

तकनीकी पत्रिका विषय-सूची

CURRENT CONTENT

(Technical Journals)

(A Monthly Current Awareness Service from Technical Journals)

Vol.4 No.02, February, 2020

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Subsidisation of Higher Education

An analysis of why public funding of higher education is vital for a nation throws light on the implications of fee hikes in higher education institutions. **page 32**

Compensating Cantonment Boards

There should be an assignment of new tax handles to local authorities, including cantonment boards to correct their revenue loss due to the introduction of the goods and services tax. **page 15**

Caste Matters and the Dalit Jati Self

Suraj Yengde's thesis of "Brahmins against Brahminism" is examined through the idea of Brahmin, which is intrinsically related to the practice of untouchability. **page 12**

Health Technology Assessment

A discussion on various approaches for assessing the appropriate cost-effectiveness threshold for India, following the setting up of the health technology assessment board **page 19**

The Practice of Untouchability

What is the socio-economic profile of those who practise untouchability, and are households with a wider network outside their community less likely to do so? **page 36**

Economic & Political Weekly, Vol.55 No.2, January 11, 2020

The Rising Tide of Student Protests

- 7 The unleashing of masked terror in JNU has been countered with renewed spirits and solidarity.

Trump and Tehran

- 8 The United States' insatiable appetite for war is yet again proving to be a threat to world peace.

Revisiting the NBFC Crisis

- 10 Even while the effort to resolve the crisis resulting from non-performing assets in the banking sector was underway, India's financial sector was overwhelmed by failures of large non-banking financial companies.
— C P Chandrasekhar

Dalitness and the Idea of Brahmin

- 12 Engaging with Suraj Yengde's book *Caste Matters*, an attempt has been made to negotiate with the notion of "Dalitness" and the idea of Brahmin, by problematising the relation between the discrete jatis and the political categories. — Srinivasa Ramanujam

Compensation for Revenue Loss on Account of GST

- 15 The introduction of the goods and services tax has resulted in a subsumation of taxes like local body tax, which used to be collected by "local authorities," making the demand for compensation by the local authorities (including cantonment boards) justified. — Sacchidananda Mukherjee

Cost-effectiveness Threshold and Health Opportunity Cost

- 19 A robustly determined opportunity cost of healthcare spending should serve as a proxy for setting up a cost-effectiveness threshold, and it should be used to advocate for greater resources towards achieving universal health coverage.
— Shankar Prinja, Thiagarajan Sundararaman & V R Muraliedharan

Public Funding of Universities

- 32 The ongoing protests by the students against the fee hike in Jawaharlal Nehru University have brought to the fore the contentious issue of adequacy of public funding of universities. — Saumen Chattopadhyay

The Continuing Practice of Untouchability in India

- 36 The second wave of the India Human Development Survey data has been used to generate a socio-economic profile of those who practise untouchability in India, and check the hypothesis that households with a wider network outside the community are less likely to practise untouchability. — Amit Thorat, Omkar Joshi

Sustainable SRI and Rice Production

- 46 The experience of Tamil Nadu shows that the System of Rice Intensification offers an attractive opportunity for increasing food production per unit of water and improving efficiency. — Vibhu Nayar, V K Ravichandran, B C Barah & Norman Uphoff

Multidimensional Poverty in Tripura: An Inter-temporal Analysis

- 52 The changes in multidimensional poverty are analysed for the states of the north-eastern region in general, and Tripura in particular, from 2000 to 2015.
— Niranjana Debnath, Salim Shah

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- 62 Sneha Annavarapu's personal essay explores the idea of "home" in the context of the protests against the CAA and NRC; Ananya on Finnish auteur Aki Kaurismäki's framing of displacement in his cinema; Avner Pariat cautions us on premature enthusiasm for foreign funding of projects in the North East; and Last Lines by Ponnappa.

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- Revisiting Factor Proportions in the Indian Economy: A Study of Tradable Sectors
- Persistence of Solid Fuel Use in Rural North India

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Autonomy of the Statistical System

Actions such as the merger of the NSSO and CSO under the NSO point towards the attempts by the government to compromise the independence and integrity of statistical institutions for political gain. [page 29](#)

Comparing Employment Surveys

While the PLFS, 2017–18 marks distinct methodological improvements over the EUS, 2011–12, it lacks enough data to have a cross-sectional view of the employment scenario in the country. [page 12](#)

Techniques of Caste Domination

Brahminical influence over higher educational institutions is reproduced through policy mechanisms as well as the denial of “being” for Dalit Bahujans on a day-to-day basis. [page 36](#)

Export and Import Mis-invoicing

Data on fraudulent trade practices as a percentage of the GDP presents a bleak picture and calls for greater scrutiny and transparency in the recording of transactions. [page 41](#)

Infrastructure and the Environment

Environmental impacts of the proposed and ongoing infrastructure projects in Mumbai necessitate a thorough interrogation of the meaning and significance of the category of sustainable development. [page 16](#)

Underwhelming Judgment on Internet Shutdowns

- 7 The Supreme Court has made no attempt to check the irregular imposition of internet shutdowns in J&K.

When the FRDI Bill Returns

- 8 When reintroduced, will the FRDI Bill address the issues of financial instability?

A Decade of Decay

- 10 Deep systemic failings in the last decade have come to the fore as the Supreme Court enters a new decade in the midst of an existential battle for relevance.
—Alok Prasanna Kumar

Is PLFS, 2017–18 Comparable with EUS, 2011–12?

- 12 Towards improving data collection on socio-economic parameters, the National Sample Survey Office introduced the Periodic Labour Force Survey in 2017–18, replacing its previous quinquennial rounds on the employment and unemployment situation. —Deepika Jajoria, Manoj Jatav

The Myth of Sustainable Development in Mumbai's Infrastructure Projects

- 16 The concept of sustainable development is juxtaposed with the ramifications the ongoing and proposed infrastructure projects in Mumbai have on the environment. —Stalin Dayanand

Six Months of YSRCP Rule in Andhra Pradesh

- 20 The Yuvajana Sramika Rythu Congress Party government is embroiled in controversies over policies pertaining to education, sand mining, and a new capital for the state. —K Nageshwar

Indian Statistical System in a Troubled State

- 29 If government control continues trampling upon the autonomy and integrity of the official statistical institutions in the country, then their reputation of competence and impartiality stands the risk of being marred. —S L Shetty

Violence of Caste Embodiment in Higher Educational Institutions

- 36 The everyday normalised brutality that dominant upper-caste bodies seem to inflict on Dalit Bahujans in elite higher educational institutions is addressed in this article. —P Thirumal

Trade Mis-invoicing: Evidence from India, 2007–17

- 41 Using disaggregated data for the period 2007–17, the existence of trade mis-invoicing in India is shown. —Aastha Jain

Revisiting Factor Proportions in the Indian Economy

- 47 Using Semi-Input-Output modelling, an analysis reveals that output and export distributions are largely aligned with factor endowments, while FDI distribution is skewed towards sectors with high capital proportions.
—Anjali Tandon

Persistence of Solid Fuel Use in Rural North India

- 55 Survey evidence from rural North India shows persistent solid fuel use despite increases in liquefied petroleum gas ownership. —Aashish Gupta, Sangita Vyas, Payal Hathi, Nazar Khalid, Nikhil Srivastav, Dean Spears & Diane Coffey

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The Women of Shaheen Bagh

The protestors against CAA–NPR–NRC at Shaheen Bagh in Delhi offer a hope-affirming version of community expression and make a claim for citizenship as participation and contribution to the nation's diversity. **page 13**

Maligning a World-class University

It will be tragic if a public university like JNU is dismantled, for it will bring to closure both the efforts at intellectual exploration and the focus on social consciousness with which this university had its beginnings. **page 27**

Gender Diversity in the Judiciary

An analysis of the data on women's entry into the lower judiciary between 2007 and 2017 across multiple states points to the barriers in improving their numbers. **page 33**

Cultural Mindsets and Education

Empirical research affirms that there are three central worldview beliefs among government teachers that contradict the assumptions of policy documents. **page 50**

Creating Roadblocks

In Kinnaur in Himachal Pradesh, the very agency that should enable the Forest Rights Act on the ground has made it ineffectual. **page 16**

Economic & Political Weekly, Vol.55 No.4, January 25, 2020

Food for Expediency

- 7 The current food price inflation results from a systemic crisis of supply management in agriculture.

Forebodings of Bright Orange Skies

- 8 The Australian mega bushfires show again what the climate crisis means in reality.

Modi's Multi-alignment and Nehru's Non-alignment

- 10 Jawaharlal Nehru's non-alignment and Narendra Modi's multi-alignment are not averse to playing ball with the American hard as well as soft power.
— Atul Bhardwaj

Muslim Women Protestors of Shaheen Bagh

- 13 The peaceful indefinite sit-in by the protestors at Shaheen Bagh helps us understand resistance as an expression of belonging and citizenship as a participatory tool. — Irfanullah Farooqi

Forest Rights Act in Kinnaur, Himachal Pradesh

- 16 The conflicting narratives from Kinnaur are discussed, where instead of being recognised under the FRA, the tribals are being ripped away from their identity and forest dependence. — Aditi Vajpeyi, Vaishnavi Rathore

The University that Made a Difference

- 27 The assault on students and faculty of Jawaharlal Nehru University has raised a number of questions about politics on the campuses of universities.
— Romila Thapar

Breaking through the Old Boys' Club

- 33 A data-driven analysis of the trends of women's entry into the lower judiciary between 2007 and 2017 points to a direct relationship between methods of recruitment and women's representation in the judiciary.
— Sumathi Chandrashekar, Diksha Sanyal, Shreya Tripathy & Tarika Jain

New Evidences from the Kerala Migration Survey, 2018

- 41 The Kerala Migration Survey 2018 undertaken by the Centre for Development Studies, sheds light on the various issues concerning migration and mobility, based on a large-scale sample survey of 15,000 households.
— S Irudaya Rajan, K C Zachariah

The Invisible Barriers to India's Educational Reforms

- 50 Three decades of pedagogical reforms have failed to translate the learner-centred vision of national documents into reality due to entrenched cultural mindsets restricting a shift in India's education system.
— Suzana Brinkmann

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- 61 Satvik Gade on the role of socially engaged art; Anu Kumar's reflection on her life-long fraught relationship with food; Pranathi Diwakar discovers the "other" side of her city, Chennai; and Last Lines by Ponnappa.

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166B, S. P. Mukherjee Road
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₹ 950 (Single Copy)

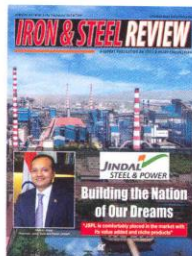
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\$ 1200 (Yearly)
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● 5 % GST on advertisement as applicable

Owned & Printed by Santosh Mahanti
at M/s. Gupta Quick Printers
4D/28, Dharmatalla Road
Kolkata - 700 039
and published by him from
10, Chowringhee Road
Kolkata - 700 013, India.

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SSAB Oxelösund selects ABB's Advance Optima AO2000 gas analysers to achieve and fully meet the BAT emission requirements

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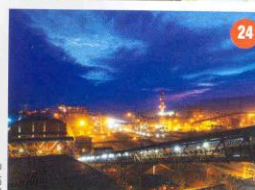
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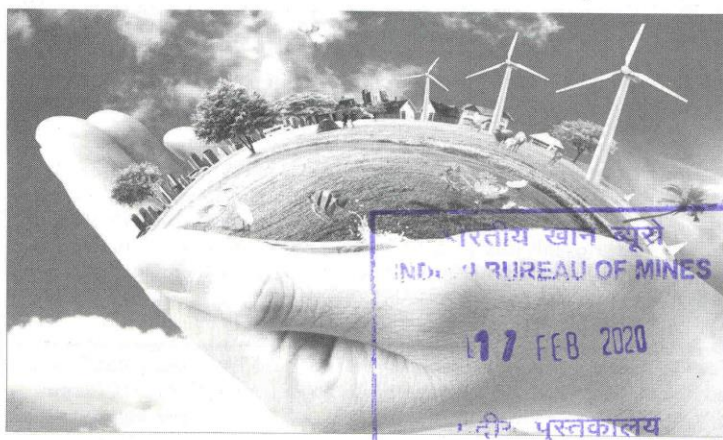
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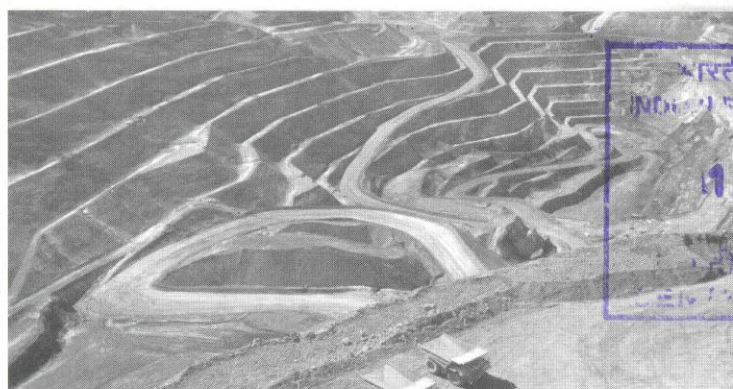
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Go small or go home?

The general trend of opting for bigger operations, bigger mobile machinery and bigger processing equipment can still be witnessed at most major mine sites. As miners are facing larger, lower-grade orebodies, it might seem self-evident that concentrator plants, for example, will require ever larger pieces of equipment to process more material.

At LME Week in London, UK, at the end of October, Rio Tinto CEO Jean-Sébastien Jacques said how since the 1960s, when the industry saw breakthroughs in aluminium and copper processes, the company had "just increased the size of [its] dig units".

He added: "By the end of this year, our iron ore business in Australia will have shipped almost as much iron ore this decade as it did in the last 40-plus years."

In the 2020s, due partly to the dearth in new tier-one deposits, he believes the industry needs to take a different approach. With further advances in automation, digitalisation, artificial intelligence and other technologies and processes, a move to smaller, faster electric trucks, autonomous rail-cars, optimised blending, material recycling – and the list goes on – could change how mines are designed and operated.

As an example, Jacques mentioned how Rio was developing "a breakthrough process to generate battery-grade lithium carbonate from waste rock at [its] Boron site in California".

Moreover, in some cases, miners are hitting a wall when it comes to equipment size. For example, as Metso's global manager for flotation Thierry Monredon told MM, it's simply not cost-efficient to go any larger than about 600m³ in flotation cells.

Rio is now looking at building smaller mines, with a quicker, more agile construction process, which would still leave room for growth in stages. The miner said this would also mean quicker returns on investment.

At a recent mining conference, BHP's chief transformation officer Jonathan Price, on the other hand, spoke about a global operating model that had left it with "a small number of large, high-quality assets and a highly connected workforce".

With this smaller, simplified portfolio (resulting from the South32 demerger), the company aims to do "more with less".

Technology is also assisting BHP in its aims, as its enterprise-wide business operations system and the Yammer social network help the company share data and connect people. Price also stressed that new technologies and work methods from other industries would continue to influence mining.

"The realisation has struck that the next wave of productivity will come in an entirely different form. As such, we can't expect that what has worked in the past will lead to success in the future," he said.

So, while the business and operating models of the two rival mining majors might not quite match up, both still see transformation and disruption on the horizon. This will be further pushed along by increasing environmental, social and governance pressures, and change, in many ways, can't come soon enough.

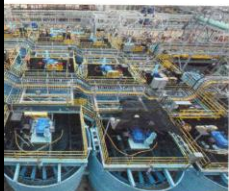
"It is not new to anyone ... that the imperative to change, and to change quickly, is stronger than it has ever been," Price added.

"Societal expectations will rightly continue to demand more from a public company than just profits."

NIA KAJASTIE, EDITOR

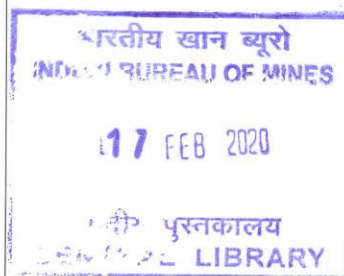
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"The imperative to change, and to change quickly, is stronger than it has ever been"



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COVER

Dyno Nobel, a global leader in commercial explosives, launches DIFFERENTIAL ENERGY² (ΔE²) – the next evolution of DIFFERENTIAL ENERGY™. This easy-to-use software system is enabled by Dyno Nobel's proprietary in-truck control panel, DynoLogix™, that utilises data from outside sources that characterize rock properties to allow targeted placement of energy in the blast hole. This system can also send loading instructions directly to the pump-truck control system ensuring boreholes are loaded as designed, giving control back to the engineer or blaster www.dynonobel.com

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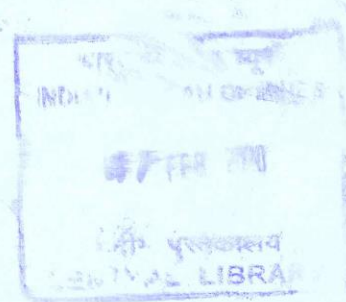
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INCORPORATING INDIAN MINING JOURNAL (II ISSN 0022-2755)

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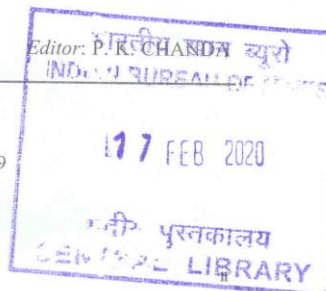
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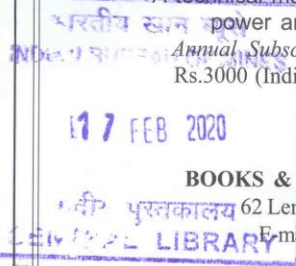
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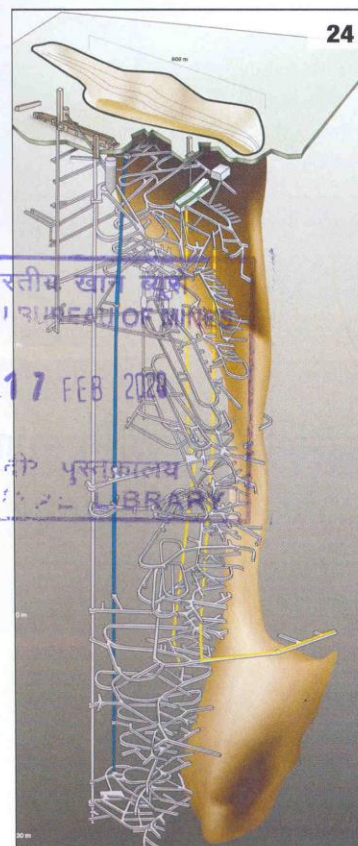
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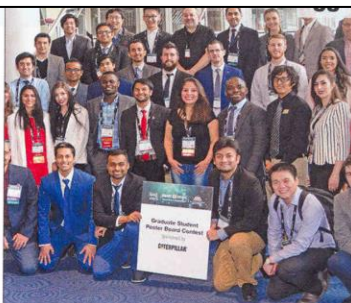
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Printed by Cummings Printing Co.

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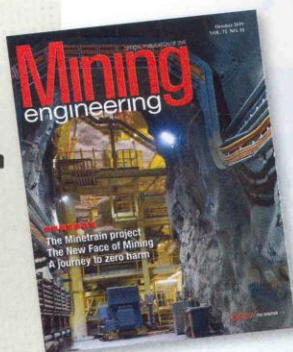
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