAWLS STILL POSES A PROBLEM

The Kashmir Chamber of Commerce and Industries (KCCI), a Valley-based traders’ body, has raised the issue of confiscation and poor testing of pashmina shawls with the Union Minister for Forest, Environment and Climate Change, Bhupender Yadav.

According to the body, there has been a growing seizure of shawl consignments by the Customs Department at international airports in the country.

“Exports of Kashmiri shawls will touch anywhere between ₹1,000 crore and ₹2,000 crore mark if the hurdles are removed. We apprised the Minister of the centuries-old cottage craft that has provided employment to tens of thousands of male and female artisans. We also discussed the product demand within and outside the country,” Javid Ahmad Tenga, president of the KCCI, said. The hurdles Mr. Tenga talks about begin at the airport. Basic microscopes may detect banned shahtoosh guard hair (wool from the chiru goat or Tibetan antelope) in what are classified as pashmina shawls (wool from the pashmina goat). Pashmina wool has a thread width of 13 to 16 microns, while shahtoosh has a width below 11 microns (the diameter of human hair is 70 micron).

Testing delays

“The shawl is then sent for further testing to laboratories, either in Dehradun or Kolkata. We have to wait for months together to get a report. Many times, the reports are inconclusive. By the time,



traders are questioned and even CBI raids are carried out on artisans involved in the weaving of these pashmina shawls,” Tariq Dar, a Kashmiri exporter who owns the label Pashmkaar, said.

Mr. Tenga said the Ministry has promised to set up a DNA testing lab in Gurugram. “We are hopeful this will help in the fast processing of consignments at the Customs Department,” he added. The KCCI also demanded installation of the latest pashmina testing machine in Srinagar as well in Delhi for simplification of Customs clearance. The KCCI stressed the need for DNA testing and not basic microscopic testing.

According to official figures of the Kashmir Handicrafts Department, against ₹305 crore of shawl exports in 2018-19, before the Centre ended J&K’s special constitutional position, exports dipped to ₹272 crore in 2019-20, to ₹172 crore in 2020-21, to ₹166 crore in 2021-22.

The Wildlife Trust of India (WTI) says that 537 illegal imports of shahtoosh scarves have been spotted by Switzerland authorities in the past five years, pointing at the continuous illegal trade.

Shahtoosh ban

Manufacturing of shahtoosh shawls was stopped in Kashmir since the ban was imposed in 2002 by the J&K government. The move came after the chiru population showed a downward spiral in the 1980s. A senior official of the WTI put the number of chiru in 2003 between 200-500 in the trans-Himalayan deserts of Ladakh. However, the population of chiru has been stabilising.

Traders are aware that shawls with shahtoosh fibre could be confiscated overseas for being a banned item and attract stricter actions than in India. They say only a miniscule section may be involved in illegal trade. However, contamination is a reality that the government needs to look into.

Mahmood Shah, director of the Handicrafts and Handloom Department in Kashmir, said contamination is a “high possibility” and needs to be looked into from a scientific perspective. “Both pashmina goat and chiru are inhabitants of Ladakh’s high-altitude Changthang belt. There is a possibility of herders mixing pashmina and shahtoosh fibre, when these animals shed their coats seasonally. Two, once traders purchase pashmina wool with shahtoosh contamination for spinning, artisans can’t make out the difference. So, contamination at source is a high probability,” Mr. Shah said.

WHY THE INDIGENOUS IDU MISHMIS ARE PROTESTING A PROPOSED TIGER RESERVE IN ARUNACHAL PRADESH

On March 24, the National Tiger Conservation Authority (NTCA) chief SP Yadav said that the Dibang Wildlife Sanctuary in Arunachal Pradesh would soon be notified as a tiger reserve. The announcement has caused disquiet among the area’s Idu Mishmi people, who feel that a tiger reserve would “hinder their access” to the forest.

The Idu Mishmi, the ‘tiger brothers’

The Idu Mishmi is a sub-tribe of the larger Mishmi group (the other two Mishmi groups are Digaru and Miju) in Arunachal Pradesh and neighbouring Tibet. Known for their weaving and craftsmanship skills, the Idu Mishmis primarily live in Mishmi Hills, bordering Tibet. Their ancestral homelands are spread over the districts of Dibang Valley and Lower Dibang Valley as well as parts of Upper Siang and Lohit. The tribe is estimated to comprise around 12,000 people



(as per census 2011), and their language (also called Idu Mishmi) is considered endangered by UNESCO.

Traditionally animists, the tribe has strong ties with the region's rich flora and fauna. Animals such as the hoolock gibbons and tigers have deep cultural relations with the Idu Mishmi. Tigers are especially important to the Idu Mishmis — according to Idu mythology, they were born to the same mother, and thus, tigers are their “elder brothers”.

While hunting has traditionally been a way of life, the Idu Mishmis also follow a strict belief system of myths and taboos — ‘iyu-ena’ — that restrict them from hunting many animals, including a complete prohibition on killing tigers. Anthropologists and other researchers who have studied the area say that this belief system has led to a unique model of wildlife conservation. “Idu beliefs concerning tigers prevent their widespread and immediate retaliatory killing...it is because of these cultural beliefs that tigers thrive in these areas,” wrote Dr Sahil Nijhawan, who did his PhD in the Dibang Valley, in his research on the subject.

The move to propose a tiger reserve

While the Dibang Wildlife Sanctuary — a biodiversity hotspot home to rare Mishmi takin, musk deer, goral as well as clouded leopards, snow leopards and tigers — was notified in 1998, plans to declare it as a tiger reserve have been afoot for a while now.

In April 2022, at the 20th NTCA meeting held at the state's Pakke Tiger Reserve, under the chairmanship of Union Minister for environment Bhupender Yadav, members accorded final approval to declare the wildlife sanctuary as a tiger reserve.

But the push dates further back. In 2012, two tiger cubs were rescued from the Angrim Valley village in Dibang Valley. “Since the rescue, the Dibang Valley district has been witnessing a series of conservation interventions by state and non-state actors,” Dr Ambika Aiyadurai, IIT Gandhinagar scholar, writes in a 2016 paper ‘Tigers are Our Brothers: Understanding Human-Nature Relations in the Mishmi Hills, Northeast India’ published in the Conservation and Society journal. As Dibang Valley became a site by wildlife biologists to map the tiger habitat and count tigers, the recommendations from these visits have led to a proposal suggesting a reconstitution of the existing Dibang Wildlife Sanctuary as the Dibang Tiger Reserve, Dr Aiyadurai, who has done extensive research in the area, adds.

In 2014, the Wildlife Institute of India (WII) in collaboration with NTCA had carried out a survey to determine the presence of tiger population in the area. Their study — based on photographic evidence via camera trapping — recorded the presence of tigers in the highest reaches of the Mishmi Hills. It is primarily based on these findings that a case is being made to declare the sanctuary as a tiger reserve.

The Idu Mishmi resistance

The tribe has been vociferously opposing any move to convert the wildlife sanctuary into a tiger reserve, fearing that the move will “cut off access to their lands”.

Following media reports on Yadav's announcement, the tribe's apex body, the Idu Mishmi Cultural and Literary Society (IMCLS), put out a statement saying that while their cultural ethos emphasised on the protection of wildlife, it should not be done at the cost of “lives and livelihoods of local communities”.



In its current form as a wildlife sanctuary, the community's access to the Dibang forests has not been impacted. But many say a tiger reserve would increasingly restrict access. An upgrade to a tiger reserve would feature stricter security measures like a 'Special Tiger Protection Force', which would be guarding the area at all times. This, the community believes, would cut off access to their forest lands.

"Our own survival will be endangered... as access to our own lands will be cut off if this is made into a tiger reserve. It will dislodge the local people and hinder their rights to go to the forest," said IMCLS president Dr Ista Pulu, adding that the community's cultural taboos already play a unique role in conservation. More recently, the community has declared part of its forest land as a 'Community Conserved Area', or a CCA. It is a model governed entirely by local populations, where villagers are demarcate a part of their ancestral land as a "biocultural conserved area", where they ban hunting, felling trees, and implement other conservation measures

Created without Idu Mishmi 'consent or knowledge'

Moreover, members of the community claim that Dibang Wildlife Sanctuary was created without people's consent or knowledge. "It was unilateral, arbitrary and illegal. They did not follow the due procedure as mentioned in the provisions of the Wildlife Protection Act, 1972 and the Land Acquisition Act, 1894...many residents whose areas were made part of the sanctuary were not consulted," said Tilu Linggi, IMCLS member who looks after issues on community rights and protected area.

In 2015, the community had approached the Gauhati High Court seeking legal re-demarcation of the wildlife sanctuary. The ICMLS said that the court had directed the state government to address the issue and come up with a report with the help of a committee, including locals. "The problem of the DWLS is not even sorted out, the government has imposed the idea of a tiger reserve," said the IMCLS statement.

The community also alleges that the WII study about the presence of tigers in the upper reaches of the Mishmi hills, the findings of which were released in 2018, is "misleading". Back then, the IMCLS had written to the NTCA saying that the study failed to mention that "photo-captures of tigers at higher altitudes of 3,246 and 3,630 m. occurred outside the sanctuary and in community-owned forests."

"Tigers cannot survive at such high altitudes [as the study claims]... most tigers actually live outside the wildlife sanctuary and in community-owned forest lands," said Pulu.

The ICMLS has urged the authorities to find a solution that "benefits everyone and respects the rights of the indigenous people". "Otherwise we will be forced to resort to other democratic means," it said.

**BUSINESS & ECONOMICS****EXPRESS VIEW: SLOWER PACE OF STATE CAPEX RAISES QUESTIONS OVER EXTENT TO WHICH PUBLIC SECTOR CAN DRIVE ECONOMIC MOMENTUM**

Data on government finances released by the Controller General of Accounts last week shows that the Centre's fiscal deficit for 2022-23 is unlikely to significantly exceed the revised estimates presented in the recent Union budget, notwithstanding concerns over deviations in both income and expenditure. On the revenue side, the Centre's tax collections have grown at a healthy pace during April-February 2022-23, despite subdued growth in February. Gross tax collections have touched Rs 25.4 lakh crore, up 12 per cent over the same period last year. This is only marginally lower than the growth assumed in the revised estimates for the full financial year.

Direct tax collections have grown at a considerably faster pace than indirect taxes. Data released on Monday shows that provisional direct tax collections (net of the refunds) have in fact exceeded the revised estimates by 0.69 per cent. Under direct taxes, growth in income tax has so far (April-February) outpaced corporate tax collections, while on the indirect tax side, excise duty collections remain subdued, even as GST has exhibited a healthy growth. Data released on Saturday shows that GST collection in March stood at Rs 1.6 lakh crore, up around 13 per cent over the same period last year. For the full year, gross collections are estimated to be 22 per cent higher than last year. However, overall tax collections have grown at a slower pace than nominal GDP growth. And while non-tax revenues are in line with the target, proceeds from disinvestment remain a matter of concern. As against a target of Rs 60,000 crore, collections at the end of February stood at Rs 38,640 (including the proceeds from monetisation of national highways).

On the expenditure side, while spending did slow down in February, overall central government spending for the year (April-February) grew by around 11 per cent, marginally higher than what was factored in the revised estimates. Capital spending has grown at a significantly higher pace of 21 per cent so far, as the government has focused on ramping up investments. To achieve the target for the full year, however, spending will have to grow by 28 per cent in March. In comparison, capital expenditure by state governments has been relatively subdued. As per a report by ICRA, 15 states had spent only 54 per cent of their capital expenditure targets for 2022-23 during the first 10 months of the year (April-January). This implies that in order to meet their targets, states would have had to raise spending by 76 per cent in February and March. Failure to meet this year's targets will also raise questions over their ability to achieve the scaled up targets in 2023-24. As states account for a significant share of overall public sector investments, their spending is critical for driving investment activity. The slower pace of state capex raises questions over the extent to which the public sector can drive the economic momentum.

THE GROWTH MATH

On Tuesday, two multilateral institutions presented their regional economic outlook for this year, scaling down their projection for India's growth prospects in 2023-24. The World Bank has pared its real GDP growth forecast for the country to 6.3% from 6.6% it had estimated a few months earlier, and 7% projected in October 2022. The key domestic factors it flagged for the downgrade are: rising borrowing costs would hurt otherwise resilient consumption demand, government consumption will likely contract, while services sectors' growth will slip to a three-year low of 6.7% from an estimated 9.5% in 2022-23. The Manila-based Asian Development Bank (ADB) noted that a rebounding China's and India's domestic demand (which it believes will likely stay



healthy) would lift up Asia's growth prospects. However, it slashed its 2023-24 GDP growth forecast for India from 7.2% to 6.4%, citing tight monetary conditions and fading optimism on business conditions that it reckoned would lead to lower growth in private investments (that had only seen a fledgling post-COVID recovery till now). Apart from these domestic issues, of course, both the institutions have cited the effects of the existing challenging conditions in the global economy, which are freshly exacerbated by a spate of bank failures in the developed world and resurfacing concerns about oil prices heading north despite slowing world demand as producers cut output in unison.

To be clear, the government, which presented the Union Budget around two months after the last forecasts of these institutions, of 7%-plus growth, had not articulated such high hopes for this year. The Economic Survey pegged 2023-24 growth at 6.5%, while the Reserve Bank of India (RBI) estimates it at 6.4%. However, India's current growth estimate for last year is 7%, while the World Bank and ADB expect it to be marginally lower at 6.9% and 6.8%, respectively. A better picture on the base over which this year's growth has to be calculated, will only emerge by the end of May when first estimates for the last quarter of 2022-23 will be released. The world would also have spun a few more times by then and 2023-24 forecasts shall be revised whichever way the winds blow. At this time last April, the International Monetary Fund had just scaled down its India growth estimate for the year gone by, from 9% to 8.2%, while the World Bank, the ADB and the RBI had projected it to be 8%, 7.5% and 7.2%, respectively. Policymakers can safely tune out the noise generated by these numbers, but must pay heed to the stress signs being flagged so as to pro-actively minimise any impending damage.

LONG ON INTENT

India's long-delayed, refreshed Foreign Trade Policy has finally been unveiled. The new policy, announced on Friday by the Union Minister for Commerce, Industry and Textiles Piyush Goyal, has made bold to set an ambitious target of reaching \$2 trillion in total exports (goods and services combined) by 2030. With the government currently estimating exports to have crossed \$760 billion in the fiscal year just ended on March 31, the policy projects a near tripling in outbound shipments of goods and services over the course of seven years. And when one compares this growth goal with the 75% expansion achieved over the last seven years since 2016, the magnitude of the aspiration suggests vaulting ambition. To be sure, the last three years have been unprecedented, with first the COVID-19 pandemic and then Russia's invasion of Ukraine disrupting global trade momentum. Still, the last three years, when India put its trade policy reset on hold, also provided policymakers a unique opportunity to take a fresh approach to delineating the contours of its trade policy goals. The end result is long on statements of intent. The National Trade Facilitation Action Plan, for instance, lists aims to achieve that are essential and laudable but in no way novel: an improvement in the ease of doing business through reduction in transaction cost and time, a reduction in cargo release time, and a paperless regulatory environment.

In a nod to India's WTO obligations, the shift from incentives to an enabling regime of duty remission and exemption schemes to facilitate duty-free imports of inputs required for boosting exports has been near complete. Most of these schemes including the RoDTEP (Remission of Duties and Taxes on Exported Products), RoSCTL (Rebate on State and Central Taxes and Levies), AA (Advance Authorisation) and EPCG (Export Promotion Capital Goods) have been around for a while and the policy has just tweaked some of the terms of implementation to improve adoption. In the key sector of apparel and clothing, for instance, the facility of self-declaration has now been



offered across the board to all exporters. A one-time amnesty has also been offered, giving exporters more time to avail of both the AA and EPCG schemes. And acknowledging the substantial surge in online trade, the policy devotes a whole chapter to 'Promoting Cross Border Trade in Digital Economy' including moves to facilitate the establishment of dedicated e-commerce export hubs. Still, with global trade largely becalmed and the services sector facing headwinds of uncertainty in the key western markets, the FTP falls short in offering more substantive and sectorally targeted measures as well as a well-defined road map to meet the 2030 export target.

INDIA, MALAYSIA MOVE BEYOND DOLLAR TO SETTLE TRADE IN RUPEE

India and Malaysia have agreed to settle trade in the Indian rupee, the Ministry of External Affairs announced on Saturday. The announcement came against the backdrop of ongoing official efforts to safeguard Indian trade from the impact of Ukraine crisis.

The shift away from the U.S. dollar, which has been the dominant reserve currency for international trade so far, has added significance as it indicates that India is willing to take concrete steps towards de-dollarisation of its international trade. The Union Bank of India, in a statement, said that it has become the first bank in India to operationalise this option by opening a Special Rupee Vostro Account through its "corresponding bank" in Malaysia — India International Bank of Malaysia.

"Trade between India and Malaysia can now be settled in Indian Rupee (INR) in addition to the current modes of settlement in other currencies. This follows the decision by the Reserve Bank of India in July 2022 to allow the settlement of international trade in the Indian Rupee (INR). This initiative by RBI is aimed at facilitating the growth of global trade and to support the interests of the global trading community in Indian rupees," the Ministry of External Affairs announced.

Trading in the U.S. dollar has faced growing difficulties, especially after the Russian economy was sanctioned by the Western powers following President Vladimir Putin's launch of a so-called "special military operation" against Ukraine on February 24, 2022.

As a fallout of the sanctions and war-making, payments to Russia in U.S. dollars became increasingly difficult, which in turn triggered a search for solutions in national currencies and de-dollarisation worldwide.

On March 14, the government had informed the Rajya Sabha that banks from 18 countries were allowed by the RBI to open Special Rupee Vostro Accounts to settle payments in the rupee. Malaysia was one of the 18 countries that figured in the statement laid out before the Rajya Sabha, by Minister of State for Finance Dr. Bhagwat Kishanrao Karad.

For better trade

"This mechanism will allow the Indian and Malaysian traders to invoice the trade in Indian rupee and therefore achieve better pricing for goods and services traded. This mechanism is expected to also benefit the traders on both sides as they can directly trade in Indian Rupee and therefore save on currency conversion spreads," a press note from the Union Bank of India informed on Saturday.

The India-Malaysia bilateral trade touched \$19.4 billion during 2021-22 and Saturday's announcement is expected to help bilateral trade to overcome currency-related obstacles.



Malaysia is the third largest trading partner of India in the ASEAN region, after Singapore and Indonesia that account for \$30.1 billion and \$26.1 billion bilateral trade with India respectively.

PAUSE AND EFFECT

The Reserve Bank of India's Monetary Policy Committee (MPC) has unanimously and wisely decided to apply a temporary pause to its inflation-battling monetary tightening by keeping the repo rate unchanged. RBI Governor Shaktikanta Das was emphatic in stressing that the decision to pause was "for this meeting only", underlining the commitment to ensuring that retail inflation is progressively aligned to the mandated target of 4%. Clearly, developments in the global financial system, particularly the banking sector turmoil and the volatility and uncertainty they have triggered, have weighed heavily on policymakers' decision to wait and watch. Notwithstanding his assertions that India's 'banking and non-banking financial service sectors remain healthy and economic activity remains resilient', it is the spectre of rising credit costs posing risks to both consumption demand and private investment that was a key factor in the World Bank's calculus earlier this week, when it cut India's 2023-24 growth forecast to 6.3%. With the global economy still facing headwinds including from unabated geopolitical tensions, which the World Bank warned could result in a recession were more shocks to occur, the RBI's policymakers have judiciously chosen to subordinate their concerns over inflation, for now, so as to ensure the growth momentum is not undermined.

Still, monetary authorities have only a small window in which to see if their prognostication of a moderation in inflation is indeed starting to pan out. With Mr. Das acknowledging that core inflation remains elevated across a range of goods and services and unyielding, the MPC faces a challenge in its mandate of achieving durable disinflation. As the RBI's latest Monetary Policy Report notes, upside risks to the inflation outlook emanate from factors including higher global crude and commodity prices and extreme weather conditions and deficient monsoon rains. Already, as Mr. Das acknowledged, the sudden recent announcement of an output cut by OPEC+ producers had resulted in a jump in crude prices, which could well upset the RBI's assumption of crude averaging \$85 a barrel (for the Indian basket) this year. Similarly, the outlook for food prices too is beset with uncertainty given the unseasonal rains in parts of the country combined with the likelihood of an El Niño, which could raise summer temperatures and depress monsoon rainfall. Additionally, the RBI sees milk prices staying firm over the coming months amid fodder cost pressures. Policymakers must remember, as the RBI chief so pithily said, price stability still remains "the best guarantee for sustainable growth".

HOW ASBA-LIKE FACILITY FOR SECONDARY MARKET TRADING BENEFITS CUSTOMERS

The capital markets regulator, Securities and Exchange Board of India (SEBI), last week approved a framework for Application Supported by Blocked Amount (ASBA)-like facility for trading in the secondary market.

The facility will be optional for investors and stock brokers. To facilitate smooth transition in the market, the framework will be implemented in a phased manner.

What is ASBA?

ASBA, which was first introduced by SEBI in 2008, is an application by an investor that contains an authorisation to a Self Certified Syndicate Bank (SCSB) to block in the bank account the application money for subscribing to an issue.



An SCSB is a recognised bank capable of providing ASBA services to its customers.

The application money of an investor applying through ASBA shall be debited from the bank account only if her application is selected for allotment after the basis of allotment has been finalised. In public issues and rights issues, all investors have to mandatorily apply through ASBA.

And what has SEBI done?

In its board meeting on March 29, the markets regulator gave its nod for an ASBA-like facility for secondary market trading. The facility is based on the blocking of funds for trading in the secondary market through UPI (Unified Payments Interface). At present, ASBA is available for the primary market, wherein the initial public offering (IPO) funds only are blocked on application, and are debited only on allotment.

According to discount stock broker 5paisa, the extension of ASBA to secondary markets means brokers will no longer collect margins from clients; only a block will be placed on the bank account. This will not matter much for banks-cum-brokers such as ICICI, HDFC, and Axis, since it anyways works like a quasi-ASBA. However, it could matter for non-bank brokers.

How does ASBA work in the primary market?

In the ASBA system, there is an explicit authorisation to block the application money in the bank account. When an investor makes an application for an IPO, a similar amount of funds are blocked in the ASBA bank account. Such funds cannot be used for any other purposes.

However, once the allotment is finalised, based on the number of shares allotted, the ASBA bank account will be debited, and the balance funds will be released for regular use, according to 5paisa.

How will the ASBA facility benefit retail investors in the secondary market?

ASBA in secondary market trading will ensure that clients will continue to earn interest on the blocked funds in their savings account till the debit takes place. There will be direct settlement with Clearing Corporation (CC), without passing through the pool accounts of the intermediaries. Hence, it will provide client-level settlement visibility to CC, and help avoid the risk of co-mingling of clients' funds and securities.

It will eliminate the custody risk of client collateral, which is currently retained by the members, and is not transferred to the CC. There will be hassle-free and immediate unblocking of client's funds and/ or return of securities in case of member default.

The markets regulator said the facility will bring efficiency in the secondary market ecosystem by allowing usage of the same blocked amount towards margin and settlement obligations. It will result in lower working capital requirements for members.

Under the proposed framework, stock brokers will be allowed to either directly settle the brokerage with the UPI clients or opt for CC's facility to deduct standard rate of brokerage from the UPI block of the clients.

Will this impact the markets?

Market participants feel that the ASBA-like system for the secondary market would impact volumes. While client volumes may not be impacted, the proprietary volumes can be negatively impacted, according to 5paisa.



The current volume mix shows that proprietary trading by market intermediaries on their own books accounts for 27 per cent of cash market volumes and 50 per cent F&O (future and option) volumes.

Much of these funds are client funds and that could take a hit. This is also likely to reduce the leverage provided by brokers to the clients.

So, there will certainly be a short-term volume impact, although it is expected to be value accretive in the long run, the brokerage said.

What other steps has SEBI taken to protect small investors?

SEBI had earlier introduced quarterly settlement of funds and transfer of funds from depository participants (DP) to bank accounts on the first Friday of the quarter (April, July, Oct, Jan).

For clients who have opted for monthly settlements, the running account is allowed to settle on the first Friday of every month. If the first Friday is a trading holiday, the settlement happens on the previous trading day.

Earlier this year, a new trade-plus-one (T+1) settlement cycle was introduced, which means that trade related settlements will be done within a day, or 24 hours, of the completion of a transaction. The move helps investors in reducing the overall capital requirements with margins getting released on T+1 day, and in getting the funds in their bank accounts within 24 hours of the sale of shares.

EXPRESS VIEW ON POVERTY ESTIMATION IN INDIA: MIND THE DATA GAPS

Estimates of poverty and inequality in India have been deeply contested. Differences exist among economists not only on data which forms the basis of their estimation, but also on trends over past decades. In the absence of official data for recent years — the last consumption expenditure survey, which forms the basis of poverty and inequality estimates, was for 2011-12 — the issue has been particularly contentious. More so, given the sharp differences of opinion on the extent to which the pandemic exacerbated poverty and inequality. In the absence of official data, several economists have put forth their estimates based on different data sources. For instance, Arvind Panagariya and Vishal More, using PLFS data, find that rural poverty “saw a modest rise” only during the strict lockdown period of April-June 2020, and then declined as sharply as in the pre-Covid period. And that while urban poverty also saw a “modest rise” in 2020-21, by April-June 2021 its decline had resumed.

These trends are, however, at odds with studies that draw on other data sources to estimate poverty. In the “State of working India 2021” report, economists at Azim Premji University, based on CMIE data, found that the pandemic led to a “sudden increase in poverty”. As per the report, over an eight month period (March to October 2020), average incomes of the bottom 10 per cent of households were lower by Rs 15,700. This income shock caused an increase in the poverty rate (below the national minimum wage threshold) by 15 percentage points in rural areas and nearly 20 percentage points in urban areas. Research by Arpit Gupta, Anup Malani and Bartosz Woda, based on CMIE data, found that income poverty, applying the World Bank’s \$1.9 cutoff, rose from 7.6 per cent in November 2019 to 50.5 per cent in April 2020. And that while poverty did fall subsequently, it did not recover to pre-pandemic levels. Other indicators suggest that more workers fell back on agriculture indicating the absence of non-farm employment. More



individuals worked under MGNREGA than in the pre-pandemic period. Regular real wages witnessed a decline. And, sales of two-wheelers remain subdued.

In the absence of official consumption expenditure data, reliance on alternate data sources has only risen, giving rise to conflicting trends. As understanding the trends in poverty and inequality, and their underlying reasons, is critical for designing government policies and programmes, this scenario is harmful for policy formulation. The absence of timely and reliable data, especially during times of uncertainty, needs to be addressed. While some steps have been taken — employment surveys are now carried out with greater regularity — more needs to be done. The country's statistical system needs to be strengthened.

SMALL SAVINGS TO NUDGE UP GOVT. INTEREST COST'

The Centre's decision to increase interest rates by 10-70 basis points on most small savings schemes for this quarter, will raise the government's interest costs on borrowings from these instruments to 6.75% from 6.47%, according to an assessment by Bank of Baroda economists.

The government plans to tap small savings schemes for financing its debt beyond the record gross market borrowings of ₹15.43 lakh crore proposed in 2023-24.

Despite the increased rates on small savings, the interest costs on those borrowings will be significantly lower than the average cost range of 7.29%-7.35% estimated by the economists for the ₹8.88 lakh crore market borrowings the Centre plans to undertake in the fiscal first half.

"For 2023-24, the Government has budgeted ₹6.48 lakh crore as receipts from small savings," Bank of Baroda economist Jahnavi Abhyankar wrote in a research note. "After deducting repayments, the net securities against small savings have been earmarked at ₹4.74 lakh crore," she added.

'Inched up'

"By calculating the component-wise borrowing costs and using the revised interest rates; it has been estimated the overall interest payment for government with the revision has inched up to 6.75% from 6.47%," Ms. Abhyankar said, adding this would entail a marginal uptick in the interest cost, from ₹41,917 crore based on the old rates, to ₹43,731 crore.

While the Public Provident Fund (PPF) rate has been retained at 7.1%, the Finance Ministry has raised rates for most other small savings schemes including time deposits with post offices, National Savings Certificate, Kisan Vikas Patra and the Sukanya Samriddhi Account (SSA).

The SSA will now yield 8% to investors, but the highest return is being offered on Senior Citizens' Savings Schemes at 8.2%. The returns on the PPF and the SSA are tax-free.

As per Reserve Bank of India data on small savings from last year analysed by Ms. Abhyankar, the PPF accounts for almost 8% of investments in small savings schemes, savings certificates account for another 23% and time deposits amount to 69%.

Starting Saturday, a new small savings instrument, the Mahila Samman Savings Certificate, 2023, has been introduced for women and is available at 1.59 lakh post offices. The scheme, valid for two years, offers 7.5% return for investments up to ₹2 lakh, and provides a partial withdrawal option.



Separately, the Centre has doubled the investment limit into the Senior Citizens' Savings Scheme to ₹30 lakh, and that on the Monthly Income Account Scheme to ₹9 lakh.

ANUSHKA SHARMA'S PLEA ON SALES TAX DISPOSED OF BY BOMBAY HIGH COURT: WHAT WAS THE CASE?

Would an actor hold a copyright for her performances and is she liable to pay sales tax for it? The Bombay High Court heard a case last week involving actor Anushka Sharma in which she challenged the sales tax levied against her income from advertisements and performances in award shows. The case raises questions on how intellectual property is treated for taxation purposes.

What is the case about?

Actor Anushka Sharma had moved the Bombay High Court challenging the Mazgaon sales tax deputy commissioner's orders raising dues for 2012-13 and 2013-14 under the Maharashtra Value Added Tax (MVAT) Act.

The state had levied Rs 1.2 crore sales tax (inclusive of interest) for 2012-13 on Rs 12.3 crore revenue received by Sharma. For 2013-14, Rs 1.6 crore tax was levied on her for the Rs 17 crore she had received. This would be remuneration for advertisements and performances at award shows received by the actor.

At the heart of the issue is how tax officials interpret a key change in copyright law brought in 2012 to protect rights of artists.

Why was the sales tax levied against Sharma?

Sharma's remuneration is from tripartite agreements with Yash Raj Films (YRF) which was her agent and a third party for ad films, stage shows etc. As per the tax department, Sharma, who has the "first owner of copyright" on all her artistic work is selling that right through these agreements and hence is liable to pay sales tax and not just treat it as personal income.

Sales tax is an indirect tax charged on sale of goods affected by individuals and/or entities engaged in selling activities. This is now replaced by the Goods and Services Tax. Income tax, on the other hand, is a direct tax paid on income generated.

In an written response, the taxmen claimed before the Bombay High Court that the actor was essentially selling her copyright and had to pay an indirect tax on it. Section 6(1) of the Maharashtra Value Added Tax Act, 2002 provides there shall be levied a sales tax on the turnover of sales of goods.

They argued that she was providing services and earning income through a "contract for services" and not through "contract of services," where she is not employed with anyone.

A contract for service is when one wants to engage the services of a third-party as an independent contractor for a specific purpose. A contract of services is for example, an employment contract.

"Anushka Sharma is an actor by profession and a copyright is created in her artistic performance, which is recorded by various company clients and used for commercial purposes... In Anushka Sharma's case, along with her artistic performance, the copyright gets transferred and used by her client company for which she is receiving valuable consideration," the taxmen argued.



What is Sharma's case?

The actor moved the High Court arguing that the taxmen have 'erroneously' noted that she had acquired 'copyright' through endorsements and by anchoring award functions, and had sold or transferred it.

As per the law, unless it is established that there is a sale of goods, sales tax cannot be levied.

The petition claimed that, as the actor does not possess any copyright in the film, the question of transferring/selling the 'copyright' to any other person or to the producer does not arise. Therefore, the conclusion drawn by the assessing officer that she has transferred/sold copyrights has no factual and legal base.

The actor argued that as per Section 2 (d) of the Copyright Act, it was the producers of the shows, who are original creators, who always owned the respective videos' copyright and that she could not sell or transfer it. She said that any actor who performed any role in the film cannot be called a creator or producer of the film and hence does not own a copyright in the film.

Sharma said that she is a 'performer' under the law and acquired performer's rights under section 38 and 38A of Copyright Act. However, she added the "performer's rights vested in her are not copyrights and they are not capable of being transferred."

What are performer's rights?

Section 38 of the Copyright Act, 1957, as amended in 2012, recognises "Performer's Rights" where the performer engages in any performance including, literary work, song, movie and same subsists in the concerned person for 50 years from the "beginning of the calendar year next following the year in which the performance is made". This amendment was brought in 2012 to protect artists. For example, if copyright of a song is licensed, it would not just be the producer who would get a royalty but the singer and lyricist would also be entitled for a share.

Crucially, the rights under this provision cannot be waived off or diluted through a contract, which means performers' rights cannot be transferred or sold through an agreement. This was done to ensure production houses cannot simply buy out an artist and her work remains with her.

What did the Bombay High Court decide?

The Bombay High Court did not go into the merits of the case since under the Maharashtra Value Added Tax Act, there is a specific process of appeal against the assessment. The taxmen objected to Sharma's plea since she had alternative, efficacious remedy under the law.

However, the law requires the actor to deposit 10% of the tax levied before the appeal can be heard. The HC intervention would have allowed her to bypass that requirement.

THE NPCI'S NEW CIRCULAR ON LEVY CHARGES

The story so far:

Earlier last week, the National Payments Corporation of India (NPCI), which governs UPI, in a circular issued directly to banks, intimated that they can now levy charges on merchant transactions made through Prepaid Instrument wallets using UPI. After the information was leaked to the media, the NPCI issued a clarification stating that normal bank-to-bank UPI



transactions will not be charged and that customers will not have to pay for transactions made via PPI on UPI. It said that the new interchange charges are only applicable for Prepaid Payment Instruments' (PPI) merchant transactions. The interchange fee, generally associated with card payments to cover the transaction cost, has now brought PPI wallets also under its fold.

What are PPIs?

Prepaid Payment Instruments (PPIs) are payment methods that can be used to purchase goods and services and send/receive money by using the stored value in the wallet. Users have to pre-load the wallet with a desired amount. The amount can be loaded/reloaded against cash or through debit to bank account, or by using credit/debit cards, UPI, or any other approved payment method in India. PPIs can only be used in Indian rupees. PPIs can be in the form of mobile wallets, physical smart cards, secure tokens, vouchers, or any other method that allows access to prepaid funds.

What is PPI interoperability?

Previously, to use PPI at any merchant, it was necessary that the concerned merchant was engaged directly by the specific PPI issuer (specific network). All PPIs with which the merchant did not have a direct tie-up would get rejected. The most prevalent form of PPI used in the country is the mobile wallet, and this restriction meant that customers of one specific mobile wallet could spend the money in the wallet only at specific merchant locations which were directly tied up with the same PPI wallet provider. For example, if you had a Paytm or Mobikwik wallet, you could only use it at merchants that accepted Paytm or Mobikwik QR codes. To overcome this limitation of PPIs, the RBI has mandated interoperability among different PPI issuers. Subsequently, PPI issuers tied-up with NPCI for issuing (a) interoperable RuPay PPI cards or (b) creating interoperable wallets on UPI rails. Prepaid instruments in the form of wallets can now be linked to UPI, thus creating interoperable wallets on UPI rails.

How does PPI interoperability through UPI work?

After linking one's PPI wallet to UPI, customers can transact using Scan and Pay on all UPI interoperable QR codes. This will enable the use of PPI wallets at all merchant locations. The user can also send/receive money to any other wallet user.

Similarly, a merchant with any UPI QR code can now accept payments from any PPI issuer or mobile wallet. PPI on UPI will speed up the growth of merchant transactions in rural areas and further deepen digital financial inclusion by catering to use cases such as healthcare, transit, education, utility bills, etc.

Do merchants have to pay for accepting wallet transaction on UPI?

The PPI enabled merchants were already paying charges to the PPI issuer for acceptance of mobile wallets or prepaid cards. Now the charges are aligned at a network level with some standardisation. However, each merchant can work with their preferred acquiring entity.

Now, for using prepaid payment instruments (PPIs) such as gift cards, wallets etc for transactions on UPI, an interchange fee of up to 1.1% has been levied from April 1, 2023. The charges are applicable if the transaction is more than ₹2,000. If you are a merchant and accepting UPI payments from a customer's bank account, then there are no charges applicable. Charges are applicable only if you have accepted or consented for the transactions made using PPI Wallet.

**Are there any charges to be paid by consumers holding wallets for PPI on UPI transactions?**

Officially there are no charges to be paid by the customer. However, merchants may pass on the additional burden to customers by way of price increase or some other means.

GUJARAT REFINERIES FORM LION'S SHARE OF INDIA'S SURGING FUEL EXPORTS

Russia's invasion of Ukraine has resulted in two significant developments, which have subsequently sparked a surge in India's fuel exports. The first is the increased import of cheaper crude from Russia. Second, more countries are depending on India for their fuel needs.

In the last five years, the export of petrol and high-speed diesel by public sector units in India to countries other than Nepal and Bhutan almost doubled from 3,353 TMT to 6,376 TMT (thousand metric tonnes). Petroleum products were the most exported commodities from India to the Netherlands, China, Singapore, the U.K., the UAE, Saudi Arabia, Brazil, Indonesia, Turkey and South Africa in FY23 (April 2022 to January 2023). The Netherlands imported \$8,890 million worth of petroleum products from India — the highest by any country in that period. This was a 186% increase from the country's imports five years ago.

Refineries in Gujarat are at the centre of this sudden fuel export boom. The State exported ₹4.9 lakh crore worth of petroleum products in FY23. In contrast, Karnataka, the second biggest exporter of the commodity, sent out only ₹0.44 lakh crore worth of petroleum oils, which is more than 10 times less than Gujarat. Overall, Gujarat exported 77% of India's petroleum oils in FY23.

Export of petroleum oils formed over 65% of Gujarat's total exports in FY23. In no other State except Himachal Pradesh did a single product dominate exports to this extent. Exports of medicaments formed 79% of Himachal Pradesh's total exports. Moreover, the export of petroleum oils formed over 21.7% of Gujarat's GSDP in FY23, the highest share among all the States. Goa was a distant second with the export of medicaments forming 4.9% of its GSDP that year. No other State crossed the 4% mark.

All these factors have boosted Gujarat's share in India's exports. Gujarat's share in India's exports increased from 20.8% between FY18 and FY21 to 30% in FY22. No other State recorded such a jump. Odisha came close with its share increasing by 1.5% points in that period. On the other hand, Maharashtra's share declined from 21.4% to 17.3%.

The recent surge in India's exports is mainly fuelled by petroleum products, the most exported commodity in three States — Gujarat, Karnataka and Bihar. The map shows the most exported commodity in value terms across States. In Punjab and Haryana, basmati rice was the most exported item, while in Kerala and Andhra Pradesh, it was vannamei shrimp. Diamonds from Maharashtra, unset gold from West Bengal, smartphones from Tamil Nadu and Uttar Pradesh, and tea from Assam were the other most exported items. Medicine for retail sale was the most exported item from Goa, Himachal Pradesh, Jammu and Kashmir, Telangana and Sikkim.

Diamonds, the most exported commodity from Maharashtra in value terms in FY23, formed 38% of the State's exports and 2.6% of the State's GDP. In that year, Maharashtra exported ₹90,320 crore worth of diamonds, but that was still about five times less than Gujarat's petroleum oil exports that year. Though the most exported commodity from Tamil Nadu is smartphones, it formed only 13% of the State's total exports. This is because the State exports a diverse set of goods.



In five States, the most exported product formed over 50% of their total exports. Goa and Himachal Pradesh (medicaments), Gujarat and Bihar (petroleum oils) and Assam (tea) showed high dependency on a single product.

CHANGES IN DOMESTIC GAS PRICING FORMULA: MATH, RATIONALE, AND HOW CONSUMERS ARE AFFECTED

The Union Cabinet on Thursday (April 6) approved significant changes in the pricing regime for domestic natural gas under the ambit of the administered price mechanism (APM), which mainly applies to gas produced by legacy fields, or nomination fields, of national oil companies Oil and Natural Gas Corporation (ONGC) Ltd and Oil India Ltd (OIL).

Nomination fields are acreages that the government awarded to ONGC and OIL before 1999, after which auctions became the basis of awarding oil and gas blocks. The price of APM gas, which accounts for about two-thirds of India's natural gas production, has been determined as per the 'modified' Rangarajan formula since November 1, 2014.

(Soon after coming to power, the Narendra Modi government tweaked the formula devised by a committee appointed by the UPA government under C Rangarajan, chairman of the PM-EAC.)

Key changes in the pricing regime, which were notified on Friday and will take effect from Saturday, include benchmarking the price of APM gas to the price of imported crude instead of gas prices in four international gas trading hubs, and monthly, rather than biannual revisions in prices.

The new pricing regime also provides for floor and ceiling prices — \$4 and \$6.5 per million British thermal units (mBtu), respectively — for ONGC and OIL's APM gas with the intention of shielding consumers from high prices while ensuring that the producers are not forced to book losses on gas sales.

The government expects the new pricing system to result in significant reduction in the retail price of piped natural gas (PNG) for households and compressed natural gas (CNG) used as an automobile fuel. It is also expected to lower the government's fertiliser subsidy burden, and aid gas-based power generation units.

After international gas prices shot up over the past couple of years due to a combination of factors including the war in Ukraine, CNG and PNG prices in India surged, in addition to the higher fertiliser subsidy burden. Information & Broadcasting Minister Anurag Thakur said that as soon as the new pricing formula is implemented, PNG prices for households will fall by about 10 per cent, and CNG prices by 7-9 per cent.

The revised pricing mechanism is based on recommendations of a panel headed by Kirit Parikh. The panel was constituted last year to delve into the extant gas pricing guidelines and recommend changes to balance the interests of gas consumers and producers, while also helping India achieve its aim of increasing domestic gas output and substantially increasing the share of natural gas in the country's energy mix.

However, not all of the panel's recommendations have made it to the new gas price rules.



New domestic gas pricing regime: Fine print & math

Henceforth, the price of APM gas will be 10 per cent of the average price of the Indian crude basket in the preceding month. The price will be revised every month.

Gas produced from ONGC and OIL's nomination fields will have a floor price of \$4/ mBtu and a ceiling of \$6.5/ mBtu. This means that the two companies will get a minimum of \$4/ mBtu even if the gas price as per the formula falls to a lower level.

Similarly, no matter how high the formula-based price goes, the maximum price they can realise for APM gas will be \$6.5/ mBtu.

The Petroleum Planning & Analysis Cell (PPAC) of the Ministry of Petroleum & Natural Gas on Friday notified \$7.92 per mBtu as the price of domestic natural gas as per the revised formula for the remainder of April. As per PPAC data, the average price of the Indian crude basket in March was \$78.54 per barrel. However, ONGC and OIL will get \$6.5 per mBtu.

The price of APM gas was \$8.57/ mBtu for the six months ended March 31. The government kept on hold the scheduled price revision for APM gas for April-September 2023 as it was in the process of changing the pricing formula. As per estimates, the price of APM gas as per the modified Rangarajan formula would have risen to over \$10.5/ mBtu for the six months starting April.

There shall be no revision in the ceiling price for two years, after which the cap will increase by 25 cents per year.

To encourage ONGC and OIL to make efforts to raise output from legacy fields, the new pricing regime allows the two companies a premium of 20 per cent over the APM price for gas produced from new wells, and for technology interventions in existing wells.

Rationale behind the changes to gas pricing regime

As per the 2014 gas pricing guidelines, the APM gas price was set for a six-month period based on the volume weighted prices prevailing at four international gas trading hubs — Henry Hub, Alberta, National Balancing Point in the UK, and Russia — for a period of 12 months and a with a lag of a quarter.

According to the government, the earlier system based on these gas hubs had a significant time lag and high volatility and, therefore, "the need for this rationalisation and reform was felt".

The new regime will have the APM gas price linked to crude oil prices, which has now become the prevalent practice in most natural gas contracts internationally, is more relevant to India's consumption basket, and has deeper liquidity in global trading markets on a real-time basis.

With the changes in the pricing formula, data of the Indian crude basket price from the previous month would form the basis for APM gas price determination. The Indian crude basket represents a derived basket consisting of sour grades and sweet grades of crude oil in the ratio of 75.62 to 24.38. It represents the mix of crude grades processed by Indian refineries.

Over the past few years, ONGC and OIL had been petitioning the government for a floor price as they were forced to sell gas at a loss for a prolonged period when prices sustained below their cost of production. On the other hand, gas consuming industries had been urging the government



to ensure affordability of domestic natural gas. The new pricing formula attempts to balance demands of consumers as well as producers.

No change in pricing formula for gas from difficult blocks

The changes in pricing formula for domestic APM gas do not apply to gas production from difficult acreages — deep water, ultra-deep water, high-temperature, and high-pressure fields. A pricing regime for gas from difficult blocks — such as Reliance Industries and BP's KG-D6 and ONGC's KG-DWN-98/2 — was introduced in 2016, which allowed marketing and pricing freedom subject to a ceiling price. The revision in ceiling price for difficult fields was done every six months along with APM gas price revision.

Petroleum Secretary Pankaj Jain said that the Cabinet had only approved changes to the 2014 norms for APM gas and not the 2016 norms for difficult blocks. Therefore, the existing pricing regime for gas from difficult blocks shall continue. The ceiling price for gas from such fields has been set at \$12.11 per mBtu for April-October.

Parikh panel suggestions: What was accepted, what wasn't

Although the new domestic gas pricing regime is based on the Parikh committee's recommendations, not all of the panel's key suggestions made it to the new pricing regime. The government accepted the panel's recommendations to benchmark APM gas price to crude oil price, introduce floor as well as ceiling price, provide a 20 per cent premium for gas from new wells, and leave the pricing system for gas from difficult fields unchanged.

But the panel's recommendation on hiking the ceiling every year was tweaked. The Parikh panel had recommended raising the ceiling by 50 cents per year, but the government decided to keep the annual increment at 25 cents. Also, the government decided to start hiking the ceiling price after two years.

One of the panel's key recommendations that the government has so far not commented on is the deregulation of APM gas prices.

The Parikh panel had recommended that APM gas prices be made market-determined by 2027. However, the details of the new pricing regime shared by the government does not have any mention of deregulation of APM gas prices.

THE BHARAT 6G VISION DOCUMENT: HOW INDIA PLANS TO LEAD TELECOMMUNICATION TECH

The story so far:

On March 22, Prime Minister Narendra Modi unveiled the Bharat 6G Vision Document, a starting point for policymakers and the industry to gear up for the next generation of telecommunication. This is happening even as over 45,000 villages lack 4G connectivity, and 5G networks are still being built out.

Why did the government put out a 6G vision document?

The government has indicated that it wants to accelerate India's wireless data consumption and assume leadership in setting the standards for 6G in the coming years. This may involve everything from encouraging local manufacturing of telecom gear to supporting Indian companies



and engineers in international discussions around standardisation. Influence in the latter is key, as telecommunications standards are usually adopted globally.

Another key motivation is the delay in previous generations of telecommunication technology rolling out in India — 5G started rolling out in India years after countries like South Korea and the U.S. had already blanketed their major urban areas with high-speed wireless connectivity. India does not want a repeat of that; the government even says in the 6G vision document that it wants to make sure it grabs 6G “from the oven”.

Yet another reason is pure physics: frequencies generally increase in newer generations of networks, but the lower the frequency, the longer a cell signal can travel. With increasing data usage, lower frequencies in 4G networks may not physically be able to keep up with the demand for traffic. The government says so in plain terms: “Right now, the spectrum is congested, particularly in the low and mid-bands where the propagation characteristics are favourable,” the vision document says. More data can travel in higher frequencies, which is the basis for 5G architectures where base stations with low coverage took the place of a single larger cell tower.

Beyond encouraging greater participation in standardisation discussions, the vision document says the government will financially support “research pathways” where breakthroughs are most likely to advance connectivity goals, leveraging talent in academia and companies. The government said an “apex body” will be set up to shepherd these groups through roadblocks.

Some indicative goals are to guarantee every citizen a minimum bandwidth of 100Mbps; ensure every gram panchayat has half a terabit per second of connectivity; and blanket the country with over 50 million internet hotspots, with thirteen per square kilometre.

How will 6G be different from 5G?

For consumers, websites will load faster, videos will look better, and files will download faster, as has been the case with every new generation of technology. But we may be hitting the ceiling on how noticeable these improvements can get. Latency, which is the time taken for a data packet to move from one place to another (as opposed to speed, which is the number of such packets that can travel on a connection each second), is not far off from the speed of light itself on existing networks. Businesses and governments are still on the verge of how best to leverage 5G to reap the benefits of high-precision low-latency applications with these new connections. Holograms and robotic surgery are already riding on 5G networks. So how much better will 6G be? Like 5G, it will depend largely on how different groups plan to use the spectrum.

According to the vision document, satellite constellations will join telecom towers and base stations, integrating networks and extending them to rural areas.

Some of the innovations that the government envisions as 6G-powered connectivity boosters are solutions that already exist in other forms. For instance, satellite internet in remote areas is a solution that the government can instantly approve by granting firms like Elon Musk’s SpaceX and Bharti Airtel-backed OneWeb the administrative clearance to begin offering their services. Like DTH satellite dishes, setup is minimal as the satellites are already in the sky. However, administrative clearances lag behind.

At least two parts of India have already relied on satellite internet for decades. The Andaman & Nicobar Islands relied on 1Gbps link to connect to the outside world, which is comparable to a



single expensive home connection in many Indian cities today. The situation improved vastly after the islands were connected to Chennai by an undersea cable in 2020.

While satellite internet speeds have improved, thanks to innovations like constellations, connectivity goals have as much to do with satellites hundreds of kilometres overhead as they do with the cables beneath the ground and on the seabed.

How are other nations looking at 6G?

As early as July 2021, South Korea planned 220 billion KRW (almost Rs 1,400 crore) in investments into “super performance, hyperspace, and super precision standards,” according to the country’s Ministry of Science and Information Technology. “As this year marks the beginning of 6G technology development, the focus will be on laying the ground for key original technologies and domestic production of core equipment and components, for example, by identifying technical requirements for key areas of 6G network[s] and designing elementary technologies,” the ministry said that year.

Countries have already started working together, with Japan and Germany planning a workshop in April to work on everything from “fundamental technologies to demonstrations”.

The Indian 6G Vision paper cites Europe’s equivalent of the document, saying that “The overarching Vision is to ensure leadership in strategic areas and establish secure and trusted access to key technologies making Europe a sovereign, independent, and reliable source for 6G public and private network solutions and services.”

UNDERSEA CABLE INTERESTS TELCOS, BUT IS YET TO SOLVE ANDAMAN’S STRUGGLE WITH POOR INTERNET

The undersea cable between the Andaman and Nicobar Islands and Chennai, connecting the Union Territory to global Internet, has seen a reasonable level of interest from telecom operators, which have to buy bandwidth on the system to be able to serve islanders on mobile and fixed line connections with fast Web access.

According to information provided to The Hindu by the Universal Service Obligation Fund (USOF), the BSNL alone has been allotted 40 GBPS in bandwidth in the largest segment of the 2,300-km-long cable, the one between Chennai and Port Blair.

Airtel has bought 20 GBPS, and an additional 4.625 GBPS in bandwidth on the smaller parts of the cable, between Port Blair and islands such as Car Nicobar, Campbell Bay, Long Island, and Rangat.

The Chennai-Andaman & Nicobar Islands (CANI) cable was inaugurated in August 2020, and soon after, islanders with wired home broadband and mobile connections in Port Blair, the capital, saw their speeds improve dramatically.

Mixed response

Nirman Lall, 39, a resident of Port Blair, said over a phone call, “Previously, I was paying ₹12,000 to ₹15,000 [for Internet] during the main [tourist] season... Now, I am paying 10% of what I used to pay for 10 times the speed.”



However, outside Port Blair, the experience of Internet access remains mixed. “As you move away from the city, [Internet] lacks stability, as in some places it’s good, and in other places it’s weak or nil,” Mohammed Irfaan, a dental surgeon from Phoenix Bay, at the heart of Port Blair, said.

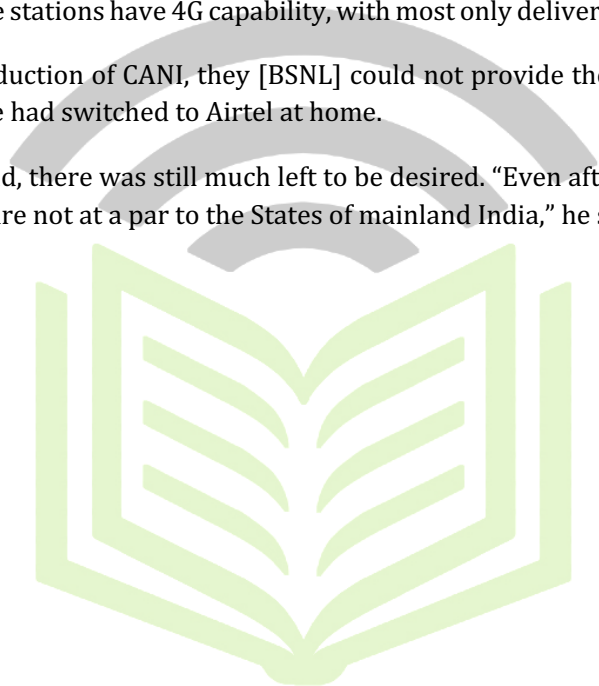
The official data — which indicates that only two telcos have bought a small amount of bandwidth between the capital and other islands — reflects this inequality.

Notably, the BSNL, which oversaw CANI’s laying, does not appear to have updated its home broadband speeds to reflect the vast bandwidth it now has access to.

Tariffs listed on the BSNL Andaman & Nicobar Circle’s website indicate that they exclude streaming subscriptions offered in other parts of the country, and only run up to 10 MBPS. Only 93 of its wireless base stations have 4G capability, with most only delivering 2G and 3G bandwidth.

“Even with the introduction of CANI, they [BSNL] could not provide the service adequately,” Dr. Irfaan said, adding he had switched to Airtel at home.

Overall, Dr. Irfaan said, there was still much left to be desired. “Even after three years of [CANI’s] launch, the services are not at a par to the States of mainland India,” he said.



DreamIAS

**LIFE & SCIENCE****EXPLAINED: HOW SCIENTISTS ARE PLANNING TO 'RESURRECT' THE EXTINCT TASMANIAN TIGER**

Scientists in the US and Australia have embarked on a \$15-million project to resurrect the thylacine or Tasmanian Tiger, a marsupial that went extinct in the 1930s, using gene-editing technology. The ambitious project aims to reintroduce the animal to its native place Tasmania to revive the region's lost ecological balance.

Announced by the Texas-based Colossal Biosciences, which is also behind the Wolly Mammoth resurrection project announced last year, the project will be conducted with the partnership of the Thylacine Integrated Genetic Restoration Research Lab at the University of Melbourne. The initiative is supported by many, including actor Chris Hemsworth, an investor of Colossal.

Interestingly, this is not the first attempt to revive thylacines. In 1999, an Australian scientist, Dr Michael Archer, embarked on an unsuccessful journey to resurrect the animal using cloning technology from a perfectly preserved specimen in a museum.

So, what are Tasmanian Tigers and how did they become extinct?

Tasmanian Tiger (*Thylacinus cynocephalus*), the only animal in the Thylacinidae family to survive in modern times, was a marsupial mammal that raises young ones in a pouch.

Even though the species earned its nickname Tasmanian Tiger because of the stripes along its back, it was a slow-paced carnivorous that usually hunted alone or in pairs at night. The sharply clawed animal had a dog-like head and ate kangaroos, other marsupials, small rodents, and birds.

Once widespread in the grass and woodlands of continental Australia extending north to New Guinea and south to Tasmania, the animal's fate changed after the European Colonisation of Australia.

The animals were reported to have eaten poultry of farmers, and were killed following official authorisation. In 1830, Van Diemens Land Company announced a bounty on the animal. Years later in 1888, the Tasmanian Parliament itself passed an official bounty of 1 pound on thylacines.

A series of photographs by naturalist Harry Burrell published in the 1920s showcasing thylacines catching poultry and other birds also explains the unpopularity of this animal among the public, even though the authenticity of these pictures was questioned later.

Apart from this, competition with another animal, the Dingo, is also considered a reason for its extinction.

The last wild thylacine was killed between 1910 and 1920. Following this, the Australian government declared the thylacine a protected species in July 1936. But two months after the announcement, Benjamin, the last captive animal, died at the Beaumaris Zoo in Hobart. The official declaration of the animal's extinction was in the 1980s.

The animal was at the top of the food chain, and hence played a significant role in balancing the ecosystem of its habitat by removing the weak animals and maintaining species diversity. Also known as the apex predator for the same reason, its disappearance from the food chain resulted



in Trophic Downgrading — causal degradation of an ecosystem that occurs when higher trophic level animals are removed from the food chain, resulting in loss or exponential growth of other species.

Trophic Downgrading also results in disruption of biogeochemical cycles, wildfires, growth of invasive species, and carbon sequestration, among other effects.

As the thylacine was the only apex predator in its ecosystem, its absence impacted the Tasmanian Devil, which was almost wiped out by a facial tumour disease. The thylacine would have prevented this by removing sick and weak animals from the ecosystem, which would have eventually controlled the spread of the transmissible diseases.

The resurrection process

Even though the last living thylacine died over 86 years ago, many embryos and young specimens of the species have been preserved.

For the de-extinction project, the scientists led by Dr. Andrew Pask, a professor of Epigenetics Biosciences at the University of Melbourne, will be using a genome sequenced from a DNA extracted from a 108-year-old specimen held at Australia's Victoria Museum.

This genome will be compared with the closest living animal of the species— the fat tailed dunnart — to identify all the differences. Once all the differences are identified, scientists will engineer the living cell's DNA where it is different, essentially engineering the extinct species back.

“Once we have the engineered cells, we use stem cell technologies and cloning techniques to turn those cells back into a living animal. While all of these technologies already exist, this is the first time they will be developed for marsupials,” Pask told Indianexpress.com.

The fat-tailed dunnart is a mouse-like species in the Dasyuridae family in Australia. With an average body length of 2.4–3.5 inches, they are one of the smallest carnivorous marsupials.

According to the Colossal, de-extinction will not be complete until the success of the rewilding process – reintroducing the animal to its native habitat — which will ‘stabilise the fragile ecosystem of Tasmania.’

“The thylacine is a great candidate for de-extinction because it only went extinct in 1936 due to human hunting and the ecosystem we are looking to return it to is still intact. Furthermore, we have incredible tissue samples and genomes assembled as well as many additional pelts that are being sequenced for population genomics studies,” Ben Lamm, CEO and co-founder of Colossal said.

Even though the team hasn't set a timeline for the project, it is expected to take much less time than the de-extinction of Woolly Mammoth, considering the gestation of elephants is longer than Dunnarts.

Lamm said the process of the rewilding project needs to be carefully studied, and executed in collaboration with local governments, conservation groups, rewilding experts, ecologists, and indigenous people groups.



"We have started conversations with leading rewilding and conservation groups in Australia and Alaska as well as consultants that work with the local indigenous people groups in both Australia and the broader Arctic circle," he said.

However, amid praises, many scientists have also raised concerns about the practicality of the technology.

"De-extinction is a fairytale science," Associate Professor Jeremy Austin from the Australian Centre for Ancient DNA told The Sydney Morning Herald.

"It's pretty clear to people like me that thylacine or mammoth de-extinction is more about media attention for the scientists and less about doing serious science," he said.

De-extinction technology; possibilities and challenges

De-extinction, or resurrection biology, is the method of creating a species that went extinct or is endangered, in order to revitalise ecological diversity and balance shattered due to reasons ranging from biodiversity loss to climate change. While cloning is the most widely used method of de-extinction, genome editing and selective breeding are also considered effective ways.

The Pyrenean ibex, a subspecies of Spanish ibex, was one of the first extinct animals that have been resurrected using somatic cell nuclear transfer (SCNT), even though the baby Ibex died minutes after its birth from lung defect.

Apart from Colossal's project to resuscitate Woolly Mammoths and thylacines, a cooperation between the Dutch Foundation partnered with multiple universities, called Tauros Programme, is currently working to breed a cattle species similar to the extinct wild ancestor of domestic cattle, aurochs.

Other candidates for de-extinction are Maclear's rat, an extinct large rat species endemic to Christmas Island in the Indian Ocean, the passenger pigeon, a type of migratory bird in North America, and the quagga, which is a subspecies of plains zebra.

One of the challenges of de-extinction is that reintroducing the species to its former habitat may make it an invasive species, which will also impact the balance of the current ecological system.

TIME TO PUT A PRICE ON CARBON EMISSIONS

In the absence of a price for the use of natural resources such as air and forests, environmental destruction has been part of every country's recipe for boosting GDP growth. But the consequence of this approach has been the relentless emission of carbon, causing runaway climate change. It is time, starting with the biggest economies of the G-20, to agree on valuing nature, including by pricing carbon effluents. India can take the lead, as president of the G-20 this year, in carbon pricing, which will open unexpected avenues of decarbonisation.

Ways of pricing

Three ways of pricing carbon are: the establishment of a carbon tax domestically, as in Korea and Singapore; the use of an emissions trading system (ETS), as in the European Union (EU) and China; and the application of an import tariff on the carbon content, as the EU is proposing. Some 46 countries price carbon, although covering only 30% of global greenhouse gas (GHG) emissions, and at an average price of only \$6 a ton of carbon, a fraction of the estimated harm from the



pollution. The International Monetary Fund has proposed price floors of \$75, \$50, and \$25 a ton of carbon for the United States, China, and India, respectively. It believes this could help achieve a 23% reduction in global emissions by 2030.

The economy-wide benefits of carbon pricing in terms of damages avoided (plus revenue generation) generally outweighed the cost it imposed on individual industries in the EU, British Columbia, Canada, and Sweden. A key dynamic is that carbon pricing, by signalling a price for cleaner air, makes investment in renewable energy such as solar and wind, which has huge prospects in India, more attractive.

Impact on India

Among the three ways of pricing, India could find a carbon tax appealing as it can directly discourage fossil fuels, while raising revenues which can be invested in cleaner sources of energy or used to protect vulnerable consumers. It could replace the more inefficient scheme of petroleum taxes which are not directly aimed at emissions. By the way, Saudi Arabia and Russia are at the low end of gasoline prices (including taxes and subsidies), China and India in the mid-range, and Germany and France at the high end. In most countries, including India, fiscal policy has set in place the basic structures needed to implement a carbon tax. For example, they can be woven into road-fuel taxes, which are established in most places, and extended to industry and agriculture. Policymakers have to choose the tax rate, which varies widely from Japan's \$2.65 a ton of CO₂ to Denmark's \$165 a ton set for 2030.

India could start with the IMF figure of \$25 a ton. The main obstacle is the argument by industrial firms about losing their competitive advantage to exporters from countries with a lower carbon price. It would stand to reason, therefore, for all high, middle and low-income countries to set the same rate within each bracket.

It might also make sense to allow companies to use high-quality international carbon credits to offset up to a certain percentage of their taxable emissions. The EU excludes transport, where higher costs would have been passed on to consumers directly, Singapore provides vouchers for consumers hit by utility price rise, and California uses proceeds from the sales of carbon permits partly to subsidise purchases of electric cars. Some make a case for exempting "emission intensive trade exposed" enterprises from the carbon tax, but output-based rebates would be superior ways of doing the same.

Communication is important

All said, any type of carbon pricing faces stiff political opposition. When a new, conservative government took office, Australia repealed the 2012 tax just two years after it was instituted. Recent months have revealed the political pressures on decarbonisation: soaring energy prices led the EU to sell millions of emission permits, causing a 10% drop in carbon prices. Sweden may have handled some of these political constraints as well as any by presenting the carbon tax as part of a bigger fiscal package that lowers other taxes and includes new social safety nets. Communicating the idea of wins at the societal level, even in the presence of some individual producers' losses, is vital.

A high enough carbon tax across China, the U.S., India, Russia, and Japan alone (more than 60% of global effluents), with complementary actions, could have a notable effect on global effluents and warming. It could also pave the way to seeing decarbonisation as a winning development formula. As carbon pricing gains acceptance, the first movers will be the most competitive. India, as



president at the G-20 summit this September, can play a lead role by tabling global carbon pricing in the existential fight against climate change.

CAN COUNTRIES BE SUED OVER CLIMATE CHANGE?

The story so far:

On March 29, the United Nations General Assembly passed a resolution that asked the International Court of Justice at The Hague to provide an opinion on what kind of obligations countries have towards climate change reduction, based on the promises they have made to the UN Framework Convention for Climate Change (UNFCCC). What made it particularly important was that the resolution passed by consensus had been pushed through by one of the smallest countries in the world, the Pacific Island of Vanuatu, an island that was devastated in 2015 by the effects of Cyclone Pam, believed to have been spurred by climate change, that wiped out 95% of its crops and affected two-thirds of its population.

What does the resolution seek?

The draft resolution (A/77/L.58) invoked article 96 of the UN Charter to ask the ICJ to deliberate on two questions: 1) What are the obligations of states under international law to ensure the protection of the climate system for present and future generations? 2) What are the legal consequences under these obligations for states where they, by their acts and omissions, have caused significant harm to the climate system, particularly for Small Island Developing States (SIDS) and for people who are harmed. The resolution refers to several international protocols including the Paris Agreement (2015), the United Nations Convention on the Law of the Sea and even the Universal Declaration of Human Rights. The entire process is expected to take about 18 months for the ICJ to deliberate and deliver its opinion.

What is India's position?

India has thus far been cautiously silent about the move, although it is generally supportive of the need for climate justice, and holding the developed world accountable for global warming. The government is understood to have referred the resolution to legal authorities in the country who will look into the implications and international ramifications of the ICJ opinion. India has updated its NDC (nationally determined contribution) commitments, as required by the 2015 Paris Agreement and has said it's on its way to sourcing half its electricity from renewable sources by 2030. However, it is significant that India did not join the overwhelming majority of countries that co-sponsored the draft resolution. In the neighbourhood, the list of co-sponsors included Bangladesh, Maldives, Nepal, Sri Lanka, and a number of island countries in the Indian Ocean Region (IOR). India is also watching how global powers like the U.S. and China respond to the resolution, as without their support, it will be hard to implement. During the discussion on the resolution, the U.S. representative voiced concerns about whether "launching a judicial process" was the best way to reach "shared goals". "Successfully tackling the climate crisis is best achieved via diplomatic efforts," the U.S. representative added, according to a UN press release. Indian officials have also said that the ICJ process can only speak about climate change issues and problems broadly and that it cannot name or profile any one country in the process. Pointing to the Paris agreement as a landmark shift towards a "bottom-up" approach, where states themselves determine their ability to mitigate climate change, they also said any attempt to impose an opinion in a "top-down" manner would be resisted. Many other countries are likely to voice their opinion as the process gathers momentum in the months ahead.



What do sponsors of the resolution want?

A legal opinion from the ICJ, the highest global court recognised by all 193 UN members is expected to bolster the efforts under the UNFCCC to ensure all countries work towards mitigating climate change and global warming to the suggested 1.5-2°C limit. While it is expected to give its opinion on the basis of the Convention already consented to by all countries, what will be watched closely is what it says about more contentious issues such as climate reparations by the developed world, legal culpability for countries that don't achieve their NDC promises, and climate support to the most vulnerable parts of the world battling the effects of global warming. According to the latest IPCC "Synthesis report", global climate levels have already increased 1.1 degrees since pre-industrial levels in the past century, and deep cuts in greenhouse gas emissions reductions, as much as by a half are required by 2030 to keep this goal. UN Secretary General Antonio Guterres said that the ICJ opinion was "essential", and would "guide the actions and conduct of states in their relations with each other, as well as towards their own citizens."

The UNGA route adopted by Vanuatu and its supporters also appears to have been more inclusive than two other attempts for an Advisory Opinion sought in December 2022 by Small Island States to the International Tribunal for the Law of the Sea; and another by Colombia and Chile in January 2023 at the Inter-American Court of Human Rights (IACHR) asking for an Advisory Opinion on human rights obligations for countries pertaining to the "climate emergency".

What sparked the idea for the resolution?

The original idea for taking the case for climate obligations to the highest legal court came from a group of 27 Pacific Island law students, who set up a campaign and brought it to the Pacific Islands Forum. Since 2019, the Vanuatu government, with the support of an 18-member "core group" of countries, has been promoting the idea of an Advisory Opinion from the ICJ. It prepared the draft resolution that was eventually co-sponsored by 132 countries at the UNGA and went through without a vote. While the U.S was among a few countries that expressed some reservations, no country opposed the resolution. Vanuatu's Prime Minister Ishmael Kalsakau, who spearheaded the campaign, called it "a win for climate justice of epic proportions".

Is the advisory opinion of the ICJ binding?

The ICJ is being asked for an "advisory opinion", which by definition would not be legally binding as an ICJ judgment. However, its clarification of international environmental laws would make the process more streamlined, particularly as the COP (Conference of the Parties) process looks at various issues like climate finance, climate justice, and the most recently agreed to "loss and damages" fund at the COP27 in Sharm El-Sheikh last year. The ICJ carries "legal weight and moral authority", said the sponsors of the resolution, and gave as examples advisory opinions given in the past on the Palestinian issue (Construction of the Wall) and nuclear threats that have been respected.

WHAT WAS DISCUSSED AT THE UN WATER CONFERENCE?

The story so far:

The United Nations 2023 Water Conference held on March 22-24 was the first such meeting in 46 years. In a recent report entitled 'Water for Sustainable Development 2018 – 2028', the UN recognised the urgent need for action given that we are not on track to meet the 2030 Sustainable



Development Goal (SDG) for water — “Ensure availability and sustainable management of water and sanitation for all”.

What is the water conference?

The water sector is prone to fragmentation because water problems tend to be local. If a particular lake is polluted or a particular area is often flooded, it needs local solutions. Therefore, there is an inherent problem in mobilising globally for local problems. The last UN Water Conference, held in 1977, was ground-breaking as it resulted in the first global ‘Action Plan’ recognising that “all peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs.”

This declaration led to several decades of global funding and concerted effort to lower the population without access to safe drinking water.

What are the current challenges?

Extending services to underserved populations is relatively uncontroversial: it comes down to finding the money to pay for it. This is already occurring in India through programmes such as the Swachh Bharat Mission and the Jal Jeevan Mission. However, the challenge is that improving access to water and sanitation no longer translates directly to sustained access to water and sanitation. For example, many drinking water projects have failed because they drew too much groundwater or the water sources were contaminated, leaving communities again with no access to water.

Groundwater over-abstraction is mostly driven by agricultural pumping. The only way to solve this problem in heavily irrigated places like Punjab is to pump less. This would need a policy change which requires many agencies and ministries to cooperate. As such, the water problem is no longer about access to water. The remaining SDG targets pertain to sustainable agriculture, industry, and natural ecosystems. These targets are harder as they need, among other things, tough political choices and a stronger democracy.

What are the key commitments?

This year’s conference resulted in 713 voluntary commitments by philanthropic donors, governments, corporations, and NGOs. This included a \$50-billion commitment from India to improve rural drinking water services under the Jal Jeevan Mission. On the technology front, apart from specific innovations in wastewater treatment, there were several proposals for incubation platforms focusing on water management.

There are already many solutions for knowledge-sharing and thus, we need to accelerate cross-learning. A notable tool here was the W12+ Blueprint, a UNESCO platform hosting city profiles and case studies of programs, technologies, policies that addresses common water security challenges. An effort called ‘Making Rights Real’ offered to help marginalised communities and women understand how to exercise their rights. Similarly, the ‘Water for Women Fund’ offered mechanisms for more effective and sustainable water, sanitation, and hygiene outcomes for women. However, whether these commitments will become binding through the COP process, only time will tell.