

NEWS ITEMS ON CAG/ AUDIT REPORTS

1. Is there a problem with India's Metro Rail? (*finshots.in*) 9 JANUARY 2024

In August 2023, an independent think-tank in India called The Infravision Foundation got together with a couple of professors from IIT Delhi and published a whitepaper. It pointed out issues with India's metro rail network. No one paid much attention to it initially. But then, UK-based publication The Economist picked it up last week. And suddenly, the government of India felt the need to provide a rebuttal.

So in today's Finshots, we tell you what's the fuss around India's metro rail network.

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The Story

You can't deny the allure of a metro railway. Sleek carriages quietly whiz along a structure in the sky. It gives cities an aura of development. And not to forget the promise of getting to your destination avoiding the traffic snarls. It's too good an opportunity to pass.

And India is on overdrive with metro construction. We've earmarked around ₹90,000 crores for it in the past decade. We're commissioning 6 km of new track every month. And we will soon have the second-largest network in the world. We'll be just behind China.

But behind the glitz of these metro projects, there seems to be a problem too...

The riders are missing!

Yup, a whitepaper by a couple of professors at IIT Delhi looked into the ridership numbers and said that all the metros in India operate far below projections—it's at 47% in Delhi, it's 30% in Mumbai and Kolkata, and Bengaluru sees a measly 6%.

What?! That is shocking!

And when The Economist picked this news up, it created a massive furore. The government issued a statement and claimed that the daily metro ridership figure now stands at 10 million. And as for Delhi, it has beaten the ridership projection for 2023.

Now it's worth pointing out a couple of things here.

For starters, the whitepaper didn't say that the absolute numbers were appalling. Rather, it simply said that metro projects were predicated on a certain number of riders using

the service daily. That's how the massive costs to set up the networks were justified. That's the reason they got the green light in the first place. But when those projections fail, it could put the metro projects at risk. It means the metro may not be earning enough to sustain itself financially. And if this continues, the financial viability of metros could be under threat.

Secondly, it's not just this whitepaper that has brought this ridership issue to the fore. The government's auditor, the Comptroller and Auditor General of India (CAG), had questioned the Delhi Metro a couple of years ago. It pointed out that by March 2020, the metro ridership was way behind what it had projected in its initial report. A parliamentary committee looked into Lucknow's metro rail and said that the project needs 200,000 daily riders to repay loans. But it only had around 85,000.

So yeah, the problem does seem to be genuine, no? And it's no wonder then that experts have pointed out that most metro projects in India aren't profitable.

This begs the question—don't people like metros?

Well, they probably do. But, there could be an issue of last-mile connectivity.

See, for many Indians, it might not be easy getting from one's home to the metro. Or from the metro station to the office. Everything is dispersed. So you might have to walk.

But India's not a walking city. And by that, we mean that we lack wide footpaths and amenities to make walking a habit. So getting to a metro station might involve taking an autorickshaw. There's extra money involved in that.

The only way out is feeder buses—the ones that operate with the sole intention of connecting public transit locations with other major stops. And unfortunately, most metros in India have failed to pay attention to this. Here's something from the CAG report about Delhi again: "...Bus services were available only on 44% of the total approved routes due to the shortage of buses."

This tiny inconvenience would dissuade even more people from using the metro.

Another reason, as the recent whitepaper pointed out, is that metro rails make sense for longer commutes—of more than 10km. So if you live in Bengaluru, the metro could be a game-changer if you commute from say your home in Mysore Road to your office in Whitefield. That's a distance of roughly 30km. But the problem is that nearly 70% of the metro rides in India are less than 10km. So the allure of saving time isn't as great anymore for short distances. Especially if you tack on the time it takes to pass through security at the station, wait for a train, and then deal with last-mile connectivity issues.

But despite these issues, we're pumping money into these fancy projects and probably ignoring its humble cousin—the bus. A couple of years ago, Rohit Chandra, another professor at IIT Delhi, wrote this for The Morning Context:

As transportation expert Geetam Tiwari points out, if the number of tax exemptions and interest-free subordinate loans made available to the DMRC [Delhi Metro] was given to the Delhi Transport Corporation (which runs Delhi's buses), it would impact a lot

more people—almost twice as many—in terms of daily ridership. In fact, if you were to compare costs, the aggregated total cost of Delhi’s buses would be about 5% of the investment required for the Delhi Metro while carrying 40% more passengers. Tiwari also points out that the aggregated greenhouse gas emissions by Delhi’s buses—powered by CNG—over their lifetime are lower than that of the Delhi Metro because of the massive emissions from initial construction.

Buses.

Lower costs—check

Fewer emissions—check.

So, should we abandon these metro projects and opt for buses, you ask?

Well, not so fast. Because as the government pointed out, if we had to meet the high peak-hour ridership of 50,000 people on the Delhi Metro along some routes, we’d need 715 buses all travelling in one direction. And the time gap between these buses should be just 5 seconds. That’s quite an impossible endeavour, no?

That’s why the Metro is an enticing prospect. It does have the ability to pack in more people in one journey and you just can’t beat that.

Also, the whitepaper doesn’t say we should end all metro projects. Instead, it simply says that metros are very attractive for longer trips. And that for large cities with more than 8 million people, metros along with a feeder-bus system for connectivity can do wonders. In other cities, improving the bus system might be the way to go.

So yeah, it’s not really a debate of ‘this or that’. It’s more of a ‘this and that’ scenario. And we’ll do well to remember this as we ferociously expand our metro connectivity. <https://finshots.in/archive/is-indias-metro-rail-a-failure/>

STATES NEWS ITEMS

2. CAG rap: MC to try out AI to assess road health (*timesofindia.indiatimes.com*) Updated: Jan 9, 2024

CHANDIGARH: Having been reprimanded by the Director General of Audit last year for carrying out road repair work even on "good stretches", the Chandigarh municipal corporation has now decided to conduct its first-ever artificial intelligence-based survey to assess the condition of roads and the need for re-carpeting in the city.

Even the DG Audit had used an AI-based survey to point out anomalies in selecting stretches for re-carpeting.

The engineering department of the civic body authority has started the process where only one stretch of a road will be covered on a pilot basis to see and assess the impact of AI survey mainly to see the condition of roads while planning repair work or re-carpeting.

All the related technical aspects have been finalized and the work will be allotted through the tender process, MC sources said.

The engineering department of the MC has started the process to float the tender.

According to information, the AI-based survey will be primarily used to identify road anomalies like potholes, cracks or any other damage on the surfaces. Importantly, condition of the road will be assessed without manual intervention.

"Though there is no compulsion to use this technology for all road re-carpeting works in the future, the civic body wants to see and assess its efficacy, feasibility and requirement. This survey will be done only on a portion of a road and the report will be submitted to the senior officers," sources said.

Significantly, the Director General of Audit under the central government had carried out an AI-based survey to raise serious objections on road recarpeting works in May last year. <https://timesofindia.indiatimes.com/city/chandigarh/cag-rap-mc-to-try-out-ai-to-assess-road-health/articleshow/106651791.cms>

3. KLIS a Cesspool of Corruption: CAG Finds Excess Payments of Minimum of Rs.7,500 Cr (*deccanchronicle.com*) Updated: January 9, 2024

Hyderabad: High-profile Megha Engineering and Infrastructure Limited (MEIL) has allegedly pocketed thousands of crores of rupees of public money in the ill-famed Kaleshwaram Lift Irrigation Scheme (KLIS), thanks to the patronage it enjoyed from the previous Bharat Rashtra Samithi (BRS) government.

According to the draft performance audit report on KLIS by the Comptroller and Auditor General (CAG), the company was paid an excess of Rs.5,188.43 crore in just four packages, involving the supply and commissioning of pumps, motors and auxiliary equipment.

The amount is likely to be much more as there were 17 more such packages. While works in four of 17 packages were still under progress at the time of the audit in 2022, the BRS government did not provide invoices for 13 packages to the auditing agency, without which it could not arrive at the excess payments made to the contractors.

The Congress and Bharatiya Janata Party (BJP) alleged that the 'Bahubali' project of KLIS was a cesspool of corruption, which, they said, turned into an ATM for former chief minister K. Chandrashekar Rao.

Giving strength to these allegations, the CAG, within the limited opportunity it got to audit the controversial project, established that contractors like MEIL, L&T and Navayuga were extended undue benefits of at least Rs.7,500 crore.

The CAG said L&T was paid an excess of Rs.66.29 crore in road construction, Rs.29.01 crore towards dewatering charges and Rs.26.46 crore for the additional lead for procurement of metal in Medigadda Barrage that sank recently.

The audit report also clearly established that the cost of KLIS would cross Rs.1.5 lakh crore, against the BRS' claims that the total outlay of the project itself was Rs.80,000 crore and a full study of the expenditure would provide an enhanced figure of undue payments made to contractors.

"The way the administration, from top to bottom, doled out benefits to contractors obviously after receiving kickbacks leaves one wonder if the government can indulge in such gross and glaring irregularities and get away with it," a retired engineering official said.

The siphoning of public funds was done in several ways, including price adjustments, loading excess quantities in estimates and more importantly, not reducing the estimate even after reducing the scope of work.

The CAG found that then government obtained price estimates for pumps, motors and auxiliary equipment from the Public Sector Undertaking Bharat Heavy Electricals Limited in 2008, but the BRS government prepared the estimates based on inputs provided by the irrigation adviser and that the irrigation department had no clue on how the price was arrived at.

As a result, the contractor took advantage and paid Rs.1,686 crore to BHEL for the equipment, against the inflated estimate price of Rs.7,214 crore. Even after factoring in 20 per cent profit against the permitted 13 per cent, the contractor still was extended undue benefit of Rs.5,188.43 crore, the CAG pointed out.

The government, according to CAG, allowed price adjustments (in the event of changes in rupee value in the international market) for electro-mechanical and hydro-mechanical equipment to the successful bidder, although it outright rejected such requests in the pre-bid meetings.

The CAG put the excess payments made in the form of price adjustments at Rs.1,343 crore.

In Package 18, the government reduced the length of the tunnel and corresponding works but it did not bring down the estimated price, resulting in an undue benefit of Rs.94.32 crore to the contractor.

Similarly, in Package 17 audit tunnel works, the contractor got an excess payment of Rs.50 crore.

In Package 9, additional survey charges of Rs.48 crore were paid to the contractor.

For the pressured pipe irrigation system in Package 21A, the contractor was paid Rs.21 crore towards excavation and disposal of soil at identified spots one kilometre away from the pipeline. However, the CAG found that the pipe laid was too small that it did not require excavation and transportation of soil at all.

In Package 16, the length of the canal was reduced from 89 km to 57 km, but the government paid for 89 km, because of which the contractor got the undue benefit of Rs.117 crore.

In Package 12 of Link IV, the CAG concluded that the actual requirement of steel quantities used in tunnel construction would be 182 MT but it was shown as 13,048 MT in the estimates, because of which the contractor got an additional payment of Rs.64.98 crore.

In Package 15, the value of additional works was inflated by Rs.58 crore, said the CAG. <https://www.deccanchronicle.com/nation/crime/080124/klis-a-cesspool-of-corruption-cag-finds-excess-payments-of-rs7500-c.html>

4. Future not uncertain, KIIFB to move into own office building (*newindianexpress.com*) 09 January 2024

In a move indicating its plans to have a permanent presence, KIIFB has announced that it is establishing its own big office building near the secretariat in Thiruvananthapuram.

KOCHI: The Kerala Infrastructure Investment Fund Board (KIIFB) is here to stay. At least, that's the message the government has given. In a move indicating its plans to have a permanent presence, KIIFB has announced that it is establishing its own big office building near the secretariat in Thiruvananthapuram. The move comes at a time when the Union government has made attempts to clip its wings.

In an expression of interest (EoI) last week, KIIFB said it proposes to acquire office space/building with a space of 65,000-100,000 sq ft with "clear and unambiguous title deeds" in the state capital on outright purchase basis or on long lease. The space/building should be situated within 1km of the secretariat, said the EoI. Currently, KIIFB functions from a rented space in Felicity Square on MG Road, Statue.

The premises should have the facility for parking 25-30 cars and 150-200 two-wheelers at once. The EoI comes at a time when the infra-funding agency's future was under a cloud after the Centre said loans taken by KIIFB would come under the state's overall borrowing limit.

Earlier, the Comptroller and Auditor General (CAG) said KIIFB's ways of raising funds were unconstitutional and an encroachment by the state on the powers of the Union government. KIIFB had raised Rs 2,150 crore through rupee-denominated 'masala bonds' and listed the bonds on the London Stock Exchange in March 2019.

KIIFB, which was established with the main objective of providing investment for critical and large infrastructure projects in Kerala, received Rs 2,470 crore from the government from motor vehicle tax and petroleum cess (levy) in the 2022-23 financial year. It is expected to receive Rs 2,810 crore in the current fiscal year, according to rating agency S&P Global.

Meanwhile, Kerala continues to seek clarity on the open market borrowing limit of Rs 20,500 crore imposed on it for fiscal 2024, said S&P Global. "If maintained, this cap may begin to limit KIIFB's future borrowing programme," it said.

Top KIIFB officials told TNIE that the move to establish its permanent office space showed the state government's confidence in the agency to deliver the goods, and on its long-term existence notwithstanding recent uncertainties.

A 2,470 cr from motor vehicle tax and petroleum cess in the 2022-23 financial year was given to KIIFB by the state government. It is expected to receive D2,810 crore in the current fiscal year.
<https://www.newindianexpress.com/states/kerala/2024/jan/09/future-not-uncertain-kiifb-to-move-into-own-office-building-2649231.html>

5. जलवायु लक्ष्य व जस्ट ट्रांजिशन के लिए घातक साबित हो रहे हैं गुजरात के पेट्रोकेमिकल उद्योग (downtoearth.org.in) 08 January 2024

प्लास्टिक समेत अन्य पेट्रोकेमिकल उत्पादन से अंत तक की यात्रा में बड़ी मात्रा में ग्रीन हाउस गैसों का उत्सर्जन करते हैं

पेट्रोकेमिकल उद्योगों की वजह से गुजरात के कई इलाकों में रहने वाले स्थानीय लोगों का जीवन दूभर हो गया है। वहीं, इन उद्योगों की वजह से होने वाले प्रदूषण की वजह से जलवायु लक्ष्य तक प्रभावित हो रहे हैं। पहली कड़ी में आपने पढ़ा: पेट्रोकेमिकल सेक्टर में जस्ट ट्रांजिशन: विकास, पर्यावरण और समुदाय के सवाल पर कौन करे बात? । आज पढ़ें अगली कड़ी -

गुजरात के भरुच जिले के दहेज औद्योगिक क्षेत्र में केमिकल और पेट्रोकेमिकल इंडस्ट्री के गोल्डन कॉरिडोर से गुजरते हुए कोयले की काली धूल और राख की परत चारों तरफ देखी जा सकती है। सड़क, मकान, दुकान, कपड़े, बर्तन यहां तक की अपनी सांस में भी लोग कोयले के बारीक कण उतरने की शिकायत करते हैं।

भरुच जिले के वागरा तालुका में दहेज पोर्ट को जोड़ने वाला, गोल्डर कॉरिडोर कहा जाने वाला मार्ग, जहां करीब 9.8 किलोमीटर लंबी कन्वेयर बेल्ट साथ-साथ गुजरती है। फोटो: वर्षा सिंह

खंभात की खाड़ी में समुद्र तट किनारे बसा लखीगाम गांव मछुआरों की बस्ती हुआ करता था। वर्ष 2011 की जनगणना के मुताबिक तकरीबन 5 हजार आबादी वाले गांव की जमीनें दहेज औद्योगिक क्षेत्र को विकसित करने के लिए ले ली गईं। गांव के समुद्री तट पर अडाणी पेट्रोनेट (दहेज) पोर्ट प्रा. लि. का विशाल टर्मिनल वर्ष 2003 में बना। कोयले, जिप्सम, स्टील, पॉली-प्रॉपिलीन, प्रॉपिलीन जैसे ठोस कच्चे माल की ढुलाई और ट्रांसपोर्ट का काम यहां बहुत तेजी से होता है। 4,200 मीट्रिक टन/घंटा की निकासी दर पर थोक में कोयले को संभालने के लिए कन्वेयर हैंडलिंग प्रणाली लगाई गई है।

लखीगाम निवासी अजय गोयल कहते हैं कि पोर्ट पर कोयले और जिप्सम की ढुलाई होती है तो पूरे गांव में धूल उड़ती है, (दाएं) लखीगाम की सड़कों, छतों, सामान पर जमा कोयले की धूल। फोटो: वर्षा सिंह

पेट्रोकेमिकल प्रदूषण से जूझता समुदाय

लखीगाम गांव के पूर्व उपप्रधान और सामाजिक कार्यकर्ता अजय गोयल कहते हैं “जब यहां कोयले और जिप्सम की ढुलाई होती है तो पूरे गांव में धूल उड़ती है। इसका सीधा असर हमारी सेहत पर पड़ता है। हम कोयले वाला पानी पीते हैं, कोयले वाला खाना खाते हैं, हमारी थूक और छींक से भी कोयला निकलता है। हमारा स्वर्ग जैसा गांव नर्क बन गया है”।

लखीगाम के बचे-खुचे बुजुर्ग मछुआरों ने मच्छी पकड़ने के लिए समंदर के दूसरे हिस्से में जाना शुरू किया। यहां की महिलाओं को आमतौर पर इन कंपनियों में साफ-सफाई का काम मिलने लगा। बहुत से पुरुष दैनिक मजदूरी करने लगे। युवाओं के सामने आईटीआई प्रशिक्षण लेकर नौकरी करने का रास्ता खुल गया। इंडस्ट्री के लिए जमीन देने वाले परिवार के एक सदस्य को नौकरी मिली।

गांव के लोग कहते हैं जिन्हें स्थायी नौकरी मिली वे भरूच जिले में पलायन कर गए। जो यहां हैं, उन्हें अस्थायी काम के साथ, रहने के लिए बेहद प्रदूषित वातावरण मिला।

कॉर्पोरेट सोशल रिस्पॉन्सिबिलिटी फंड से बने एक कमरे के कुछ पक्के घरों पर “अडाणी” नेमप्लेट लगी है। ऐसे ही एक घर के भीतर शंकर भाई राठौर एक कुर्सी पर बैठे हैं। उनकी पत्नी शंकुतला देवी घर के काम निपटा रही हैं। शंकर भाई बताते हैं कि 5 वर्ष से ज्यादा समय तक अडाणी पेट्रोनेट कंपनी में बतौर मजदूर काम किया। करीब डेढ़ महीना पहले पैरालिसिस अटैक पड़ा और वह चलने-फिरने में असमर्थ हो गए। “बीमार पड़ने पर काम छूट गया और कंपनी की तरफ से इलाज के लिए कोई मदद नहीं मिली। हमारा कोई स्वास्थ्य बीमा नहीं है। मैं एक दिहाड़ी मजदूर था”।

बीमार पति की देखरेख कर रही शंकुतला का भी काम छूट गया, “अगर मैं काम पर जाऊंगी तो इन्हें खाना और दवाइयां कौन देगा, शौचालय कौन ले जाएगा। कंपनी में मजदूरी करके घर में जो दो पैसे आते थे, अब वो भी नहीं आते”।

लखीगाम के युवा प्रदीप गोयल (सफेद शर्ट) और अजय गोयल (नारंगी शर्ट) क्षेत्र में बेहद तीव्र वायु और ध्वनि प्रदूषण की शिकायत करते हैं। फोटो: वर्षा सिंह

लखीगाम के बीच से गुजरती अडाणी कंपनी की 9.8 किलोमीटर लंबी कनवेयर बेल्ट यहां औद्योगिक विकास का प्रतीक है लेकिन इसका शोर ग्रामीणों के लिए असहनीय है। यहां के निवासी प्रदीप गोयल शिकायत करते हैं “करीब दो महीने पहले मैंने महसूस किया कि बाएं कान से कुछ सुनाई नहीं दे रहा है और कान में रह-रहकर सीटियां बज रही हैं। अब मैं डॉक्टर से इलाज करवा रहा हूं। दिन या रात कभी भी चलने वाले इस कनवेयर बेल्ट के शोर से मेरी तरह अन्य लोग भी प्रभावित होंगे। जिन्हें अभी पता नहीं होगा”।

गांव के प्राथमिक विद्यालय के ठीक पीछे से कनवेयर बेल्ट गुजरती है। प्रदीप दिखाते हैं “इसके शोर से बच्चे पढ़ नहीं पाते। यहां के लोगों को त्वचा, सांस यहां तक कि कैंसर जैसी बीमारियां हो रही हैं”।

दहेज प्राथमिक स्वास्थ्य केंद्र में तैनात डॉ. द्रुमिल वैद्य और पीएचसी से जुड़ी स्वास्थ्य कर्मचारी तरुणा परमार भी स्थानीय लोगों की शिकायत की पुष्टि करते हैं। वह मानते हैं कि प्रदूषण के चलते सामान्य लोगों को बहुत ज्यादा कफ, खांसी, फेफड़े की बीमारी और त्वचा संबंधी बीमारियां बढी हैं।

इन मुश्किल परिस्थितियों के बावजूद दहेज औद्योगिक क्षेत्र के निवासी ये नहीं चाहते कि ये औद्योगिक इकाइयां यहां से चली जाएं। दहेज गांव के सरपंच आहिर लक्ष्मण भाई कहते हैं “इंडस्ट्री आने की वजह से हमें रोजीरोटी मिली है। लेकिन ये कंपनियां सरकार के नीति-नियम भूल गई हैं और अपना फायदे बढ़ाने के लिए बहुत प्रदूषण करती हैं। हम एनजीटी तक गए लेकिन कुछ नहीं हुआ। हमने भी स्थिति स्वीकार ली है”।

स्थानीय समुदाय की इन शिकायतों की पुष्टि अगस्त 2022 में संसद में रखी गई कैंग रिपोर्ट ने भी की और जांच में पाया कि स्थानीय समुदाय और पारिस्थितिकीय तंत्र के बचाव के लिए जरूरी समाधान नहीं किए गए। जैवविविधता के लिहाज से बेहद समृद्ध समुद्री दलदलीय क्षेत्र में ये पोर्ट बना है, जो प्रवासी पक्षियों समेत मछलियों की कई प्रजातियों के लिए प्रजनन स्थल के तौर पर कार्य करता था। पोर्ट से जुड़ी पर्यावरणीय प्रभाव आकलन (ईआईए) रिपोर्ट में संचालन के दौरान तेल गिरने जैसी वजहों से समुद्री जल की गुणवत्ता प्रभावित होने की आशंका जताई थी। इसके बावजूद बचाव के उपाय नहीं किए गए।

खंभात की खाड़ी में गहरे पानी वाला, बहु-कार्गो बंदरगाह। फोटो: वर्षा सिंह

पेट्रोकेमिकल का बढ़ता कारोबार

दहेज के समुद्री क्षेत्र में अडाणी समेत ओएनजीसी, गेल, जीसीपीटीसीएल लिक्विड केमिकल टर्मिनल, एलएनजी पेट्रोनेट गैस टर्मिनल, रिलायंस लिक्विड फ्यूल जेटी, बिरला कॉपर बल्क कार्गो जेटी जैसे प्लेटफॉर्म मौजूद हैं।

औद्योगिक इकाइयों से एथिलिन, प्रॉपीलिन, पॉलीथीलिन, पॉलीप्रॉपलीन, बेंजीन, बुटाडीन समेत कई तरह के केमिकल और उर्वरक का उत्पादन होता है।

प्लास्टिक और उर्वरक दो सबसे बड़े उत्पाद समूह हैं। वाहनों, डिजिटल उपकरणों से लेकर भोजन तक में इनका इस्तेमाल होता है। दुनियाभर में तेजी से बढ़ते प्लास्टिक ने स्टील, एल्यूमिनियम, सीमेंट जैसे उत्पादों को भी पीछे छोड़ दिया है।

वर्ष 2020-21 में भारत की कुल प्रमुख पेट्रोकेमिकल्स स्थापित उत्पादन क्षमता 50.44 मिलियन मीट्रिक टन प्रति वर्ष (एमएमटीपीए) और उत्पादन 42.15 एमएमटीपीए रहा। जबकि पॉलिमर उत्पादन 12.14 एमएमटीपीए रहा। प्लास्टिक, कच्चे तेल और प्राकृतिक गैस से प्राप्त हाइड्रोकार्बन-आधारित पॉलिमर हैं।

भारत में केमिकल और पेट्रोकेमिकल उत्पादों की मांग वर्ष 2040 तक लगभग तीन गुना और 1 ट्रिलियन अमेरिकी डॉलर तक पहुंचने की उम्मीद है। मौजूदा समय में देश में इसका बाजार 190

बिलियन डॉलर का है। भारत दुनिया का छठा और एशिया का चौथा सबसे बड़ा केमिकल उत्पादक है। पेट्रोकेमिकल में विश्वस्तर पर 10% से अधिक वृद्धि में भारत का योगदान होने की उम्मीद है।

पर्यावरण कार्यकर्ता और टॉक्सिक वॉच एलायंस के गोपाल कृष्ण कहते हैं “हम जीडीपी में पेट्रोकेमिकल उद्योगों के फायदे का आकलन करते हैं। लेकिन इससे पर्यावरण और जैव-विविधता को नुकसान, पारंपरिक आजीविका और मानव सेहत पर असर की लागत का आकलन नहीं करते। इन्हें साथ देखें तो समझ आएगा कि ये कितना घाटे का व्यापार है”।

वह आगे कहते हैं, “केंद्रीय प्रदूषण नियंत्रण बोर्ड ने जिन पेट्रोकेमिकल उद्यमों को भारी प्रदूषण वाली इंडस्ट्री चिन्हित कर रेड केटेगिरी में रखा है, क्या इन्हें रेड केटेग्री में ही बने रहना चाहिए। जस्ट ट्रांजिशन की मांग इन उद्यमों में बदलाव लाने और पर्यावरण अनुकूल प्रक्रिया अपनाने की है”।

प्लास्टिक प्रदूषण और नेट जीरो

प्लास्टिक समेत अन्य पेट्रोकेमिकल उत्पादन से अंत तक की यात्रा में बड़ी मात्रा में ग्रीन हाउस गैसों का उत्सर्जन करते हैं, जो वैश्विक तापमान में बढ़ोतरी को 1.5°C से नीचे रखने का लक्ष्य हासिल करने में बड़ी बाधा हो सकते हैं। विश्वस्तर पर यदि मौजूदा दर से प्लास्टिक उत्पादन होगा तो वर्ष 2030 तक इससे सालाना 1.34 गीगाटन जीएचजी उत्सर्जन होगा। जो 500 मेगावाट के 295 से अधिक कोयला आधारित पावर प्लांट के बराबर होगा।

वैश्विक ऊर्जा चर्चाओं में पेट्रोकेमिकल इंडस्ट्री “ब्लाइंड स्पॉट” के तौर पर चिन्हित की गई है। जलवायु परिवर्तन के संकट को कम करने के लिए इस सेक्टर पर जरूरी ध्यान नहीं दिया जा रहा है।

प्लास्टिक प्रदूषण पर कार्य कर रही संस्था टॉक्सिक लिंक की चीफ प्रोग्राम कॉर्डिनेटर प्रीति महेश कहती हैं, “भारत में सिर्फ प्लास्टिक कचरे के निस्तारण और उससे जुड़े समुदाय के हितों की बात की जा रही है। इसके निर्माण के दौरान होने वाला प्रदूषण और उससे प्रभावित समुदाय पर कोई बात नहीं हो रही है। हम इसके उत्पादन को सीमित करने के लिए भी कोई बात नहीं कर रहे”।

प्लास्टिक प्रदूषण पर अंकुश लगाने के लिए 2 मार्च 2022 को संयुक्त राष्ट्र पर्यावरण सभा (यूएनईए-5.2) में एक अंतरराष्ट्रीय कानूनी रूप से बाध्यकारी, वैश्विक प्लास्टिक संधि, बनाने के प्रस्ताव का 175 देशों ने सर्वसम्मति से समर्थन किया था।

इस दिशा में एक महत्वपूर्ण कदम सितंबर 2023 में लाया गया जीरो ड्राफ्ट माना जा रहा है। इस ड्राफ्ट के मसौदे को अंतिम रूप देने के लिए वर्ष 2024 में दो महत्वपूर्ण बैठकें होनी हैं।

इस संधि का उद्देश्य वर्ष 2040 तक प्लास्टिक प्रदूषण को समाप्त करना है। ये सिर्फ प्लास्टिक कचरा नहीं, बल्कि इसके पूरे जीवन चक्र को शामिल करती है। प्रीति महेश कहती हैं “खाड़ी देश हों या भारत, वे अभी प्लास्टिक उत्पादन कम करने पर चर्चा नहीं करना चाहते। वे सिर्फ प्लास्टिक कचरे तक कार्रवाई के लिए ही तैयार हैं”।

पेट्रोकेमिकल क्षेत्र में जस्ट ट्रांजिशन कब?

भारतीय केमिकल और पेट्रोकेमिकल सेक्टर में करीब 20 लाख लोग प्रत्यक्ष तौर पर रोजगार से जुड़े हैं। इसमें सालाना 6% से अधिक बढ़ोतरी हो रही है। इसके अलावा औद्योगिक क्षेत्र के ईर्दगिर्द बसी लाखों की आबादी अप्रत्यक्ष तौर पर आजीविका के लिए इस पर निर्भर करती है।

संयुक्त राष्ट्र के क्लाइमेट टेक्नॉलजी सेंटर एंड नेटवर्क के सलाहकार बोर्ड के सदस्य सौम्य दत्ता कहते हैं “भारत के पास पेट्रोकेमिकल्स से दूर जाने की कोई ठोस योजना नहीं है, हालांकि हमारी सरकार के पास सिंगल यूज प्लास्टिक को कुछ हद तक सीमित करने के लिए एक अस्थायी और सीमित रणनीति है”।

“पेट्रोकेमिकल उत्पादन में बड़े कॉर्पोरेट घराने से लेकर छोटी मोल्डिंग इकाइयों, विक्रेताओं, रिसाइकल करने वालों तक, यह इंडस्ट्री बड़े पैमाने पर लोगों को रोजगार और मुनाफा देती है। हमारे जीवन का लगभग हर क्षेत्र प्लास्टिक से जुड़ा है। पेट्रोकेमिकल उद्योगों से बड़े पर्यावरणीय नुकसान के बावजूद, अगले कुछ दशकों में इन्हें रोकना मुश्किल है”, सौम्य आगे कहते हैं।

डब्ल्यूआरआई की रिपोर्ट के मुताबिक वैश्विक जलवायु लक्ष्यों को पूरा करने के लिए पेट्रोकेमिकल सेक्टर से दूर जाना होगा। विकासशील देशों को इस पर निर्भर श्रमिकों और समुदायों की सुरक्षा के लिए ‘जस्ट ट्रांजिशन’ यानी एक ‘न्यायसंगत परिवर्तन’ की आवश्यकता है। इससे महत्वपूर्ण पर्यावरणीय, सामाजिक और आर्थिक लाभ मिल सकते हैं। लेकिन ये विकासशील देशों के लिए महत्वपूर्ण चुनौती होगी।

प्लास्टिक प्रदूषण खत्म करने के बाध्यकारी दस्तावेज में भी इसपर निर्भर समुदाय को कौशल प्रशिक्षण और आजीविका के अवसर उपलब्ध कराने के लिए जरूरी नीति और व्यवस्था तैयार करने को कहा गया है।

गुजरात के पर्यावरण कार्यकर्ता उस्मानगनी शेरसिया कहते हैं “अगर पेट्रोकेमिकल कंपनियां हटती हैं तो समंदर में मछलियां और खेतों में फसल दोबारा लौट आएगी। इससे भी बड़ी आबादी का रोजगार जुड़ा है”। <https://www.downtoearth.org.in/hindistory/pollution/industrial-pollution/gujarat-s-petrochemical-industries-are-proving-fatal-for-climate-goals-and-just-transition-93766>

SELECTED NEWS ITEMS/ARTICLES FOR READING

6. GST Evasion: मई से अब तक 44000 करोड़ की टैक्स चोरी
(*hindi.cnbctv18.com*) January 9, 2024

वित्त मंत्रालय ने बताया कि नॉन-एक्सिस्टेंट टैक्सपेयर्स के खिलाफ पिछले मई से गुड्स एंड सर्विसेज टैक्स (GST) क्रेडिट से संबंधित 44,000 करोड़ रुपए से ज्यादा की संदिग्ध टैक्स चोरी (GST Evasion) का पता चला है। जीएसटी धोखाधड़ी (GST Fraud) पर अंकुश लगाने और रेवेन्यू बढ़ाने

के लिए केंद्रीय और राज्य टैक्स अधिकारी फर्जी जीएसटी रजिस्ट्रेशन और गुड्स और सर्विसेज की सप्लाई किए बिना नकली इन्वॉइसेज जारी करने के खिलाफ एक विशेष अभियान चला रही है. मंत्रालय ने एक बयान में कहा कि इस अभियान में संदिग्ध टैक्स क्रेडिट चोरी में शामिल 29,273 फर्जी फॉर्मों का भी पता चला है, जिसमें 121 लोगों को गिरफ्तार किया गया है.

4,153 फर्जी फॉर्मों से 12,036 करोड़ की ITC चोरी

मंत्रालय ने कहा कि इस प्रयास से 4,646 करोड़ रुपये की बचत हुई है, जिसमें से 3,802 करोड़ रुपये इनपुट टैक्स क्रेडिट को ब्लॉक करने और 844 करोड़ रुपये वसूली के माध्यम से है. अक्टूबर-दिसंबर 2023 को खत्म तिमाही में 4,153 फर्जी फॉर्मों से लगभग 12,036 करोड़ रुपये की संदिग्ध इनपुट टैक्स क्रेडिट चोरी (Input Tax Credit Fraud) रिपोर्ट की गई है. इनमें से आधे से ज्यादा फॉर्मों का पता केंद्रीय जीएसटी अधिकारियों ने लगाया है. इस दौरान 1,317 करोड़ रुपये का रेवेन्यू सिक्योर हुआ है. इन मामलों में 41 लोगों को गिरफ्तार किया गया. मंत्रालय ने कहा कि सरकार ने जीएसटी रजिस्ट्रेशन को मजबूत करने के लिए कई उपाय किए हैं. रजिस्ट्रेशन के समय बायोमेट्रिक बेस्ड आधार ऑथेंटिकेशन के पायलट प्रोजेक्ट्स गुजरात, पुडुचेरी और आंध्र प्रदेश में शुरू की गई हैं.

इन राज्यों में सबसे ज्यादा फर्जी फॉर्म

बयान में कहा गया है कि इसके अलावा सरकार ने जीएसटी रिटर्न की सिक्वेशल फाइलिंग और अलग-अलग जीएसटी रिटर्न फॉर्मों में उल्लेखित टैक्स लियाबिलिटीज के अंतर के समाधान के लिए सिस्टम की मदद से उत्पन्न सूचना जैसे उपायों के माध्यम से टैक्स चोरी को कम करने की कोशिश की है. टैक्स चोरी का पता लगाने के लिए डेटा एनालिटिक्स का भी उपयोग किया जा रहा है. मंत्रालय की तरफ से जारी आंकड़ों से पता चलता है कि महाराष्ट्र, राजस्थान, दिल्ली और उत्तर प्रदेश उन राज्यों में से हैं जहां दिसंबर तिमाही में सबसे ज्यादा फर्जी फॉर्मों का पता चला. <https://hindi.cnbc18.com/personal-finance/gst-evasion-tax-evasion-of-rs-44000-crore-86217.htm>

7. The 'easy revenue' addiction: States' dependence on Alcohol excise duties has been deepening (*financialexpress.com*) January 9, 2024

Furthermore, an array of challenges compounds the situation, encompassing enduring economic volatility, inflationary pressures, geopolitical uncertainties, and climate

The latest RBI 'State Finances: A Study of Budgets of 2023-24' report highlights the fiscal challenges plaguing numerous states. While the RBI cautiously projects a marginal improvement, anticipating states' debt to decrease to 29.5% of GDP in 2022-23 from 31.1% in 2020-21, this starkly remains above the prudent threshold of 20% set by the Fiscal Responsibility and Budget Management Act, 2003, Review Committee. The persistence of this fiscal imbalance demands attention and corrective measures.

The soaring debts of states underscore a troubling trend, revealing imperfect economic thinking at the sub-national level. Reverting to the old pension scheme, for instance, not only means a significant fiscal burden but also undermines the flexibility needed for boosting capital spending. Such decisions compromise the very economic fabric these states aspire to build, fostering doubt over their long-term financial prudence. The 16th Finance Commission faces a formidable challenge as the constitutional entity

responsible for devising the methodology to determine Centre-state relationships over a five-year period including sharing of revenue between the Centre and states, grants for state-specific needs.

Of the various issues the Commission may consider, the impact of indiscriminate freebies amid financial stress in states is an important one. Additionally, it may consider the financial impact of the resurgence of the old pension scheme in various states. It should increase the weightage assigned to the Human Development Index (HDI) and SDGs while incorporating India's climate goals into its formula. The commission improving upon the conditions linked to fiscal transfers to urban and rural local bodies, ensuring the efficient utilisation of funds, also remains a major concern.

Furthermore, an array of challenges compounds the situation, encompassing enduring economic volatility, inflationary pressures, geopolitical uncertainties, and climate change. These factors collectively overshadow precise fiscal planning, rendering revenue projections and resource allocation an arduous undertaking. Despite these obstacles, it is imperative to underscore the significance of striking a balance in revenue devolution, considering both vertical aspects (revenue-raising capacity) and horizontal factors (infrastructure and development disparities). With the rise of a consumption-driven economy, the imperative to balance it with socio-economic prudence becomes more pronounced.

Amid these challenges, the imperative of addressing women's empowerment cannot be overlooked. In theory, attaining political consensus on gender issues ought to be within reach for the Commission, as no political party openly opposes it. However, the true challenge lies in compelling states to honour their financial commitments and adhere to responsible fiscal behaviour in this regard. While states have various options, they are oblivious to long-term financial concerns and societal impacts of fiscal policies unless regulations enforce prudence.

Currently, for many states, the go-to revenue source—often at the expense of developing capacities in other revenue generating sectors—is the taxation of alcohol. According to a recent industry report, alcohol revenues account for 1.2% of India's nominal GDP, 7.7% of the total tax collection, and a striking 11.7% of the nation's indirect tax revenue. States are increasingly reliant on alcohol for revenue, with one in every seven rupees expected to be generated from state excise duties levied on it. In fact, if devoid of contributions from alcohol consumers, many states would find themselves forced to borrow funds for their social service expenditure or struggle to meet even half of their pension obligations.

The discourse on alcohol consumption is stark, demanding states to tread a sensitive line between the compulsion to generate tax revenue and the imperative to confront the adverse fallout of rampant drinking. While alcohol has entrenched itself in human history, the critical query persists: does the toll of detrimental consequences from drinking overshadow its role in states' revenue generation and obstructs its moral societal obligations?

In certain instances, many states take on the conflicting roles of both producer and distributor of alcohol, exploiting liquor sales as a readily available means to fortify state treasuries. This excessive dependence on alcohol-derived revenues reflects a

complacent and unsustainable governance approach. It conveniently sidesteps the need for proactive efforts to attract investments, hindering the exploration of more innovative and enduring income sources. These revenues demand minimal effort, often at the expense of societal well-being, as the repercussions of excessive alcohol consumption manifest in a host of social problems. From family disruptions to health crises and elevated crime rates, the toll is significant. States, fixated on escalating revenues, inadvertently become accomplices in social injustice, perpetuating societal issues through their reliance on alcohol.

For many states, these revenues form a considerable chunk of their income, perpetuating what can be labeled as the “lazy-economic model” of fiscal planning. The crux of the matter is that reliance on alcohol revenues discourages states from seeking out more innovative, sustainable, and equitable methods for income generation. Urgent measures are required to overhaul state-level policies, rendering them enticing for investments, tapping into the potential of the population, and capitalising on the unique geographical advantages each state possesses. In the pursuit of gender equality, the Commission must take resolute strides in reaffirming its commitment to this cause.

To enact meaningful change, it is important for the Commission to exclude revenues generated from alcoholic beverages when computing the Gross State Domestic Product (GSDP) for any state. This adjustment holds the potential to substantially reshape the resource allocation from the Commission, aligning fiscal policies with the overarching objective of gender equality. Additionally, this would compel states to diversify their revenue streams by fostering capacity-building initiatives to attract alternative investments and industries, as the exclusion of alcohol revenues would curtail the level of debt states can borrow (as it is linked to their SGDP). <https://www.financialexpress.com/opinion/the-easy-revenue-addiction-states-dependence-on-alcohol-excise-duties-has-been-deepening/3359199/>

8. Slowing nominal growth poses a challenge to the Centre (*thehindubusinessline.com*) Jan 08, 2024

After India’s real Gross Domestic Product (GDP) growth for the second quarter sprang a surprise at 7.6 per cent, forecasters upgraded their projections for FY24 to 7 per cent. But the First Advance Estimates for FY24 GDP growth from the Central Statistics Office suggests that more upgrades will follow. The CSO has now estimated that India’s real GDP will likely expand by 7.3 per cent in FY24. Should this come good, it would be a creditable performance achieved on a high base (real GDP grew 7.2 per cent in FY23). With this, India would have managed a 22 per cent absolute expansion in its economic activity and a 4.2 per cent annualised growth in the five-year term of the outgoing NDA regime, despite the Covid contraction. In the last three years, real GDP numbers in First Advance Estimates have been pegged upwards by 1-2 per cent in subsequent revisions.

A break-down of the data shows that the CSO does not expect any big shift in economic drivers in the second half of the year. Gross fixed capital formation, projected to grow 10.3 per cent in FY24 (11.4 per cent in FY23), will remain the hero. This is being fuelled by the Centre’s 33 per cent expansion in capital outlays for this fiscal. But with fiscal tightening on the cards, similar growth in outlays may be hard to deliver next year. Sustaining the investment juggernaut from here on will thus fall to the private

sector, which will need to be nudged to shift from maintenance capex to greenfield projects. The end of election-related uncertainty and positive GDP prints will hopefully provide a catalyst to business confidence in the latter half of FY25. With government consumption likely to remain low-key owing to tighter deficit targets, all eyes will be on a revival in private consumption to sustain GDP growth. On this score, the Advance Estimates does not have much good news to offer, as it projects private consumption growth to slow to 4.4 per cent in FY24 from 7.5 per cent last year. This would be a six-year low.

For it to improve, private consumption will need to be broad-based from credit-fuelled spending on premium products by affluent urban consumers, to more balanced demand for essential goods and services, from lower-income and rural consumers. On this, the sequential deceleration in employment-intensive sectors such as agriculture, manufacturing and trade, hotels, transport and communications in the second half, is a dampener.

While real GDP numbers have surprised on the upside, nominal growth pegged at 8 per cent for FY24 compared to 15.4 per cent last year, can prove a wet blanket. High nominal GDP growth gives the Centre headroom to stay within its fiscal deficit and debt-to-GDP targets even if its spending overshoots. The sub-par nominal growth forces the Centre to make the devil-and-the-deep-sea choice of either belt-tightening in Q4 to keep to the 5.9 per cent deficit target, or risk an overshoot by keeping up its spending that has been powering the economy. <https://www.thehindubusinessline.com/opinion/editorial/slowing-nominal-growth-poses-a-challenge-to-the-centre/article67719504.ece>

9. The secret sauce of India's climate march (*livemint.com*) 09 Jan 2024

India has been quick to recognize that the complexity of climate actions demand a synchronised orchestration of the will and might of government and business

In the vast realm of the world's sustainability landscape, one of the lesser-known yet compelling stories unfolds along the tracks of the Indian Railways. Renowned as one of the world's longest and busiest rail networks, it has become an unexpected hero in India's battle against climate change.

Far removed from the stereotypical image of trains chugging through industrial landscapes, this tale spotlights the state-owned rail service provider's determined pursuit of environmental sustainability, steering towards a goal of becoming a net-zero carbon emitter by 2030.

Indian Railways, which ferried 5,858 million passengers in the previous fiscal year, rolled out its first solar-powered train six years ago. It hasn't looked back since.

The department has installed solar power units at thousands of railway stations, electrified a significant portion of its vast track network, implemented waste-to-energy projects, adopted energy-efficient technologies, and undertaken numerous afforestation and tree plantation drives along railway tracks.

Indian Railways not a case in isolation

At the COP-28 held in Dubai last month, India affirmed its status among global top performers, ascending to seventh position in the Climate Change Performance Index for 2024—one spot higher than in the previous year and a significant climb from 31st position in 2014.

So what explains India taking long strides on climate change?

India was quick to recognize that the complexity and interconnectedness of climate actions demand a synchronised orchestration of the will and might of government and business. And that this was even more necessary in the world's fastest-growing major economy, where the pursuit of rapid GDP growth needed to be balanced with an environmentally conscious and sustainable approach to lift the living standards of millions of people.

After nearly four decades of liberalisation, collaboration between government and private sector on climate remains a relatively uncharted territory, and by no means easy. But it is gaining momentum, and much like the Green Railways project, is a less-known facet of India's fight against climate change.

To set out a clear national climate agenda, India has made public commitments towards achieving net-zero emissions by 2070 and reducing carbon intensity by 45% by 2030.

India is also pursuing climate-resilient urban development, waste management, recycling and circular economy, and large-scale afforestation. A slew of policy changes, private sector actions, and government and private investments are being unleashed to drive significant progress towards these ambitious targets.

A business case for sustainability

India's private sector sees the moral imperative as well as a business case. The country's transition to a net zero economy can build business resilience, catalyze new industries, generate over 50 million jobs, and have an economic impact of more than \$15 trillion, as per a World Economic Forum paper titled Mission 2070: A green new deal for a net zero India).

It is no surprise that nearly 90% of Indian corporate leaders consider sustainability as a primary driver of competitive advantage, long-term strategic growth, and lower costs, according to this EY India CEO Survey.

Large business houses are leading the way. The \$21-billion Mahindra Group has made public commitments on net zero emissions, renewable energy, and energy productivity and water and waste management. The conglomerate is also investing significantly in building a green business portfolio across electric vehicles, renewable energy, green buildings, logistics, and hospitality.

India's focus on domestic manufacturing presents a significant opportunity for economic growth and job creation in green industries. The government of India has allocated \$2.2 billion for the development of 5 million tonnes of green hydrogen capacity and 125 GW of renewable energy.

The private sector has pledged over \$200 billion to support India's energy roadmap. The government's production linked incentive scheme has attracted over \$8 billion in private sector investment, a large part of that going into electric vehicles, renewable energy, and battery production.

Startups too are playing their role. Climate startups are providing solutions for emission reduction, resilience, and sustainability across sectors such as agriculture, energy, and transportation.

To create an enabling environment, the government is promoting digitalization through multiple initiatives, such as the Digital Agriculture Mission. By encouraging the development of sustainable technologies, the government's 'Startup India Scheme' fosters the growth of startups that tackle pressing environmental challenges.

The Indian ethos of sustainable living

Underpinning the various government and business efforts on climate is the government's Mission LiFE (lifestyle for environment) initiative—an awareness mobilisation effort unveiled in 2022 to encourage Indians towards sustainable living.

Mission LiFE seamlessly aligns with the ethos of the Indian way of life, which is deeply ingrained in the principles of sustainability.

The journey of a cotton shirt in India—from work wear to weekend wear a few months later, and a floor duster a few years later—may seem amusing to many, but it highlights the reduce-reuse-recycle practice that has been hard-coded among Indians for centuries.

The Indian ethos, grounded in respect for resources and limited wastefulness, is being harnessed to contribute to a more climate-friendly society that will support the government and business efforts on sustainable growth.

In the times to come, I am sure that India will be seen as a torchbearer not just for progress on national climate goals but also for how government-business collaboration can play a pivotal role in getting there. <https://www.livemint.com/opinion/first-person/the-secret-sauce-of-india-s-climate-march-11704780244691.html>

10. Report calls for purchase obligation, banking of RE to reduce cost of G-H2 (*thehindubusinessline.com*) Updated - January 09, 2024

The report looks into actions required on the demand and supply sides and suggests measures to be taken to achieve the target of green hydrogen for \$2/kg, down from \$4-5 a kg today

A report prepared by Bain & Company for the World Economic Forum on "Green Hydrogen: Enabling Measures Roadmap for Adoption in India" has called for a 'green hydrogen purchase obligation' to spur domestic demand.

The report will be presented at a panel discussion at the World Economic Forum, Davos, next week.

The report looks into actions required on the demand and supply sides and suggests measures to be taken to achieve the target of green hydrogen for \$2/kg, down from \$4-5 a kg today.

Speaking to businessline about the report, Sachin Kotak, Partner, Bain & Company, one of the authors of the report, said that State governments should allow 'banking' of renewable energy so that there is no cost of storage added to green electricity supplied to the electrolysers. The report notes that electricity accounts for 50-70 per cent of the cost of green hydrogen.

The report stresses on the need for banking, saying that banking does not incur additional capital costs. "States such as Maharashtra and Gujarat, which receive surplus solar and wind energy, have developed systems for banking renewable energy. However, these facilities are not available throughout the country," the report says. It quotes an executive with a leading steel manufacturing company as saying, "While banking facilities are provided in policy, there is lack of clarity on the mechanism of banking about cost, physical infrastructure and capacity."

"To make banking available in every state throughout the country, greater clarity on the banking process is needed, including precise details on facility and ownership costs, banking capacity, award mechanisms, and the processes for renewable energy certification, among other issues," the report says.

To reduce the cost of renewable energy, the report notes that the "stakeholders might consider interventions to reduce the capital costs associated with setting up renewable energy plants." Capital expenditure costs account for at least 90% of wind and solar energy generation costs currently.

"Interventions that can effectively reduce capital costs include direct capital cost subsidies, goods and services tax (GST) waivers, reduced land fees, and stamp duty waivers, among others. For example, GST exemptions on solar panels (currently taxed at 12%) can reduce the cost of electricity generation by 10 per cent," the report says.

The report also wants intra-state transmission charges reduced or eliminated.

The report underscores the need for more pumped storage facilities. It says that "drawn-out clearance processes have delayed timelines and restricted private-sector contributions to only about 8 per cent of the total installed hydro capacity today." It calls for expeditious clearance of environmental clearances.

Alongside, the government should give more subsidies for the manufacture of electrolysers, which account for about "30-50 per cent of green hydrogen production costs." The PLI (an incentive) that the government gives electrolyser manufacturers today can only reduce the cost of green hydrogen by \$ 0.5, the report says. <https://www.thehindubusinessline.com/economy/report-calls-for-purchase-obligation-banking-of-re-to-reduce-cost-of-g-h2/article67720464.ece>

11. DRDO launches ‘Ugram’, indigenous assault rifle for armed forces (*indianexpress.com*) Updated: January 9, 2024

The Defence Research and Development Organisation (DRDO) on Monday launched Ugram, a state-of-the-art assault rifle of the 7.62 x 51 mm calibre, which has been indigenously designed, developed and manufactured in collaboration with a private industry partner. The assault rifle has been designed for the operational requirements of armed forces, paramilitary and state police entities.

The first operational prototype of the rifle, which has been named Ugram, which means ferocious, was unveiled at the hands of Dr Shailendra V Gade, Director General, Armament and Combat Engineering Systems of the DRDO on Monday in Pune.

The rifle has an effective range of 500 metres and weighs less than four kilograms and has been developed by DRDO’s Pune-based facility Armament Research and Development Establishments (ARDE) in collaboration with Hyderabad-based Dvipa Armour India Private Limited.

ARDE scientists, who have worked on the project, said the rifle was designed based on the General Staff Qualitative Requirements (GSQRs) of the Indian Army.

The rifle has a 20 round magazine and fires in both single and full auto mode. The configuration of the rifle is comparable to the latest AK and AR type rifles and it has a rivet-free design, making it robust.

The unveiling of this specific type of assault rifle of 7.62 x 51 mm calibre comes at a time when the Defence Acquisition Council had in December given a nod for procurement of 70,000 US-made SIG Sauer assault rifle of the same calibre for the Indian armed forces for over Rs 800 crore in addition to over 72,000 procured early in 2020.

DRDO’s Ugram will have to go through several internal tests, acceptance trials and user trials before it can be considered for induction.

Speaking about the Ugram assault rifle, ARDE Director Ankathi Raju said, “This was a mission mode project taken up two years ago. After the ARDE designed the rifle, we started looking for a private industry partner for development and manufacturing. Simultaneously, we started working on its hardware through our sources. We have followed the concept of Development cum Production Partner, DcPP for the speedy progress of the project. Under this, the vendor is associated with us during the design and production too. After the product is made by the vendor, it will undergo the acceptance trials. We placed the order for the assault rifle to the Hyderabad-based Dvipa Armour. The rifle will soon go for trials.”

A Mission Mode Project of the DRDO refers to a focused and time-bound development undertaken to achieve specific goals and objectives in the field of defence and technology.

Director Raju further said, “As part of its trial, a set number of rounds will be fired from Ugram without stoppage, and accuracy and consistency checks will be conducted. The

weapon will be tested in various weather and geographic conditions including the high altitude, desert etc. A board of Army officers will be constituted for the acceptance procedure. If some non-compliances are found, we will have to address them in specific time and the trials will be redone. Before these trials, we also conduct our own internal trials at our own small arms testing facility. While the process of design and design-related analysis started two years ago, the development in collaboration with the private vendor was completed in 100 days.”

G Ram Chaitanya Reddy, Director of the Dviba Armour India, said, “There is a major shortfall of assault rifles in India. The AK-203 project has not taken off because of the Russia Ukraine war and PLR is supplying weapons to the Israel Weapon Industries because of the Israel-Hamas conflict. So this window of opportunity has come up. Three months ago, in October 2023, we received the order. And we have successfully given five prototypes. We believe this is the fastest development of a weapon anywhere in the world. After the development of the prototype and their trials, we will go for more tests for which we will give 15 more units to the ARDE. Subsequently, the process of further clearances will begin.” <https://indianexpress.com/article/cities/pune/drdo-launches-indigenous-assault-rifle-for-armed-forces-9100894/>

12. Indian Railways logs 6,577 route kms electrification in calendar year 2023 (*business-standard.com*) Jan 09, 2024

The Indian Railways achieved 6,577 route kilometres (RKMs) electrification in the calendar year 2023, the government said on Monday.

"With a vision of providing an eco-friendly, faster and energy-efficient mode of transportation, Indian Railways is marching ahead towards 100 per cent electrification of Broad Gauge tracks", the Ministry of Railways said in a press release. With the latest figures, electrification stands at 93.83 per cent of the total Broad Gauge route of the Indian Railways.

The Indian Railways has set a target to become the world's largest green railway by 2030.

"Total Broad Gauge (BG) network of 61,508 Route Kms have been electrified up to December 2023 which is 93.83 per cent of total Broad Gauge route (65,556 RKMs) of Indian Railways," the press release added.

The government also highlighted its speed of taking up the electrification drive under the Narendra Modi government, noting that 21,801 KM of broad gauge network was electrified until the year 2014.

Railways would need 30.13 billion units of electricity after 100 per cent electrification

Notably, the railways would need around 30.13 billion units of electricity after 100 per cent electrification drive. Railways minister Ashwini Vaishnaw, during the winter session of the Parliament in December 2023, had informed the Lok Sabha of the estimated requirement. He added that "The actual demand will depend on the future passenger and goods traffic over Indian Railways."

So far, the Indian Railways has achieved 100 per cent railway electrification in at least 14 states/UTs. The push towards the electrification drive is aligned with the government's efforts towards the Sustainable Development Goals endorsed by the United Nations. https://www.business-standard.com/economy/news/indian-railways-logs-6-577-route-kms-electrification-in-calendar-year-2023-124010800917_1.html

13. Probe fund utilisation under Jalandhar smart city project: Meghwal writes to Puri (*hindustantimes.com*) Jan 09, 2024

Union law minister Arjun Ram Meghwal has written to Union minister of housing and urban development Hardeep Puri demanding a detailed inquiry into ₹1,000 crore allocated to the Jalandhar municipal corporation (MC) under the smart city project

Jalandhar : Union law minister Arjun Ram Meghwal has written to Union minister of housing and urban development Hardeep Puri demanding a detailed inquiry into ₹1,000 crore allocated to the Jalandhar municipal corporation (MC) under the smart city project.

The local BJP leadership had written to Meghwal to get the investigation done by the Central Bureau of Investigation (CBI) and the Central Vigilance Commission in the alleged misuse of funds.

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“I have requested for an investigation into the mega scam in smart city project. Strict action should be taken against all the guilty contractors, officials and political leaders,” Meghwal said in a press release issued on Monday.

Jalandhar BJP president Sushil Sharma said a ₹1,000 crore grant was sent by the Union government to the Jalandhar MC through the Punjab government, but they fear huge embezzlement of these funds.

“It came to fore that after the tenders were awarded, the contractors used poor quality material in these projects and made huge money in connivance with officials and politicians,” he alleged. <https://www.hindustantimes.com/cities/chandigarh-news/probe-fund-utilisation-under-jalandhar-smart-city-project-meghwal-writes-to-puri-101704740769276.html>

14. On drawing board for 60 years, MTHL completed after numerous remodelling, bidding processes (*indianexpress.com*) 09 Jan 2024

While Mumbai has been the epicentre of India and the state's commerce, urban planners for years had been looking at ways of ensuring that the proximal regions around Mumbai get benefit of the megapolis economic heft. This economic integration could be done only through improving connectivity in the region.

India's longest sea bridge is set to open this week that will facilitate greater economic integration of Mumbai with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug. While the project is being touted as one of India's mega transport

infrastructure projects, it has taken almost 60 years for the project to translate into reality. In these six decades, the project has been redrawn almost half a dozen times, undergone multiple unsuccessful project biddings, and has fallen victim to the acrimonious Ambani family feud before work commenced in 2018.

While Mumbai has been the epicentre of India and the state's commerce, urban planners for years had been looking at ways of ensuring that the proximal regions around Mumbai get benefit of the megapolis economic heft. This economic integration could be done only through improving connectivity in the region.

The first proposal

It was with this in mind that in 1963, the US consultancy firm Wilbur Smith and Associates, proposed a bay crossing concept with a bridge between Greater Mumbai and the mainland, and submitted a study report to the Ministry of Transport on 19 December 1963.

Subsequently, the Maharashtra government formed committees in 1972 and 1978 to study the possible alternatives for establishing the sea link across the Mumbai bay. The committees identified two alternative routes, a northern route linking Sewri with Nhava and a southern route linking Colaba (southern tip of Mumbai Island) with Uran.

In 1981, a steering group was constituted which reviewed the previous studies and recommended that a priority be given to the construction of a northern route connecting Sewri with Nhava.

On drawing board for 60 yrs, MTHL takes shape after many remodelling processes

Revived in 90s

The project, however, remained in the back-seat for close to a decade before being revived in the late 90s by the newly set up Maharashtra State Road Development Corporation which decided to test the feasibility of the project once again.

Subsequently, the first tenders were floated in 2006 with Maharashtra State Road Development Corporation being appointed as the nodal agency for the project that was to be built on a public-private partnership model.

Two years later, in February 2008, after a protracted battle in the Supreme Court, Anil Ambani's Reliance Infrastructure which was initially disqualified by MSRDC from bidding, emerged as preferred bidder, promising to build and recover the cost of building the Rs 6,000-crore bridge in nine years eleven months. His brother Mukesh Ambani's firm had quoted a toll collection period of 75 years.

Over to MMRDA

However, by June 2008, Anil Ambani bowed out of the project, so the state government then decided that the cash-rich Mumbai Metropolitan Region Development Authority

will build the project on a cash contract basis. In February 2009, cash contracts for the project were floated but no parties evinced interest in the project.

When the project was revived again in 2011, MMRDA appointed a new consultant for constructing the project on a PPP basis. In May 2012, MMRDA shortlisted five consortiums out of six that had expressed an interest in the project. But even by August 5, 2012, none of the five shortlisted firms submitted a bid on the project. As a result, MMRDA decided to scrap the initiative in August 2013.

EPC basis

With the project not taking off, MMRDA finally decided to undertake a switch to engineering, procurement, and construction (EPC) basis model, seeing funds from Japan International Cooperation Agency which agreed to fund 80 per cent of the project cost, with the rest of the funds to be paid by the Centre and state government. The deal and tendering was finally completed by December 2017, and work finally commenced on the much delayed project. <https://indianexpress.com/article/cities/mumbai/on-drawing-board-for-60-years-mthl-completed-after-numerous-remodelling-bidding-processes-9100813/>