

1st to 15th July, 2023

Features of 7 PM compilation

- Comprehensive coverage of a given current topic
- Provide you all the information you need to frame a good answer
- Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world
- Written in lucid language and point format
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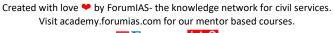
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India's National Research Foundation (NRF): Needs, significance and challenges-Explained, pointwise

Introduction

The recent approval of the National Research Foundation (NRF) Bill by the Indian Union Cabinet marks a significant step towards boosting scientific research in the country. With a significant budget at its disposal, the NRF aims to tackle India's long-standing need to increase research and development investments and cultivate a robust research culture within higher educational institutions. While the initiative holds great potential, it also faces challenges including the need for equitable fund distribution, encouraging interdisciplinary collaborations, and ensuring international competitiveness.

What is (National Research Foundation) NRF?

It is modelled on the lines of the hugely successful National Science Foundation of the United States. It is designed to be an apex body for providing high-level strategic direction for scientific research in India. The body would be formed in accordance with the recommendations of the **National Education Policy (NEP).**

Aim: The primary aim of NRF is to foster a culture of research and innovation throughout India's universities, colleges, research institutions, and R&D laboratories. The NRF also aims to create a multidisciplinary approach, integrating various disciplines for a comprehensive and holistic advancement of scientific research.

Fund allocations: A total of Rs. 50,000 crores would be allocated over the span of five years (2023-28). Out of the allocated ₹50,000 crores, the government plans to raise ₹36,000 crores through investments from industries and philanthropists, while the remaining amount will be funded by the government— ₹10,000 crores from the Centre and ₹4,000 crores through subsuming Science and Engineering Research Board (SERB) into the NRF. Scientific research projects under the NRF would be funded by the DST and industry on a 50:50 basis.

Composition: The NRF would be administratively housed in the Department of Science and Technology (DST). It would have a 16-member governing board with two members from DST, five from industry, one from humanities and six experts who would be selected depending on the nature of the project being evaluated. The Prime Minister will be the ex-officio president of the board and the Minister of Science and Technology, and the Minister of Education will be the ex-officio vice presidents. The NRF's functioning will be governed by an executive council chaired by the Principal Scientific Advisor to the government of India.

What is the need for NRF?

Insufficient research funding: India's investment in research and development (R&D), as a percentage of GDP, has steadily dropped–from 0.84% in 2008 to about 0.69% in 2018; whereas it was 2.8% in the US, 2.1% in China, 4.3% in Israel and 4.2% in South Africa.

Low patents and publications: India lags in the number of patents and publications produced. According to the **World Intellectual Property Organisation (WIPO),** China made as many as 1.538 million patent applications (with just 10% being made by nonresident Chinese), the US made 605,571 patent applications, while India made a mere 45,057, of which over 70% were by non-resident Indians.





Limited accessibility to research grants: Funding opportunities are often limited to established institutions and researchers, leaving those in peripheral areas underserved. For example, according to DST officials, about 65 per cent of funds from SERB had been cornered by the IITs, and only 11 per cent flowed to projects in state universities.

Fragmentation of research: Currently, research in India is largely fragmented with various institutions conducting studies in isolation, leading to inefficiencies and duplication of efforts.

Lower private sector contributions: About 56% of R&D spend comes from the government and 35% from the private sector. The profile in technologically advanced countries is different. R&D is led by the private sector, contributing as much as 88% in Israel.

Lack of focus on social sciences and humanities: Most of the research funding tends to gravitate towards natural sciences and engineering, while social sciences and humanities often receive less attention.

Read more: How NRF aims to boost research in higher educational institutes

What are the significances of NRF?

Democratisation of science funding: One of the key significances of the National Research Foundation (NRF) is the promised democratisation of science funding. The NRF plans to shift the emphasis of funding from elite institutions towards projects in peripheral, rural, and semi-urban areas.

Promotion of interdisciplinary research: The NRF intends to foster research not just in the natural sciences and engineering, but also in social sciences, arts, and humanities. It's a recognition of the importance of holistic and interdisciplinary approaches to addressing societal challenges. This is significant as it would promote more well-rounded and comprehensive research outputs.

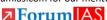
Encouraging industry involvement in research: Of the estimated Rs 50,000 crore funding over the next five years, Rs 36,000 crore is expected to come from the industry. This indicates that the NRF is aiming to encourage more industry involvement in research. Collaborative efforts between academia, industry, and research institutions will lead to more pragmatic and impactful research, addressing real-world problems.

Mentorship for higher education institutions: The NRF is designed to foster a culture of research in universities and colleges across India. This will be achieved through funding, mentorship, and providing strategic direction to scientific research. The NRF aims to unite education and research, which have traditionally been separate domains in the Indian context.

Policy framework for increased R&D spending: The NRF will create a policy framework and regulatory processes to encourage increased spending by industry on R&D. In comparison to other countries, India's R&D spending is considerably low. The creation of NRF signals a step towards increasing India's investment in scientific research.

Addressing pressing societal challenges: A primary aim of the NRF is to find solutions to big problems facing Indian society like clean energy transition, climate change etc. By promoting research in various disciplines, the NRF hopes to stimulate innovation that will address societal challenges, thereby making India a frontrunner in research and innovation.





What are the potential challenges faced by NRF?

Ensuring equitable funding distribution: One challenge for the NRF will be ensuring that funding is distributed equitably across institutions in various geographic locations, particularly in peripheral, rural, and semi-urban areas. The historical trend of wealthier, more prestigious institutions like the IITs receiving the bulk of the available funding will be a difficult pattern to break.

Integration of diverse research areas: The NRF has the ambitious goal of promoting research in not only natural sciences and engineering, but also in social sciences, arts, and humanities. It aims to encourage interdisciplinary research. Balancing the interests, needs, and funding allocation across these diverse disciplines, each with their unique requirements, could pose a challenge to the NRF.

Balancing public and private funding: While the NRF plans to draw substantial funding from the private industry, ensuring a balance between public and private interests in research could be a challenge. For example, private industry may have commercial interests that might not always align with public good or scientific discovery.

Managing the absorption of SERB: The NRF will also face the challenge of absorbing the Science and Engineering Research Board (SERB) without disrupting the ongoing projects and initiatives. This process would require careful planning and execution to ensure the continuity and efficiency of research funding.

What should be done?

Establish a fair and transparent evaluation system: To ensure equitable distribution of funds, NRF should establish a fair and transparent system for evaluating research proposals. This system should take into account the potential impact of the research, the capabilities of the research team, and the needs of the specific geographic area or community.

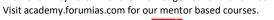
Foster interdisciplinary collaboration: This could involve creating funding opportunities specifically for interdisciplinary projects, providing resources to help researchers from different fields work together effectively, and organizing events or forums to facilitate cross-disciplinary communication.

Secure industry involvement: This could include demonstrating the potential returns on investment, offering opportunities for industry to influence research directions that align with their interests, and creating mechanisms for regular communication and feedback.

Ensure smooth transition for SERB: A transition plan should be made to ensure the smooth absorption of the Science and Engineering Research Board (SERB) into the NRF. This should ensure the continuity of ongoing projects and the retention of important institutional knowledge and expertise.

Promote international competitiveness: To achieve internationally competitive research, the NRF should invest in creating high-quality research environments, provide robust mentorship programs, and foster collaborations with international research entities. In addition, the NRF should track global research trends and standards to ensure that the research it supports is at the forefront of global scientific progress.

Strengthen university research capabilities: The NRF should prioritize building research capabilities within universities. This can be achieved by providing funding and resources to Created with love by ForumIAS- the knowledge network for civil services.





improve research facilities and infrastructure, encouraging the development of research-oriented curricula, and supporting faculty development programs focused on research.

Sources: <u>Pib, The Hindu, Hindustan Times</u>, Indian Express (<u>Article1</u>, <u>Article2</u>, <u>Article3</u>), <u>The Economic Times</u>, Deccan Herald (<u>Article1</u>, <u>Article2</u>), <u>The Times of India</u>

Criminalisation of politics: causes, impacts and solutions - Explained, pointwise

Introduction

Recently, the Association for Democratic Reforms (ADR) wrote to the Election Commission (ECI), seeking action against political parties that failed to publish details of criminal records of their candidates as per orders of the Supreme Court and the ECI. Activists and independent electoral watchdogs like ADR have been raising concerns over criminalisation of politics for a long time. The increasing trend of criminalisation of politics poses a significant threat to the democratic system.

A little background of the petition

In a petition filed by **Public Interest Foundation**, the Supreme Court in 2018, made it mandatory for political parties to widely publicize the details of criminal cases pending against their candidates.

Subsequently, in February 2020, while hearing a contempt petition regarding its 2018 order not being implemented, the court repeated that the parties would have to publish the details of candidates with pending criminal cases. It also added that they would have to include the reasons for selecting such a candidate.

However, an analysis of data by the ADR of Karnataka, Gujarat and Himachal Pradesh elections shows that the number of candidates with criminal antecedents has only increased from previous elections.

A petition filed by the ADR in 2022 in the Supreme Court sought contempt proceedings against various political leaders for not complying with earlier Supreme Court orders.

The Supreme Court, earlier in 2023, dismissed the petition and asked ADR to pursue the remedies before the EC. This led ADR to write the letter to ECI.

What is criminalisation of politics?

"Criminalisation of politics" refers to the entry of criminals and corrupt individuals into the political system. These individuals then exploit their positions of power and influence to prioritize their personal agendas over the welfare of the nation and its people.

Read more: What is the criminalisation of politics?

What are the recent trends?

Data by the ADR reveals that the number of candidates with criminal charges getting elected to Parliament has been on the rise since 2004.





In 2004, around 24% of Members of Parliament (MPs) had pending criminal cases against them. By 2009, this percentage increased to 30%, followed by a further rise to 34% in 2014. In 2019, as many as 43% of MPs had criminal cases pending against them.

According to a recent report published by ADR, in the recently held Karnataka elections, approximately 45 per cent of the candidates had criminal cases registered against them. Nearly 30 per cent of these candidates were accused of grave offences, including rape and murder.

What are the causes of criminalisation of politics in India?

Attraction of the strongmen: Due to the government's failure to address the socio-economic and political concerns of the people, they are attracted towards people with a criminal image. These strongmen, who possess both power and wealth, are expected to fulfill the needs of the people.

Vote bank politics: Money and muscle power of criminals help political parties gain votes. Since, in India electoral politics is more about caste, ethnicity, religion and several other factors, candidates overcome the reputational loss due to criminal charges and come out as victorious in elections.

Black money in elections: Electoral politics is largely dependent on the money and the funding that it receives. Since candidates with criminal records often possess greater wealth, they ensure greater inflow in money, labour and other advantages that may help a party in successful campaign, and also possess greater 'winnability'. Research suggests that a candidate with a tainted reputation is three times more likely to win an election than a candidate with a clean record.

Lack of Intra-party democracy: Political parties in India largely lack intra-party democracy and the decisions on candidature are largely taken by the elite leadership of the party. Thus, politicians with criminal records often escape the scrutiny by local workers and organisation of the party.

Lack of adequate deterrence: Due to the low levels of convictions of MPs and MLAs, and delays in trials, political parties are not deterred from giving tickets to criminals.

Loopholes in the functioning of Election Commission: The Election Commission has prescribed forms for the contestants of elections to disclose their property details, cases pending in courts, convictions etc. while filing their nomination papers. However, these steps have not been stringent enough to break the nexus between crime and politics.

What are the impacts of criminalisation of politics in India?

Undermines democracy: The foundation of a democracy is the trust between its citizens and those elected to govern on their behalf. When elected representatives have criminal backgrounds, it undermines this trust and erodes the credibility of the democratic system.

Poor governance: Individuals with criminal backgrounds often lack the skills, education, and understanding necessary to govern effectively. Their policies and decisions may be guided by their own personal interests rather than the interests of their constituents.

Cultivates culture of impunity: Criminalisation of politics can foster a culture of impunity where individuals believe they can commit crimes without facing consequences, which can lead to increased crime rates and a general lack of respect for the law.





Encourages corruption: Politicians with criminal backgrounds are more likely to engage in corrupt practices, such as bribery, fraud, and embezzlement, further undermining the legitimacy of the government and public faith in it.

Impact on economic development: The chronic corruption and mismanagement associated with criminal politicians can deter both domestic and foreign investors, stymie economic growth, and exacerbate poverty and inequality.

Hampers social development: With corruption and self-interest driving policymaking, social development initiatives, such as health, education, and welfare programs, can be severely compromised, preventing the upliftment of disadvantaged groups.

Taints international reputation: The criminalisation of politics can damage India's reputation on the international stage, making it more difficult to engage in beneficial relationships with other countries and international organizations.

What are the initiatives taken so far to overcome the issue of the criminalisation of politics in India?

Constitutional initiative: Articles 84 and 173 deal with eligibility, whereas articles 102 and 191 deal with the disqualification of the House of Parliament and state legislative assemblies respectively.

Legislative initiative: Indian Penal Code: Chapter IX A of Indian Penal Code deals with offences relating to elections. There are nine portions in it. For crimes like bribery, improper influence, and impersonation during elections, it defines them and lays forth the associated penalties.

Representation of People Act (RPA), 1951: Section 8 of the Act lists certain offences which, if a person is convicted of any of them, disqualifies him from being elected, or continuing as, a Member of Parliament or Legislative Assembly.

A candidate for any National or State Assembly elections is required to furnish an affidavit, in the shape of Form 26 appended to the Conduct of Election Rules, 1961. Failure to furnish this information, concealment of information or giving of false information is an offence under Section 125A of the RPA.

What are some of the landmark judgements on criminalisation of politics in India?

In Union of India (UOI) v. Association for Democratic Reforms and Anr, 2002, the SC held that every candidate, contesting an election to the Parliament, State Legislatures or Municipal Corporation, must declare their criminal records, financial records and educational qualifications along with their nomination paper.

In Ramesh Dalal vs. Union of India, 2005, the SC held that a sitting MP or MLA shall also be subject to disqualification from contesting elections if he is convicted and sentenced to not less than 2 years of imprisonment by a court of law.

The SC in **Public Interest Foundation vs Union of India** case, **2018** had also directed political parties to publish online the pending criminal cases of their candidates. In this case, the court left the matter of disqualification of politicians carrying criminal charges against them to Parliament saying that the court cannot add to the grounds of disqualification.





Order to establish Special Courts: Accordingly, the Union Government facilitated setting up of 12 Special Courts in States which had 65 and above pending cases, for expeditious trial of criminal cases involving MP/MLAs. Accordingly, 12 Special Courts (02 in NCT of Delhi and 01 each in the state of UP, Bihar, WB, MP, Maharashtra, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu and Kerala) were constituted. Performance of these special courts is being monitored by the Hon'ble Supreme Court of India.

What are the various recommendations on de-criminalization of politics?

Read here: **Important Recommendations**

What should be done?

Legal reforms: The laws concerning the disqualification of candidates with criminal backgrounds need to be strengthened. For instance, 2nd ARC recommended amending section 8 of RPA to disqualify all persons facing charges related to grave and heinous offences and corruption, where charges have been framed six months before the election.

Time-bound justice delivery system: Fast tracking trials and expediting the judicial process through a time-bound justice delivery system will weed out the corrupt as well as criminal elements in the political system.

Pressure on political parties: Pressure must be exerted on political parties to make them accountable for their choices. Political parties must realise that they must follow the rule of law and that they are not above the law.

Strict enforcement of directives: The ECI needs to strictly enforce the directives of the Supreme Court. Parties that do not comply with these directives should face penalties, including fines, as suggested by the ADR. In extreme cases, non-compliant parties could be deregistered.

Internal democracy in political parties: Encouraging internal democracy within political parties can also help. When party members have a say in candidate selection, they are more likely to choose individuals of integrity.

Implementing recommendations of various committees: The recommendations of several committees, such as the **Vohra Committee (1993) and Goswami Committee** and law commission report (170 and 244 th), which have focused on tackling the criminalisation of politics, need to be fully implemented.

Use of technology: Technology can be harnessed to ensure speedy trials and provide easy access to information about candidates. For instance, online platforms could be used to maintain a publicly accessible database of the criminal records of all political candidates.

Sources: ADR, Indian Express (Article 1, Article 2), Department of Justice, Free Press Journal, SCO

Should India join NATO Plus? Explained, pointwise

Introduction

At the beginning of 2023, the U.S. Permanent Representative to NATO expressed openness to increased engagement with India. Subsequently, the U.S. House Select Committee on China





proposed to enhance the deterrence of Taiwan by including India to strengthen NATO Plus. However, India rejected this idea. But as Prime Minister's visit to the U.S. approached, the U.S. Senate's India Caucus Co-Chairs announced their intention to introduce legislation granting India a "NATO plus five" defense status. Currently, U.S. lawmakers have stopped using "NATO Plus" phrase. Nevertheless, these recent developments have reignited discussions on whether India should form closer relations with NATO.

What is NATO and NATO Plus?

NATO is an intergovernmental military alliance comprising 31-member states, mainly from Europe and North America. It aims to ensure the freedom and security of its members through political and military cooperation.

NATO Plus includes five more member nations which are treaty allies of the US- namely: Australia, Japan, South Korea, New Zealand and Israel. It is a security arrangement that brings together NATO and five aligned nations to enhance global defence cooperation.

The term 'NATO Plus' is not officially recognised within NATO itself but has been used in discussions regarding the potential expansion of the alliance. Read more: NATO: Historical Context and its Role in Ukraine Conflict - Explained, pointwise

Why the US invited India to join NATO Plus?

The US aims to strengthen security cooperation with India based on their shared interest in countering Chinese dominance in the Indo-Pacific region. It believes that India should join NATO to safeguard its borders from China and enhance global security to counter Chinese aggression in the Indo-Pacific region.

The American strategic culture emphasizes treaty-bound alliances. By enhancing India's capabilities and promoting military-to-military cooperation, the U.S. hopes to establish a formalized relationship like the NATO framework.

Why India refused to join NATO Plus?

India maintains that it can handle any challenges posed by China independently.

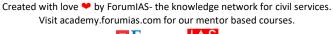
The geographical barrier between India and China represented by the Himalayan region makes it currently impossible for India to join an alliance with NATO.

Also, China's current economic crisis, as evidenced by declining exports and imports, weakens the argument for joining NATO to counter Chinese aggression.

Why should India join NATO Plus?

Strengthened defence capabilities: As part of India's contacts with various stakeholders on various issues of mutual interests, India has already been in communication with NATO. It also has military exchanges with many NATO members, like the US, Britain, and France, in bilateral and minilateral formats. With increasing regional security challenges, joining the NATO Plus framework could enhance India's protection and deterrence against potential threats.

Access to high tech equipment: India could also gain access to advanced military technologies, intelligence-sharing platforms, and inter-operability with other member-states.





Decline in India-Russia relations: The relationship has been on a decline despite the best efforts of India. The primary reason is Russia's recent choices and actions. Russia's economic stagnation, ambitions in its neighboring regions, closer ties with China, and its aggressive actions towards Ukraine have all made a strong Russia-India partnership less likely. The India-US relationship, on the other hand, have evolved into a strong partnership.

Chinese aggression: China's rise and its aggression has made a strong India-US partnership a necessity. If China continues with its assertive and aggressive foreign policy agenda against India, India should consider a pragmatic engagement with NATO.

India's Europe policy: The bureaucratisation of the relations and the lack of high-level political interest has prevented India from taking full advantage of a re-emerging Europe. In the last few years, Delhi has begun to develop an independent European policy. Engagement with NATO can become one important part of India's European strategy as the continent is searching for a new role in the Indo-Pacific.

Why should India not join NATO Plus?

Breaking India – Russia ties: If India joins NATO Plus, it will directly impact India's strong, ties with Russia. Russia has been useful to India in dealing with regional security challenges and, in moderating the stance of China. Even though Russia is getting over-dependent on China, post the war in Ukraine, it remains a valuable partner for India. Upsetting Russia would push it closer to China and Pakistan.

Strategic autonomy: India has traditionally maintained a policy of strategic autonomy, allowing it to engage with various nations and blocs based on its own interests. Joining NATO could potentially risk India's strategic autonomy, particularly concerning its nuclear arsenal. Being part of NATO would essentially mean that India will get dragged into America's conflicts.

Limiting freedom of action: A military framework will limit India's freedom of action and prevent it from pursuing an independent policy towards China. Joining the Taiwan strategy of the U.S. under NATO Plus will complicate India's security, with the possibility of further Chinese military build-up along the India-China border and frequent intrusion.

No real benefit: India may still enjoy tangible benefits of an ally of the US without binding itself in a treaty-based framework. For example, initiative on Critical and Emerging Technologies (iCET) has transformed defence industrial cooperation. India's status of a strategic partner and a major defence partner, but not a treaty ally, have not obstructed such an important deal. Additionally, neither does NATO Plus provide Article 5 protection that is available to NATO members, nor it is beneficial for achieving AatmaNirbhar Bharat.

Great-power aspirations: India is a middle power with great-power aspirations. It has been the leading voice for the Global South at world forums. A junior-partner status in an alliance would mean giving up its great-power aspirations. It would make it difficult for India to rise as the third pole.

US military base in India: Till now, India does not host any foreign military base on its land. But joining NATO Plus would mean the US will eventually have a military base in India as well. All other NATO plus members are hosting US military bases today.





What should be the future course of action?

India should prioritize addressing regional security challenges such as border disputes, terrorism, and regional conflicts. While NATO has certain competencies to deal with such issues, its larger geopolitical agenda starting from Eurasia to the Indo-Pacific may divert resources and attention away from these pressing issues.

India should seek to profit from its status as a swing state amid great power rivalries. Though it has steadily intensified security and defence partnership with the US, it is under no obligation to take part in the security competition or any possible conflict over Taiwan.

For now, India's posturing through the Quadrilateral Security Dialogue (Quad) looks more promising than the NATO Plus as there is no mutual-defence pact like NATO. The group is meant to deepen economic, diplomatic and military ties among the members.

India should refrain from direct military involvement with NATO. But a dialogue between India and NATO could facilitate productive exchanges as the two share similar values for a rules-based international world order.

Sources: The Hindu (Article 1 and Article 2), Indian Express, Deccan Herald, Firstpost, Mint, Wion, Observer Research Foundation, The Statesman

Governance issues at Indian Startups: causes and impacts - Explained, pointwise

Introduction

India became the third-largest start-up ecosystem in the world after the US and China last year. Further, for the second time in a row, India topped China by creating 23 unicorns in 2022. At present, India, has more than 99,000 start-ups. However, the corporate governance issues faced by Byju's have raised significant concerns and highlighted a broader problem within India's startup ecosystem. Similar violations of corporate governance standards have also been reported in other Indian startups such as Mojocare, GoMechanic, and BharatPe. These incidents have highlighted the need for corporate governance and oversight in India's startup ecosystem.

What is a startup?

An entity is considered as a Startup in India if it fulfills the following criteria:

- 1. if the entity is less than 10 years old.
- 2. if the annual turnover is not more than 100 crores.
- 3. if the entity is involved in innovation or if it is a scalable business model with a high potential of employment generation or wealth creation.

What is corporate governance?

Corporate Governance refers to the way in which companies are governed and to what purpose. It identifies who has power and accountability, and who makes decisions.

Corporate governance is a toolkit that enables management and the board to deal more effectively with the challenges of running a company.





Corporate governance ensures that businesses have appropriate decision-making processes and controls in place so that the interests of all stakeholders (shareholders, employees, suppliers, customers and the community) are balanced.

Read more: What is the meaning of Corporate Governance?

Why is corporate governance important for startups?

Startups usually want to focus on growth and **see corporate governance as a burden**. But sound governance is an enabler.

Corporate governance ensures that startups are operating in a **transparent and ethical** manner, which is important for **building trust** with investors, customers, and other stakeholders.

A good corporate governance framework and its implementation is important for the **long-term growth and sustainability** of Indian start-ups.

Startups that have good corporate governance are more likely to build a stronger brand reputation, attract more financial resources and attract and retain top talent.

Corporate governance also helps startups to **mitigate risks** and **ensure compliance** with regulatory requirements.

Why Indian startups are facing governance issues?

Founder's fault: With considerable capital inflows and rapid increase of startup ventures across sectors, India's startup ecosystem is **highly competitive**. This can influence some founders to overlook governance aspects. Also, first-time founders **don't have the required expertise** on corporate governance. Focus on governance can also **increase operational costs** which founders may not like. In certain cases, founders may engage in questionable acts due to a **lack of ethical standards** or a general disregard for the law.

Growth at all costs: VC-induced drive for fast growth is a major reason for the rise in corporate mis-governance cases in the start-up ecosystem. The **pressure to grow at all costs** forces the startups to **abandon the systems and processes** they may have set up for governance.

Fear of missing out: India's startup space saw funding of more than \$131 billion between 2014-22. As global venture capital (VC) firms rushed to invest in promising Indian companies, there was a 'fear of missing out' among the investors. This made **due diligence less important and entering into a deal became more important.**

Exaggerated valuations: With the rise of start-ups and VCs encouraging start-ups to grow at any cost, company valuations have started exceeding fundamental values. People have started to give **more importance to company valuation than business processes.** Financial performance, particularly growth in revenues and related metrics, were drivers of company valuation and enabled companies to raise subsequent funding at ever-increasing valuations resulting in a direct impact on the incentives for wrongdoing.

Overestimation of the size of Indian Market: VCs and founders have overestimated the size of Total Addressable Market in India and **exaggerated the India opportunity** to their investors. But India is a **small market with limited merger and acquisition opportunities** which provide for large exits within seven years (the lifecycle of a fund within which founders are expected to



give exits). The pressure to meet the expectations forces startups to adopt unprofessional practices.

Read more: Reality check for startups

How will governance issues impact the startup ecosystem in India?

Tighter regulations: The government makes many **exceptions** for and gives **concessions** to startups so they can contribute to the economy. However, if cases of financial and operational failure become more regular, the government and regulators may **start tightening the rules**, which will kill innovation.

Reduced investment: The startup ecosystem thrives on easy funding from foreign investors. But due to recent incidents of mis-governance, **investors may lose confidence** in an already challenging funding environment.

Distrust: The emerging distrust between investors and founders due to a few badly managed organisations has caused **litigations**, **layoffs**, **exiting directors**, **and forensic audits**. Founders are experiencing **longer due diligence processes**, and closing funding rounds is no longer as easy as it was in 2020 and 2021.

Growing Significance of Corporate Governance: Investors are increasingly looking at corporate governance practices while making investment decisions. This means that startups with good governance practices are more likely to attract investments.

What should be done to address governance issues at Indian startups?

Self-regulation: Clear norms of self-regulation are laid out in 'Start-Up Governance Playbook' for every stage in startup growth. Startups should recognize the importance of corporate governance and every start-up must follow the laid out self-regulation norms. Also, the start-up community should **develop corporate governance standards** based on which auditors can transparently audit accounts and report malpractices.

Bring in the experts: A startup continues to be a founder-centric organization even after experiencing exponential growth. But start-up founders cannot be experts in every aspect of the business. VCs should bring in the relevant experts for various functions.

Building for long term: Founders should focus on building a sustainable business rather than building valuations for the short term.

Longer fund lifecycles: Building a sustainable business in India takes time but VC funds have seven-year lifecycles and push startups for exits within seven years. The fund lifecycles for India should be longer.

Sources: The Hindu Businessline (Article 1 and Article 2), Mint (Article 1 and Article 2), Financial Express, Deccan Herald, New Indian Express.



India and SCO: relevance and challenges - Explained, pointwise

Introduction

India recently hosted the 23rd summit of the Shanghai Cooperation Organization (SCO) in a virtual format. This marked the first time India chaired the summit since becoming a full member of the organization in 2017. The theme for the summit was 'Towards a SECURE SCO', which is an acronym coined by the Indian PM. It stands for: S: Security, E: Economic development, C: Connectivity, U: Unity, R: Respect for sovereignty and territorial integrity, E: Environmental protection.

What is SCO?

The Shanghai Cooperation Organization (SCO) is an inter-governmental organization that was officially announced in Shanghai, China, on June 15, 2001.

It was formed by Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan.

Prior to Uzbekistan's inclusion, the other five countries were part of the 'Shanghai Five,' established in 1996 by China to address border security concerns with its neighboring nations.

Following Uzbekistan's membership in 2001, the body was renamed the Shanghai Cooperation Organization.

Read more: Shanghai Cooperation Organization (SCO) - Explained, pointwise

What are the highlights of the summit?

During the summit, Iran officially joined the SCO as the Ninth Member Country.

Member countries expressed the need for the establishment of a "more representative" and multipolar global order in global interest.

The issue of Afghanistan received widespread consensus.

Several agreements were signed, including the New Delhi Declaration, as well as two joint statements addressing the issues of countering radicalization and digital transformation.

Indicating a lack of consensus, India opted out of statements on economic cooperation and on China's Belt and Road Initiative (BRI).

Read more: 23rd SCO Summit - SCO calls for multipolar world order as Iran joins grouping

Why SCO is relevant for India?

Strategic significance: The SCO platform is a key part of India's policy on multi-alignment and strategic autonomy, especially balancing India's widely perceived tilt towards the West. By engaging with the SCO, India can balance its relationships with other regional and global powers effectively. For example, India is also a part of QUAD, which is referred to as Asian-NATO by China. India's participation in SCO will balance this perspective.

Dealing With Pakistan & China: Within the SCO framework, India can better evaluate China's Belt and Road Initiative in the region. It is important for India to be an active participant,

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especially as Pakistan is a member. It would help in addressing challenges like terrorism originating from Pakistan and its efforts to prevent closer links between India and Central Asia.

Expanding footprint: SCO is expanding, which, again, increases its importance for India. Iran's acceptance as a permanent member is a significant geopolitical step. Having India's neighbours like Nepal and Sri Lanka as dialogue partners adds to the importance of the SCO platform.

Central Asia: As an emerging power, India must be involved in Eurasian geopolitics. India's economic rise gives make it a more attractive economic partner for Central Asian countries as they seek to reduce over-dependence on China. India is also pursuing regional connectivity projects linking it with landlocked Central Asia to access Central Asian markets and resources

Economic Potential: The SCO has the potential to create an economically constructive alliance. Member-countries make up 40 per cent of the world's population and 30 per cent of global output. With Iran, it will control 20 per cent of the world's oil reserves and about 44% of natural gas reserves.

What are the challenges facing SCO?

Decline of Russia: India's full membership into SCO was premised on the prime position of Russia in SCO. India trusted Russia to be able to help advance India's 'Connect Central Asia Policy'. But Russia's war in Ukraine is raising questions about its capacity to sustain primacy in its backyard as the Central Asian states are looking to reduce their reliance on Russia.

Gap between purpose and practice: The SCO advocates peaceful resolution of conflicts, respect for territorial integrity, counteracting terrorism, extremism and separatism in all its forms etc. But these norms are violated by China and Pakistan in their relations with India. Pakistan continues to nurture jihadi groups and promote terrorism against India, despite the Regional Anti-Terrorist Structure of the SCO.

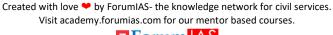
Becoming China-centric: Shared borders, growing political importance, and rising regional security profile is increasing the prospects for China's emergence as the dominant force in central Asia. Most members of the group are recipients of infrastructure aid from China's BRI. The inclusion of Iran in the SCO is likely to further consolidate China's position within the organisation as Iran has moved strategically closer to China in recent years.

Limited institutional capacity: The institutional capacity and decision-making processes of the SCO are comparatively weak. This pose challenges in effectively implementing agreements and responding to crises.

"Anti-West" forum: SCO is increasingly seen as an "anti-West" forum and entry of Iran in SCO has made the situation difficult for India. The expected induction of Belarus next year will only strengthen this image of the SCO.

What should be the future course of action?

Improving Connectivity with Central Asia: The lack of adequate connectivity with the Central Asia has been a major constraint for India. Iran's induction into SCO will help India build its connectivity strategy through Iran's Chabahar port, where it operates a terminal and through the International North South Transport Corridor that goes through Iran and Central Asia to Russia. This will also help India circumvent land-based trade through Pakistan.





Counterterrorism and Security Cooperation: India should actively engage with SCO members to address shared security concerns, particularly in the areas of counterterrorism, countering extremism, and ensuring regional stability.

Protecting interests: India must protect its own interests amidst a rapidly changing regional power distribution in China's favour by actively participating in SCO to shape the organization's agenda and contribute to its decision-making processes.

Sources: Indian Express (<u>Article 1</u> and <u>Article 2</u>), The Hindu (<u>Article 1</u> and <u>Article 2</u>), <u>Business</u>
<u>Standard</u>, <u>Outlook</u>

Internationalisation of the rupee: Explained, pointwise

Introduction

India is aiming to make the rupee a global currency. Recently, the Reserve Bank of India (RBI) released the report of Inter-Departmental Group (IDG) on Internationalisation of Indian Rupee, which has made several recommendations for internationalizing the rupee. The group was constituted by the RBI to review the current position of the rupee as an international currency and to frame a roadmap for internationalisation of the rupee. The recommendations are significant, considering the economic sanctions imposed by the US on Russia for invading Ukraine and the growing demand for dedollarization. Given Indian economy's status as one of the fastest-growing large economies and its ability to withstand challenges, the rupee has the potential to become an internationalized currency.

What is currency internationalisation?

Currency internationalization refers to the use of a country's currency outside its borders for transactions involving residents and non-residents.

An international currency performs all three functions of money. As a unit of account, it is used to **invoice foreign trade** and **denominate international financial instruments** by private actors and to express **exchange rate relationships** by government.

As a medium of exchange, it is used by private actors to settle international economic transactions or by governments for exchange market intervention and balance of payments (BoP) financing.

As a store of value, it acts as a reserve currency and at a private level, it is held as capital assets.

Internationalisation of the rupee involves promoting the rupee for **import and export trade** and then other **current account transactions** followed by its use in **capital account transactions**.

Currently, the US dollar, the Euro, the Japanese yen and the British pound are the leading reserve currencies in the world.

China's efforts to make its currency renminbi has met with only limited success so far.

What is the rationale for internationalisation of the rupee?

Increased linkages: Internationalisation of the currency is **closely interlinked with the nation's economic progress**. Economic growth and development over the past few decades have

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led to a greater integration of the Indian economy with the global economy in terms of trade and capital flows. India's foreign exchange reserves have grown from USD 290.5 billion in August 2012 to USD 560.4 billion in August 2022. During this period, India's Foreign Direct Investment (FDI) has increased from 46.6 billion dollars to 84.8 billion dollars; imports have increased from 489.3 billion dollars to 612.6 billion dollars, and exports have grown from 306.0 billion dollars to 421.9 billion dollars. Therefore, the rupee has the potential to become an internationalized currency.

Declining share of the dollar: The international monetary and financial system has moved towards being multipolar. Various bilateral and regional economic cooperation agreements have emerged. The share of the dollar in foreign exchange reserves of countries is steadily **declining.** Other currencies are increasingly used in trade invoicing and settlement.

Geopolitical: In the wake of the sanctions imposed on Russia, many countries have become cautious of the potential costs if they are subjected to similar sanctions by the Western governments. China, Russia and a few other countries have become more vocal in questioning the US dollar-dominated global currency system.

What are the recommendations of RBI panel?

Short term recommendations

- 4. Designing a template and adopting a **standardised approach** for examining the proposals on bilateral and multilateral trade arrangements for invoicing, settlement and payment in the rupee and local currencies.
- 5. Making efforts to enable rupee as an additional settlement currency in existing multilateral mechanisms such as ACU.
- 6. Encouraging opening of rupee accounts for non-residents both in India and outside India.
- 7. Integrating Indian payment systems with other countries for cross-border transactions.
- 8. Recalibrating the foreign portfolio investor (FPI) regime and rationalizing/harmonizing the extant Know Your Customer (KYC) guidelines.

Medium term recommendations

- 9. A review of taxes on **Masala bonds**.
- 10. International use of Real Time Gross Settlement (RTGS) for cross border trade transactions and inclusion of rupee as a direct settlement currency in the Continuous Linked Settlement (CLS) system.
- 11. Examination of taxation issues in financial markets to harmonise tax regimes of India and other financial centres.

Long term recommendation

1. Efforts should be made for inclusion of the rupee in IMF's (International Monetary Fund) **SDR** (special drawing rights) basket.

What are the benefits?

For private sector

The benefits of currency internationalisation accrue largely to a country's private sector.





Firstly, the internationalisation of currency limits the exchange rate risks for local exporters and importers. It is because domestic firms may be able to raise invoices and settle their exports/imports in their local currency. It shifts exchange rate risk to their foreign counterparts or customers.

Secondly, it permits domestic firms and financial institutions to access international financial markets without assuming exchange rate risk.

Thirdly, the internationalisation of domestic currency will offer **new profit opportunities** for domestic financial institutions to grow in the global financial market.

Lastly, it will reduce the cost of doing business. It will motivate the existing exporters to increase their exports and investors to invest more in the exporting businesses. New players will find it attractive to enter the exports market. Overall, it will have a positive impact on economic growth and atmanirbhar Bharat program of India.

For government

First, currency internationalization allows a country's government to finance its budget deficit by issuing domestic currency debt in international markets rather than issuing foreign currency instruments.

Second, it also allows a government to finance part of its Current Account Deficit (CAD) without using its official reserves. The current account deficit may also be financed by private capital flows from abroad, especially from the banking system, as financing in domestic currency becomes integrated globally.

Third, the internationalisation of a currency reduces the requirement for the authorities to maintain large foreign exchange reserves in foreign currencies to manage external vulnerabilities.

Fourth, it leads in lowering the impact of sudden stops and reversals of capital flows and enhances the ability to repay external sovereign debt.

As the international use of the rupee becomes significant, the bargaining power of Indian businesses would improve, adding weight to the Indian economy and enhancing India's global stature and respect.

What are the macroeconomic risks?

Internationalisation of a currency may result in a potential increase in volatility of its exchange rate in the initial stages. This would have monetary policy implications as the obligation of a country to supply its currency to meet the global demand may come in conflict with its domestic monetary policies, popularly known as the **Triffin dilemma**.

Also, it may increase the impact of an external shock due to the free flow of funds into and out of the country and from one currency to another.

Thus, it would make the conduct of monetary policy more complex.

What are the challenges?

International demand for the rupee is very low. The daily average share for the rupee in the global foreign exchange market is about 1.6%,





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The rupee is **not fully convertible** in the capital account and India's share of global exports of goods is just about 2%. This reduces the necessity for other countries to hold rupees.

What are the initiatives taken?

Indo-Nepal Remittance Facility Scheme: This Scheme was launched by the RBI in May 2008 as an option for cross-border remittances from India to Nepal. The Scheme leverages the NEFT ecosystem.

Bilateral Swap Arrangements (BSA): India currently has a BSA with Japan as a line of support in case of any balance of payments issue. Under the South Asian Association for Regional Cooperation (SAARC) swap agreement, the requesting central bank can make withdrawals in dollar, Euro and also in rupee.

Developments in the GIFT City: Gujarat International Finance Tec-City (GIFT City) was set up as India's first International Financial Service Centre (IFSC). It has the potential to develop as a international financial centre for Rupee products and more specifically Rupee derivatives, given the fact that the Rupee derivatives are among the most traded contracts globally.

Indo-Iran Agreement: An agreement was signed between India and Iran for undertaking eligible trade transactions using rupee.

Asian Clearing Union (ACU): RBI had proposed the use of local currencies of members for settlement of ACU transactions and inclusion of rupee as one of the settlement currencies under the ACU.

Rupee as a Designated Foreign Currency in Sri Lanka: This have paved the way for rupeebased bilateral trade between Sri Lanka and India.

Use of Indian Payment Infrastructure: RBI making efforts to increase the global outreach of the UPI system to facilitate cross-border transactions. Various other initiatives have also been undertaken to facilitate cross-border payments, especially personal remittances like the Money Transfer Service Scheme (MTSS).

Other initiatives: RBI has enabled external commercial borrowings in rupees. The recent Foreign Trade Policy (FTP) 2023, proposes invoicing, payment, and settlement of trade in Indian rupees. RBI has permitted rupee settlement of external trade through Special Rupee Vostro Accounts (SRVAs). A total of 18 countries have been allowed to open SRVAs. (A vostro account is held by a bank on behalf of a bank in another country).

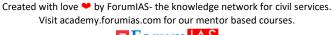
What should be the future course of action?

The RBI should pursue a deeper and more liquid rupee bond market to enable foreign investors and Indian trade partners to have more investment options in rupees.

Indian exporters and importers should be encouraged to invoice their transactions in rupee. For this, the trade settlement formalities for rupee import/export transactions should be optimised.

Additional currency swap agreements (as with Sri Lanka) would further allow India to settle trade and investment transactions in rupees.

Tax incentives must be given to foreign businesses to utilise the rupee in operations in India.





Efforts must be made to make the rupee an **official currency in international organisations**, thereby giving it a higher profile and acceptability.

The **Tarapore Committees**' (in 1997 and 2006) recommendations must be pursued including a push to reduce fiscal deficits lower than 3.5%, a reduction in gross inflation rate to 3%-5%, and a reduction in gross banking non-performing assets to less than 5%.

Gradually, the rupee must be made **more freely convertible.** This would allow foreign investors to easily buy and sell the rupee, enhancing its liquidity and making it more attractive.

Sources: Indian Express, The Hindu, Livemint, Business Standard, RBI report.

Dark Patterns: Explained, pointwise

Introduction

Recently, The Ministry of Consumer Affairs, Food and Public Distribution has asked e-commerce companies to not use dark patterns on their platforms. Amid a rise in online shopping and an increase in the number of internet users, which is expected to touch 900 million by 2025, the dark pattern has caught the attention of the government. The digital space has become an integral part of the consumer's life, significantly influencing how they consume information, goods and services. With e-commerce and social commerce growing at very high-speed online consumer safety has become important.

What are dark patterns?

Harry Brignull coined the term 'dark pattern' in 2010 to describe deceptive strategies used by websites or apps to deceive users.

Dark patterns are also called deceptive patterns. These patterns are used for **intentionally manipulating or misleading users** to make certain choices or perform specific actions that may not be in their best interest.

These **unethical strategies** are designed to exploit certain **cognitive and behavioral biases** to persuade users into purchasing goods and services they would typically not pay for.

They **downgrade the user experience** to benefit the company implementing it.

What are the different types of dark patterns identified by Consumer Affairs Ministry?

The Consumer Affairs Ministry has identified nine types of dark patterns.

False Urgency: This tactic creates a sense of urgency or scarcity to pressure consumers into making a purchase or taking an action.

Basket Sneaking: Websites or apps use dark patterns to add additional products or services to the shopping cart without user consent.

Subscription Traps: This tactic makes it easy for consumers to sign up for a service but difficult for them to cancel it, often by hiding the cancellation option or requiring multiple steps.

Confirm Shaming: It involves guilt as a way to make consumers obey. It criticizes or attack consumers for not conforming to a particular belief or viewpoint.



Forced Action: This involves forcing consumers into taking an action they may not want to take, such as signing up for a service to access content.

Nagging: It refers to persistent, repetitive and annoyingly constant criticism, complaints, requests for action.

Interface Interference: This tactic involves making it difficult for consumers to take certain actions, such as canceling a subscription or deleting an account.

Bait and Switch: This involves advertising one product or service but delivering another, often of lower quality.

Hidden Costs: This tactic involves hiding additional costs from consumers until they are already committed to making a purchase.

Disguised Ads: Disguised ads are advertisements that are designed to look like other types of content, such as news articles or user-generated content.

What are some examples of companies using dark patterns?

Instagram allows users to deactivate their account through the app, but they must visit the website if they want to delete the account.

Many websites and apps trick their users into allowing them to track their location or gather their data. For example, Instagram uses terms like 'activity' and 'personalised' instead of 'tracking' and 'targeting'.

Certain dating apps require the user to type the word 'delete' if they want to delete their account permanently. The pop-up showing 'yes' and 'no' options has been removed. In short, they have made it difficult to delete accounts by the user.

Why should dark patterns be cause for concern?

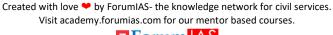
Harms to consumer autonomy: Dark patterns compromise consumers' personal autonomy because they lead consumers to make choices they may not otherwise have made. Dark patterns often provide the illusion of control rather than actual control to consumer.

Financial loss: Dark patterns such as basket sneaking, hidden costs, drip pricing or scarcity cues are aimed at getting consumers to buy something that they may not have needed. It leads to spending more than users may have otherwise intended to spend.

Privacy harms: Privacy-intrusive dark patterns like nagging and confirm shaming force consumers into accepting privacy-intrusive settings through repetitive requests and criticism for not conforming. Consequently, individuals may unintentionally disclose more personal data than intended, potentially exposing themselves to additional risks.

Psychological harm and time loss: The dark patterns cause psychological harm like emotional distress, such as frustration, feelings of shame and being tricked. The cognitive burden of unnecessarily spending energy or attention leads to time loss. Frustration and cognitive burden might result from repeatedly prompting the consumer to agree to certain settings (nagging).

Weaker or distorted competition: Firms employing dark patterns may obtain a competitive advantage over firms that do not employ dark patterns, without offering better quality goods or





services. For example, they may be able to get more sales (through hidden costs), personal data (through privacy-intrusive defaults) or attention time (through addictive practices).

Trust erosion: Much of consumers' behaviour towards online businesses is based on trust. Dark patterns may instill a sense of distrust in online businesses that employ them. Over time, this erosion of trust may lead consumers to lose faith in markets.

What are the challenges in regulating dark patterns?

Presently, there are **no specific regulations** in place in most nations against dark patterns. **Consumer protection laws** and **data protection laws** are used to regulate dark patterns in various jurisdictions.

But the application of these laws is difficult in the **absence of a body of case law** (Dark patterns are a relatively recent phenomenon). The enforcement of these laws thus far has focused on a **limited number of commonly recognised dark patterns**. This indicates **potential gaps** in existing laws, available evidence, or enforcement capabilities.

Notably, certain dark patterns that lack clear deception may not fall within the scope of current general prohibitions on deceptive commercial practices.

Determining the legality of dark patterns can be a complex issue since it can be challenging to differentiate between manipulation and fraudulent intent (which is illegal). The question therefore remains over when a dark pattern will cross the threshold from controversial marketing technique to illegal practice.

What are the global actions taken against dark patterns?

Recently, regulators in jurisdictions such as the European Union, USA and UK have acted against dark patterns.

The **Competition and Markets Authority (CMA)** of the U.K. has listed different pressure-selling techniques that it believes violate consumer protection laws and for which actions will be taken.

In 2022, the **European Data Protection Board** released guidelines that gave designers and users of social media platforms practical guidance on how to spot and avoid dark patterns that are in violation of General Data Protection Regulation (GDPR) laws.

In 2021, California passed amendments to the **California Consumer Privacy Act,** banning dark patterns that made it difficult for consumers to exercise legal rights, like opting out of the sale of their data.

In 2019, the UK issued a set of guidelines which prohibited companies from using dark patterns which influence underage users to have low privacy settings. These guidelines were later made enforceable under its Data Protection Act, 2018.

How do India is addressing dark patterns?

The Department of Consumer Affairs have written to major Indian online marketplaces warning them against engaging in unfair trade practice by implementing dark patterns in their user interfaces. Earlier, it held consultations with stakeholders on this issue.





The government's position is that deceptive patterns that manipulate consumer choice and impede their right to be well informed, constitute **unfair practices** that are **prohibited under the Consumer Protection Act 2019.**

The department has started classifying complaints received on the **National Consumer Helpline** to compile information on dark patterns, which can be used by the Central Consumer Protection Authority to initiate action under the **Consumer Protection Act, 2019.**

The government has also set up a **task force** to prepare guidelines to protect consumers against dark patterns.

The **Advertising Standards Council of India (ASCI)**, an industry body, has come up with guidelines against the use of dark patterns.

What should be done?

Empowering users: Users must be educated on cognitive biases and the various methods utilized to influence choices. This will enhance their ability to avoid being deceived. They should also be equipped with tools and resources that allow them to make informed choices. This could include browser extensions, apps or plugins that detect and block dark patterns or platforms providing clearer and more accessible settings and privacy options. Users should also be encouraged to report cases of dark patterns they encounter, and the platforms should establish clear channels for users to provide feedback and report manipulative practices.

Industry self-regulation: Online platforms can establish ethical design guidelines that discourage the use of dark patterns. Encouraging responsible design practices and conducting independent audits can help identify and rectify dark pattern issues.

Robust legal mechanism: The government should set up strong legal mechanisms to specifically address dark patterns. New rules aimed against deceptive design practices should be introduced along with updated consumer protection laws and data protection legislation.

Sources: Indian Express, The Hindu, PIB (Press release 1 and Press release 2), OECD

Open Market Sale Scheme: Significance and recent changes

Introduction

The Open Market Sale Scheme (OMSS) has been in the news recently. Apart from the distribution carried out under the National Food Security Act (NFSA), several states, including those governed by Opposition parties, have their own welfare schemes to provide subsidized or free grains to targeted segments of the population. For this, states rely on OMSS bulk sales for additional food grain procurement. However, the sudden changes to the scheme announced by the centre have drawn criticism from Opposition-ruled States such as Karnataka and Tamil Nadu.

What is OMSS and what are the objectives?

Open Market Sale Scheme (Domestic) [OMSS (D)] refers to selling of food grains by Food Corporation of India (FCI) at a predetermined prices in the open market from time to time.

Through the OMSS, the FCI sells excess food grains, particularly wheat and rice from the central pool, in the open market.



This is done through **e-auctions**, allowing traders, bulk consumers, and retail chains, among others, to purchase these surplus stocks.

Usually, states are also allowed to procure food grains through the OMSS without participating in the auctions, for their needs beyond what they get from the central pool to distribute to NFSA beneficiaries.

FCI utilizes the OMSS (D) to sell surplus stocks from the Central Pool at predetermined prices to achieve following objectives:

- To enhance the supply of food grains during the lean season and deficit regions
- To moderate the open market prices
- To offload the excess stocks
- To reduce the carrying cost of food grains

What are the advantages of OMSS?

Price stabilization: The OMSS is essentially a measure to curb food grain inflation. For example, earlier in 2023, the prices of Wheat declined by 19 percent in a period of 45 days due to FCI's OMSS (D).

Reducing wastage: Every year, more than 1500 metric tonnes (MT) of food grains get wasted in FCI godowns, due to lack of storage facilities and unscientific methods of storing food grains. The scheme helps to prevent the wastage of excess food grains by offloading excess stocks in the open market.

Reduced carrying costs: A portion of the total food subsidy also goes towards meeting the carrying cost of the buffer stock as buffer subsidy. Timely OMSS reduces this cost by maintaining optimal buffer stocks.

What are the changes made to the OMSS?

The central government has made two major changes in the OMSS.

Firstly, the government has **restricted the quantity** that a single bidder can purchase in a single bid under the OMSS. Previously, buyers were allowed to buy a maximum quantity of 3,000 metric tonnes (MT) per bid. Now, it will range from 10-100 metric tonnes (MT).

Secondly, it has **discontinued the sale** of rice and wheat from the central pool under the OMSS to State governments.

What are the reasons for the changes?

For reducing bidding quantities:

The bidding quantities have been reduced to accommodate more small and marginal buyers and to ensure wider reach of the scheme.

The government has argued that it will allow the supplies to reach the general public immediately.

It is argued that by permitting smaller bids from small buyers, it will **foster competition** and break the monopolistic hold of bulk buyers.

Consequently, this is expected to **control retail prices** by encouraging more competitive bidding and ensuring a **fairer market environment**.



For discontinuation of OMMS grains to the states:

The central government has given three reasons for the discontinuation of OMSS for State governments:

One, it claims that the OMSS can be more successful in curbing the inflationary trend in food grains if the grain is released through the market rather than through States/the PDS.

Two, the government argued that it needs to maintain adequate food grain stock in the central pool as it expects lower procurement this year. This is because the output of some crops has been hit due to adverse weather events like untimely rains and high temperatures.

Three, the central government has cited its obligation towards consumers who are not covered by the NFSA but are affected by fluctuations in retail prices of food grains. It argued that while the state governments will allocate food grains to the NFSA beneficiaries, as well as for beneficiaries of state-specific schemes, the interest of general consumers has been ignored.

What are the critical arguments against the government's actions?

Firstly, the critics argue that there is no difference in releasing the grain through the market or through the states. Price stabilization can happen in both cases. Also, there is concern that private traders who get OMSS rice at fixed prices will not pass on the benefits to consumers.

Secondly, the current buffer stock position is more than adequate. On average, for the past five years, stocks have been generally twice as high as the buffer stock norms.

Thirdly, if States are forced to go to the open market, rice and wheat prices are bound to go up. This will defeat the Centre's objective behind restrictions on quantity sold through OMSS.

What should be done?

Expansion and diversification of the PDS: The Centre and the States should focus more on making the Public Distribution System foolproof than on expanding existing schemes. The centre should update PDS coverage by using the projected population for 2023. At the all-India level, the under-coverage results in the exclusion of an estimated 113 million people. Besides inadequate coverage, in most States, the PDS does not provide nutritious food items such as pulses and oil.

Seek alternative sources: When it comes to implementing State schemes in the food sector, the States must identify their own sources, and in a cost-effective manner. For example, Odisha and Chhattisgarh procure food grains locally to add on to PDS coverage.

Cooperative federalism: The centre should grant more freedom to state governments to design their own food security system because the state government machinery knows better about the requirement of their local population.

Sources: The Hindu (Article 1, Article 2 and Article 3) and Indian Express.



[Yojana July 2023 Summary] Sahakar se Samridhi: From Planning to Realisation – Explained, pointwise

Introduction

For harnessing cooperation for prosperity and progress, Prime Minister Narendra Modi established the Ministry of Cooperation (MoC) as a separate administrative body in July 2021, with a call for "Sahakar se Samriddhi" (prosperity through cooperation). The ministry adopts a Whole-of-Government approach to effectively implement government initiatives. During the Amrit Kaal (2023-2047), India has the opportunity to emerge as one of the world's economic leaders by harnessing the power of cooperation.

What is the significance of cooperatives?

Cooperation, represented by the term "Sahakarya" means working together and **signifies team trusteeship**.

By adopting a cooperation-led economic model, India can foster **balanced regional development** and inspire **local entrepreneurs to have a global perspective**.

Cooperation serves as a powerful tool to attain **economic freedom**, **self-reliance**, **and social justice**.

Cooperatives, as community-level business organizations, have the potential to **generate and absorb social capital**.

Brief history of cooperatives

Throughout India's history, cooperation has been **deeply rooted** in its way of life, reflecting the core principle of **Vasudhaiva Kutumbakam**, which emphasizes the concept of the world as one family.

The cooperative movement in India initially emerged as a **relief-oriented effort** with the promulgation of the **Cooperative Credit Societies Act in 1904**, later amended in 1912. Its primary focus was on **mobilizing rural credit** and **providing financial assistance to farmers**.

However, with the recommendations by the Maclagan Committee on Cooperation in India (1914-15), the cooperative movement transformed from a relief-oriented approach to a more comprehensive agenda of enhancing socio-economic welfare.

In post-independent India, cooperatives were acknowledged as essential contributors to the country's development and progress and were duly included in the perspective plans of the Government of India.

Today, India is home to 8.54 lakh cooperatives of which 80% are non-credit cooperatives, and 20% are credit cooperatives. Today, cooperatives have a presence in 98% of villages, with 29 crore members.

What are the cooperative principles?

Cooperatives are **people-centric** organizations as they operate with a focus on people rather than capital. They promote **collective cohesiveness**, **community business sense**, and **stronger social bonds** by adhering to the **seven golden principles of cooperation**.





PRINCIPLES OF COOPERATION

VOLUNTARY AND OPEN MEMBERSHIP

Voluntary membership and open to all without discrimination.

MEMBER ECONOMIC PARTICIPATION

Members contribute equitably to and control and utilise the capital of their cooperative to support their economic activities.

AUTONOMY AND INDEPENDENCE

Autonomous business entities which believe in self-help with democratic controls.



DEMOCRATIC MEMBER CONTROL

Member-driven and member controlled democratic units. Members actively participate in decision making processes. Members have equal voting rights [one member - one vote].

EDUCATION, TRAINING AND INFORMATION

Provision of member education and training, training for elected representatives, managers and employees of cooperatives.

CONCERN FOR COMMUNITY

Ensure sustainable community development by adopting right policy measures and meeting issues of community development.

COOPERATION AMONG

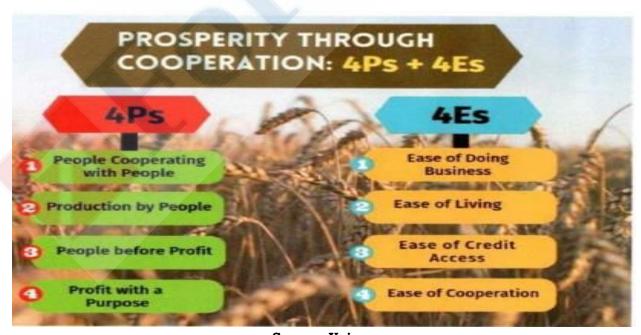
Strengthening the cooperative movement by working together.

(Source: International Cooperative Alliance [Available at https://www.ica.coop/en/cooperatives/cooperative-identity])

Source: Yojana

Cooperation holds immense potential to ensure comprehensive economic growth. For example, Sardar Vallabh Bhai Patel, through Tribhuvandas Patel, sowed the seeds of **Anand Milk Union Limited (Amul).** It has now become a **global diary brand**.

Cooperatives' full potential as a business model for achieving inclusive development is yet to be fully harnessed. Addressing hurdles and challenges through appropriate policies and effective government interventions is necessary to unleash the complete potential of cooperatives. This can be done through **4 Ps and 4 Es framework** for attaining Sahakar se Samriddhi.



Source: Yojana

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Commitment to cooperative movement

The government has decided to plan, prioritise and explore new emerging areas for cooperatives through the **'SQUAD' framework**:

- S Self-reliance (Atmanirbhar)
- Q Quality Performance
- U Unshakable Cooperative Movement
- A Accountability in Governance
- D Development through Modern Technology

To establish a **uniform legal and operational framework** for cooperative development, the Union Government collaborating with the States/UTs. To achieve this, the government is formulating an all-inclusive **National Cooperation Policy** through a committee (Chairman: Suresh Prabhu).

How model bye-laws will make PACS vibrant?

Model bye-laws for Primary Agricultural Credit Societies (PACS) have been formulated and shared with the States/UTs for their consideration and adoption.

These model bye-laws aim to **establish a dynamic and robust cooperative culture** at the grassroots level, fostering the development of multi-purpose and multi-dimensional cooperatives.

So far, **22 States/UTs have adopted the model bye-laws**. The model byelaws have the potential to enhance operational efficiency, transparency, and responsibility towards collective community development.

What are the other measures for PACS?

PACS and Large Area Multi-Purpose Societies (LAMPS) will provide more than 300 e-services to citizens as **common service centers (CSC)**.

PACS will be **integrated with Farmer Producer Organisations (FPOs)** under the existing FPOs Scheme of the Ministry of Agriculture and Farmers Welfare. This would help PACS extend their scope of activities.

The PACS are now eligible to avail licenses for Petrol/ Diesel dealerships and LPG distributorships.

Developing National Database

MoC is developing a **cooperative database** which will store authentic and updated data on cooperatives of all sectors.

It will help stakeholders carry out data analytics, find gaps and support policy formulation.

What should be done to consolidate cooperative credit?

To strengthen the Long-Term (LT) cooperative credit structure, MoC is working on a project for the computerisation of Agricultural and Rural Development Banks (ARDBs).





Computerisation of PCARDBs and State Cooperative Agriculture and Rural Development Banks (SCARDBs) will **remove issues**, **inadequacies**, **and inefficiencies in their operation and profitability**.

What steps are being taken for improving cooperative education and training?

The government is creating a **national cooperative university** for a comprehensive, integrated and standardised structure for cooperative teaching and training.

The university will also meet the demand for capacity building of the existing workforce while ensuring a local, adequate, and quality supply of trained workforce.

What should be the future course of action?

To realise the potential of cooperatives, primary cooperatives at the community-level must be empowered and revitalized as a priority.

Some issues require immediate attention. They are – (a) reduction in regional and sectoral imbalances in cooperative spread; (b) meeting regulatory complexities; (C) improving governance, leadership and operational systems; (d) ensuring professional management; (e) initiating structural reform measures, etc.

There should be collective efforts to ensure a uniform and quick spread of cooperatives across States/UTs.

The vision of Sahakar se Samriddhi will be realised in its true sense if cooperatives adhere to the core philosophy of the cooperative-based model of socio-economic progress.

Semiconductor manufacturing in India: significance and challenges – Explained, pointwise

Introduction

Recently, two important events happened in the context of India's semiconductor programme. **First** was the **withdrawal of Foxconn** from the \$19.5 billion chip-making joint venture with Vedanta. While Foxconn has given no reason, it is a general belief that the inability of Vedanta to pay for acquiring the necessary technology for chipmaking played a key role in this exit. The second event was **Micron's recent announcement to invest \$825 million** in a chip testing and packaging facility in India. These developments showcase the opportunities and challenges facing India's semiconductor programme.

What are the other developments in semiconductor industry of India?

Both Foxconn and Vedanta can set up a fabrication facility independently.

Also, ISMC, backed by Abu Dhabi-based Next Orbit and Israel's Tower Semiconductor, has submitted a proposal to set up fabrication facility in Karnataka. But it has asked the government not to consider its proposal due to a pending merger between Intel and Tower Semiconductor.

The other proposal is by Singapore-based IGSS Venture to set up fabrication facility in Tamil Nadu, is on hold.





Why is the government encouraging semiconductor manufacturing in India?

India relies heavily on imports for its domestic requirements of semiconductors. This makes the country vulnerable to coercions and supply chain disruptions- especially as China dominates the global semiconductor space. Setting up domestic manufacturing units would help to insulate India against future supply disruptions and achieve self-reliance.

The inclusion of embedded instructions in semiconductor chips presents a potential security risk, as they can contain malware that is challenging to identify. Given the extensive utilization of semiconductor chips in vital sectors like defense and telecommunications, domestic chip manufacturing becomes strategically significant, offering an enhanced level of security.

Why is there a global race to diversify semiconductor supply chains?

As of now, chip manufacturing is concentrated in a few countries. For example, Taiwan produces over 60% of the world's semiconductors, and along with South Korea makes 100% of the most advanced chips (below 10 nanometers).

Also, the semiconductor industry experienced significant supply shortages during the **pandemic** due to disruptions in China's production.

Additionally, the ongoing Russia-Ukraine conflict resulted in another round of shortages, as Ukraine plays a critical role as a key supplier of neon, an essential input in semiconductor manufacturing.

The European Union and the United States has refused to sell advanced manufacturing equipment to China. In retaliation, China imposed export controls on crucial inputs such as gallium and germanium. This may lead to another potential round of shortages in the semiconductor industry.

Therefore, many countries are looking to diversify their supply chain.

What are the government initiatives for making India a semiconductor manufacturing hub?

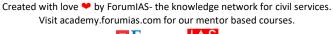
The government has approved the **Semicon India programme** with a total outlay of **INR 76,000** crore for the development of semiconductor and display manufacturing ecosystem in the country.

The programme has further been modified due to two reasons: a) the aggressive incentives offered by countries that already have established a semiconductor ecosystem b) limited number of companies owning the advanced technologies.

The modified programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem. This will pave the way for India's growing presence in the global electronics value chains.

Following schemes have also been introduced under the program:

Modified Scheme for setting up of Semiconductor Fabs in India' for attracting large **investments** for setting up semiconductor wafer fabrication facilities in the country. The Scheme extends a fiscal support of 50% of the project cost on an equal footing basis for setting up of Silicon complementary metal-oxide semiconductor (CMOS) based Semiconductor fabrication in India.





Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab / Discrete Semiconductors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India' extends a fiscal support of 50% of the Capital Expenditure on an equal footing basis for setting up of production facilities in India. It covers production of semiconductor types other than CMOS based semiconductors and includes assembly, testing and packaging facilities.

'Semicon India Future Design: Design Linked Incentive (DLI) Scheme' offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design. The scheme provides "Product Design Linked Incentive" and "Deployment Linked Incentive".

What are the opportunities of setting up semiconductor manufacturing facilities in India?

A large portion of semiconductor design engineers globally are either Indian or Indian Origin. India is already an **R&D** hub for the semiconductor industry with nearly 2,000 chips being designed per year and more than 20,000 engineers working in various aspects of chip design and verification. These factors are expected to foster the growth of semiconductor manufacturing.

There is a **huge domestic market** for semiconductors which could exceed \$60 billion by 2026. Growth of the semiconductor industry in India is expected to be driven by the increasing semiconductor content across consumer electronics and automobiles including EVs and, increasing demand for smartphones. The number of smartphones in India is projected to reach a billion by 2026.

Many companies may still be interested in setting up semiconductor fab in India due to the **government's \$10 billion incentive package** for semiconductor manufacturing.

Moreover, many global players are supporting India's efforts in this area because they are looking to diversify their semiconductor supply chains. As the **US** has restricted its firms and its allies from assisting the Chinese production of 16 nanometers or smaller chips, advanced smartphones could not be produced in China anymore. This provides opportunities for India.

What are the challenges for India?

Semiconductors manufacturing is a very **complex and technology-intensive** sector with huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology. These require significant and sustained investments. Also, chip manufacturers require a huge scale to be cost effective. This means **large investments**, **often in the \$20 billion range**.

Additionally, developing an **ecosystem for chip manufacturing in a greenfield location** is a major challenge. It requires suitable infrastructure like availability of uninterrupted power, huge quantities of clean water and requires setting up expensive water purification facilities. Hundreds of chemicals and gases are also required for chip fabrication.

Semiconductors have a **small freight-to-price ratio** and a **zero-custom duty** regime under the **Information Technology Agreement, 1996.** Therefore, the location of raw material or sales market is meaningless due to low transportation cost. This facilitates concentration of production in a few countries where ecosystem for semiconductor manufacturing is already well established.

High-end chip manufacturing requires **sophisticated technology**, which very few corporations possess. Moreover, since such chips are considered **dual-use technology** (can be used for



civilian and military purposes), countries can place curbs on their export as the US and the Netherlands have done. Recently, the Netherlands restricted export of advanced semiconductor equipment.

What are the different stages of chip making and how can India succeed at each stage?

Chip design: It accounts for 15-20% of supply chain value. The US is the leader, followed by Japan, China, and the UK. Based on its electronics, computer-aided design and simulation design expertise, India can enter this space in **collaboration with lead firms** like Mentor Graphics, Cadence Design etc.

Chip fabrication: It accounts for 35-40% of supply chain value. Chip making is a complex and multi-step process involving etching, doping, and assembling silicon wafers. India **must not manufacture low nanometer (nm) chips.** This is because the investment required to produce them may exceed \$20 billion with no guarantee of outcome. Also, the US has committed over \$50 billion in subsidies for local fabricators producing high-end chips, which will result in surplus capacity in low nm chip manufacturing. Therefore, India should **focus on low-end fabs (more than 100 nm chips)** that account for most volume and require lesser investment.

Assembly testing and packaging: The segment accounts for 15-20% of supply chain value. China, Taiwan, South Korea, and Singapore are key competitors. India can offer better prices due to its already existing cheaper expertise.

Distribution: This segment accounts for 5-10% of supply chain value. The US, Canada, China, and Taiwan are key players. Micron collaboration may help India to participate in this segment as it is the **logical next step to the ATP segment.**

End use: This accounts for 15-20% of supply chain value. India, a large manufacturer of smartphones, automobiles, laptops etc., can **incentivize local manufacturers** to use chips assembled in India. This is a ready and waiting segment.

What should be done?

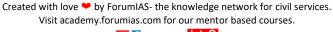
India should persevere on this path despite the challenges. It took Taiwan decades to become a semiconductor giant, starting with the transfer of American technology in the 1970s and gradually building its expertise and infrastructure.

The Indian government should **address domestic gaps** in nurturing a semiconductor ecosystem to attract investors and technology providers. It should **focus on assembly, packaging, and testing** of semiconductors to develop the necessary expertise and systems for chip manufacturing. India should also **prioritize the development of its expertise in chip design**.

The chip industry is highly competitive, and companies are hesitant to share their intellectual properties (IPs) with new entrants. Hence, partnering with an established technology partner that holds the necessary IPs is necessary. Incentives should be specifically directed towards fostering collaborations with established value chain partners.

India should remain focused on semiconductor manufacturing due to its strategic importance, which will significantly impact **future geoeconomics and geopolitics**. But it may have to reset the timelines and review its policy to attract another round of proposals.

Sources: Times of India (Article 1 and Article 2) and Business Standard





Extreme rainfall events and urban floods: Explained, pointwise

Introduction

Recently, heavy rainfall in parts of North India led to extensive flooding, impacting major cities such as Delhi, Gurugram, Patiala, Ludhiana and Jalandhar. Urban floods have now become a widespread occurrence across the nation, affecting numerous mega and metropolitan cities in India on an almost annual basis. While climate change and global warming are often cited as major causes of urban floods, several other factors also contribute to the problem.

What caused the recent episode of heavy rainfall?

Recent weather conditions which triggered heavy rains in Northwest India and the Himalayas were like those which caused **2013 Uttarakhand floods**.

First, an **active monsoon** with strong winds in the lower atmosphere, brought moisture into the region from the Bay of Bengal or the Arabian Sea.

Second, a **large-scale atmospheric forcing** (a dynamic process that forces the air to rise) occurred. Outflows in the upper layers of the atmosphere moved **eastward through** mid-latitude troughs (Western Disturbance). These troughs can also direct the flow of moisture towards the Himalaya.

Third, **deep convection** was triggered by orographic uplift due to the steep terrain of the Himalaya.

Thus, an interaction between a western disturbance and active monsoon, combined with the topography of the Himalayas led to extremely heavy rainfall over Himachal Pradesh, Uttarakhand, Punjab and Haryana

Excess rainfall over Northwest India is also related with the **warm Arabian Sea** (warmed by about 1.5 degrees Celsius since January) which has infused excess moisture over North-Northwest India

Why are extreme rainfall events increasing?

A study on the 2013 floods in Uttarakhand identified the Himalayan region is conducive to formation of deep, **intense convective clouds**. Instances of such deep convection have increased over time mainly due to **climate change**. Warmer temperatures lead to increased evaporation, which leads to more moisture in the atmosphere. This extra moisture leads to heavy rainfall when weather systems interact with the steep topography of the region.

Human influence is causing the Arctic to warm and sea ice to shrink. There is increasing evidence that **Arctic warming** impacts monsoon climate through mid-latitude circulation. Observations and models suggest that due to Arctic warming, the frequency of occurrence of deep mid-latitude troughs is likely to increase.

Due to climate change, hilly areas and surroundings like the Himalayan foothills or the Western Ghats are more vulnerable to heavy rains and landslides. Because of global warming, there's **extra moisture** in the atmosphere which is **lifted orographically** and comes down as heavy rains.



Changes in land use and land cover also appear to be reasons for the increase in extreme monsoon rainfall, especially its intensity.

The IPCC's scenarios for climate change indicate that these trends will continue. Multi-day flood events are projected to increase faster than single-day events in the future.

What are the other causes of recurrent urban flooding?

Urban planning: According to a NITI Aayog report titled 'Reforms in Urban Planning Capability in India', 65% of the urban settlements do not have any master plan. As a result, there are fragmented interventions, disorderly constructions and urban sprawl, all of which can worsen problems like urban flooding.

Urban governance: On the governance front, municipal administrations have disregarded unauthorized construction. They also failed to prevent encroachments, particularly on water bodies and allowed construction in low-lying areas without adequate mitigation measures. Failure to stop indiscriminate disposal of solid waste and illegal dumping of construction debris also adds to the problem.

Encroachment of water bodies: Water bodies such as wetlands, marshes, lakes, riverbeds and their floodplains act as natural rainwater sinks and buffers against floods. Their encroachment due to rapid and unplanned urbanisation has limited their ability to perform this vital function.

Deforestation in the catchment area: The catchment regions of rivers and their tributaries have seen uncontrolled deforestation and degradation of vegetation. This has increased soil erosion and siltation which has increased the load of sediments in riverbeds and reduced their water-carrying capacity. The discharge of waste into the rivers has added to this problem.

Storm water drains: In many urban localities, there is absence of storm water drains. At places where a storm water drainage network exists, it was planned several decades ago and thus inadequate to handle increasing instances of extreme rainfall. For example, Delhi's storm water drainage network can carry a maximum of 50 mm of rainfall in 24 hours but recently, the city recently saw rainfall of 153 mm in a day. Poor maintenance of existing storm water drains due to incompetent municipal administration leads to their clogging with mud and material which further compounds the problem.

What are the steps taken by the government?

The National Disaster Management Authority (NDMA) has issued the **National Guidelines on Urban Flood Disaster Management.** The guidelines are comprehensive and identify the institutional framework required for improving flood resilience through better flood disaster management.

A National Disaster Management Plan has been developed. The plan has a special section on urban flood disaster risk reduction.

A **standard operating procedure (SOP) for urban flooding** was also brought out by the Ministry of Housing and Urban Affairs. The SOP identified the objectives, mitigation strategies for urban flooding, nodal agencies for early warning, city-level action plans including the establishment of the emergency operations center and other related measures including reporting formats.



Also, the Ministry of Housing and Urban Affairs has released the **first dedicated stormwater drainage manual.** The manual has taken inspiration from established international codes of practice and has been modified to suit the local conditions.

The government has also launched schemes like Atal Mission for Rejuvenation and Urban Transformation (**AMRUT**), National Heritage City Development and Augmentation Yojana (**HRIDAY**) and **Smart Cities Mission** for capacity building of urban local bodies.

What should be done?

Resilient design in urban planning: This should involve restoring traditional water bodies, revitalizing lakes, building artificial lakes, and developing green infrastructure such as rain gardens. These measures will enhance permeability, create open spaces, and effectively manage stormwater runoff. Rainwater harvesting in parks and open spaces will act as sponges and reduce flooding.

Comprehensive stormwater drainage master plan: Cities should have separate stormwater and sewage drains. Master plans should be developed for all urban settlements keeping in mind the city's land use patterns and drainage infrastructure. Encroachment of stormwater drains should be stopped, and they should be solely used carrying excess rainwater.

Assess flood-carrying capacity of Indian cities and prepare urban flood risk database: This assessment would involve evaluating the ability of cities to manage flooding by examining the level of inundation during different intensities and durations of precipitation. This information would aid in fine-tuning forecasting models, allowing for timely issuance of early warnings and alerts based on specific regional thresholds.

Governance measures: There should be regulated real-estate growth with proper implementation of land use planning and zoning regulations. For example, areas prone to flash floods can be designated as non-residential or restricted areas.

Restoration of ecosystems: Ecosystems, such as forests and wetlands, should be protected and restored so that they can act as a natural buffer, absorbing rainfall and reducing runoff.

NDMA guidelines: The recommendations made by the NDMA guidelines should be implemented.

Sources: Indian Express, Times of India, Hindustan Times and Deccan Herald.

[Yojana July 2023 Summary] Strategic diversification of cooperatives and business competitiveness – Explained, pointwise

Introduction

The Indian cooperative movement started in the late 19th century and made significant progress until the 1970s. However, certain challenges such as accountability and governance issues, internal vested interests, lack of coordination, political interference, and limited diversification began to hinder its growth. As a result, policymakers and planners gradually shifted their focus away from cooperation-led socio-economic development. Recognizing the untapped potential of the cooperative sector, the Ministry of Cooperation was established with a renewed focus on promoting cooperative activities at the grassroots level. It is crucial to empower cooperatives to compete on an equal footing with corporate businesses. To ensure their continued relevance and





competitiveness, cooperatives at all levels, ranging from community-based to national, must pursue strategic business diversification.

Why must Cooperatives pursue strategic business diversification?

Cooperatives are a type of business organization, and like any other business, they need to expand their customer base and explore new markets to remain **commercially viable**.

Cooperatives need to diversify to ensure their long-term viability and growth. If a business doesn't diversify, it can become **stagnant**, which hinders its future growth.

Strategic diversification keeps businesses **relevant in the market** by forcing them to discover unmet customer needs and identify new, untapped markets. This enables businesses to generate **long-term profits and wealth.**

By strategically diversifying their operations, cooperatives can expand their customer base, decrease reliance on specific markets, and enhance their ability to **meet the needs of their members**.

How should cooperatives formulate diversification strategies?

In this context, strategy refers to the **stated visions and missions** of an organization. Strategic decisions are typically aligned with these visions and missions.

Cooperatives should **establish clear vision and mission statements**. These statements define the objectives and purposes for which the cooperatives are formed. This information can help develop tactics for diversification of their businesses.

Following five steps are involved in strategy formulation:

Firstly, a cooperative need to **determine the specific goals** it wants to achieve and identify the different purposes behind those goals. This clarity is crucial for outlining and accomplishing the objectives of the cooperative.

Secondly, it is necessary to acquire a **practical understanding of the ground situation**. This should be followed by an assessment of the internal and external environment, which involves conducting a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis.

Thirdly, **formulate a strategy** for achievement of goals through reflection, prioritization, and the development of decision-making options. Alternative options should then be assessed to determine the most suitable strategy.

Fourthly, the individual responsible for its execution should be entrusted with the available and allocated resources, personnel, and the necessary means to achieve the goals of the strategy. Their role is to implement the chosen course of action, mobilize resources, and identify tactics for successful strategy implementation.

Finally, it is important to **monitor the strategy** according to the agreed timeline or verification process. This involves conducting mid-term or periodic reviews to evaluate the success of the interventions and taking corrective actions if needed.



What are different strategic diversification strategies for cooperatives and examples of successful diversification by cooperatives?

Product Diversification: Cooperatives can diversify their product/service offerings to meet the needs of new markets or due to changes in customer tastes and preferences. For example, Amul - introduced ice creams and other frozen milk confectionaries in 1996, to diversify its businesses.

Geographic Diversification: Cooperatives expand their range of products to access new markets and cater to the needs of different customers. For instance, the Karnataka Milk Federation's milk brand called 'Nandini Goodlife' is now available in various states of India through prominent retailers.

Service Diversification: Cooperatives go beyond their primary products and services to provide new offerings that fulfill the needs of their members and customers. For instance, the **Anjarakandi Urban Cooperative Bank** in Kerala not only offers banking services but also sells coconut-based products like copra, coconut water, and coconut milk/oil.

Joint Ventures: Cooperatives have the option to establish Joint Ventures (JVs) by combining resources and expertise. For instance, the Indian Farmers Fertiliser Cooperative Limited (IFFCO), collaborated with Spain's Con gelados De Navarra to establish a food processing plant in Ludhiana, Punjab.

Vertical Integration: Cooperatives can vertically integrate their operations by incorporating upstream or downstream activities related to their current operations. For instance, Amreli District Cooperative Milk Producers Union entered into a joint venture with IFFCO Kisan Sanchar to supply high-quality animal feed.

Horizontal Integration: Cooperatives can horizontally integrate their operations by merging with or acquiring other cooperatives or companies within the same industry. This consolidation can lead to the realization of economies of scale, offering numerous advantages to their customers and stakeholders. For instance, Ceritrum Finance Ltd., a Non-Bank Finance Company (NBFC) based in Mumbai, acquired the Punjab and Maharashtra Cooperative Bank to access the markets served by the bank.

How can cooperatives multiply profits through business diversification? A Case study.

Sittilingi Organic Farmers Association (SOFA) was formed as a cooperative society in 2004 in the tribal village of Sittilingi in Dharmapuri district of Tamil Nadu.

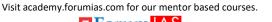
With over 500 members, each having a minimum landholding of 2.5 acres, the cooperative cultivates a variety of millets and cash crops including cotton, turmeric, sugarcane, groundnut, and vegetables.

SOFA ensures the financial and economic viability of its member farmers by advising them on crop production based on market demand and ensuring crop diversification among members.

The cooperative has diversified into food processing through the production and marketing of millet-based cookies, health-mixes, roasted powders, papads, and other products.

In addition, SOFA has expanded into ancillary agri-business activities, such as organic fertilizers, and operates plant nurseries and bio-compost units.

These endeavors collectively yield an **annual turnover of Rs 25 lakh** for the cooperative.





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What should be done?

To achieve a competitive advantage for cooperatives through strategic diversification, the Ministry of Cooperation must undertake a thorough analysis of their strengths, mission, and values.

Active involvement and support from members must be sought throughout the process of strategic management.

Cooperatives should capitalize on their distinctive strengths and capabilities and align diversification opportunities with their mission and values to achieve growth and gain a competitive advantage in new markets and product lines.

Chandrayaan-3: How its different and its significance - Explained, pointwise

Introduction

Recently, India's third moon mission, Chandrayaan-3, was successfully launched onboard a Launch Vehicle Mark-3 (LVM-3) rocket from the Satish Dhawan Space Centre in Sriharikota. This is India's second attempt at soft-landing on the lunar surface after the failure of previous attempt, Chandrayaan-2, in 2019. So far, only three countries, the U.S., Russia and China, have successfully soft-landed on the moon. Chandrayaan-3 seeks to study moonquakes, composition of lunar surface and atmosphere, understand Earth's life-like elements, how heat passes through the lunar surface and plasma environment on the Moon. The mission will demonstrate Indian Space Research Organization's (ISRO) ability of soft landing on lunar surface and roving on the lunar terrain. It is expected to be supportive to ISRO's future interplanetary missions.

Read More: What is Chandrayaan-3?

How does the Chandrayaan-3 compare with 2019's Chandrayaan-2 and why does it have a higher probability of success?

While the mission objectives remain the same, unlike Chandrayaan-2, which consisted of a lander, rover, and orbiter, Chandrayaan-3 will launch with **only a lander and a rover**, utilizing the existing orbiter from Chandrayaan-2 for communication and terrain mapping purposes.

ISRO adopted a "failure-based design" for Chandrayaan-3 instead of a "success-based design" used of Chandrayaan-2. It means that ISRO's focus during the Chandrayaan-3 mission was on identifying potential failure points and implementing safeguards to ensure a successful landing.

Learning from its Chandrayaan-2 failure, ISRO has implemented several improvements in Chandrayaan-3 to ensure success this time. Some of them are as following:

Landing area: The landing area has been expanded. Instead of trying to reach a specific 500m x 500m patch for landing as targeted by Chandrayaan-2, the current mission has been given instructions to land safely anywhere in a 4km x 2.4km area.

Strengthened legs: The legs of Chandrayaan-3 Lander have been strengthened to ensure that it would be able to land, and stabilise, even at a speed of 108 km/hour.

More fuel: The Chandrayaan-3 Lander is carrying more fuel than Chandrayaan-2 to enhance the Lander's capability to make a last-minute change in its landing site, if the need arises.





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Solar panels: The Chandrayaan-3 Lander has solar panels on four sides, instead of only two in Chandrayaan-2. This design modification enables the lander to continue harnessing solar power even if it lands in an incorrect orientation or experiences tumbling.

More instruments: Chandrayaan-3 incorporates additional navigational and guidance instruments to continuously monitor the speed of the lander and making any required corrections.

Updated software: Significant upgrades have been made to the hazard detection and avoidance camera, processing algorithm, and navigation and guidance software of Chandrayaan-3. Multiple layers of redundancies have been implemented to guarantee that alternative systems are available in case of any failure or malfunction.

Multiple stress tests: The Lander has been subjected to multiple stress tests and experiments. ISRO created several kinds of test beds at one of its facilities to simulate lunar landing conditions.

How is Chandrayaan-3 different from other moon missions?

Chandrayaan-3 is different from other moon mission as it will be the **world's first mission to** try to soft-land near the lunar south pole.

All the previous spacecraft have landed a few degrees latitude north or south in the lunar equatorial region as it is easier and safer to land near the equator.

The surface near the **lunar equator is even and smooth**, with lesser hills or craters. Also, **abundant sunlight** offers regular supply of energy to solar-powered instruments.

The polar regions of the moon have **numerous craters** and many regions near lunar poles are characterized by lack of sunlight and extremely low temperatures, reaching below minus 230 degrees Celsius. The **absence of sunlight** and **extremely low temperatures** pose obstacles for instrument operation.

Why ISRO wants to explore the Moon's south pole

Unexplored region: The challenging conditions of the polar regions on the moon have discouraged exploration, but evidence from various Orbiter missions suggests these areas hold significant potential for exploration. For example, the 2008 Chandrayaan-1 mission indicated the presence of substantial amounts of ice molecules in the deep craters of this region.

Insights into early history of Solar System: Also, the extreme cold temperatures in the polar regions of the moon preserves objects as they remain frozen and undergo minimal change over time. As a result, the rocks and soil found in the Moon's north and south poles have the potential to offer valuable insights into the early stages of the Solar System.

Presence of water: The Moon's minimal axial tilt of 1.5 degrees results in certain craters near the lunar north and south poles never receiving direct sunlight. These specific areas are referred to as Permanently Shadowed Regions (PSRs). According to a 2019 NASA report, water can potentially persist for extended durations in PSRs, as certain areas maintain sufficiently low temperatures to keep water stable at the surface.

What is the significance of the mission?

Gaganyaan: With a **human-rated** (thorough process to safely design, build and launch a crewed spacecraft) Launch Vehicle Mark (LVM) to be used for the upcoming Gaganyaan mission, the





LVM-3's successful launch of the Chandrayaan-3 has gained significance, as it has further enhanced the reliability of the launch vehicle.

Shift in India's space programme: The Chandrayaan and Mangalyaan signal a **shift in strategy**. Earlier, ISRO seemed focussed on **utilitarian objectives** like enabling telecommunications, telemedicine and tele-education, broadcasting, or setting up remote sensing satellites. But **space and planetary exploration** is becoming a priority now.

Future space exploration: The ability to make a **soft landing** on a planetary body is a **crucial technology** which can impact IRSO's ability to carry out, or participate in, other scientific missions to the moon. The US **Artemis programme** significantly expands the scale of future exploration. In the future, there is a likelihood of discontinuing the International Space Station, leading several nations, including the US, to explore the construction of more permanent structures on the lunar surface. India aspires to become a significant partner in these endeavors.

Boost to the Indian space-tech ecosystem: The successful launch of Chandrayaan-3 could bolster investor confidence and attract more private investment in space technology. This development will promote cost-efficient and highly reliable space-grade hardware provided by the Indian space industry for this mission. Moreover, it validates India's industry as a potential supplier for lunar programs undertaken by other countries.

Conclusion

As ISRO gets into scientific space exploration, it will most likely also face **greater scrutiny** and demands for **accountability** because space exploration has gained significant strategic, economic, and even military dimensions. It offers tangible power advantages, which is evident by the fact that major global powers are also leading space-faring nations. Hence, ISRO should swiftly progress in this new phase.

Moreover, the **future of space exploration will heavily rely on collaboration**, as the envisioned missions and infrastructure necessitate capabilities beyond the reach of any single country. However, collaborations will only be established with partners who can add value to the partnership.

India has the potential to exert a **significant influence on global space policy** and should actively pursue the establishment of a regional space alliance, such as an Asian Space Agency, to enhance collective bargaining power and become a formidable force in the field. While prioritizing the peaceful use of outer space, India must also remain cautious of the potential militarization of space. However, becoming a space power is a crucial initial step, and Chandrayaan-3 can propel India closer to achieving this goal.

Sources: The Hindu (Article 1 and Article 2), Indian Express (Article 1, Article 2, Article 3 and Article 4), Times of India (Article 1 and Article 2)

