

NEWS ITEMS ON CAG/ AUDIT REPORTS

1. CAG report reveals no action taken against defaulters under AB-PMJAY *(odishatv.in, menafn.com, telanganatoday.com, daijiworld.com)* 24 AUG 2023

In its performance audit report on the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), the Comptroller and Auditor General of India (CAG) revealed that no action was taken against the defaulters.

The audit noted that 12 hospitals in Jharkhand and one hospital in Assam indulged in various malpractices -- illegal collection of money from beneficiaries, repeated submission of same photograph for multiple claims and non-disclosure of facts, etc., as per the CAG report on AB-PMJAY.

However, follow-up action like recovery of amount of money collected and imposition of penalty, action against errant medical and paramedical professionals, de-panels of hospitals etc., had not been initiated, it said.

"NHA replied (in August last year) that SHA (State Health Agency) Jharkhand had taken appropriate action against the defaulters but did not furnish any documentary evidence in support of action taken," the CAG report said.

The reply in respect of SHA Assam was awaited, it added.

The report further said it is the responsibility of SHA to design and implement strategies for beneficiary awareness on possible episodes of fraud under the PMJAY.

The awareness may include understanding types of fraud, its impact on beneficiaries, preventive measures that the beneficiaries could take and whom to report to. It may be done by using mass media and interpersonal communication at the point of service.

"Audit noted that Bihar, Chandigarh and Uttar Pradesh did not plan/conduct anti-fraud awareness activities. The documentary evidence regarding organising of camps for fraud awareness were not made available to audit in any of the selected districts of Himachal Pradesh. Thus, the aim of apprising the beneficiaries of the possible irregularities in implementation of the programme remained unachieved," it said.

The NHA while accepting the audit observation, replied (in August last year) that innovative measures have been taken for improving beneficiary awareness regarding fraud/abuse, it added.

The AB-PMJAY provides a health cover up to Rs 5 lakh per family per year, for secondary and tertiary care hospitalisation services.

It provides cashless and paperless access to services for the beneficiaries at the point of service -- hospital.

It may be mentioned that the Ministry of Health and Family Welfare had said it is examining in detail the recommendations of the CAG performance audit report on AB-

2. **आयुष्मान भारत-प्रधानमंत्री जन आरोग्य योजना को लेकर सीएजी की रिपोर्ट**
(*jantaserishta.com*) 25 Aug 2023

भारत के नियंत्रक एवं महालेखा परीक्षक (सीएजी) ने आयुष्मान भारत-प्रधानमंत्री जन आरोग्य योजना (एबी-पीएमजेवाई) पर अपनी प्रदर्शन ऑडिट रिपोर्ट में खुलासा किया कि बकाएदारों के खिलाफ कोई कार्रवाई नहीं की गई। सीएजी की रिपोर्ट के अनुसार, एबी-पीएमजेवाई के ऑडिट में पाया गया कि झारखंड में 12 अस्पताल और असम में एक अस्पताल विभिन्न कदाचार में लिप्त थे - लाभार्थियों से अवैध धन संग्रह, कई दावों के लिए एक ही तस्वीर को बार-बार जमा करना और तथ्यों का खुलासा न करना आदि। कहा गया, एकत्र की गई धनराशि की वसूली और जुर्माना लगाने, दोषी चिकित्सा और पैरामेडिकल पेशेवरों के खिलाफ कार्रवाई, अस्पतालों को पैनल से हटाने आदि जैसी अनुवर्ती कार्रवाई शुरू नहीं की गई थी।

सीएजी रिपोर्ट में कहा गया है, "एनएचए ने (पिछले साल अगस्त में) जवाब दिया कि एसएचए (राज्य स्वास्थ्य एजेंसी) झारखंड ने डिफॉल्टरों के खिलाफ उचित कार्रवाई की थी, लेकिन की गई कार्रवाई के समर्थन में कोई दस्तावेजी साक्ष्य प्रस्तुत नहीं किया।"

एसएचए असम के संबंध में जवाब की प्रतीक्षा की जा रही है। रिपोर्ट में आगे कहा गया है कि पीएमजेवाई के तहत धोखाधड़ी के संभावित प्रकरणों पर लाभार्थी जागरूकता के लिए रणनीतियों को डिजाइन और कार्यान्वित करना एसएचए की जिम्मेदारी है।

जागरूकता में धोखाधड़ी के प्रकारों को समझना, लाभार्थियों पर इसका प्रभाव, निवारक उपाय जो लाभार्थी अपना सकते हैं और किसे रिपोर्ट करना है, शामिल हो सकते हैं। यह सेवा के स्थान पर जनसंचार माध्यमों और पारस्परिक संचार का उपयोग करके किया जा सकता है। आगे कहा गया, "ऑडिट में पाया गया कि बिहार, चंडीगढ़ और उत्तर प्रदेश ने धोखाधड़ी-रोधी जागरूकता गतिविधियों की योजना/संचालन नहीं किया। धोखाधड़ी जागरूकता के लिए शिविरों के आयोजन के संबंध में दस्तावेजी साक्ष्य हिमाचल प्रदेश के किसी भी चयनित जिले में ऑडिट के लिए उपलब्ध नहीं कराए गए थे। इस प्रकार, कार्यक्रम के कार्यान्वयन में संभावित अनियमितताओं के बारे में लाभार्थियों को अवगत कराने का उद्देश्य अप्राप्त रहा।"

ऑडिट अवलोकन को स्वीकार करते हुए एनएचए ने जवाब दिया (पिछले साल अगस्त में) कि धोखाधड़ी/दुरुपयोग के संबंध में लाभार्थियों की जागरूकता में सुधार के लिए अभिनव उपाय किए गए हैं। एबी-पीएमजेवाई माध्यमिक और तृतीयक देखभाल अस्पताल में भर्ती सेवाओं के लिए प्रतिवर्ष प्रति परिवार 5 लाख रुपये तक का स्वास्थ्य कवर प्रदान करता है।

यह लाभार्थियों को सेवा स्थल - अस्पताल - पर सेवाओं तक कैशलेस और पेपरलेस पहुंच प्रदान करता है। उल्लेखनीय है कि स्वास्थ्य एवं परिवार कल्याण मंत्रालय ने कहा था कि वह एबी-पीएमजेएवाई पर सीएजी प्रदर्शन ऑडिट रिपोर्ट की सिफारिशों की विस्तार से जांच कर रहा है। <https://jantaserishta.com/national/cag-report-regarding-ayushman-bharat-prime-minister-jan-arogya-yojana-2748187>

3. **Ayushman Yojana Gadbad In MP: अस्पतालों में 403 मरे हुए मरीजों का हुआ इलाज, आयुष्मान योजना की सुविधा वाले यह 46 Hospital हिट लिस्ट में** (yashbharat.com) 25 August 2023

अस्पतालों में 403 मरे हुए मरीजों का हुआ इलाज, आयुष्मान योजना की सुविधा वाले यह 46 Hospital हिट लिस्ट में । आयुष्मान भारत योजना में नियंत्रक एवं Auditor General (कैग) की रिपोर्ट में मध्य प्रदेश में भी कई गड़बड़ियां सामने आई हैं।

आयुष्मान योजना घोटाला करने वाले अस्पतालों ने 403 ऐसे रोगियों के उपचार का दावा पेश कर भुगतान लिया जो मर चुके थे। प्रदेश में 24 ऐसे अस्पताल मिले हैं जो जिन्होंने अस्पताल की बिस्तर क्षमता से ज्यादा मरीजों को भर्ती कर भुगतान प्राप्त किया था।

कैग ने सितंबर 2018 से मार्च 2021 के बीच 10 जिलों के 46 अस्पतालों का सैंपल के तौर पर आडिट किया। इसमें आठ हजार 81 ऐसे रोगी मिले हैं, जिनका एक ही समय में दूसरे अस्पतालों में भी उपचार दिखाकर भुगतान प्राप्त किया गया। 213 अस्पतालों ने यह गड़बड़ी की है।

अर्थदंड में सिर्फ चार प्रतिशत की ही वसूली

वहीं, 403 ऐसे रोगियों के उपचार का दावा पेश कर भुगतान लिया जो मर चुके थे। यह राशि एक करोड़ 12 लाख रुपये थी। 25 अस्पतालों में 81 रोगियों का दो बार आपरेशन दिखाकर भुगतान लिया। अस्पतालों पर लगाए अर्थदंड में सिर्फ चार प्रतिशत की ही वसूली हो पाई।

भोपाल का जवाहर लाल नेहरू कैंसर अस्पताल भी शामिल

प्रदेश में 24 ऐसे अस्पताल मिले हैं जो जिन्होंने अस्पताल की बिस्तर क्षमता से ज्यादा मरीजों को भर्ती कर भुगतान प्राप्त किया था। इसमें भोपाल का जवाहर लाल नेहरू कैंसर अस्पताल भी शामिल था। यहां एक समय में सौ रोगियों को भर्ती करने की क्षमता है पर 223 को भर्ती दिखाया गया था। यह गड़बड़ी करने वाले ज्यादातर अस्पताल भोपाल के थे।

राज्य स्वास्थ्य प्राधिकरण द्वारा की गई कार्रवाई

– योजना की शुरुआत से लेकर अब तक अस्पतालों पर दो करोड़ 46 लाख रुपये अर्थदंड लगाया गया।

- कुछ की संबद्धता समाप्त की गई जबकि कुछ के विरुद्ध एफआइआर दर्ज कराई गई।
- राज्य स्वास्थ्य प्राधिकरण का 80 प्रतिशत से अधिक स्टाफ बदला गया है।

योजना में इस तरह की गड़बड़ी मिली

-गलती करने वाले अस्पतालों से 33 लाख 57 हजार रूपए अर्थदंड की वसूली की जानी थी, पर यहां सिर्फ 4 प्रतिशत की वसूली हो पाई थी। कम वसूली के मामले में छत्तीसगढ़ के बाद मप्र दूसरा राज्य है। - 305 ऐसे दावे मिले हैं, जिनमें अस्पताल में भर्ती होने की तारीख राज्य स्वास्थ्य प्राधिकरण शुरू होने के पहले की थी।

इनमें तीन दावों के अनुमोदन की तारीख भी प्राधिकरण शुरू होने के पहले की थी। - प्रदेश के किसी भी जिले में जिला स्तरीय शिकायत निवारण समितियों को गठन नहीं किया गया था। पहली बार मई 2023 में इनका गठन हुआ।

- दो लाख 66 हजार दावों का भुगतान बायोमैट्रिक प्रमाणीकरण के बिना किया गया।

- 11 दावों में एक लाख 34 हजार रुपये का भुगतान अक्षम आयुष्मान कार्डों में किया गया।

- 63 दावों का भुगतान कार्ड अस्वीकृति करने की तिथि के बाद किया गया। इसकी राशि सात लाख 16 हजार रुपये थी।

- मध्य प्रदेश में व्हिसिल ब्लोअर की नीति को नहीं अपनाया गया।

- इसमें भ्रष्टाचार के विरुद्ध शिकायतें प्राप्त कर जांच की व्यवस्था थी।

- 638 करोड़ रुपये के दावे निपटान के संबंध में लंबित थे।

- एक लाख 46 हजार दावों के भुगतान में 12 घंटे से अधिक समय लगा। इसमें अधिकतम समय 11 हजार घंटे थे।

- योजना की शुरुआत- 23 सितंबर 2018

- योजना की शुरुआत में शामिल परिवार- 97,76,438

- योजना में शामिल सदस्य - 2,47,38,533

आर्टिफिशियल इंटेलिजेंस सिस्टम और औचक निरीक्षण कर गड़बड़ी करने वाले अस्पतालों को पकड़कर उनके विरुद्ध कार्रवाई की गई है। कुछ के विरुद्ध FIR भी कराई गई है। पुराना स्टाफ भी बदला गया है। अब पूरी व्यवस्था पारदर्शी है। -डा. प्रभुराम चौधरी, स्वास्थ्य मंत्री, मप्र <https://www.yashbharat.com/archives/102732>

4. **Edappally-Thrissur toll operator owes NHAI Rs 441 crore: CAG report** (*newindianexpress.com*) 25 August 2023

KOCHI: Guruvayoor Infrastructure Pvt Ltd (GIPL), a unit of Bharat Road Network Ltd (BRNL) that operates the Thrissur-Edappally highway, owes nearly Rs 441 crore to the government in the form of penalties and dues, according to the Comptroller and Auditor General (CAG).

In its report on the toll operator published earlier this month, the auditor criticised the National Highway Authority of India (NHAI) for having failed to put in safeguards to prevent the company from defaulting on payments.

The pending dues to NHAI “running at Rs 440.5 crore as of March 2021” were calculated by CAG as part of its audit. Of the Rs 449.5 crore, nearly Rs 296 crore is owed in the form of a premium that is GIPL’s share of the toll collection up to March 2021, including interest on account of delays.

Another Rs 137.74 crore is due as a penalty for deficiency in the maintenance of the stretch of NH-544. The company also owes NHAI another Rs 7.21 crore for wrongfully collecting tolls on the stretch of the road under the management of the Kochi Metro Rail Ltd (KMRL).

The Thrissur-Edapally highway was the first major project won by BRNL, which is promoted by Srei Infrastructure Finance Ltd.

BRNL has seen its stock price plummet to Rs 33.30 (as of August 24) from around Rs 200 nearly five years ago even as its promoter, Srei, went into bankruptcy. However, GIPL continues to operate the stretch and collect tolls.

Merry-go-round of claims

The four-lane highway from Angamaly to Edapally was originally constructed by the state government’s Public Works Department (PWD). It was later handed over to NHAI, which wanted to convert the whole length from Thrissur to Edapally into a four-lane highway.

NHAI handed over the four-laning contract to GIPL for Rs 313 crore in 2006. Under the contract, GIPL is entitled to collect tolls on the stretch up to 2028.

However, GIPL won the contract after it promised to pay a premium “also known as a negative grant” of Rs 215 crore to NHAI in six annual instalments. According to the CAG, the company paid only the first instalment of Rs 15 crore in December 2006.

The remaining amount of Rs 200 crore was due between 2014 and 2018. By March 2021, the company owed NHAI a total of Rs 295.78 crore under this header, including interest. NHAI made a demand for the amount in April 2021.

CAG pointed out that GIPL, instead of sending the money, asked NHAI to wait till the Kerala government cleared some of its dues. The company claimed that Kerala government owed it money as compensation for free passes issued to local residents. GIPL also claimed that it was due some amount as user fee from KSRTC. In addition to premium, GIPL owes Rs 137 crore for not carrying out maintenance on the Thrissur-Aluva stretch since July 2014. The Rs 441 crore also included Rs 7.2 crore which was excessively collected from road users.

Road users should have been given a discount in toll from 2013 as GIPL was no longer required to maintain or repair an 11km stretch from Aluva to Edapally. This was because this stretch was handed over to KMRL in April 2013.

CAG noted that, although NHAI raised the demand, the amount had not been recovered as of July 2021. TNIE reached out to BRNL, but could not elicit a response. <https://www.newindianexpress.com/states/kerala/2023/aug/25/edappally-thrissur-toll-operator-owes-nhai-rs-441-crore-cag-report-2608470.html>

5. NHAI भूदृश्य, वृक्षारोपण मानदंडों का पालन करने में विफल रहा: CAG
(*jantaserishta.com*) 24 Aug 2023

सीएजी ने वायु और ध्वनि प्रदूषण के प्रतिकूल प्रभावों को कम करने और छाया प्रदान करने के लिए राष्ट्रीय राजमार्गों के किनारे भूनिर्माण और वृक्षारोपण पर दिशानिर्देशों का पालन करने में विफलता के लिए एनएचएआई को दोषी ठहराया है।

दक्षिण भारत में एनएचएआई के टोल संचालन पर अनुपालन-लेखापरीक्षा में कहा गया कि राष्ट्रीय राजमार्गों के किनारे भूनिर्माण और वृक्षारोपण हरित राजमार्ग (वृक्षारोपण, प्रत्यारोपण, सौंदर्यीकरण और रखरखाव) नीति - 2015 के प्रावधानों के अनुसार किया जाना था। और भारतीय सड़क कांग्रेस विशेष प्रकाशन: 21-2009 - भूदृश्य और वृक्षारोपण पर दिशानिर्देश।

नीति और दिशानिर्देशों के अनुसार, प्रति किमी एवेन्यू पौधों की कुल संख्या 333 होनी चाहिए। एकल पंक्ति और दोहरी पंक्ति के मामले में प्रति किमी मध्य पौधों की संख्या क्रमशः 333 और 666 होनी चाहिए।

हालाँकि, ऑडिट में पाया गया कि पाँच क्षेत्रीय कार्यालयों के तहत 8,814 किमी की कुल परियोजना लंबाई पर, निर्धारित लक्ष्य वृक्षारोपण से एवेन्यू और मध्य वृक्षारोपण में क्रमशः 65.63% और 34.65% की कमी थी।

आंकड़ों के अनुसार, चेन्नई और मदुरै में एवेन्यू पेड़ों की कमी क्रमशः 37% और 83% है, जबकि सड़क के मध्य वृक्षारोपण 13% और 52% है।

एनएचएआई के बेंगलुरु क्षेत्रीय कार्यालय से जवाब आया, "वृक्षारोपण निरंतर गतिविधि है, शेष वृक्षारोपण आने वाले वर्षों में किया जाएगा और लक्ष्य हासिल किया जाएगा।"

हालाँकि, चेन्नई, मदुरै, केरल और विजयवाड़ा के क्षेत्रीय NHAI कार्यालयों ने कोई प्रतिक्रिया नहीं दी। <https://jantaserishta.com/local/tamil-nadu/nhai-failed-to-adhere-to-landscaping-plantation-norms-cag-2747234>

6. Striking the Balance: Reforming DRDO for a Stronger Defence R&D Landscape (*bharatshakti.in*) 25 Aug 2023

The government has finally bitten the bait of restructuring and rejigging India's premier defence research monolith, the Defence Research and Development Organization (DRDO), following extensive restructuring and transformation of the Ordinance Factory Board (OFB). A nine-member committee has been appointed to assess and revamp the Defence Research and Development Organization (DRDO) operations. Led

by Vijay Raghavan, the former Principal Scientific Advisor to the Government of India, this committee includes representatives from the armed forces, the defence industry, ISRO and academia. The committee is tasked with generating recommendations to review and redefine the department's role and align it with India's futuristic technological requirements in the defence domain.

The other members constituting the DRDO review committee include Lt Gen (Retd) Subrata Saha, who previously served as Deputy Chief of Army Staff; Vice Admiral S N Ghormade, former Vice Chief of Navy Staff; Air Marshal B R Krishna, former Chief of Integrated Defence Staff; Sujan R Chinoy, Director General of MP-IDSA; Prof Manindra Agarwal from IIT Kanpur; Mahindra Group's S.P. Shukla, President of SIDM; J D Patil from Larsen and Toubro's Defense division; Dr S Unnikrishnan Nair, Distinguished Scientist at ISRO; and Ms Rasika Chaube, Financial Advisor at the Ministry of Defence.

The committee's scope is extensive, promising a significant transformation of the organisation. The key areas it will address:

- Revamping and redefining the roles of both the Department of Defence (R&D) and DRDO, along with their interconnections, as well as their relationship with academia and industry.

- Enhancing involvement of academia, MSMEs, and startups in pioneering cutting-edge technology development.

- Creating strategies to attract and retain top-tier talent. It includes establishing a project-oriented workforce with effective incentive and dismissal mechanisms. The focus will be on stringent performance accountability and removing underperforming employees.

- Harnessing the expertise of Non-Resident Indians (NRIs) and foreign consultants and fostering international collaborations to advance groundbreaking and disruptive defence technologies.

- Modernising administrative, personnel, and financial systems to expedite project implementation.

- Streamlining the structure of laboratories and refining the process for evaluating their performance.

Reform: A Long-Awaited Step

The government's decision to evaluate the operations of the DRDO and the entire defence research and production ecosystem has been a long-awaited step. The decision has been finally arrived at due to concerns about its lack of accountability and delayed research, as expressed by its end users in the armed forces. Critics allege the DRDO's operational model resembles a government Public Sector Undertaking (PSU), which often regards the entire defence process – spanning research, development, and production – as its exclusive jurisdiction.

Established in 1958 with ten labs, the DRDO had grown into a monolith with over 50 labs. It was initially envisioned to facilitate the domestic production of India's weaponry needs. However, this objective has yet to materialise, and its production output has remained notably inadequate. This deficiency is clearly illustrated by India's continued reliance on imports to fulfil most of its military requirements. The quality of DRDO products often falls short of expectations, leading to rejections by the armed forces. Additionally, DRDO projects are infamous for their persistent delays, causing substantial budget overruns. Moreover, many DRDO projects do not truly qualify as entirely 'made in India.'

In 2019, a Parliamentary Committee noted that the DRDO's performance fell short of anticipated standards and emphasised the need for a significant restructuring of the organisation. The Comptroller and Auditor General (CAG) has also reprimanded the DRDO for its lacklustre performance. Its inability to successfully conclude mission mode projects within stipulated timeframes resulted in substantial time and cost escalations.

Among the 175 projects scrutinised by the CAG, two-thirds encountered challenges in meeting their scheduled timelines, necessitating extensions ranging from 16% to 500%. These extensions were primarily attributed to frequent alterations in design specifications and delays in executing user trials and procurement orders. Often, extensions were granted after the originally set completion deadlines had already passed. The management of projects exhibited inefficiencies, and the consequent delays led to product obsolescence, ultimately requiring resorting to imports to address immediate needs.

The government had recognised the necessity for an overhaul for some time, and directives to initiate these reforms have now been issued from the Prime Minister's Office, as disclosed by a source within the DRDO. Defence Minister Rajnath Singh conveyed last year that reforms were being introduced in the Defense Research and Development Organization (DRDO) to bolster technological advancements.

R&D: Plethora of Committees

Before the formation of this recent committee, in 2020, the Ministry of Defence (MoD) set up a five-member committee led by V. Ramagopal Rao of IIT Delhi to overhaul the DRDO to meet 'defence and battlefield needs'. It mirrored a prior initiative undertaken in 2007, when a similar Committee was instituted under Dr. P. Rama Rao, former Secretary of the Department of Science and Technology, to assess the functionality of the DRDO. The recommendations delivered in 2008 led to the consolidation of several DRDO laboratories and associated institutions into more manageable clusters, resulting in seven technology clusters, each overseen by accomplished scientists as their Directors General. The reasons behind the necessity to reevaluate this arrangement remained inexplicable.

No dearth of committees and task forces has been formed to address self-sufficiency in India's defence needs. Notably, in 1992-93, a committee led by the late A.P.J. Abdul Kalam, during his tenure as DRDO head, developed a decade-long strategy to elevate indigenous production in defence equipment from 30% to 70% by 2005. Despite nearly

two decades since then, India has persisted as one of the world's largest importers of military hardware.

R&D Reforms Already in Motion

The Defence Research and Development Organisation (DRDO) currently has 45 laboratories across the country that are engaged in developing defence technologies covering disciplines like aeronautics, armaments, combat vehicles, engineering systems, missiles, advanced computing and naval systems.

“The move to enhance the efficiency of the DRDO is in sync with the government's focus on cutting-edge technologies and boosting the domestic defence industry,” said a DRDO source, adding that several measures have already been taken to improve the functioning of the DRDO laboratories in recent times.

As part of the restructuring process, the DRDO has closed down three research facilities/laboratories and amalgamated their research areas and workforce with other institutions. The two laboratories located in Delhi, namely the Defence Terrain Research Laboratory (DTRL) and the Laser Science and Technology Centre (LASTEC), along with the Advanced Numerical Research and Analysis Group (ANURAG) situated in Hyderabad, have ceased to operate as independent entities. According to sources, this action, aimed at mitigating functional redundancies among laboratories sharing similar objectives, thus streamlining expenditure. It is anticipated that more laboratories will either be shut down or merged in the near future.

In January 2020, Prime Minister Narendra Modi formally launched five fresh DRDO Young Scientist Laboratories (DYSLs). These specialised labs will exclusively engage scientists under 35 and are tasked with advanced, cutting-edge, forward-looking technologies for military applications. Each laboratory is dedicated to a specific domain of spin-off technologies: artificial intelligence in Bengaluru, quantum technologies at IIT Mumbai, cognitive technologies at IIT Chennai, asymmetric technologies in Hyderabad, and smart materials at Hyderabad. The impetus for these laboratories materialised in August 2014 when Prime Minister Narendra Modi proposed that DRDO create avenues for young talent in India to excel and take on leadership roles in demanding scientific domains.

R&D Reform Should Focus on Issues that Inhibit DRDO's Functioning

Over the past six decades, the DRDO has substantially contributed to developing essential weaponry and military platforms for all three branches of the armed forces. However, the DRDO requires a significant reevaluation to refine its objectives and enhance its delivery capabilities. However, there are numerous constraints under which the DRDO has operated, including international sanctions and inadequate funding. Over the recent years, its share of the defence budget has hovered around 6%, which pales when compared to the substantial funding allocated to counterparts in the US and China. Budgetary reductions have compelled the DRDO to scale down certain major initiatives. Despite these challenges, the DRDO has achieved reasonably favourable outcomes in specific domains, particularly in the realm of missile development. The DRDO has achieved groundbreaking advancements in guided missile systems.

Comprising a workforce of more than 25,000 employees, including 7,000 scientists, the DRDO has initiated a highly anticipated procedure to initiate comprehensive reforms. These reforms are oriented towards facilitating the creation of cutting-edge military weaponry and aligning with the government's drive to enhance domestic production capabilities. However, limiting the DRDO's scope exclusively to a narrower research and development framework is not the answer, nor is speculation about assigning a bureaucrat as the defence R&D department Secretary, a DRDO insider observed. Viewed holistically, the current status raises concerns about the country's defence research and development. atmanirbharta calls for robust and progressive R&D capabilities. The perceived lack of professionalism and dependability within the DRDO, coupled with the pursuit of desperate solutions to its challenges, raises significant alarm. Instead, it is essential also to recognise that the military and other stakeholders have not consistently provided wholehearted support to the DRDO so far. These dynamics need to shift to enhance the effectiveness and productivity of the DRDO. <https://bharatshakti.in/striking-the-balance-reforming-drdo-for-a-stronger-defence-rd-landscape/>

7. Adani's Acquisitions: The 'Inorganic Strategy' Behind the Purchase of Gangavaram Port (*thewire.in*) 25 Aug 2023

Deloitte's decision last week to resign as auditors of Adani Ports and Special Economic Zone Limited (APSEZ) citing concerns raised by Hindenburg Research has refocused global attention on the Adani group and its business practices. The global auditing firm has said it wanted an independent external examination of the allegations made by the US-based short seller, a request Adani rejected by claiming Hindenburg's accusations had no impact on any of its financial statements.

Over the past six months, in response to Hindenburg's allegations of "brazen stock manipulation", the Adani Group has repeatedly emphasised the health of its underlying assets, most of which were acquired over the past decade.

In 2017-18, the Adani Group's six listed companies, which account for almost all of its turnover, earned a net profit (EBIDTA) of Rs 3,455 crore. But the acquisition of assets from other companies has helped propel Adani to a higher level. By FY2023, "the conglomerate recorded its highest ever EBITDA at the group portfolio level (combined all group companies) of Rs 57,219 crore."

In its annual report for FY23, the flagship Adani company APSEZ recently described its strategy in the ports sector as an "inorganic approach". It said it plans to extend this approach to "the acquisition of companies and services in the transport utility space," with a "sustained focus on acquisitions at a deep discount value."

Since the acquisition by the Adani group of assets like ports and airports has been crucial to its phenomenal growth, the process of some of these acquisitions is undoubtedly a matter of public interest.

This is also because allegations have been made – in a PIL before the Andhra Pradesh high court over Gangavaram port and by the Opposition – that the state has shown little interest in maximising its own future revenue share from some highly profitable companies or concessions Adani has acquired, or has even batted for the group in its

quest for acquisitions in India and elsewhere, like Sri Lanka and Bangladesh. What one corporate governance analyst has described as an “almost lock step between the government and Adani” has been decried as ‘cronyism’ by the Congress – which has alleged, in the case of Mumbai international airport, for example, that the promoter was virtually strong-armed into selling his asset to the Adanis. The seller, GVK and the Adanis, have denied the charge but questions about the pace and range of acquisitions continue to be asked in the wake of Hindenburg, and not just by politicians. As the noted economist Arun Kumar asked recently, “How did Adani get hold of so many businesses so quickly”?

The answer is complicated because of the range of sectors and businesses the Adani group spans but a closer look at a key sector – ports – and specific acquisitions can give us some insight into the company’s nose for business opportunities and the evolving nature of India’s political economy.

The sale of Gangavaram port

In September 2021, the Adani group announced it had completed the acquisition of Gangavaram port in the Visakhapatnam district of Andhra Pradesh for a total of Rs 6,200 crore.

A press statement by Adani Ports & SEZ (APSEZ) said that it had purchased the Andhra Pradesh government’s entire stake – 10.4% – in the port for Rs 645 crore. The statement noted that the Adani group had earlier – in April 2021 – acquired 31.5% of Gangavaram’s shares from private equity firm Warburg Pincus and had signed an agreement for the controlling stake of 58.1% which was held by the port’s promoter, DVS Raju and family.

Warburg sold its shares to the Adani group for Rs 1,954 crore (\$268 million at the prevailing exchange rate). In a parallel move, the private equity firm acquired a 0.49% stake in Adani Ports for Rs 800 crore. The deal with Raju, the promoter, which happened right after the Warburg purchase, involved the Adanis taking control of his stake in exchange for him and his family receiving Rs 3,604 crore worth of APSEZ shares – amounting to 2.2% of the acquiring company at the time.

Gangavaram was a port the Adanis had been interested in for some time. In 2015, when Warburg Pincus had tried to sell some of its shares, it was reported to have variously valued the port at between \$1,050 million (Rs 7,000 crore) and \$2 billion (Rs 13,000 crore). “Around the same time, Adani emerged as a potential buyer to acquire Warburg’s entire stake [i.e. 31.5%] and even hired investment bank Macquarie Capital to advise on the stake acquisition,” Capital Quest had reported. “However, the deal fell through owing to a valuation mismatch.” Nevertheless, six years later, Adani was able to acquire 100% of Gangavaram for Rs 6,200 crore. This despite the fact that the port’s capacity, which was 30 million tonnes in 2015, had doubled to 60 million tonnes by 2019.

Though the COVID-19 pandemic and its dampening effect on the economy might have played a role, it is not clear why Warburg settled on a lower valuation, setting a benchmark price that Raju and – more controversially – the AP state government

subsequently went by. The Wire sent a questionnaire to the equity firm on June 29, 2023, and will update this story if and when their answer is received.

A good deal for buyer

Gangavaram port had posted an EBITDA of Rs 634 crore in FY20. The sale price of a company is a multiple of EBITDA – a measure of how much it earns every year – with the multiple a measure of the number of years the buyer needs to recoup his purchase price. With Adani paying Rs 6,200 crore, the deal’s enterprise value/EBITDA multiple stood, by Adani’s own calculations, at a relatively low 8.8 – a measure of how good a deal this was for the buyer.

This relatively low multiple is now the subject of a public interest litigation petition in the Andhra Pradesh high court, with the petitioner claiming it was well below global benchmarks for port acquisitions. “In May 2019, when PSA, Polish Development Fund and IFM Global Infrastructure Fund acquired 100% of DCT Gdansk from Macquarie Infrastructure and Real Assets, they paid an enterprise value/EBITDA multiple of 16,” says the petition filed in 2021 by Satya Bhupal Reddy Vaiza, the executive director of an NGO called REEDS. “Similarly, when Orient Overseas International sold its container terminal to Macquarie Infrastructure and Real Assets, it did so at a multiple of over 20,” said the PIL, which is challenging the state government’s decision to sell its own stake of 10% in Gangavaram to Adani without inviting bids.

Even within India, the deal’s enterprise value/EBITDA multiple stood on the lower side. Just the previous year, Adani had acquired Andhra’s private sector Krishnapatnam Port at Rs 13,572 crore – a multiple of 10.2 – despite it carrying debt of Rs 6,212 crore and, at 64 million tons, having similar capacity as Gangavaram.

In contrast, Gangavaram was debt-free and had a cash balance of Rs 570 crore at the time of acquisition. The PIL, which is still before the court, also alleged that the state government did not follow prescribed norms for valuing its share, nor the value of the land that Adani would now get effective control over. The port concession also included 1,800 acres of nearby land, given by Chandrababu Naidu when he was chief minister. Going by market rates, the PIL claimed, that land was now worth at least Rs 3,000 crore.

Lengthy counter affidavits were filed by the state government (the Adani group was not named as a respondent) between September 2021 and January 2022 disputing the petitioner’s claims on the value of the land and the port as a whole. The last time the court took up the matter was, however, in December 2021. Now, a former revenue secretary in the Union government, E.A.S. Sarma has written to the Comptroller and Auditor General of India noting what he alleges are anomalies in the state government’s sale of its Gangavaram stake to the Adanis and demanded an audit.

To better understand the Gangavaram deal, The Wire met port promoters, spoke to senior executives in ports and other infrastructure companies acquired by Adani and their peers in industry, the relatives and associates of promoters whose firms have been acquired by Adani, a former chief secretary in Andhra Pradesh, former bureaucrats in mid- and senior positions in Andhra Pradesh, including those in the state’s planning and ports department; and the owners of firms that dealt with Gangavaram – like those

importing coal through the port, and those offering shipping logistics, as well as activists and trade union leaders working in Gangavaram.

In all, about 45 interviews were conducted. Subsequently, detailed sets of questions were emailed to all the dramatis personae – the Adani Group; D.V.S. Raju; Warburg Pincus, C. Sridhar of Navayuga Engineering Company; K. Muralidharan (formerly at the Andhra Pradesh Maritime Board); KPMG, which valued Gangavaram; the Union ministry for ports and shipping; and Andhra Pradesh CM Jagan Mohan Reddy.

The Adani growth machine

For observers of corporate India, the sprawling Adani group is something of a black box.

Despite being in long-gestation, low-margin sectors like infrastructure – and a much lower group EBITDA than peers like Reliance and Tata – the group has grown furiously. Not only did it direct cash into existing businesses and loss-making arms, it simultaneously acquired rival firms – through buy-outs like Gangavaram and asset sales by India’s bankruptcy courts – and announced large forays into sunrise sectors like green hydrogen, renewables manufacturing and defence. Most recently, it acquired a large media company, NDTV, and added to its considerable presence in the cement sector by buying Sanghi Cements.

Since January, when Hindenburg Research released its report on the Adani group, the spotlight has turned onto the financial arrangements that have enabled this dizzyingly rapid expansion. Hindenburg alleges Adani has used a clutch of offshore entities to push up its share prices, a charge the company denies. In the past, the company has pledged shares to raise debt. It has used international bonds to mop up additional debt. Those borrowed sums are used for not just capex but, as Hindenburg charged, also to smoothen out earnings – and to launch new businesses (Adani has used borrowed funds as equity for new businesses).

An expert panel tasked by the Supreme Court to look into some of the questions raised by Hindenburg concluded that there was no evidence to sustain the charge of stock manipulation. It also concluded that there had been no regulatory failure on the part of the Securities and Exchange Board of India – though repealed provisions had hampered SEBI’s ability to investigate what it noted were “opaque structures” that the Adani group was accused of using.

In the wake of Hindenburg, some investors have highlighted the strength of Adani’s underlying assets. Supporting the group with both cash flows and hard assets, acquisitions account for a large chunk of those assets. As Hindenburg Research says in its report, “(APSEZ) is... the only listed (Group) entity which seems capable of consistently generating substantive positive cash flow: approximately INR 52 billion (US \$640 million) as of 31 March, 2022.”

Central to APSEZ’s cash flow is the array of strong assets the company has assembled. Take Adani Ports. Its first port came up in 1998 (Mundra, Gujarat). In the next 14 years, it added two more ports, both in Gujarat – Dahej (2010) and Hazira (2012). Thereafter, its growth has been quicksilver. It added Mormugao (2013); acquired Dhamra from

L&T and Tata (2014); set up Tuna Tekra and acquired Katupalli from L&T (2015); signed Ennore (2018); bagged Vizhinjam (2019); acquired Krishnapatnam (2020); bought Dighi through India's bankruptcy courts and acquired Gangavaram (2021). As this article was being written, the conglomerate bagged the port at Karaikal through bankruptcy proceedings. In all, then, the Adani group has 13 ports – of which, six have been acquired – in India. It also has Haifa in Israel and a terminal in Colombo.

These acquisitions are significant given the history of the sector. The first generation of India's ports – like Kandla, Paradeep and JNPT – were built by the state. The second generation – like Mundra, Gangavaram and Krishnapatnam – were built after liberalisation as public-private partnerships. Reflecting both cronyism and the need to attract private sector participation in what were untested and risky greenfield projects, the Union and state governments offered generous incentives to promoters. If a project matured and took off after its difficult gestation period, the promoter stood to make a handsome profit. As would the government, which retained a stake in the partnership.

Krishnapatnam's agreement with the Andhra Pradesh government, for instance, not only gave its promoters, the Navayuga group, an exclusive zone – in which no other port could come up – of 30 kilometres on either side, it also pegged the concession fee payable to the state at just 2.6% (of gross income) for the first 30 years. As the PIL filed in the Andhra Pradesh high court says, the average revenue share offered by other ports/terminals on India's eastern shore stands at 33.15%. "The revenue share offered in the case of already established major ports was as high as 52% since there is already established infrastructure, ready customer and infrastructural linkages with minimal risk to the bidder/terminal operator," the petitioners wrote in their affidavit.

A 2015 CAG report on PPP projects in major ports contains similar numbers. In 2005, Dubai Ports International bagged a tender to build and run a container transshipment terminal at Cochin Port Trust by offering a revenue share of 33.3 percent of gross revenues. In 2009, JNPT awarded the project to build a container terminal to PSA Mumbai Investment after it promised a revenue share of 50.828 per cent.

Gangavaram's terms are the same as those of Krishnapatnam. "Its initial concession [in 2002-03] was given on the basis of a DPR," or detailed project report, a senior executive at a private port in southern India told *The Wire* on condition of anonymity. Defending the low revenue share for the government of 2.1% that was written into the initial concession, he said, "There was no asset. Also, these concessions were signed at a time when the economy was growing at the 'Hindu' rate of growth."

By the time Adani acquired Gangavaram, however, the situation had changed. The port had become a mature concession with ongoing operations, an established market position, monopolistic cash flows and vastly transformed surroundings as an industrial area developed around the port. And yet, by acquiring the concession through Gangavaram, Adani will give the Andhra Pradesh government a revenue share of just 2.1 per cent till 2039, i.e. during "the first 30 years of the Concession Period, and at double the rate for [two] extended spells of 10 years each."

The economics of the deal needs to be underlined. According to the Adani Ports website, Gangavaram can handle 60 million tons of cargo in a year. If Adani charges Rs 300 per ton of cargo, it will generate a top line of Rs 1,800 crore. If Gangavaram

settles at similar operating margins like the rest of Adani Ports (44.22%) – its EBIDTA margins in FY21 stood at 59% – it will make Rs 795.9 crore as operating profit. The government’s revenue share, however, will stand at just Rs 37.8 crore.

Effectively, then, the Adani group has acquired a mature asset on greenfield terms. Profits that should have gone to the initial risk-taking entrepreneur or the state government – which could have earned a fatter revenue share by re-tendering the concession as a mature PPP – flow to Adani instead.

The centrality of concessions

Since they become highly profitable after the first ten or so years, matured concessions are not always up for sale. And yet, Adani has picked up six ports in just nine years. It has done so, in the case of Gangavaram, without paying a high EV/EBIDTA multiple either.

In other words, while the company paid Rs 6,200 crore for Gangavaram, after the acquisition, at a multiple of 20, the port could arguably be estimated to be worth Rs 12,680 crore. By pledging these shares, the group could conceivably raise more cash than what it had paid Raju – and then repay those loans through Gangavaram’s cash flows.

The Adani Group told The Wire it has “proven its expertise in designing, building and managing world class infrastructure projects” and that, “in addition to greenfield projects, the Group has also relied on strategic acquisitions to expand its business. Our business expansion decisions emerge from a careful evaluation of the state of the potential acquisition, its prospects for growth and its synergies with our existing operations, through fair, transparent and well-established business processes. These are business transactions handled professionally, with mutual respect and trust.”
<https://thewire.in/business/adanis-acquisitions-the-inorganic-strategy-behind-the-purchase-of-gangavaram-port>

8. AAP targets Centre, UP on CAG revelations (*timesofindia.indiatimes.com*)
August 25, 2023

Lucknow: The Aam Aadmi Party held a statewide protest against the BJP on Thursday, targeting the Centre and the state over revelations made by the CAG recently on the Dwarka Expressway and the PM Ayushman Yojana.

A senior party functionary said even though there are charges of corruption against the BJP, the party's ability to manipulate the narrative has so far kept it away from any serious damage. Party MP Sanjay Singh said: “The CAG has highlighted corruption of crores of rupees and the AAP will visit every district to tell people about it.”

The issues which AAP highlighted during protest, included the Bharat Mala project under which 75,000 km of roads are to be laid. Singh said the CAG report stated that Rs 30 crore was spent on laying a km road against the rate of Rs 15crore. “This is a Rs 11,000 crore scam. The cost of a road is determined by NHAI through the cabinet committee on economic affairs. Can the committee explain why the cost was doubled,” Singh said, adding that other projects which were highlighted by the CAG were the

Dwarka Expressway, the old age pension scheme and the PM Ayushman Yojna. <https://timesofindia.indiatimes.com/city/lucknow/aap-targets-centre-up-on-cag-revelations/articleshow/103042363.cms?from=mdr>

SELECTED NEWS ITEMS/ARTICLES FOR READING

9. DAC clears procurement of weapons for MH-60R choppers, EW suite for Mi-17 V5s (*indianexpress.com*) Updated: August 25, 2023

The Defence Acquisition Council (DAC) on Thursday accorded Acceptance of Necessity (AoN) for capital acquisition proposals worth approximately Rs 7,800 crore, including Electronic Warfare (EW) Suite for the IAF's Mi-17 V5 helicopters, weapons for the Navy's MH-60R helicopters, as well as for Light Machine Guns and ground-based autonomous systems.

The DAC, which is headed by Defence Minister Rajnath Singh, is among the top bodies for clearing major capital acquisitions for defence. AoN is the first step in the long defence procurement process. Grant of an AoN does not necessarily lead to a final order.

As per a statement issued by the Defence Ministry, the installation of EW Suite on Mi-17 V5 helicopters will enhance their survivability. They will be procured from Bharat Electronics Limited (BEL) — a PSU under the Defence Ministry. The statement added that the DAC has also cleared procurement of weapons for the Navy's MH-60R Helicopters to enhance their operational capability.

The DAC also cleared procurement of Ground-Based Autonomous System for mechanised infantry and armoured regiments to enable various operations like unmanned surveillance, logistic delivery of ammunition, fuel and spares and casualty evacuation in the battlefield.

Other procurement proposals which got the DAC nod were those of 7.62×51 mm Light Machine Guns (LMG) and Bridge Laying Tanks (BLT).

The induction of LMG will enhance the operational edge of the Army's infantry forces, and the induction of BLT will aid quick mobility of its mechanised forces.

“Ruggedised” laptops and tablets for the Army under Project Shakti will also be procured from indigenous vendors. <https://indianexpress.com/article/india/defence-ministry-clears-acquisition-proposals-worth-rs-7800-crore-8907640/>

10. India gives nod to defence buys worth ₹7.8k-cr (*hindustantimes.com*) August 25, 2023

India on Thursday gave its initial approval to defence purchases worth ₹7,800 crore, including light machine guns, bridge laying tanks, electronic warfare suite for air force helicopters and weapons for naval choppers, to boost the combat readiness of the armed forces, officials aware of the development said.

The defence acquisition council (DAC), chaired by defence minister Rajnath Singh, accorded its acceptance of necessity (AoN) for the capital acquisition proposals, setting in motion the process to buy the military hardware. Under India's defence procurement rules, AoN by the council is the first step towards buying weapons and systems needed by the armed forces.

While the induction of light machine guns (LMGs) will enhance the fighting capabilities of the infantry, the induction of bridge laying tanks will result in faster movement of mechanised forces, the defence ministry said in a statement. The army has a requirement of tens of thousands of LMGs. It is looking for 7.62mm x 51mm LMG with an effective range of at least 800 metres.

DAC also cleared the procurement of electronic warfare suite for Mi-17 V5 helicopters to enhance their survivability, the statement said. This will be procured from Bharat Electronics Limited (BEL).

Another proposal greenlit by the council is for buying ground-based autonomous system for mechanised infantry and armoured regiments to enable unmanned surveillance, delivery of ammunition, fuel and spares and casualty evacuation from the battlefield, the statement said.

The council also gave its go-ahead to a proposal to buy weapons for the navy's new MH-60R helicopters to boost their operational capabilities. The helicopters have been ordered from the US to boost the navy's anti-submarine warfare, anti-surface warfare and surveillance capabilities.

The navy has thus far received a few of the Lockheed Martin-Sikorsky MH-60R multi-role helicopters from the US as part of a 24-chopper deal signed three years ago to modernise the country's ageing naval helicopter fleet. The government-to-government contract for the helicopters was worth around ₹17,500 crore.

To be armed with AGM-114 Hellfire missiles, MK 54 torpedoes and advanced precision weapons, the twin-engine helicopters can operate from frigates, destroyers and aircraft carriers.

Among the projects cleared by DAC is one for the procurement of rugged laptops and tablets for the army. <https://www.hindustantimes.com/india-news/india-approves-rs-7-800-crore-defence-purchases-to-boost-armed-forces-combat-readiness-101692904022537.html>

11. Air Force set to order 100 more indigenous LCA Mk1A fighter jets (*economictimes.indiatimes.com*) August 25, 2023

New Delhi: The Indian Air Force (IAF) is planning to buy 100 LCA Mark 1A fighter jets from the Hindustan Aeronautics Limited (HAL). A proposal to this effect this has been submitted to the Ministry of Defence.

In a major show of confidence for the indigenous Light Combat Aircraft (LCA), the air force is set to order an additional 100 of the Mk 1A variant of the fighter jet, with the order value likely to be around \$8 billion.

The Indian Air Force (IAF) has already placed an order for 83 LCA Mk1A fighter jets, the first of which is to be delivered by early next year. The Mk 1A version is a major improvement over the 40 Mk1 jets that were originally ordered by the air force, with modern avionics, Active Electronically Steered Radar, a new electronic warfare suite and a Beyond Visual Range missile capability.

The order will place the total number of LCA jets-also called Tejas-in the Indian fighter fleet at 223, second only to the Russian origin Su 30MKI fighter jets. India has also recently announced a deal for manufacturing of GE F414 engines under technology transfer pact with the US. These are for the under development Mk2 variant of the LCA, with numbers ordered expected to be in excess of 100. In July, the LCA completed seven years of accident free service in the air force.

On Tuesday, Chief of Air Staff Air Chief Marshal VR Chaudhari reviewed the status of the LCA programme at Air Headquarters with all stakeholders, including manufacturer Hindustan Aeronautics Limited (HAL). The officer termed the LCA as the flag bearer of IAF's efforts towards indigenisation of its aircraft fleet. HAL officials have earlier told ET that the production rate of the LCA can be increased by 2-3 times, depending on the requirements of the air force.

The air chief said that the new LCA Mk 1A would be inducted in a newly-raised squadron in an operational base by early next year. "With timely deliveries of the more capable variant, the LCA Mk 1A is likely to see increased deployments at forward bases, besides participation in international exercises in the days to come," an official said. <https://economictimes.indiatimes.com/news/defence/air-force-set-to-order-100-more-indigenous-lca-mk1a-fighter-jets/articleshow/103034398.cms?from=mdr>

12. Discom health key to meeting economy's power needs *(thehindubusinessline.com) August 25, 2023*

Electricity distribution companies (Discoms) are the backbone of the country's power sector. Their poor financial health can have a ripple effect on the efficient functioning of the electricity generation and transmission sector. For India's growth momentum to stay intact, the effective functioning of all three is crucial. The Central Electricity Authority's (CEA's) Optimal Generation Mix report for 2029-30 projects a peak electricity demand of 334.8 gigawatts (GW) and electrical energy requirement of 2,279.7 billion units (BU) for 2029-30. To meet this demand, India needs to add 777.1 GW of capacity, including 251.7GW of coal and lignite, 292.7 GW of solar photovoltaic, 99.9 GW of wind and 53.8 GW of hydro.

Given the uncertainty around Discoms being able to effectively cater to demand, Indian consumers, especially commercial and industrial (C&I), installed 77 GW of captive installed capacity as of June 2022. Further, most residential consumers have backup power, which either runs on battery or diesel, adding to carbon emissions. In rural areas, people stack fuel like kerosene, solar home systems and solar pumps, in addition to the grid, to deal with erratic power supply.

The political economy is critical in determining the electricity tariff, with most States providing subsidies to agricultural and residential consumers. However, these subsidies are poorly targeted, adding to the financial woes of Discoms.

In the last couple of years, the government has announced several measures to instil financial discipline in Discoms — improved cash flows, a streamlined accounting process, differential time-based tariffs and strengthened demand projections.

The recent amendment to the Electricity (Second Amendment) Rule 2023 aims to improve subsidy payments to Discoms by streamlining the accounting, reporting and billing processes. Moreover, the government's decision to implement Time of Day (ToD) tariffs for C&I consumers from 2024 onwards and smart prepaid meters' installation will not only ease the strain on the grid during peak hours but also encourage responsible electricity consumption patterns and optimise costs. Shifting the power demand from evening to daytime can help reduce tariffs by tapping into solar power, and such measures can promote greater deployment of clean energy.

With the help of the July 2023 CEA guidelines on power demand projections, Discoms can plan and optimise their operations, resulting in reduced losses and improved efficiency.

The Finance Ministry has earmarked ₹1.4 trillion (\$17.3 billion) under additional borrowings in FY24 for States to undertake power sector reforms. This includes transparency in the reporting of financials, timely rendition of financial/energy accounts and auditing, providing subsidies through direct benefit transfer (DBT) to consumers and achieving targets for reduction in Aggregate Technical and Commercial (AT&C) losses.

These government initiatives are already creating a positive impact. AT&C losses have reduced from 23.7 per cent in FY16 to 15.8 per cent now, according to the Ujjwal Discom Assurance Yojana (UDAY) dashboard. The government aims to reduce losses by improving the billing and collection ratio through smart metering. <https://www.thehindubusinessline.com/opinion/discom-health-key-to-meeting-economys-power-needs/article67231605.ece>

13. Look beyond the metro rail: Many Indian cities are keen on the capex-intensive system, but the solution lies elsewhere (*financialexpress.com*)
August 25, 2023

Urban India has been experiencing an upgrade of its PT systems to meet its rapidly-growing travel demand.

Globally, a variety of public transport (PT) systems have been developed and used to meet urban travel demand. These include high-capacity systems like metros, light rail transit (LRT), trams, trolley buses, bus rapid transit (BRT), etc, and the ubiquitous three- and four- wheelers (rickshaws, taxis, etc).

Urban India has been experiencing an upgrade of its PT systems to meet its rapidly-growing travel demand. The most significant upgrade is the implementation of the

metro system that has redefined the standards of PT. Metros now operate in 13 cities; in 29 more, these are under construction or have been approved or proposed.

However, these networks have not yet achieved the expected benefits, primarily because the ridership is much lower than what was estimated. Delhi Metro—India's largest such network—has managed just 47% of the projected ridership. Most metros have less than 15%—less than 10% for some others—of the projected ridership. This is a double whammy—not enough people enjoy the benefits, and operations become financially unsustainable. Metro systems are capital-intensive and cost about 220 crore (elevated) to 550 crore (underground) per km. They create massive non-performing assets when they prove financially unsustainable. Thus, any decision to set up a metro system must be thoroughly scrutinised. A research paper published by The Infravision Foundation (in collaboration with IIT Delhi) presents a framework to understand the suitability of various PT options for Indian cities. The suitability of such systems is dictated by what urban planners call differentiated travel demand, which is characterised by the number of trips per day, distance travelled per trip, ability to spend, city population, and vehicle ownership. This demand must guide the choice of PT systems to ensure maximum benefits. Data shows that about 30-60% of urban trips are of less than 5 km and more than 75% of the trips are of less than 10 km, regardless of the city's population density and per capita income.

Different PT systems are suitable for different travel demands. While metro systems suit long-distance trips (>10 km), bus systems, LRTs, trams, and trolley buses can meet medium-range trips (5-10 km). Intermediate public transport (IPT) systems like e-rickshaws, auto-rickshaws, and taxis can cover trips of less than 5 km for small cities and serve as feeders for larger systems.

Therefore, an integrated public transport system is essential to meet the differentiated travel demand in cities of different sizes. This integration must be at the policy, planning, operations, and infrastructure design stage and needs a strong policy and implementation framework.

For commuters, convenience and reliability dictate the preference. PT systems have a fixed route and many commuters need to make transfers in reaching their destination. Therefore, a commuter may spend significant time accessing and exiting the PT system.

In contrast, private vehicles (PVs) are under the control of the user, offering convenience, adaptability and flexibility as a door-to-door unimodal service. Rising incomes and affordability of PVs have resulted in increasing use by a large proportion of commuters for daily commutes, leading to traffic snarls and pollution. An efficient PT system, therefore, must compete with the convenience and comfort offered by personal vehicles.

So how should the city managers and urban planners plan an appropriate mobility infrastructure?

Responses to the following questions can guide them:

- How can the dependence on PVs be reduced?
- How can current PT users be retained as incomes rise and PV ownership grows?
- How can the share of PT users, pedestrians, and bicyclists be increased?

-What proportion of the population can be served by the selected PT system?

What level of subsidy will be required to run quality PT services? The accompanying graphic shows the suggested strategies for Indian cities that are based on the existing differentiated travel demand.

The key lies in understanding differentiated travel demand and complementarity of different PT systems to provide an integrated solution at all levels—policy, planning, design, and operations.

For example, in megacities like Delhi (with about 300 km of operating metro network), the existing bus system must be strengthened. The operational integration of the bus system with the metro (common tickets, running on all arterial and sub-arterial roads, maximum frequency of 5 minutes, exclusive lanes on congested corridors) is also required. In smaller cities like Patiala (~1 million population), bus systems running on all arterial and sub-arterial roads with few sections of exclusive lanes can meet the travel demand. IPT vehicles are suitable for shorter trips in Patiala and the last-mile connectivity to bus and metro systems in Delhi.

Such a robust and scientific framework can help Indian cities and their managers provide a comfortable and accessible PT system and improve the “ease of living” for citizens. More importantly, capex-heavy metro systems are often not the right answer. <https://www.financialexpress.com/opinion/look-beyond-the-metro-rail-many-indian-cities-are-keen-on-the-capex-intensive-system-but-the-solution-lies-elsewhere/3221987/>

14. Kerala government offices owe Rs 2,000 crore to KSEB
(*newindianexpress.com*) 25 August 2023

THIRUVANANTHAPURAM: Various government offices have regularly defaulted payment of power bills, plunging the KSEB into deep crisis with the arrears amounting to a staggering Rs 2,013 crore. The KSEB has until 2025 to collect the arrears, failing which it stands to lose the Union Energy Ministry’s grant for the Revamped Distribution Sector Scheme (RDSS) smart meter project.

Power Minister K Krishnankutty will take up the arrear issue with Chief Minister Pinarayi Vijayan during the online meeting scheduled on Friday evening on the power crisis.

According to the Centre, there should be no arrears by 2025, by when the RDSS smart meter project will be implemented. In fact, the project document has a clause that by next year, the dues should not exceed the current year’s figure.

What makes the realisation of pending bills tough for KSEB is the fact that the Kerala Water Authority, the top defaulter, is reeling under huge financial loss and has not paid dues since 2018. A top KSEB official told TNIE that KWA owes the board a whopping Rs 1,680 crore.

“In 2018, the KWA paid KSEB Rs 1,300 crore. After that, they have not paid any arrears,” said the official. “Arrears of various PSUs amount to Rs 182 crore, while that

of the Kerala Police come to Rs 151 crore. They have to pay only the principal amount. There is no interest,” the official said.

Interestingly, the KSEB itself owes the police department Rs 50 crore, the salary of the personnel deployed at various dams. The KSEB official said the amount will be adjusted in the arrears. Uncertainty on smart meters will also be taken up at the online meeting being held at 3:30 PM.
<https://www.newindianexpress.com/cities/thiruvananthapuram/2023/aug/25/kerala-governmentoffices-owe-rs-2000-crore-to-kseb-2608447.html>