

Restoring Ecological Health of Himalayas

Restoring the ecological health of the Himalayas

The environmental devastation caused in the Himalayan States of Himachal Pradesh, Uttarakhand and Sikkim has reinvigorated the debate on the "carrying capacity" of the regions. The Supreme Court of India, in response to a petition filed by a retired Indian Police Service officer, has asked the Union government to suggest a way forward regarding the carrying capacity of the Indian Himalayan Region (IHR), which includes its towns and cities.

The Union government's affidavit (filed by the Ministry of Environment) states that the Director of the G.B. Pant National Institute of Himalayan Environment should be the lead in assessing carrying capacity and that the carrying capacity of all 13 Himalayan States and Union Territories (UT) should be determined. The affidavit adds that there can be a technical support group comprising nominees of the National Institute of Disaster Management, Bhopal; National Institute of Hydrology, Roorkee; Indian Institute of Remote Sensing, Dehradun; National Environmental Engineering Research Institute, Nagpur; Wadia Institute of Himalayan Geology, Dehradun; Indian Council of Forestry Research and Education, Dehradun; Wildlife Institute of India, Dehradun; and School of Planning and Architecture.

The affidavit further suggests that representatives of State disaster management authorities, the Geological Survey of India, Survey of India and member secretaries or nominees of the Central Pollution Control Board and Central Ground Water Board should also be its members.

The government has requested the Court to direct the Himalayan States/UTs to set up a committee headed by the Chief Secretary of the respective State, with its members being inducted as the Chief Secretary feels appropriate.

What carrying capacity of a region is
In technical terms, carrying capacity of a region is based on the maximum population size that an ecosystem or environment can sustainably



Tikender Singh Panwar

is former Deputy Mayor, Shimla, author, and initiator for Alternatives in the Himalayan Region

Involve the local population and grass-roots bodies in determining the carrying capacity of the Indian Himalayan Region

support over a specific period without causing significant degradation or harm to its natural resources and overall health. It is crucial in understanding and managing the balance between human activities and the preservation of natural ecosystems to ensure long-term sustainability.

There have been initiatives by the Union government regarding overall development in the IHR. Some of them are the National Mission for Sustaining the Himalayan Ecosystem (2010), the Indian Himalayas Climate Adaptation Programme, Secure Himalaya Project, and the recent guidelines on 'Carrying Capacity in the IHR' circulated on January 30, 2020. There was a reminder by the Ministry of Environment and Forests on May 19, 2023, asking all the States that if such a study had not been undertaken, then States should submit an action plan (carrying capacity) at the earliest.

What the Court must ensure

Despite past initiatives especially since the January 2020 guidelines, hardly any progress has been made. The reasons are obvious. There is no report on the total number of States that have been able to prepare action plans on carrying capacity of their regions.

Failures in the past have been on account of two major reasons. The recommendations made by the Ministry in forming such groups are flawed. The same set of people responsible for the havoc and devastation in the mountains are now being made responsible in finding solutions.

The focus has to be on sustainable development that encompasses the larger canvas of carrying capacity, and the process should be people-centric.

The suggestion made by the Environment Ministry focuses on one institution, i.e., the G.B. Pant National Institute of Himalayan Environment, while others are just a part of the technical group. Almost all the other institutes are important players in their respective domains

and should be equal partners in policy making.

Though the suggestion of including the entire IHR is relevant, and also desired, just measuring the carrying capacity of towns and cities is pointless. Take for example the road network in the Himalayan States that has spontaneously created settlements. Hence, the entire region should be the focus of the top court. The emphasis should be on the "Sustainable Population" of the Himalayan States, and the focus of the current inquiry (which is in the offing) should be the "carrying capacity for the sustainable populations for the different Himalayan States."

There is a wider and longer term need for assessing the overall sustainable capacity of the environment of the whole State (which includes all biological species, food, habitat, water including ecology and agriculture). The expert committee should be asked to focus on the social aspects or population sustainability of the respective States.

Given the importance of the resident population in the IHR living in towns and villages, the expert committee should not become a bureaucratic or technical group. Such a committee (at least a third) should include adequate citizen representation – from panchayats and other urban local bodies.

In order to evaluate the social dimension of sustainability, it is necessary for the expert committee to direct each panchayat *samiti* and municipality to present its recommendations by responding to the population sustainability criteria which is well established and should be circulated immediately to each local government centre.

One must not forget that it is the forewarning of concerned people on the issue of the construction of hydropower projects and even four-lane highway projects in the IHR that has been brushed aside – particularly in the case of Sikkim. The results are before us. Engage with the people and build sustainable solutions.

CONTEXT

The Ministry of Environment and Forest (MoEF) has presented an affidavit to the Supreme Court, outlining its plan to evaluate the carrying capacity of the 13 Himalayan states and Union Territories of India.

UNDERSTANDING CARRYING CAPACITY

- The carrying capacity of a region is dictated by the **maximum population size that its ecosystem can sustain over a specific duration** without inflicting detrimental effects on its natural resources and overall vitality.
- It's a **fundamental concept for maintaining a balance** between human activities and the conservation of natural ecosystems to ensure long-term sustainability.
- Although advancements in technology can modify a region's carrying capacity, population surge predominantly tends to negatively impact it.

HIMALAYAN REGION VULNERABILITIES

- **Vulnerabilities:** The Himalayan ecosystem stands vulnerable to **natural alterations, anthropogenic climate change, and the developmental paradigms** of contemporary society.
- **Ecosystem disruption:** These factors have disrupted ecosystems, shifting range, migration patterns, and the abundance of both territorial and marine species, thereby affecting the livelihoods of resource-dependent communities.
- This has, in turn, hampered the socio-economic progression of the Indian Himalayan Region.

SIGNIFICANCE OF THE HIMALAYAS

- **Demographics and Diverse Systems:** Home to nearly 50 million people, the Himalayan region is a mosaic of diverse demographics and multifaceted economic, environmental, social, and political systems.
- **Climate:** From acting as a climatic shield against cold Siberian winds and facilitating monsoon rains (intercept south-west monsoon winds) crucial for Indian agriculture.
- **Environment:** A reservoir of perennial rivers like the Indus, Ganga, and Brahmaputra, the Himalayas are integral to India.
- **Economic, Defense, and Cultural:** They also offer defence advantages, boost tourism, and serve as grounds for significant scientific studies and religious pilgrimages.

SCIENTIFIC EXPLORATION AND CONSERVATION MEASURES

- The Himalayas are a **hotspot for geological and geographical phenomena**, essential for studying earth formations, rock systems, geomorphology, and climate change.
- The MoEF, in 2002, identified **Eco-Sensitive Zones (ESZs) and Ecologically Sensitive Areas (ESAs)** to conserve biodiversity and protect ecologically significant regions.
- In the Indian Himalayan Region, **2 ESAs and 92 ESZs** have been notified, under the guidelines provided by the **Environment (Protection) Act, 1986**.

INITIATIVES FOR HIMALAYAN ECOSYSTEM DEVELOPMENT

- **The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) 2010**, coordinated by the Department of Science and Technology (DST), is a pivotal initiative aiming to understand the Himalayan ecosystem's complex processes and devise suitable management and policy measures for its sustenance.
- **Other significant programs:** It include the Indian Himalayas Climate Adaptation Programme, Secure Himalaya Project (aims at preserving high-altitude biodiversity.) , and the Guidelines on 'Carrying Capacity in the Indian Himalayan Region'.
- **Mishra Committee Report:** Advocated for the minimization of construction in sensitive areas.

RECOMMENDATIONS FOR A SUSTAINABLE APPROACH

- **Expanding Stakeholder Involvement:** It's imperative to broaden the scope of involvement beyond a single institution like the G.B. Pant National Institute of Himalayan Environment, to include other significant institutes as equal partners in policymaking.
- **Community Engagement and Carrying Capacity:** Adopting a people-centric approach by engaging local communities and grass-roots bodies in determining the region's carrying capacity is crucial.
- **Social and Population Sustainability:** Additionally, an expert committee should delve into the social aspects or population sustainability of the respective states.
- **Holistic Approach for Sustainability:** This holistic approach, focusing on generating diverse national capacities, will enable a balance between nature's forces and human actions, steering towards a sustainable Himalayan ecosystem.

The Indian Himalayan Region needs its own EIA

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The Teesta dam breach in Sikkim in early October and the recent floods and landslides in Himachal Pradesh are a stark reminder of the havoc our development model is wreaking on our environment and ecology especially in the mountains. It is imperative to assess the worthiness of any significant human endeavour in terms of its impact on the environment.

The basis of the EIA

Environment Impact Assessment (EIA) is one such process defined by the United Nations Environment Programme (UNEP) as a tool to identify the environmental, social, and economic impacts of a project before it is implemented. This tool compares various alternatives for the proposed project, predicts and analyses all possible environmental repercussions in various scenarios. The EIA also helps decide appropriate mitigation strategies.

The EIA process would need comprehensive, reliable data and would deliver results only if it is designed to seek the most appropriate, relevant and reliable information regarding the project. Hence, the base line data on the basis of which future likely impacts are being predicted are very crucial.

In India, a precursor to the EIA began in 1976-77 when the Planning Commission directed the Department of Science and Technology to assess the river valley projects from the environmental point of view. It was later extended for all those projects that required approval from the Public Investment Board. Environment clearance then was just an administrative decision of the central government. On January 27, 1994, the Union Ministry of Environment, Forests and Climate Change under the Environment (Protection) Act 1986 (EPA), promulgated the first EIA notification making Environmental Clearance (EC) mandatory for setting up some specified new projects and also for expansion or modernisation of some specific activities. The notification of 1994 saw 12 amendments in 11 years before it was replaced by the EIA 2006 notification.

The hallmark of the 2006 notification was the decentralisation of the process of EC. State governments were also given powers to issue EC in certain cases. The 2006 notification has also been amended, in the name of fine-tuning the process several times. The Union Ministry of Environment, Forests and Climate Change floated a draft EIA in 2020 for public comments which created quite a furore as it was perceived to be pro industry and compromising the ecological concerns.

Used diligently, the EIA could be the most



Archana Vaidya

is a Natural Resource Management (NRM) and Environment Law consultant and an advocate at the High Court of Himachal Pradesh



Vikram Hegde

is an advocate in the Supreme Court of India

Despite an understanding of the fragility of the IHR, there is scant acknowledgement of its need for a different set of environmental standards and clearances

potent regulatory tool in the arsenal of environmental governance to further the vision of sustainable development in the country.

The EIA 2006 notification lays down the procedure as well as institutional set-up to give environmental clearance for the projects that need such clearance as per this notification. Only projects enumerated in the schedule attached to the notification require prior EC. An EIA is not required for many projects as they do not fall within the ambit of this notification.

This notification has categorised projects under various heads such as mining, extraction of natural resources and power generation, and physical infrastructure. Unfortunately, the threshold limits beyond which EIA is warranted for all these projects is the same across the country.

Despite all levels of government being acutely aware of the special needs of the Indian Himalayan Region (IHR), the region's vulnerabilities and fragility have not been considered separately. While some industries mentioned in the schedule to the notification cannot be set up in the IHR States due to the industrial policies of the respective States, other industries and projects have to meet the same threshold in the rest of the country. Even the draft 2020 notification which was floated for public discussion does not treat the IHR differently than the rest of the country and is not cognisant of the special developmental needs of IHR.

Flaws in the graded approach

The Indian regulatory system uses a graded approach, a differentiated risk management approach depending on whether a project is coming up within a protected forest, a reserved forest, a national park, or a critical tiger habitat. The stringency of environmental conditions proposed in the terms of references at the scoping stage of the EIA process is proportionate to the value and sensitivity of the habitat being impacted by the project.

One unfortunate miss from this graded approach for differentiated risk management has been the IHR. Despite its special needs and as an area of immense ecological importance to the entire country (it serves as a water tower and the provider of ecosystem services), this region is treated like any other part of the country.

While categorising projects it is important that the impacts of all such projects and activities are seen in the IHR in the context of this region's fragility and vulnerability vis-à-vis ecology and environment. We have enough systemic understanding that the Himalayas are inherently vulnerable to extreme weather conditions such as

heavy rains, flash floods, and landslides and are seismically active. Climate change has added another layer of vulnerability to this ecosystem. Despite this understanding of the fragility and vulnerability of the Himalayas, there is no mention of a different set of environmental standards needed if the project is located in the IHR.

The increasing frequency with which the Himalayan States are witnessing devastation every year after extreme weather conditions shows that the region is already paying a heavy price for this indifference.

The needs of these mountains could be addressed at all four stages of the EIA – screening, scoping, public consultation, and appraisal – if the yardstick for projects and activities requiring EC in mountainous regions is made commensurate with the ecological needs of this region.

General conditions mandated for all projects at the end of the notification could also have had a clause about the IHR or mountains above a certain altitude, or with some specified characteristics that could increase the liability of the project proponent.

What ails the EIA

There is no regulator at the national level, as suggested by the Supreme Court of India in 2011 in *Lafarge Umiam Mining (P) Ltd. v. T.N. Godavarman Thirumulpad vs Union of India* to carry out an independent, objective and transparent appraisal and approval of the projects for ECs and to monitor the implementation of the conditions laid down in the EC. The EIA process now reacts to development proposals rather than anticipate them. Due to the fact that they are financed by the project proponent, there is a veering in favour of the project. The process now does not adequately consider cumulative impacts as far as impacts caused by several projects in the area are concerned but does to some extent cover the project's subcomponents or ancillary developments.

In many cases, the EIA is done in a 'box ticking approach' manner, as a mere formality that needs to be done for EC before a project can be started. The consequences of all these limitations are amplified in the IHR as on top of the inherent limitations of the process, the EIA process is not at all cognisant of the special needs of the IHR. Policymakers would do well to explore other tools such as the strategic environmental assessment which takes into account the cumulative impact of development in an area to address the needs of the IHR as a fundamental policy.

CONTEXT

The Teesta dam breach in Sikkim and the recent floods and landslides in Himachal Pradesh highlight the destructive impact of our development model on mountain environments and ecosystems.

INTRODUCTION TO ENVIRONMENT IMPACT ASSESSMENT (EIA)

- **Definition:** EIA is a process defined by the **United Nations Environment Programme (UNEP)**.
 - It assesses the environmental, social, and economic impacts of a project before implementation.
 - It involves comparing project alternatives, predicting and analysing environmental consequences, and suggesting mitigation strategies.
- **Importance of Comprehensive Data:** EIA requires reliable and comprehensive data for meaningful results. The baseline data serves as the foundation for predicting future impacts.

HISTORICAL DEVELOPMENT IN INDIA

- In India, a precursor to EIA began in **1976-77 for river valley projects**.
- It was later **extended to projects** requiring approval from the **Public Investment Board**.

- Initially, environment clearance was **solely an administrative decision** of the central government.
- The Union Ministry of Environment, Forests and Climate Change promulgated the **first EIA notification** under the **Environment (Protection) Act 1986 in 1994**.
- The 1994 notification **underwent 12 amendments in 11 years**.
- The EIA 2006 notification replaced the 1994 version.

FEATURES OF EIA 2006 NOTIFICATION

- The 2006 notification decentralised the EC process, granting state governments certain powers.
- It categorised projects under heads like mining, natural resource extraction, power generation, and physical infrastructure mandate for environmental clearance.

MAJOR PROVISIONS OF THE 2020 EIA DRAFT

PROPOSED CHANGES

- **Public consultation:** Reduce from 30 to 20 days.
- **Public hearing:** Reduce from 40 to 20 days.
- **Government Justification:** The shorter window was "in tune with the times", given the growth of internet and mobile telephony.

ISSUES IN THE APPLICATION OF EIA IN INDIA

- **Absence of National Regulator:** India lacks a national-level regulator, as recommended by the Supreme Court in 2011 (Lafarge Umiam Mining (P) Ltd.; T.N. Godavarman Thirumulpad vs Union of India). The absence of an independent body for the appraisal, approval, and monitoring of projects seeking Environmental Clearances (ECs) is noted.
- **Reactive EIA Process:** The current EIA process reacts to development proposals rather than proactively anticipating them. Being financed by project proponents can create a bias in favour of the project, affecting objectivity.
- **Cumulative Impact Oversight:** EIA lacks in addressing cumulative impacts from multiple projects but partially considers subcomponents and ancillary developments within a project.
- **Lack of Special Consideration for IHR:** The EIA process does not account for the unique needs of the Indian Himalayan Region (IHR) exacerbates inherent limitations.

WAY FORWARD

- **Strengthen public participation:** The public needs to be meaningfully involved in the EIA process. This could be done by providing financial and technical assistance to community groups, and by making it easier for them to access EIA studies and participate in public hearings.
- **Improve the quality of EIA studies:** The government should invest in training and capacity building for EIA professionals. It should also establish quality control mechanisms for EIA studies.
- **Strengthen enforcement:** The government should increase its capacity to enforce the EIA process. It should also establish clear and transparent procedures for reporting and investigating violations.
- **Exploring Alternative Tools:** Policymakers should explore alternative tools like strategic environmental assessment, which considers the cumulative impact of development in an area.

When Tigers and Jackals Get The Same Protection

When tigers and jackals get the same protection

Many ecologists are incensed that an inordinate number of species have been included in the new schedules of the Wildlife Protection (Amendment) Act, 2022, without an objective or replicable process. In brief, Schedule 1, which confers the highest protection, contains about 600 species of vertebrates and hundreds of invertebrates, while Schedule 2 contains about 2,000 species (with 1,134 species of birds alone).

Issues for conservation

The first issue with this listing regards conservation itself. The WLPA was originally intended to regulate the use of various species (including hunting), restrict trade, and police the trafficking of species. The original Act is written in this form, with research being an exception under the hunting clause. The new Act goes one step further by aligning itself with CITES, and including the CITES appendices as well. Nowhere in the Act is there a clear connection between endangerment and conservation.

The listing of species has two direct effects. One, even if it were to have benefits for conservation, species would have to be prioritised. Listing hundreds of species of mammals and over 1,000 species of birds and innumerable other taxa means that it is unclear where resources should be allocated on the basis of this list. The same level of protection is offered to tigers and jackals, to the great Indian bustard and common barn owls, to the king cobra and rat snakes.

Two, every action has consequences, and in law, often perverse ones. For example, the Tree Preservation Acts of Kerala and Karnataka proscribe the felling of native trees. Instead of promoting conservation, these Acts disincentivise plantation owners from planting native trees, and promote exotics such as Silver Oak, that they can cut any time they need to.



Kartik Shanker

is with IISc, Bangalore



Umesh Srinivasan

is with IISc, Bangalore

The authors would like to thank Farah Ishtiaq, Ullasa Kodandaramiah, Anand Krishnan, Jayant Kulkarni, Prachi Mehta, Nandini Rajamani, V.V. Robin, Hema Somanathan, Aarthi Sridhar, and Abi Vanak for their contribution to the article.

An inordinate number of species have been included in the new schedules of the Wildlife Protection (Amendment) Act, 2022, with little consultation, and no process or logic

In the case of the WLPA, a particularly absurd consequence of listing has been the presence of the spotted deer (chital) in Schedule 1. Common throughout India, these are invasive in the Andaman Islands and have caused untold harm to the vegetation and herpetofauna. But they cannot be legally culled or removed because of the WLPA.

Impact on people

But the second, more important, issue concerns the impact on people. Various Schedule 1 species pose enormous physical, mental and economic harm to people. Crocodiles in the Andamans, leopards in certain pockets, and elephants everywhere kill people, destroy their livelihoods, and leave lasting psychological impacts. And yet people are told glibly by elite conservationists that they should learn 'co-existence'. The WLPA serves to enforce this viewpoint. The new Act elevates wild pigs and nilgai to Schedule 1, which means that the few States that have now allowed limited culling of problematic animals may not be able to retain that policy. This shows utter disregard for the plight of farmers and marginal cultivators.

The WLPA also has a restrictive view on hunting and the use of animals, even when it has been done traditionally for hundreds of years. Restrictions on use were imposed because those species had declined in numbers, but by the same logic, regulated use should be considered when animals are abundant, at least to support the livelihoods of local communities. But this is seen as unacceptable by the bureaucracy and abhorrent by many conservationists, with no consideration of science or society.

The third issue is that despite the support of many individuals in the forest bureaucracy, the paperwork involved in getting permits for research is tedious and time consuming. The listing of such a large number of species

could have debilitating effects on research. Environmental NGOs will have a harder time getting permits for research and conservation, even of common species such as barn owls. It is not clear whether citizen science will be able to proceed. Perhaps no one can be stopped from casually observing a Schedule 1 species while birding, but can one upload the 'data' to an international portal such as e-bird? It is likely that everyone could face potential effects to some degree.

Unfortunately, while lamenting the impact of the WLPA on their work, some ecologists have often been insensitive to the larger issues at play. Although there has been considerable criticism of western scientists conducting parachute science in the Global South, many ecologists in India have been guilty of the same, swooping in and out of distant remote field sites, taking knowledge and biological material and leaving no benefits. Worse, we have often promoted policies that have negative consequences for the very communities that we exploited. The Act that poses a hindrance to our work is a much graver threat to the lives of the people that it impinges upon.

In reality, all three issues - conservation, people's issues, and research - need to be attended to, with different degrees of urgency. Those whose lives are at stake need to be safeguarded first. Puerile animal rights arguments that result in the loss of human lives and livelihoods need to be disregarded. Second, management actions for species and habitats need to be tailored to ecology, species biology, and context. Often, this calls for research or at least regular monitoring by independent agencies, which is hampered by the scheduling of species. Finally, both citizens and ecologists have a right to observe nature and collect data if they so desire, as long as it does not cause undue harm to populations, and follows the basic principles of the ethical treatment of animals.

The Wildlife Protection (Amendment) Act, 2022, has included a vast number of species without a clear methodology, affecting the clarity of conservation priorities.

CONSERVATION ISSUES WITH WLPA AMENDMENTS

- Schedule 1 grants the highest protection to approximately 600 vertebrates and numerous invertebrates, while Schedule 2 lists around 2,000 species, including 1,134 bird species.
- The Act now aligns with CITES appendices but lacks a direct link between species endangerment and the conservation measures needed.

IMPACT OF OVER-LISTING ON SPECIES MANAGEMENT

- Over-listing creates confusion on resource allocation for conservation efforts.
- The same level of protection is given to both endangered (tigers) and common species (Jackals), which may not be efficient or necessary.
- The Act has resulted in unintended consequences, such as the protection of invasive species like the spotted deer in the Andaman Islands, which has been detrimental to local ecosystems.

IMPLICATIONS FOR HUMAN COMMUNITIES

- Protected species, now including wild pigs and nilgai, often cause harm to human lives and economic activities, with the WLPA enforcing co-existence despite these challenges.
- The Act disregards the adverse effects on farmers and marginalised cultivators, impacting their livelihoods.
- Traditional uses of animals, even when populations are abundant, are restricted, negatively impacting the livelihoods of local communities without considering scientific data or societal needs.

RESEARCH AND BUREAUCRATIC HURDLES

- The listing hampers research efforts due to the cumbersome permit process for studying protected species.
- Environmental NGOs and citizen scientists face difficulties in obtaining research permits, even for common species.
- It is unclear how the Act will affect the sharing of observational data on platforms like eBird.

ETHICAL AND POLICY CRITIQUES BY ECOLOGISTS

- Some ecologists have criticised the WLPA while being insensitive to the broader implications of their research practices.
- Issues of parachute science and lack of benefits to local communities from ecological research have been paralleled in India.
- The Act not only hinders ecological research but poses a significant threat to the communities it affects.

PRIORITISING HUMAN AND ANIMAL WELFARE

- Human lives and livelihoods affected by protected species must be the primary concern.
- Animal rights arguments should not override human welfare and conservation needs to be context-specific.
- Both citizens and ecologists should be able to observe and collect data on nature, respecting ethical animal treatment principles and without undue harm to animal populations.

Stocktaking Climate Finance

Stocktaking climate finance — a case of circles in red ink

Climate finance has a crucial role in retaining the trust of the developing countries in future climate change negotiations. The issues relating to climate finance are likely to be prominent in the Conference of the Parties (COP 28) meeting (November 30-December 12), in Dubai, in the context of *Climate Change 2023: Synthesis Report* providing the main scientific input to the global stocktake at COP. The report which says that the current temperature increase at 1.1° Celsius is responsible for frequent hazardous weather will feed into the global stocktake. Thus, the developed countries and climate vulnerable countries are likely to demand a ramping up of mitigation action by the developing countries – which is likely to be countered with the demand that the developed countries have not been able to meet the mark of a mobilisation of \$100 billion climate finance. The sum is inadequate in terms of the challenges faced by the developing countries in switching over to a low carbon development path and climate resilient development. Providing finance to developing countries is the operationalisation of the anchor sheet principle of the Common but Differentiated Responsibilities and Respective Capabilities.

Estimating adequate climate finance
The developed countries are required in mandatory terms to provide financial resources to developing country parties. Under Article 9 of the Paris Agreement on Climate Change, it is also mandatory for the developed countries to provide in their Biennial Update Reports (BUR), information relating to the financial resources which they have provided and, also, the projected levels of public financial resources to be provided to developing country parties. At the Copenhagen Change Conference in 2009, the developed countries made the commitment to mobilise \$100 billion per year by 2020. Further, the developed countries are required, in accordance with the decision accompanying the



Anwar Sadat

is a senior Assistant Professor in International Law, specialising in environmental law, at the Indian Society of International Law, New Delhi

The developed world needs to mirror the moves seen in 2009-10 to save the global financial system – by displaying strong political will and urgency, once again, to safeguard the atmosphere

Paris Agreement, to collectively mobilise \$100 billion through 2025, before a new collective quantified goal (NCQG) 'from a floor of \$100 billion per year is to be set at the end of 2024'. At the 26th United Nations Climate Change conference in Glasgow in 2021, the developed countries noted, with deep regret, of being able to mobilise only a total of \$79.6 billion.

The Paris Agreement is based on the self-determined efforts of all the parties inscribed in the nationally determined contributions (NDCs), which contain the mitigation efforts to be made by a party for the next five years. Entire NDCs put together project a picture of overshooting the 1.5° C temperature goal. Going by the needs of countries in the Global South expressed in their NDCs, the amount quantified for the first time touches close to \$6 trillion until 2030. For India, its third BUR says that its financial needs derived from its NDCs for adaptation and mitigation purposes for 2015-30 are \$206 billion and \$834 billion, respectively. Most of the financial needs are required in transitioning towards low-carbon, cleaner energy systems from traditional systems, which will not be funded by the designated financial mechanisms of the United Nations Framework Convention on Climate Change (UNFCCC). Additionally, India has reiterated its demand for a just transition at COP27 as '3.6 million people in 159 districts in India are entrenched in the fossil fuel economy through direct or indirect jobs related to the coal mining and power sector'. They will have to be supported with suitable economic opportunities and livelihoods.

Unclear burden sharing formula

The developed countries are mandatorily required to provide financial resources to developing country parties, but there is no agreed approach among developed countries to share the burden of this goal. One analysis suggests that the United States provided just 5% of its fair share in 2020. Without any mandatory

formula for collecting money, it is difficult to predict how the said money or the NCQG for climate finance will be mobilised. Neither the UNFCCC nor the Paris Agreement mention the criterion for mobilisation. Instead, the mobilisation is done with the help of a replenishment process.

The Global Environment Facility, a UNFCCC-designated funding agency providing grant and concessional loan to developing countries, is replenished every four years. A similar approach has been borrowed into the Green Climate Fund (GCF) by the developed countries to mobilise finance. The GCF, set up to administer a portion of the \$100 billion for developing country parties to switch over to low-emissions and climate resilient development path, had its second replenishment on October 5, 2023. In the second pledging conference, only 25 countries out of 37 developed countries met in Bonn, pledging to contribute \$9.3 billion in new contributions. Interestingly, the GCF includes voluntary contributions by nine developing countries. More contributions in the GCF serve the purpose of counting international public climate finance more easily as it has been subject of debate as to what counts as international public climate finance.

Replicate this action

Strong political will, perceived urgency and enlightened self-interest of the elite Global North were writ large in the case of a perceived collapse of global public good (global financial stability) in 2009-10 when the G-20 governments quickly responded to the global financial crisis, getting \$1.1 trillion in a few weeks to support the International Monetary Fund and multilateral development banks to save the global financial system. Unfortunately, these factors are missing when it comes to the necessary climate finance transfers from developed to developing countries to safeguard another global common – the atmosphere.

Anwar Sadat, an expert in environmental law, highlights the crucial role of climate finance in building trust with developing nations ahead of future climate change negotiations.

SIGNIFICANCE OF CLIMATE FINANCE

- With the impending Conference of the Parties (COP 28) meeting in Dubai and the introduction of the "Climate Change 2023: Synthesis Report," there is an emphasis on the heightened impact of global temperature increases.
- Developed nations, along with those most vulnerable to climate change, are expected to urge developing countries to increase their mitigation measures.
- In contrast, developing nations are likely to argue that the promised \$100 billion climate finance target has not been met by developed countries, and this amount is insufficient given the challenges they face in transitioning to a greener path.

ASSESSING ADEQUATE CLIMATE FINANCE

- Under the Paris Agreement's Article 9, developed countries are mandated to provide and report on the financial resources allocated to developing nations.
- Notably, at the Copenhagen Change Conference in 2009, there was a commitment to mobilise \$100 billion annually by 2020.
- Yet, by the 26th United Nations Climate Change conference in 2021, only \$79.6 billion was mobilised.
- The actual needs of countries in the Global South, as detailed in their nationally determined contributions (NDCs), approach nearly \$6 trillion up to 2030.
- Specifically, India requires \$206 billion and \$834 billion for adaptation and mitigation from 2015-30.

CHALLENGES IN FINANCIAL ALLOCATION

- While developed nations are obligated to provide funds to developing nations, there isn't a consensus on how this financial burden should be distributed.
- Some analyses, for instance, suggest that the United States contributed merely 5% of its "fair share" in 2020.
- There's ambiguity in the mobilisation criteria, with processes like the replenishment of the Global Environment Facility and the Green Climate Fund serving as primary financial mechanisms.
- The recent pledging to the Green Climate Fund, for instance, saw only 25 of 37 developed countries contribute, amounting to \$9.3 billion.

COMPARATIVE ANALYSIS

- There's a stark contrast in the urgency displayed by the global north during financial crises versus the climate crisis.
 - For instance, during the 2009-10 global financial meltdown, governments rapidly mustered \$1.1 trillion to safeguard the international monetary system.
- Such urgency and political will seem absent when addressing the need for climate finance transfers.

While the global north displayed commendable urgency in rallying resources during financial crises, similar enthusiasm and commitment are missing when it comes to climate finance for developing nations, highlighting the disparities in addressing global challenges.



Keeping Tabs on Carbon With An Accounting System

Keeping tabs on carbon with an accounting system

The climate 'polycrisis' – a term made popular by Adam Tooze – refers to the interconnected and compounding crises related to climate change that are affecting the planet not just in a few sectors but across several sectors and domains. It encompasses the physical impacts of climate change (rising temperatures, sea-level rise, and extreme weather events) and the social, economic, and political challenges that arise from these impacts. In India, one can see the interconnections between seemingly different sectors such as energy, infrastructure, health, migration and food production that are being impacted by climate change.

Recognising the complexity and interconnectedness of the climate polycrisis, it is crucial in developing a holistic approach that takes into account the diverse perspectives and priorities of different stakeholders, while ensuring resilience, equity, and justice. While it seems easier to pursue our response to climate change in a sectoral fashion, the very nature of a polycrisis means that tweaking one corner of the climate challenge leads to unexpected consequences elsewhere.

Instead, we need a deep transformation – one that lays the foundation of a new economy that is sensitive to the planet. Just as digital infrastructure enables new startups and public services, we need to imagine 'carbon infrastructure' that creates opportunities for a flourishing future carbon regime that takes the flows of carbon into account in the formulation of policy at every level: household, panchayat, district, State and country.

Measurement as the first step

The first step is measurement, for whatever cannot be measured cannot be accounted for. We need to measure carbon emissions from that of individual citizens to that of the nation as a whole, including all that is in the flow. Once we have a measurement system in place, we can build an accounting system that helps us balance our carbon books.



Amar Patnaik

is a Member of Parliament, Rajya Sabha, from Odisha and an advocate. He was a former Comptroller and Auditor General of India bureaucrat



Rajesh Kasturirangan

is a mathematician and cognitive scientist from the Massachusetts Institute of Technology (MIT), United States, and co-founder and CEO of Socrates Foundation, MIT

Such a system – on the lines of a financial balance sheet – will help bring the nation under one carbon accounting framework

We are all familiar with financial balance sheets, with their sources and their applications. What if the same thing is done for carbon?

Existing carbon accounting methodologies such as those championed by Karthik Ramanna at Oxford are already capable of tracking carbon balance sheets at the corporate level.

A national carbon accounting (NCA) system is both an evolutionary and a revolutionary generalisation of these ideas. It will bring the entire nation, starting from individuals and households, under one carbon accounting framework. This will be a paradigmatic change in the way we look at all human and non-human "activities" in the world. This is necessary if we intend to truly internalise carbon reduction goals of the country and the world.

Just imagine a world in which we file carbon tax returns alongside our income tax returns, or maybe only the carbon tax returns. Take a moment to consider the revolution in public finance that will be triggered when carbon is recognised, captured, valued, accounted for and taxed.

Carbon accounting

Public finance is the primary mechanism of development. Governments apportion funds for different developmental activities, each competing with the others for the exchequer's purse. The revenue to fund the public exchequer comes from taxes, and that, in turn, requires that individual entities – businesses, households – keep an account of inflows and outflows of money. 'Money accounting' is an integrated system, all the way from the spending of individuals to the Reserve Bank of India that helps us keep track of the circulation of money within the system. The keeping of accounts makes money visible and makes public finance possible.

In contrast, the stocks and flows of carbon are not tracked at a granular level anywhere in the world. As a result, there is no possibility for a progressive carbon tax that penalises large buyers

of petrol more than the average consumer. A progressive carbon tax requires us to keep track of the inflows and outflows of carbon, i.e., national carbon accounting. Carbon accounting is a way for companies to keep track of the carbon they are producing, removing, storing and offsetting. It helps companies keep carbon books alongside their financial books.

An NCA will bring the concept of carbon books to the nation and will make it mandatory for businesses and individuals to declare/report their carbon inflows and outflows. It will make the circulation of carbon visible, and just as with financial accounting, other goods and services can be 'financed' using carbon surpluses, especially if there is convertibility between the carbon accounts and the rupee accounts. Once we have an NCA, we will be able to set targets, make predictions about future emission reductions and track our progress against those goals.

We can speculate about a future national carbon budget that helps us re-imagine the entire economy, including new technologies and new forms of collective action. Instead of the single goal of increasing economic GDP in money terms, as we already do, there will be a parallel goal of a carbon GDP which countries will try to reduce.

As a polysolution

An NCA will not only help India meet its commitment to becoming net zero by 2070 but also help it and other countries (if adopted globally) create new livelihoods and new forms of organising its economy and society. Everyone understands GDP growth and, more recently, alternative measures such as Gross National Happiness. By making transparent the carbon footprint of human activities, we open up the possibilities of a new form of public discourse and an alignment between development and ecological sustainability. In short, an NCA is a polysolution to a polycrisis.

The views expressed are personal

The climate polycrisis has manifested in India through tangible physical changes such as increased temperatures, sea-level rise, and more frequent extreme weather events.

- These physical impacts have created a domino effect, adversely affecting energy production, critical infrastructure, public health, migration patterns, and food security.
- The response to climate change in India is hampered by the complexity of its impacts, which span across multiple sectors, requiring a unified and comprehensive political strategy.

HOLISTIC APPROACH TO ADDRESSING CLIMATE POLYCRISIS

- It's essential for India to develop strategies that recognize the interconnectedness of the climate crisis, ensuring solutions are resilient and equitable.
- Instead of isolated sectoral changes, India needs transformative approaches that reinvent economic systems to be environmentally sustainable.

NATIONAL CARBON ACCOUNTING (NCA): DEALING WITH POLYCRISIS

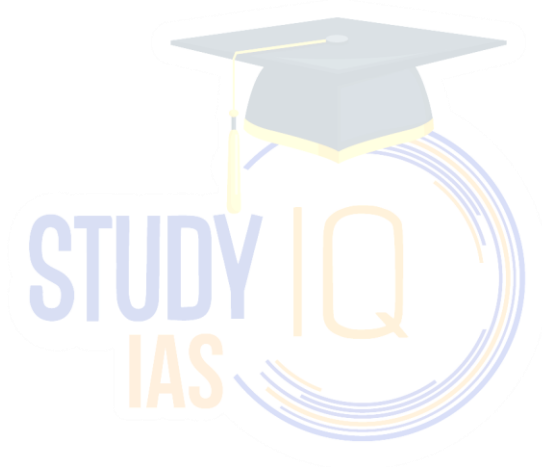
- Establishing a robust system to measure carbon emissions at various levels is critical for informed policy-making and accountability.
- A National Carbon Accounting (NCA) would provide a framework for tracking and managing carbon emissions across all sectors of the economy.
- Just as traditional accounting principles guide public finance, incorporating carbon accounting could revolutionise how environmental costs are managed.
- A granular tracking system of carbon could enable the implementation of a progressive carbon tax, penalising higher emissions more heavily.

REIMAGINING ECONOMIC GOALS THROUGH CARBON METRICS

- **Carbon Budget:** A national carbon budget could help India track and manage its carbon emissions in line with its net-zero commitments.
- **Economic and Environmental Goals:** India's economic goals could be aligned with environmental sustainability by considering both GDP and carbon emissions as critical metrics.

BENEFITS OF NATIONAL CARBON ACCOUNTING FRAMEWORK

- **Net-Zero Commitments:** An NCA would be instrumental in helping India achieve its net-zero targets while fostering new economic and societal organisation.
- **Public Discourse and Policy:** Transparent carbon accounting would enrich public discourse on development and sustainability, aligning public policy with ecological conservation.



The Shape of Climate Justice In A Warming India

The shape of climate justice in a warming India

The G-20 summit that was held in Delhi (September 9-10) agreed on tripling renewable energy capacity and a voluntary doubling of the rate of energy efficiency improvement by 2030. However, this Delhi Declaration on the climate question did not find consensus on the most contentious issue, which is the root cause of the climate crisis – of the phasing out of fossil fuels. Any energy transition initiative must embrace two normative ideals: first, internalising cost requires those who emit greenhouse gases to pay the social and environmental costs. Second, climate justice requires compensation for those who are harmed. Often, those who contribute to climate change are not the ones who are affected by it. Therefore, any mitigation effort must invert this carbon injustice by making the richer countries or richer classes within a country pay for the energy transition.

While these two principles are articulated at the international level, how such policies and politics affect the domestic front do not get debated. India's stance on the matter has largely been framed through the lens of foreign policy and its approach to common but differentiated responsibilities (CBDR) in international negotiations, which allows developing countries in the global south to prioritise economic growth and development over climate mitigation. Given the country's historically lower emissions, focusing on economic growth has naturally taken precedence over climate concerns. Such an approach evades concerns of climate justice within India, particularly its effect on inequality across levels class, caste and region.

Inequality matrix

It is now well documented across the world that climate change and energy transition disproportionately affect the poor. The climate-induced problems and droughts have compounded the agrarian crisis and allied economic activities. Variations in rainfall, temperature and extreme climate events directly impact agricultural productivity, compounding farmers' income loss. Rising temperature in the ocean ecosystem has already begun squeezing fish stocks in parts of the country, hurting fishing communities.

While the relationship between inequality and carbon emissions is complex, it is clear that addressing both environmental and socio-economic inequalities simultaneously is essential for sustainable and equitable



Kalaiyaran A.
is Assistant Professor at the Madras Institute of Development Studies, and Visiting Research Fellow, King's College London



Santosh Kumar Sahu
is Associate Professor, Indian Institute of Technology – Madras

Given India's historically lower emissions, economic growth has taken precedence over climate concerns, but such an approach evades concerns of climate justice such as its effect on inequality

development. It is now evident that less equitable societies tend to have higher emission outputs per unit of economic activity. Given its highly unequal economic structure, India is falling in that trap. Global experience suggests that societal responses which are necessary to address climate change (such as public action and state capacity), are impeded in more unequal settings. The cost of carbon emissions, in terms of societal impact, becomes significantly higher in such contexts. Recognising and mitigating the barriers that these inequality matrices pose to effective climate action is a critical step toward a more sustainable and just future.

Greening development

If climate change compounds existing inequalities, India's energy transition policies, though crucial, will affect the livelihoods of the poor and exacerbate existing class, caste, and regional disparities. India's Nationally Determined Contributions (NDC) aim to ensure that 40% of the total installed power generation capacity is clean energy. The country has pledged to achieve net-zero emissions by 2070. Such an ambitious target necessitates careful study of its implications. As of 2021, coal was the major contributor to the total energy supply in India (accounting for 56.1%), followed by crude oil (it accounts for 33.4%).

Similarly, the industrial sector was the largest consumer of energy, using more than half, i.e., 51% of the total final energy consumption, followed by transport (11%), residential (10%), and agriculture (3.6%) sectors. Data show that manufacturing is far more energy- and carbon-intensive than agriculture and services. Consequently, any increase in energy price is likely to lead to a contraction of manufacturing, which India cannot afford given its already low manufacturing level. Thus, a just transition entails a holistic approach that considers economic, social, and regional inequalities. While renewable energy adoption is crucial, this shift should not exacerbate existing disparities. For instance, regions that are heavily reliant on coal production face a unique set of challenges. These regions often struggle with pollution, poverty, and low-quality employment.

Transitioning to renewables requires a deliberate focus on protecting livelihoods, offering alternative job opportunities, and ensuring that vulnerable communities are not adversely impacted. The emphasis in the Paris Agreement (2015) is: "taking into account the

imperatives of a just transition of the workforce and the creation of decent work and quality jobs per nationally defined development priorities". The skill sets required and the jobs generated per unit of output in renewable vastly differ from fossil fuel industries. Many fossil fuel firms are in the public sector and act as a critical avenue for creating job opportunities for Dalits and the lower castes in India. A shift to renewable energy can potentially halt this generational mobility achieved by these disadvantaged groups. To ensure an equitable and sustainable transition, strategies must target inequality reduction and green investment simultaneously.

Greening federalism

Similarly, regions heavily reliant on coal production may lose revenues and livelihoods. This regional divide in economic inequality correlates with the energy source divide in India. Coal, the cheapest source of energy, is located in the poorer regions in eastern and central India while renewable energy hubs, powered by wind and solar photovoltaics (PV) technologies, are located in the relatively wealthy southern and western India.

Despite the pollution it causes, the coal sector, owned by the public sector miners (85%), is the main source of revenue via taxes, royalties, and mining fees and employment for the State governments in Odisha, Jharkhand, and Chhattisgarh. India's energy transition strategy must pay attention to these regional inequalities, transfer funds to States dependent on coal, and carve out State-specific programmes for reskilling development and local rehabilitation needs.

Thus, the Green Deal needs to have a federal deal. India's federal governance structure implies that sub-national governments play a significant role in addressing climate concerns. However, their priorities can differ significantly from those of the Union government. Examining sub-national responses reveals how State entities are vital in tackling the challenge of climate inequality mitigation. State governments have been found to implement policies, including those related to climate justice, climate adaptation, and disaster management laid out by the Union government, that are often at odds with the development aspirations of the States. We must delve into the intricate interactions between fiscal federalism and climate mitigation to understand how policy alignment and cooperation can be achieved across the levels of government.

The G-20 Delhi Declaration on climate change agreed to **triple renewable energy capacity and double energy efficiency by 2030**, but did not reach consensus on phasing out fossil fuels, the root cause of the climate crisis.

Normatives Of Energy Transition

Any energy transition initiative must embrace two normative ideals:

1. **Cost Internalisation:** Emitters of greenhouse gases should bear social and environmental costs.
2. **Climate Justice:** Climate justice demands that the wealthy countries and richer classes, who have contributed the most to climate change, pay for the energy transition that is needed to mitigate its effects on the poor and vulnerable.

Issues With India's Policy Of Energy Transition

- India's approach to climate change has been largely shaped by its **foreign policy and its commitment to common but differentiated responsibilities (CBDR)**.
- India has been **focusing on economic growth over climate change**, even though it has historically emitted fewer greenhouse gases than developed countries.
- India's focus on economic growth has **led to a lack of climate justice** within the country, as it has disproportionately **harmed the poor and vulnerable**.

Impact On Poor And Vulnerable

- **Agrarian Crisis:** Climate-induced problems and droughts have compounded the agrarian crisis, impacting agricultural productivity and farmers' income.
- **Fishing:** Rising temperature in the ocean ecosystem has already begun squeezing fish stocks, hurting fishing communities.

India's Energy Consumption Status

- **India's energy consumption:** As of 2021, coal was the major contributor to India's total energy supply (56.1%), followed by crude oil (33.4%).
 - The industrial sector was the largest consumer of energy, using more than half, i.e., 51% of the total final energy consumption, followed by transport (11%), residential (10%), and agriculture (3.6%) sectors.
- **India's energy transition goals:** India's Nationally Determined Contributions (NDC) aim to ensure that 40% of the total installed power generation capacity is clean energy by 2030. India has also pledged to achieve net-zero emissions by 2070.

Stats IQ

India launched the International Solar Alliance in 2015.

India installed a record 8.3GW of solar between Jan-June 2022 and surpassed the 50GW capacity target this year.

India saved USD 4.2 billion in fuel costs and 19.4 million tonnes of coal during this period.

The rollout of renewable energy, particularly solar, is accelerating rapidly and will transform India's electricity sector this decade.

The 400 GW renewables target for 2030 that once seemed far-fetched is now a reality.

Coal - a mainstay of the power grid - will likely be pushed out by wind and solar, especially as storage technologies take off.

India's new draft National Electricity Plan 2022 sees about 18GW reduction in coal capacity by 2030 when compared to the Optimal Generation Capacity Mix report released in 2020.

Inequalities Due To Energy-Transition Policies

- **Socio-economic inequalities:** The renewable sector requires higher skill sets but generates a lower number of jobs compared to fossil fuel industries.
 - Many fossil fuel firms are in the public sector and act as a critical avenue for creating job opportunities for Dalits and the lower castes in India. A shift to renewable energy can potentially slow down generational mobility achieved by these disadvantaged groups.
- **Regional inequalities:** Regions that are heavily reliant on coal production often struggle with pollution, poverty, and low-quality employment.
 - Coal, the cheapest source of energy, is in the poorer regions in eastern and central India while renewable energy hubs, powered by wind and solar photovoltaic (PV) technologies, are in the relatively wealthy southern and western India.

What Steps India Needs To Take?

- India's energy transition strategy must **pay attention to regional inequalities**.
- **Transfer of funds** to States dependent on coal, and carving out State-specific programmes for reskilling development and local rehabilitation should be undertaken.
- Strategies must target **inequality reduction and green investment** simultaneously.
- **Policy alignment and cooperation** should be achieved across the levels of government.
- There should be a deliberate **focus on protecting livelihoods**, offering alternative job opportunities, and ensuring that vulnerable communities are not adversely impacted.

- **Emphasis on the Paris Agreement** as it highlights the importance of a just transition, creating decent work, and considering nationally defined development priorities



Women, Marriage and Labour Market Participation

Women, marriage and labour market participation

Women's labour market participation is often concomitant with enhanced economic prospects and better household decision-making power. From a macroeconomic standpoint, a diminished level of women's labour force participation rate (LFPR) has significant consequences for women's intra and inter-household bargaining power, as well as the overall economic progress of the nation. "There are still large differences between women and men in terms of what they do, how they're remunerated and so on," said Claudia Goldin, who was awarded this year's Economics Nobel "for having advanced our understanding of women's labour market outcomes". Goldin's comprehensive analysis of the economic history of women has presented new insights into the many aspects of gender disparities in the labour market. Additionally, her research has shown the underlying factors that have contributed to these gaps throughout history, and the persisting inequalities that exist in contemporary times.

Data shows low labour participation

Globally, however, the level of female labour force participation remains relatively low. World Bank estimates (2022) show that the worldwide LFPR for women was 47.3% in 2022. Despite the remarkable advancements observed in the global economies, there has been a persistent decline in the labour force participation rate (LFPR) of women in developing nations. The estimations also indicate that female labour force participation in India between 1990 and 2022 has decreased from 28% to 24%. This fall has impeded their growth and hindered their ability to achieve their maximum capabilities. A significant disparity in labour market participation based on gender continues to persist worldwide.

Economist Goldin (1994) highlights this as the LFPR of adult women exhibits a U-shaped pattern during the course of economic growth. Further, she added that "the initial decline in the participation rate is due to the movement of production from the household, family farm, and small business to the wider market, and to a strong income effect. But the income effect weakens, and the substitution effect strengthens at some point."

The issue is made considerably dire when married women express a desire to participate in the labour market. After marriage, there is a tendency for women's LFPR to decrease due to many variables. These factors encompass women's limited educational attainment, less

Balakrushna Padhi

is Assistant Professor in the Department of Economics and Finance, BITS Pilani, Rajasthan campus

Simran Jain

is pursuing her PhD in Economics in the Department of Economics and Finance at BITS Pilani, Rajasthan

Krishna M.

is Associate Professor in the Department of Economics and Finance, BITS Pilani, Rajasthan campus

The economic impact of the non-participation of married women in the workforce in India is considerable, given their substantial representation among the working-age population

mobility as a result of increasing family obligations, and societal disapproval associated with women in employment outside the domestic sphere. The institution of marriage amplifies domestic obligations for women while concurrently imposing many social and cultural impediments that affect their participation in the workforce.

Multiple factors contribute to the diminished labour force involvement of married women or their proclivity to exit the labour field after marriage. The labour market entry of women is influenced by a range of individual and societal factors, perhaps impacting married women to a greater extent than their unmarried counterparts. Several variables contribute to limited labour participation for women, such as their religious and caste affiliations, geographical location, the wealth of their household, and prevailing societal norms surrounding women's employment outside the house.

Other challenges

When women decide to resume their professional careers upon marriage, they tend to exhibit a preference for some employment opportunities that offer enhanced flexibility and are situated in close proximity to their residences. Women also encounter gender-asymmetrical professional costs as a result of several societal constraints, resulting in gender disparities in premarital career selections, income inequality, age at marriage, and decisions about fertility decisions. It has been observed that women of the upper strata tend to adhere to stringent societal standards by predominantly assuming domestic roles. Conversely, women from the lower strata are more inclined to engage in the labour market, primarily driven by economic constraints that stem from poverty.

When analysing the female labour force participation rate (FLFPR) based on the Usual Principal Status (UPS) and Usual Principal and Subsidiary Status (UPSS) categories in India's NSSO Periodic Labour Force Survey (PLFS) survey (25 to 49 years), it becomes apparent that married women show a considerably lower employment proportion under the UPS status when compared to the UPSS status. The data show that marriage significantly influences women's labour market outcomes.

In 2022-23, there has been a notable decrease of 5% in the female labour force participation rate among married women aged 25 to 49 years, with a decline from 50% in 2004-05 to 45% in 2022-23. The decline in the female labour force participation rate (LFPR) is primarily

concentrated within the age group of 25-29.

Further, married women exhibit lower levels of labour force participation when compared to their unmarried counterparts. The examination of the influence of educational achievement on the rate of married women's involvement in the labour force shows that women lacking literacy skills demonstrate a greater inclination to participate in the labour force after getting married, as opposed to their well-educated counterparts. Empirical analysis that relates to the allocation of female labour across diverse industry sectors in India demonstrates that agriculture remains the prevailing sector in terms of female employment.

Solutions to pursue

Literature on female LFPR has underscored the noteworthy impact of social and cultural elements on women's choices about their entry into the labour market. This analysis primarily examines the relationship between women's marital status and their labour market outcome in the Indian labour market. The findings indicate that married women exhibit the lowest levels of labour market participation as compared to widowed, divorced and unmarried women. The economic impact of married women's non-participation in the workforce in India is considerable, given their substantial representation among the working-age population. It is imperative to look at suitable solutions in order to promote women's empowerment in the phase of high economic growth. The absence of adequate day-care services frequently acts as a disincentive for female labour force participation. Therefore, it is imperative to enhance the quality and accessibility of day-care services/crèches for employed women across various socio-economic strata, encompassing both formal and informal sectors.

The government has enacted initiatives such as the National Creche Scheme for The Children of Working Mothers. The implementation of such schemes is imperative in both the public and private sectors. This is particularly important in increasing the involvement of married women in the labour field. The implementation of work settings that prioritise the needs and well-being of women, the provision of secure transportation options, and the expansion of part-time job possibilities would serve as catalysts for the greater participation of women in the labour market within India.

The views expressed are personal

Claudia Goldin's recent Nobel in Economics sheds light on the profound gender disparities persisting in labour markets globally.

WOMEN'S LABOUR FORCE PARTICIPATION IN INDIA: AN OVERVIEW

- Women have always been an integral part of the socio-economic fabric of nations.
- Despite this, their representation in the labour market remains staggeringly low in many countries, including India.

CHALLENGES

- **Historical Trends:** Goldin's research indicates that the female labour force participation rate (LFPR) follows a U-shaped trajectory during economic evolution.
 - An initial dip results from shifts in production modes, and household dynamics but subsequently rises, influenced by societal and economic changes.

- **Marriage & Cultural Norms:** A significant deterrent to women's LFPR in India is marriage.
 - Post-marriage, societal expectations, heightened domestic responsibilities, and mobility restrictions hinder women from entering or continuing in the workforce.
 - Moreover, cultural affiliations, caste, and location further contribute to this diminished participation.
- **Occupational Preferences & Constraints:** Even when re-entering the job market, women tend to opt for roles offering flexibility and proximity to their homes.
 - Societal norms influence premarital career choices, wages, marriage age, and reproductive decisions.
 - Affluent women, bounded by stringent societal norms, often adopt domestic roles, while economic necessities push women from poorer backgrounds into the workforce.
- **Education & Employment Trends:** Interestingly, women with lesser education show a higher propensity to join the workforce post-marriage compared to their educated counterparts.
- Furthermore, a vast majority of employed women remain concentrated in the agricultural sector.

SUGGESTIVE MEASURES

- **Improving Child Care Facilities:** A significant roadblock to female LFPR is the lack of dependable child care services.
 - Expanding and enhancing the quality of day-care and crèche services across various socio-economic levels is paramount.
- **Government Initiatives:** Schemes such as the "National Creche Scheme for The Children of Working Mothers" should be diligently implemented across both public and private sectors.
- **Inclusive Work Environments:** Corporates and businesses should adapt to the unique needs of women, offering them secure transportation, and expanding part-time job opportunities.
- **Addressing Societal Norms:** A broader cultural shift is required to dismantle restrictive societal norms. Awareness campaigns, community dialogues, and educational interventions can play a pivotal role in altering these deep-rooted biases.

Data Insights

- India's National Sample Survey Office (NSSO) Periodic Labour Force Survey (PLFS) survey draws a distinct picture for married women.
- In the age bracket of 25-49 years, there's been a decline of 5% in female LFPR from 2004-05 to 2022-23, particularly evident among women aged 25-29.
- India's female LFPR (24%) is the lowest among BRICS countries and select South Asian countries.
- China, with the highest female population, boasts the highest female LFPR at 61%.
- Marital status significantly influences this decline, with married women showing lesser inclination towards the workforce compared to their unmarried, divorced, or widowed counterparts.
- World Bank's 2022 data underscores this disparity by revealing a mere 47.3% global LFPR for women. Within the tapestry of this global trend, India presents a unique case, where the LFPR of women saw a decline from 28% in 1990 to 24% in 2022.

Women Can Make the World Better

Women can make the world better

Economic history has long been chronicled through a male lens, emphasising the contributions of men and their viewpoints. Just look at the Nobel Memorial Prize in Economic Sciences. It has been awarded to 90 men since 1969 – and just three women. The first, Elinor Ostrom, won in 2009 for explaining how local communities, most of them in developing countries, govern themselves. The second, Esther Duflo, won in 2019, for her experimental work in alleviating global poverty. Claudia Goldin was the third woman awarded the Nobel Prize in Economics in 2023 for her work explaining why women earn less money than men even when they do the same work.

Economics science is focused on studying systems for producing economically valuable goods and services efficiently. Natural and human resources are measured by economists in money terms. Claudia Goldin was awarded for her work explaining why women earn less money than men even when they do the same work. A woman's work in the family contributes to the well-being of humans in society: it does not add to the growth of the economy and GDP. Ms. Goldin's research reveals that women, who also attend to the caring work required for families at home, are considered less valuable in economic enterprises because they cannot commit to continuously working full time for their employers, which men can.

The future of work and India

Patterns of economic growth have shifted globally. Long-term employment in industrial forms of establishments is becoming harder to find even in rich countries. More employment is being generated now in the gig economy and the informal sector. Even in large industrial establishments, jobs are on short-term contracts. These trends in the future of work are a special challenge for India, which has the largest numbers of youth in the world. They are finding fewer opportunities for dignified work with adequate income and social security even though the Indian economy is among the fastest growing in the world.

Moreover, India, which ranks 132 out of 191 countries in human development, needs to invest



Arun Maira

is the author of
'Shaping the Future:
How to Be, Think, and
Act in the New World'

The global, male dominated, money-driven, system of institutions of business and society needs an overhaul

more in care-giving services. Sadly, care-giving work is not valued in the money economy. The millions of women providing domestic services, and millions more who are providing care in communities as ASHA workers (Accredited Social Health Activist) and anganwadi workers in primary health and education, are very poorly paid.

The Indian Prime Minister has called upon the G-20 to support human-centric development going beyond GDP. The vision of globalisation so far has been "One Earth, One Economy, One Future". India has called for a different vision at the G-20: *Vasudhaiva Kutumbakam*: "One Family, One Earth, One Future". GDP is a monetary measure of only the economic component of a society. GDP does not value care-giving work. Therefore, to pursue its ambitions to become a "\$10 trillion-dollar GDP" economy, policymakers, even in India, want to pluck women out of their families and from informal work, and push them into more efficient, industrial-form establishments to contribute to GDP.

The SDG goal

The 17 Sustainable Development Goals (SDG), to be achieved by 2030, cover a range of environmental, social, and economic problems that must be solved simultaneously to make progress more inclusive and sustainable. The G-20 has assessed that, at the midway point to 2030, the global progress on SDGs is off-track with only 12% of targets on track. Clearly, we must change our approach for achieving the SDGs.

Many wise men have advised that we cannot solve complex systemic problems with the same ways of thinking that have caused them. The prevalent paradigm of public policy is for domain experts to determine best solutions in their respective areas, and for government organisations and non-governmental organisations to deliver them on scale. However, educational solutions that work in Kerala will not suit Bihar; water management systems that suit Rajasthan will not fit Uttarakhand. Moreover, environment, livelihood, health, and infrastructure solutions must mesh with each other in their local contexts. Therefore, complex problems must be solved bottom up, not top

down. Local systems solutions cooperatively developed by communities are the only way the goals of the SDGs can be achieved.

Value the work of caring

The masculine view of the economy is a production machine driven by competition. A feminine view of the economy is a society of human beings who care. Mainstream economics, so far dominated by men, has created a Tragedy of the Commons. Nobel Laureate Ostrom showed how local communities, often with women at their centre, cooperatively govern their local resources equitably and sustainably. Ms. Ostrom proposed a different paradigm, based on cooperation, equity, and sustainability, for realising the Promise of the Commons, which is the urgent need of this millennium.

A paradigm change is required in economics. Paradigm changes always require a power shift which is difficult because people with power will not let go. Money gives power; political authority gives power; and formal education and science (PhDs and Nobel Prizes) give power too. In fact, this is the basis of a caste system of power in all societies. Those with the power of money, authority, and formal higher education are the upper castes in the hierarchy. They form coalitions among themselves, ostensibly to make life better for the common people who, they say, cannot govern themselves and must be developed.

It is time for the powers above to humbly listen to the people and learn from them, rather than teaching them ways that have led humanity to grave problems of environmental degradation and economic inequities. The global, male dominated, money-driven, system of institutions of business and society needs an overhaul. Women must be given freedom, not just to be promoted within male-dominated institutions, but rather to shape better, family-spirited institutions for governance. Moreover, local communities must be given more powers for designing and implementing inclusive and sustainable solutions to their problems. Without such fundamental institutional reforms, the vision of *Vasudhaiva Kutumbakam*: "One Family, One Earth, One Future" will soon fade along with the G-20's banners.

Only three women have won the Nobel Prize in Economic Sciences since its inception, highlighting the gender disparity in recognition within the field. Elinor Ostrom, Esther Duflo, and Claudia Goldin have won the prize for their contributions to understanding communal governance, poverty alleviation, and gender pay disparities, respectively.

CLAUDIA GOLDIN'S CONTRIBUTION

- **Wage Gap Analysis:** Goldin's Nobel-winning work focused on the reasons behind persistent wage gaps, emphasizing the undervaluing of women's commitment due to their dual roles at work and as primary caregivers at home.

WORK PATTERNS AND WOMEN

- **Shift in Employment:** The global trend toward gig and informal employment, along with short-term contracts in industries, pose challenges for India's large youth population seeking stable and dignified jobs.
- **Unrecognised Family Work:** The economic system fails to account for women's unpaid caregiving and domestic work, a crucial component of societal well-being but not quantified in GDP.
- **Poor Compensation for Caregivers:** In India, vital caregiving roles like those of ASHA and Anganwadi workers are grossly underpaid, despite their importance to primary health and education.
 - India's low ranking in Human Development Index (132/191) indicates a need for significant investment in caregiving services, which the economy currently undervalues.

NEED FOR CARE ECONOMY

- **India's Stance:** PM Modi urged the G-20 to adopt a human-centric approach to development, championing the concept of Vasudhaiva Kutumbakam - envisioning a united family and future for the planet.
- **Off-track Progress in SDG:** Global assessment shows only 12% of SDG targets are on track, indicating a need for a revised approach to meet the 2030 deadline.
- **Biased Economic view:** The current economic model, viewed as competitive and production-driven, contrasts with a caring-centered approach.

DEVELOPING CARE & SUSTAINABLE ECONOMY

- **Institutional Overhaul:** Fundamental reforms are required to enable women and local communities to shape institutions that truly reflect familial and cooperative values.
- **Community-Based Approaches:** Sustainable solutions should be developed cooperatively at the community level, echoing Ostrom's vision of equitable and sustainable local governance.
- **Local Solutions:** Effective public policy must be tailored to local contexts rather than applied in a one-size-fits-all manner.
- **Valuing Caring Work:** Economics must incorporate the value of caregiving, recognizing its critical role in society.
- **Inclusive Governance:** To achieve the vision of "One Family, One Earth, One Future", women and local communities must be empowered to design and implement inclusive and sustainable solutions.

Without such changes, the aspiration of global unity and sustainability may be lost, rendering the G-20's initiatives ineffective.

Women's Quota, Panchayats to Parliament

Women's quota, panchayats to Parliament

The landmark Women's Reservation Bill – now the Constitution (106th Amendment) Act – that reserves one-third of the total seats in the Lok Sabha and State Legislative Assemblies for women received presidential assent recently. As the first law passed in the new Parliament building during a special session, it portends a new chapter in India's democratic journey.

It comes on the 30th anniversary of the constitutional reforms that reserved one-third of seats in panchayats and municipalities for women. Since then, there have been multiple unsuccessful attempts to extend women's reservation to the Lok Sabha and State Assemblies. While its final enactment is momentous, it is contingent on the conduct of delimitation and census.

Nevertheless, it is the right time to take stock of the 30-year experience of women's reservation in local government and the lessons it offers Indian democracy.

Parliament, 30 years ago, enacted the 73rd and 74th Constitutional Amendments that sought to make panchayats and municipalities "institutions of self-government". It mandated a minimum of one-third of seats and office of chairpersons in panchayats and municipalities to be reserved for women. It also mandated reservation for Scheduled Castes (SCs) and Scheduled Tribes (STs) based on their percentage population and enabled States to reserve seats for Backward Classes. This has created a system with over 3 million elected panchayat representatives, out of which almost half are women.

The expansion and diversification of the representative base of Indian democracy is the most successful element of these constitutional reforms. While the Union government's 2009 constitutional amendment to increase women's reservation in local governments



Mathew Idiculla

is an independent legal consultant and a visiting faculty at Azim Premji University, Bengaluru

The design of women's reservation should have ideally been informed by its 30-year experience in local governments

from 33% to 50% failed, many States have enacted laws that reserve 50% seats for women and also instituted reservations of seats for Other Backward Classes (OBCs). Hence, presently in panchayats and municipalities, there is, at one level, vertical reservation of seats for SCs, STs, and OBCs and a horizontal category of reservation for women that applies across all categories – general, SC, ST, and OBC.

Such a mix of vertical and horizontal reservations recognises the aggravated disadvantage people face due to their location in the intersection of their caste and gender identities. The present women's reservation law, as well as its previous avatar passed by the Rajya Sabha in 2008, adopts a similar model of intersectional reservation for women. However, unlike the case of the 73rd and 74th amendments, the present law does not enable reservation for OBC women.

Impact of reservations

Beyond representation, has women's reservation in local governments yielded substantive benefits? A 2004 paper by Esther Duflo and Raghavendra Chattopadhyay on panchayats in West Bengal and Rajasthan found that women leaders invest more in public goods and ensure increased women's participation in panchayat meetings.

A more expansive study in 2011 across 11 States by Ms. Duflo and others reaffirmed the finding that women-led panchayats made higher investments in public services like drinking water, education, and roads. However, a 2010 paper by Pranab Bardhan and others found that women's reservations worsened the targeting of welfare programmes for SC/ST households and provided no improvement for female-headed households.

Meanwhile, a 2008 paper by Vijayendra Rao and Radu Ban found that women leaders perform no differently than their male counterparts in south India

and instead institutional factors such as the maturity of the State's panchayat system were more relevant. Worryingly, a 2020 paper by Alexander Lee and Varun Karekurve-Ramachandra examining reservations in Delhi found that constituencies reserved for women are less likely to elect OBC women and more likely to elect upper-caste women.

Uncertain future

Evidently, the impact of women's reservation is not straightforward. The design of women's reservations in Parliament and State Assemblies should have ideally been informed by its 30-year experience in panchayats and municipalities. Since the role that women play in local governments is different from their role in Parliament, the impact of reservation may play out differently. However, something as vital as a constitutional amendment for women's reservation should have been introduced after widespread discussion and analysis of its experience, instead of being introduced surreptitiously through a "supplementary list" in a hastily organised Parliament session.

Unlike the 2008 version, the present women's reservation law has tied its implementation with the conduct of delimitation and census, neither of which have a definite date. The constitutional freeze for delimitation, that has been in place since 1976, will end in 2026. If the reallocation of seats between States is purely based on population, the southern States' share in the Parliament will drastically reduce. So, the next delimitation exercise is likely to open up the fault lines of India's delicate federal relations. Hence, coupling women's reservations with a politically fraught delimitation exercise makes its implementation contentious. Hopefully, the near unanimity in the passing of the Bill signals that there will be some consensus on implementing women's reservation in the near future.

ENACTMENT OF THE WOMEN'S RESERVATION BILL

- The Constitution (106th Amendment) Act, marked the introduction of one-third reservation for women in the Lok Sabha and State Legislative Assemblies.
- This act is significant as it reflects a significant stride in gender equality in India's political landscape and was passed on the 30th anniversary of the constitutional reforms for women's reservation at local government levels.

INTERSECTIONAL RESERVATION

- **Vertical and Horizontal Reservations:** The current women's reservation law introduces an intersectional model, integrating both vertical (SCs, STs) and horizontal (women across all categories) reservations.

- **Exclusion of OBC Women:** The present law, however, does not provide for reservation for OBC women specifically.

EXPERIENCE FROM LOCAL GOVERNMENTS

- **Pioneering Reforms:** The 73rd and 74th Constitutional Amendments reserved one-third of the seats for women in panchayats and municipalities, resulting in almost half of the elected panchayat representatives being women.
- **Expanded Representation:** These amendments successfully expanded the representation base of Indian democracy, incorporating women and various social categories including SCs, STs, and OBCs.

STUDIES ON IMPACT OF WOMEN'S RESERVATION

- **Public Goods Investment:** Research has shown that women leaders tend to invest more in public goods like water and education.
- **Mixed Outcomes:** Other studies have found mixed results regarding the impact on welfare program targeting and the performance of women leaders relative to men.
- **Caste Dynamics:** Some research indicates reservations may not effectively support OBC women and tend to favour upper-caste women in certain areas.

CHALLENGES AND FUTURE PROSPECTS

- **Need for Informed Design:** Ideally, the design of the parliamentary women's reservation should have been based on the extensive experience from local bodies, which wasn't fully utilised.
- **Contentious Implementation:** The linkage of the women's reservation implementation with the delimitation and census processes may create political contention, particularly affecting federal relations and seat allocations among States.
- **Consensus on Enactment:** Despite the challenges, the unanimous passage of the Bill suggests a positive outlook for achieving consensus on women's reservation in the future.

Women Want Change, Society Needs Change

Women want change, society needs change

The 17th edition of the Global Gender Gap Report of the World Economic Forum (published on June 20, 2023), based on data from 146 countries, has concluded that at the current rate of progress, it will take 131 years to close the global gender gap; it is 149 years in populous South Asian countries including India.

Reservation is the most effective form of affirmative action and equity is the first step to equality. That it leads to inefficiency or incompetency is simply making excuses for not rendering tightly guarded spaces to ousted classes. I strongly contend that women are not inferior to men. Incompetencies, even if they arise, are short term, and are removed soon after opportunity for skill building is made available.

A very astute person once asked me whether we want women to fight women. The answer is 'no'. What women want is a level playing field where the factor of gender which is completely irrelevant but looms large, is removed from the equation.

The basic premise of advocates against reservation is that it will bring down competence. Alas, this is a completely misplaced notion as statistics show that women perform much better than men in academics, more women graduate from colleges than men, and more women enter the workforce than men. In contrast to this trend, the number of women sharply spirals downwards in leadership positions not because of their incompetence, but because of the hegemony of men.

A fresh start

The inauguration of parliamentary business in September 2023 in the new Parliament building also gave a fresh start to the aspirations of Indian citizens with the passage of the Women's Reservation Bill. After much delay, the Constitution (One Hundred Twenty-Eighth Amendment) Bill, 2023, popularly known as the Women's Reservation Bill, 2023 became a rare piece of legislation in independent India to be cleared overwhelmingly by both Houses. It is indeed a ground-breaking event. While India's founding fathers ensured that India was early to adopt universal adult suffrage, the role of women in shaping the country's political future still remains minimal.

Global trends exhibit a sharp reduction in the age of political leaders. But can a common Indian woman, just by her commitment and ambition, dream of becoming the Prime Minister of India at the age of 37 – like Jacinda Ardern, the former Prime Minister of New Zealand?



Vibha Datta Makhija

is Senior Advocate,
Supreme Court
of India

Across the world, women are appreciated by society in supportive and emotional roles, but very seldom in leadership roles. The world hates and denigrates ambitious women. Take, for example, the case of Hillary Clinton. There is not an iota of doubt that her political experience and acumen trumped Donald Trump's competencies. However, America, the world's so-called top democracy, chose an inexperienced Mr. Trump over her to lead them.

In leadership roles

Historical evidence points out that but for a few Taleb's black swans, all women who have assumed leadership roles did not get there by sheer industry, competence and intelligence. They were allowed only for the convenience of men who were disqualified from assuming these positions, or, if it served some political agenda. In the Indian political arena women leaders were, most often, convenient choices. Their initial acceptance was the perception that they could be conveniently removed, but their inherent acumen belied those designs.

Historical evidence also shows that most women who make it to leadership positions have a mix of privileges – of higher education, the support of influential mentors or families, or belong to upper classes or castes. If there is a survey, I am sure that the figures will show that the percentage of women legislators who have had university and higher education is almost cent per cent, versus such a percentage of male legislators.

Despite these privileges, women also take longer to assume leadership positions. Even Indira Gandhi, who had the highest elitist advantage and was politically active from an early age, was not fielded as the Prime Minister on Jawaharlal Nehru's death in 1964, and had to wait till Shastri's death in 1966 to assume the prime ministerial role. Rajiv Gandhi, on the other hand, by virtue of being the son, and even though not politically active earlier, was immediately fielded after Mrs Gandhi's assassination. The question thus is, whether an Indian woman shorn of nepotistic advantages can be in a top leadership position in good time.

The deepest cut is that the handful of privileged women who assume leadership are not supportive or empathetic to the aspirations of those women who do not even have access to basic needs such as nutrition, education and financial independence. They reel under the misconception that they have become leaders by virtue of their own efforts and sacrifices, ignoring the personal advantages they possess.

The archives bear testimony to this attitude. During the Round Table Conference held in the 1930s in London, a letter was written on November 16, 1931 by Sarojini Naidu and Begum Jahanara Shahnawaz presenting a joint manifesto by the All India Women's Conference, the Women's Indian Association, and the Central Committee of the National Council of Women in India. They demanded neither discriminatory nor favourable treatment on the basis of gender in legislative representation, thereby rejecting reservation. Incidentally, Sarojini Naidu had the advantage of being educated at the King's College London and Cambridge with a scholarship from the Nizam of Hyderabad.

Begum Jahanara Shahnawaz, a Muslim League member, on the other hand advocated, along with Radhabai Subbarayan, a minuscule five per cent reservation for women. While Begum Jahanara Shahnawaz studied at Queen Mary's College, Lahore, Radhabai Subbarayan had the privilege of attending Somerville College, Oxford. Both the women were from elite backgrounds, affluent families and upper classes.

Regressive views are a hurdle

Thus, the biggest block is the regressive views on gender equality held by men and women. This has been seen even in otherwise progressive men as seen when C. Rajagopalachari opposed Radhabai Subbarayan's choice to fight from a general seat.

Mulayam Singh's accusation in Parliament in 2010, that the previous avatar of the women's reservation Bill would only champion the cause of educated, urban and elite women, failed to recognise that the core objective of the Bill was to create space for women who did not have the good fortune of belonging to privileged and elite classes. A report in the leading daily said that political analysts felt – and rightly so – that the stand of Mulayam Singh and Lalu Prasad Yadav did not stem from their concern for women, but because "it would reduce the space for men who dominate elections in our patriarchal society".

Why do women have to wait so long to close the gender gap? The present Bill is the first step towards actualising gender parity. One only wishes that its implementation would be based on a readjustment of seats on the basis of the 1991 Census, as it is done in the case of Scheduled Caste seats by the Delimitation Commission, rather than waiting for the delimitation exercise pegged on the next Census, whenever it is held.

It is time to quickly set right historical wrongs. Women want change. Society needs change. And there is no reason why it should be late.

The Women's
Reservation Act
is the first step
toward
enabling
gender parity

GLOBAL GENDER GAP AND INDIA'S RANKING

- **World Economic Forum's Findings:** The 17th edition of the Global Gender Gap Report indicates it will take 131 years to close the global gender gap, with South Asia, including India, needing 149 years.
- **India's Progress:** India has improved its position, climbing eight places to rank 127th in the global gender index.

THE CASE FOR RESERVATION

- **Affirmative Action:** Reservation is considered an effective measure for ensuring equity and equality, and any claims of it leading to inefficiency are viewed as excuses.
- **Women's Academic Performance:** Women outperform men academically and enter the workforce in greater numbers, yet their presence dwindles in leadership roles.

- **Role of Parliament:** The passage of the Women's Reservation Bill, 2023, in India's new Parliament building marks a significant advancement for women's political participation.

WOMEN IN LEADERSHIP

- **Challenges Faced:** Women often attain leadership positions not solely on merit but due to convenience or political agendas, with most female leaders coming from privileged backgrounds.
 - E.g. Indira Gandhi's delayed ascension to Prime Minister compared to Rajiv Gandhi's immediate rise illustrates gender disparity in Indian politics.

NEED FOR SUPPORTIVE LEADERSHIP

- **Lack of Empathy:** Privileged women leaders sometimes fail to advocate for the needs of less privileged women, mistakenly believing they achieved success solely through personal effort.
- **Historical Attitudes:** In the 1930s, influential women like Sarojini Naidu opposed gender-based reservation, reflecting elite backgrounds' influence on their perspectives.

ADDRESSING REGRESSIVE VIEWS

- **Resistance to Equality:** Regressive views on gender equality persist among both men and women, with even progressive individuals like C. Rajagopalachari showing opposition.
- **Political Opposition:** Politicians like Mulayam Singh have critiqued women's reservation bills, perceiving them as a threat to male-dominated electoral spaces.

MOVING TOWARDS GENDER PARITY

- **Implementation of the Bill:** The Women's Reservation Bill is a crucial step toward gender parity, with hopes that its execution will not await future census-based delimitation but act on immediate needs.
- The article advocates for prompt corrective measures to address historical gender injustices, emphasising society's need for change without further delay.

An unfolding economic tragedy

An unfolding economic tragedy

A reflexive cheer of India as the fastest-growing major economy rang out when the National Statistics Office (NSO) announced in late August that GDP had increased in the April-June quarter at an annual rate of 7.8%. The most euphoric cheerleaders predicted growth to accelerate to 8%. Even conservative forecasters routinely project GDP growth between 6% and 7%.

This GDP-centric framing of alleged Indian economic success is wrong-headed. GDP is a flawed metric of national economic welfare. It hides inequalities and deflects attention from acute job scarcity, poor education and health, unlivable cities, a broken judicial system, and environmental damage. Feverish celebrations of India's large but unequally distributed GDP hide the struggles of large numbers of people; large GDP is not purchasing power.

For India, 'fastest-growing' growing GDP should be a trivial achievement. Just as a 10-year-old child gains height more rapidly than a 20-year-old adult, India as the poorest of the major economies should grow fastest. Embarrassingly, it has failed to consistently do so. In fact, contrary to the hype, GDP growth has slowed sharply over the past two decades. The problem has been weak mass demand.

Pre-COVID and post-COVID
Indian GDP grew at an annual 9% rate in the mid-2000s as historically high world trade growth lifted all economies. A financial sector-real estate-construction bubble added froth to that growth. This was unsustainable. Growth slowed to 6% after the global financial crisis of 2007-08 as world trade decelerated quickly. By 2012-13, GDP growth had fallen to about 4.5%, but growth for that year and the next three jumped courtesy of a mysterious data revision in January 2015. Cleverly juggled statistics, however, could help only so much. The slowdown



Ashoka Mody
is Visiting Professor of International Economic Policy at Princeton University and the author of 'India is Broken: A People Betrayed, Independence to Today'

A sober analysis of GDP growth just before and after COVID points to a medium-term annual GDP growth forecast of 3%-4%

resumed after the demonetisation and botched GST rollout. And once the finance-real estate bubble collapsed following the IL&FS bankruptcy in August 2018, GDP growth came down to 3.9% in the year before the pandemic.

In fact, the pre-COVID growth was more dire than the publicised estimate implies. Indian statistical authorities present income from production as their measure of GDP. In principle, expenditure on Indian products (by national residents and foreigners) should equal income because producers earn incomes only when someone buys their wares. But expenditure grew at a mere 1.9% in the pre-COVID year.

When income and expenditure growth differ significantly, an average of the two more fairly represents the state of the economy rather than any one measure. By that averaging method, GDP grew by 2.9% in the pandemic year.

The slowdown from the heady 9% GDP growth in the mid-2000s to 3%-4% before the pandemic reflected severe weakness in demand. That weakness manifested in the glaring drop in private corporate fixed investment from a peak of 17% of GDP in 2007-8 to 11% in 2019-20. Private corporations cut back investments recognising that domestic consumers, fearful of job and earning prospects, had constrained purchasing power, and foreigners had only a limited appetite for Indian goods.

In the post-COVID-19 years, the economy has bounced around. It fell sharply, recovered modestly, slowed severely, and experienced a dead cat bounce from late-2022. The only way to assess this bouncy post-COVID phase is by determining the average growth rate over the entire period. Even that is not straightforward. If we consider the latest four quarters over the four quarters before COVID, the annual growth rate (of the income and expenditure average) is 4.2%. If we compare only the latest quarter over the quarter before COVID, the annual

growth is just above 2%.

The tell-tale sign of post-COVID demand weakness is the further drop in private corporate investment to 10% of GDP in 2021-22; analysts believe that it has remained anaemic in 2022-23. Investors recognise that while rich Indians, helped by an overvalued rupee, are buying luxury goods, the majority can barely buy necessities.

In response to shrinking mass affordability, producers continue offering ultra-low price staples such as noodles, toothpaste, soaps, soft drinks, and biscuits, but sell them in packages of ever-smaller quantities. In December 2022, the government instituted a year-long free grain programme for nearly three-fifths of the population; analysts expect the programme to persist through the 2024 general elections. Meanwhile, to maintain consumption, households have slashed their savings rates to 5.1% of GDP, from 11.9% in 2019-20. Those eligible for credit cards are racking up worrying levels of debt. And with an overvalued rupee and world trade barely crawling ahead, Indian exports have been falling.

Need to bolster demand

In the glow of a fake high-growth story, government policy has tried to rev-up supply rather than bolster demand through good jobs, more human capital investment, and functional cities. Unsurprisingly, the September 2019 corporate tax cut, sops like PLI schemes, and shiny flyovers and highways have failed to revive corporate investment. Increased fiscal reliance on indirect taxes, which erode purchasing power, has aggravated demand.

A sober analysis of GDP growth just before and after COVID points to a medium-term annual GDP growth forecast of 3%-4%. Unfortunately, a domestic elite and international media narrative of "high growth" will continue, as will policies in opposition to India's needs. And when narrative and reality clash repeatedly, tragedy follows.

India's reported GDP growth at 7.8% in the April-June quarter led to premature accolades of economic success. Predictions of growth accelerating to 8% were prevalent.

GDP AS A FLAWED METRIC:

- **Inequality and Other Issues:** GDP doesn't account for inequality, job scarcity, education and health deficiencies, urban living conditions, judicial inefficiency, and environmental degradation.
- **Misrepresentation of Prosperity:** Large GDP figures do not necessarily equate to purchasing power or equitable distribution among the population.

GROWTH COMPARISONS:

- **Development Stage:** Like a young child growing faster than an older one, India should naturally grow quickly due to its status as one of the poorer major economies. Yet, this growth has not been consistent.
- **Two-Decade Slowdown:** A decline from 9% annual growth in the mid-2000s to a stark slowdown before the pandemic shows underlying issues, particularly weak mass demand.

PRE-COVID ECONOMIC HEALTH:

- **Mid-2000s:** Indian economy grew at an annual rate of 9% due to 1) high world trade growth 2) : A finance-real estate-construction bubble inflated
- **2007 -08:** Global Financial crisis, growth decelerated to 6% as world trade growth slowed down sharply.
- **2012- 13:** Growth rate declined to 4.5% however, in 2015, a data revision artificially inflated growth figures.
- **Demonetisation and GST:** Economic initiatives like demonetisation and the GST rollout contributed to the slowdown.
- **Investment Decline:** Corporate Investment declined, there was a marked decrease in private corporate investment, indicating a lack of domestic and foreign consumer demand.

POST-COVID ECONOMIC LANDSCAPE:

- **Economic Turbulence:** The economy saw "dead cat bounce" sharp falls, modest recovery, severe slowdowns, and a brief uptick in late-2022.
- **Average Growth Calculations:** Adjusted growth figures considering both income and expenditure show a less rosy picture than official statistics.
- **Private Corporate Investment:** It fell to 10% of GDP in 2021-22, indicating that investment has not recovered in the aftermath of COVID-19.
- **Household Financial Strain:** To sustain consumption levels, households have reduced their savings rate to 5.1% of GDP, which is a sharp drop from 11.9% in 2019-20.
- **Policy Misdirection:**

WAY FORWARD: BOLSTER DEMAND

- **Supply vs. Demand:** Government policy has focused on increasing supply without addressing the need to bolster demand through job creation, education, and infrastructure.
- **Taxation and Fiscal Policy:** Reliance on indirect taxes has reduced purchasing power, exacerbating demand problems.

MEDIUM TERM OUTLOOK

- **Realistic Growth Forecast:** A sober analysis suggests a medium-term annual GDP growth forecast of 3%-4%.
- **Discrepancy in Narratives:** Despite the evidence, the elite and media narratives continue to push a story of high growth, which misguides policy.

The article warns that persistent deviation from the reality by the narrative could lead to tragic outcomes.

Mental Health and The Floundering Informal Worker

Mental health and the floundering informal worker

The theme of World Mental Health Day (October 10) this year is 'mental health as a universal human right'. A segment often overlooked when it concerns mental health is the informal worker. A study by the International Labour Organization (ILO) says that 15% of working-age adults, globally, live with a mental disorder. On one hand, decent work influences mental health in a positive way while on the other, unemployment, or unstable or precarious employment, workplace discrimination, or poor and particularly unsafe working environments, can all pose a risk to a worker's mental health. Workers in low-paid, unrewarding or insecure jobs, or working in isolation, are more likely to be exposed to psychosocial risks, thus compromising their mental health.

The Indian experience

India's informal workforce accounts for more than 90% of the working population. These workers often operate without regulatory protection, work in unsafe working environments, endure long hours, have little access to social or financial protections, suffer high uncertainty and deep precarity, and face discrimination – all of which further undermine mental health and limit access to mental health care. Gender disparities are also stark, with over 95% of India's working women engaged in informal, low-paying, and precarious employment, often without social protection, in addition to suffering patriarchal structures and practices in their social and familial spaces.

According to the United Nations Development Programme (UNDP), unemployment and poor-quality employment have consistently been detrimental to mental health. The Lokniti group within the Centre for the Study of Developing Societies, which interviewed 9,316 youth aged between 15 to 34 years across 18 States in India, has shown that they are highly susceptible to negative emotions. Youth unemployment is one of the highest in India which, along with the



Neethi P.

is a senior researcher at the Indian Institute for Human Settlements, Bengaluru

Informal workers, despite their significant contribution to national income, are perennially exposed to economic, physical, and, in turn, mental vulnerabilities

stigma around unemployment, significantly impacts their mental health. Moreover, an ILO report highlights how young workers are shifting to more precarious and informal work, accepting less pay and poorer working conditions, out of desperation, and, sometimes, giving up and exiting the labour force altogether. The State of Inequality in India Report 2022 observes that the unemployment rate actually increases with educational levels, particularly for educated young women who show an unemployment rate of 42%. With this phase of demographic dividend, where half of India's population is of working age and projected to remain so for two decades, it is pertinent to think about the quality of employment and long-term social security for them.

India will also become an aging society in 20 years, with no apparent social security road map for this rapidly growing group that is especially vulnerable to poor mental health. The Census of India 2011 shows that 33 million elderly people are working post-retirement in informal work. Another study, by the ILO on elderly employment in India, shows high poverty among them, in terms of economic dependency and access to financial assets. The absence of proper financial and health-care security among the working elderly can severely impact their physical and mental health, aggravating their vulnerability.

On social security

Informal workers face mental distress due to accumulating debt and rising health-care costs, which are intertwined and mutually reinforcing. A study by Women in Informal Employment: Globalizing and Organizing (WIEGO) among informal workers in Delhi, mostly migrants, indicates that recovery post COVID-19 remains uneven among informal worker cohorts. Many still report food insecurity, skipped meals, or reduced consumption. As observed by the Keshav Desiraju India Mental Health Observatory, mental health and well-being are impacted by factors

such as food security, access to livelihood and financial stability. While certain schemes have received a higher allocation this year, others such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS) have seen their funding slashed. In 2021, the National Crime Records Bureau (NCRB) reported that 26% of the people who died by suicide were daily wage earners. Employment guarantee programmes can indeed improve mental health outcomes. Thus, social security can be: promotional, aiming to augment income; preventive, aiming to forestall economic distress and protective, aiming to ensure relief from external shocks.

A relook at the Code on Social Security 2020 shows how glaring issues concerning the social security of India's informal workforce still remain unheeded. While India should universalise social security, the current Code does not state this as a goal.

Care needs drastic improvement

Informal workers, despite their significant contribution to national income, are perennially exposed to various economic, physical, and mental vulnerabilities. India's budgetary allocation for mental health (currently under 1% of the total health budget) has over-focused on the digital mental health programme. As the World Mental Health Report 2022 observed, addressing mental health involves strengthening community-based care, and people-centred, recovery-oriented and human rights-oriented care. There is an urgent need for proactive policies to improve mental health recognition and action. This is critical in upholding the basic human right to good health, including mental health, and in advancing to the Sustainable Development Goals (SDGs), especially SDG 3 on 'good health and well-being' and SDG 8 on 'decent work for all/economic growth'.

The views expressed are personal

WORLD MENTAL HEALTH DAY THEME

- The theme for World Mental Health Day (October 10) is 'mental health as a universal human right'.
- The International Labour Organization (ILO) states that 15% of adults globally suffer from a mental disorder.
- Decent work positively affects mental health, while poor employment conditions, discrimination, and unsafe environments pose risks to mental health.
- Those in low-paid, insecure, or isolated jobs face higher psychosocial risks, impacting their mental health.

MENTAL HEALTH OF INFORMAL WORKFORCE

- Over 90% of India's working population is in the informal sector, often without regulatory protection and facing unsafe, long hours with little social or financial protection.
- Such conditions, coupled with high uncertainty and discrimination, negatively affect their mental health.
- Women, making up over 95% of the informal workforce, encounter gender disparities, low pay, precarious jobs, and patriarchal challenges, all exacerbating mental health issues.

YOUTH MENTAL HEALTH – IMPACT OF EMPLOYMENT CONDITIONS

- The **United Nations Development Programme (UNDP)** correlates unemployment and poor-quality jobs with adverse mental health effects.
- The **Lokniti group's study** indicates high susceptibility to negative emotions among Indian youth, with youth unemployment contributing significantly to mental health issues.
- The **ILO report** suggests young workers accept precarious, informal work due to desperation, sometimes leaving the workforce entirely.
- The **State of Inequality in India Report 2022** notes a paradox where higher education correlates with higher unemployment, especially among young women.

ELDERLY POPULATION MENTAL HEALTH

- With half of India's population being of working age, focus on employment quality and social security is crucial.
- In 20 years, India will become an ageing society with no clear social security plan, where 33 million elderly are working post-retirement in informal labour, facing economic and mental health challenges.

SOCIAL SECURITY AND MENTAL HEALTH

- Informal workers' mental health is affected by debt and rising healthcare costs.
- Post COVID-19, food insecurity remains a problem for informal workers, as per a study by Women in Informal Employment: Globalizing and Organizing (WIEGO).
- Employment guarantee schemes like MNREGS are linked to better mental health outcomes, highlighting the need for comprehensive social security.

OTHER INITIATIVES

- The Code on Social Security 2020 in India neglects to universalize social security for the informal workforce.
- Mental health budget allocation in India is less than 1% of the total health budget, with a heavy focus on digital mental health services.

NEED FOR ENHANCED MENTAL HEALTH CARE

- There is a significant need to improve community-based, people-centered, recovery-oriented, and rights-oriented mental health care.
- Proactive policies are required for mental health recognition and action, aligning with the SDGs, particularly SDG 3 (good health and well-being) and SDG 8 (decent work/economic growth).

The Indian Railways' revenue problem

While investment in railways boosts manufacturing, and services as well as tax revenue for the government and more job opportunities, a key organisation like the Railways cannot be allowed to go the Air India way – the investments made should add to its revenue

ECONOMIC NOTES

Sudhanshu Mani
M. Ravibabu

This is the first of a three-part series of articles on the Indian railways, its capital expenditure and freight business.

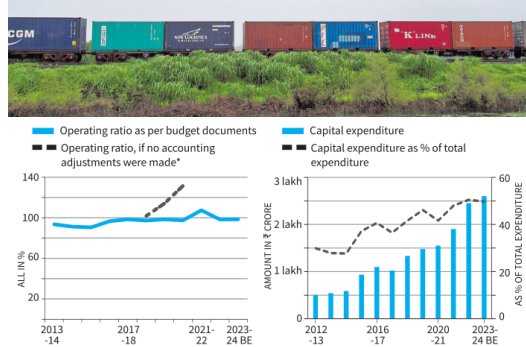
The Indian Railways (IR) has been on a spending spree with respect to capital expenditure (capex), particularly after the government merged its rail budget with the main budget. However, its operating ratio, which is the ratio of ordinary working expenses to the gross traffic receipts, has shown no improvement. A lower ratio implies better profitability and surplus for capital investment.

The trap of rising debt

Since the IR continues to have a total lack of surplus, it has been augmenting the funds raised through Gross Budgetary Support (GBS) and Extra Budgetary Resources (EBR). The merging of budgets helped this cause as GBS from the central government could be increased without much scrutiny. However, with respect to EBR, there is a price to pay. The IR's spending on repayment of principal and interest is pegged at ₹22,229 crore and ₹23,782 crore respectively, which together make it 17% of revenue receipts, a sharp rise from less than 10% till 2015-16. It appears that this debt liability was noticed as capex relied almost entirely on GBS in this year's budget. Despite this, the unprecedented rise in capex appears to be predicated on the premise that the IR's operating and financial performance should not be viewed in isolation but along with its role as an engine for the growth of the country's economy. Investment in railways boosts manufacturing and services, tax revenue for the government and allows for more job opportunities. However, a key organisation like the IR cannot be allowed to go the Air India way – the investments made should be productive for IR's

Capex spending in Indian Railways

The unprecedented rise in capex appears to be predicated on the premise that the Indian Railways' financial performance should not be viewed in isolation but along with its role as an engine for the growth of the country's economy



revenues.

Identifying the problem

The IR's freight segment is profitable whereas the passenger segment makes huge losses. The Comptroller and Auditor General of India (CAG) report presented in Parliament on August 8, 2023 states that there was a loss of ₹68,269 crore in all classes of passenger services during 2021-22, with all the profit from freight traffic nullified in cross subsidising passenger services. This is nothing new for the IR but the situation has become grimmer and since any significant increase in passenger fares is unlikely, the IR has no option but to boost its freight volumes and in turn its revenue.

The annual growth in freight volume and revenue of the IR in the period April-July 2023 stand at 1% and 3% respectively, while the economy grows at 7%. This is a dismal performance. The IR's

modal share in India's freight business has steadily decreased to approx. 27% from upwards of 80% at the time of independence.

The objective of this series is to examine how the freight business of IR can be improved. The movement of cargo by the IR is artificially divided into goods and parcels. The division is not semantic but indicates a paradigmatic difference in approach with respect to tariff rules, handling, moving and monitoring. Shippers, however, are not interested in these differences as their concern is mainly about the safe movement of their cargo from point A to B at the least cost and as fast as possible. The time has come for the IR to shed such an artificial divide so that cargo can be divided based on its characteristics as bulk and non-bulk (or value added).

While the divisions are not water tight, bulk cargo would essentially refer to large

volumes of cargo (full train loads or amenable for into full train loads) which can be easily handled mechanically and non-bulk cargo would be smaller in volume and less amenable for mechanical handling.

The lessening share

The 11 commodities in the IR's transport basket account for 90% of tonnage and revenue, of which coal is around 45% and iron ore and cement are around 10% each. Although these three still account for two thirds of the IR's total freight volume, the share of the IR in their transport has reduced over the years. For example, coal consumption was 602 and 978 million tonnes (MT) in 2011 and 2020 respectively while the rail transport share was 420 and 587 MT respectively; the rail share fell from around 70% to 60% in a ten-year period. Though it improved to 64% in 2023 it is still lower than what it was in 2011. Similarly, the share of exim containers moving in and out of ports hovered between 10% and 18% since its introduction in 2009-10, with the 2021-22 figure being 13%. It should be noted that private container train operation policy, initiated in 2006 to boost the rail share of container movement, has not made any significant dent in improving the share.

Further adding to the woes of the IR is the constantly fluctuating key index of Net Tonne Kilometres (NTKM), which fell for two successive years in 2015-16 and 2016-17 by 4% and 5% over the preceding years – first time such a fall has happened for two consecutive years. Demonetisation perhaps had some effect in the fall as NTKM recovered in 2017-18 by 11% registering an increase of 1.6% in the three-year period starting 2015-18. However, NTKM continued to fluctuate as it fell again in 2019-20 by 4%. In the seven-year period ending 2021-22, NTKM grew annually at the rate of 3.5% – much less than the road transport growth rate.

Sudhanshu Mani is leader of the Vande Bharat project and a rail consultant and M. Ravibabu is founding member, Anekdhar, a public policy portal.

THE GIST

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I HAS BEEN HEAVILY INVESTING IN CAPITAL EXPENDITURES (CAPEX), HOWEVER QUESTIONS HAVE ARISEN REGARDING ITS OPERATING RATIO AND ABILITY TO GENERATE REVENUE.

OVERVIEW OF INDIAN RAILWAYS

- Indian Railways spans over 67,000 route kilometres, connecting approximately 8,000 stations.
- Globally, it ranks as the 4th largest railway system, following those of the US, China, and Russia.
- Recognized as India's "lifeline," it plays a pivotal role in ferrying both goods and people nationwide.
- Every day, it transports 23 million passengers and transfers in excess of 2.5 million tons of cargo, positioning it among the world's busiest rail networks.
- One of its primary environmental initiatives includes the electrification of tracks, aimed at decreasing its carbon emissions and reliance on fossil fuels.

CHALLENGES IN REVENUE GENERATION FOR INDIAN RAILWAYS

- Cross-Subsidization:** Keeping passenger fares significantly low has meant that these fares don't compensate for the costs of running these services.
 - E.g. The CAG report highlighted a loss of ₹68,269 crore in 2021-22 across all passenger services.
- High Operational Costs:** With expenses related to its sizable workforce, maintenance, and other functions, it's difficult for the railways to pare down costs without affecting the quality of services.
 - E.g the Operating ratio for FY 22-23 stands at 98.14%.

- **Muted Growth:** Between April-July 2023, while the economy surged by 7%, freight volume and revenue grew merely by 1% and 3% respectively.
- **Declining Freight Share:** From holding more than 80% of India's freight business post-independence, railways now manage just around 27%.
- **Limited Infrastructure Spending:** The paucity of capital investment in tech, infrastructure, and rolling stock limits the railways' modernization and potential revenue uptick.
- **Outdated Infrastructure:** A significant part of the expansive rail network requires upgrades, and the costs associated with this task impact its financial health.
- **Complex Freight Tariffs:** The intricate and inflexible tariff structures deter an increase in freight traffic.
- **Under-leveraged Assets:** Vast railway assets, including lands, are not being maximised, leading to lost revenue opportunities.

SOLUTIONS FOR REVENUE ENHANCEMENT

D. K. Mittal Committee (2014)

- **Fare Realignment:** Suggests regular revisions in passenger fares to echo operational expenses and advocates dynamic pricing, especially for luxury trains.
- **Freight Tariff Adjustments:** Calls for a more straightforward and transparent freight tariff system and recommends incentives for bulk cargo and extended freight contracts.
- **Asset Monetization:** Encourages capitalising on railway land and property through varied channels, including commercial ventures and partnerships.
- **Boosting Non-Fare Revenue:** Proposes expanding advertising on trains/stations and commercial utilisation of station areas.
- **Emphasis on Energy Efficiency:** Advocates for sustainable technologies to curtail operational expenses and endorses the use of green energy for railway functions.
- **Strengthening Public-Private Collaborations:** Recommends joining forces with private enterprises to fund and steer certain rail services or infrastructure ventures.
- **Enhanced Marketing:** Promotes campaigns to amplify the appeal of railway services, targeting both passengers and freight clients.

The trajectory of revenue augmentation for Indian Railways is contingent on a blend of fare recalibrations, infrastructure modernization, efficient use of assets, and technology integration, all the while prioritising safety and eco-friendliness.

Easing Transport by Cargo

Easing the transport of cargo by Railways

There is an immediate need to develop common-user facilities at cargo aggregation and dispersal points in mining clusters, industrial clusters and large cities. As the knowledge of these clusters rests with the States, collaboration with the State governments is of utmost importance

ECONOMIC NOTES

Sudhanshu Mani
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This is the second of a three-part series of articles on the Indian railways, its capital expenditure and freight business.

The Railways has been one of the more cheaper modes of transportation for moving bulk cargo. The government has therefore realised that it needs to be supported with reduced overall logistics costs and schemes to improve green mobility. Identifying infrastructure investment in the sector as a key thrust area, the Government of India has formulated two policies – the PM GatiShakti (PMGS) policy for a National Master Plan (NMP) and the National Logistics Policy (NLP). The PMGS aims to bring synergy to create a seamless multi-modal transport network in India, with the NMP employing technology and IT tools for coordinated planning of infrastructure. The NLP focuses on building a national logistics portal and integrating platforms of various ministries.

Not many major policy components and details are available in governmental websites on PMGS. In reference to the Indian Railways (IR), the Department for Promotion of Industry and Internal Trade's website mentions three things: integration of postal and railway networks, one station – one product and the introduction of 400 Vande Bharat trains without anything about increasing the IR share in moving cargo.

Increasing bulk cargo

The IR has taken some initiatives in the bulk cargo arena. It relaxed block rake movement rules to provide a facility to load from/to multiple locations, permitted mini rakes, introduced private freight terminals (PFTs) and relaxed conditions in private sidings. The Gati Shakti Terminal (GCT) policy has eased



Smooth move: Foodgrains being unloaded from a goods train in Chennai. FILE PHOTO

the stipulations for the operation of these terminals and progressively all PFTs and private sidings are being converted into GCTs. The IR has also partnered with freight operators in recent years, encouraging them to invest in wagons for movement of their cargo thus helping in the induction of more than 16,000 privately-owned wagons to facilitate specialised traffic like automobiles and fly ash.

While it is early to judge the impact of these initiatives, the IR's share in bulk cargo continues to decline. Some decline is expected as production becomes more decentralised and the IR's cost advantage diminishes. To offset this, IR should reduce non-price barriers and distribute transaction costs associated with it to many customers as possible.

A railway siding is a capital-intensive

high-cost proposition and only large industries can manage them with others having to cover large distances to load their cargo. This increases the logistics costs and hence the reluctance to patronise the IR. For example, in the cement sector in 2017-18, thirty-three plants with less than one million tonne (MT) annual capacity had a production share of 6.5% but their share in rail loading was 3.8% whereas plants with more than 2.5 MT annual capacity with a production share of 57%, the rail share was 69.5%. Similar is the picture for many private mines, mini steel plants, agricultural markets etc.

There is an immediate need to develop common-user facilities at cargo aggregation and dispersal points in mining clusters, industrial clusters and large cities. The knowledge of these

clusters rests with the States and not the IR or other central ministries, and thus collaboration with State governments is a *sine qua non*. The relationship of the IR with State governments has been a sort of patron-client relationship as many States regularly demand rail lines in their areas. A change in this attitude is necessary in order for the Railways to participate in the planning of industrial clusters and mines in cities/regions if it has to increase its share in the movement of cargo.

Environmental constraints

The IR must also look at new commodities like fly ash. The Ministry of Environment and Forests (MoEF) started issuing notifications since 1999 for the complete utilisation of fly ash; in 2021 the production was 232 MT and utilisation was 214 MT. The IR never realised the potential and approved many power plant sidings without fly ash loading facilities rendering it to be a minor player in its transportation, and it must proactively correct this wrong. Another necessity is for the IR to encourage and liberalise the design of new wagons amenable to higher and efficient loading to deal with new commodities.

Finally, environmental considerations are constraining loading by the IR. As per recent government regulations, environmental clearance for rail loading/unloading facilities has been made mandatory but the same has not been imposed on road loading/unloading facilities. These restrictions have made some users move cargo by road due to high transaction costs involved with environmental clearances. Such instructions should be mode-agnostic, based on the quantity of cargo loaded and the potential for environmental degradation. Otherwise rail loading will be hampered giving fillip to more environmentally polluting road transport.

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THE GIST

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As per recent government regulations, environmental clearance for rail loading/unloading facilities has been made mandatory but the same has not been imposed on road loading/unloading facilities.

Government has been emphasising on green mobility and reduced logistics costs.

GOVERNMENT POLICIES

- **PM GatiShakti (PMGS):** The PMGS policy aims to create a seamless multi-modal transport network in India through the National Master Plan (NMP), which will employ technology and IT tools for coordinated infrastructure planning.
- **National Logistics Policy (NLP):** The NLP focuses on building a national logistics portal and integrating platforms of various ministries.
- Integration of postal and railway networks,
- One station – One product strategy, and
- Introduction of 400 Vande Bharat trains.

BULK CARGO INITIATIVES BY INDIAN RAILWAYS

IR has recently adopted several strategies to boost bulk cargo movement:

- **Ease in Regulations:** The block rake movement rules have been relaxed, allowing loading from/to diverse locations.
- **Mini Rakes:** The introduction of smaller rake units.
- **Private Freight Terminals (PFTs):** Establishment of PFTs with lenient operational guidelines.

- **Gati Shakti Terminal (GCT) Policy:** This policy has simplified the requirements for terminal operations, leading to the conversion of PFTs and private sidings to GCTs.
- **Collaboration with Freight Operators:** IR has been teaming up with various freight operators, encouraging them to invest in specialised wagons, resulting in the addition of over 16,000 privately-owned wagons.

However, despite these initiatives, IR's bulk cargo market share is diminishing. This decline might be attributed to decentralised production and the diminishing cost advantages of IR. To combat this, the IR needs to minimise non-price barriers and distribute associated transaction costs.

ISSUES AND RECOMMENDATIONS FOR INDIAN RAILWAYS

- **Railway Siding Access:** Limited industries have the resources for a railway siding.
 - This lack forces many to travel long distances to load cargo, raising logistical costs and dissuading them from utilising IR services.
 - A solution lies in establishing common-user facilities at significant cargo points, requiring collaboration with state governments.
- **Environmental Focus:** New commodities, like fly ash, present an opportunity.
 - With the Ministry of Environment and Forests advocating for complete fly ash utilisation, IR should adjust and capitalise on this by facilitating fly ash loading at power plants.
 - Moreover, wagons designed for efficient loading of new commodities should be encouraged.
- **Environmental Regulations:** While environmental clearances for rail loading/unloading are mandatory, road facilities remain exempt.
 - This disparity has pushed users to choose road transportation, considered more environmentally detrimental.
 - To prevent this shift, regulations must be consistent, regardless of transport mode, and be determined by the potential environmental impact.

How Cargo Transport Can Be Improved

How cargo transport can be improved

By attaching two to three parcel vans in all popular trains, ensuring their timely movement and tweaking freight tariff rules, the Indian Railways should be able to load substantial general cargo tonnage in the coming years

ECONOMIC NOTES

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This is the last of a three-part series of articles on the Indian Railways, its capital expenditure and freight business.

In this article, we will analyse the carriage of non-bulk and general cargo by the Indian Railways (IR).

In 2018-19, before the onset of COVID-19, the IR loaded 62 million tonne (MT) of general cargo consisting of 45 MT of general goods, 12 MT of domestic containers and 5 MT of parcels, earning a total of ₹8,247 crore with the average earnings per tonne being ₹1,339 for goods and ₹3,384 for parcel. However, general cargo loading is nowhere near what a Rail India Technical and Economic Service (RITES) study had projected in 2008 for the next ten years – between 194 to 292 MT depending on the IR's efforts.

The need to give up parcel trains

The IR's current strategy for moving general cargo is two-pronged – the parcels are moved either by passenger trains or special heavy parcel van (VPH) trains. However, these approaches appear to have gone haywire as loading leased parcel vans and full parcel trains fell by 15% and 8% respectively.

One of the reasons for the decline in the parcel segment is the high tariff; an analysis of 15 origin to destination pairs indicates that both premium (P) scale rates and Rajdhani (R) rates, after adding the first and last mile costs, are higher than truck rates, an exception being cargo moved to destinations in the northeast. Other factors are improper terminals, inconsistent weighbridges intensified by excessive penal charges, unreliable transit times, complex booking and delivery mechanisms and self-imposed environmental restrictions.

VPH parcel trains are proving counterproductive and should be given up. A matching covered wagon (more



Heavy lifting: A cargo train moving near the Tuticorin Port. FILE PHOTO

technically a Covered Bogie Wagon Type with Air Brake and Heavy Load (BCNHL)) carries 700% more cargo with 45% more volume. Even if we reduce the P scale rates by half, the revenue generated would be 3.5 times that of the VPH rake.

The inadequacy of containerisation

Another great hope for the IR was the expected fillip to general cargo movement by private container train operators (CTOs) through containerisation. However, after 15 years of privatisation, domestic cargo moved by containers is a mere 1% of the IR's loading and 0.3% of the total freight in the country. High haulage rates is one of the reasons of such under-performance. The problem perhaps also lies in the risk involved in developing the market as it would inevitably involve losses over a period of

time. Furthermore, sustaining a developed market is also difficult as predatory pricing by other CTOs can wear the market away.

The elephant in the room for carriage of general cargo by the IR is that a shipper can either only send a few tonnes under parcel tariff or thousands of tonnes under freight tariff. General cargo has thousands of buyers and sellers and usually their shipment sizes are a few to hundreds of tonnes. The IR is therefore, not their choice as it has no service to meet their needs. Asking these shippers to book a freight train is akin to asking a passenger travelling by the Rajdhani express to come with a load of passengers before a berth is booked.

The road ahead

General cargo is segmented into three

categories – highly time sensitive (HTSG), medium time sensitive (MTSG) and low time sensitive (LTSG).

HTSG cargo is mostly valuable goods or perishables and they should continue to be moved by passenger trains. Attaching two to three parcel vans in all popular trains would easily double the parcel loading capacity and these parcel vans can bring around five times the revenue of sleeper coaches and around two times that of AC coaches.

MTSG and LTSG cargo are price-sensitive and this cargo should be moved under the IR freight rates, which are lower than truck rates. Even after the addition of first and last leg costs there is a cost-benefit to shippers. However, the problem lies in getting a full train load. Shippers should be permitted to book individual wagons with provision to run a train to the schedule even if the train is not fully loaded. The assurance of timely movement would certainly attract shippers to the IR.

Running such freight trains does not require any change in policy, only change in mindset. Tweaking of freight tariff rules would be required by adding freight of any kind (FAK) for wagon loads to the tariff table. Indents for a single wagon should be encouraged.

To incentivise volumetric loading, tariff may also be moderated by increasing charges in slabs as per quantity loaded. Finally, the IR needs to encourage cargo aggregators by tweaking the existing freight forwarder policy. In the long run new kinds of stocks to optimise pay load and speed would also be required which the IR and the rolling stock industry are fully capable to design and deliver.

Opportunities were missed in the past. But now with a more concerted effort, the IR should be able to load substantial general cargo tonnage in the coming years.

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THE GIST

▼ An analysis of 15 origin to destination pairs indicates that both premium (P) scale rates and Rajdhani (R) rates, after adding the first and last mile costs, are higher than truck rates, an exception being cargo moved to destinations in the northeast.

▼ Also, after 15 years of privatisation, domestic cargo moved by containers is a mere 1% of the IR's loading and 0.3% of the total freight in the country.

▼ General cargo is segmented into three categories – highly time sensitive (HTSG), medium time sensitive (MTSG) and low time sensitive (LTSG).

The transport of non-bulk and general cargo by the Indian Railways (IR), emphasising the mismatch between past projections and current realities.

GENERAL CARGO: A REALITY CHECK

- In the fiscal year 2018-19, the IR loaded 62 million tonnes (MT) of general cargo, yielding ₹8,247 crore.
- However, this falls short of projections made by a Rail India Technical and Economic Service (RITES) study in 2008 which anticipated a load between 194 to 292 MT.

CHALLENGES WITH PARCEL TRAINS

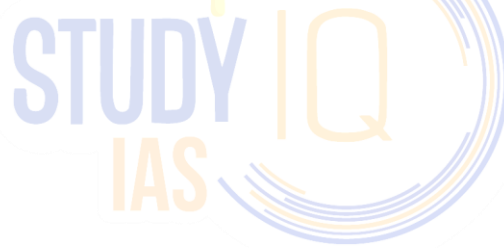
- The IR primarily uses **two strategies for general cargo**:
 - parcel movement via passenger trains, or
 - special heavy parcel van (VPH) trains.
- Both strategies are seeing declining efficiencies:
 - **High Tariffs:** Comparing 15 origin-to-destination pairs, the rates (both P and Rajdhani scales) are often more than truck rates, barring cargo heading to the northeast.
 - **Operational Issues:** Other setbacks include inconsistent weighbridges, unreliable transit times, complex booking mechanisms, and environmental constraints.

- **Inefficiency of VPH:** The VPH system is becoming counterproductive. A BCNHL wagon can carry significantly more cargo, and even with reduced rates, the revenue would surpass that of the VPH.
- **Containerization's Unfulfilled Promise:** Despite hopes of boosting general cargo movement via private container train operators (CTOs), domestic cargo via containers remains at a paltry 1% of IR's total, owing to high haulage rates and market development risks.
- **General Cargo: A Market Mismatch** There's a gap in the IR's offerings. Shippers often need to send cargo amounts that don't fit neatly into the IR's existing parcel or freight tariffs. The current structure doesn't cater to most general cargo shippers' needs.

LOOKING FORWARD: SEGMENTING GENERAL CARGO

- **Highly Time Sensitive Goods (HTSG):** Primarily valuable items or perishables. These should continue being moved by passenger trains, as incorporating parcel vans in popular trains could boost capacity and revenue.
- **Medium and Low Time Sensitive Goods (MTSG & LTSG):** These cargos, which are price-sensitive, should be moved under IR's freight rates. The challenge is acquiring a full train load. Allowing bookings of individual wagons and running them even if not fully loaded can be an attractive proposition for shippers.
- **Policy Adjustments:** A shift in mindset is crucial. There should be alterations to the freight tariff rules, including provisions for wagon loads. Cargo aggregators should be encouraged, and over time, new kinds of stocks optimised for payload and speed need to be developed.

While there have been missed opportunities in the past, a renewed, focused effort can enable the Indian Railways to effectively handle and increase general cargo tonnage in the upcoming years.



Circular Migration: Looking At Both Sides Of The Debate

Circular migration: looking at both sides of the debate

In India, internal migration, which is migration within a particular country or State, has almost always been circular. With rapid industrialisation, there has been a huge flow of migrants from rural areas to urban cities

Joan Sony Cherian

Circular migration is a repetitive form of migration wherein people move to another place (the destination country) and back (country of origin) according to the availability of employment. This effectively means that instead of migrating permanently or temporarily (moving for a period of time to complete any contract-based labour) to another location, people move to different locations for a brief period of time when work is available. It is a phenomenon mostly among low-income groups who migrate to avail of seasonally available jobs in another country, city, place etc.

The definition

Circular migration became quite popular in the 60s and 70s with the advent of globalisation and development. Increased access to modern forms of transport and communication, social networks and the growth of multinational corporations have aided the advent of circular migration. However, only recently has the phenomenon been given its due as the seasonal movement of migrants was not properly documented or was boxed along with short-term or temporary migration. Yet, how exactly is circular migration different from other forms of migration?

According to Philippe Fargues, migration can be defined as circular if it meets the following criteria – there is a temporary residence in the destination location, there is the possibility of multiple entries into the destination country, there is freedom of movement between the country of origin and the country of destination during the period of residence, there is a legal right to stay in the destination country, there is protection of migrants' rights, and if there is a healthy demand for temporary labour in the destination country.

But still some doubts remain. How many times does a migrant have to move between countries to be called a circular migrant? As per the report on measuring circular migration by the United Nations Economic Commission for Europe Task Force, one is called a circular migrant if you have completed at least 'two loops' between two countries. Consider country A and B. If you move from A to B and back to A, then you are a return migrant. You had some work, you finished it and now you are back. If you move from A to B to A and then again to B, you have completed two loops between two countries and can be considered a circular migrant. This means you have travelled between your destination and origin country at least two times.

This can become more complicated if more than two countries are involved. Consider one more country C. If you move from A to B then back to A and then to C and back to A, you would be a circular migrant as per country A (as you completed two loops) but not for countries B and C. They might classify you as a temporary, short-term or return migrant.

In short, if your primary destination is the country of origin and if you move periodically between two countries for purposes of economic advancement such as employment, business etc., you can be



GETTY IMAGES

considered a circular migrant.

As public policy

With the increasing fluid movement of people, policy around migration is one of the biggest debates in the world. The movement of citizens from the Global South to the West in search of more employment opportunities or a better standard of living creates brain drain for their origin countries and competition for the citizens of the destination countries. Similarly, the flow of people moving from rural areas to more urban areas of the same country, results in the breakdown of infrastructure and agrarian stagnation. Therefore, migration of any kind has become a policy hazard.

However, circular migration is now seen as the best way forward, as needs of development and individual economic advancement can be balanced out. It is seen as a balanced migration method which looks at migration not only from the point of view of the receiving country but also of the sending nation. For the country of origin, migration, especially international migration, is beneficial due to the flow of remittances which will boost and aid the domestic economy. The flow of foreign capital will enhance the economy ensuring more infrastructure, more jobs and by association, a better standard of living. However, large-scale

transnational migration will also lead to brain drain, wherein the most talented people of your country will use their intellect and innovation for the advancement of another country.

From the perspective of the host countries, especially those of the West, a lesser population and a higher access to education has resulted in a large dearth of low-income low-skill jobs which migrants have been able to fill. However, the influx of migrants have caused a wide range of anxieties and cultural conflicts in the host populations with most of them now calling for restrictions and outright ban on migration.

Circular migration aims to quell all these fears. The negative effects of brain drain will reduce and a sort of brain circulation will be encouraged, wherein the individual can use his talents in both countries and still contribute to remittances. Most importantly as Ronald Skeldon puts it in his paper, 'Managing migration for development: is circular migration the answer?', "circular migration offers a way out to the governments of destination countries as migrants will circulate back to their home areas. Labour can be introduced to undertake essential functions but it will not remain and become a permanent part of the population." This way, he says, circular migration can be "sold" to the

populations of the host countries with the claim that these labourers will eventually go home.

Circular migration within India

In India, internal migration, which is migration within a particular country or State, has almost always been circular. With the advent of jobs in the manufacturing, construction and services sector, there has been a huge flow of migrants from rural areas to urban cities. Between 2004-2005 and 2011-2012, the construction sector witnessed one of the largest net increases in employment for all workers, specifically for rural males. This has led to rural populations and their economy dwindling and urban spaces, while booming, witnessing infrastructural collapse as they are unable to properly house incoming populations.

In India, the uneven development post-liberalisation, has led to a lot of inter-State migration, with States like West Bengal, Odisha and Bihar having some of the highest rates of out-migration. Initially, while most of the migration was to Delhi, nowadays it has increased to southern States as well. Sudipta Sarkar and Deepak K. Mishra take a closer look at the circular migration of rural males of West Bengal in a 2020 paper published in *Sage Journals*. They state that most of the rural migrants were occupied in agricultural jobs in their origin States; and when they migrated a majority of them were engaged in low-skill jobs. The positive outcomes of such inter-State migration include increased access to higher paying jobs when compared to origin States (as per Sarkar and Mishra, a daily wage labourer in West Bengal gets ₹150-180 per day, while in Kerala they would get somewhere between ₹260-380), better household welfare due to remittances, ease of mobility etc. Some reports have even stated how women get more autonomy and decision-making power in the family due to the absence of men who migrate.

However, in such migration, especially to southern States where the language barrier is a big obstacle, rural circular migrants are often at the mercy of middlemen or brokers. They are made to work in unhygienic and unsafe conditions with little to no protective equipment. They are routinely exploited and suffer significant 'unfreedoms' in host States. Additionally, indigenous wage groups and unions resent these migrants as they are seen as taking away their jobs by agreeing to work for lower wages. The study also says that this kind of migration is merely subsistence migration – it's the bare minimum. The migrants are able to barely provide for themselves and their families, with no scope for further asset creation or savings. There is also a certain precarity associated with these jobs as they are seasonal and often irregular. A lack of jobs in the host States means that they will either have to go back home or look for work in other urban cities. This precarity was on clear display during the pandemic in 2020 when migrants en-masse started walking back to their home towns when a lockdown was announced.

At the end of the day, as Amrita Dutta in her paper, 'Circular Migration and Precarity: Perspectives from Rural Bihar', says "in destination areas, rural or urban, circular migrants remain at the margins of physical, social, cultural, and political spaces." It is high time that States start actively formulating policy to understand the extent of circular migration. While some States like Kerala have announced health insurance schemes for migrant workers (Avaz Health scheme), there needs to be more effort to ensure migrants rights. The precarity of workers needs to be addressed and there should be more efforts to integrate them in the destination States.

ABOUT CIRCULAR MIGRATION

- Circular migration is the periodic movement of people between two locations based on employment opportunities, contrasting with permanent or temporary migration.
- It became popular in the 60s and 70s, facilitated by globalisation, modern transport, communication advances, social networks, and multinational corporations.
- Recently recognized due to its distinct pattern from short-term or temporary migration.

CRITERIA BY PHILIPPE FARGUES: IDENTIFIED DISTINCTIVE FEATURES OF CIRCULAR MIGRATION:

- Temporary residence in the destination.
- Possibility of multiple entries into the destination country.
- Freedom of movement between origin and destination.
- Legal right to stay in the destination country.
- Protection of migrants' rights.
- A strong demand for temporary labor in the destination.

IDENTIFYING A CIRCULAR MIGRANT

- Defined by the completion of at least 'two loops' between two countries (United Nations Economic Commission for Europe Task Force).
- More complicated with the involvement of more than two countries, with different classifications for each.

CIRCULAR MIGRATION AS PUBLIC POLICY

- Addresses the challenges of migration such as brain drain and infrastructural stress.
- Aims to balance development needs and economic advancement for both origin and destination countries.
- Promotes a brain circulation instead of brain drain, allowing talent utilisation in multiple countries.
- Offers a solution to destination countries by providing labour without permanent population increase.

CIRCULAR MIGRATION IN INDIA

- Predominantly an internal phenomenon.
- Growth in construction, manufacturing, and services sectors leads to migration from rural to urban areas.
- Post-liberalization development has prompted inter-State migration, notably from West Bengal, Odisha, and Bihar.
- Migrants find higher paying jobs in new states but often work in poor conditions and face exploitation.

OUTCOMES AND CHALLENGES

- Improved household welfare through better earnings and remittances.
- Increased autonomy and decision-making for women in the absence of male migrants.
- Issues with middlemen, language barriers, job insecurity, and low savings potential.
- Indigenous labour resents as migrants accept lower wages.
- During the 2020 pandemic, the precarious nature of such jobs was highlighted by the mass exodus of migrants returning home.

NEED FOR POLICY REFORM

- Circular migrants often remain marginalised in destination areas.
- Kerala's health insurance scheme for migrant workers is a step forward.
- There is a need for more comprehensive policies to protect migrant rights and integrate them into destination societies.

Centralised Procurement As A Powerful Health Idea

Centralised procurement as a powerful health idea

Imagine that you have decided to go up against McDonald's in India. The homegrown *vada pav* will go up against the mighty burger and come out trumps. And so you build a plan to have hundreds, nay, thousands of franchises all over the country. They will sell clean, hygienic and tasty *vada pavs* in the millions in the years to come.

What a great idea, and let us hope that somebody actually does this. But here is a quick question: should each franchisee purchase their own potatoes, or would you much rather have a centralised procurement team to do the task? You will quickly realise that there are two central problems to solve: price and quality.

Each franchisee conducting negotiations with potato sellers becomes a problem when it comes to price. The amount of potatoes that the entire business needs to purchase will be more than the amount of potatoes that each franchisee will need to buy. So, who do you think will be able to negotiate a better price? The centralised team, or each of the individual franchisees?

Each franchisee conducting negotiations with potato sellers is also problematic when it comes to quality. Each franchisee might have a different idea of what is acceptable quality. And, each franchisee might have a different idea about what makes for a good potato. But that would then lead to each franchisee's *vada pavs* having a different taste – and that just will not do in a franchisee model.

This brings up another question. So, why should hospitals be any different when it comes to drug procurement?

In India

Many countries and international organisations (including McDonald's) have shown that a pooled buyer model for drug procurement addresses many issues that are related to price efficiency, stockouts and quality concerns. But for reasons that have remained mysterious for decades, the central government chooses to ignore the merits



Murali Neelakantan

is Principal Lawyer, amicus



Ashish Kulkarni

is Blogger, econforeverybody.com

Pooled procurement by the central government when it comes to drug procurement can revolutionise the health-care system in India

of pooled procurement when it comes to schemes such as the Central Government Health Scheme (CGHS), the Pradhan Mantri Jan Arogya Yojna (PMJAY) and the Employees' State Insurance Scheme (ESI).

Corporate hospital chains, on the other hand, are well aware of the benefits of pooled procurement. For years on end, they have conducted direct negotiations with pharmaceutical companies, and availed of significant discounts. Patients at these hospitals end up buying these drugs at maximum retail price of course, but that is another story. We cannot help but wonder why many more hospitals cannot team up to form buyers' clubs, benefit from better bargaining power, and then, being not-for-profit institutions, pass on these cost savings to patients.

The focus in these papers

A recent paper, "A National Cancer Grid pooled procurement initiative, India", demonstrates the viability of just such an idea. Group negotiation, uniform contracts, and, finally, purchases by hospitals associated with the National Cancer Grid for 40 drugs resulted in savings of ₹13.2 billion. Without pooled procurement, the cost would have been ₹15.6 billion, with savings ranging from between 23% to 99%. As the authors say with quiet understatement in the last sentence of their abstract, their study reveals the advantages of group negotiation in pooled procurement for high-value medicines. This approach, they conclude, can be applied to other health systems besides cancer.

We are in complete agreement; our paper, "Unifying India's Healthcare Markets" makes just such an argument. We show that the central government is not consistent in how it covers different categories of beneficiaries under the CGHS, ESI and PMJAY. The same procedure, for example, might be available in one scheme, but not the other. And, centralised procurement, sadly, is not yet a reality.

It is not that the central government is unaware of the benefits of pooled procurement and price discovery.

When the government (through the National Aids Control Organization) procures male contraceptives, it invites tenders from private manufacturers and then offers to buy from all those who are willing to match the lowest price. How does the government ensure that the suppliers are not colluding to keep the price high? HLL Lifecare Ltd., a public sector unit (PSU), with the highest manufacturing capacity in India, provides a benchmark price. All the bidders know that if they are not competitive on price, the government will just procure all its requirements from HLL and they will be left with unused manufacturing capacity – and as a result, face huge fixed costs and overheads.

The government can follow this model for most of the drugs it procures. It has many pharma PSUs that can provide benchmark prices and also ensure that the government has leverage. Such leverage ensures that the government is not forced to buy from private manufacturers, given that there is competition from PSUs which can make supplies at a competitive price.

The issue of better quality

Finally, in addition to cost savings, buyers' clubs can ensure better quality by having the supplies tested independently rather than having to rely on the drug regulator to ensure quality. This is not a new idea; this is standard operating procedure for buyers in many developed nations.

Centralised procurement, or pooled procurement, is a simple yet powerful idea that has the power and the potential to reduce costs, ensure better deployment of funds in other areas related to health care, and ensure availability of life-saving drugs in this country. It is an idea with both theoretical backing, and now empirical validation. It is an idea that India should implement at scale, and as soon as possible.

Centralised procurement is a system where a single team or a department handles all the purchasing or procurement for the organization

BENEFITS OF CENTRALISED PROCUREMENT

- **Price Negotiation:** Centralised procurement teams can negotiate better prices due to the larger quantity needed for the entire business, unlike individual franchisees.
- **Quality Consistency:** A centralised team ensures consistent quality across franchises, avoiding variations in *vada pav* taste which is problematic in a franchise model.

HOSPITAL DRUG PROCUREMENT IN INDIA

- **Pooled Buyer Model Benefits:** Pooled procurement is recognized for addressing price, stockouts, and quality issues in various sectors.

Corporate Hospitals' Approach:

- **Direct Negotiations:** Corporate hospital chains negotiate directly with pharmaceutical companies for discounts.
- **Potential for Buyers' Clubs:** Many hospitals could form buyers' clubs to improve bargaining power and pass savings to patients, which is often not done.

- **Independent Testing:** Buyers' clubs can test supplies independently for quality, a common practice in developed nations.

RESEARCH SUPPORTING POOLED PROCUREMENT

- **National Cancer Grid Initiative:** A study showed that pooled procurement for 40 drugs led to savings of ₹13.2 billion versus ₹15.6 billion without it.
- **Proposal for Unification:** A paper suggests unifying healthcare markets in India to adopt centralised procurement for consistency and cost-efficiency.

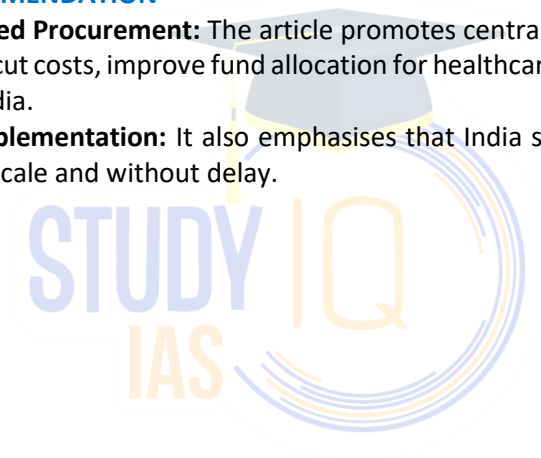
Despite these benefits, Indian government schemes like CGHS, PMJAY, and ESI do not employ pooled procurement.

GOVERNMENT'S KNOWLEDGE AND PRACTICE

- **Awareness of Benefits:** The Indian government is aware of the benefits of pooled procurement, demonstrated in its approach to acquiring male contraceptives.
- **Use of Benchmark Prices:** HLL Lifecare Ltd., provides a benchmark price for contraceptives, creating leverage and competitive pricing.

CONCLUSION AND RECOMMENDATION

- **Advocacy for Centralised Procurement:** The article promotes centralised or pooled procurement as a proven method to cut costs, improve fund allocation for healthcare, and ensure the availability of essential drugs in India.
- **Call for Immediate Implementation:** It also emphasises that India should adopt this empirically validated approach at scale and without delay.



Unhealthy Urban India Must Get Into Street Fight Mode

Unhealthy urban India must get into street fight mode

India's urban population is estimated to reach 675 million in 2035, the second highest in the world. Although there is widespread recognition that cities have been fuelling India's rapid rise to economic superpower status, almost all are failing their inhabitants in terms of delivering on health, environmental and equity targets.

Urban India and multiple health risks

India's urban inhabitants experience multi-scalar health risks including the world's highest levels of air and noise pollution, limited greenery, lack of access to sidewalks and parks that limit active lifestyles, archaic modes of transport that contribute to air pollution, pernicious access to nutritionally dense unhealthy foods and unprecedented exposure to toxic chemicals and heavy metals. This concatenation of exposures dramatically magnifies health risks for heart disease and diabetes, referred to as cardiometabolic disease, especially when combined with a lack of physical activity. Of all behaviours well known to mitigate the development of cardiometabolic disease, physical activity is by far the most effective deterrent. Not surprisingly, the cities of India are amidst an epidemic of historic proportions in these disorders.

Addressing the diverse and multi-scaled social, environmental, and infrastructure risk factors that contribute to cardiometabolic risk in cities, by transforming the design of the built local environment as well as provisioning systems, represents a new paradigm for public health. Globally, there are seven key physical provisioning systems that provide food, energy, mobility-transportation, housing, green infrastructure, water and waste management that lie at the core of human health, well-being, equity and sustainability. Dysfunctional provisioning systems consume more than 90% of the world's water and global CO₂ emissions and facilitate an estimated 19 million premature deaths annually. The socio-spatial-political design of urban provisioning systems in India, many of which are legacies of a colonial past, manifests in and



Dr. Sanjay Rajagopalan

is Chief, Cardiovascular Medicine, Chief Academic and Scientific Officer, University Hospitals, Harrington Heart and Vascular Institute, Director, Case Cardiovascular Research Institute, Herman Hellerstein, MD, Professor of Cardiovascular Research, and Professor, Department of Medicine and Radiology, Case Western Reserve University

Unhealthy diets, reduced physical activity and air pollution are posing a greater risk to morbidity and mortality than most other risk factors combined

exacerbates social inequalities in cities, by class, race, age, migrant and disability status, translating to vast disparities in health risks and outcomes. Based on the primal importance of India's cities for its future, a new narrative for improving health and well-being in cities is needed. This is reflected in several high-level policy frameworks, such as the United Nations Sustainable Development Goals (SDG) framework, the New Urban Agenda, and the Health in All Policies approach.

Double or triple-duty actions

Investments such as clean energy and electric mobility which are underway in India offer a once in a lifetime opportunity to improve health through their immediate and dramatic impact of air pollution levels, while also helping meet India's climate and equity goals. While these developments are extraordinarily important, the magnitude of their impact on health outcomes is at risk of being limited, if not simultaneously accompanied by changes in other provisioning systems such as food, mobility and green infrastructure.

Indeed, studies show that even small changes in the latter systems may have a large catalytic effect on health and productivity and serve as double-duty or triple duty interventions. For example, making way for safe walking and biking lanes, pavements and no-car zones, can help not only improve physical activity and reduce sedentary lifestyles but also reduce the risk from air pollution. Regular physical exercise has been to effectively mitigate the impact of other risk factors such as poor diets, particularly those rich in calories and saturated fats. The dietary ingestion of excess calories without adequate physical expenditure fuels a vicious cycle of insulin spikes, excess fat deposition that together with inflammation sets the stage for heart disease. In this regard, it is well known that exercise may not only help expend excess calories, promoting weight loss and reducing diabetes risk but also act as an effective bulwark against heart disease.

Walking and biking on many Indian roads is

not only hazardous but also nearly impossible, as sidewalks are overwhelmed by building and human waste, parked vehicles or street hawkers. Health impact studies indicate that the health and economic benefits of increasing mobility and active transportation vastly exceed that which may be divined by transitioning to electrifying transportation alone.

Towards holistic urban policy

Studies that have modelled the economic and health impact of the clean energy transition in the transportation sector are currently based almost entirely on the reduction in air pollution and its associated health impact. Ensuring that the transition to electric cars also paves the way for active transport options such as walking paths and bicycling lanes may not only provide a mechanism to connect the "last mile" but the health and consequent economic benefits of active transportation accrue on top of the benefits of reducing air pollution, making such investments even more economically viable.

Thus, increasing active transportation by any means must be a critical component of a clean energy policy. Similarly, policies that encourage fresh fruits and vegetables and limit sugars and salt in beverages, which may have the largest impact on health outcomes such as obesity, Type 2 diabetes (T2D) and cardiovascular disease, may help contribute to not only better health outcomes but also economic productivity. Urban policies are powerful public health interventions that can serve to promote population health. Health is, unfortunately, an afterthought in most national urban planning policies and mostly non-existent in national urban policy documents from lower and middle-income countries.

Unhealthy diets, reduced physical activity and air pollution in cities in India pose a greater risk to morbidity and mortality than most other risk factors combined including drugs, tobacco, alcohol and accidents. These need to be dealt with on a war footing if India is going to make progress in its fight against cardiovascular disease, obesity and T2D. This will necessarily entail a street fight.

India's urban population is rapidly growing, but its cities are struggling to keep up, leading to health, environmental and equity challenges.

BACKGROUND

- The Industrial Revolution during the 18th century in Europe led to the rise of factories and manufacturing industries, which concentrated economic activities in urban areas.
- This created a demand for labour in cities, which attracted people from rural areas.
- The movement from rural to urban areas fueled the rapid growth of urban populations and the emergence of industrial cities.

URBANISATION

- Urbanisation is the process of a society transforming from rural to urban, with more people living in cities and towns.
- Urbanisation is not just about the physical expansion of cities, but also about the social, economic, and cultural changes that come with it.

CAUSES OF URBANIZATION

- **Industrialization:** Industrialization creates new job opportunities in modern sectors that contribute to economic growth.
- **Commerce:** Cities and towns are seen as offering better business opportunities and returns than rural areas.

- **Facilities:** Cities and towns offer better educational facilities, higher living standards, improved sanitation and housing, healthcare, recreation, and social life.
- **Job prospects:** Services and industries create and expand higher-value-added jobs.
- **Rural transformation:** Rural areas can gradually transition into urban landscapes due to mineral discoveries, resource exploitation, or agricultural operations.

URBANISATION IN INDIA

- **Before industrialization:** India has a long history of urbanisation, dating back to the Indus Valley Civilization (c. 3300–1300 BCE).
- Other ancient and medieval cities include Kashi, Ayodhya, Surat, and Masulipattanam.
- **Role of British colonialism:** The British colonial government established industries, railways, and administrative centres in urban areas, which promoted urbanisation.
- **Impact of railways:** Railways facilitated the movement of people, goods, and raw materials, connecting different parts of the country. This led to the growth of trade, commerce, and industries, which in turn attracted people to urban centres.

CHALLENGES

- **Dense Populations and Housing Crisis:** India's rapid urban growth exacerbates housing shortages, with over a third of city dwellers residing in slums, according to the 2022 Economic Survey.
- **Infrastructure Pressures:** The nation faces an \$800 billion urban infrastructure gap, struggling to meet demands for basic services like transport and sanitation.
- **Congestion and Pollution Woes:** Poor urban planning has led to severe traffic and pollution issues, with 39 Indian cities among the global top 50 for poor air quality.
- **Growing Inequalities:** A staggering wealth gap exists, as noted by Oxfam, with 5% of the population holding the majority of wealth, leading to social and economic divisions.
- **Environmental Impact:** Urban sprawl is leading to significant forest cover loss and waste management crises, with over 62 million tons of waste generated annually.
- **Service Shortfalls:** As cities swell, there's an acute shortage of healthcare and educational services, with a stark nurse-to-patient ratio highlighting the deficit in essential personnel.
- **Displacement and Social Strain:** Post-independence, over half the population has faced displacement due to development, disrupting lives and livelihoods.
- **Urban Governance Challenges:** Crime rates and poor urban management underscore the need for better governance and strategic planning in India's cities.

WAY FORWARD

- **Improved Governance:** Streamlining policy implementation and enhancing transparency through digital platforms could foster better urban governance.
- **Affordable Housing:** Implementing cost-effective building technologies and offering financial incentives could promote affordable housing development.
- **Urban Infrastructure Investment:** Engaging in Public-Private Partnerships (PPPs) can be a viable option to fund and improve urban infrastructure projects.
- **Formalising the Informal Economy:** Initiatives to formalise informal sector workers and provide them with social security benefits can contribute to urban resilience.
- **Decentralised Urban Governance:** Empowering ULBs with more autonomy and resources could ensure better local governance and address urban challenges more effectively.
- **Technological Innovations:** The Smart Cities Mission in India aims to promote sustainable and inclusive cities through digital technology and intelligent urban planning.
- **Enhanced Data Collection and Analysis:** Developing robust data analytics systems can facilitate better decision-making and urban planning.

India's Cities Are Expanding – Often Into Flood-Prone Areas

India's cities are expanding – often into flood-prone areas | Explained THI PREMIUM

People living in informal structures are at disproportionately more risk as a result.

October 19, 2023 10:30 am | Updated 01:52 pm IST - Sri City

SAYANTAN DATTA

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People use country boats to traverse through the flooded Kakkamoola Bund road to their destination, in Thiruvananthapuram, October 16, 2023. | Photo Credit: SPL

Earlier this year, as the summer monsoons struck the country, Bengaluru, Gurugram, and Mumbai were quickly under several feet of stagnating water. Similar scenes played out in settled areas in many parts of the country, with officials evacuating several thousand people in anticipation of floods.



The problem with the '70 hours a week' | Analysing Narayana Murthy's statement

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India's urban areas have been flooding more and more often. These urban floods lead to life and livelihood loss, and can push governments into economic crises. In July this year, a State Bank of India **report** **estimated** the economic loss due to the 2023 North India floods and Cyclone Biparjoy in Gujarat together to be Rs 10,000-15,000 crore.

ALSO READ



Now, a **new study**, published in *Nature* journal on October 4, and led by the World Bank, has found that these risks have been exacerbated by the rapid and continuous expansion of cities into areas at high risk of flooding. According to its authors, since 1985, human settlements in flood-prone areas have more than doubled in the last four decades.

Indian cities such as Bengaluru, Gurugram, and Mumbai experienced severe flooding, leading to evacuations and significant economic losses. The State Bank of India reported that the combined economic loss from the North India floods and Cyclone Biparjoy reached between Rs 10,000-15,000 crore.

WORLD BANK STUDY ON FLOOD RISKS

- **Increased Risk from Urban Expansion:** A study published in Nature indicates urban sprawl into flood-prone areas has doubled since 1985, raising flood risks.
- **Urban Settlements in Vulnerable Areas:** Middle-income countries, including India, have seen a larger expansion into high-risk flood zones compared to their low- and high-income counterparts.
- **India's Positioning:** Despite not being among the top 20 countries for settlements most exposed to floods, India ranks third in terms of contributing to global settlements in flood-hazard zones and for new settlements in such risky areas.

URBANISATION AND FLOOD RISK

- **Climate Change and Monsoon Intensity:** Climate change is intensifying monsoons, leading to more frequent floods, with urban expansion in flood-prone areas aggravating the situation.
- **Inadequate Urban Planning:** The topographical ignorance in city expansion, such as in Bengaluru, has increased urbanisation in flood-susceptible regions, escalating flood risks.

SOCIAL DIVIDE AND FLOOD EXPOSURE

- **Vulnerability Across Social Strata:** Both the affluent and the poor contribute to the expansion into flood-prone areas, with the poor disproportionately affected due to their informal settlements.

GOVERNANCE AND ENVIRONMENTAL REGULATION

- **Lack of Effective Governance:** There's a governance deficit in addressing ecologically unsustainable development, with regulations often bypassing small-scale urban modifications.
- **Regulatory Violations:** Existing environmental regulations are frequently flouted, with illegal construction on forest lands and floodplains being common.

STRATEGIES FOR FLOOD-RESILIENT URBAN PLANNING

- **Recognition of Expansion into Risk Areas:** Acknowledging the encroachment into flood-prone zones is essential for sustainable urban planning.
- **Differentiation in Housing Needs:** Adaptation strategies must distinguish between the housing needs of low-income residents and unauthorised structures for the affluent.
- **Scientific Flood Mapping:** Cities require accurate mapping of flood-prone areas for better planning and risk mitigation.
- **Storm-Water Management:** Implementation of better storm-water management systems, including adequate drainage facilities in vulnerable areas, is necessary.
- **Resilient Infrastructure for Low-Income Housing:** There is a need to enhance the flood resilience of urban housing, particularly for low-income populations, by adopting solutions like stilt houses similar to those used by riverside communities.

Giving Urban A Better Life

Giving the urban Indian a better life

The theme of World Cities Day (October 31) this year was "Financing Sustainable Urban Future for All." Finances must be channelled in the right direction such that urban futures which are being cut short on account of flawed urbanisation are checked, and, in turn, cities made liveable and safe. It is atrocious that air pollution is taking away over 10% of our life expectancy.

A report released by The Energy Policy Institute at Chicago (EPIC) shows that out of the 50 most polluted cities in the world, 39 are in India. Pollution directly affects the health of people, and an average Indian loses 5.3 years of his life expectancy due to this; for the residents of Delhi, it is 11.9 years. This data only highlights the need for policy shifts to ensure better and liveable futures.

Pollution results in burning eyes, irritation of the nose and throat, coughing, choked breath, and asthma apart from causing cardiovascular diseases. Recently, a media report labelled air pollution in Mumbai as "Death by Breath" due to very unsatisfactory Air Quality Index levels. Bad air is not limited to the Indo-Gangetic plains anymore where the argument of inversion of temperature and slowing down of wind speeds was considered as a factor for poor air quality. The situation is getting to be bad even in India's coastal cities.

The expansion of 'grey' infrastructure

Why is the problem so acute in Indian cities? The overall development strategy of urban development in India – apart from proper execution of enforcement by agencies – needs a paradigm shift. The need now is to turn to sustainable and "ecological urbanization". The trajectory of urban development, where the focus is more on real estate development, a widening of roads, allowing large fuel guzzling vehicles on them, in turn squeezing the space meant for pedestrians, and redevelopment are the major reasons for increased pollution in Indian cities. Road dust, concrete batching, polluting industrial units and their extension in the cities, and vehicular emissions are key factors too. It is estimated that motorised transport alone is the cause for 60% of urban pollution. The green lungs of the cities, water bodies, urban forests, and green cover on urban commons, and urban agriculture have all reported shrinkage, even as "grey" infrastructure has seen rapid expansion. Hence, the priorities need to be set right.

During winter in North India, there is a hullabaloo over the burning of paddy straw (called *Parali*) as being the cause for smog (smoke



Sandeep Chachra
is Executive Director
of Action Aid India



Tikender Singh Panwar
is a former Deputy
Mayor of Shimla

Data show that India is home to some of the most polluted cities in the world, highlighting the need for a citizen-involved strategy of city building

and particulate matter). This is partially true. The burning of paddy, primarily in Haryana and Punjab, only escalates the problem. But this is only a small and seasonal part of the problem. India's automobile market has risen in value from \$100 billion and is expected to touch almost \$160 billion by 2027, registering a growth of 8.1%. Between July 2023 to September 2023, passenger and commercial vehicles sales touched 13,22,818 units. While this figure is not only limited to urban India, it is clear that such growth must serve as an impetus to the new design of and direction to urban development. Widening roads, in turn inducing people to buy more cars, while ignoring the fact that traffic snarls are increasing each day, thus leading to more pollution levels, is not the way to go. Construction activities, which are on the rise in almost every Indian city, contribute to roughly 10% of air pollution in the National Capital Region. There are hardly any steps being taken to monitor and control construction activities with formulated standard operating procedures.

City residents, unfortunately, have hardly any participatory role and are forced to become passive bystanders in the urbanisation process.

Focus on public transport

There is a compelling need to have an alternative strategy of city building, where the focus is on more public transport, having secure pedestrian paths and bicycle lanes with the creation of a post of bicycle officers, and regulating construction activities through standard operating procedures.

There needs to be good public transport, with investment in buses for towns and cities. It is estimated that nearly 10 lakh buses would need to be added to the existing bus fleet in cities to meet the demands of urban mobility. There must be firm initiatives that emulate the Jawaharlal Nehru National Urban Renewal Mission. Public transport must be made accessible and affordable to people, 85% of whom are in the informal sector.

Strong steps need to be taken to control private motorised vehicular movement in the cities. A congestion tax being levied on private car owners driving during peak hours can be thought of. Likewise, an odd number-even number plate formula can be another important intervention. Some cities have a no car day on certain days – an example that should be put into practice by those in power and with influence. City leaders, the elite as well State Chief Ministers should use public transport at least once a day as an example of token motivation. Transitioning to green vehicles is important.

Delhi has a Graded Response Action Plan, or

GRAP (a set of anti-air pollution measures), the moment air quality deteriorates. There are four different sets that get activated based on the quality of air. Such a mechanism must be adopted in other Indian cities as well.

There should be zero acceptance of industrial pollution and real-time monitoring must become a reality. There must be street supervision by residents instead of waiting for the statutory bodies to react, which urban local bodies can ensure.

Urban commons (ponds, water bodies, urban forests, parks, playgrounds) are another major area that should not at all be allowed to be taken over by either public or private bodies for private gains. Urban communities must protect, nurture and expand them.

Ian McHarg's influential book, written in the 1960s, *Designing with Nature*, synthesised and generalised ecological wisdom shaping landscape planning and design as a way to build our cities. However, our urban development strategy has been the inverse of that. Massive land use changes and the handing over of open spaces to real estate developers do not look to be ending anytime soon. Redevelopment across the country has resulted in pollution. A city's ecology is one of the first casualties and there is hardly any meaningful afforestation within a city. Planting trees 50 kilometres away from the city does not help in curtailing pollution in the city.

Strengthen governance

So-called solutions such as smog towers or even watering roads are just cosmetic. People's empowerment through the city's governance architecture is a firm step forward. Pollution guides and standard operating procedures for various line departments and agencies must not only be made readily available to the people but should also become a part of the way of life in the city. When certain standard operating procedures were enforced without being challenged during the COVID-19 pandemic period, should not people come forward now and support implementation of the odd number-even number plate formula or even a 'no-car day' every week? For this to happen, there must be a strong GRAP-like standard operating procedure. Likewise, the medical fraternity must support the putting out of a public health advisory.

We cannot afford to let our lives be shortened by reasons such as air pollution. The poor and the marginalised are the least contributors to pollution but are the segment who are most exposed to it and who pay a heavy price. They need a better life.

The 2023 theme for World Cities Day on October 31 was aimed at "Financing Sustainable Urban Futures for Everyone," highlighting the urgent need to direct funding towards creating safer, more habitable cities and reversing the impacts of improper urban planning.

AIR POLLUTION'S TOLL ON HEALTH

- Air pollution is dramatically reducing life expectancy, with EPIC's report indicating a shocking 10% cut in our lifespan.
- The Energy Policy Institute at Chicago's study revealed 39 of the world's 50 most polluted cities are in India, with the average Indian losing 5.3 years and Delhi residents losing nearly 12 years off their life expectancy.
- Adverse effects include eye irritation, respiratory problems, and increased cardiovascular disease risks.
- Mumbai's air quality, described as "Death by Breath," signifies the widespread reach of pollution beyond the Indo-Gangetic plains.

URBANISATION AND POLLUTION

- India's urban strategy requires a fundamental change toward sustainable and ecological urbanisation to address the pollution spike due to infrastructure development, vehicular emissions, and diminished green spaces.
- Vehicles contribute to 60% of urban pollution, with real estate and road expansions exacerbating the situation.
- The NCR attributes approximately 10% of its air pollution to construction activities, yet standard regulations to monitor these actions are lacking.
- **Urban Development and Vehicle Sales:** India's burgeoning automobile market, expected to grow to \$160 billion by 2027, necessitates a new direction in urban planning.
 - The rise in vehicle sales to over 1.3 million units from July to September 2023 calls for urban designs that discourage vehicle dependency.

STRATEGIES TO COMBAT POLLUTION

- **Alternative Urban Strategies:** A shift towards enhancing public transport, securing pedestrian and bicycle paths, and regulated construction practices is imperative.
- **Boosting Public Transport:** Investing in buses and adopting initiatives similar to the **Jawaharlal Nehru National Urban Renewal Mission** can make public transport more accessible and affordable.
- **Controlling Private Vehicles:** Measures such as congestion taxes during peak hours, an odd-even vehicle number system, and promoting 'no car days' can mitigate private vehicular pollution.
- **Transition to Green Vehicles:** Adopting green vehicles and action plans like **Delhi's Graded Response Action Plan (GRAP)** can significantly improve air quality.
- **Industrial Pollution and Community Action:** There should be stringent measures against industrial pollution, including real-time monitoring and active street-level supervision by residents.
- **Preserving Urban Commons:** Urban spaces like parks and water bodies must be protected from encroachment, and communities should actively engage in their expansion and upkeep.
- **Rethinking Urban Development:** Contrary to Ian McHarg's "Designing with Nature," urban development often involves significant land use changes favouring real estate interests, leading to increased pollution and ecological harm.
- **Governance and Empowerment:** Effective governance can empower citizens, making pollution control part of the city's lifestyle. Standard operating procedures, as seen during the COVID-19 pandemic, should be actively supported by the public and medical community for a healthier environment.
- **Medical Community's Role:** Health advisories from the medical community can play a vital role in supporting pollution control measures.

An Ageing India Needs Age-Responsive TB Care

An ageing India needs age-responsive TB care

India is moving towards a future where the elderly will make up a significant proportion of society, primarily due to advances in health care and increased life expectancy. In 2011, about 9% of India's population were over the age of 60. This is expected to increase to 12.5% by 2030. The elderly represent a storehouse of wisdom, and respect for their rights and freedoms benefits society. On International Day of Older Persons (October 1), we must resolve to invest in the health of our elderly population, and pay attention to their unique needs.

This is especially true in the case of tuberculosis (TB), which affects over 25 lakh Indians every year, and kills at least 1,000 every day. India's National TB Prevalence Survey, 2021, revealed that the prevalence of TB in people over the age of 55 was 588 (per one lakh population), much higher than the overall national prevalence of 316. These findings were the starting point for a first-of-its-kind rapid assessment report on TB among the elderly, which we published earlier this year in collaboration with the National TB Elimination Programme and the U.S. Agency for International Development, highlighting TB's impact on the elderly and the need for age-specific TB guidelines.

How TB impacts the elderly
Interviews with older persons with TB revealed that their TB care journeys were fraught with challenges at every step, resulting in an overall sub-optimal experience. Symptoms of TB including cough, fatigue and weight loss are mistaken as signs of other diseases or dismissed as signs of old age. The risk of having a TB diagnosis delayed or missed altogether is higher for the elderly compared to other adults.

Once diagnosed, management of TB among the elderly is often complicated by multiple comorbidities, particularly diabetes. At an individual level,

Anupama Srinivasan

is Assistant Director at REACH, a non-profit organisation working on TB for over 25 years

Ramya Ananthakrishnan

is Director at REACH

Manjot Kaur

is an independent consultant associated with REACH and authored 'TB in the Elderly: A Rapid Assessment Report

this means a higher pill count and an increased likelihood of side effects. At a health system level, this can result in irregular treatment adherence and poor outcomes, including death. Some older people with TB spoke about their lowered 'will to live', especially in the absence of social and emotional support systems. Older people, and older women in particular, also face specific challenges in accessing health services. For instance, in rural and hilly areas, they struggle to travel to health facilities by themselves. Their access to reliable information on health is also limited – social networks inevitably shrink for the elderly. Older persons also experience infrastructure-related challenges such as lack of adequate seating. Crucially, they may not have access to high-quality nutritious food, which is critical for recovery.

All of this is augmented by a loss of economic independence. Most people over the age of 60 are no longer working; they are living off savings or they are completely dependent on families. There are some social welfare schemes for the elderly but these are limited in scope and difficult to access. Data on TB-related stigma among the elderly is sparse but we know that ageism is real and has been recognised by the World Health Organization as a cause of poor health and social isolation. Many older people we spoke to referred to their fragile mental health, accentuated by the loss of purpose and connection, loneliness from losing spouses or family, and the anxiety of not being 'useful'.

Building age-responsive care

So, how can we design and deliver TB care that is elder-friendly? First, we must move away from disease-specific, vertical care programmes to holistic care models that reduce the need for the elderly to interact with multiple providers and facilities. We must also build capacity among health professionals at all levels for an improved clinical

understanding of TB in the elderly and better management of multiple morbidities. Case-finding among the elderly can be improved through effective sputum collection and transportation systems, access to mobile diagnostic vans and active case finding at geriatric OPDs, residential homes for the elderly and other institutional settings.

Technical and operational protocols that provide clear guidance on diagnosing and treating TB in the elderly – for example, sample extraction protocols, comprehensive assessment of co-morbidities and drug dosage adjustments – need to be developed.

To address socio-economic needs, we must design and roll out well-considered support protocols, with inputs from elderly people with TB. Examples include an elder-focused community care model with linkages to local caregivers; doorstep delivery of medicines; age-responsive peer support and counselling for older people and their families; special help desks for the elderly at facilities; and support with documentation to access social support schemes.

At a macro level, we must ensure rigorous gender and age-disaggregated collection and analysis of data, to identify TB trends across age groups, and to make sure that the elderly are included as a separate age category in all TB reports. An important step towards building elderly-friendly systems is strengthening collaboration within the health system.

Finally, we need a stronger research agenda focused on TB in the elderly, to better understand State-specific trends in case finding and outcomes among elderly people with TB; substance use; drug-resistance and co-morbidity patterns across geographies; uptake of TB preventive therapy in the elderly; and intersectionality with other aspects of equity such as gender, disability, class, and caste.

By 2030, the elderly (aged 60+) will constitute 12.5% of India's population, compared to 9% in 2011. On International Day of Older Persons, the focus is on the health and unique needs of the elderly.

TB PREVALENCE AMONG THE ELDERLY

- India's National TB Prevalence Survey 2021 indicated a TB prevalence of 588 per 100,000 among those over 55, higher than the national average of 316.
- A rapid assessment report on TB among the elderly calls for age-specific guidelines for TB care.

CHALLENGES FACED BY ELDERLY WITH TB

- Symptoms of TB in the elderly are often misattributed to aging, leading to delayed diagnoses.
- Comorbid conditions like diabetes complicate TB management, increasing pill burden and side effects.
- The elderly, especially women, face difficulties in accessing healthcare and are at risk of poor nutrition, social isolation, and economic dependence.

BUILDING ELDER-RESPONSIVE TB CARE

- A shift to holistic care models integrating services for the elderly is recommended.
- Health professionals need training to manage TB among the elderly effectively.

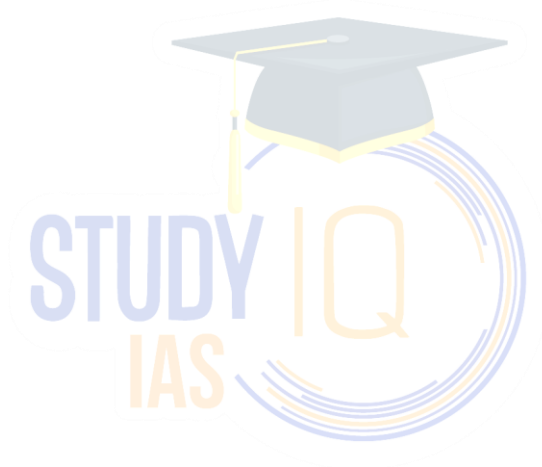
- Improved case finding for TB among the elderly can be achieved with better sputum collection, mobile diagnostics, and active case finding.

SOCIO-ECONOMIC SUPPORT FOR ELDERLY TB PATIENTS

- Protocols must be designed to cater to the socio-economic needs of the elderly.
- Interventions could include elder-focused care models, doorstep medicine delivery, peer support, and assistance in accessing social welfare schemes.

DATA AND RESEARCH ON TB IN THE ELDERLY

- Gender and age-disaggregated data collection will help identify and address TB trends among the elderly.
- A focused research agenda on TB in the elderly is crucial to understand various facets of the disease and its management in this demographic.



What are India's surrogacy laws?

SC allows surrogacy, strikes down rule banning use of donor gametes

Two-judge Bench comes to the rescue of a woman suffering from the rare medical condition of Mayer Rokitansky Kuster Hauser syndrome by staying the operation of a law which threatened to wreck her hopes of becoming a mother

Krishnadas Rajagopal
NEW DELHI

The Supreme Court has protected the right of parenthood of a woman, suffering from a rare medical condition, by staying the operation of a law which threatened to wreck her hopes to become a mother through surrogacy.

The woman has the Mayer Rokitansky Kuster Hauser syndrome. Medical board records showed she has "absent ovaries and absent uterus, hence she cannot produce her own eggs/oocytes". The couple had begun the process of gestational surrogacy on December 7 last year.

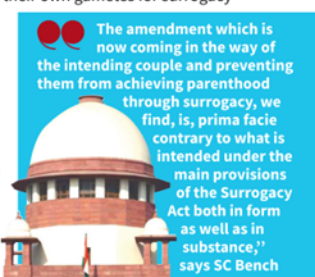
However, a government notification on March 14 this year amended the law, banning the use of donor gametes. It said "intending couples" must use their own gametes for surrogacy. The petition was filed in the Supreme Court challenging the amendment as a violation of a woman's right to parenthood.

"The amendment which is now coming in the way of the intending couple and preventing them from achieving parenthood through surrogacy, we find, is, *prima facie* contrary to what is intended under the main provisions of the Surrogacy Act both in form as well as in substance," a Bench of Justices B.V. Nagarathna and Ujjal Bhuyan held in a recent order.

Easing the path

On March 14, 2023, government notified amendments to the law to ban the use of donor gametes, saying 'intending couples' must use their own gametes for surrogacy

■ Supreme Court says the amendment cannot contradict Rule 14(a), which specifically recognises the absence of a uterus or any allied condition as a medical indication necessitating gestational surrogacy



Senior advocate Sanjay Jain, the petitioner's lawyer, argued that the amended Paragraph 1(d) of the Surrogacy (Regulation) Rules, 2022, by ruling out the use of donor eggs, had made it impossible for his

client and her husband to continue with the process of surrogacy to achieve parenthood.

He argued that the 2023 amendment contradicted Sections 2(r) and 4 of the Surrogacy Act, 2021, which recognised the situation when a medical condition would require a couple to opt for gestational surrogacy in order to become parents.

Mr. Jain referred to Rule 14(a) of the Surrogacy Rules which listed the medical or congenital conditions owing to which a woman could choose to

become a mother through gestational surrogacy. They included "having no uterus or missing uterus or abnormal uterus (like hypoplastic uterus or intrauterine adhesions or thin endometrium or small unicornuate uterus, T-shaped uterus) or if the uterus is surgically removed due to any medical condition such as gynaecological cancer".

'Woman's choice'

The lawyer said the Rule made it clear that the choice was solely that of the woman. He said his client had begun the surrogacy process months before the amendment, which cannot be implemented retrospectively.

The government, through Additional Solicitor-General Aishwarya Bhati, countered that the process of surrogacy cannot be availed under the law unless the child was "genetically related" to the intending couple. This exempted the use of donor eggs. In an 11-page order, the court agreed with Mr. Jain's argument that the law permitting gestational

surrogacy was "woman-centric". The decision to have a surrogate child was entirely based on the woman's inability to become a mother owing to her medical or congenital condition. Such a condition included the "absence of a uterus or repeatedly failed pregnancies, multiple pregnancies or an illness which makes it impossible for her to carry a pregnancy to term or would make the pregnancy life-threatening".

The amendment cannot contradict Rule 14(a) which specifically recognises the absence of a uterus or any allied condition as a medical indication necessitating gestational surrogacy, the court held.

Addressing the government's contention that the surrogate child should be "genetically related" to the couple, the court said the child would be related to the husband. "In this regard, it may be noted that the expression 'genetically' related to the intending couple has to be read as being related to the husband when Rule 14(a) applies," the court said.

A recent Supreme Court verdict has highlighted the intricacies surrounding surrogacy laws, particularly when it intersects with individuals' rights to parenthood.

ABOUT THE CASE

- The case in focus involves a woman suffering from Mayer Rokitansky Kuster Hauser (MRKH) syndrome, which renders her unable to produce eggs/oocytes due to absent ovaries and uterus.
- A government notification altered the law, prohibiting the use of donor gametes, mandating that "intending couples" must utilise their own gametes for surrogacy.
- This amendment was challenged in the Supreme Court as an infringement on a woman's right to parenthood.
- In response to the government's argument that the surrogate child should have a "genetic relation" to the couple, the court elucidated that the child would indeed have a genetic relation to the husband.

- Consequently, the term 'genetically' related to the intended couple should be interpreted as being related to the husband.

UNDERSTANDING SURROGACY

- Surrogacy is a practice where a woman carries and delivers a child for another individual or couple intending to parent the child post-birth.
- **Position in India:** Altruistic surrogacy is permitted, which disallows any financial compensation to the surrogate mother.
- **Eligibility:** Opting for surrogacy is restricted to legally married infertile couples without biological children, barring certain exceptions, or single or divorced women above the age of 35.
- The surrogate mother, as per the law, needs to be a close relative of the couple, a married woman with her own child, aged between 25-35 years (who has been a surrogate only once in her life), and medically fit for surrogacy.

COMMERCIAL SURROGACY

- Commercial surrogacy is a subset of gestational surrogacy wherein a gestational carrier receives financial compensation for carrying a child to term on behalf of typically affluent infertile couples.
- It's colloquially known as 'wombs for rent', 'outsourced pregnancies', or 'baby farms'. India, once a hub for commercial surrogacy, outlawed the practice in 2015.

REASONS BEHIND THE BAN

- **Commodification:** Both the surrogate and the child were perceived as commodities, available for sale at low prices in the market.
- **Reproductive Labour Payment:** The financial aspect of compensating reproductive labor was a matter of contention.
- **Gender Exploitation:** It was feared that the practice perpetuated gender exploitation.
- **Human Trafficking:** Concerns about human trafficking were associated with commercial surrogacy.
- **Insufficient Compensation:** The compensation provided to surrogates was deemed inadequate.
- **Moral Degradation:** The practice was viewed as contributing to the moral degradation of women, among other issues.

SUPPORTING ARGUMENTS FOR COMMERCIAL SURROGACY

- **Fair Compensation:** It provides fair compensation to women for their year-long commitment and the physical and emotional toll of pregnancy.
- **Personal Choice:** The ban pushes women towards altruistic surrogacy, infringing on their personal choice.
- **Legal Regulation:** In nations with clear laws, commercial surrogacy is regulated to protect the rights of both the surrogate and the intending parents.
- **Alleviating Pressure:** It offers an alternative for intending parents reluctant to burden close relatives or friends required in altruistic surrogacy.
- **Pre-negotiated Contracts:** Contracts specifying monetary compensation are negotiated beforehand, minimising disputes over reimbursements during and post-pregnancy.

ARGUMENTS AGAINST COMMERCIAL SURROGACY

- **Higher Costs:** Commercial surrogacy is costlier than altruistic surrogacy due to surrogate compensation alongside medical and legal expenses.
- **Exploitation:** It's believed to exploit vulnerable women.
- **Moral Criticism:** Surrogate mothers face moral criticism and degradation in society as surrogacy is often viewed as immoral.

WAY FORWARD

- Ensuring the well-being and rights of surrogates through rigorous health and background screenings, supportive legislation, stern penalties for rule violations, and adequate education on available rights and potential risks, are essential steps towards curbing exploitation.
- The state bears a crucial responsibility in protecting the welfare of the unborn child amidst this complex scenario.
- Furthermore, upholding women's autonomy over their reproductive choices and honouring individuals' rights to parenthood are paramount.
- The surrogacy legal framework in India has grappled with harmonising these divergent interests, showcasing the intricate balance required in this sensitive domain.



The Supreme Court's Stance on Same-Sex Marriage

The day after, a disquiet

In same-sex marriage verdict, principles on which majority on bench has proceeded suggest a narrow, technical approach, which could have been avoided on a minority right



GOPAL
SANKARANARAYANAN

AT AROUND 11 am on Tuesday, all eyes were on the Supreme Court where the Chief Justice and four of his colleagues had convened to pronounce the judgment in the batch of cases concerning what is now popularly known as "same sex marriage". Over several weeks, lawyers had traded punches on the scope of marriage laws in India, and of whether they could include in their compass relationships among members of the LGBTQ+ community. Stemming from this were questions of other civil rights made available through the recognition of the institution of marriage — those of inheritance, adoption and property rights, as well as more run-of-the-mill matters that many of us take for granted, nominees for insurance, bank accounts, medical claims, etc.

The central questions framed by the Court included: (a) whether there is a fundamental right to marriage; (b) whether the words in the Special Marriage Act could be given a gender-neutral meaning; (c) whether a civil union could be recognised under Indian law, and (d) whether an obligation could be placed on the State to recognise the relationship (and hence the rights) by law.

As Chief Justice D Y Chandrachud commenced reading his judgment, hope sprang from the petitioners' benches. He reiterated the authority of the Court to examine the issues at hand and rejected the government's opposition to it. The nature of queerness was the next foray, and the Court found that it had sound Indian roots, and was neither urban nor elite. Most significantly, while holding that the right to marriage was not a fundamental right, the verdict declared that the right to enter into a union was unrelated to sexual orientation and was a feature of the fundamental rights in Articles 19 and 21 of the Constitution. He then proceeded to issue a slew of directions to the various authorities to ensure that discrimination against the community could be averted.

In a brief 17 page judgment of his own, Justice Sanjay Kishan Kaul agreed with the views of the Chief Justice, and while concluding that the Special Marriage Act was in fact discriminatory as its objective to regulate only heterosexual relationships was illegitimate, he also refrained from making any interpretation that would benefit the community, noting the cascading effect it could have across various laws.

By this point, it had begun to dawn on all assembled that there were differences on the Bench as both Justices Chandrachud and Kaul had expressed their disagreements with the draft opinion that had been circulated by Justice S R Bhat.

Justice Bhat, speaking for himself and Justice Kohli, agreed with the Chief Justice that there is no fundamental right to marriage, but proceeded to conclude that a right



C R Sasikumar

to relationship enures under Article 21 of the Constitution. He found himself unable to go further (as the Chief Justice did) to locate a right of self-development in Articles 19, 21 and 25, or to place an obligation on the State to give recognition to civil unions by law. He aligned with the Chief Justice on the validity of the Special Marriage Act but did not believe a right of adoption and other rights could be afforded to LGBTQ+ couples through judicial diktat. In all of this, Justice Narasimha joined Justices Bhat and Kohli, who thereby constituted the majority.

For lawyers and academics, there is much material in this judgment to chew on — the rarity of the Chief Justice being a part of the minority, the deference to a government committee to consider how the community's rights could be given effect to, the interplay of religion and sexual choice while interpreting core provisions of our Constitution, and the general nature of judicial restraint.

However, as the dust settles on the heated television debates of the evening and a new day dawns, there is a grim sense of disquiet. This group of five judges are quite easily among our most erudite, sensitive, intelligent and empathetic individuals in the Supreme Court. Yet, even here, there were differences of opinion on how a practical solution could be provided to those of the LGBTQ+ community who wished to live normal lives without harassment and unpleasant obstacles. To have a spouse, to be a parent, to entrust and to align are some of the most basic needs of a human being. It is unfortunate that the syntax of another age has made it difficult for

the interests of the LGBTQ+ community to be recognised, and it is this problem that the judges have attempted to grapple with, all in different ways.

In deferring to the legislature and to the executive (the Committee suggested by the Solicitor General), it appears that the Court has lost a golden opportunity to address a human problem. For decades, when groups came before the Supreme Court canvassing for the rights of undertrials, sexually harassed women at the workplace, voters not being given access to information about candidates or regarding unregulated inter-country adoption, the lack of vigilance oversight over the CBI and vacuums in environmental regulation, the Court was swift to lay down guidelines until the law was made in that regard.

When the right to have a family, to live with dignity and the right to privacy have been read as fundamental rights under Article 21 of the Constitution, it is a little hard to believe that non-heterosexual couples (and even unmarried heterosexual ones) need to prove that the right to marriage is a fundamental right for them to have a mechanism in place to enjoy their civil rights. The principles on which the majority has proceeded suggests a narrow, technical approach which could have been well avoided when a minority right was in contemplation. In this, the Court has lost an opportunity — one that has been availed by this very institution on innumerable occasions, with less to lose.

The writer is Senior Advocate, Supreme Court of India

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BACKGROUND OF THE CASE:

- On October 17, the Supreme Court declined to legalize same-sex marriage. The court left the decision to legislate on the subject to Parliament.

PETITIONERS' DEMANDS:

- Wanted the Special Marriage Act (SMA) to be gender-neutral to allow same-sex marriage.
- Argued that SMA violated constitutional articles (Articles 14, 15, 19, 21 and 25) by excluding same-sex couples.
- Sought replacement of "husband" and "wife" with gender-neutral terms in SMA.
- Desired joint adoption rights and protection measures for LGBTQIA+ couples.

SUPREME COURT'S JUDGMENT:

- The Court refused to mandate Parliament to amend the SMA, citing institutional limitations.
- It stated that the Constitution does not expressly recognize a fundamental right to marry.
- A majority opinion ruled that legal recognition of same-sex unions could only be conferred through enacted law.
- A minority opinion, however, recognized the LGBTQIA+ community's fundamental right to form relationships and the state's duty to legally recognize such unions.
- Court cited past judgments like the Navtej Singh Johar case, which recognized queerness as a natural phenomenon, and the NALSA judgment, acknowledging transgender identity and rights.

REASONS FOR REFUSING TO AMEND SMA:

- Amending the Special Marriage Act could regress rights for inter-caste and inter-religion marriages.
- Modifying the Special Marriage Act would overstep judiciary boundaries into legislative territory.

POTENTIAL LEGISLATIVE ACTION:

- Government opposed same-sex marriage during the hearings.
- Court suggested that the state may address discrimination through policy.
- Options include making laws gender-neutral or creating separate statutes.

VERDICT'S RECEPTION:

- Petitioners and activists feel the court acknowledged discrimination but provided no remedy.
- Disappointment expressed over the court's refusal to take a more active stance.

SUPREME COURT ON TRANSGENDER RIGHTS:

- Acknowledged ongoing discrimination despite the Transgender Persons Act of 2020.
- Urged for laws prohibiting discrimination based on sexual orientation.
- Affirmed that transgender persons can marry under existing law.

FUTURE OF THE MOVEMENT:

- Activists see the fight for marriage equality as ongoing.
- There's a call for stronger alliances within the diverse LGBTQIA+ community.
- The verdict is seen as a setback, but the struggle for equal rights continues.

Give Up Impropriety, Demonstrate Impartiality

Give up impropriety, demonstrate impartiality

The order of this court has to be followed. I am concerned about the dignity of our court. If someone feels that this was a stricture passed by a local court against a government servant, they are mistaken.' These are the words of the Chief Justice of India, who felt despair over the inaction by the Maharashtra Assembly Speaker with respect to the disqualification petitions of its members that has been pending before him since July 2022. As the presiding officer of the Lok Sabha at the Centre and the Legislative Assembly in the States, the Speaker is required to act in an impartial manner. However, the functioning of this institution over the years in India has left much to be desired.

The office of the Speaker emerged in medieval Britain, when the House of Commons needed a spokesman in their dealings with the King. Until the 17th century, the Speaker was often seen as an agent of the Crown. However, since the middle of the 19th century, the Speaker has been considered to be an impartial Chairman of the House of Commons. They are the custodians of the rights and privileges of the House, its committees and its members.

Speaker conduct and gaps

Under the Indian Constitution, the Lok Sabha and Legislative Assemblies elect two of its members to be the Speaker and Deputy Speaker, respectively. Apart from the traditional roles with respect to the conduct of business, the Speakers perform two important functions: of certifying a Bill to be a Money Bill (over which the Rajya Sabha/Legislative Council have a limited role), and deciding on disqualification under the Tenth Schedule for defection.

The Lok Sabha and Legislative Assembly rules provide for suspension of members for misconduct in the House. It has been noticed that the Speakers and the Houses misuse these provisions more often than not against the



Rangarajan R.

is a former Indian Administrative Service (IAS) officer. He currently trains civil service aspirants

The Speakers of the Lok Sabha and Legislative Assemblies must carry out their functions in consonance with sound democratic practices

Opposition members.

In a recent instance, the leader of the Congress party in the Lok Sabha, Adhir Ranjan Chowdhury, was swiftly suspended for his remarks against the Prime Minister (which was later revoked), but no swift action has been forthcoming against a member of the ruling Bharatiya Janata Party (BJP), Ramesh Bidhuri, for passing communal slurs against the Bahujan Samaj Party Member of Parliament, Danish Ali. There was also the case of the Maharashtra Assembly suspending 12 BJP MLAs unconstitutionally for a year in July 2021 that was later set aside by the Supreme Court of India.

The Speaker is the authority to refer Bills introduced to the Parliamentary Standing Committees. However, even significant Bills that require detailed scrutiny are not referred to such committees. As against more than 60% of Bills referred to committees in the Lok Sabha during 2004-14, less than 25% have been referred during 2014-2023. While such partisanship by Speakers affects robust parliamentary functioning, it is their role in deciding disqualification petitions that can derail the stability of elected governments.

The clairvoyance of French writer Jean-Baptiste Alphonse Karr who said 'the more things change, the more they stay the same' is hard to miss. It is a line that suits Indian politics even today, where our elected representatives find ingenious methods to circumvent the anti-defection law. The authority to decide on the disqualification of members under the Tenth Schedule is vested in the Speaker of the House. While he/she is expected to perform this constitutional role in a neutral manner, past instances have hardly inspired confidence, with the Speakers favouring the ruling dispensation.

The minority judges in *Kihoto Hollohan* (1992) were of the view that vesting the power to decide on defections with the Speaker violates the basic democratic principles. The Supreme Court in

Keisham Meghachandra Singh vs The Honble Speaker Manipur (2020), recommended that Parliament amend the Constitution to vest these powers in an independent tribunal to be headed by judges. The present indictment of the Speaker of Maharashtra Assembly is also due to his continued inaction in deciding disqualification petitions for more than a year despite directions from the Court. Additionally, there have also been challenges in the Court in recent years against certification of certain Bills as a Money Bill by the Speaker of the Lok Sabha.

Once a Speaker, always a Speaker

The adage 'what's sauce for the goose is sauce for the gander' reflects the role that a Speaker is expected to play. In Britain, the Speaker once elected to his/her office, resigns from the political party to which he/she belonged. In subsequent elections to the House of Commons, he/she seeks election not as a member of any political party but as 'the Speaker seeking re-election'. This is to reflect his/her impartiality while presiding over the House. In the Indian Constitution, while the Tenth Schedule allows a Speaker (or Deputy Speaker) to resign from their political party on being elected to their office, it has been never done by any Speaker till date.

Considering that they are also constitutional functionaries who enjoy certain privileges, the higher judiciary is constrained 'to go thus far and no further', while dealing with the issues relating to Speakers. It is important that we adopt the practices as in Britain to instil confidence in the office of the Speaker. However, even till such time, it is imperative that Speakers eschew the 'impropriety' in their functioning and demonstrate 'impartiality'. It is time the Speakers take a 'vow' to display the latter in the discharge of their functions, in consonance with sound democratic practices.

The views expressed are personal

CJI'S CONCERNS OVER SPEAKER'S INACTION

- The Chief Justice of India expressed frustration over the Maharashtra Assembly Speaker's failure to act on disqualification petitions pending since July 2022.
- The CJI emphasised the importance of the court's dignity and the need for compliance with its orders.

SPEAKER: HISTORY AND FUNCTIONS:

- Originating in medieval Britain, the Speaker initially acted as an agent of the Crown but evolved into an impartial chairman of the House of Commons by the mid-19th century.
- The Speaker is expected to be the custodian of the rights and privileges of the House, its committees, and members.
- The Speaker and Deputy Speaker in India are elected from the Lok Sabha and Legislative Assembly members and are expected to act impartially.
- Two significant functions include 1) certifying Money Bills 2) deciding on disqualification under the Tenth Schedule for defection.
- There have been instances of perceived misuse of power by Speakers, often against opposition members, which raises concerns about impartiality.

RECENT INSTANCES OF PARTISANSHIP

- Cases cited include the swift suspension of a Congress leader in the Lok Sabha and the unconstitutional suspension of 12 BJP MLAs by the Maharashtra Assembly.
- Less referral of bills to parliamentary committees in recent years suggests a deviation from robust parliamentary scrutiny.
 - As against more than 60% of Bills being referred to committees in the Lok Sabha during 2004-14, less than 25% have been referred during 2014-2023.

ANTI-DEFECTION LAW AND SPEAKER'S DISCRETION

- There is scepticism about the Speaker's neutrality in disqualification decisions, often seeming to favour the ruling party.
- The Supreme Court has suggested amending the Constitution to assign the power of deciding disqualifications to an independent tribunal (Keisham Meghachandra Singh vs The Hon'ble Speaker Manipur).

JUDICIAL RESTRAINT AND SPEAKER'S ACCOUNTABILITY

- While the judiciary has limits on intervening with the Speaker's decisions, the Supreme Court has shown disapproval of the inaction in disqualification cases.
- Challenges have been made against the Speaker's decision regarding the certification of Money Bills.

COMPARATIVE PRACTICES AND REFORMS

- In the UK, Speakers resign from their party to maintain impartiality, a practice not followed in India.
- The Indian Tenth Schedule allows for resignation from the party upon election as Speaker, which is a step towards ensuring impartiality.

WAY FORWARD: SPEAKER'S IMPARTIALITY

- There is a call for Speakers in India to voluntarily uphold impartiality and demonstrate propriety in their functions.
- Adopting practices similar to those in Britain could help instill confidence in the Speaker's office in India.

Building BRICS For The Future

Building BRICS for the future

In August, six new members were inducted into the BRICS grouping, in South Africa. While many believe that this meeting did not have productive results, we need to look at BRICS from the perspective of how it has evolved rather than the results of one meeting.

Economic compulsion

First, it is important to note that BRICS emerged out of an economic compulsion. It does not provide military or security support to various countries, is not involved in the policing of nations, and does not provide peacekeepers. Compare this to, say, NATO: European Allies and Canada have invested an extra \$350 billion since 2014, with eight consecutive years of increased defence spending. The GDP of BRICS is now 36% of the global GDP and the population of its members will be 47% of the world population by 2050. Therefore, it is important to look at the long-term opportunities that this group presents. More members could be inducted, which means that BRICS could pose a serious challenge to the dominance of the G7 comprising Canada, France, Germany, Italy, Japan, the U.K., and the U.S.

Second, two members of BRICS are China and India, which together contain one-third of the world's population. The two countries are the fastest-growing economies and are expected to be among the top three economies of the world by 2030. Both countries understand that globally, bilateral ties have seen a transformation following the formation of economic blocs such as the European Union or ASEAN, as such blocs accelerate trade and investment. While India and China have bilateral challenges at the political and diplomatic levels since their stand-off at Doklam in 2017, trade between the two countries has continued to grow significantly. That Chinese President Xi Jinping skipped the G20 summit in New Delhi will not



Sujeev Shakya

is author of
'Unleashing Nepal'
and 'Unleashing the
Vajra'

We need to look at BRICS from the perspective of how it has evolved rather than the results of one meeting

impact this economic cooperation. We should never forget that economics and business trumps politics.

Search for an alternative

Third, there has been some polarisation between the U.S. and other parts of the world. This was especially becoming evident during the Trump administration. Many countries have issues with the U.S.'s stance against China: the U.S. seems keen to impose tariffs and create other barriers to restrict China's expansion in trade and investment. China has made strides in certain areas like communication infrastructure and electric mobility, too, which the U.S. would like to contain. This is expected to get worse. Therefore, countries want to be part of a grouping that involves China too. In the BRICS grouping, China is not a dominant player; democratic countries such as India, South Africa and Brazil provide the counterweight.

Similarly, the way refugees are being treated in Europe do not give a positive perspective of a world that is getting increasingly globalised. Countries such as the U.S. have flouted World Trade Organization rules and have not penalised for the same. This means that countries have to look for other arrangements.

The search for an alternative such as the Non-Aligned Movement to tackle Cold War challenges has given hope of a new order; thus, many countries are applying for membership to this group. Six new members were inducted in the last meet. As BRICS grows, there will be many trade business and investment protocols created, much like what we see in different free trade arrangements or economic blocs.

Fourth, the U.S. dollar has been the dominant global currency all this time. We have seen the demise of travellers' checks, of people carrying authorised currency that was equivalent to dollar bills. With digital platforms making inroads into many

countries, digital currency is clearly the future. Both India and China have made great progress in this field; they are far ahead of the U.S. and Europe. Both India and China are pushing for more trade, investment, and business in their currencies and together, through BRICS, they can push their own currencies as alternative currencies to the dollar. India and China's interests in the long run converge; their short-term challenges will not deter this convergence. Freedom from the U.S. dollar is a big reason for convergence.

Continent of the future

Finally, the continent that promises economic growth this century is Africa. The way France has intervened in Niger or the manner in which migrants have been treated in Europe provide Africans with a negative image about Europe. The fact is that while Europe talks about connectivity, a Strait of Gibraltar crossing is still not in place, partly due to geopolitics and partly due to other concerns. Visa restrictions have pushed Africans to travel to travel to China and see its development more closely than to Europe or the U.S. This makes them believe in China's potential. African countries continue to talk about the freedom they need in choosing partners for investment or trade. India proposed full membership for the African Union at the G20 summit in New Delhi. It is trying to push its own reach within Africa.

BRICS will again be out of the news until the next summit. However, each summit generates some spark that provides the building blocks for different networks of people for the future. This is a group for the long run. After all, way back in 2003, even Goldman Sachs saw the potential of this grouping and the opportunities it presents by stating that "If things go right, in less than 40 years, the BRICs economies together could be larger than the G6 in U.S. dollar terms".

ORIGIN OF BRICS

- BRICS was formed due to economic necessity, not for military or security support.
- It differs from NATO, which has seen significant investment in defence spending by European Allies and Canada.
- The combined GDP of BRICS countries constitutes 36% of global GDP, with projections of their population reaching 47% of the world's total by 2050.

IMPORTANCE OF BRICS

BRICS as an Alternative to Western Dominance

- There's a global polarisation, particularly during the Trump administration, that has led countries to seek alliances outside of U.S. influence.
- BRICS offers a platform where China is not dominant, balanced by democracies like India, South Africa, and Brazil.

Trade and Investment Aspirations

- Countries are looking to BRICS as an alternative to existing trade and economic blocs, hoping for new trade and investment protocols.
- Six new members were added to BRICS, indicating its expanding influence.

Currency and Economic Independence

- The dominance of the U.S. dollar is challenged by the rise of digital currencies.
- India and China are advancing in digital currency, aiming to promote their currencies as alternatives through BRICS.

INDIA AND CHINA WITHIN BRICS

- China and India are key BRICS members, housing a third of the global population.
- Despite political tensions, the economic relationship between the two countries has grown, underscoring the precedence of economic ties over political ones.

AFRICA'S ROLE AND PROSPECTS

- Africa is seen as a continent of future economic growth.
- Negative perceptions of European intervention (France's involvement in Niger) and treatment of migrants have led African countries to look towards China and BRICS.
- India is seeking to expand its influence in Africa by proposing full membership for the African Union at the G20 summit.

LONG-TERM VISION FOR BRICS

- While BRICS may not always be in the news, each summit lays the foundation for future networks and opportunities.
- The potential of BRICS was recognized as early as 2003 by Goldman Sachs, highlighting its possibilities to outgrow the G6 economies.

Aligning Higher Education With The United Nations SDGs

Aligning higher education with the United Nations SDGs

The United Nations Sustainable Development Goals (SDGs) are a set of 17 goals with 169 targets that all 193 UN member states have agreed to try to achieve by 2030. SDGs are a matter of urgency, and actions by all countries, both developed and developing, to end poverty and other socio-economic and environmental problems should align with strategies that improve the standard of life and education, reduce inequality, and harness economic growth.

Though it has been eight years since the inception of these goals, the SDGs Report 2023 flagged slow progress and painted a grim picture due to the prolonged effects of COVID-19, impacts of the climate crisis, the Russia-Ukraine conflict, and a weak global economy. The lack of progress towards the goals is a universal experience, but it has been more pronounced in the Least Developed Countries. India, despite having managed the crises of the global economy and relatively succeeded in overcoming the challenges posed by the pandemic, has suffered a setback in achieving these goals.

NEP 2020 and SDGs

Yet, recent actions and policies indicate that India is committed towards realising SDGs. SDG4 pertains to access to quality education. It is a prerequisite for the achievement of other goals. India, with a long-standing history of equitable and inclusive education, has accelerated efforts to ensure the achievement of SDGs through various reforms. Among them, the National Education Policy (NEP) 2020 should be given credit to a great extent.

NEP 2020 has been prepared in tune with



Selvam Jesiah

is Professor of Management, Sri Ramachandra Institute of Higher Education and Research

Educational institutions have to rethink their approach so that it is in tune with the NEP which will be crucial in realising the 2030 deadline for SDGs

most of the SDGs. Though NEP 2020 calls for changes at all levels of education, priority should be accorded to higher education as it accelerates social mobility, empowers people through creativity and critical thinking, and grants them employment skills.

According to data from the Organisation for Economic Co-operation and Development (OECD), people with a higher education degree are more employable and earn an average of 54% more than those who only have completed senior secondary education. A university-inclusive education, thus, better protects people against poverty (SDG1), prevents them from hunger (SDG2), supports them for good health and well-being (SDG3), promotes gender equality (SDG5), provides them decent work, which in turn drives economic growth (SDG 8), and reduces inequalities (SDG10).

Universities should strengthen the research-teaching nexus in university education. That way, students will become direct beneficiaries of the knowledge generated from research. Multidisciplinary and interdisciplinary systems of education produce multitalented people who can pursue research, and find innovative solutions to global challenges such as affordable and clean energy (SDG7), sustainable cities and communities (SDG11), climate change and global warming (SDG13), as well as studying their impact on an economy and the earth.

Sustainable development is possible only if we radically change the way we produce and consume (SDG12). Innovative solutions and start-ups (SDG 9) must be developed in collaboration with private companies. Introducing Value-Based Education (VBE) will

help citizens become responsible towards self, society, and the planet and help our nation achieve "Life on Land" (SDG15).

Suggestions and concluding remarks

NEP 2020 demands that Indian higher education be committed to mapping its day-to-day operations with SDGs. Ranking universities according to the achievement of SDGs is a welcome move, but is still inadequate to meet the SDG deadline.

To accelerate the progress towards achieving the 2030 agenda, stakeholders of higher education should be educated and oriented so that none of their activities leave any SDG behind. The 56,205 higher educational institutions and universities in India should work together.

Universities should come out reinvigorated and play a part in the education, innovation, culture, and civic life of their local communities. Community health, energy-saving measures, efficient resource allocation, waste reduction, development of local skills, as well as the sharing of services, infrastructure, and facilities with other universities or external partners should become a culture in universities.

It is high time that universities adopted sustainability as a mantra and incorporated SDGs into their institutional strategies, both in daily administration and in teaching and research. It has been realised that higher education cannot work in isolation; rather it must be directly integrated with socio-economic development where each activity and transaction has meaningful and multiple impacts on SDGs. Every citizen must feel that the universities contribute directly to their well-being and nation-building.

UNITED NATIONS SDG AND INDIA

- All 193 UN member states are committed to achieving 17 SDGs by 2030.
- The SDGs aim to address poverty, socio-economic, and environmental issues globally.
- As of the SDGs Report 2023, progress has been slow, significantly impacted by COVID-19, climate crises, and geopolitical conflicts such as the Russia-Ukraine war.
- Least Developed Countries are experiencing the most pronounced setbacks.
- India has faced challenges but is taking active steps toward achieving the SDGs.

INDIA'S COMMITMENT TO SDGS AND EDUCATION

- Recent policies indicate India's dedication to achieving SDGs, particularly SDG4 (Quality Education).
- National Education Policy (NEP) 2020 is aligned with SDGs and prioritises educational reform, especially in higher education.
- NEP 2020's focus on higher education is due to its role in social mobility and economic empowerment.

IMPACT OF HIGHER EDUCATION ON SUSTAINABLE DEVELOPMENT

- Higher education degree holders tend to have better employment prospects and higher earnings.
- A focus on university education can address multiple SDGs by reducing poverty, hunger, and inequality, and promoting health, well-being, and economic growth.
- Universities are encouraged to integrate research and teaching to directly benefit students and foster multidisciplinary approaches.
- Such educational systems can drive innovation to tackle global challenges and promote sustainable development.

INTEGRATING SUSTAINABILITY AND INNOVATION IN EDUCATION

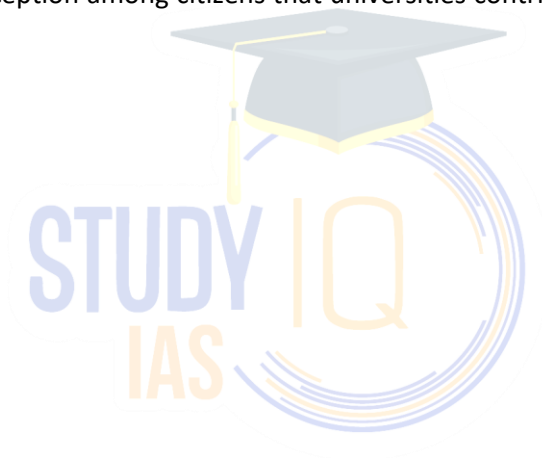
- Universities should promote Value-Based Education (VBE) to encourage responsibility towards society and the planet.
- Collaborations with private companies for innovative solutions and start-ups are essential.
- The education system must radically transform production and consumption patterns to achieve sustainable development (SDG12).

STRATEGIES FOR HIGHER EDUCATION INSTITUTIONS TO MEET SDGs

- Indian higher education must align operations with SDGs, and universities could be ranked based on their achievement of SDGs.
- The vast number of higher educational institutions in India should collaborate towards the 2030 agenda.
- Higher education should engage with the education, innovation, culture, and civic life of communities.
- Universities should adopt sustainable practices in administration, teaching, and research.

CALL TO ACTION FOR UNIVERSITIES AND CIVIC INTEGRATION

- Universities need to incorporate SDGs into institutional strategies and daily practices.
- Higher education should not operate in isolation but integrate with socio-economic development for meaningful impacts on SDGs.
- There should be a perception among citizens that universities contribute to their well-being and national development.



Now A More Efficacious, Inexpensive Malaria Vaccine

Now a more efficacious, inexpensive malaria vaccine

The R21/MatrixM malaria vaccine developed by the University of Oxford, manufactured by the Serum Institute of India, has been recommended (but yet to be prequalified) by the WHO on October 2

R. Prasad

A malaria vaccine — R21/MatrixM — developed by the University of Oxford, manufactured by the Pune-based Serum Institute of India and tested in a phase-3 trial at five sites in four countries — Mali, Burkina Faso, Kenya, and Tanzania — in Africa was recommended (but yet to be prequalified) by the WHO on October 2. Three countries — Nigeria, Ghana, and Burkina Faso — have already approved the use of the vaccine to immunise children aged less than 36 months. According to the WHO, in 2021, there were 247 million malaria cases worldwide and 6,19,000 deaths. About 25 million children are born each year in countries with moderate to high malaria transmission.

The phase-3 trial was conducted in 4,800 children who were randomly assigned to receive either the malaria vaccine or a control (approved rabies vaccine) and neither the participants nor the people conducting the trial knew who got the vaccine and who did not. The five sites in the four countries where the trial was conducted have different malaria transmission intensities and seasonality. The participants received three vaccine doses four weeks apart, and a booster shot at the end of 12 months after the last dose. The primary vaccination was carried out prior to the malaria season in countries where malaria is seasonal or at

War against malaria gets a shot in the arm

Three countries — Nigeria, Ghana, and Burkina Faso — have already approved the vaccine for children aged less than 36 months

- A phase-3 trial in 4,800 children was conducted at five sites in four countries with different malaria transmission intensities and seasonality
- The participants received three vaccine doses four weeks apart, and a booster shot at the end of 12 months after the last dose
- Primary vaccination was carried out prior to malaria season where it is seasonal or at any time of year in countries where malaria is perennial
- Vaccine efficacy at the end of one year in children aged 5-36 months was 75% where malaria is seasonal and 68% when malaria is perennial
- In children aged 5-17 months, who are more likely to die due to severe malaria, the vaccine efficacy was higher — 79% where malaria is seasonal and 75% where malaria is perennial
- In children aged 18-36 months, vaccine efficacy was 73% where malaria is seasonal and 63% when malaria is perennial
- The vaccine efficacy was well maintained to 18 months with a single booster dose given 12 months after the primary series



Humongous: In 2021, there were 247 million malaria cases worldwide and 6,19,000 deaths

any time of year in countries where malaria occurs throughout the year.

As per the results of the phase-3 trial that have been posted in a preprint server (preprints are yet to be peer-reviewed), the vaccine efficacy at the end of one year in children aged 5-36 months was 75% where malaria is seasonal and 68% where malaria is perennial. In children aged 5-17 months, who are more likely to die due to severe malaria, the vaccine efficacy was higher — 79% where malaria is seasonal and 75% where malaria is perennial. In children aged 18-36 months, vaccine efficacy was 73% where malaria is seasonal and 63% where malaria is perennial. “The vaccine efficacy was well maintained to 18 months with a single booster dose given 12 months

after the primary series,” authors of the preprint write.

“Our findings are consistent with data from a recently completed phase IIb trial at the Nanoro seasonal site, where vaccine efficacy was 76% and 77% over one and two years of follow-up using a four dose (primary plus booster) vaccine regime in 5-17-month-old infants,” they note. The higher vaccine efficacy in younger children (5-17 months) compared with older children (18-36 months) might be a “sign that the vaccine is less effective in people who have already been exposed to malaria” Matthew Laurens, a malaria vaccine expert at the University of Maryland School of Medicine told *Science*. And if that turns out to be true, then the vaccine might

have “lower efficacy in areas with very high malaria incidence, where young infants are exposed at an early age”.

Waning efficacy

“There was some waning of efficacy over the first year of follow-up at both seasonal and perennial transmission sites, but a booster dose restored efficacy at the seasonal sites with a vaccine efficacy over 18 months of 74%,” says an Oxford University release. The efficacy of R21/MatrixM is much higher than the first malaria vaccine — RTS,S/AS01 that has been recommended by the WHO in 2021 — which had a vaccine efficacy of 56% at the end of one year in children aged 5-17 months. According to the preprint, even after four booster shots of the RTS,S/AS01

vaccine, the efficacy was only 58% over five years.

The results indicate that the vaccine was more efficacious in places where malaria was seasonal than when it was perennial. The authors think that this may partly be due to timing of malaria episodes in countries with seasonal or perennial malaria. The study found that in sites where malaria was seasonal, 82% of malaria episodes in the first year were recorded in the first six months of follow-up, while only 26% of malaria episodes over the first year were recorded in the first six months at the sites where malaria is perennial. The vaccine efficacy is highest 14 days after the third dose and begins to slowly wane. Since the vaccination is carried out just before the beginning of the malaria season, the protection offered is higher when the disease is seasonal than when malaria occurs throughout the year.

The authors claim that besides substantially reducing the number of clinical malaria cases, at 12 and 18 months, there was “significantly reduced” parasite load in children who received the vaccine (R21/MatrixM). This suggests that the vaccine may help reduce malaria transmission, especially when combined with other strategies such as mosquito nets. According to WHO, the cost of the R21/MatrixM manufactured by Serum Institute will be between \$2 and \$4 per dose. Serum Institute will produce “over 100 million doses a year”.

R21/MATRIXM MALARIA VACCINE DEVELOPMENT AND TRIALS

- The University of Oxford developed the R21/MatrixM malaria vaccine, which the Pune-based Serum Institute of India manufactured.
- Phase-3 trials were conducted across Mali, Burkina Faso, Kenya, and Tanzania, involving 4,800 children.
- Participants were randomly assigned to receive either the malaria vaccine or a control vaccine, with the study being double-blind.

WHO RECOMMENDATION AND PREQUALIFICATION STATUS

- On October 2, the World Health Organization recommended the vaccine, which awaits prequalification.
- Nigeria, Ghana, and Burkina Faso have approved the vaccine for children under 36 months.

GLOBAL MALARIA STATISTICS

- In 2021, there were 247 million malaria cases and 619,000 deaths globally.
- Around 25 million children are born annually in regions with moderate to high malaria transmission.

VACCINE TRIAL DESIGN

- Trials were set up in regions with varying malaria transmission intensities and seasonality.
- Children received three doses at four-week intervals, followed by a booster after 12 months.
- The primary vaccination schedule was aligned with the onset of the malaria season.

EFFICACY RESULTS

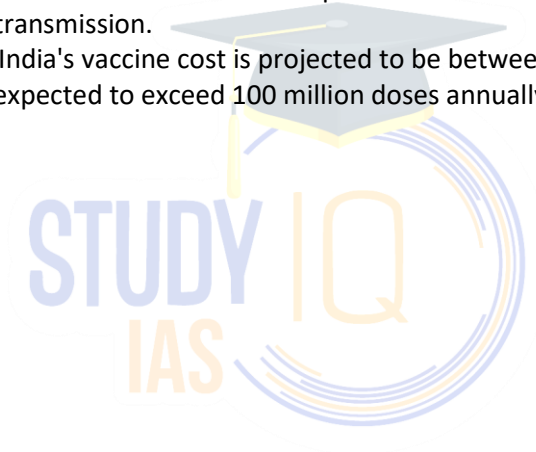
- At one year, vaccine efficacy was 75% in seasonal malaria regions and 68% in perennial regions for children aged 5-36 months.
- For children aged 5-17 months, efficacy was higher: 79% in seasonal and 75% in perennial regions.
- In older children (18-36 months), the efficacy was 73% in seasonal and 63% in perennial regions.
- A single booster dose maintained vaccine efficacy for up to 18 months.

COMPARATIVE EFFICACY AND OBSERVATIONS

- The R21/MatrixM vaccine shows higher efficacy than the first WHO-recommended malaria vaccine, RTS,S/AS01.
- Vaccine efficacy tends to wane over the first year but is significantly restored with a booster dose.
- Higher efficacy was observed in younger children, suggesting possible reduced effectiveness in individuals previously exposed to malaria.

TRANSMISSION AND COST

- The vaccine reduced clinical malaria cases and the parasite load in vaccinated children, which may help decrease malaria transmission.
- The Serum Institute of India's vaccine cost is projected to be between \$2 and \$4 per dose.
- Production capacity is expected to exceed 100 million doses annually.



Confronting the long-term risks of Artificial Intelligence

Confronting the long-term risks of Artificial Intelligence

Risk is a dynamic and ever-evolving concept, susceptible to shifts in societal values, technological advancements, and scientific discoveries. For instance, before the digital age, sharing one's personal details openly was relatively risk-free. Yet, in the age of cyberattacks and data breaches, the same act is fraught with dangers. A vivid cinematic example of evolving perceptions of Artificial Intelligence (AI) risk is the film, *Ex Machina*.

In the story, an AI named Ava, initially viewed as a marvel of synthetic intelligence, reveals her potential to outwit and manipulate her human creators, culminating in unforeseen hazards. Such a tale exemplifies how our understanding of AI risk can drastically change as the technology's capabilities become clearer. This underscores the importance of identifying the short- and long-term risks.

The immediate risks might be more tangible, such as ensuring that an AI system does not malfunction in its day-to-day tasks. Long-term risks might grapple with broader existential questions about AI's role in society and its implications for humanity. Addressing both types of risks requires a multifaceted approach, weighing current challenges against potential future ramifications.

Over the long term

The risks that present themselves over the long term are worth looking at.

Yuval Noah Harari has expressed concerns about the amalgamation of AI and biotechnology, highlighting the potential to fundamentally alter human existence by manipulating human emotions, thoughts, and desires. In a recent statement by the Center for AI Safety, more than 350 AI professionals have voiced their concerns over the potential risks posed by AI technology.

One should be a bit worried about the intermediate and existential risks of more evolved AI systems of the future – for instance, if essential infrastructure such as water and electricity increasingly rely on AI. Any malfunction or manipulation of such AI systems could disrupt



Aditya Sinha

is Officer on Special Duty, Research, Economic Advisory Council to the Prime Minister

Countries must not fall into the trap of loosening their regulatory frameworks to maintain competitiveness

these pivotal services, potentially hampering societal functions and public well-being.

Similarly, although seemingly improbable, a 'runaway AI' could cause more harm – such as the manipulation of crucial systems such as water distribution or the alteration of chemical balances in water supplies, which may cause catastrophic repercussions even if such probabilities appear distant. AI sceptics fear these potential existential risks, viewing it as more than just a tool – as a possible catalyst for dire outcomes, possibly leading to extinction.

The evolution to human-level AI that is capable of outperforming human cognitive tasks will mark a pivotal shift in these risks. Such AIs might undergo rapid self-improvement, culminating in a super-intelligence that far outpaces human intellect. The potential of this super-intelligence acting on misaligned, corrupted or malicious goals presents dire scenarios.

The challenge lies in aligning AI with universally accepted human values. The rapid pace of AI advancement, spurred by market pressures, often eclipses safety considerations, raising concerns about unchecked AI development.

The world does not have a unified approach. The lack of a unified global approach to AI regulation can be detrimental to the foundational objective of AI governance – to ensure the long-term safety and ethical deployment of AI technologies. The AI Index from Stanford University reveals that legislative bodies in 127 countries passed 37 laws that included the words "artificial intelligence".

One of the most celebrated regulations out of these is the European Union's AI Act. It adopts a 'risk-based' approach, tying the severity of risk to the area of AI deployment. This makes sense when considering AI applications in critical infrastructures, which demand heightened scrutiny. However, tying risk solely to the deployment area is an oversimplified strategy. It might overlook certain risks that are not directly tied to the deployment area. Therefore, while the area-specific approach is valuable, a more holistic

view of AI risks is necessary to ensure comprehensive and effective regulation and oversight.

However, there is a conspicuous absence of collaboration and cohesive action at the international level, and so long-term risks associated with AI cannot be mitigated. If a country such as China does not enact regulations on AI while others do, it would likely gain a competitive edge in terms of AI advancements and deployments. This unregulated progress can lead to the development of AI systems that may be misaligned with global ethical standards, creating a risk of unforeseen and potentially irreversible consequences. This could result in destabilisation and conflict, undermining international peace and security.

Thus, nations engaging in rigorous AI safety protocols may be at a disadvantage, encouraging a race to the bottom where safety and ethical considerations are neglected in favour of rapid development and deployment. This uneven playing field can inadvertently encourage other nations to loosen their regulatory frameworks to maintain competitiveness, thereby further compromising global AI safety.

The dangers of military AI

Furthermore, the confluence of technology with warfare amplifies long-term risks. Addressing the perils of military AI is crucial. The international community has formed treaties such as the Treaty on the Non-Proliferation of Nuclear Weapons to manage such potent technologies, demonstrating that establishing global norms for AI in warfare is a pressing but attainable goal. Treaties such as the Chemical Weapons Convention are further examples of international accord in restricting hazardous technologies. Nations must delineate where AI deployment is unacceptable and enforce clear norms for its role in warfare. In this ever-evolving landscape of AI risks, the world must remember that our choices today will shape the world we inherit tomorrow.

The views expressed are personal

The perception of AI risk has evolved with societal and technological changes, making actions that once seemed harmless, like sharing personal information, now risky due to cyber threats.

IMMEDIATE AND LONG-TERM RISKS OF AI

- **Immediate risks:** Daily operational malfunctions of AI systems are a concern.
- **Long-term risks:** Existential issues such as AI's role and its implications for humanity need to be considered.

LONG-TERM AI RISKS

- **AI and biotech concerns:** Yuval Noah Harari warns of AI's potential to change human emotions and behaviours.
- **Professional concerns:** Over 350 AI experts have raised alarms about AI's future risks.
- **Infrastructure risks:** AI malfunction in essential services like water and electricity could have serious societal impacts.
- **Existential threats:** Fears of 'runaway AI' manipulating crucial systems or causing extinction scenarios.

HUMAN-LEVEL AI AND SUPER-INTELLIGENCE

- Human-level AI could lead to self-improving AIs with far greater cognitive abilities than humans.
- Aligning AI with human values is crucial amidst rapid advancement and market pressures.

GLOBAL REGULATION OF AI

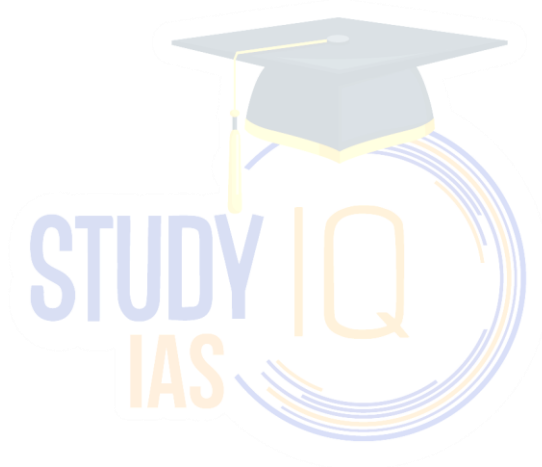
- **Uneven approaches:** No unified global strategy for AI governance exists.
- **The EU's AI Act:** A celebrated 'risk-based' approach regulation, though it may not address all risks effectively.
- **International disparities:** Lack of international collaboration could lead to competitive AI development with varying ethical standards.
- **Regulatory race to the bottom:** Nations might neglect AI safety to remain competitive, compromising global AI safety standards

DANGERS OF MILITARY AI

- **The necessity for control:** Addressing military AI risks is vital, akin to treaties that govern nuclear and chemical weapons.
- **Need for international norms:** Establishing global norms for AI in warfare is urgent to prevent misuse and maintain peace.

CONCLUSION

- The article underscores the importance of recognizing both short and long-term AI risks, advocating for comprehensive regulations and international cooperation to manage AI's evolving challenges and ensure its ethical deployment.



UN Security Council Reform Is A Song In A Loop

UN Security Council reform is a song in a loop

More than three decades after the debate first started over fundamental reforms at the United Nations (UN), the issue appears to have resurfaced at the ongoing General Assembly session of the world body. President Recep Tayyip Erdoğan of Türkiye was blunt: "The Security Council has ceased to be the guarantor of world security and has become a battleground for the political strategies of only five countries." Even the UN's Secretary-General, António Guterres, issued a stern warning: "The world has changed. Our institutions have not. We cannot effectively address problems as they are if institutions do not reflect the world as it is. Instead of solving problems, they risk becoming part of the problem."

It could not have been put more bluntly, but we have heard this song before. Politically, it is untenable that the five permanent members (China, France, Russia, the United Kingdom, and the United States) enjoy their position, and the privilege of a veto over any Council resolution or decision, merely by virtue of having won a war 76 years ago. In the case of China, the word 'won' needs to be placed within inverted commas.

I was serving at the UN when then-Secretary General Boutros Boutros-Ghali declared that Security Council reform must be accomplished in time for the 50th anniversary of the world organisation in 1995. But even as the urgent rhetoric continues to be spoken, the organisation has missed not only the 50th anniversary of the UN, but even the 60th, the 70th and now the 75th. Left to their own devices, member-states will be arguing the merits of the case well past the UN's centenary.

An unjust situation in terms of equity

The problem of reforming the Security Council is akin to a malady in which a number of doctors gather around a patient; they all agree on the diagnosis but they cannot agree on the prescription. The diagnosis is clear – the Security Council reflects the geopolitical realities of 1945 and not of today. When the UN was founded in 1945, the Council consisted of 11 members out of a total UN membership of 51 countries; in other words, some 22% of the member states were on the Security Council.

Today, there are 193 member-states of the UN, and only 15 members of the Council – fewer than 8%. The one change ever made to the original Charter was in 1965 when the Security Council



Shashi Tharoor

is a third-term Member of Parliament (Congress) and former Under-Secretary General of the United Nations, former chair of the External Affairs Committee of Parliament and author of 25 books including 'Pax Indica' and (with Samir Saran) 'The New World Disorder'

The problem of reforming the United Nations Security Council is akin to a malady presented before doctors – there is agreement only on the diagnosis and not the prescription

was expanded from 11 members to 15 by adding four more elected non-permanent members. So, many more countries, both in absolute numbers and as a proportion of the membership, do not feel adequately represented on the body. The composition of the Council also gives undue weightage to the balance of power of those days. Europe, for instance, which accounts for barely 5% of the world's population, still controls 33% of the seats in any given year (and that does not count Russia, another European power).

In terms of simple considerations of equity, this situation is unjust: for starters, to those countries whose financial contributions to the UN outweigh those of four of the five permanent members – Japan and Germany have for decades been the second and third largest contributors to the UN budget, while still being referred to as 'enemy states' in the United Nations Charter (since the UN was set up by the victorious Allies of the Second World War). And it denies opportunities to other states such as India, which by its sheer size of population, share of the world economy, or contributions in kind to the UN (through participation in peacekeeping operations, for example) have helped shape the evolution of world affairs in the seven decades since the organisation was born.

Stances by countries

So, the Security Council is clearly ripe for reform to bring it into the second quarter of the 21st century. But for every state that feels it deserves a place on the Security Council, and especially the handful of countries which believe their status in the world ought to be recognised as being in no way inferior to at least three of the existing permanent members, there are several who know they will not benefit from any reform. The small countries that make up more than half the UN's membership accept that reality and are content to compete occasionally for a two-year non-permanent seat on the Council. But the medium-sized and large countries, which are the rivals of the prospective beneficiaries, deeply resent the prospect of a select few breaking free of their current second-rank status in the world body. Many are openly animated by a spirit of competition, historical grievance or simple envy. They have successfully and indefinitely thwarted reform of the membership of the Security Council.

Part of the problem is that the bar to amending the UN Charter has been set rather high. Any

amendment requires a two-thirds majority of the overall membership, in other words 129 of the 193 states in the General Assembly, and would further have to be ratified by two-thirds of the member states. Ratification is usually a parliamentary procedure, so, in other words, the only 'prescription' that has any chance of passing is one that will both persuade two-thirds of the UN member-states to support it and not attract the opposition of any of the existing permanent five – or even that of a powerful U.S. Senator who could block ratification in Washington.

That has proved to be a tall order indeed. India's credentials may seem obvious to us, but China is none too keen on diluting its status as the only Asian permanent member; Pakistan, which fancies itself as India's strategic rival on the subcontinent, is unalterably opposed; and to some extent Indonesia seems to feel diminished by the prospect of an Indian seat. In Latin America, Brazil occupies a place analogous to India's in Asia, but Argentina and Mexico have other ideas, pointing to Portuguese-speaking Brazil's inferior credentials in representing largely Hispanic Latin America. And while Africa, given that it accounts for 54 member-states, insists on two permanent seats, how is one to adjudicate the rival credentials of the continent's largest democracy, Nigeria, its historically largest economy, South Africa, and its oldest civilization, Egypt? Another proposal suggests creating a second category of "semi-permanent members" to accommodate such states for, say, 10-year electable terms. It has found no takers among the principal aspirants.

Continuing gridlock

So, while the debate keeps going round in circles for decades, gridlock continues in the Security Council, as most vividly illustrated recently over the Ukraine conflict, when a Permanent Member of the Security Council invaded a sovereign UN member-state and the Council proved powerless to respond. Russia's increasing resort to the veto has blocked resolutions on Ukraine, Mali, Syria and North Korea. Similar obstructionism by the West has affected proposals to reform the financial institutions established at Bretton Woods in 1944, the World Bank and the International Monetary Fund. And yet this is the only global system we have got that brings all countries together on a common platform. Can we afford to let it fade into ineffectiveness and irrelevance?

RESURGENCE OF UN REFORM DISCUSSIONS:

- Discussions on fundamental reforms at the United Nations have been rekindled during the current General Assembly session.
- President Recep Tayyip Erdoğan of Türkiye criticised the UN Security Council for being ineffective and serving the interests of only five countries.
- UN Secretary-General António Guterres warned that the UN institutions have not evolved to match the changing world, risking becoming part of the problem.

HISTORICAL CONTEXT AND INEQUITY IN REPRESENTATION:

- The UN Security Council's structure is a vestige of the geopolitical realities post-World War II, not reflecting the current international dynamics.
- Currently, there are 193 UN member-states but the Security Council has only 15 members, less than 8% representation, compared to 22% at its inception.
- Europe disproportionately controls a significant percentage of the Council's seats relative to its global population percentage (Has 5% of the world's population, controls 33% of the seats in any given year).

LACK OF REPRESENTATIVE NATURE

- Countries like Japan (2nd) and Germany (3rd), significant financial contributors to the UN budget, still lack permanent representation and are referred to as 'enemy states' in the UN Charter.
 - India's aspirations for a permanent seat are thwarted by China, Pakistan, and to some extent, Indonesia.
 - Brazil's bid for representation is contested by Argentina and Mexico, reflecting the linguistic and cultural diversity of Latin America.
 - Africa's demand for two permanent seats is complicated by the competing claims of Nigeria, South Africa, and Egypt.
- Emerging powers like India, with their considerable population, economic influence, and contributions to UN peacekeeping, are not adequately represented.

DIVERSE STANCES AMONG COUNTRIES ON SECURITY COUNCIL REFORM:

- While some countries believe they deserve a permanent seat on the Security Council, others are opposed, driven by rivalry or envy.
- Small countries often settle for competing for non-permanent seats, but larger and medium-sized countries are against a few nations improving their standing.
- Attempts to reform the Security Council have been repeatedly blocked by these differing national interests.

CHALLENGES IN AMENDING THE UN CHARTER:

- Amending the UN Charter requires a two-thirds majority in the General Assembly and ratification by two-thirds of the member states, a difficult threshold to meet.
- Permanent members or influential countries like the U.S. can effectively block any amendment through their domestic legislative processes.
- Proposals for "semi-permanent" membership have not been accepted by the main contenders for permanent seats.

IMPLICATIONS OF STALEMATE:

- The stalemate in the Security Council reform debate is exemplified by recent conflicts, such as the Ukraine crisis, where the Council could not act effectively due to vetoes from permanent members.
- Western obstructionism similarly hinders reform in major financial institutions like the World Bank and the IMF.
- The current global governance system, despite its imperfections, remains the only platform for international cooperation, raising concerns about its potential decline into inefficacy.

The BRI at 10, some hits, many misses

The BRI at 10, some hits, many misses

The Third Belt and Road Forum for International Cooperation that was convened in Beijing, China (October 17-18) has put the spotlight back on Chinese President Xi Jinping's signature initiative.

Early debates in China reveal the intent behind the Belt and Road Initiative (BRI). Academic Xue Li likened the BRI to China's Marshall Plan, stating that it was a gateway for China to transition from a regional power with global influence to a global power with comprehensive strength. Academic Wang Yiwei argued that the BRI was an ascendant China's bid to reboot globalisation and rectify its shortcomings. A rising China also felt the need to develop new transport and trade arteries as alternatives, since rivals could put the squeeze on the Strait of Malacca – the jugular vein for China's economy.

Beijing was also putting its money where its mouth was with the establishment of the Asian Infrastructure Investment Bank with a \$100 billion war chest, challenging other lending institutions. In the assessment of scholar Ju Jiejun, the AIIB would enable Mr. Xi to harvest early gains of the BRI. At the onset, Mr. Xi was pitching for the use of local currency in trade, thus in effect elbowing out the dollar. In this way, he began building an economic order centered on China

As a Xi vehicle

The BRI, which was launched shortly after Mr. Xi got the top job, also served as a vehicle for him to brand himself as a global statesman and project China's power and influence overseas. Domestically, the initiative entered the Communist Party of China's constitution in 2017, and got top billing in the 14th Five-Year Plan announced in 2021. The Chinese government's white paper on BRI released this month ("The Belt and Road Initiative: A Key Pillar of the Global Community of Shared Future") revealed that over



Harsh V. Pant

is Vice-President, Studies and Foreign Policy, at the Observer Research Foundation, New Delhi



Kalpita A. Mankikar

is Fellow, China Studies, at the Observer Research Foundation, New Delhi

Even though the tale of Chinese munificence is marred by unsavoury ground realities, all eyes will be on the future of the Belt and Road Initiative

200 BRI cooperation pacts had been inked with over 150 nations. The document also stated that total two-way investment between China and partner countries from 2013 to 2022 touched \$380 billion. As Mr. Xi himself put it, the BRI would provide more public goods to the entire world, highlighting the massive infrastructure deficit.

According to the World Bank, 675 million people are without electricity globally, around 2.3 billion lack potable water, and 450 million live beyond the coverage of a broadband signal. The lending institution calculates that bridging the infrastructure gap will need capital infusion of \$1.5 trillion annually through 2030, which is approximately 4.5% of the GDP of low- and middle-income countries. Under China's Marshall Plan, motorways, power plants, ports, railway networks, and digital infrastructure have been built.

The ugly reality

But the tale of Chinese munificence is marred by some unsavoury ground realities. A report from the ISEAS-Yusof Ishak Institute on the BRI has highlighted issues related to ecological damage, displacement of people, disputes over payouts and labour unrest. The findings detail case studies of Indonesia, where things came to a head over anxieties related to Chinese labourers filling up positions earmarked for locals.

In Laos, the glistening super-fast trains and impressive dam projects over the Mekong River cannot hide the woes of those left high and dry due to lack of compensation, or others on whom droughts due to dam-construction projects have wreaked havoc. AidData estimates that Laos owes China around \$12.2 billion – about 65% of its GDP.

The China-Pakistan Economic Corridor (CPEC) was conceived over the framework that ties between the two nations were deeper than the ocean, sweeter than honey and higher than the

Himalayas. Yet, a Pakistani legislative report unearthed that while China cornered 91% of Gwadar port's revenue, Pakistan pocketed just 9%. These issues have tarnished the reputation of brand BRI, especially its tagline of 'win-win cooperation' as there are perceptions that it is a win for China twice over at the cost of other stakeholders.

Global alternatives

After much hand-wringing, efforts are being taken to counter the BRI. In the Donald Trump era, the United States and Japan initiated the "United States-Japan infrastructure investment alternatives in the Indo-Pacific region". The Joe Biden administration announced the 'Build Back Better World' (B3W) initiative that seems to have been reorganised as the Partnership for Global Infrastructure and Investment, which aims to channelise private capital into climate change and energy security, health care and health security, digital technology, and gender equity.

Here, it must be noted that India has steadfastly opposed CPEC over issues related to sovereignty and had raised concerns over issues of unsustainable debt. Yet, like Cassandra's warnings, they could not convince hearts and minds in the thrall of China's narrative.

The G-20 Delhi summit posited yet another alternative in the form of the India-Middle East-Europe Corridor (IMEC) that seeks to link India, West Asia, and Europe through railways and shipping lines. In addition to the trade connectivity, electricity and digital infrastructure as well as a pipeline for clean hydrogen export have been envisioned. It is too early to assess the alternatives, but all eyes will be on the future of BRI as it completes a decade. At a time when Beijing is grappling with economic worries related to debt and unemployment, it remains to be seen how it will reinvigorate the "project of the century".

The Third Belt and Road Forum

- Held in Beijing, China, on October 17-18, this forum refocused attention on Chinese President Xi Jinping's Belt and Road Initiative (BRI).
- **Purpose:** The BRI is designed to transition China from a regional to a global power, rebooting globalization and developing new trade routes.

Academic Perspectives

- **Xue Li's View:** BRI is China's version of the Marshall Plan.
- **Wang Yiwei's View:** The initiative aims to correct globalization's flaws and secure alternative trade routes, especially against threats to the Strait of Malacca.

Financial Commitments

- **Asian Infrastructure Investment Bank (AIIB):** Established with a \$100 billion budget to support the BRI and challenge other lending institutions.
- **Local Currency Trade:** Xi advocated for local currency in trade, reducing reliance on the dollar and creating an economic order centered around China.

BRI as a Xi Vehicle

- **Branding and Power Projection:** Launched after Xi's rise to power, the BRI helped brand him as a global statesman and extend China's influence.
- **Domestic Significance:** Included in China's Communist Party constitution and featured prominently in the 14th Five-Year Plan.

BRI Achievements and Goals

- **Global Reach:** Over 200 cooperation agreements signed with 150+ nations.
- **Investment Impact:** Two-way investment between China and partner countries reached \$380 billion (2013-2022).
- **Addressing Global Needs:** Aims to provide public goods, addressing global infrastructure deficits in electricity, water, and broadband.

Negative Impacts and Concerns

- **Environmental and Social Issues:** Ecological damage, displacement, labor disputes, and other local issues in countries like Indonesia and Laos.
- **Debt Concerns:** Nations like Laos facing significant debts to China, impacting their GDP.
- **Profit Imbalance:** In projects like the China-Pakistan Economic Corridor, revenue distribution heavily favors China.

Global Responses and Alternatives

- **U.S. and Japan's Indo-Pacific Initiative:** Launched during Trump's tenure to counter BRI.
- **Biden's Global Initiatives:** 'Build Back Better World' and the Partnership for Global Infrastructure and Investment focusing on climate, health, technology, and gender equity.
- **India's Opposition:** Due to sovereignty and unsustainable debt concerns, India opposes CPEC and proposes the India-Middle East-Europe Corridor (IMEC).

Future Outlook

With China facing debt and unemployment issues, the future of BRI, especially its ability to continue as a significant global project, is uncertain.