NEWS ITEMS ON CAG/ AUDIT REPORTS

1. CAG considering tax concessions as 'presumptive loss' not fair: Subbarao *(business-standard.com, zeebiz.com)* Updated: May 02 2024

Subbarao was responding to a question on the 2G scam case and the CAG's investigation of the presumptive loss to the government during the UPA-2 period

If tax concessions announced by the government are treated as 'presumptive loss' by federal auditor Comptroller and Auditor General of India (CAG), it would diminish democracy and not enhance it, opined former RBI Governor Duvvuri Subbarao.

Subbarao, who held various positions including the Union finance secretary, wrote in his new book titled 'Just A Mercenary?: Notes from My Life and Career' about his involvement in the decision-making on the pricing of the 2G spectrum, an issue that embroiled the UPA-2 government amid charges of mammoth corruption.

"If a democratically elected government decides to forego revenue in order to serve the larger public good of deepening telecom penetration, is it open to the CAG to substitute his own judgement for the government's and call it a 'presumptive loss'?" he asked.

Subbarao was responding to a question on the 2G scam case and the CAG's investigation of the presumptive loss to the government during the UPA-2 period.

"If the CAG is allowed to enter into this issue, what could then stop him to go on logically to question every tax concession in the budget as a presumptive loss? "Surely, that would diminish, not enhance, our democracy," he told PTI.

Subbarao emphasised that the prerogative of the CAG to do a special audit of spectrum pricing is unquestionable.

"However, the CAG's decision to go into the question of 'presumptive loss' to the government and the assumptions made in quantifying that loss is questionable on several grounds," he said.

Arguably, Subbarao noted that it is possible to come out with a study that would in fact show a 'presumptive gain' to the governmentthat the overall benefits to the government far exceed the revenue foregoneby making assumptions that would be no less robust than those underlying the CAG methodology.

"More important than the estimate of presumptive loss, questionable as it was, is the CAG's locus standi in questioning the right of the government to decide to sell spectrum at below market price," he said.

In 2007, the Department of Telecom (DoT) under the erstwhile ministerial charge of A Raja of the DMK, a partner in the UPA coalition, determined that there was a case for licensing more 2G operators in each of the twenty-three telecom circles in the country in order to encourage competition in the sector.

The department consulted TRAI (Telecom Regulatory Authority of India), and TRAI, in turn, endorsed the need to increase the number of operators and recommended that fresh licensees should be given spectrum at the same price at which incumbent operators had gotten it, which was the price set in an auction in 2001.

The absence of a level-playing field, TRAI argued, would disadvantage fresh entrants and defeat the goal of deepening telecom services.

The 2001 cabinet decision stipulated that all future pricing of spectrum would be decided jointly by DoT and the Ministry of Finance.

"When the issue came to the finance ministry for opinion, I took the view that it would be inappropriate to sell spectrum in 200708 at a price set in 2001 and that we must rediscover the price through a fresh auction," Subbarao wrote in his book.

According to him, the DoT wrote back to say that they saw no reason to revisit the pricing issue and that they preferred to go along with the TRAI recommendation.
"For sure, there was some logic to the DoT position. If the objective was to deepen telecom penetration, it made sense to keep the price of spectrum low; competition among operators would then ensure that the lower price was passed on to customers," he noted.

Even as this disagreement on pricing remained unresolved, Subbarao wrote that the DoT went ahead and invited applications for licences in September 2007 and awarded 120 licences to 46 companies on January 10, 2008.

Although these licences were given away at the 2001 price, the licence agreement contained a clause that the price could be increased later to accommodate the possibility of the finance ministry's view prevailing.

After stray reports began appearing that spectrum had been given away at a throwaway price, the CAG in a report tabled in the parliament in November 2010 concluded that the government had incurred a presumptive loss' of Rs 1.76 trillion by selling spectrum at below market price. https://www.business-standard.com/india-news/cag-considering-tax-concessions-as-presumptive-loss-not-fair-subbarao-124050200261_1.html

2. कैग का सरकारी कर रियायतों को "अनुमानित नुकसान" मानना लोकतंत्र को कमजोर करता है: सुब्बाराव *(ibc24.in)* May 02, 2024

भारतीय रिजर्व बैंक के पूर्व गवर्नर दुव्वुरी सुब्बाराव ने कहा कि सरकार द्वारा घोषित कर रियायतों को भारत के नियंत्रक एवं महालेखापरीक्षक (कैग) के "अनुमानित नुकसान" बताने से लोकतंत्र मजबूत नहीं बल्कि कमजोर होगा।

केंद्रीय वित्त सचिव सहित विभिन्न पदों पर रह चुके सुब्बाराव ने अपनी नई पुस्तक 'जस्ट ए मर्सिनरी?: नोट्स फ्रॉम माई लाइफ एंड करियर' में 2जी स्पेक्ट्रम के मूल्य निर्धारण संबंधी निर्णय

लेने में अपनी भागीदारी के बारे में भी लिखा है। यह एक ऐसा मुद्दा था जिसने संयुक्त प्रगतिशील गठबंधन -2 (संप्रग) सरकार को भ्रष्टाचार के आरोपों में उलझा दिया था।

उन्होंने पूछा, "यदि एक लोकतांत्रिक रूप से निर्वाचित सरकार दूरसंचार पहुंच को बढ़ाने के व्यापक सार्वजनिक हित के लिए राजस्व का त्याग करने का निर्णय लेती है, तो क्या कैग को सरकार के निर्णय के स्थान पर अपना निर्णय रखने तथा इसे "अनुमानित नुकसान" कहने का अधिकार है?"

सुब्बाराव 2जी घोटाला मामले और संप्रग-2 अवधि के दौरान सरकार को हुए संभावित नुकसान की भारत के नियंत्रक एवं महालेखापरीक्षक (कैग) की जांच से संबंधित एक प्रश्न का उत्तर दे रहे थे।

उन्होंने 'पीटीआई-भाषा' से कहा, " यदि कैग को इस मुद्दे में हस्तक्षेप करने की अनुमति दी जाती है, तो फिर उन्हें बजट में प्रत्येक कर रियायत को "अनुमानित नुकसान" के रूप में तार्किक रूप से प्रश्न करने से कौन रोक सकता है? निश्चित रूप से, इससे हमारा लोकतंत्र मजबूत नहीं होगा, बल्कि कमजोर होगा।"

सुब्बाराव ने इस बात पर जोर दिया कि स्पेक्ट्रम मूल्य निर्धारण का विशेष ऑडिट करने का कैग का विशेषाधिकार निर्विवाद है।

उन्होंने कहा, " हालांकि, सरकार को होने वाले "अनुमानित नुकसान" के प्रश्न पर विचार करने का कैग का निर्णय तथा उस नुकसान का परिमाण निर्धारित करने में की गई धारणाएं कई आधारों पर संदिग्ध हैं।"

सुब्बाराव ने तर्क दिया कि ऐसा अध्ययन करना संभव है जो वास्तव में सरकार को "अनुमानित लाभ" दिखाएगा...सरकार को होने वाला समग्र लाभ, राजस्व की हानि से कहीं अधिक है। इसके लिए ऐसी धारणाएं बनाना आवश्यक है जो कैग पद्धति में निहित धारणाओं से कम मजबूत नहीं होंगी।

उन्होंने कहा, "अनुमानित नुकसान के अनुमान से अधिक महत्वपूर्ण, जो कि संदिग्ध था, यह है कि कैग को सरकार के बाजार मूल्य से कम पर स्पेक्ट्रम बेचने के निर्णय के अधिकार पर प्रश्न उठाने का अधिकार है।"

वर्ष 2007 में तत्कालीन संप्रग गठबंधन सरकार में सहयोगी पार्टी द्रमुक के नेताा ए राजा के कार्यकाल में दूरसंचार विभाग (डीओटी) ने यह निर्धारित किया था कि इस क्षेत्र में प्रतिस्पर्धा को बढ़ावा देने के लिए देश के 23 दूरसंचार सर्किल में से प्रत्येक में अधिक 2जी संचालकों को लाइसेंस देने की आवश्यकता है। https://www.ibc24.in/business/cag-treating-government-tax-concessions-as-estimated-loss-undermines-democracy-subbarao-2490355.html

SELECTED NEWS ITEMS/ARTICLES FOR READING

3. Powering India’s developed nation goal *(financialexpress.com)*

May 2, 2024

Measures like using data-driven forecasting to deliver power optimally and fortifying distribution networks will help the sector rise above challenges

An efficient power sector is a crucial enabler in India’s journey to sustained economic growth and development. While the country’s distribution companies (discoms) have significantly raised operational and financial performance, they face two challenges — keeping up with fast-expanding demand, and providing high-quality and reliable power supply. Measures such as using data-driven forecasting to plan and deliver power optimally and strengthening distribution networks will help the sector rise above these challenges.

India’s power sector has attained 100% electrification and has been integrated in a single grid across the country. Daily power availability has increased to 20 hours in rural areas, and 23.5 hours in urban centres. The aggregate technical and commercial (AT&C) losses have narrowed from 21.2% in FY21 to 15.4% in FY23, according to power ministry data — sufficient savings to power the state of Karnataka or eliminate the need for building a 20 gigawatt (Gw) coal-fired power station. The sector’s payables fell from 200 days in FY21 to 120 days in FY23, while capital expenditure increased to `70,000 crore in FY23.

However, power demand has been growing at 8-9% per annum, outstripping the baseload capacity additions at discoms. In FY23, as demand levels reached or exceeded baseload contracted capacities, the government directed imported coal-based plants to run at full capacity and domestic power plants to import coal for blending. Several discoms also resorted to expensive short-term procurement from power exchanges, raising power prices by 71 paise per unit during FY23. But only 46 paise were passed on to customers, widening the gap between discom revenue and power costs.

At the same time, the quality of power supply in India could still improve. Metrics that measure average system interruption frequency and duration reveal that urban areas in India face 120 outages and 131 hours of power cuts annually. This compares to less than one outage and one hour of outage in two years in developed economies.

To be an enabler in India’s economic development the power sector could focus on four aspects. First, generating a granular forecast to allow discoms to plan power procurement with high-fidelity and ensure resource adequacy will be helpful.

Advanced analytics can help assess any demand additions, changing load profiles, integration of distributed energy sources, and demand migration from open-access users in detail. Such forecasting would let discoms optimise the supply mix across long-term and short-term power purchase agreements as well as purchases from power exchanges.

Second, an improved distribution network will ensure reliable supply. Investments in loss reduction works, prepaid smart meters, additional transformative capacity, and system redundancy would be key. Smart solutions such as GIS mapping of assets, predictive maintenance and network automation tools can boost operational efficiency.

Third, a renewed customer focus is key, especially as enterprises and households demand higher reliability. Ensuring 24/7 supply will nudge commercial and industrial customers away from diesel or gas backup gensets. In other examples of customer-centric efforts, discoms could reduce the time to get new connections, facilitate solar installations, promote digital payments, and provide visibility on outages. They could also leverage smart meter data through analytics to unlock value-added services.

Lastly, discoms need a clear road map for seamless integration of renewable energy, with 322 Gw of the planned 469 Gw capacity addition till 2032 expected from renewable sources. However, as solar and wind power generation are intermittent, discoms need to plan for 24/7 availability through energy storage, hybrid power plants, green hydrogen, etc. Additionally, demand-side strategies like time-of-day tariffs and demand response management would incentivise customers to shift consumption to peak solar hours.

Some discoms have already started taking steps in this direction. City discoms in Mumbai and in Delhi have invested in building network redundancy and smart solutions for reliable power supply; they are improving consumer experience by developing dedicated apps, messaging systems, and real-time usage monitoring. States such as Maharashtra, Andhra Pradesh, Karnataka, and Odisha have implemented green tariffs for high tension consumers. The use of AI is also picking up, with implementation of a demand response system incentivising consumers to modulate demand in Mumbai.

The availability of affordable and reliable power is a prerequisite for India's journey towards greater economic development. Timely investments by the distribution sector to build adequate resources, strengthen capabilities, and improved customer service will be essential to fuel this progress.

Further, as the share of renewable energy in the power mix grows and more consumers demand green energy, discoms need to innovate to mitigate renewable intermittency challenges. Some of the discoms have taken the lead towards these goals; it is time for the entire distribution sector to work together and emerge as a lynchpin in national development. https://www.financialexpress.com/opinion/powering-indias-developed-nation-goal/3474347/

4. Mystery of MGNREGA Demand Asymmetry

(economictimes.indiatimes.com) May 02, 2024

MGNREGA data shows Tamil Nadu's success in fund allocation and female participation, unlike Bihar. The 'north-south' disparity highlights the need for better implementation and addressing challenges in laggard states.

Popularity of the MGNREGA scheme in poorer states is well-known. But a new data analysis reported in this paper has thrown up an interesting fact: Tamil Nadu, one of India's most industrialised states, takes a much larger share of funds under the rural employment guarantee scheme than Bihar, one of the country's poorest and more populous states. Over the past five years, TN accounted for 10-15.3% of India's annual work demand submitted by individuals under MGNREGA, while Bihar made up for 4-5.7%. As for person-days generated, TN's annual share has been 8.6-13.1% over the same period, compared to Bihar's 5-8%. Other progressive southern states like Andhra Pradesh, Karnataka and Kerala have also been cornering larger shares of MGNREGA funds than states with similar populations or workforces.

What accounts for this unintended asymmetry? One, an efficient administrative set-up has not just streamlined the job demand-to-payment process better, but it has also - as the TN case study shows - managed to execute a geographical exercise where labourers can find work at a place not far from their homes, thereby reducing the need to travel far, never mind migrate. The other factor is higher participation by women. 80% of active MGNREGA workers in TN are women, while in Bihar, the corresponding figure is about 54%. The high number of female workforce participation in MGNREGA work can be attributed to decades of the southern state's progressive politics, policies and supportive ecosystem.

While GoI should delve deeper into this 'north-south' asymmetry, laggard states must learn how to utilise the scheme better and weed out roadblocks in MGNREGA implementation. Essentially, make it work better for those who need this economic cover. https://economictimes.indiatimes.com/opinion/et-editorial/mystery-of-mgnrega-demand-asymmetry/articleshow/109761711.cms?from=mdr

5. India moving towards ‘broadband for all’ *(thehindubusinessline.com)* Updated - May 01, 2024

The Universal Service Obligation Fund has helped expand optic fibre connectivity, wi-fi networks, and rural penetration. These efforts must continue

The Telecom Performance Indicators Report 2022-23, published by the Telecom Regulatory Authority of India (TRAI), reveals that the number of broadband subscribers (with a minimum downlink speed of 2 Mbps) in the country has reached about 840 million out of which about 340 million and 500 million, respectively, are rural and urban subscribers.

In particular, in rural areas, the percentage of telecom subscribers that have broadband connection has increased twofold in the past five years to reach about 65 per cent. This huge growth in rural broadband subscription is due to many of the following initiatives.

Providing universal service at affordable prices has always been a regulatory challenge all over the world. Regulatory economics indicates that unless we have a monopoly service provider who can cross-subsidise the rural loss using high price plans for urban subscribers, any option including introducing competition does not yield the intended benefits to the rural populace.

The widely adopted principle is to subsidise the deployment of rural networks through Universal Service Obligation Fund (USOF) — referred to as Bharath Nidhi in the Telecom Act 2023. India enacted the setting up of USOF in 1997, by charging a Universal Service Levy (USL) of 5 per cent of adjusted gross revenue of the operators. Today, the corpus of USOF collected over the years has been put into many areas.

Rural connectivity

First, is the completion of one of the largest rural broadband connectivity projects in the world, BharathNet, deploying about 6,50,000 route km of optic fibre connectivity to more than 2,00,000 village panchayats, thereby improving access to robust backhaul network connectivity. With this in place, and by offering affordable broadband tariffs, the scheme has resulted in data usage exceeding 100,000 terabytes per month.

With two phases completed, and the third phase expected to start soon, covering the remaining 50,000 village panchayats, the BharathNet project that was started in 2011 is realising its true potential in providing rural broadband connectivity.

A substantial portion of the USOF amounting to about ₹40,000 crore have been disbursed for this project alone.

Given a robust backhaul, the next step is to provide affordable and easy access. The wi-fi density in India is very low compared to many countries. Wi-fi offloading, that enables shifting the traffic from the cellular broadband network to wi-fi networks is one of the strategies used by the telcos in many countries to do effective traffic management. However, in India we have not seen this due to the disinterest exhibited by the telcos.

In order to improve penetration of wi-fi hotspots, the Prime Minister Wireless Access Network Interface (PM WANI) was conceptualised by TRAI in 2018, which is now being rolled out across the country. WANI is an interoperable wi-fi network that provides flexible authentication and payment models that allows users to access wi-fi on the go.

Another objective of WANI is to create an abundance of last mile wi-fi access providers (aka public data offices — PDOs) in the form of local micro entrepreneurs to provide ubiquitous wi-fi access.

The relatively higher leased line charges levied by the telcos has been a deterrent for the PDOs to provide sustainable wi-fi service. Since leased line tariffs are under tariff forbearance, the regulator is also not able to make any headway. The government should issue a separate lower tariff for backhaul leased line for WANI-registered PDOs so that wi-fi provided by the PDOs take off in larger scale.

The third, is a hard look at villages and areas in the country that have been uncovered. With funding from USOF, 354 of these uncovered villages are being covered through a subsidised mobile tower installation scheme. The difficult geographical terrain of the North-East region of the country increases the average cost per connection.

Mobile towers

With this in mind, mobile towers are being commissioned in the North East region with support from USOF. Apart from these, through the Comprehensive Telecom Development Project (CTDP) of the government of India, the submarine optic fibre cable connecting mainland India to Andaman and Nicobar and Lakshadweep islands is providing robust broadband connectivity compared to the relatively expensive and unreliable satellite based low bandwidth connectivity these islands had earlier.

Role of BSNL

Fourth, is the role of the state-owned enterprise (SOE), BSNL. One of the regulatory interventions in augmenting universal service is to equip the SOE to manage the roll-out of rural broadband networks. While countries such as the US that do not have an SOE depend on private telcos to provide universal broadband connectivity, India is fortunate to still have BSNL.

In recent years, efforts have been initiated by the government to streamline processes and operations within BSNL to effectively compete with private telcos. The BharatNet Udyami scheme being offered by BSNL to provide very low price Fiber To The Home broadband connectivity to rural households, funded through the USOF, has met with success. The recent announcements regarding 4G rollout by BSNL are timely, to accelerate the momentum towards rural broadband connectivity in the country.

For India to attain "broadband for all" as indicated in the National Digital Communications Policy 2018, sustainable efforts such as the above are the need of the hour. https://www.thehindubusinessline.com/opinion/india-moving-towards-broadband-for-all/article68129387.ece

6. Govt to go ahead with administrative allocation for satellite broadband *(livemint.com)* 01 May 2024

The government will allocate spectrum for satellite broadband outside of auctions, in accordance with the Telecommunications Act 2023, and will not go back to court, said people familiar with the development.

The government will go ahead with allocation of spectrum for satellite broadband outside of auctions, in accordance with the law laid down under the Telecommunications Act 2023, said two people familiar with the development.

The decision has been taken after high-level consultations within the communications ministry, one of the people said, even as the miscellaneous application filed by the government in the Supreme Court has not been accepted.

"For the items specified in the Act that will be given through administrative allocation, the law will be followed," one of the people said, asking not to be named.

According to Telecommunication Act, 19 types of services can be allocated outside auctions

According to the first schedule of Telecommunication Act 2023, 19 types of services including satellite broadband which is technically called global mobile personal communication by satellites (GMPCS), and others like TV broadcast, direct-to-home (DTH), national long-distance calling, maritime and in-flight connectivity services, can be allocated outside auctions.

"The courts had to be informed and the application has been disposed of. The government will not go back to the Court," the person said. The Economic Times reported on Wednesday that the Supreme Court registrar had not accepted the government's miscellaneous application for allowing administrative allocation of spectrum in special cases on grounds that it did not disclose reasonable cause to be entertained, while also noting the time lapsed since the judgement in 2012. The report added that the government sought a review of the order passed by the court in the guise of an application.

The Supreme Court in 2012 had said that competitive auctions will be the route for distribution of natural resources owned by the public. A review petition to the judgement was withdrawn by the government. A Presidential reference by the Union government also followed the judgement.

Mint had reported last week quoting officials that the application filed by the government did not seek to change the 2012 order issued by the court, and that auction will continue to be the only mechanism for giving out spectrum for telecom services.

To be sure, currently the government allocates spectrum in certain categories on administrative basis, for instance, airwaves to state-run carrier Bharat Sanchar Nigam Ltd, spectrum for radar for weather forecasting, for maritime communications on ships, communication and radar for the armed forces.

A second person aware of the development said that the telecom department was close to preparing a reference to the Telecom Regulatory Authority of India (Trai) for beginning fresh consultation on allocation of airwaves for satellite broadband.

“The reference to the regulator is being prepared and will be sent out soon," the person said, asking not to be named.

Mint had reported last week that the Trai’s fresh consultation will be aimed at giving recommendations on the mechanism of allotment, the frequencies to be given out and the pricing of the spectrum which will be given administratively.

Trai had first begun the consultation on allocation methodology for satellite spectrum in 2022 and had held several rounds of consultations including an open-house discussion last year but did not issue any recommendations, in the light of enactment of the new telecom law.

Satellite spectrum is key for players such as Bharti Group-backed Eutelsat OneWeb, Reliance’s Jio Satellite Communications, Elon Musk’s Starlink and Amazon’s Project Kuiper to begin satellite broadband services in India. While OneWeb and Jio Satellite Communications have got GMPCS license, Starlink and Kuiper have applied for it. DoT had given an in-principle approval to Starlink’s application, but it is yet to receive clearance from security agencies which is needed for a formal approval. https://www.livemint.com/technology/govt-to-go-ahead-with-administrative-allocation-for-satellite-broadband-11714558473904.html

7. The wrong way to fight inequality *(thehindu.com)* May 02, 2024

What is required is not higher taxes on high-income earners but greater economic freedom for India’s poor

French economist Thomas Piketty, along with a few other economists, recently came out with some startling findings on economic inequality trends in India over the last century. In Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj, Piketty and his co-authors estimate that inequality in India today is far worse than during the inter-war British colonial rule.

In 2022, the top 1% of the Indian population owned 40.1% of total wealth and earned 22.6% of total income, while the bottom 50% owned 6.4% of total wealth and earned 15% of total income. The fate of the bottom 50% looks even worse when compared with the top 10% who owned 65% of total wealth and earned 57.7% of total national income.

Top 1% Indians' share in national income is higher now than under British-rule: Data

The authors use their findings to argue that India's tax system, which is mostly based on people's incomes, is regressive, and call for a wealth tax on the rich. While Piketty's data might look alarming, it is crucial to question its use to justify wealth redistribution.

The economic pie has grown

To understand why, it is important to study two important trends noted by Piketty and his co-authors. First, income and wealth inequality in India began to rise sharply only from the 1980s when India gradually began to adopt markets. For example, the share of the bottom 50% in total national income dropped from 23.6% in 1982 to 15% in 2022, while the income share of the top 10% rose from 30.1% to 57.7% during the period. Second, economic growth in India was stagnant in the socialist decades, and began to rise only after 1990. Piketty and others note that India's economy grew at a miserable 1.6% per year between 1960 and 1990, but at a much stronger 3.6% per year between 1990 and 2022.

So, what do these trends tell us?

Towards a less poor and more equal country

First, they tell us that the fall in the bottom 50%'s share of total national income does not mean that there was a fall in their real income levels or standard of living. Data from the World Inequality Lab suggest that the total real income of the bottom 50% increased over four-fold between 1991 and 2022 even though their share of total national income dropped from 23.6% to 15% during the same period. In other words, the size of India's total economic pie has grown so much in the last 30 years that the bottom 50% now enjoys higher real income despite receiving a much lower share of national income.

Second, the trend in income shares of different groups since the 1980s shows that the bottom 50% does not enjoy as much economic freedom as the top 1% or even the top 10%. The income share of any group in a market economy, it should be noted, depends on the ability of the group to compete against others in the market for a share of the total national income. Piketty estimates that the top 1% income earners in India earn ₹53 lakh on average annually while the bottom 50% earners earn just ₹71,000.

Growth mania can be injurious to society

In a free market economy, such stark differences in income levels would present lucrative arbitrage opportunities and help close the gap between the richest and the poorest. So, for example, seeing that neurosurgeons in India earn several millions of rupees each year, more people from lower income groups would try to become neurosurgeons.

But we know that such arbitrage does not happen so easily in the real world because of various barriers, including the poor's lack of access to capital and the high cost of medical education. If so, liberalising the financial sector and the medical education sector would be the right way forward as it would allow the poor to invest in building the skills for high-paying jobs. A hefty tax on neurosurgeons to redistribute income, on the other hand, will only impede the movement of labour towards high-paying jobs and even shrink the current supply of neurosurgeons.

Analysing the rising gap in incomes

It should also be noted that the bottom 50% enjoy very little protection of their property rights, which makes it hard for them to even make a living, let alone to climb up the income ladder. So, what is required is greater economic freedom for India's poor, not higher taxes on high-income earners.

Wealth inequality is inevitable

Trends in wealth inequality also paint a similar picture. India's top 1%, on average, possesses a net wealth worth ₹5.4 crore while people in the bottom 50% are worth just ₹1.7 lakh. To be sure, wealth inequality is inevitable in a market economy as the market rewards people who are better at investing or allocating capital; investors who make profits see their wealth share grow over time while investors who suffer losses see their wealth share shrink. An entrepreneur with an innovative product that benefits billions of people, for instance, would enjoy massive profits and see his or her wealth share rise. Thus, the market ensures that capital is in the hands of the best investors, and resources are used in the best way possible to create a bigger economic pie. And it is a bigger economic pie, one should note, that allows the bottom 50% to enjoy higher real income despite their falling income and wealth shares.

Understanding what the right to equality promises

The extreme wealth disparity we see in India today, however, is largely not because of the free market rewarding the top 1% for their entrepreneurial capabilities. Instead, much of it is due to the top 1% enjoying special privileges from the government, which protects them from competition in the marketplace that could erode their wealth share significantly. So, the way forward then is to get rid of such special privileges and allow more competition in the economy. This would naturally reduce the wealth share of the top 1% and also benefit the wider economy since competition ensures that the best investors rise to the top of the wealth hierarchy and enlarge the size of the economic pie in the process. Free competition would also ensure no one would stay at the top forever by enjoying special privileges.

Impact of a wealth tax

A wealth tax, on the other hand, will have unintended consequences. Contrary to common belief, investors can actually shield themselves from higher taxes (including wealth tax) by lowering the amount of capital they invest in any venture based on their expected post-tax income. So, people who would really be affected by higher taxes on the wealthy would then be workers and landowners who will be paid lesser in order to maintain investor returns. The tax would thus indirectly affect the income of ordinary workers, most of whom belong to the bottom 50% or the middle 40% of the population, and hence also affect their output. A wealth tax on labour and land owners would have a similar negative effect. In effect, a wealth tax on the rich would eventually turn out to be a tax on lower income groups.

It should also be noted that most of the wealth that the top 1% possess is in the form of the capital assets such as advanced factories and real estate, and not consumer goods and services. It is thus incorrect to believe that the poor suffer low living standards because the rich have cornered most consumer goods. In fact, capital assets owned by the wealthy, by massively increasing the productivity of workers, help boost the output of consumer goods and services and improve the living standards of the masses.

Overall, the wealth tax will have a negative effect on economic growth and living standards. The right way to fight inequality and help the poor is thus not to tax the rich but to offer more economic freedom to the poor so that they can compete better in the marketplace for a bigger share of the economic pie. https://www.thehindu.com/opinion/lead/the-wrong-way-to-fight-inequality/article68129186.ece

8. Inheritance Tax in India: A Timely Imperative *(livelaw.in)* 1 May 2024

Inheritance tax, often dubbed the "death tax," has resurfaced as a topic of debate in India following recent comments by Indian Overseas Congress chairman, Sam Pitroda. It was levied as per Estate Duty Act of 1953, but was subsequently repealed because of not achieving its objective of "curbing the social inequality". While many academics are opposed to the inheritance tax, several nations are taking steps to implement it due to various objectives including social equality or economic growth. There are growing speculations in business circles that the Indian government is planning to revive the inheritance tax.

This tax is imposed on the property that a deceased person leaves to a lawful heir or successor. Although this tax is usually considered as the most progressive of all the tax systems in various countries, its implementation in many other nations is still a matter of controversy. While economic and legal scholars recommend countries that charge a high inheritance tax, like the USA, to repeal it, certain nations that do not presently levy it are taking steps forward and contemplating implementing it for a variety of reasons, such as economic development of the country. While recommending against it, researchers often overlook not just the social necessities of an inheritance tax, but also the additional legal and commercial advantages that the imposition can have.

Despite India being one of the nations where the inheritance tax is not presently imposed, it is crucial to take into account that it was levied in the past as estate duty before it was scrapped in the year 1985 after the recommendation of the Economic Administration Commission. The then finance minister V.P. Singh scrapped it stating that the Estate Duty Act of 1953[1] had failed to achieve its goals of achieving social equality and reducing the wealth gap[2]. Nevertheless, there were speculations that the Indian government might reintroduce the inheritance tax in the Union Budget for 2018–

19. Although, this was never actually implemented, there are still persistent rumors in corporate circles regarding its imposition.

The central argument of the paper revolves around whether India, having previously abolished the inheritance tax, should reconsider its reintroduction due to various economic, social, and legal considerations. Moreover, the article aims to examine the impact of inheritance tax in other countries compared to India to bolster the case for its timely reinstatement. The primary objective is to advocate for the reintroduction of the inheritance tax while addressing and countering common arguments against it. Additionally, the article will explore the implications of inheritance tax in other nations that currently enforce it, and discuss its relevance in the context of the COVID-19 pandemic and Uniform Civil Code (UCC).

The Need Of The Hour

As previously stated, there are several reasons, including societal, legal, and economic ones, why it is finally the time for India to impose the inheritance tax. The primary and most compelling argument put up by researchers in favor of the inheritance tax is that it will enhance government revenue, further boost the Gross Domestic Product (GDP), and ultimately lead to the overall economic growth of the country. However, there are various counter arguments in this regard which are addressed further.

Firstly, the most developed countries which have been enforcing the inheritance tax or estate tax since decades are unable to generate substantial amounts of revenue, and it contributes only 0.5% of the government's total revenue in most countries, making it almost insignificant, and that the tax should be abolished as it has failed to achieve its goals[3]. While in response to this, it is pertinent to emphasize that the majority of developed nations who impose inheritance taxes are unable to make major revenues due to the numerous exemptions granted. As an instance, the United Kingdom levies an inheritance tax of 40%; however, there were exemptions, such as gifts to trusts and donations, which were later subjected to taxation and the revenue increased[4]. However, several exceptions, such as donations, agricultural property, and lifelong gifts, continue to be the statutory loopholes that result in more tax evasion and lower revenue collection which should not be granted in India for effective imposition.

Secondly, another economic as well as logistical limitation that is frequently brought up is the problem of "double taxation". The inheritance tax not only results in double taxation, but even multiplicity of taxes, that too on the property not earned but inherited which was already been taxed. Even in the United Kingdom, it is contended that estate tax is a second tax on the same income as individuals already pay "income tax" or "capital gain tax" on their earnings[5]. Similarly, in the past, in India, the imposition of the tax became challenging due to the issue of double taxation caused due to levying the inheritance tax and wealth tax simultaneously. Even in the present day, the problem of multiplicity of taxes being levied on the same income will arise if inheritance tax is implemented alongside the other taxes such as the wealth tax, property tax, capital gains tax and many others. However, in response to this, many economists and legal scholars argue that if the inheritance tax is levied accurately and in the appropriate quantum in tandem with other taxations, it will be much easier to implement, and the state will also be able to generate revenue. For instance, if the wealth tax is imposed at around 2-3%

and the inheritance tax is levied at around 20%, it is unlikely to result in a problematic situation of double taxation[6].

Thirdly, it is claimed that the enforcement of the inheritance tax results in significant administrative expenses for the government, but does not generate any substantial tax income. The same arguments were put forward in India when the estate duty was scrapped, where it was claimed that even though it only generates revenue of about 20 crores, the high administrative expenses and increasing litigation rendered it useless[7]. However, this reasoning seems erroneous because the lawmakers must consider that application of a tax depends upon number of factors, including the policy characteristics, size of the jurisdiction and even the time period for which the tax was imposed. Moreover, how did the collection of estate duty by the already existing Income Tax department led to an increase in administrative costs? In countries like Ireland, France, Germany and even United Kingdom, the long run implementation of inheritance tax resulted in higher revenue and negligible administrative costs of only around 0.52% of the year's total tax revenue[8]. Additionally, the Swiss model of tax implementation highlights the importance of automatic administrative processes and digitizing the filing of tax returns[9]. Even, by establishing a third-party reporting, the administrative burden for both taxpayers and the tax authority can be minimized by lower human resource, infrastructure and IT development costs[10].

Another evidence in favor of the argument is that, based on the statistics at hand, the cost of collecting income taxes for the fiscal year 2000–01 in India was as high as 1.36%. But the income tax was not abolished as a result of this. Thus, the bureaucratic inefficiencies should not have resulted in the inheritance tax being repealed entirely, since the state should receive a share in the assets not earned by an individual for welfare functions.

Another essential justification for the reinstatement of the inheritance tax in India is the persistent issue of Benami transactions. Although the Benami Transactions (Prohibition) Act of 1988 was introduced to render the Benami property as illegal, but the execution problem still persists. The authorities frequently introduce multiple schemes to reward those who report Benami property and also impose severe fines on the beneficial owners, yet Benami transactions along with extensive tax evasion continue. Therefore, imposing an inheritance tax will help the government to uncover, prevent and keep a track of Benami transactions and level of tax evasion. For instance, if a legal heir acquires property from his ascendant, he will be required to pay inheritance tax and because of the required wealth transparency, the government will be able to attest that the inherited property is actually a Benami property.

Now, the only argument in opposition that can be made in this regard is that imposing an inheritance tax will encourage the rich class to hold more assets as Benami property, which will increase tax evasion and reduce government income. In response to this, some economists propose that the inheritance tax should be combined alongside other taxes to prevent tax evasion, such as a gift tax, to prevent people from outrightly gifting their property to their heirs. Additionally, it can be argued that the estate duty, which was repealed in India being unable to achieve its objectives, was because of being unreasonably high around 85% which resulted in increased Benami transactions and tax evasion. It was practically impossible for the country's ultra-rich to pay an 85% tax to the government in order to inherit their own hereditary fortune. For instance, Japan, which has the highest inheritance tax globally with rates ranging from 10% to as high as 55%, still generates revenue for the government and being reasonable does not encourage tax evasion. Yet again, because of the unrealistic approach of the government of levying an exorbitant 85% inheritance tax is another reason why the much-needed inheritance tax had to be repealed.

Finally, the most significant yet controversial argument in support of enacting inheritance tax is that executing it would reduce the concentration of wealth in the hands of a select group of individuals and narrow the gap between the rich and poor. The rich percentile, who usually inherit their wealth, contribute significantly to this disparity. Applying the inheritance tax will improve wealth distribution and minimize the economic inequality which is rampant in India. Through this tax, the government may gradually tax the richer segment of the population, generate revenues that can be utilized for social initiatives. However, this argument is contradicted by various scholars from a religious, political, and even logistical standpoints, which are addressed in the paragraphs that follow.

Firstly, the most heated counter argument in this regard is that the Indian constitution guarantees freedom of religion and that since inheritance is one of the crucial practices of one's religion, the government should not interfere in it. Thus, the imposition of inheritance tax will lead to a complex legislation as its predecessor, Estate Duty Act, resulting in increased litigations. However, in response to this, it is argued that the Estate Duty Act was a complicated statute primarily because of its frequent modifications, exemptions and high estate tax of 85% which led to its failure. Estate Duty while being in implementation for around 30 years, was paid by citizens, and the super-rich percentile was the one who evaded the tax - not because it interfered with one's religion. A tax that is levied consistently across all religions is neither discriminatory nor restricts the right to practice any religion. Furthermore, despite the fact that in present time, the Uniform Civil Code is the most contentious issue in the nation, it is crucial to argue for the inheritance tax to be imposed uniformly on every individual.

Second, it is contended that even if a property is inherited, the heir may not be able to afford the tax. For instance, if a person inherits a property worth Rs. 100 crores, they might not be wealthy enough to pay the Rs. 1-2 crores of inheritance tax on that property. Herein, inheritance tax will again become a problem for both taxpayers and the authorities. However, this argument can be refuted by stating that there is always an option for the heir to get a loan or sell a portion of the inherited property. For instance, even if a bank loan of Rs. 1 crore is taken to pay the tax, a part of the inherited property can be mortgaged with the bank; yet, the successor can conveniently sell another portion of the property and use the proceeds to pay off the loan. Hence, the inheritance tax can easily be paid.

Finally, the very basis of the imposition is questioned that, whether the government would actually utilize the revenue generated to carry out "social initiatives" and reduce inequality. In response to this, it is again argued that the issue still lies with the administrative procedures rather than the tax.

After taking into account all the requirements and addressing the counter arguments raised against the imposition of Inheritance tax, it is therefore concluded that it is the right time for the government to reinstate the tax. While the nation has a number of indirect taxes, which disproportionately impact the country's economically poorer groups, a direct tax like inheritance tax is a necessity. It seems absurd that an individual who earns money from his time, efforts and skills is required to pay income tax. However, one might become extremely wealthy just by being born into a wealthy family and will not have to pay taxes on the inherited property. The Estate Duty Act was not effective due to structural limitations since it had undergone several alterations, including the introduction of a gift tax, changes in slab rates, and several exceptions. Rather than rectifying the statute and improve the administration procedure, the then government simply chose to give up and abolish the tax. In addition to many of the social, economic, and legal factors, the resurrection of the inheritance tax would work wonders in this time of legislative reform that can be brought by the Uniform Civil Code and the uncertain era of pandemic which widened the gap between rich and poor. The tax will generate revenue that can be utilised to develop infrastructure, generate employment, and enhance its human resources, which were tarnished after the COVID outbreak. However, the lawmakers must consider that the tax cannot be as high as the 85% originally imposed; the quantum must be realistic and reasonable. As the prominent economist and lawyer Nani Palkhivala stated, "the health of our economy won't improve unless we give our fiscal regulations the "S" factor and make them Sane, Simple, and Stable. https://www.livelaw.in/articles/inheritance-tax-in-india-timely-imperative-256667

9. Deciphering India's GDP: Navigating Divergent Data For Taxpayers *(businessworld.in)* 02 May 2024

Amidst the prevailing narrative of India's economic ascent, a contentious debate brews over its gross domestic product (GDP) figures, questioning the veracity of its growth trajectory.

The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), paints a rosy picture, estimating India's real GDP for 2023-24 to reach Rs 172.90 lakh crore, signalling a cause for jubilation with a 7.6 per cent growth rate. However, this optimism is swiftly rebutted by the International Monetary Fund (IMF), which foresees a more conservative 6.7 per cent growth for FY24 and a further dip to 6.5 per cent in FY25. Such projections, contrary to domestic expectations, find resonance with venerated institutions like CRISIL Ratings, whose forecast of 6.8 per cent GDP growth for FY25 echoes the IMF's cautionary stance.

The Reserve Bank of India (RBI), in its first monetary policy review for FY25, has projected the GDP to grow at 7 per cent. So, the IMF projects India's GDP to grow at 90 basis points (bps) lower than the estimates of the Indian government for FY24 and 50 bps lower than what RBI estimates for FY25. “With rural demand catching up, consumption is expected to support economic growth in 2024-25. Urban consumption stayed buoyant as evident from various indicators. The resilience in cement production, together with strong growth in steel consumption and production and import of capital goods augur well for the investment cycle to gain further traction,” RBI Governor Shaktikanta Das said.

During the first quarter of 2024-25, the RBI anticipates a growth rate of 7.1 per cent, a slight adjustment from the previous estimate of 7.2 per cent made in February. Earlier, the RBI had estimated a growth rate of 6.7 per cent for Q1 FY25.

The divergence in growth projections underscores the significance of global economic indicators in shaping India's economic narrative. The IMF's pivotal role is accentuated, not merely as a prognosticator of economic trends but as a bastion of financial stability and policy guidance during tumultuous times.

The IMF projects India's GDP to grow at 90 bps lower than the estimates of the Indian government for FY24 and 50 bps lower than what RBI estimates for FY25. But IMF projections are also supported by other reputed ratings agencies. Take, for example, CRISIL Ratings. It also projects India's GDP growth for FY25 at 6.8 per cent, 20 bps lower than RBI's projections. But the Asian Development Bank (ADB) just upgraded India’s GDP growth forecast for FY25 to 7 per cent from 6.7 per cent made earlier, citing robust public and private investments and strong services sector.

But from within IMF different growth projections came to the fore recently. On March 28. Krishnamurthy Subramanian, Executive Director at IMF said that the Indian economy could grow at 8 per cent till 2047, if the country redoubles the good policies that it has implemented over the last 10 years and accelerate reforms. Taking a different stand, Julie Kozack, IMF spokesperson, clarified thereafter: "The views conveyed by Subramanian were in his role as India's representative at the IMF." Kozack was asked about IMF's stand on India's growth projection and why was it different from Subramanian's numbers. The IMF spokesperson said, "We do have an Executive Board. That Executive Board is made up of executive directors who are representatives of countries or groups of countries, and they make up the Executive Board of the IMF. And that's distinct, of course, from the work of the IMF staff."

Be that as it may, to put the India growth numbers in perspective, it is very clear that the Indian economy has grown at a healthier pace in the past decade. For example, as per the data from NSO and MoSPI, India's real GDP or GDP at constant (2011-12) prices in the year 2013-14 stood at Rs 99.21 lakh crore. In FY24, it is estimated at Rs 172.90 lakh crore. Which means in value terms the Indian economy added Rs 73.69 lakh crore in the last 10 years. Is that a good data point reflecting all-round growth of the economy? Perhaps not. But it does reflect growth amidst global challenges including the slowdown after the global pandemic.

Pressing Concerns

Rajani Sinha, Chief Economist, CARE Ratings, directs the attention to more immediate concerns, particularly for the RBI. "The main concern of the central bank is the persistent high food inflation and the adverse impact of that on household inflationary expectations," says Sinha. For FY25 outlook, Sinha says the expectations of normal monsoon bodes well for food inflation. But she warns that the continuation of geopolitical rifts and supply-side risks of the same on commodity prices requires monitoring. "Increased climate risks in the domestic and global economy have emerged as another big risks for food inflation in the last few years," says Sinha.

But circling back to the GDP growth data, how do economists explain the NSO data estimating India's GDP growth for FY24 at 7.6 per cent beating the estimates of the World Bank and IMF projections? According to D.K. Srivastava, Chief Policy Advisor, EY India, most of the GDP growth has come about through robust non-agricultural growth on the supply side and substantial investment growth on the demand side. In terms of quarterly growth rates, the average GDP growth for the first three quarters of FY24 was 8.2 per cent implying the fourth quarter growth estimate at only 5.9 per cent.

But economists are concerned on the demand side slowdown in consumption expenditure which shows a growth rate of only 3 per cent for both private and government final consumption expenditure. On the output side, agricultural growth is also limited only to 0.7 per cent in FY24. But the non-agricultural sectors show robust growth. In particular, construction has grown 10.7 per cent followed by manufacturing at 8.5 per cent and financial, real estate and professional services sector at 8.2 per cent. This growth has been achieved despite a negative contribution by net exports to real GDP growth at (-)2.3 percentage points.

The main driver for this growth, therefore, has been investment demand (gross fixed capital formation) which has shown a growth of 10.2 per cent in FY24, economists say. This has particularly been driven by government capital expenditure growth directed towards building infrastructure, as per Srivastava.

"An unanticipated feature of the FY24 annual growth relates to the difference between the GDP growth of 7.6 per cent vis-à-vis GVA growth of only 6.9 per cent which is accounted for by growth in net indirect taxes (indirect taxes net of subsidies). GoI’s indirect tax growth remained low at 4.5 per cent during April-January FY24. It implies, therefore, that subsidies were reduced substantially leading to a significant excess of GDP growth over GVA growth of 0.7 percentage points," Srivastava points out.

Credit Outlook for India Inc.

According to the latest assessment by CRISIL Ratings for fiscal 2025, the credit quality outlook will remain positive. Upgrades will continue to outpace downgrades, driven by domestic demand, low corporate debt levels and tailwinds from the ongoing infrastructure build-out, says Gurpreet Chhatwal, Managing Director, CRISIL Ratings. For the fiscal year gone by (FY24), the CRISIL Ratings credit ratio (rating upgrades to downgrades) moderated in the second half of fiscal 2024 but remained elevated. In all, there were 409 upgrades and 228 downgrades in FY24. “The three key pillars of India Inc.’s credit quality — deleveraged balance sheets, sustained domestic demand and government-led capex — kept the upgrade rate elevated in the second half of fiscal 2024. That’s above the 10-year average for the sixth consecutive half year," explains Chhatwal.

So what is in store for India Inc. in FY25? As per Chhatwal, for fiscal 2025, as many as 21 of 26 corporate sectors have strong-to-favourable credit quality outlook, marked by robust balance sheets and healthy operating cash flows — expected to be as much, or higher, than in fiscal 2024. These include auto component manufacturers, hospitality and education sector companies where the credit quality is supported by healthy domestic demand. It also includes sectors benefiting from the government’s infrastructure spending, such as construction companies, steel, cement and capital goods manufacturers, Chhatwal adds.

For banks, credit growth is expected to remain healthy in fiscal 2025, but grow a tad slower at ~14 per cent, compared with ~16 per cent estimated for fiscal 2024, given the likely moderation in economic growth. https://businessworld.in/article/deciphering-indias-gdp-navigating-divergent-data-for-taxpayers-518347

10. Road to sustainability *(millenniumpost.in)* 01 May 2024

Owing to its uniquely low per capita energy consumption, India needs to deploy a blend of fossil fuel and renewable energy, alongside resorting to practices like coal washing and price restructuring

In order to meet the climate challenge, most countries are pursuing transition from fossil fuel-based energy to renewable energy. In developed nations, where the energy consumption is saturated or growth is miniscule, any addition to renewable capacity causes corresponding phasing out of fossil fuel-based capacity. India stands out as an exception to this, where addition to renewable capacity complements addition to fossil fuel-based capacity.

This is because India is low in terms of per capita power consumption, being at one-third of world average, one fifth of China—a comparable country in terms of population—and one tenth of the developed world. This position is sure to undergo change as the country develops. In other words, the growth of energy consumption will rise exponentially, which can be met by growth in both renewable and fossil fuels, albeit at a slower pace for the latter.

As India's roadmap to meet the domestic energy demand stands out in sharp contrast to global trends, strong international headwinds are inescapable. India needs to develop and closely pursue a strategy to mitigate the fallout and insulate the great Indian Growth Story from being adversely impacted by the headwinds. As a corollary, this will call for concerted action to mitigate the environmental impact of rising use of coal for power generation.

While absorbing CO2 emission from coal usage by adopting Carbon Sequestration and Storage (CSS) or Utilisation (CSU) need cost-effective technology, for which India has to depend largely on developed nations, these are not forthcoming due to inadequate research funding by those countries. In each successive COPs, ending in COP28 at UAE in 2023, more pressure is getting built on advanced countries to come forward with infusion of funds estimated at USD 100 billion annually. However, the outcome has remained meagre. As it looks, sourcing cost-effective technology for CSS & CSU may have to wait for more time till R&D activities in this sphere takes off with adequate funds pouring in from advanced nations.

The other major initiative that India can take on its own is extensive washing of coal before usage. As recent experiments in a large opencast mine in MCL has demonstrated, state-of-the-art technology for coal washing reduces the energy content in rejects to a level where it cannot be used for any purpose other than landfilling or backfilling in mines. The yield of washed coal is over 85 per cent. Tests held at National Institute of

Advanced Sciences (NIAS), Bangalore, indicate that the use of washed coal, besides reducing ash substantially, is able to bring down SOx, NOx and PM 2.5 particles. The technology is capable of recirculating water for washing, thus reducing input of water significantly. It's also power efficient.

Hence, large-scale use of this new technology should be implemented across the country to ensure complete avoidance of supply of mined coal within a limited time frame.

However, to make the process commercially viable, it is important to correct a long-pending discrepancy in the price structure of coal.

Internationally, the coal price in Rs/tonne moves exponentially higher @ 2.5-3 per cent for 1 per cent rise in Calorific Value (CV). In Rs/GCal terms — the price unit considered more relevant by consumers — the price moves upward @ 1.5 to 2 per cent for 1 per cent rise in CV. This allows the coal producers to undertake all necessary measures for processing and washing of coal. The price differential adequately takes care of the capex & opex incurred for quality improvement. No wonder that internationally, coal washing is practiced almost universally.

In complete contrast, the coal price in the Indian situation is flat in Rs/GCal terms, and is modestly linear in Rs/tonne particularly in the range of power grade coal (G9-G14). Coal washing is thus rendered commercially unattractive. Actually, the situation is more detrimental for coal consumers than producers. In Rs/GCal terms, the consumer at the destination end pays a higher price for lower grade coal and vice versa. This is primarily due to components like rail freight and GST compensation cess being fixed in Rs/tonne, thereby declining with rise in GCV of the coal supplied.

Hence, the price structure needs to be aligned with the trend prevailing internationally in terms of percentage rise/fall in price with each 1 per cent variation in GCV.

Bringing these measures in place at the earliest should help the country buy time to deal with international headwinds against coal-fired power generation along the way. This process needs to continue unabated till such time India reaches the per capita consumption levels where addition to renewable capacity leads to replacement of coal-based capacity instead of complementing it. Fast rise of renewable capacity onwards that stage will lead to equally fast phasing out of coal-based capacity, eventually enabling India become Net Zero by 2070, as committed by the Hon'ble PM at COP26.
https://www.millenniumpost.in/opinion/road-to-sustainability-562160

11. Complex network of India's existing air defence capabilities & the way forward *(theprint.in)* 02 May, 2024

Provocations among Israel & Iran have prompted discussion on the need for India to broaden its air defence apparatus, given tensions with adversarial neighbours.

New Delhi: In its first direct attack on Israeli soil since the beginning of the Israel-Hamas war last October, Iran launched Operation 'True Promise' on the intervening night of 13 and 14 April, firing hundreds of drones, ballistic missiles, and cruise missiles at Israel.

This was days after Tehran vowed retaliation for what it called an Israeli strike on its consulate in Damascus on 1 April that killed seven officers of the Islamic Revolutionary Guard Corps (IRGC), including two senior commanders.

The salvo deployed by Iran in retaliation, according to Israel's chief military spokesman, comprised around more than 30 cruise missiles, at least 120 ballistic missiles and 170 drones. The attack, it is suspected, was aimed at overwhelming Israel's air defences and causing damage to its Nevatim air base. However, Israel, with the help of the US, the UK, Jordan as well as Saudi Arabia, shot down most of the incoming projectiles.

Though Israel claimed "99 percent" of projectiles fired by Iran were intercepted, satellite imagery hints that a taxiway at Nevatim air base was damaged in the attack.

Much of the credit for minimising damage went to Israel's multi-tiered air defence system which consists of various components including man-portable air defence systems (MANPADS), short-range air defence systems (SHORADS), Spyder air defence system, Iron Dome, David's Sling, Patriot air defence system, Arrow anti-ballistic missiles, Iron Beam and the naval air defence system or C-Dome. These systems are complemented by the Israeli air force's fleet of F-15, F-16, and F-35 aircraft.

Air defence systems are put in place to defend sovereign air space from enemy aircraft, drones and weapons. It is also meant to protect vulnerable civilian and military targets.

Back in India, the strikes by Iran and Israel drew attention to the Indian military's air defence preparedness in the backdrop of tensions with adversarial neighbours China and Pakistan. It has also been pointed out that India will need relatively more air assets simply on account of its geography — the country has an area of more than 32.87 lakh sq km.

Layers of India's air defence capability

The Indian Air Force (IAF) currently operates several equipment with varying ranges that work in conjunction to form layers of air defence.

At present, the S-400 air defence system is the only long-range system deployed by the IAF. While three squadrons have already been delivered, Russia is expected to deliver the remaining two by 2026. The S-400 has a range of 400 km and can engage fighters and cruise missiles.

The Defence Research and Development Organisation (DRDO) is also working on developing a long-range surface-to-air missile (LRSAM) under 'Project Kusha'.

Besides, the Army and Air Force also operate medium-range surface-to-air missiles (MRSAM) that can intercept targets at a range of 70 km. MRSAMs form the intermediate layer of India's air defence apparatus.

The next layer comprises the Israeli-made Spyder and DRDO-developed Akash short-range air defence systems operated by the IAF.

Terminal weapon systems, which have a short range, form the next layer. These include anti-aircraft guns, also known as close-in weapon systems, which have a high rate of fire — measured in rounds per minute or rounds per second.

The Army operates these weapons to meet tactical requirements. Among those with a range of less than 10 km, it operates OSA-AK-M surface-to-air missiles, Tunguska anti-aircraft gun and missile system, Shilka radar-guided anti-aircraft weapon system, L70 anti-aircraft gun, ZU-23 MM anti-aircraft gun and Strela-10M anti-aircraft missile system.

Among MANPADS, India operates Igla-M and Igla-S with ranges of 5 km and 6 km, respectively. As reported by ThePrint earlier, the Army procured a fresh batch of the Russian Igla-S systems in April this year.

The DRDO is also pursuing its own programme to develop a very short-range air defence system (VSHORAD). The Request for Proposal (RFP) for these systems was issued in 2010.

The Navy's role in air defence is limited to the defence of its fleet in sovereign and international waters. For this purpose, it operates Barak-8 medium-range surface-to-air missile for area defence and the Barak-1 for point-defence. It also has the AK-630 close-in weapon system which has a rate of fire of nearly 5,000 rounds per minute.

Sources in the defence and security establishment told ThePrint that the Indian military needs to induct more air defence systems and that when it came to certain equipment, the shortfall in numbers was acute.

"Air defence (systems) are complex interdependent systems which come at a huge cost. Resultantly, their inventory in a nation's arsenal is finite and limited," explained Lt Gen V.K. Saxena (Retd), former Director General of the Corps of Army Air Defence.

He added that it was on account of these constraints that there is invariably a gap between what needs to be protected and what can be protected with resources currently at hand.

According to Lt Gen Saxena (Retd), the country's assets are marked as Priority 1, 2 and 3, depending on their importance and vulnerability, to ensure that critical assets are secured.

"The air defence weapons are allocated according to these priorities, which themselves are dynamic and change with respect to a host of factors — flow of war and the changing geopolitical situation. The prioritised assets under this exercise cover the entire spectrum such as national strategic assets, key industrial infrastructure, nuclear assets and war-waging potential," he added.

However, since the number of prioritised vulnerabilities exceeds the resources at hand, India needs to ramp up procurement of air defence systems in line with its changing priorities, he told ThePrint.

Seamless integration of BMC2 systems

All three armed services have their own battle management/command and control (BMC2) systems. But the nation's air defence in peace and war rides on the Air Force's Integrated Command and Control System (IACCS) — an automated command and control system for air defence managed by the IAF and spread across the country in nodes.

The IACCS provides a digitised integrated fused picture of India's airspace. A network centric and warfare enabled system, it reduces the time taken to detect a target or respond to it. It can also shoot down an incoming aerial object.

Lt Gen Saxena (Retd) said that the air defence BMC2 capability of the nation must be seamlessly connected and integrated across the three services. "That is to say that the Indian Air Force's Integrated Air Command and Control System (IACCS) must have a seamless connectivity with the Army's and the Naval BMC2 systems."

Air Marshal Diptendu Choudhury (Retd), former Commandant of the National Defence College, emphasised that the IAF has always looked after the country's air defence.

"The Army's air defence requirements, on the other hand, are more tactical. They will come into play during times of war. During peacetime, the Air Force is solely responsible for air defence. For future requirements, it makes sense to integrate India's peacetime air defence capability. While the nation's wartime air defence is fairly well integrated, for future requirements, given the paucity of resources, it would make sense to integrate all air defence assets of all services," he told ThePrint.

He added that there now exists "greater understanding of this and all services are looking at common systems as well as their integration in the future".

Given provocations by China's People's Liberation Army Air Force (PLAAF) over Taiwanese airspace and Beijing's efforts to ramp up resources in Tibet, air activity along the India-China border can be expected to increase in the future.

Asked about this aspect, Air Marshal Choudhury (Retd) added, "Air defence of our border areas must therefore be kept relevant and responsive. Therefore, it is vital that IAF's air defence fighters and air-to-air weapons must retain the advantage over the adversary. For this, regular upgrade of platforms and weapons will be necessary in future."

Aerospace defence: The future

In the wake of increasing use of space for transit of ballistic missiles and the possibility of space-launched weapons in the future, there has emerged a need to widen the idea of air defence.

As Air Marshal Choudhury (Retd) put it, air defence has graduated from being a 'purely defensive affair' to one with an 'offensive capability' as both long-range surface-to-air missile systems and fighter-launched air-to-air missiles have the ability to shoot down the enemy well within enemy airspace. Thus, offensive capabilities of air defence weapons are increasingly becoming more relevant.

"In the future, air defence will no longer be limited to air- and surface- launched threats, but will also include futuristic weapons, possibly even emanating from space," he added.

According to him, the potential threat from India's northern adversary could be centred around air and space forces.

"In the long-term national interest, we must now move away from mere air defence to a more comprehensive concept of aerospace defence. This also means that we need to begin with increasing our aerospace awareness," said Air Marshal Choudhury (Retd).

This would amount to the ability to monitor and defend the air and space continuum over India's sovereign territories, exclusive economic zones (EEZ) and other areas of interest. https://theprint.in/defence/complex-network-of-indias-existing-air-defence-capabilities-the-way-forward/2065704/

12. MP: National Student Union of India Alleges Financial Anomalies in Medical Science University *(freepressjournal.in)* May 02, 2024

Bhopal (Madhya Pradesh): National Student Union of India (NSUI) has lodged a complaint with the Economic Offence Wing (EOW), alleging a scam of crores of rupees in Medical Science University, Jabalpur.

Ravi Parmar, coordinator of NSUI medical wing in his complaint stated that financial irregularities have been committed in Medical Science University, Jabalpur. The audit of last year found non-renewable FDR (Fixed Deposit Receipt) as faulty.

Moreover, the cash register was not managed properly, the complaint read. In want of renewal of the FDR during the past few years, it seems that varsity incurred financial loss (in terms of interest) of more than Rs 120 crores. He claimed that overall financial irregularities could be much bigger. He alleged that registrar of varsity, Pushpraj Baghel has tampered with tenders for his vested interests. There is also an instance that exam controller Sachin Kuchia helped absentee students in clearing the exams, the NSUI member stated in the complaint.

NSUI has demanded that varsity's vice chancellor Ashok Khandelwal, registrar Pushpraj Baghel, exam controller Sachin Kuchia shall be immediately removed and a probe into the alleged irregularities. He has also submitted the audit report to EOW which allegedly points towards possible irregularities in stock ledger maintenance, keeping money in current accounts etc.
https://www.freepressjournal.in/bhopal/mp-national-student-union-of-india-alleges-financial-anomalies-in-medical-science-university