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POLITY AND GOVERNANCE

POSTHUMOUS BHARAT RATNA FOR BIHAR EX-CM KARPOORI THAKUR

CONTEXT: On the birth centenary of Karpoori Thakur, celebrated for his championing of social justice and equality, President Droupadi Murmu announced that he would be awarded the Bharat Ratna, India's highest civilian award.

Prime Minister Modi reflected on his life and contributions, highlighting his commitment to empowering the marginalized and underprivileged sections of Indian society.

BACKGROUND:

Born into a farming family of the Nai community, Karpoori Thakur rose to become Chief Minister of Bihar not once, but twice. His first term, from December 1970 to June 1971, was under the Bharatiya Kranti Dal banner, while his second, from December 1977 to April 1979, came under the Janata Party.

Earning the moniker "**Jannayak**" (people's leader), Thakur's political journey was deeply intertwined with India's fight for social justice. A freedom fighter jailed during the Quit India movement in 1942, **he is considered a key architect of the socialist plank in Indian politics.** He stood shoulder-to-shoulder with Jayaprakash Narayan in the anti-emergency movement, his unwavering commitment leaving an indelible mark.

Notably, the **Mungeri Lal Commission report**, implemented during his Chief Ministership, paved the way for the landmark Mandal Commission report of the 1990s, forever altering the landscape of Indian politics.

A BRIEF OVERVIEW:

Jan Nayak Karpoori Thakurji's life was characterized by simplicity and a deep commitment to social justice. Some key points illustrating his simplicity include his preference to use personal funds for his daughter's wedding and his refusal to accept land or money for a political leaders' colony during his tenure as Chief Minister.

His dedication to social justice was evident throughout his political career, marked by efforts to create a fair and equal society. Despite the dominance of the Congress party during his time, he took an anti-Congress stance, believing they had deviated from their founding principles.

Karpoori Thakurji played a significant role in strengthening affirmative action for backward classes, facing opposition but remaining steadfast. His policies aimed at creating a more inclusive society where birth did not determine one's fate.

His contributions extended to education, with a focus on improving facilities for the poor and advocating for education in local languages. As Chief Minister, he also took steps for the welfare of senior citizens.

Democracy, debate, and discussion were integral to his personality, as seen in his involvement in the Quit India movement

and resistance against the Emergency. He earned the admiration of prominent leaders like JP, Dr. Ram Manohar Lohia, and Charan Singh.

CONCLUSION: Karpoori Thakur's legacy transcended his two terms as Bihar Chief Minister. He embodied simplicity, championed social justice, and tirelessly advocated for the marginalized. His unwavering commitment to equality, evident in his policies and personal conduct, earned him not just the people's title "Jannayak," but also the nation's highest civilian honour, the Bharat Ratna. He remains a powerful symbol of hope and progress for those striving for a just and equitable India.

POLITY AND GOVERNANCE

SC TAKES SERIOUS NOTE OF THE REGISTRY NOT LISTING ADANI'S POWER CASE

CONTEXT: The case against Adani Power in the Supreme Court disappeared from the schedule but later reappeared after a lawyer intervened. This has raised concerns about interference in the court's listing procedures, emphasizing the importance of transparency.

STORY SO FAR: A case involving Adani Power was initially absent from the Supreme Court's scheduled list but reappeared after a lawyer, Dushyant Dave, representing the opposing party, raised concerns about its mysterious absence. Dave highlighted the disturbing nature of the case's omission and questioned the Registry's direction not to list it. Justice Aniruddha Bose expressed incredulity at this revelation. Dave urged the court to address the issue seriously, citing a previous instance where a similar incident led another Bench to issue notice to the Registry. He emphasized that such situations reflect poorly on the institution. The Bench assured Dave that the case would be listed on January 24, 2024. In January 2023, the court had previously sought a report from its Registry following questions raised about the listing of an application filed by Adani Power.

POTENTIAL IMPLICATIONS OF THE INCIDENT**Erosion of transparency and public trust:**

- The incident raises concerns about transparency in the listing process, a core principle of judicial proceedings. If cases can be arbitrarily removed and reinstated based on unknown directions, it undermines public trust in the impartiality and fairness of the court.
- The opacity surrounding the Registry's actions breeds suspicion and speculation, potentially harming the judiciary's reputation as an independent and unbiased institution.

Potential for undue influence and manipulation:

- The revelation of "directions" not to list the case raises questions about who is influencing the Registry and for what reasons. This opens the door to potential manipulation of the

judicial process by powerful entities seeking favourable outcomes.

- If such interference goes unchecked, it can create a system where justice is not dispensed based on merit and law, but on the clout of individual actors.

Impact on judicial independence and separation of powers:

- The Supreme Court is the custodian of the Constitution and acts as a check on other branches of government. If its internal processes are susceptible to external influence, its ability to function as an independent watchdog is compromised.
- This incident undermines the principle of separation of powers, a cornerstone of Indian democracy, by blurring the lines between the judiciary and other power centres.

Possible consequences for future cases:

- The perceived lack of transparency and potential for manipulation could discourage parties from seeking judicial recourse, especially those facing powerful opponents.
- This could lead to a chilling effect on public engagement with the judicial system and weaken its ability to uphold justice and protect the rights of citizens.

Potential corrective measures:

- To address these concerns, the Supreme Court needs to take concrete steps to strengthen transparency and accountability within the Registry. This could involve:
 - Clearly defined protocols for case listing and delisting.
 - Internal auditing mechanisms to prevent manipulation and ensure adherence to protocols.
 - Increased communication and engagement with the public regarding judicial processes.

CONCLUSION: The incident surrounding the disappearance and reappearance of Adani Power's case in the Supreme Court's schedule has unveiled critical implications for the judiciary's integrity and the trust it commands from the public. The erosion of transparency and public trust, the potential for undue influence and manipulation, and the impact on judicial independence and the separation of powers collectively underscore the need for robust corrective measures.

To restore confidence in the judicial system, the Supreme Court must undertake substantial reforms within its Registry. Clearly defined protocols for case listing and delisting, internal auditing mechanisms to prevent manipulation, and enhanced communication with the public are essential components of these corrective measures. Strengthening transparency and accountability within the Registry not only safeguards the principles of justice but also reinforces the judiciary's role as an impartial guardian of constitutional values. As the custodian of the Constitution, the Supreme Court must diligently uphold these principles to ensure that its proceedings remain beyond reproach, fostering public trust and upholding the foundations of a just and democratic society.

INTERNATIONAL RELATIONS

MALDIVES RULES OUT RESEARCH BY CHINESE VESSEL IN ITS WATERS

CONTEXT: The Government of Maldives informed about the port call of Chinese research vessel Xiang Yang Hong 03. The Ministry of Foreign Affairs informed of a diplomatic request was made by the Government of China to the Government of Maldives for “necessary clearances to make a port call, for rotation of personnel and replenishment”.

Rough sailing

The Chinese vessel's visit is the latest source of tension amid strained Maldives-India ties

- The research vessel is expected to reach Maldives early February
- However, Sri Lanka in December announced a year-long moratorium on foreign research vessels
- It had sought clearance from Colombo last year



PHOTO: TIO.ORG

The Chinese vessel heading to the Maldives have drawn considerable attention in India, especially in the wake of Sri Lanka announcing a one-year moratorium on foreign research vessels calling at the island's ports, after India voiced concern over visits by a Chinese vessel.

'Welcoming vessels'

Foreign Minister Moosa Zameer noted that the vessel would not be conducting any research while in the Maldivian waters. The arrival of Xiang Yang Hong 03, which marine traffic portals describe as a research or survey vessel, is expected early next month. The vessel had earlier called at Sri Lankan ports, but did not obtain clearance for a visit early this year, according to Colombo-based media reports. Around the same time, Sri Lanka announced the one-year moratorium.

Challenging phase

The visit of the Chinese vessel to the Maldives is the latest source of tension for New Delhi, during a challenging phase of its ties with Male. Maldivian President Mohamed Muizzu, who was elected to office in September 2023, has demanded that Indian troops be withdrawn from the Maldives, while also terminating a joint hydrographic survey exercise with

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ECONOMICS AND DEVELOPMENT

‘PUBLIC CAPEX THRUST TO SLACKEN IN 2024-25 AHEAD OF ELECTIONS’

CONTEXT: The upcoming general elections and the government’s fiscal consolidation hopes for the next two years could lead to a moderation in public capex growth plans in the upcoming Interim Budget for 2024-25.

Trimming spending

Fresh capital expenditure expected to slow down due to pick-up in private capex, polls and the fiscal consolidation goal



- Centre is expected to stay on fiscal course-correction glide path in Budget, while shunning populist spending
- Since FY90, governments have pared fiscal deficit by over 140 bps of GDP across 2 years only eight times
- Capex, fiscal path are monitored closely given the impact they have on growth and interest rates

The Centre has committed to bring down its fiscal deficit to 4.5 % of GDP by 2025-26, from a target of 5.9 % of GDP this year. The Union government’s capital expenditure growth is expected to slow down to 12% in 2024-25 from 37.4% laid down in this year’s Budget.

While the rating firm expects capex growth to end up at 31.4% in 2023-24, it reckoned that fresh capex next year may slow down due to multiple factors, including the pickup in private capex in a few sectors, the forthcoming elections and the fiscal consolidation goal for 2025-26.

Capex and fiscal consolidation path followed in the vote on account would be monitored closely, given their impact on growth and interest rates. A balance will have to be struck as higher capex could postpone the fiscal consolidation journey.

Since 1989-90, there have been eight instances where the government has reduced the fiscal deficit by over 140 basis points (bps) of GDP over two years. The Centre was likely to stay on the fiscal course-correction glide path in the Interim Budget, while seeking to shun populist spending.

AGRICULTURE AND RELATED ISSUES

‘AT WTO, INDIA MAY PROMISE IT WON’T EXPORT RICE FROM ITS PUBLIC STOCKS’

CONTEXT: The Conference of Parties at the WTO—a top issue on India’s agenda for in Abu Dhabi is set to host the 13th WTO Ministerial Conference in February to break the impasse on public stockholding (PSH) for food security.



India could give an undertaking that it will not export from its public stock in return for a permanent solution that gives it flexibility on its MSP programmes. The U.S. and some others argue that India has become the largest rice exporter on account of its high price support through MSP. India may undertake not to export rice commercially from its PSH stock. India should get a clean, permanent solution to the public stockholding issue in return on ‘breaking the impasse at the WTO on the PSH programme’.

As rice production is water-intensive and the cost of production is high, India will not suffer economically if its rice export declines, the paper argued. India, which has on several occasions laid down that it did not export from its PSH stock, is unlikely to have any problem in adhering to an undertaking on the same, in exchange for a permanent solution.

Permanent solution

Several developing countries, including members of the G33 group, of which India is a part, the ACP group and the African Group, have called for a permanent solution to the problem of public stock holding as the Agreement on Agriculture does not allow them to provide food security subsidies for programmes such as the MSP beyond 10 % of production value.

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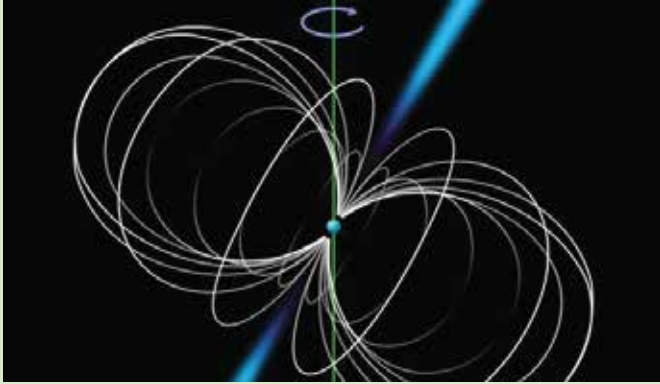
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SCIENCE AND TECHNOLOGY

HOW PHYSICISTS ARE MAKING SENSE OF THE MYSTERY OF PULSAR GLITCHES



Origin of pulsars

When heavy stars die, their cores implode. If they're heavy enough, they become black holes; but if not, they collapse just enough to form a ball of neutrons, with gravity not being strong enough to overwhelm their outward pressure. This compact, super-dense object is called a neutron star.

Radio signals emitted from near the poles of such a star would form a narrow cone that sweeps past the earth with every rotation – like the light from a lighthouse shining over a ship on the sea.

The pulsar and the neutron

In 1932, when James Chadwick had discovered neutrons. When neutrons are in a group, they are not allowed to have the same energies. Each neutron will have to settle for the lowest available energy level. If gravity tries to compress this collection of neutrons inward, their inability to 'merge' into a common energy level will resist with an outward pressure.

A not-so-eureka moment

Physicists found that the rotation of these neutron stars slowed over time. They found that the energy 'saved' by reducing the rotation rate was used to accelerate electric charges outside the star, producing the radio signals. This explanation was satisfying because it fit their theories so neatly – until they discovered a problem in 1969.

Two research groups, working separately, reported an abrupt and brief increase in the rotation rate of the pulsar PSR 0833-45. This glitch remains to be explained 45 years on, although physicists have some ideas. To date, they have spotted more than 3,000 pulsars and around 700 such glitches. The data they've accumulated plus some physics ideas have given rise to some hypotheses about what these glitches are, and why they happen.

A curious feature

When scientists plotted the rotation rate of pulsars over time on a graph, they saw the familiar decreasing pattern. If the inside of the neutron star was made primarily of regular matter, then all internal relative motions would be damped quickly by friction, in a matter of a few milliseconds. So the slow post-glitch relaxation hinted that the neutrons inside the

star were in a slippery, frictionless state, which physicists called a superfluid.

Superfluids have peculiar properties. A superfluid set-in motion inside a container will keep moving around. At a certain speed, a slender cylindrical portion will rotate in a vortex. As the container's rotation rate is increased, more such vortices appear. The number of vortices – or their number density – determines how fast the fluid itself rotates. This has intriguing ramifications for the pulsar.

The origin of glitches

The neutron star is a 20-km-wide sphere with a solid crust and a core. The crust, believed to be a lattice of iron-like nuclei, is interspersed with neutron superfluid. The core predominantly contains the superfluid, and no solid parts.

The presence of the superfluid in a rotating system immediately implies the existence of vortices. The vortices have less energy when they attach themselves to the nuclei in the crust than if they don't. The phenomenon of vortices 'sticking' to the nuclei is called pinning.

As the rotating neutron star loses energy to radiation, the crust slows down. On the other hand, the pinned vortices aren't at liberty to rearrange themselves, which means the density of vortices remains unchanged and maintains the speed of the superfluid's rotation.

The speed difference between the crust and the superfluid leads to a force on the vortices that eventually overcomes the pinning. At this point, the vortices are thrown outward, reducing the speed of the superfluid. The angular momentum lost by the superfluid is gained by the crust and this brief increase in rotation is reflected as a glitch in the pulsar timing data.

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INTERNATIONAL RELATIONS

THE LARGER MESSAGE TO NEW DELHI FROM THE RED SEA

CONTEXT: China is increasing its presence in the Indo-Pacific, posing a potential maritime threat to India and aiming to contain its influence in the region. India needs a well-thought-out maritime grand strategy to counter this challenge and secure its interests in the Indo-Pacific.

STORY SO FAR: China's rising presence in the Indo-Pacific poses a new two-front challenge for India, both on land and at sea. China's expanding navy, military bases, and strategic partnerships threaten to contain India. India needs to develop a well-thought-out maritime grand strategy, involving like-minded partners, to counter this challenge and secure its interests in the region. While initiatives like Quad are helpful, they are insufficient. New Delhi must act now to build a cohesive and effective response to China's growing influence.

MAJOR ISSUES:

India's Maritime Turn: From Opportunity to Challenge?

Shifting Focus: India has moved its strategic focus from the landlocked continent to the Indo-Pacific maritime region.

Emerging Threats: The Indo-Pacific, despite its promise, is becoming a new theatre of conflict and competition, highlighted by the recent Houthi attacks on Indian ships.

Limited Response: India's current response to maritime challenges seems reactive and insufficient, relying on occasional maneuvers and budget increases.

Lacking Strategy: A clear and defined maritime grand strategy is missing, raising questions about India's long-term vision and effectiveness in the Indo-Pacific.

Need for Action: Despite its initial shift, India needs to develop a comprehensive maritime strategy to secure its interests and navigate the increasingly complex Indo-Pacific.

A DIFFERENT 'NEW' TWO FRONT SITUATION

New Two-Front Challenge: India faces a combined continental and maritime challenge, not just land threats from Pakistan and China.

China's Growing Influence: China has quietly expanded its naval presence in the Indian Ocean while India focused on land borders.

Missed Opportunity: India's continental focus allowed China to gain a strategic advantage in the maritime space.

Pressure from Land and Sea: China applies pressure on India through both the People's Liberation Army (LAC) and the People's Liberation Army Navy (Indian Ocean).

NUMBERS DO NOT LIE:

OVERSEAS MILITARY BASES:

- China has established a military base in Djibouti, signaling its global military ambitions.
- Growing Chinese activities in Gwadar (Pakistan) and Hambantota (Sri Lanka) are of concern, even if not officially military bases.
- The construction of the Kyaukpyu port in Myanmar

enables China's PLAN to approach the Bay of Bengal, challenging India's traditional maritime dominance.

Numbers Don't Lie: China has a significantly larger navy than India (370+ ships vs. 132) and plans to expand further.

Expansion in Strategic Locations:

- China is reportedly expanding an artificial island in the Maldives, strengthening the China-Maldives strategic partnership.
- Strategic investments and a naval base in Ream, Cambodia, indicate China's extended influence in Southeast Asia.
- Comoros, a small Indian Ocean island, aligns with China, further expanding its presence in the Indo-Pacific.

Containment of India:

- China's actions, from Djibouti to Gwadar and the Maldives, suggest a strategy aimed at containing India in the broader Indo-Pacific region.
- This approach includes challenging India's traditional dominance in the Indian Ocean and strategic locations like Gwadar.

Global Outreach and Influence:

- China's expanding outreach to the global South, port-building efforts worldwide, and strengthened relations with West Asia and Africa contribute to its global influence.

Insufficient Assessment:

- India's assessment of China's containment strategy in South Asia is not misplaced but insufficient.
- China is concurrently attempting to extend its containment strategy to the larger maritime theatre, challenging India's influence in the Indian Ocean.

Historical and Cultural Influence:

- China aims to influence regions historically engaged with by India, including the Indian Ocean region and Africa.
- The zero-sum game implies that China's gain in these regions comes at the expense of India, affecting its traditional spheres of influence.

UTILISING GLOBAL ATTENTION:

Global Attention on Indo-Pacific:

- Leverage the growing global interest in the Indo-Pacific, recognizing it as a crucial geopolitical construct.
- The Indian Ocean's strategic importance makes it imperative for the international community to prevent China's dominance.

Coalitions and Partnerships:

- Form coalitions with like-minded countries in the Indo-Pacific to counter China's influence.
- Utilize the current scenario where Beijing lacks significant great power support in the maritime theatre.

Strategic Importance of India:

- Acknowledge India's pivotal role in the Indo-Pacific moment, serving as a counterbalance to Chinese expansion.
- Strengthen partnerships with other nations sharing similar concerns and objectives in the region.

Cohesive Indo-Pacific Strategy:

- Develop a comprehensive and well-thought-out Indo-Pacific strategy that goes beyond noble intentions.
- The existing initiatives like Quad and Malabar are commendable but need integration into a purposeful and cohesive maritime grand strategy.

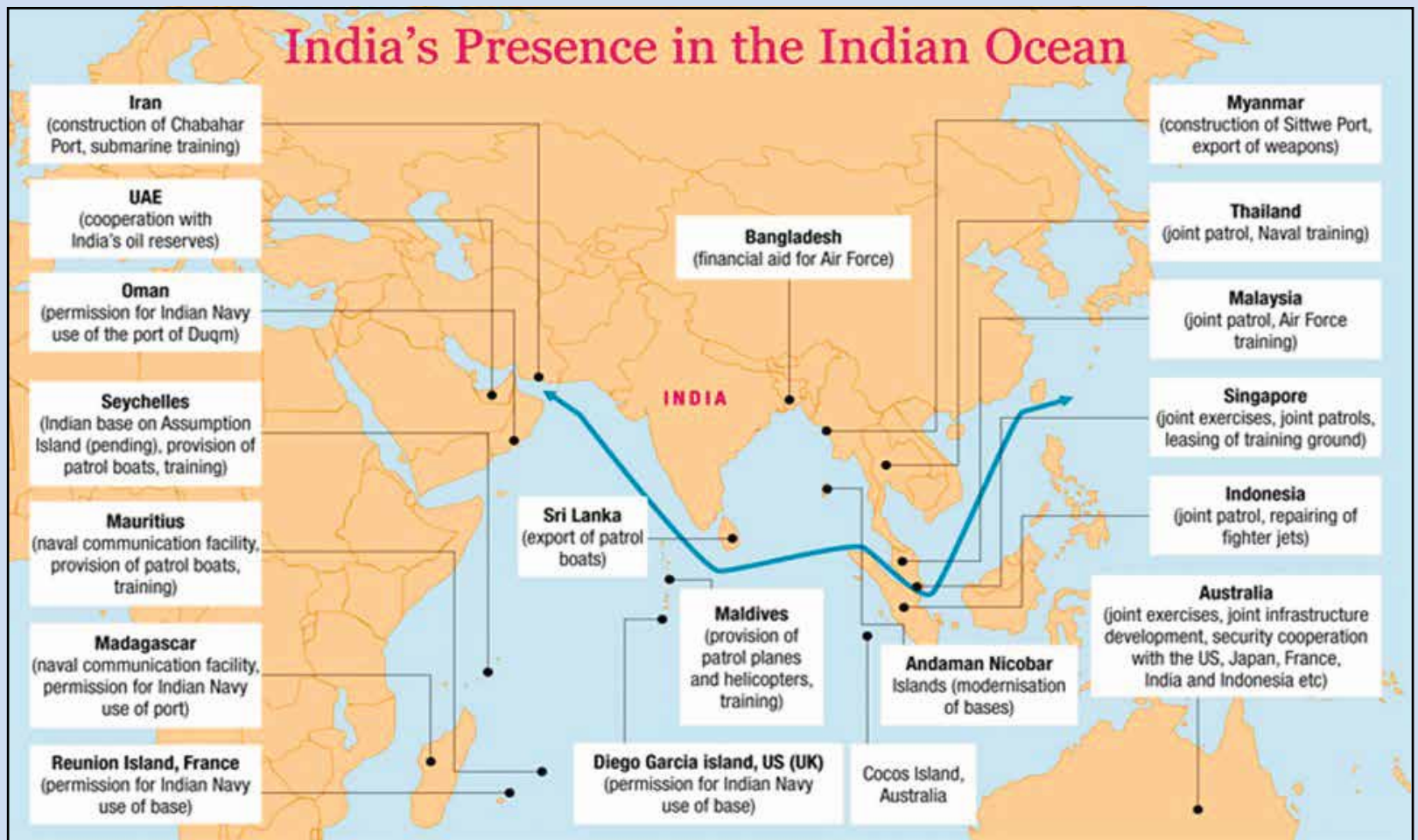
Long-Term Vision:

- Recognize the unfolding grand challenge in the Indo-Pacific region and plan for a long-term vision.
- Emphasize the need for a strategic response beyond immediate situations, considering the evolving dynamics.

Decision on Collective Efforts:

- While refraining from joining 'Operation Prosperity Guardian' might be suitable for now, acknowledge the potential limitations.
- Realize that addressing the China challenge in the longer run may require active participation in collective efforts and initiatives.

SIGNIFICANCE: India stands at a critical juncture as it navigates the complex geopolitical landscape of the Indo-Pacific. The Red Sea incidents and China's expanding influence underscore the urgency for New Delhi to formulate a robust maritime grand strategy. Shifting from a continental focus to the Indo-Pacific demands a proactive approach, transcending reactive responses. The numerical superiority of China's navy and its strategic bases raise significant concerns, necessitating a comprehensive and well-defined long-term vision. India must leverage global attention on the Indo-Pacific, forging coalitions, strengthening partnerships, and integrating existing initiatives into a cohesive strategy. The maritime challenge requires a collective effort, and while current decisions may be suitable in the short term, active participation in collaborative endeavours becomes imperative for effectively countering China's ambitions in the evolving Indo-Pacific theatre. India's response will shape not only its maritime destiny but also contribute to regional stability and global security.



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ECONOMICS AND DEVELOPMENT

THE NEED TO OVERHAUL A SEMICONDUCTOR SCHEME

CONTEXT: The mid-term appraisal of the semiconductor Design-Linked Incentive (DLI) scheme is due soon. Since its announcement, the DLI scheme has approved only seven start-ups, markedly short of its target of supporting 100 over five years.

India's \$10 billion Semicon India Program has had mixed results, at best. There are three goals of India's semiconductor strategy.

- Reduce dependence on semiconductor imports, particularly from China, and especially in strategic and emerging sectors, ranging from defence applications to Artificial Intelligence development.
- Build supply chain resilience by integrating into the semiconductor global value chain (GVC).
- Double down on India's comparative advantage: India already plays host to the design houses of every major global semiconductor industry player and Indian chip design engineers are an indispensable part of the semiconductor GVC.

These goals will help cement India's status as a semiconductor powerhouse. However, resources are limited. Therefore, priorities for industrial policy should ensure that we reap disproportionate benefits from our investments. Stimulating the design ecosystem is less capital-intensive than the foundry and assembly stages of the semiconductor GVC. Bolstering this stage can help establish strong forward linkages to an up-and-coming fabrication and assembly industry in India. Therefore, it is odd to note a concerted lack of policy scrutiny of the DLI scheme's lack of results, while Production-Linked Incentive schemes for foundries and assembly stages received quick revisions post notification.

Issues with the scheme

Prima facie, the DLI scheme fares well with its focus on providing access to design infrastructure, such as electronic design automation (EDA) tools, alongside financial subsidies for different steps of the chip design process. But there has been lacklustre uptake of the scheme. First, the scheme mandates that beneficiary start-ups maintain their domestic status for at least three years after receiving incentives, and for this they cannot raise more than 50% of their requisite capital via foreign direct investment. This is a significant barrier.

Costs for semiconductor design startups are also significant. Semiconductor R&D usually only pays off in the longer term, and the funding landscape for chip start-ups in India continues to be challenging despite promising IP and business potential. Such capital requirements, combined with the lack of success stories caused by the absence of a mature start-up funding ecosystem for hardware products in India, reduce the risk appetite of domestic investors. Consequently, any shortfall in investment for DLI beneficiary start-ups could be bridged by equity financing bringing in foreign funds, if not for the scheme's riders on ownership.

The relatively modest incentives under the DLI scheme (capped at ₹15 Crore for Product DLI and ₹30 Crore for Deployment Linked Incentive, per application) would not make for a worthwhile trade-off for start-ups standing to lose out on access to crucial long-term funding. It is therefore crucial to delink ownership from the development of semiconductor design and adopt more start-up-friendly investment guidelines. This would also boost their financial stability and provide them global exposure.

The primary aim of the DLI scheme should be to cultivate semiconductor design capabilities in India, with the understanding that home-grown IP will organically evolve as local talent fosters the creation of indigenous companies over time. The scheme needs to be revised to focus on the broader objective of facilitating design capabilities for a wide array of chips within the country, so long as the entity engaging in the design development process is registered in India. The Union government's recent statement, that "(the product) should be an India-designed chip", implies a move in this direction. The financial outlay of the scheme must be enhanced substantially to support this policy shift.

Nodal agency

The Centre for Development of Advanced Computing's role as the nodal agency appraising proposals by applicants under the DLI scheme merits a re-look too. As it is also a market player in the Indian chip design sector, clear concerns of a conflict of interest arise, as well as its capacity and suitability to be the implementing and regulating agency. The Karnataka government's Semiconductor Fabless Accelerator Lab (SFAL), with its specific partnerships with the Indian Electronics and Semiconductor Association, EDA vendors, IP, and testing companies, could be an appropriate blueprint for an implementing agency for DLI.

A similar agency under the auspices of the India Semiconductor Mission could aim to emulate SFAL's approach and provide affiliated start-ups access to a network of mentors, industry, and financial institutions, in addition to the disbursement of financial incentives under the scheme. It could inspire an expanded focus for a revamped DLI scheme attracting a broader range of semiconductor design start-ups (not just ones ready for volume production) and help them overcome initial hurdles in developing design ideas. A recalibrated policy focused on chip design steered by a capable institution can tolerate a certain failure rate and treat beneficiary start-ups as exploratory risk-taking vehicles to establish India's foothold in this high-tech sector.

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