

## **NEWS ITEMS ON CAG/ AUDIT REPORTS**

### **1. Aadhaar data of 815 million on sale on the dark web, says report** (*business-standard.com*) October 30, 2023

In a serious data breach, personally identifiable information of 815 million Indians has been up on the dark web for sale, according to a report by US-based cybersecurity firm Resecurity. Details such as Aadhaar and passport information along with names, phone numbers and addresses are available for sale online, it has said.

Media reports suggested that the Indian Council of Medical Research (ICMR) database might have been compromised, given the extensive scope and sensitive nature of the information. Queries sent to ICMR were not answered at press time.

“Securing assets is of importance for businesses in today’s world. The recent incident where the personal information of 815 million Indians was exposed in a data leak highlights the need for companies to take adequate measures,” said Sanjay Kaushik, managing director of Netrika Consulting.

According to the Resecurity website, on October 9 an individual using the alias “pwn0001” shared a post on BreachForums (a darknet crime forum) offering access to 815 million records containing information on “Indian Citizen Aadhaar and Passport”.

The hacker was willing to sell the entire Aadhaar and Indian passport dataset for \$80,000 when contacted by Resecurity.

In August this year, another threat actor known as “Lucius” posted a thread on BreachForums offering to sell a 1.8 terabyte data leak related to an unnamed “Indian internal law enforcement organisation”.

In April 2022, the Comptroller and Auditor General conducted an investigation into the Unique Identification Authority of India (UIDAI) and discovered that the authority had not effectively regulated its client vendors and safeguarded the security of their data vaults, as stated in a Brookings report.

Since its inception in 2009, UIDAI has issued approximately 1.4 billion Aadhaar cards. A report from the Brookings Institution in 2022 highlighted that the ID system ranked among the world’s largest biometric identification initiatives.

“Adopting measures like encryption, multifactor authentication and access controls are vital to protect data. Regular security audits and updates are also components of a cybersecurity strategy that can adapt to emerging threats effectively,” said Kaushik.

The exposure of personally identifiable information on the dark web, which includes Aadhaar and other personal details of Indian citizens, poses a substantial threat of digital identity theft. Malicious actors use pilfered identity data to engage in activities such as online banking fraud, tax refund scams and various cyber financial crimes.  
[https://www.business-standard.com/india-news/aadhaar-data-of-millions-of-indians-put-on-sale-on-the-dark-web-reports-123103000993\\_1.html](https://www.business-standard.com/india-news/aadhaar-data-of-millions-of-indians-put-on-sale-on-the-dark-web-reports-123103000993_1.html)

## **2. In Massive Aadhaar Data Leak, Personal Information of 815 Million Indians on Sale on Dark Web: Report (*india.com*)** October 31, 2023

In a massive data breach, personal information of 815 million Indians has been up on the dark web for sale, according to a report by US-based cybersecurity firm Resecurity. The report claimed that details such as Aadhaar and passport information along with names, phone numbers and addresses have been put on sale online.

However, reports suggested that the Indian Council of Medical Research (ICMR) database might have been compromised, given the extensive scope and sensitive nature of the information.

“Securing assets is of importance for businesses in today’s world. The recent incident where the personal information of 815 million Indians was exposed in a data leak highlights the need for companies to take adequate measures,” Sanjay Kaushik, managing director of Netrika Consulting, was quoted as saying by Business Standard.

As per the Resecurity website, an individual on October 9 using the alias “pwn0001” shared a post on BreachForums (a darknet crime forum) offering access to 815 million records containing information on “Indian Citizen Aadhaar and Passport”.

The report said the hacker was willing to sell the entire Aadhaar and Indian passport dataset for \$80,000 when contacted by Resecurity.

In a similar incident in August this year, another threat actor known as “Lucius” posted a thread on BreachForums offering to sell a 1.8 terabyte data leak related to an unnamed “Indian internal law enforcement organisation”.

Another incident of such kind was reported in April 2022 when the Comptroller and Auditor General conducted an investigation into the Unique Identification Authority of India (UIDAI) and discovered that the authority had not effectively regulated its client vendors and safeguarded the security of their data vaults, as stated in a Brookings report.

Since 2009, the UIDAI has been issuing approximately 1.4 billion Aadhaar cards and a report from the Brookings Institution in 2022 highlighted that the ID system ranked among the world’s largest biometric identification initiatives.

Kaushik said that adopting measures like encryption, multifactor authentication and access controls are vital to protect aadhaar data.

A hacker on X has also informed, “India Biggest Data Breach Unknown hackers have leaked the personal data of over 800 million Indians Of COVID 19. The leaked data includes: Name, Father’s name, Phone number, Other number, Passport number, Aadhaar number, Age”.

Media reports suggested that the Central Bureau of Investigation (CBI) is currently investigating the breach that was discovered by hacker “pwn0001.”

Notably, the data breach has come as a big blow to the Central government, which has been taking steps to digitize the economy and has built digital public infrastructure (DPI) based on the biometric identification number Aadhaar, individuals' mobile numbers. <https://www.india.com/news/india/in-massive-aadhaar-data-leak-personal-information-of-815-million-indians-on-sale-on-dark-web-report-6460420/>

### 3. Dark web पर बिक रहा करोड़ों भारतीयों का डेटा, आधार-पासपोर्ट डिटेल समेत नाम, नंबर भी लीक (*hindi.business-standard.com*) October 30, 2023

लाखों भारतीयों की व्यक्तिगत जानकारियां खतरे में आ गई हैं। अमेरिका की साइबर सुरक्षा कंपनी रीसिक्वोरिटी के अनुसार डार्क वेब पर लाखों भारतीयों की निजी जानकारियां बेची जा रही हैं।

लोगों की इन निजी जानकारियों में आधार और पासपोर्ट में दी गई सूचनाएं भी शामिल हैं। इनके अलावा लोगों के नाम उनके फोन नंबर और पता आदि भी सार्वजनिक हो सकते हैं।

समाचार माध्यमों में आ रही खबरों के अनुसार आईसीएमआर (ICMR) सूचना भंडार में संभवतः सेंध लगी है। इस बारे में बिज़नेस स्टैंडर्ड ने आईसीएमआर को ईमेल किया लेकिन समाचार लिखे जाने तक उसका कोई जवाब नहीं आया था।

इस बारे में नेत्रिका कंसल्टिंग के प्रबंध निदेशक संजय कौशिक ने कहा, 'दुनिया में कारोबार के लिए परिसंपत्तियों के साथ लोगों की व्यक्तिगत जानकारियां की सुरक्षा महत्वपूर्ण हो गई है। हाल में ही 81.5 करोड़ लोगों की व्यक्तिगत सूचनाओं की चोरी हुई थी। इससे कंपनियों के लिए अपने लोगों या कर्मचारियों की व्यक्तिगत जानकारियां सुरक्षित रखना जरूरी हो गया है।'

81.5 करोड़ लोगों की व्यक्तिगत सूचनाएं उपलब्ध कराने की पेशकश

रीसिक्वोरिटी की वेबसाइट के अनुसार 9 अक्टूबर को एक व्यक्ति ने ब्रीच फोरम्स पर एक पोस्ट डाला और 81.5 करोड़ लोगों की व्यक्तिगत सूचनाएं उपलब्ध कराने की पेशकश की। इन सूचनाओं में भारतीय नागरिकों के आधार एवं पासपोर्ट में दी गई सूचनाएं शामिल थीं।

जब रीसिक्वोरिटी ने इस हैकर से संपर्क साधा वह आधार एवं भारतीय पासपोर्ट से जुड़ी तमाम सूचनाएं 80,000 डॉलर में बेचने के लिए तैयार हो गया था। इससे पहले इसी वर्ष अगस्त में एक अन्य हैकर लूसियस ने ब्रीच फोरम्स ने भारत के किसी आंतरिक कानून क्रियान्वयन संगठन से जुड़ी जानकारियां बेचने की पेशकश की थी।

इससे पहले अप्रैल 2022 में भारतीय नियंत्रक एवं महालेखा परीक्षक (CAG) ने भारतीय विशिष्ट आधार पहचान प्राधिकरण (यूआईडीएआई) की जांच की थी। इस जांच में पाया गया कि अधिकारियों ने अपने वेंडरों पर ठीक से निगरानी नहीं रखी है और उनके सूचना भंडारों को सुरक्षित रखने के पर्याप्त उपाय नहीं किए गए हैं।

आधार दुनिया में लोगों की व्यक्तिगत पहचान बताने वाला सबसे बड़ा तंत्र

ब्रूकिंग्स रिपोर्ट में यह बात सामने आई है। 2009 में अस्तित्व में आने के बाद यूआईडीएआई ने लगभग 1.40 करोड़ लोगों को आधार जारी किए हैं। 2022 में आई ब्रूकिंग्स इंस्टीट्यूशन की एक रिपोर्ट के अनुसार आधार दुनिया में लोगों की व्यक्तिगत पहचान बताने वाला सबसे बड़ा तंत्र है।

कौशिक ने कहा, 'सूचनाओं की सुरक्षा के लिए सुरक्षित कोड सहित कई स्तरों पर सुरक्षा के इंतजाम करने होंगे ताकि कोई भी संवेदनशील सूचनाएं नहीं चुरा सके। नियमित अंतराल पर सुरक्षा जांच और साइबर सुरक्षा नीति में सुधार कर इन घटनाओं से प्रभावित तरीके से निपटा जा सकता है।'

डिजिटल पहचान चोरी होने का बड़ा खतरा

डार्क वेब पर लोगों की व्यक्तिगत सूचनाएं उपलब्ध होने और भारतीय नागरिकों से जुड़ी अन्य जानकारियां सार्वजनिक होने से डिजिटल पहचान चोरी होने का बड़ा खतरा पैदा हो गया है।

फर्जीवाड़ा करने वाले लोग अक्सर इन आंकड़ों का इस्तेमाल कर ऑनलाइन बैंकिंग धोखाधड़ी, टैक्स रिफंड घोटाले और अन्य साइबर वित्तीय अपराधों को अंजाम देते हैं। <https://hindi.business-standard.com/todays-epaper/data-of-crores-of-indians-being-sold-on-dark-web-aadhaar-passport-details-and-name-numbers-also-leaked>

#### 4. '81 करोड़ भारतीयों का आधार समेत निजी डाटा बिक्री के लिए उपलब्ध' (bbc.com) October 30, 2023

अखबार बिजनेस स्टैंडर्ड की रिपोर्ट के मुताबिक, 81 करोड़ से ज़्यादा भारतीयों की निजी जानकारी डार्क वेब पर बिक्री के लिए उपलब्ध है।

अखबार ने ये रिपोर्ट अमेरिकी साइबर सिक््योरिटी कंपनी रिसिक््योरिटी के किए दावे के हवाले से की है।

रिसिक््योरिटी की रिपोर्ट में दावा किया गया है कि भारतीयों के आधार कार्ड, पासपोर्ट समेत नाम, फ़ोन नंबर, पते ऑनलाइन बिक्री के लिए उपलब्ध हैं।

अखबार मीडिया रिपोर्ट्स के हवाले से लिखता है कि इंडियन काउंसिल ऑफ मेडिकल रिसर्च यानी आईसीएमआर के डाटाबेस से ये जानकारियां लीक हुई हैं।

बिज़नेस स्टैंडर्ड ने इस बारे में आईसीएमआर का पक्ष जानने की कोशिश की मगर ख़बर लिखे जाने तक जवाब नहीं आया।

नेटरिका कंसल्टिंग के मैनेजिंग डायरेक्टर संजय कौशिक कहते हैं, "डाटा को सुरक्षित रखना आज की दुनिया में बेहद अहम हो गया है। साढ़े 81 करोड़ भारतीयों का डाटा लीक होना, एक बार फिर कंपनियों को इस दिशा में ज़रूरी क़दम उठाए जाने की ओर ध्यान दिलाता है।"

रिसिक््योरिटी वेबसाइट के हवाले से बिज़नेस स्टैंडर्ड लिखता है, "नौ अक्टूबर को डार्क वेब के क्राइम फोरम ब्रीचफोर्म्स पर 'pwn0001' यूज़रनेम ने साढ़े 81 करोड़ भारतीयों के आधार और पासपोर्ट से जुड़ी जानकारी होने की बात कही।"

रिसिक््योरिटी ने जब संपर्क करने की कोशिश की तो ये हैकर आधार और पासपोर्ट का पूरा डाटा लगभग 80 हज़ार डॉलर यानी लगभग 66 लाख रुपये में बेचने को तैयार था।

पहले भी भारत से जुड़ा डाटा बिक्री के लिए उपलब्ध था इसी साल अगस्त में ब्रीचफोर्म्स में लूसियस यूज़रनेम ने भारत की क़ानूनी संस्थाओं से जुड़े 1.8 टीबी डेटा को बेचने की पेशकश की थी।

अप्रैल 2022 में कंट्रोलर एंड ऑडिटर्स जनरल यानी कैग ने यूआईडीएआई से जुड़ी जांच की थी। इस जांच में कैग ने पाया था कि अथॉरिटी डाटा को सुरक्षित रखने से जुड़े ज़रूरी कदम नहीं उठा रही थी।

2009 में आधार कार्ड की शुरुआत हुई थी. तब से लेकर अब तक 1.4 बिलियन आधार कार्ड यूआईएडीआई जारी कर चुका है.

थिंक टैंक ब्रुकिंग इंस्टीट्यूशन की 2022 की रिपोर्ट के मुताबिक, भारत का ये आईडी सिस्टम दुनिया के सबसे बड़े बायोमैट्रिक आईडेंटिफिकेशन सिस्टम में शामिल है.

कौशिक कहते हैं, "डाटा की सुरक्षा के लिए इंक्रिप्शन, मल्टीफैक्टर अथेंटिकेशन और एक्सेस देना बेहद अहम होता है. लगातार सिक््योरिटी ऑडिट्स और अपडेट्स किए जाने से भी डाटा को बचाया जा सकता है."

ऑनलाइन डाटा लीक होने से बैंकिंग फ्रॉड, टैक्स रिफंड स्कैमस और फाइनेंशियल क्राइम के बढ़ने के खतरे ज़्यादा रहते हैं. <https://www.bbc.com/hindi/articles/cnk3kvz83klo>

## **5. Indian Railways Far from Safe despite Several Initiatives** (*deccanchronicle.com*) October 31, 2023

Visakhapatnam: Attention riveted to the lack of safety on the Indian Railways following the train mishap at Kantakapalli and Alamanda on the mainline of the Waltair Division.

The Railway data from the 1960-2022 period showed a fluctuating pattern, with a peak of 14,769 accidents in the 1960-1971 period and a notable decline to 449 accidents during the 2015-2022 period. Yet, the recent mishaps, including the huge disaster in Odisha, followed by the accident in Waltair division this year. Stunningly, both have stark similarities.

According to the railway authorities, several factors collectively caused accidents like head-on collisions, derailments and fires. These include human errors, mechanical failures, vandalism, likely sabotage etc.

The CAG's (Comptroller and Audit General of India) 2022 report highlighted several shortcomings within the Indian Railways system that operates one of the world's largest and busiest rail networks. It noted that the Railways, with more than 21,648 trains serving approximately 22.15 million passengers and carrying 3.32 million tonnes of freight, must concentrate more on safety aspects.

Key factors contributing to rail accidents include poor rolling stock maintenance, a lack of pointsmen and the long working hours of crew members in several railway zones.

Despite the overall decrease in accidents, there have been derailments, level-crossing accidents, and fire mishaps off and on. During 2018-2019, there were 16 deaths and 30 injuries, for which there was a substantial increase in compensation. Some Rs 641 lakh was paid on these counts.

The following year, 2019-2020, there were no rail mishap deaths but there were 93 injuries. The railways paid a compensation of Rs 376 lakh in relation to these mishaps. In 2021-2022, there were nine deaths and 45 injuries. The compensation amounted to Rs 85.88 lakh.

The Indian Railways yearbook data provides valuable insights into the state of rail safety over the years.

Notably, when Prime Minister Narendra Modi took charge in 2014, his government had promised to accord first priority to safety and also to modernise the ageing, largely neglected rail network.

The promised Bullet age is still a far cry. There have been some commendable changes, but the overall rail scenario remains far from impressive. <https://www.deccanchronicle.com/nation/in-other-news/311023/indian-railways-far-from-safe-despite-several-initiatives.html>

## **6. Human error likely again in the Vizianagaram train tragedy as it was in Balasore, here is what is known so far (*opindia.com*) October 30, 2023**

On 29th October, two passenger trains collided in the district Vizianagaram of Andhra Pradesh, leading to the death of at least 13 passengers. Several passengers were reported injured in the accident. The Vizianagaram train accident, which reminded me of the tragic accident of Balasore in June 2023, possibly happened due to human error.

Though the Ministry of Railways has released no official statement over the cause of the accident, a report in Times of India suggested that ‘human error’ could be the reason behind the tragedy. The paper cited sources in the Indian Railway saying the accident appeared to have been caused by an overshooting of the signal by the Visakhapatnam-Rayagada passenger train.

According to a report in The Hindu, the accident took place when the Visakhapatnam-Palasa was running on the middle line and it had stopped as an overhead cable broke. The Visakhapatnam-Rayagada Express was coming from behind on the same line and rammed into the stationary train, resulting in the derailing of two coaches.

Therefore, going by how the accident occurred, it was the result of human error, as the loco pilot of the Visakhapatnam-Rayagada train ignored the signal and continued to run on the track, hitting the other train on its rear end.

According to senior government official Nagalakshmi S, there were 90 people in the two coaches that were derailed.

### **India needs quicker implementation of Kavach**

India is implementing an anti-collision system for the Indian Railways to avoid accidents. The Kavach system uses high-frequency radio signals to communicate with nearby trains and tracks. It is a set of electronic devices and Radio Frequency Identification (RFID) devices installed in locomotives, in the signalling system and in the tracks.

Apart from preventing head-on and rear-end collisions between trains on the same train, it can also slow down over-speeding trains, alert and apply brakes when a train crosses the signal, automatically whistle at level crossings, etc. The devices in the system

connect to each other to control the brakes of the trains and alert the drivers based on the logic programmed into the system.

It is important to understand that Kavach can work in both cases where there is a possible head-on collision or a collision from the rear end. The system works when both the trains are running, or when a train is stationary on a track and another train runs towards it on the same track.

While under development for a decade, work on it started in 2012, but the system is yet to be installed on the entire network. It is a vast system, which needs to be installed on every train, every railway station, and every signalling point.

The indigenously developed anti-collision system has been implemented in the railway network only recently. The trial of the Kavach system took place just a year ago, where two trains, one with Railway Minister Ashwini Vaishnaw, were driven towards each other on the same track, and the system successfully applied brakes to stop the trains in May last year. After that, the railways started installing the safety system in a phased manner.

According to a statement by the ministry issued in December 2022, Kavach has been deployed for 1,455 Route Kms on the South Central Railway with 77 locomotives. The length of the railway routes across the country is 68,000km. This means that nearly 99% of the routes are still to be covered under the system.

It is being installed on around 3000 km of track on the Delhi-Mumbai and Delhi-Howrah corridors. The Railways has informed that Kavach works have been sanctioned on 36,545 km routes. Apart from the Delhi-Mumbai & Delhi-Howrah corridors, work is also going on in train routes in West Bengal, Jharkhand, Bihar, Uttar Pradesh, Delhi, Haryana, Rajasthan, Madhya Pradesh, Gujarat and Maharashtra.

There are criticisms that the Railways is taking only small sections for Kavach implementation each year, and budget allocation is less. It is expected the Railway Board will accelerate the process following two back-to-back accidents involving the collision of two passenger trains.

Congress had spread misinformation about the diversion of funds

After the tragic Balasore accident, the Congress Party targeted the Modi government for allegedly misusing funds designated for railway safety. Citing a Comptroller and Auditor General (CAG) report, Congress pointed out that the money was spent on items like foot massagers, crockery, and furniture from the Rashtriya Rail Sanraksha Kosh (RRSK). For the unaware, RRSK is a dedicated fund for railway safety. However, Congress had misrepresented the CAG report.

The items mentioned in the report were purchased for Running Rooms. These rooms provide essential rest facilities for train crews between shifts. It has to be pointed out that Loco pilots and train managers need proper rest to ensure safety, as fatigue can lead to human errors, which have caused past accidents. The funds allocated for these items were minimal compared to the overall RRSK fund, and they were within the guidelines for staff welfare and passenger amenities under RRSK.

However, two accidents in just a span of six months showed that there is a need for better-trained loco pilots and train managers to take quick measures to avoid accidents.

#### Balasore Train Accident

On 2nd June 2023, 296 people died, and over 1,200 were injured in the tragic accident at Bahanaga Bazar station in Balasore, Odisha. On the day of the accidents, the Coromandel Express crashed into a stationary freight train. As a result of the Balasore Train Accident, some of the derailed coaches fell onto the adjacent tracks. A few minutes later, the Yeshwantpur-Howrah Express train came on those tracks and collided with the derailed coaches. <https://www.opindia.com/2023/10/vizianagaram-train-accident-in-andhra-pradesh-might-have-been-caused-by-human-error/>

## **STATES NEWS ITEMS**

### **7. TDP alleges anomalies in a/cs submission** (*timesofindia.indiatimes.com*) October 30, 2023

Vijayawada: TDP has requested Union finance minister Nirmala Sitharaman to take action against the state government for the ‘anomalies’ in the submission of accounts of various public sector undertakings (PSUs) to CAG.

Rajya Sabha MP Kanakamedala Ravindra, and Lok Sabha MP Kinjarapu Rammohan Naidu wrote a letter to the finance minister highlighting the findings of CAG.

It was mentioned that the CAG was critical of the government for not submitting the annual accounts of Skill Development Corporation, Fibernet Corporation and 50 other corporations to it for the past five years.

There are 118 corporations in AP, of which 97 are active. From the 97 corporations, 282 annual accounts reports are pending, Rammohan said. <https://timesofindia.indiatimes.com/city/vijayawada/tdp-alleges-anomalies-in-a/cs-submission/articleshow/104839972.cms>

## **SELECTED NEWS ITEMS/ARTICLES FOR READING**

### **8. A Decade of Write-Offs: How the Govt and Banks Failed to Tackle NPAs and Helped Big Corporations** (*thewire.in*) October 30, 2023

**The government has time and again stated that ‘write off’ does not mean relief to the borrower as recovery processes continue. But in practice, banks are compelled to forgo any hope of recovery.**

The minister of finance and corporate affairs Nirmala Sitaraman has time and again stated that ‘write off’ does not mean relief to the borrower. The rich corporate borrowers, who are usually the beneficiaries of such write-offs by banks, remain liable for repayment and the process of recovery continues, the minister has asserted. Banks continue to pursue recovery actions initiated for written-off accounts through various mechanisms.



When a borrower fails to pay back a loan, it is termed as a non-performing asset (NPA) under conditions laid down by the Reserve Bank of India. But banks are required to compensate for the loans classified as NPAs, an exercise known as ‘provisioning’ in banking terms. This provision is made by setting aside some amount from the bank’s profits on an annual basis as stipulated by the RBI. Over a period with a provision of about 100%, such NPAs are then removed from the asset books of banks and are known as write-offs. Bank professionals or chartered accountants too argue that a write-off is purely a balance sheet exercise, to reduce a bank’s tax liability. They argue that the accounts that are earmarked for write-off are normally 100% provided. Thus while writing off the accounts, banks are not put to loss at least in the balance sheet. But merely compensating for NPAs and bad loans from profits made elsewhere does not take away from the fact that write-offs constitute a huge drain on public money entrusted with banks. In addition, they constitute a bonanza for the big defaulters.

A bonanza for corporate defaulters, a burden on the public

As reported in *The Wire*, banks have written off Rs 14.56 lakh crore between 2014-15 and 2022-23. The share of large industries and services in the written-off amount is Rs 7,40,968 crore or 48.36%. The amount recovered during the period is a mere Rs 2.05 lakh crore or 14.07% of the write-offs.

The simple question arising out of these figures is, who pays for the remaining amount of 86% of unrecovered write-offs? It is the respective banks that ultimately bear the burden and this is precisely the reason why banks had to book the losses amounting to Rs 2,07,329 crore successively for five years from 2015-16 to 2019-20.

Even though borrowers continue to be liable for repayment, in practice banks are compelled to forgo any hope of recovery. Thus, in practice, a write-off becomes not only a waiver but a sort of debt relief to the borrowers in which predominantly corporates have a major share. This is shown by how NPAs have been brought down over the last few years.

The amount of provision on account of non-performing assets for the period 2010 to 2015 was Rs 2,43,935 crore, which rose to a whopping Rs 21,48,906 crore for the period 2017 to 2022. This shows that the write-off exercise not only entailed a relief to big borrowers but also involved the transfer of a share of profits towards provisioning for bad loans.

The continued losses booked by banks from 2015-16 to 2019-20 led to an erosion of capital. Thus, from 2016-17 to 2020-21, the government had to infuse more than Rs 3 lakh crore in public sector banks in order to maintain mandated minimum capital. That amount could have been used on education, health and social welfare. The story doesn’t end here.

The present political dispensation at the Centre claims that they have succeeded in tackling the legacy issue of NPAs. The government cites the data that gross NPAs, which were to the tune of rupees 10.21 lakh crore in 2018, have gone down to Rs. 5.55 lakh crore as of 2023. But this reduction has been achieved owing to the write-off of a whopping Rs 10.57 lakh crore.

## Mergers of public sector banks benefited corporates

This was the period during which the government resorted to ‘consolidation’ of public sector banks (PSBs). Thus the number of public sector banks has gone down from 27 to 12. As a sequel effect, large-scale closure of the branches of merged entities has taken place, putting customers, especially senior citizens and the poor, in their command areas through unnecessary inconvenience. This consolidation was neither demanded by the customers nor by the shareholders, nor by the employees. As was being argued by the government and some academicians, this was proposed to help reduce administrative costs, increase risk appetite, provide better capitalisation etc. But the same now has proved to be an alibi. Rather, bank consolidation and the formation of bigger entities help corporate borrowers raise finances from a single financial institution. Banks have to adhere to RBI’s stipulated group-specific exposure limit, which refers to the maximum loan as a percentage of its capital base that a bank can offer to a specific business client. Since mergers increase the capital base of the new entity, they allow corporate lenders to seek loans from a lesser number of banks rather than approach many financial institutions to raise money.

Consolidation of PSBs has proved to be a boon for private banks. During the period 2017 to 2022, the number of branches of PSBs has gone down from 91,445 to 84,256 while that of private sector banks has gone up from 24,661 to 37,872. This excludes the 12 small finance banks and six payment banks which have added thousands of branches during 2016-17 to 2020-21. This had an obvious effect on business. As against 2019, in 2023 business of public sector banks has grown by 38.35% while in the case of private sector banks, this growth is by 67.30%, as per data collated by the author. This data speaks for itself. The space which public sector banks have vacated consequent upon consolidation has been occupied by private sector banks and thus it shows that even though banks have not been privatised, banking business is being privatised – which is the main agenda of Indian corporates as also of international finance capital.

## The non-solutions of the IBC regime

The government has been claiming that the Insolvency and Bankruptcy Code (IBC), 2016 has proved to be a game changer. Since its establishment, only 14% of NPA accounts referred to the IBC were resolved through resolution plans. This led to a recovery of 31% of the amount which was due but only with the sacrifice of 69%. The IBC has clearly not proved to be the promised panacea for the NPAs.

Nor has the IBC had a deterrent effect on defaulters. According to data collated by Transunion Cibil, a credit information company, there was a notable increase in the number of wilful defaulter accounts at all ‘credit institutions’ between March 2018 and March 2022. During this period, the count of such accounts rose from 20,066 to 31,026, for loan defaults of Rs 1 crore and above. This signifies a 64.67% uptick in the number of accounts.

Individuals involved in illicit activities within the corporate sector, particularly those seeking to defraud financial institutions, appear to be displaying increased enthusiasm for their wrongful actions. Their growing confidence likely arises from the belief that they can escape legal repercussions. A perception that seems to find support in the contentious circular issued by the RBI on June 8, 2023, that spoke of a framework for

compromise settlements and write-offs for wilful defaulters and fraudsters. The RBI was forced to issue a clarification explaining that it had a stand on settlements with wilful defaulters and fraudsters for 15 years!

The lenient approach adopted by both the government and the RBI carries significant implications for evaluating the effectiveness of the IBC.

The past decade stands witness to hollow claims by the government of having tackled the menace of non-performing assets. Rather, the government has bailed out the corporations through rising haircuts, remission and write-offs. <https://thewire.in/banking/a-decade-of-write-offs-how-the-govt-and-banks-failed-to-tackle-npas-and-helped-big-corporations>

## **9. Holes in IMF's climate finance plan** (*thehindubusinessline.com*) October 30, 2023

### **The IMF's stance on climate funding ends up absolving the developed nations' historical responsibility**

Early October provided yet more evidence of the breakdown of multilateralism and the lack of international commitment from countries, to work together to address shared national challenges. The 2023 pledging Conference for the second replenishment of the Green Climate Fund, the largest climate-dedicated multilateral funding source, generated only \$9.3 billion of commitments from 24 countries.

That is lower than \$10.3 billion pledged by 45 countries when the fund was created in 2014, and \$10 billion committed by 32 countries during the first replenishment in 2019. This failure to mobilise even a nominally higher sum for the second replenishment for the conference is telling.

Soon thereafter, the fourth meeting of the Loss and Damage (L&D) Transitional Committee (responsible for arriving at recommendations on how to address L&D and for deciding on the form of a special fund for the purpose approved at the COP27 climate summit) failed to arrive at a consensus. This was supposed to generate recommendations to be discussed and, possibly, ratified, at COP28. Another meeting is now planned to be held in early November, just ahead of COP28, to somehow get a consensus.

These developments should not surprise us. After all, even the promised (meagre) amount of \$100 billion a year of climate finance from the developed to the less developed by 2020 is yet to be achieved, even in nominal terms. Of this, the only component that comes through a transparent multilateral channel in which developing countries have a say — the UN's Green Climate Fund — is only 10 per cent. And even that small sum cannot be mobilised in time.

The report of Working Group III in the most recent sixth assessment of the Intergovernmental Panel on Climate Change (WGIII6AR of the IPCC) places the cumulative share of North America, Europe, Japan, Australia, and New Zealand in anthropogenic carbon emissions at 43 per cent. Add on Eastern Asia, which includes China, and that share rises to 55 per cent.

Calling on all countries to contribute to mitigation and adaptation purely on the basis of their own resources is obviously unfair.

Developed countries need to finance much of the effort at reining in carbon emissions and global warming.

Failures on this front are sought to be justified on the grounds that there is only so much that rich country governments can do, given the fiscal constraints they face. So, the 'global' (rather than rich country) failure is attributed to an inability to persuade private capital to invest in projects that mitigate carbon emissions and help countries adapt to the impacts of ongoing climate change. That absolves the developed countries of their historical responsibility, despite their disproportionate share of cumulative carbon emissions.

### **Funding plan**

The latest salvo in this propaganda war comes from the IMF, in chapter 3 of its Global Financial Stability report (GFSR) of October 2023. The report estimates global financing needs for mitigation needed to achieve net-zero emissions by 2050, using data from the International Energy Agency (IEA) and the International Renewable Energy Agency (IRENA).

That ranges from \$4.5 trillion to \$5 trillion a year (adjusted for inflation and in 2020 US dollars). The IMF estimates that around 60-70 per cent of that needs to be directed to the energy sector. This excludes the large expenditures required for Adaptation and dealing with Loss and Damage.

The IMF uses IEA data to estimate the financing for mitigation required in the Emerging Markets and Developing Economies (EMDEs) at \$2 trillion a year, or around 40-45 per cent of the total.

By contrast, the WGIII6AR observed that the IEA suggested that as much as two-thirds of future collective climate investments would have to occur in developing countries, making cross-border financial flows crucial.

### **Private share**

Particularly striking is the IMF's estimate that the share of private financing in climate investments would have to rise from 40 per cent currently to 76-88 per cent by 2030.

This includes China, where the share of public funding would be overwhelmingly larger than elsewhere in the EMDEs.

Excluding China, the private financing share has to rise from 43 per cent currently to between 85 and 93 per cent! The public sector is to have only a minimal role, even allowing for the share of climate investments in total public investment increasing by 1.5 times from current levels.

The IMF's case for this extremely high private share is based on two arguments. First, country-by-country gross investment projections suggest that growth in total public investment would be woefully short of what are needed for climate investments.

Second, while carbon pricing “can be highly effective in shifting private capital flows to low-emissions investments”, it may be politically challenging to implement.

The first argument must be based on assumptions regarding the extent to which additional public resources can be raised by enhanced taxation of income and wealth of the world’s richest, and international coordinated taxation of the profits of transnational firms and fair sharing of the resultant proceeds.

Thus far, the IMF has consistently avoided recommending such policies to the EMDEs and in fact emphasised fiscal conservatism when it comes to expenditures and budgetary deficits, amounting to severe austerity in most cases. This inevitably creates a large potential role for private finance, since “the private sector share of climate finance is calculated as the residual of climate investment needs not covered by the public sector.”

### **Private ‘worries’**

The IMF, however, ignores the extremely low probability of private investment stepping in to “fulfil its role”, even though its own estimates suggest this.

As of April 2023, assets under the management of the so-called “sustainable investment funds” (SIFs) amounted \$2.6 trillion, of which only around 9 per cent (or \$250 billion) were allocated to the EMDEs in 2022

The IMF projects that mitigation-related investments must rise to \$2 trillion by 2030, with the private share as much as \$1.8 trillion.

Assuming that SIFs must account for half of this investment, the flow to the EMDEs must rise fourfold within the next seven years. Why private investors would allocate such a large share of capital to low-return and high-risk climate investments is by no means clear.

The IMF’s case is that such investments must be de-risked and incentivised with public funds.

### **Low public funds**

But with currently low public climate funding, even a large chunk of it would not whet the appetite of yield-hungry investors.

In any case, the evidence is clear that so-called SIFs very often make claims with regard to sustainability that don’t hold on verification. Around 88 per cent of the SIF funds under management are Environmental, Social and Governance (ESG) funds, which have been critiqued for not delivering on their claimed objectives.

As Tariq Fancy (formerly BlackRock Inc’s chief investment officer for sustainable investing) argues, the ESG movement is “a deadly distraction”, holding back on needed state action and regulation in the misguided belief that an ethical corner of the market would address the current climate, environment and social crises.

Seen in this light, the IMF's case for a hugely enhanced role for private finance is nothing more than a cynical apology for the failure of rich polluters to pay for the damage they have and will continue to cause. <https://www.thehindubusinessline.com/opinion/holes-in-imfs-climate-finance-plan/article67477685.ece>

## **10. A delicate balancing act: Phasing out coal is important and needs to be done, but domestic conditions that confront India can't be ignored** (*financialexpress.com*) October 31, 2023

There are less than 40 days to go until the Conference of Parties (COP28). This also marks the halfway point for nations to achieve their self-determined emission reduction goals by 2030 and to limit global warming to below 2°C as part of the Paris Agreement signed at COP21. While most countries agree on the need to reduce emissions and greenhouse gases, there are differences on how this can be achieved. Developing countries like India have been pointing out the implementation gap from the pre-2020 era or the voluntary pledges under the 2010 Cancun Agreement, which ignored the ambitious targets required from developed countries and shifted a portion of the burden onto developing countries. The targets not being met by developed countries puts added pressure on developing countries.

At COP 21, ambitious targets for 2030 were announced by prime minister Narendra Modi, including 500 GW of renewable energy capacity and reducing emissions intensity of the economy by 45% as part of India's nationally determined contributions. There were three goals: for cumulative electric power-installed capacity from non-fossil sources to reach 40%; reducing emissions intensity by 33-35% compared to 2005 levels; and the creation of an additional carbon sink of 2.5-3 billion tonnes of CO<sub>2</sub> equivalent through additional forest and tree cover.

India has also announced its decarbonisation plans and transition to net zero emissions by 2070. This will depend on the phasing out of coal, which still contributes more than 55% to India's total energy demand. This needs to be accompanied by the use of cleaner coal and technologies that enable energy efficiency. The emissions reduction emerging from this will be comparable to limiting the increase in temperature to 2°C. Instead of coal, India hopes to meet 50% of its energy requirements through renewable sources—wind, solar, etc. Incidentally, India has achieved the target of 40% of its power capacity from non-fossil fuels well ahead of time. There are three issues for India. First, it still needs to provide energy to about 9% of its population. Second, phasing out coal is important and needs to be done, but the important domestic conditions that confront India cannot be ignored. A phaseout has to be done in a just manner.

Livelihoods will be impacted, which can have consequences for the rest of the country. India's coal-rich regions are in the east of the country while renewable energy sources are in the west, which could lead to large-scale westward migration. And third, India is dependent on energy imports of oil, gas and coal, and depending on the fuel mix in use, there will be implications for the country's energy security, with new alliances necessary for imports of minerals for batteries or electrolyzers for green hydrogen. The other question is whether greater renewable deployment can meet the technical requirements of grid balance, which means maintaining a balance between production

and consumption in an electrical grid and balancing issues like fluctuations or capacity overflow.

The most important issue for India is to grow sustainably while adhering to its international climate commitments and keeping all its energy constraints in mind. This could mean using the principles of energy efficiency in all aspects of energy use, including appliances and in the commercial and residential sectors. Decarbonisation of industry and the energy system will be key. While this will be easy in certain sectors, it will not be so in sectors such as iron and steel, bricks, etc. For this, access to technology will be necessary. Finance will be absolutely critical in the context of India and other developing countries. At the same time, countries undertaking the transition should not be getting into debt. It has been suggested that India will need \$10 trillion for a net-zero transition. At COP28, higher energy commitments are expected to be put forward. The first global stocktake process of five years will conclude at COP28 in Dubai.

The global stocktake will also need to identify the sources of finance that will be available to developing countries. The deliberations will determine how countries respond to the gaps identified in the technical assessment phase (there are three phases of which technical assessment forms the second) and form guidance for future commitments. For a country adversely affected by climate change, the pathways to low carbon growth include reduction of carbon emissions and increasing energy efficiency. International cooperation under the aegis of the United Nations Framework Convention on Climate Change and other groups like the G20, particularly the Environment and Sustainability Working Group whose mandate is to enhance cooperation, is needed in order to achieve this. Whether COP28 will deliver on all of the above remains to be seen. <https://www.financialexpress.com/opinion/a-delicate-balancing-act-phasing-out-coal-is-important-and-needs-to-be-done-but-domestic-conditions-that-confront-india-cant-be-ignored/3291823/>

## **11. A cap-and-trade system will help slash emissions more efficiently** (*livemint.com*) 30 Oct 2023

It will equalize the marginal cost of reducing emissions across sectors and also generate some revenue for the government

The announcement that India would reach net zero emissions by 2070 has triggered much discussion on what needs to be done in different sectors. This is a good start; the transition will require government support and policy intervention in many sectors and ministries should work to evolve a credible and internally consistent medium-term strategy consistent with that long-term objective.

A missing element in the discussion thus far is the potential role of relative prices in incentivizing a shift from fossil fuels to renewable energy (RE). If low/zero-carbon alternatives were fully price-competitive with conventional fuels today, the shift would be reflected in all new investments automatically. But this is not the case. Both solar and wind power plants have shown sharp declines in cost, but both are intermittent, which means investment in grid-scale batteries or pumped hydro storage is needed to ensure a stable supply of electricity. When these costs are added, RE is more expensive than coal-based power at present.

Left to themselves, discoms would not want to shift to the more expensive option. The government has therefore stepped in with administrative directions forcing discoms to purchase a portion of their electricity from RE sources and also announced that this will rise over time. Something similar is being considered for fertilizer and oil refineries to meet part of their hydrogen needs from green hydrogen.

A price-based solution would be to impose a carbon tax on emissions. Such a tax, applied at an appropriate rate, would ensure that all units would shift to RE. It would also generate additional revenues that could be used to finance climate-related public expenditures and also to offset any adverse distributional effects of the additional tax incidence.

Whatever its theoretical benefits, direct carbon taxation is not a practical option. It has few takers around the world and is unlikely to be accepted in India. However, a cap-and-trade system has wide international acceptance. It is effectively an indirect form of carbon taxation and it can be implemented in India thanks to a recent amendment to the Energy Conservation Act, 2001.

The Bureau of Energy Efficiency (BEE) is currently working on the system's detailed design. We suggest it should have the following features.

It should have wide enough coverage to make a difference. The BEE has been managing the Perform, Achieve and Trade (PAT) scheme for several years. This scheme aims at improvements in energy efficiency and covers large units in thermal power generation, iron and steel, pulp and paper, aluminium, cement, chemicals, fertilisers, and textiles. If the cap-and-trade system has the same coverage, it would ensure sufficient width.

Each unit will have to be allocated an emissions allowance. This could be fixed initially at the average emissions per unit of output for all units in that industry in the base year. Units emitting less than the allowance would receive emission credits, which could be sold to those emitting more. Sectors where emission reductions is costly or difficult due to technological limitations would buy credits from sectors where it is cheaper. This effectively equalizes the marginal cost of abatement across all units.

A key feature must be a steady reduction in allowances per unit of output over time, calibrated to the net-zero target. To ease the transition, the pace can be moderate at the start, allowing total emissions to increase as production increases but at a decreasing rate. Thereafter, allowances will have to be reduced faster as the system stabilizes.

Measuring emissions from each unit accurately will be a major challenge. It would have to include all greenhouse gas emissions from both direct use of fossil fuels and also indirect use via consumption of grid electricity, which is largely coal-based. Including indirect emissions via grid electricity would incentivize industries to switch to RE from captive power plants or independent suppliers, or to buy RE certificates from exchanges. The establishment of an independent and credible mechanism to certify the actual emissions of each unit is a major capacity building task.

There may be situations where the price of credits shoots sky-high. This could be handled by allowing units to pay an appropriate penalty for over-emitting. This would



effectively put a ceiling on the market price of credits, thereby allaying fears of price uncertainty. This ceiling price could be gradually raised.

The system described above could initially operate in parallel with administrative mandates setting specific targets for RE use in different sectors. However, as the system matures and glitches are ironed out, the mandates could be withdrawn, leaving the cap-and-trade system as the sole policy mechanism for reducing emissions. This would reduce the administrative as well as compliance burden.

A key issue is whether allowances should be given free or auctioned. Auctioning would generate much-needed revenue for the government to finance climate-related public expenditure, such as on adaptation measures and the reskilling of human capital in declining sectors like coal mining. We could start by auctioning a small proportion of allowances and increase it gradually as the system stabilizes.

The need for additional revenue for managing climate change is especially important considering that petrol and diesel consumption will fall as transport gets electrified leading to revenue loss as these are high revenue yielding items. The additional revenue from auctions will, of course, raise questions about revenue sharing with the states. This could be referred to the Finance Commission.

An important advantage of the system is that it could help shield our exports from the EU's Carbon Border Adjustment Mechanism (CBAM), which comes into effect on 1 January 2026. This will depend on the extent to which the implicit carbon tax in our system is equivalent to that in the EU's. The EU's current position is that if our carbon price is lower, then a countervailing duty on imports would be levied to cover the difference. We should try to persuade the EU that countries at lower levels of development should be allowed lower carbon taxes. The EU does have supportive provisions for lower income countries in the EU; for example, an exemption from obligatory auctioning of allowances under certain conditions.

Regardless of whether we can reach an agreement with the EU, there is a strong case for implementing a cap-and-trade system as soon as possible as part of our own long-term transition to net zero. <https://www.livemint.com/opinion/online-views/a-cap-and-trade-system-will-help-slash-emissions-more-efficiently-11698669104571.html>

## **12. Villagers allege bad road works, bungling of funds in Odisha** (*newindianexpress.com*) 31 Oct 2023

**The villagers also accused the contractor of misappropriating over Rs 1 crore specifically in the 4 km stretch.**

BARIPADA: Residents of Badasahi block in Mayurbhanj district, on Monday, presented a memorandum to Mayurbhanj collector Vineet Bhardwaj demanding to stop the ongoing road widening and strengthening project connecting Thakurmunda, Dangadiha, Podadiha, Udala, Manatri, Baisinga, and Rupsa, citing alleged substandard construction work by the contractor and misappropriation of over Rs 1 crore.

They highlighted that the government had allocated Rs22,95,70,144 for the expansion and enhancement of major district roads linking the mentioned regions.

An RTI report sought by Prakash Kar Mohapatra unveiled that the contractor was allegedly flouting the tender rules. Mohapatra, accompanied by the villagers, assembled in front of the Baripada Public Works Department and alleged that the contractor had executed shoddy roadwork, particularly on a four km section from Nakhara to Vimda.

While the project guidelines called for an increase in road height to at least 4.5 feet, the contractor reportedly only raised it by 2 feet. Despite the villagers' complaints, PWD officers did not intervene in the matter, they further alleged in the memo.

The villagers also accused the contractor of misappropriating over Rs 1 crore specifically in the 4 km stretch. Citing the RTI report, Mohapatra said the PWD, Baripada, had already disbursed Rs 3.5 crore out of the total project cost of Rs 22,95,70,144 to the contractor recently. The villagers called for a high-level inquiry to inspect the quality of work and urged authorities to take action against the contractor failing which they will stop the road work. <https://www.newindianexpress.com/states/odisha/2023/oct/31/villagers-allege-bad-road-works-bungling-of-funds-in-odisha-2628649.html>

### **13. Geo-tagging of all projects now mandatory in Delhi** (*newindianexpress.com*) Oct 31, 2023

The Delhi government has directed all its departments to geo-tagging the projects and works for which approval is to be sought from the finance department, officials said on Monday.

The move aims to check misuse of funds, corruption, quality of work and timely completion of the projects.

Last month, Delhi L-G VK Saxena directed mandatory geo-tagging of all civil work-related projects of the government departments to curb corruption, cost escalation and delay in their execution.

A memo issued by the Finance department to heads of different government departments stated that they would ensure that the projects or works for which concurrence of the department was sought for the release of funds, loans or advances, were geo-tagged and updated real-time.

The order was issued by the Chief Secretary in September who also doubles up as chief vigilance officer of the Delhi government to check misuse of funds and corruption. <https://www.newindianexpress.com/cities/delhi/2023/oct/31/geo-tagging-of-all-projects-now-mandatory-in-delhi-2628673.html>

### **14. Subsidence-Struck Hill States Await Crucial Outcome on NTPC Project** (*newslick.in*) 31 Oct 2023

The recent court-ordered hearing by the National Disaster Management Authority on the future of NTPC's Tapovan-Vishnugad hydropower project is of vital importance, for it will set the template for the many upcoming hydropower projects in Uttarakhand and Himachal Pradesh.

The residents of subsidence-ridden Joshimath have opposed continuing the construction of the ill-fated Tapovan-Vishnugad project, bringing them into confrontation with the state government and local authorities. The problem is that this two-decade-old project has witnessed several accidents, leading the public in Joshimath to believe it has spelt bad tidings.

Joshimath residents are convinced that the subsidence, which has practically destroyed 40% of the homes and commercial establishments of the ill-fated city, has been triggered by the blasting and tunnelling work integral to this mega project.

The NTPC project involved constructing a 15-km tunnel roughly 600 metres below the surface. It was partly dug by multinational companies using a Tunnel Boring Machine (TBM), and dynamite was used to carve the other half of the tunnel. Unfortunately, the TBM got stuck on December 9 2009, and could never be extricated.

It punctured a fault line, causing a massive discharge of high-pressure sub-surface water whose quantity scientists calculated at around 700 litres per second. This became a symbol of the government's irresponsibility, for, according to locals, NTPC engineers did not try to stop this water, leading the natural springs to dry up, bringing continuous water shortages.

Though Joshimath residents allege that the subsidence started after this TBM accident, not one of the eight scientific organisations—the Central Building Research Institute, Geological Survey of India, Wadia Institute of Himalayan Geology, National Geophysical Research Institute, Central Ground Water Board, Indian Institute of Remote Sensing, National Institute of Hydrology and IIT Roorkee—tasked to study the factors behind the subsidence earlier this year allude to this accident or refer to this factor as a real possibility.

By contrast, other scientists and geologists working in Uttarakhand say that a clear link exists between the emptying of the substrata water and the subsidence. When anxious Joshimath residents took to the streets and demanded halting construction of Tapovan-Vishnugad, Uttarakhand Chief Minister Pushkar Singh Dhami ordered a temporary closure till there was clear proof that the subsidence was linked to the hydro project construction.

Taking a cue from the Chief Minister's order, the Nainital High Court banned all construction activity in and around Joshimath in January 2023. However, the report of the eight scientific organisations was submitted to the Dhami government and the National Disaster Management Authority (NDMA) in April but was concealed from the public until September, when the Nainital High Court ordered that a report on public safety could not be a top-secret document.

All eight reports allude to the subsidence as a serious concern, and one institute records that Joshimath is sinking by 12 centimetres a year. The most damning report is of the National Geophysical Research Institute, which warns that the Chamoli district has developed air-filled fissures over 100 feet deep in some places, which would likely increase because the region is in a high seismic zone. It also notes that the frequently recorded small earthquakes in the area are likely precursors for a more significant event.

Despite the warning in April, in June, the Dhamsi government allowed blasting at the Helang-Marwari road on the southern tip of Joshimath.

Aghast, residents started another round of protests under the Joshimath Bachao Sangarsh Samiti banner. These have largely been ignored.

Surprisingly, two of these scientific bodies, the National Institute of Hydrology, Roorkee and the Dehradun-based Geological Survey of India, have given a clean chit to NTPC. The NIH report emphasises that the water gushing out in the Jaypee colony area of Joshimath has no connection with the aquifer leak caused by the TBM. However, it has been questioned for not providing any evidence to back its claim.

The Geological Survey of India's "clean chit" also remains a mystery because in 2005, when the NTPC project was on the drawing board, it had warned that this project would prove disastrous for Joshimath.

Since both organisations have backed the NTPC project, the power company has knocked at the doors of the Nainital High Court, seeking permission to restart blasting and other construction work. The court, however, threw the ball to the NDMA, which heard NTPC's plea on October 22.

Lawyer Snigdha Tiwari argued the petitioner's case against resuming construction. She claimed that if permission was granted to NTPC, the state "must also fix accountability, both criminal and personal, in case it aggravates the disaster or further increases subsidence in Joshimath".

It is important to note that the NDMA has also examined the subsidence and reported that Joshimath town has exceeded its "carrying capacity". The report says the town should be declared a "no new construction zone".

A Central Building Research Institute report also questions the development paradigm in the Himalayas and insists that stakeholders must understand the construction typology and follow material and regulatory practices in tune with the conditions of this ecologically sensitive zone. It also called for a "phased de-densification of Joshimath and other similar locations".

The sinking of Joshimath is one high-profile example of the problems that beset the cities of Uttarakhand. This tragedy has two aspects—the human aspect involving thousands of families forced to abandon their homes and lose their livelihoods is the first. But the financial repercussions are no less serious. Uttarakhand has released no estimates about the economic losses due to the series of disasters that plague it all year.

The Uttarakhand State Disaster Management Authority has released some figures, but these are approximations since no proper survey has been conducted on the extent of the damage in Joshimath. How much did the breakdown of expensive TBMs cost NTPC and the abrupt exit of two multinational companies that were boring at the site before the accidents? NTPC made public that the avalanche in the Chamoli district in February 2021 caused losses of over Rs 1,600 crore to the Tapovan-Vishnugad project—even though exact figures on worker casualties in that accident are still unknown. Further,

an initial conservative figure for the rehabilitation cost of Joshimath residents runs into over Rs 100 crores.

The courts could not establish why due diligence was not done before tunnelling began on this NTPC project. They also have not paid enough attention to an Early Warning System at the 11-MW Rishi Ganga dam. That might have helped save the workers at the site, including the 200 labourers building a tunnel meant for the Tapovan-Vishnugad station, who died when disaster struck in February 2021.

The Supreme Court has ordered that all hydro-projects must install Early Warning Systems, so why did the Nainital High Court not pass strictures on its non-implementation? An Early Warning System could have helped save the 1,200-MW Teesta Urja Dam in Sikkim, the second-largest dam that cost Rs 14,000 crore to build, not to mention more lives and material.

Scientists have repeatedly warned that climate change is making the upper Himalayas highly unsuitable for constructing hydropower projects. Were geological and geotechnical studies conducted before the Tapovan-Vishnugad project was cleared, or were their conclusions flawed? Why else have 80 small and large projects been cleared (or under construction in Himachal Pradesh and Uttarakhand)? It seems only the courts can investigate whether geotechnical studies clear these projects.

The role of the NDMA is to come into action once a calamity takes place. The state government, in the meantime, has evidently decided to clear numerous projects regardless of their scientific merit or ultimate outcomes. Therefore, the courts are the last recourse for the people living in these high-risk zones. Sadly, nobody seems ready to strike down projects, even though everybody has to bear the tremendous human and financial costs of those which fail. <https://www.newsclick.in/subsidence-struck-hill-states-await-crucial-outcome-ntpc-project>