AXIA IAS ACADEMY

EDITORIAL ANALYSIS

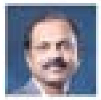
JUNE 26

CONSISTENT COMPREHENSIVE AND CREDIBLE

UNIQUE AND BEST IN QUALITY

1. Should Indian seafarers stop serving on sanctioned ships? (THE HINDU)
2. Preparing rural India for an uncertain monsoon (THE HINDU BUSINESSLINE)
3. Stress in state finances (BUSINESS STANDARD)
4. Do not encourage people to have children unless...(HINDUSTAN TIMES)

Should Indian seafarers stop serving on sanctioned ships?



Ajith Sukumaran

Retd. Additional Director General of Shipping

Biswanath Gupta

Associate Professor, Jindal Global Law School

PARLEY

While merchant ships across the world have been manned by Indian seafarers, officers, engineers and crew for years, recent conflicts have suddenly brought Indian seafarers into focus. A recent flashpoint was when the U.S. attacked three ships allegedly carrying Iranian cargo, on the grounds that they were sanctioned vessels. Three Indian seafarers were killed in those attacks. More recently, when the British detained a Russian-linked vessel that was supposedly under Western sanctions in the English Channel, the Indian captain was arrested. This raises an important question: should Indian seafarers continue serving on these so-called sanctioned ships? Ajith Sukumaran and Biswanath Gupta discuss this question in a conversation moderated by **M. Kalyanaraman.** Edited excerpts:

Could you give us some some background on Indian seafarers in general?

Ajith Sukumaran: Only recently has society started realising the importance of shipping, but unfortunately from a negative point of view. Whether it was the Titanic, the Exxon Valdez incident, or more recent maritime accidents, shipping has often been in the news for the wrong reasons. But the fact is that shipping carries around 90% of global trade by volume. It is the lifeline of modern society.

The Ever Given incident in 2021 showed this clearly. A 20,000-TEU container ship blocked the Suez Canal for six days, affecting around 20% of seaborne trade. Hundreds of ships were delayed, and loss to world trade was enormous.

The Strait of Hormuz is equally important. It carries around 11-12% of global seaborne trade, but it is strategically significant because of energy transportation. Nearly 25% of fossil fuels and around 20% of LNG move through this route. For India, this is critical because more than 85% of our energy requirements are imported, and almost all of it comes via ships.

But we often talk only about ships and cargo. Ships do not move on their own. They are operated by people. Seafarers take these vessels through difficult and risky situations, and society needs to recognise their contribution. These are high-value and high-risk assets, and they need competent professionals.

Modern cargoes also involve huge risks. LNG carriers, for example, carry enormous energy potential, yet they may be operated by only around 20-21 seafarers. Indian seafarers have been among the most respected in international shipping. They have built a reputation for their discipline and technical competence. Globally, there are around 1.8 million seafarers. India has more than five lakh registered seafarers, of whom around 3.2 lakh are active. This means one in five seafarers in global shipping is Indian. The foreign exchange contribution from Indian seafarers is estimated at between $6 billion and $9 billion annually. Their importance to India is much greater than many people realise.

Vessels at the Strait of Hormuz as seen from Oman on June 18. REUTERS

What is India's position on the sanctions imposed by countries such as the U.S., the U.K. and the European Union?

AS: There is a legal and a practical aspect. There are two broad categories of sanctions. One is UN sanctions, which are binding. The other is unilateral sanctions imposed by individual countries or groups such as the U.S., the U.K., the EU or the G-7. The challenge is that each country has its own list. It is not always easy to draw a line between sanctioned and non-sanctioned vessels. From the government's perspective, the issue is also practical. India has to protect its trade and its seafarers while dealing with international realities.

Should the government track these vessels and advise Indian seafarers not to join them?

AS: Whether India should impose a blanket ban is a political decision. Such a move would have consequences because India imports energy from different countries and employment is also important. The Directorate General of Shipping has issued guidelines that seafarers should be aware of the type of vessel they are joining and the risks involved. But every sanctioned vessel is not necessarily unsafe. If it is not operating in regions enforcing those sanctions, the situation changes. Therefore, it is not easy to identify every vessel and prohibit Indians from joining it.

> The Directorate General of Shipping has issued guidelines that seafarers should be aware of the type of vessel they are joining and the risks involved. But every sanctioned vessel is not necessarily unsafe
>
> AJITH SUKUMARAN

What is the legal position on these sanctions and on the arrest of the captain in the U.K.?

Biswanath Gupta: There are two kinds of sanctions. UN Security Council sanctions passed under Chapter VII of the UN Charter are binding under international law. Unilateral sanctions are more contested. They are technically limited to the jurisdiction of the country imposing them, but powerful states often try to enforce them beyond their territory. In international law, this is highly contested – whether those sanctions are binding or non-binding. If a strong country is applying sanctions, they are binding by nature.

Regarding the Indian captain, international law raises the question of jurisdiction. India can question whether the British court has jurisdiction, especially if the incident occurred on the high seas. Another option is diplomatic protection. If an Indian citizen is affected by a violation of international law abroad, India can intervene. Regarding missile attacks on ships, the issue comes under the law of armed conflict in the United Nations Charter. Questions arise about necessity, proportionality and whether proper warnings were given. If sufficient warning was not given, India can take the issue to the international court.

International maritime law has always been important because many principles of international law developed through the law of the sea. Existing maritime frameworks can be useful in protecting seafarers.

Has India signed such maritime agreements?

BG: Yes, India is part of important international maritime frameworks. Since India has a large number of seafarers working globally, these agreements are significant. Some reports suggest that seafarers killed in conflict zones were pressured to enter dangerous areas with threats relating to wages, employment. These issues can be examined through international mechanisms.

What is the difference between dark fleet vessels and sanctioned vessels?

AS: Dark fleet vessels are identified through certain criteria. These may include fraudulent registration, false insurance documents, illegal ship-to-ship transfers, or switching off identification systems. The case of the Indian captain arrested in the English Channel was different. The issue was related to the vessel's registry and whether it was considered stateless. The ship apparently had Cameroon registration but midway through the voyage, before entering the English Channel, the ship seems to have lost the registration. We don't know how that happened. A ship must have a proper flag state. So the legal cover was that the ship was stateless. But whether the master should be held responsible is a separate question, because a captain may not always know about administrative issues.

Given this situation, what should India do?

BG: India should focus on diplomatic engagement. International platforms such as UNCLOS [United Nations Convention on the Law of the Sea] provide a space where countries can negotiate and raise concerns. The International Labour Organization is also important because seafarer welfare and rights are discussed there.

But should the government tell Indian seafarers not to join these ships?

BG: That cannot be the approach for a country like India. Much of our trade happens through the sea, and shipping is also an important source of employment. These global platforms remain important for protecting our interests.

AS: Yes, it can be done. Recruitment in India happens through agencies licensed by the Directorate General of Shipping, and any directions issued by the DG Shipping are binding on them. The government could maintain a dynamic list of sanctioned or high-risk vessels and require recruitment agencies to exercise caution while placing seafarers on them.

In many cases, vulnerable seafarers – those struggling to find employment or facing certification and documentation issues – are being targeted by agents and drawn into risky jobs. These seafarers often become innocent scapegoats in larger geopolitical conflicts.

The government has already taken an important first step by requiring seafarers to be informed. But awareness alone is not enough. The vulnerability remains, and in such circumstances, I believe the government has a responsibility to step in.

To listen to the full interview
Scan the code or go to the link
www.thehindu.com

- **Key Terms and Explanations**
- **Multilateral Sanctions (UN Mandated):** These are economic or political restrictions imposed by an international body, primarily the United Nations Security Council (UNSC) acting under Chapter VII of the UN Charter. Because they carry the collective consensus of the global community, they are legally binding on all UN member states under international law.
    - *Example:* Comprehensive arms embargoes or asset freezes directed at specific regimes by the UNSC, which all nations are legally obligated to enforce.
- **Unilateral Sanctions:** These are economic penalties or restrictions imposed by a single sovereign nation or a specific bloc of nations (such as the US, the UK, the EU, or the G7) to achieve domestic foreign policy objectives. Unlike UN sanctions, they are highly contested in international law as they lack universal consensus and are frequently enforced extra-territorially, penalizing third-party actors who have no direct legal obligation to the imposing nation's domestic laws.
    - *Example:* The sweeping trade and financial restrictions placed on countries like Iran or Russia by Western coalitions, affecting global entities dealing with those nations.
- **Dark Fleet (Shadow Fleet):** This refers to a network of older, commercially active merchant vessels that deliberately operate outside mainstream maritime regulatory frameworks to bypass unilateral economic sanctions. These vessels are characterized by deceptive practices such as turning off tracking systems, falsifying registration documents, utilizing unrated or fraudulent insurance, and engaging in unregulated ship-to-ship cargo transfers on the high seas.
    - *Example:* An oil tanker turning off its tracking transponder in international waters to secretly take on crude oil from a sanctioned state.
- **Flag State Jurisdiction & Stateless Vessels:** Under the United Nations Convention on the Law of the Sea (UNCLOS), every commercial ship must be registered in a specific country, known as its "Flag State." The Flag State holds the exclusive regulatory, administrative, and legal authority over the vessel on the high seas. A "stateless vessel" is one that operates without a valid registration, flies multiple flags of convenience deceptively, or loses its registration mid-voyage. Such vessels lose all protections under international maritime law, exposing their crews to immediate detention by foreign navies.
- **Automatic Identification System (AIS):** An automated tracking system that uses transponders on ships to broadcast real-time data regarding a vessel's identity, position, course, and speed to other ships, coastal stations, and satellites. It is primarily used for collision avoidance and maritime safety. Deactivating or "spoofing" AIS data is a primary indicator that a ship is operating within the dark fleet.

- **Main Arguments and Substantive Parts**
- The core debate surrounding international maritime labor focuses on balancing the economic survival of global seafarers against the escalating risks of geopolitical warfare and unilateral sanctions. The fundamental points within this discourse can be broken down as follows:
- **The Economic and Labor Imperative**
- The global supply chain relies heavily on maritime transport, which handles approximately 90% of international trade by volume. Human capital is central to this system. India is a major supplier of this workforce, with over 500,000 registered seafarers, making up roughly one-fifth of the global maritime crew pool. This sector serves as a significant source of employment and generates substantial foreign exchange, contributing between $6 billion and $9 billion annually in remittances. Consequently, any broad policy measure, such as a blanket ban prohibiting citizens from working on vessels facing unilateral sanctions, would threaten the livelihoods of hundreds of thousands of seafarers and reduce India's influence in global shipping.
- **The Vulnerability and Scapegoating of Seafarers**
- A major issue in this discussion is the unfair distribution of legal and physical risk. The corporate structures behind shipping often shield the true beneficiaries—such as ship owners, commodity traders, and cargo charterers—behind layers of shell companies and offshore registrations. However, when a vessel is targeted for violating unilateral sanctions or enters a geopolitical conflict zone, the crew members bear the immediate consequences. Seafarers frequently face physical danger from drone or missile strikes in maritime chokepoints like the Strait of Hormuz, as well as arbitrary arrest and criminal prosecution by foreign governments enforcing unilateral laws, despite having little to no knowledge of the vessel's broader geopolitical or administrative non-compliance.
- **The Conflict Over Unilateral vs. International Law**
- The legal debate centers on the legitimacy of extra-territorial jurisdiction. UN sanctions are recognized as binding, but unilateral sanctions imposed by groups like the G7 or the EU occupy a legal gray zone. Powerful states often use their control over global banking systems, such as SWIFT, and maritime insurance markets to enforce domestic policies globally. This creates an environment where a seafarer might sign an employment contract that is completely legal under domestic laws but find themselves classified as a criminal actor by a foreign state. This conflict complicates state-level responses, as compliance with unilateral foreign restrictions can compromise a country's strategic autonomy and energy security.

- **Historical Evolution of the Issue**
- **The Colonial Foundation and Early Legal Frameworks**
- The integration of Indian labor into global merchant shipping dates back to the colonial era, where Indian sailors, historically referred to as *lascars*, manned British merchant vessels under restrictive colonial contracts. Following independence, the government sought to formalize, regulate, and protect its seafaring workforce, leading to the enactment of the **Merchant Shipping Act of 1958**. This legislation established the Directorate General of Shipping (DG Shipping) as the central regulatory authority to oversee maritime labor welfare, training, and recruitment standards. For several decades, this framework operated within a stable international environment focused primarily on expanding commercial fleets and standardizing labor rights.
- **The Post-Cold War Shift to Economic Weaponization**
- During the late 20th and early 21st centuries, the nature of international conflict shifted significantly. Rather than relying solely on traditional naval blockades, dominant Western economies increasingly used financial weaponization and targeted maritime sanctions as foreign policy tools. The US Office of Foreign Assets Control (OFAC) and European institutions began imposing strict secondary sanctions on shipping lines, insurance providers, and banking channels linked to targeted nations. This development placed international crews in a challenging position, as routine commercial voyages could suddenly violate foreign domestic laws, turning ordinary maritime labor into a high-risk activity.
- **The Post-2022 Reality and the Growth of the Shadow Fleet**
- The geopolitical landscape changed further with the escalation of the Russia-Ukraine conflict in 2022 and subsequent G7 price cap policies on energy exports. These interventions led to the rapid growth of the "dark fleet" or "shadow fleet," consisting of hundreds of vessels operating outside Western financial, regulatory, and insurance systems to maintain global oil flows. Concurrently, rising tensions in maritime chokepoints like the Strait of Hormuz and the Bab-el-Mandeb strait led to direct kinetic attacks on merchant ships. These parallel developments have fundamentally altered the operating environment for seafarers: global crews are now exposed to both complex legal liabilities in Western ports and immediate physical dangers in volatile shipping lanes, requiring a reassessment of national maritime labor protections.

AXIA IAS ACADEMY

RISE ABOVE THE REST

GLOBAL MARITIME GOVERNANCE: VULNERABILITIES, LAW & THE HUMAN COST

Balancing the Economic Lifeline of Seafarers with the Complexities of Geopolitical Sanctions and International Law

1. KEY TERMS & EXPLANATIONS

Multilateral Sanctions (UN Mandated)

Sanctions imposed by the UN Security Council under Chapter VII of the UN Charter. Legally binding on all UN member states.

Example: UN arms embargoes, asset freezes.

Unilateral Sanctions

Economic penalties imposed by a single country or bloc (e.g., US, EU, G7). Not universally recognized in international law and often enforced extra-territorially.

Example: Sanctions on Iran, Russia by Western coalitions.

Dark Fleet (Shadow Fleet)

Network of older vessels operating outside mainstream regulation to evade sanctions.

Use deceptive practices: AIS off, falsified papers, fraudulent insurance, ship-to-ship transfers.

Example: Tanker switching off tracking to load sanctioned oil.

Flag State Jurisdiction & Stateless Vessels

Under UNCLOS, every ship must be registered in a country (Flag State) which has exclusive jurisdiction on the high seas.

Stateless vessels lack valid registration or lose it—no protection under international law; subject to detention by any navy.

Automatic Identification System (AIS)

Transponder-based system broadcasting a ship's identity, position, course & speed for safety. Turning off or spoofing AIS is a key red flag of dark fleet activity.

Example: AIS switched off in international waters to hide operations.

WHY IT MATTERS?

- Exploitation of legal gaps enables sanction evasion.
- Seafarers become the most vulnerable link.
- Undermines rule of law and maritime order.
- Challenges state sovereignty and global cooperation.

2. MAIN ARGUMENTS & SUBSTANTIVE PARTS

The Economic & Labor Imperative

- Maritime transport carries ~90% of global trade.
- India has **500,000+** seafarers (~20% of global crew).
- Generates **$6–9 billion** annually in remittances.
- Blanket bans on working on sanctioned vessels threaten livelihoods & India's influence in shipping.

Vulnerability & Scapegoating of Seafarers

- Corporate veil protects owners, traders, charterers.
- Crew bear the brunt—risk of attack in conflict zones (e.g., Strait of Hormuz), arrest & prosecution.
- Seafarers often unaware of non-compliance but face physical & legal peril.

Conflict Over Unilateral vs. International Law

- UN sanctions are binding; unilateral sanctions exist in a legal gray zone.
- Use of control over SWIFT, insurance, and shipping to enforce domestic laws globally.
- Legal contracts may be valid domestically but criminalized under foreign unilateral laws.

3. HISTORICAL EVOLUTION OF THE ISSUE

Pre-1950s Colonial Maritime Order
European powers controlled sea lanes; labor from colonies with minimal rights.

1950s–1980s Post-Colonial & Cold War Era
Growth of global trade; rise of Flag of Convenience (FOC) registries; ILO & UNCLOS established labor & legal frameworks.

1990s–2000s Globalization & Deregulation
Liberalization, outsourcing of crews, proliferation of FOC; limited enforcement capacity of Flag States.

2010s–Present Weaponization of Finance & Sanctions
Unilateral sanctions expand; rise of dark fleet; maritime routes become geopolitical flashpoints.

Future Trajectory
AI surveillance, satellite tracking, & data-sharing may enhance transparency, but legal & political conflicts will persist.

4. WAY FORWARD: BALANCED APPROACH

Protect Seafarers' Rights

Ensure due process, legal aid, and consular support for seafarers detained abroad.

Differentiated Policy Framework

Distinguish between UN-mandated and unilateral sanctions; avoid blanket bans.

Due Diligence & Transparency

Strengthen vetting of vessels, owners & cargo; promote responsible business conduct.

Stronger International Cooperation

Push for multilateral solutions to sanction evasion; reform FOC regimes.

Enhance India's Maritime Leverage

Develop indigenous shipping capacity, insurance & dispute mechanisms.

Seafarer Awareness & Training

Educate seafarers on legal risks, rights & reporting mechanisms.

5. AT STAKE: PEOPLE, LAW & THE FUTURE OF GLOBAL ORDER

- **500,000+** Indian seafarers power the global economy.
- **$6–9 billion** annual remittances support national development.
- **90%** of world trade moves by sea—maritime stability is global stability.
- When law is weaponized, justice for seafarers is the first casualty.
- A fair maritime order requires law, ethics and humanity—not just power.

> "Seafarers do not choose the geopolitics of the seas. But the world depends on their courage. Let law protect them, not punish them."

- **Logical and Philosophical Base**
- **Realism versus Liberal Institutionalism**
- The tension surrounding maritime sanctions reflects a core debate in international relations theory between **Structural Realism** and **Liberal Institutionalism**.
- From a **Realist perspective**, international waters function as an anarchic space where state power ultimately dictates terms. Unilateral sanctions represent a mechanism through which dominant global powers use their economic and financial leverage to enforce compliance beyond their borders, prioritizing national interest over international consensus.
- Conversely, **Liberal Institutionalism** emphasizes the primacy of multilateral frameworks, arguing that the governance of the global commons must rely on established international law, such as UNCLOS and UN Security Council resolutions. When individual nations bypass these multilateral institutions to enforce unilateral restrictions, it disrupts the predictability of international law and challenges the principle of collective global governance.
- **State Sovereignty versus Extra-territoriality**
- The debate also raises important questions regarding the scope of legal jurisdiction and the limits of state sovereignty. A foundational principle of international law is that a sovereign state exercises exclusive jurisdiction over its citizens and vessels flying its flag on the high seas. The enforcement of unilateral sanctions extra-territorially challenges this concept by extending domestic legislation into international spaces and third-party jurisdictions. This creates a difficult situation for developing nations: their citizens may comply fully with national laws and international maritime regulations, yet still face legal penalties under the domestic statutes of a foreign state.
- **Utilitarian Governance versus Rights-Based Duty of Care**
- From a policy perspective, the situation forces a choice between two distinct governing philosophies:
- A **Utilitarian approach** prioritizes broader macroeconomic outcomes. It accepts the risks borne by individual seafarers as a necessary cost for maintaining national energy corridors, securing vital oil imports, and preserving billions of dollars in foreign remittances.
- A **Rights-Based framework**, rooted in a state's fundamental duty of care, argues that economic benefits cannot justify exposing citizens to systematic legal and physical dangers without adequate protection. This perspective holds that the state has a responsibility to intervene regulatory-wise to prevent its workforce from being used as unprotected labor in high-risk geopolitical disputes.

- **Multidimensional Analysis**
- **Social Dimension**
- The human aspect of this issue centers on the vulnerability of the seafaring workforce. Many merchant navy crews and junior officers come from middle-class or lower-income backgrounds, motivated by the prospect of global employment and foreign currency earnings. When a vessel is detained or attacked due to its sanctions status, these individuals face severe consequences, including physical injury, psychological trauma, and extended detention in foreign jurisdictions. Furthermore, because recruitment systems often lack transparency, seafarers frequently accept employment without clear access to information regarding a vessel's hidden regulatory or financial risks, leaving their families to navigate sudden legal and financial crises without institutional support.
- **Political Dimension**
- For national policymakers, the issue requires a careful balance between conflicting foreign policy priorities. On one side, India must safeguard its **strategic autonomy** and secure energy imports from key partners like Russia and Iran, which often rely on alternative or non-Western shipping networks. On the other side, India maintains deep economic, technology, and security ties with Western nations, including the US and the EU, who are the primary architects of unilateral sanctions. Navigating these relationships requires a careful approach that protects national economic interests and citizens' employment abroad without causing major diplomatic friction with key global partners.
- **Legal Dimension**
- The legal environment is complicated by overlapping and contradictory jurisdictions. Under UNCLOS, the high seas are preserved for peaceful purposes, and the flag state holds primary jurisdiction over a vessel. However, this framework is strained when powerful nations enforce unilateral domestic laws extra-territorially against foreign-flagged ships in international waters or foreign economic zones. This creates a legal contradiction where a seafarer's employment may be compliant with the laws of their home country and the flag state, yet deemed illegal under the domestic laws of a third country, leading to complex disputes over jurisdiction and maritime sovereignty.
- **Ethical Dimension**
- The situation contains a stark ethical imbalance regarding risk and accountability. The corporate structure of international shipping allows ship owners, commodity traders, and financiers to insulation themselves from liability using complex networks of shell companies and offshore registries. If a ship is seized or penalised for carrying sanctioned cargo, these economic actors rarely face physical endangerment or direct criminal prosecution. Instead, the legal and physical penalties fall heavily on the crew, who have no share in the strategic profits of the trade but face the immediate risks of detention, criminal charges, and physical harm.
- **International Dimension**
- This issue highlights the broader fragmentation of the multilateral international order. The growing reliance on unilateral and minilateral (e.g., G7-led) sanctions frameworks, rather than consensus-based UN mandates, signals a shift away from post-war institutional governance. This fragmentation turns vital international maritime choke points—such as the Strait of Hormuz, the Malacca Strait, and the Red Sea—into contested arenas for geopolitical competition, eroding long-standing international norms regarding the freedom of navigation and the protection of commercial shipping.
- **Economic Dimension**
- The economic stakes involve both macroeconomic stability and labor market participation. India's seafaring workforce is an important source of external remittances, sending home between $6 billion and $9 billion annually. At the same time, the country is highly dependent on maritime trade for its energy security, importing over 85% of its crude oil requirements. Implementing overly restrictive domestic bans could limit employment opportunities for Indian seafarers, causing a loss of global market share to other labor-supplying nations. Conversely, failing to address these risks could lead to higher insurance premiums, increased shipping costs, and disruptions to vital energy supply chains.

- **Linkages with NCERTs**
- **Class 12 Political Science:** ***Contemporary World Politics***
- **Relevant Chapters:** "International Organisations" and "Globalization."
- **Connection:** These chapters examine the structure of global governance, the authority of the United Nations Security Council, and the influence of dominant global powers. Analyzing maritime sanctions illustrates how powerful states can project economic authority globally, bypassing multilateral institutions and altering international trade flows.
- **Class 12 Geography:** ***India - People and Economy***
- **Relevant Chapter:** "International Trade."
- **Connection:** This chapter details India's trade profile, emphasizing its heavy reliance on maritime routes for importing critical resources like crude oil and petroleum products. The geopolitical vulnerabilities of shipping lanes explain why maritime chokepoints and seafarer protection are vital to national economic security.
- **Class 11 Political Science:** ***Political Theory***
- **Relevant Chapters:** "Rights" and "Citizenship."
- **Connection:** These sections explore the relationship between a sovereign state and its citizens, focusing on the state's obligation to protect its people. This provides a theoretical basis for analyzing the government's duty to provide legal aid and regulatory protection to its diaspora and overseas workers facing complex situations abroad.

- **Linkages with UPSC CSE Syllabus**
- **GS Paper 2: Governance, Constitution, Polity, and International Relations**
- **Effect of Policies and Politics of Developed and Developing Countries:** Assessing how unilateral sanctions from the US, EU, and G7 impact India's strategic choices, energy partnerships, and trade policies.
- **Indian Diaspora and Global Institutions:** Analyzing the government's role in protecting the rights and safety of Indian nationals working abroad within complex international legal frameworks, including UNCLOS and the International Labour Organization (ILO).
- **GS Paper 3: Technology, Economic Development, and Security**
- **Indian Economy and Mobilization of Resources:** Evaluating the macroeconomic importance of seafaring remittances ($6-9 billion) and their impact on India's current account balance.
- **Infrastructure (Ports and Shipping) and Energy Security:** Understanding India's vulnerability to supply chain disruptions given its dependence on seaborne crude oil imports (>85%).
- **Security Challenges:** Examining maritime security issues, asymmetric threats to commercial shipping in critical ocean corridors, and the growth of unregulated shadow fleets.
- **GS Paper 4: Ethics, Integrity, and Aptitude**
- **Ethical Dilemmas in International Relations:** Balancing national economic interests against human rights protections for state citizens.
- **Corporate Governance and Human Dignity:** Addressing the ethical responsibilities of international shipping companies and recruitment agencies to protect vulnerable workers from systemic legal and physical risks.
- **Essay Paper & Optional Subjects**
- **Essay Themes:** "The Weaponization of Global Interdependence," "Human Security versus Geopolitical Ambitions," or "The Future of Multilateralism in a Fractured World."
- **Optional Subjects:** Highly relevant for **Political Science & International Relations (PSIR)** (Paper 2: Global Commons and Transnational Actors) and **Law Optional** (Paper 1: Public International Law, covering the Law of the Sea, state jurisdiction, and the legal status of economic sanctions).

- **Way Forward**
- To protect national interests and seafarer welfare, a balanced strategy is needed that combines regulatory oversight, targeted legal protections, and proactive international diplomacy.
- **Implement Dynamic Risk Intelligence and Whitelisting**
- The Directorate General of Shipping (DG Shipping) should upgrade its advisory system into a real-time, data-driven maritime risk architecture. Instead of an outright ban that could hurt employment, the regulatory body should maintain a dynamic database categorizing vessels based on their regulatory compliance, insurance validity, and exposure to unilateral sanctions. Recruitment agencies must be legally required to check this database, ensuring that seafarers are fully informed of a vessel's risk profile before signing employment contracts.
- **Strengthen Regulation of Recruitment Agencies (RPSL)**
- The government needs to tighten oversight on Recruitment and Placement Services License (RPSL) holders. Many seafarers end up on high-risk or stateless ships due to misleading practices by unregulated sub-agents. Regulators should mandate that all recruitment contracts include clear clauses confirming a vessel's legal registration and valid P&I (Protection and Indemnity) insurance. Agencies that place workers on unflagged or dark-fleet vessels through deceptive practices should face immediate license cancellation and strict criminal prosecution.
- **Establish a Dedicated Global Maritime Legal Aid Cell**
- The Ministry of External Affairs, in coordination with the Ministry of Shipping, should set up a specialized legal aid cell to assist overseas maritime workers. This unit would provide immediate consular support, financial help, and expert legal defense for Indian seafarers detained by foreign authorities under unilateral sanctions frameworks. This measure ensures that individual citizens are not left to navigate complex foreign legal systems alone due to administrative violations committed by ship owners.
- **Lead International Advocacy for "Labor Immunity"**
- India should use its position in global bodies like the International Maritime Organization (IMO) and the International Labour Organization (ILO) to advocate for the principle of **Maritime Labor Immunity**. Working with other major labor-supplying nations (such as the Philippines and Indonesia), India should push for international norms that legally separate commercial crews from the political or sanction status of the ships they operate. The goal is to establish global consensus that merchant crews should be treated as neutral economic workers rather than targets for geopolitical retaliation or legal prosecution.

UPSC CSE Prelims Focus Questions

Question 1

With reference to the United Nations Convention on the Law of the Sea (UNCLOS), consider the following statements:

1.A sovereign state exercises exclusive legislative and police jurisdiction over all foreign-flagged merchant vessels passing through its Exclusive Economic Zone (EEZ).

2.The high seas are open to all states, and no state may validly purport to subject any part of them to its sovereignty.

3.Merchant vessels operating without a valid registration or flying multiple flags deceptively can be classified as stateless vessels and lose international legal protections.

Which of the statements given above are correct? (a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer: (b)

Question 2

Which of the following maritime chokepoints connects the Persian Gulf with the Gulf of Oman and serves as a critical transit route for global energy shipments? (a) Strait of Malacca

(b) Bab-el-Mandeb

(c) Strait of Hormuz

(d) Strait of Gibraltar

Answer: (c)

Preparing rural India for an uncertain monsoon

District-level institutional capacity will be put to test. Timely action on availability of seeds, water and crop advise, is needed

PVS Suryakumar

Meteorological agencies have warned of El Niño conditions and increased probability of deficient rainfall in several regions, particularly during the critical August-September period when standing kharif crops are most vulnerable. Such forecasts inevitably trigger concerns about agricultural output, food prices, rural incomes and economic growth. Agriculture may account for a smaller share of GDP today, but a significant proportion of India's population, livelihoods and economic activity continues to depend directly or indirectly on agriculture and the monsoon.

El Niño, a periodic warming of surface waters in the equatorial Pacific, influences weather systems across large parts of the world. While El Niño increases the risk of a weaker monsoon, its impact varies across years and regions. Weather forecasts matter. But preparedness matters no less. Recent reviews by the Agriculture Minister have highlighted an important but less understood aspect of Indian agriculture — the district-level contingency plans designed to respond to weather uncertainty. These encompass moisture conservation, seed preparedness, alternative crop strategies and coordinated action across institutions.

For many outside the agricultural system, these may appear to be routine administrative responses. In reality, they are part of a much larger preparedness framework that India has been building over several decades through the efforts of agricultural scientists, meteorologists, research institutions and State governments. District-specific contingency plans address delayed monsoons, droughts, dry spells and other weather aberrations. Their purpose is to help farmers adapt to a changed reality.

MONSOON. If delayed, farmers will need to go for alternative crop strategies

FACILITATING MEASURES

What does such preparedness actually involve? First, seed preparedness. If the onset of the monsoon is delayed or rainfall becomes erratic, farmers may need access to short-duration varieties or alternative crops better suited to a shortened growing season. Recommendations alone are insufficient; the required seed must reach the village at the right time. Equally important is affordability. Smallholders often exhaust their limited savings on the first round of failed sowing and may not have the resources to purchase fresh seed without timely support. Second, advisory support. Beyond rainfall forecasts, farmers require practical guidance. Should sowing be delayed? Should crop choice be altered? Should fertilizer application schedules be modified? How should scarce moisture be conserved for critical crop stages?

Third, moisture/water management. Every millimetre of rainfall assumes value. Mulching, small farm ponds, desilting tanks, and protective irrigation become critical. These simple investments often prove invaluable during difficult times. Fourth, efficient use of available fertilizers and timely agronomic practices become crucial during moisture stress.

Fifth, fodder availability, drinking water arrangements and veterinary support for livestock become integral components of drought preparedness. Livestock often provides a critical buffer for rural households when crops fail or incomes decline. Above all, there is the question of institutional coordination and timely action.

Contingency planning, in reality, is a chain of practical decisions: whether an alternative seed reaches a village in time; whether a farmer receives timely advice on sowing; whether a farm pond or village tank provides one protective irrigation; whether fodder and credit are available; whether procurement, storage and markets are ready to support any shift in cropping patterns and, if not, what corrective action is required. Its effectiveness is ultimately measured not by the document prepared but by the quality and timeliness of actions taken across thousands of villages.

This is why the discussion around district contingency plans deserves wider public attention. India's agricultural resilience today is stronger than it was a generation ago, not because the monsoon has become more reliable, but because knowledge, institutions and contingency systems have steadily evolved. Agricultural resilience is built not in the year of crisis but in the years preceding it. Yet even the best-designed plans can be undermined by failures in execution.

As the kharif season progresses, public attention will understandably remain focused on rainfall figures and reservoir levels. Equally important, though less visible, will be the preparedness measures unfolding across districts and villages. The coming months may test not only the monsoon, but also the institutional memory that Indian agriculture has accumulated over decades — and the ability to translate that learning into timely action.

The writer is former Deputy Managing Director, NABARD. Views are personal

- **Key Terms and Explanations**
- **El Niño Phenomenon:** A periodic climate pattern characterized by the abnormal warming of surface waters in the equatorial Pacific Ocean. This disruption alters global atmospheric circulation, frequently leading to weaker monsoon currents, delayed rainfall onset, and prolonged dry spells across the Indian subcontinent.
- **Kharif Season:** The primary summer cropping season in India, coinciding with the southwest monsoon (June to September). It includes water-intensive crops like paddy, maize, and cotton, making its success highly dependent on regular, well-distributed rainfall.
- **District Agriculture Contingency Plans (DACPs):** Localized, actionable frameworks tailored to specific agro-ecological zones. They provide alternative strategies for crop choices, sowing timelines, and water management when weather abnormalities occur.
- **Protective Irrigation:** The strategic application of minimal water to crops during critical growth stages (like flowering or grain filling) to prevent total crop failure, rather than aiming for maximum yield.
- **Agronomic Practices:** The physical and biological management techniques used in farming. Examples include *mulching* (covering soil to restrict evaporation) and *intercropping* (growing multiple crops together) to maintain soil health and moisture.
- **Smallholder Vulnerability:** The heightened economic fragility faced by farmers with landholdings under two hectares. When a first wave of sowing fails due to lack of rain, these households often exhaust their limited financial reserves, leaving them unable to afford fresh seeds or inputs without state support.

- **Main Arguments and Substantive Parts**
- The structural core of this issue highlights a critical paradox: while agriculture's share of India’s overall GDP has declined, it remains the primary source of livelihood for over half the population. This makes monsoon variations a major driver of food inflation and rural economic distress.
- **The Six Pillars of Micro-Level Preparedness**
- **Seed Security and Affordability:** Planning must move beyond simply recommending alternative crops. Governments need physical supply chains to deliver short-duration, drought-resistant seeds directly to villages at affordable rates, especially for resource-poor smallholders.
- **Contextual Advisory Support:** Farmers require clear, actionable guidance on when to delay sowing, how to adjust fertilizer applications under moisture stress, and when to shift cropping patterns entirely.
- **Decentralized Moisture Management:** Small-scale, localized interventions—such as desilting village tanks, digging farm ponds, and practicing mulching—provide a vital baseline defense against dry spells.
- **Input Optimization:** Applying chemical fertilizers indiscriminately during droughts can damage crops. Efficient, targeted nutrient application is essential to preserve plant health under stress.
- **Livestock as an Economic Buffer:** When crops fail, rural households rely on livestock for survival. Preparedness must ensure fodder availability, drinking water arrangements, and emergency veterinary support.
- **Translating Plan to Action:** The ultimate test of agricultural resilience is not the policy document itself, but how effectively local institutions coordinate credit, seeds, and procurement across thousands of individual villages.

- **Historical Evolution of the Issue**
- India's strategy for managing monsoon variability has transitioned from a reactive, crisis-driven relief model to a proactive, systemic risk-mitigation framework.
- **Pre-Independence Era (Famine Codes):** The colonial administration viewed monsoon failure primarily through the lens of revenue loss and famine relief. The response was reactive, relying on the Famine Codes to provide basic food and employment only after widespread distress had occurred.
- **The Green Revolution Era (1960s–1970s):** Confronted by severe food shortages, India shifted its focus toward food self-sufficiency. This period saw major investments in large-scale canal irrigation networks and high-yielding crop varieties, primarily in the northern plains.
- **Rainfed Area Focus (1980s–1990s):** As the environmental and regional imbalances of the Green Revolution became apparent, policy attention expanded to rainfed and dryland agricultural zones. Programs like the National Watershed Development Project for Rainfed Areas (NWDPRA) were introduced to harvest rainwater and improve soil health.
- **Decentralized Climate Resilience (2010s–Present):** With climate change accelerating, institutions like the Central Research Institute for Dryland Agriculture (CRIDA) and ICAR spearheaded the creation of District Agriculture Contingency Plans. This institutional evolution shifted the focus from broad national targets to highly localized, climate-smart adaptation strategies.

ANALYSIS: PREPARING RURAL INDIA FOR AN UNCERTAIN MONSOON

1. KEY TERMS & 2. MAIN ARGUMENTS (SIX PILLARS)

El Niño Phenomenon
Pacific warming, pcmtics manmaf icon
District Agriculture Continency flum

Kharif Season
Primary crops, primary
District Agriculture Contingency Plans (DACPs), local...

Protective Irrigation
Critical stages, to creven stages, protective irrigation and colmation

Agronomic Practices
mulching, intercropping and evtimating about agronomic pracseses, mulching, intercropping

SIX PILLARS OF MICRO-LEVEL PREPAREDNESS

- **1. Seed Security** — 1. Seed Security & Affordability
- **Digital Advisory** — 2. Contextual Advisory Support
- **3. Decentralized Moisture Management** — Farm pralioration (farm pond, tank desilting)
- **4. Input Optimization** — 4. Input Optimization (fertilizer efficiency)
- **(Fodder)** — 5. Livestock as (fodder, veterinary)
- **Institutional Coordination** — 6. Institutional Coordination

3. HISTORICAL EVOLUTION TIMELINE

- **Pre-Independence Famine Codes**
- **1960s-1970s Green Revolution** (Canals & HYVs)
- **1980s-1990s Rainfed Focus** (Watersheds)
- **1980s-1990s Rainfed Focus** (Watersheds)
- **2010s-Present Decentralized Resilience** (ICAR-CRIDA, DACPs)

4. LOGICAL & PHILOSOPHICAL BASE

Principle of Subsidiarity → Proactive Adaptation → Ecological Stewardship → Equity & Social Justice

5. MULTIDIIMENSIONAL ANALYSIS

Social
- Debt
- Migration

Political
- Electoral focus
- populist measures

Legal/Policy
- Disaster Mgt Act
- Water Policy

Ethical
- Justice for dryland farmers

International
- SDG alignment
- Global South leadership

Economic
- GDP impact
- Food Inflation

6. NCERT LINKAGES

- **Class X Geo:** Agriculture
- **Class XI Econ:** Rural Dev
- **Class XII Geo:** Water Res

7. UPSC CSE SYLLABUS LINKAGES

- GS 1 → Geo
- GS 2 → Governance
- GS 3 → Economy/Disaster
- GS 4 → Ethics
- GS 4 → Essay

8. WAY FORWARD (SOLUTIONS)

1. Real-time Digital Agro-Advisories → 2. Panchayat-level Seed Banks → 3. Micro-irrigation Expansion → 4. Fodder Banks & MGNREGA integration → 5. Convergent Institutional Coordination

9. ALL PREVIOUS YEARS' UPSC & APSC QUESTIONS (Grouped by Theme)

El Niño effects | Rainfed agriculture | Drip irrigation | Climate-smart agriculture

- **Logical and Philosophical Base**
- The philosophy driving decentralized agricultural planning blends governance principles with ecological economics.
- **The Principle of Subsidiarity:** This governance model operates on the premise that environmental and social challenges are handled most effectively at the most localized level competent to address them. Because weather anomalies vary significantly between districts, centralized, top-down directives are rarely effective.
- **Proactive Adaptation vs. Reactive Relief:** This approach marks a paradigm shift in disaster management, moving away from post-disaster compensation toward pre-disaster risk mitigation. It prioritizes investing in structural resilience during normal years to minimize the need for emergency relief during crises.
- **Ecological Stewardship and Resource Efficiency:** Economically, this philosophy treats water, soil nutrients, and seed biodiversity as finite resources that require careful conservation. It champions practices that value every millimeter of rainfall and every unit of soil nutrients.
- **Equity and Social Justice:** This perspective recognizes that a drought is not merely a natural event, but a social challenge that disproportionately impacts small and marginal farmers. True structural resilience requires target-driven public policies that actively protect the most vulnerable rural households.

- **Multidimensional Analysis**
- **Social Dimension**
- Monsoon failures place a heavy burden on the social fabric of rural India. When crops fail, smallholders often face rising debt, which can lead to mental health crises and higher suicide rates. It also drives distress migration to urban centers, which breaks up families, disrupts children's education, and increases the workload on women who stay behind to manage both the household and farm labor.
- **Political Dimension**
- Agricultural stability is closely linked to political accountability. Widespread rural distress can shift electoral outcomes, often prompting governments to favor short-term populist measures like farm loan waivers or direct cash transfers over long-term structural investments in irrigation, cold chains, and research. Effective climate governance requires sustained political will and strong coordination between central, state, and local panchayat bodies.
- **Legal and Policy Dimension**
- The operational success of contingency plans depends on existing policy frameworks like the Disaster Management Act of 2005, the National Water Policy, and the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). Strengthening these policies requires turning district contingency guidelines into legally backed mandates with dedicated, non-lapsable funding streams for local administrations.
- **Ethical Dimension**
- At its core, this issue touches on distributive justice and intergenerational equity. It raises an important ethical question: *Is the state meeting its constitutional and moral duty to protect vulnerable citizens from climate shocks they did not cause?* Neglecting dryland farmers while subsidizing resource-rich agricultural regions creates a deep ethical imbalance in regional development.
- **International Dimension**
- India's domestic climate resilience directly influences its standing in international climate diplomacy. Building robust, scalable models for dryland farming aligns with global commitments under the United Nations Sustainable Development Goals (SDG 1: No Poverty, SDG 2: Zero Hunger, and SDG 13: Climate Action). Demonstrating success at home positions India as a leader in climate-adaptation strategies across the Global South.
- **Economic Dimension**
- Agriculture remains a key driver of India's broader economy. A widespread crop failure reduces rural purchasing power, which directly lowers demand for manufactured goods and services across urban sectors. Furthermore, reduced agricultural yields can spark food inflation, disrupt fiscal deficits through unplanned relief spending, and destabilize agricultural export markets.

- **Linkages with NCERTs**
- **Class X: Contemporary India-II (Geography) – Chapter on 'Agriculture':** This chapter provides foundational knowledge on Indian cropping seasons (Kharif, Rabi, Zaid), major crop requirements, and institutional reforms. It helps explain why the critical August–September window is so vital for standing crops.
- **Class XI: Indian Economic Development – Chapter on 'Rural Development':** This text explores agricultural market defects, the role of non-farm employment, credit institutions like NABARD, and the economic vulnerabilities of smallholders.
- **Class XII: India: People and Economy (Geography) – Chapter on 'Water Resources':** This section details irrigation patterns, the over-extraction of groundwater, and watershed management techniques. It outlines the geographic necessity of the water-conservation measures.

- **Linkages with UPSC CSE Syllabus**
- **GS Paper I (Geography):** Important Geophysical phenomena (El Niño, Monsoons), changes in critical geographical features, and the impact of these alterations on flora and fauna.
- **GS Paper II (Governance):** Welfare schemes for vulnerable sections of the population; issues relating to the development and management of the Social Sector/Services relating to Agriculture; and the decentralization of powers and finances down to local levels.
- **GS Paper III (Economy, Environment, & Disaster Management):** Major cropping patterns; different types of irrigation and irrigation systems; storage, transport, and marketing of agricultural produce; institutional credit; e-technology in the aid of farmers; and disaster management frameworks for droughts.
- **GS Paper IV (Ethics):** Compassion and empathy toward weaker sections; the ethical dilemmas of resource allocation; and accountability in public service delivery during environmental crises.
- **Essay Paper:** Highly applicable for essays focusing on climate change and its human face, rural distress, sustainable development models, or decentralized governance strategies.
- **Optional Subjects:** Directly relevant for students with optionals in Geography, Agriculture, Public Administration, Economics, or Sociology.

- **Way Forward**
- **Dynamic, Hyper-Local Agro-Advisories:** Upgrade block-level and village-level weather forecasting by integrating AI-driven predictive models with IoT-enabled local weather stations. These updates should be delivered to farmers in real time via regional languages and simple digital interfaces.
- **Decentralized Community Seed Banks:** Establish community-managed seed banks at the Panchayat level. These centers should store certified, short-duration, and drought-tolerant seed varieties, ensuring immediate availability if a delayed monsoon forces a sudden shift in cropping plans.
- **Upgrading Farm Infrastructure:** Scale up investments in micro-irrigation systems (drip and sprinkler) alongside the Pradhan Mantri Krishi Sinchayee Yojana. Mandating farm ponds and rain-harvesting structures on large landholdings can provide critical, life-saving irrigation during dry spells.
- **Strengthening the Livestock Safety Net:** Expand institutional veterinary care and set up fodder banks in drought-prone districts. Integrating fodder cultivation into the MGNREGA work catalog can help ensure a steady supply of animal feed during agricultural downturns.
- **Convergent Governance and Accountability:** Tie district-level contingency execution directly to the Key Performance Indicators (KPIs) of District Magistrates and agricultural officers. Smooth institutional coordination between NABARD, lead banks, and state seed corporations is essential to keep credit and supplies flowing without delay.

- **UPSC Civil Services Examination (Mains)**
- **GS Paper III (2023):** "What is the hands-on approach to el-niño and monsoon anomalies in India? Discuss its multi-dimensional impact on food security and rural income."
- **GS Paper I (2022):** "Describe the characteristics and geographical distribution of rain-fed agriculture in India. Assess the role of watershed management in stabilizing agricultural production in these areas."
- **GS Paper III (2020):** "Suggest measures to improve water storage and irrigation efficiency in India with special reference to climate-smart agriculture."

Stress in state finances

The need for fiscal consolidation is back on the table

ILLUSTRATION: BINAY SINHA

The recent Assembly elections have resulted in a change in political dispensation in three states — Kerala, Tamil Nadu and West Bengal. The new governments in two of these states have tabled white papers on "State Finances" to place on record the challenges they face. Identifying the challenges, one presumes, is the first step towards taking measures to mitigate them.

Apart from concerns of rising debt levels, both these documents (of the two states) throw light on a few similar concerns on receipts and expenditures. On the expenditure side, they flag the high share of committed liabilities in revenue expenditure and the limited space left for capital expenditure, which constitutes the base for long-term growth in the economy. Kerala reports committed expenditure, including wages and salaries, pensions, and interest payments, at 77 per cent of revenue receipts while Tamil Nadu reports a figure of 64 per cent of revenue receipts. In contrast, capex is limited to 1.3 per cent for Kerala and 1.44 per cent for Tamil Nadu. Both states flag two other concerns on the expenditure side — liabilities on account of public-sector enterprises and challenges in covering the existing liabilities of the state in the form of outstanding dues.

R KAVITA RAO

On the receipts side, the white papers highlight slowdown in the growth of the own tax revenues of these states. The Kerala white paper reflects on the decline in the performance of own tax revenues both in comparison to its own past as well as in comparison to other similar states. The ratio of own tax revenues to gross state domestic product (GSDP) has declined from 6.94 per cent in 2015-16 to 6.41 per cent in recent years, indicating a low buoyancy, largely attributed to SGST (state goods and services tax) performance. The Tamil Nadu white paper too flags a decline in the ratio from a historical high of 8.94 per cent in 2006-07 to a low of 5.45 per cent in 2025-26.

A few questions arise from a perusal of the white papers. First, are the identified fiscal challenges specific to these two states, or is this a more widespread phenomenon? Second, are there any concrete options available for addressing these challenges?

To understand the fiscal space available to states in the form of growth in revenue receipts, we look at the audited figures for years up to 2024-25 and the cumulatively monthly accounts for March 2026 (of 2025-26). The pre-Covid period witnessed an average annual growth rate in revenue receipts of over 10 per cent — all states taken together. During 2019-21, it dropped close to zero per cent. In the next two years, there is a sharp increase in the rate of growth — 25 per cent in 2021-22 and 13 per cent in 2022-23. Thereafter, there is a clear slowdown — the growth rate for 2023-24 is 8 per cent while that for 2024-25 is 6.8 per cent. Taking the monthly accounts figures, there appears to be a modest improvement to 7.3 per cent. Even for major states taken together, a similar trend is visible.

Turning to states' own tax revenues, once again, a similar trend is visible for major states — a growth rate over 10 per cent in the pre-Covid period, compression during the Covid period, followed by a surge in growth for two years before it settles into a more modest growth phase — 13 per cent in 2023-24, 4 per cent in 2024-25 and 5 per cent in 2025-26. Taken together, with a nominal growth rate in gross domestic product (GDP) of 9 per cent in the last two years, it is clear that the ratio of own tax revenues to GDP for states would register a decline, as would revenue receipts.

On the utilisation of available resources, stress in state finances can be reflected in the extent to which states are utilising their fiscal deficit to finance the revenue deficit. Here too, the scenario shows clear improvement after the pandemic, with the number of major states reporting a revenue surplus increasing to nine in 2022-23. But subsequently the scenario changes. Fewer states report a revenue surplus — eight in 2023-24, six in 2024-25 and five in 2025-26. On the other hand, the number of major states using more than 50 per cent of the fiscal deficit to finance the revenue deficit has increased from four in 2023-24 to six in 2024-25 and eight in 2025-26.

In other words, there is evidence of increasing fiscal stress in state finances across states. The need for fiscal consolidation is back on the cards. The options are, as always, augmenting revenues and/or restructuring expenditures. There are two thoughts on this count. First, there are exceptions to this broad phenomenon of emerging fiscal risk. Some states have been able to consistently maintain revenue surpluses — these include Gujarat, Jharkhand, Madhya Pradesh, Odisha and Uttar Pradesh. These include high income and middle-income states, mineral-rich states as well as states dependent on the agricultural sector. On the other hand, Haryana, Maharashtra and Rajasthan report consistently good revenue performance with growth in revenues close to or over 10 per cent. Some sharing of experiences might be useful.

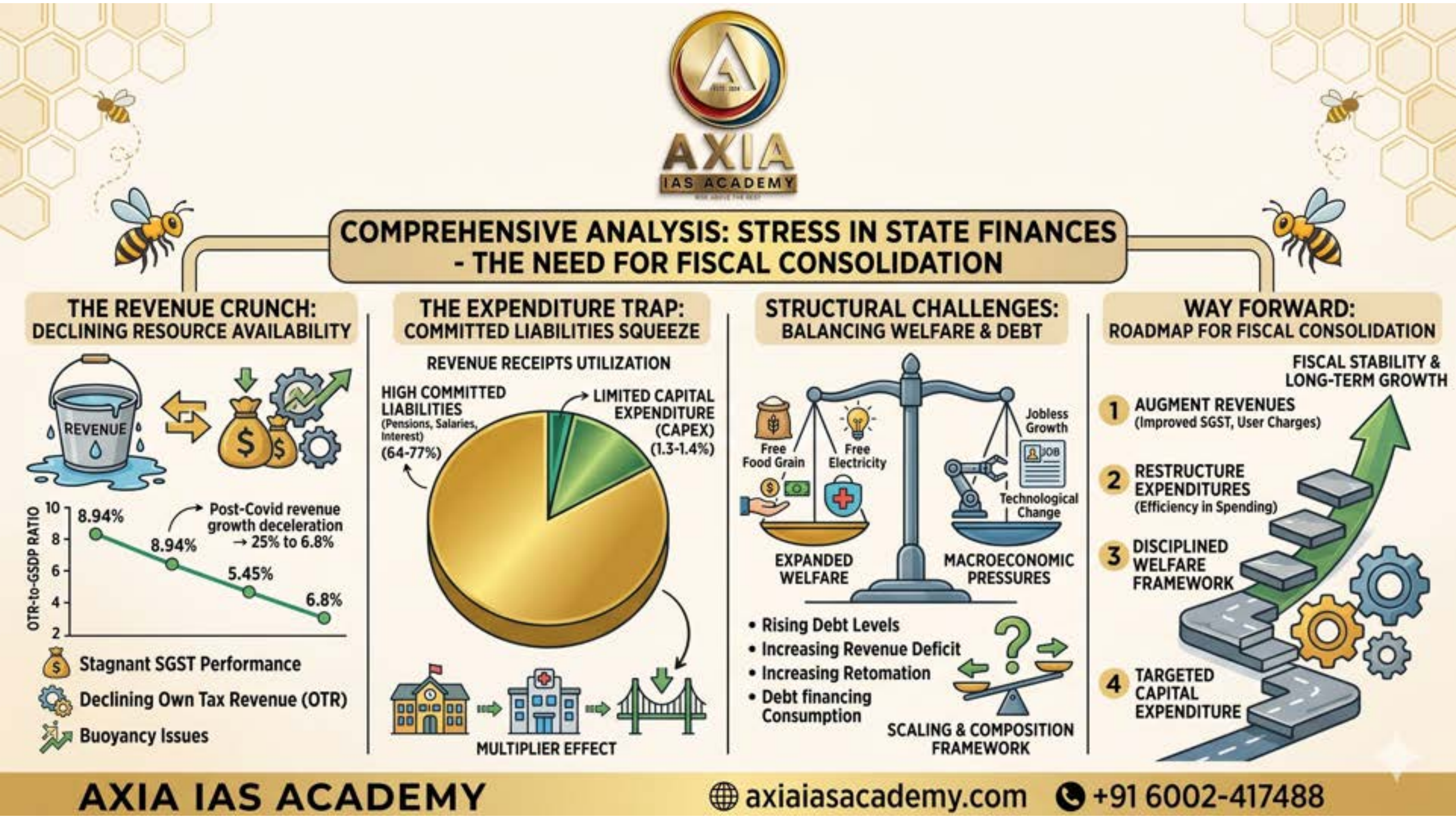
Second, while the big-picture questions on state finances have been flagged in white papers, one emerging concern seems to have been missed. Macroeconomic conditions in the economy are raising certain concerns, the foremost among them being the challenge in generating an adequate number of productive jobs. Technological change seems to suggest a further exacerbation of this challenge. In this context, there is a shift in policy in favour of expanded welfare programmes. These range from income supplements, to free food, to free electricity and transport as well as health care. While each of these is a worthy cause in and of itself, these initiatives imply a fiscal cost. One question that could have been asked is whether there could and/or should be a framework on the scale and composition of such schemes. This could be an important element in any proposed restructuring of expenditures.

The author is director, National Institute of Public Finance and Policy. The views are personal

- **Key Terms and Explanations**
- **Fiscal Consolidation:** This refers to the concrete policies and strategic pathways adopted by governments (both central and state) to reduce their fiscal deficits and accumulate less overall public debt. When a state actively pursues fiscal consolidation, it is essentially trying to live within its means by cutting down wasteful administrative expenditure and improving tax collection efficiency.
- **Committed Liabilities:** These are legally binding, non-negotiable expenditures that a state government must pay out of its revenue budget before allocating money to any new development program. They primarily comprise **salaries for government employees, pensions for retired personnel, and interest payments** on past borrowings.
- *Example:* If a state collects ₹100 in revenue receipts and its committed liabilities total ₹77, it means the state is left with a mere ₹23 to spend on schools, healthcare, industries, and environmental resilience.
- **Capital Expenditure (Capex):** This represents the money spent by the government on creating long-term physical or structural assets that generate future economic value. Examples include constructing multi-lane highways, building state-of-the-art public hospitals, setting up irrigation networks, and upgrading power grids. Capex possesses a high **multiplier effect**, meaning every rupee spent generates multiple rupees of economic output over time.
- **Own Tax Revenue (OTR):** This is the revenue generated directly by a state government through taxes it has the constitutional mandate to levy and collect. It includes the State Goods and Services Tax (SGST), state excise duties (primarily on liquor), stamp duty and registration fees for property transactions, and land revenue. A high OTR indicates that a state is self-reliant and less dependent on central government handouts.
- **Tax Buoyancy:** An economic indicator that measures how effectively tax mobilization responds to changes in the economic growth rate. If a state's Gross State Domestic Product (GSDP) grows by 10% and its tax revenue collections also grow by 10% or more, the tax system is considered highly buoyant. Low tax buoyancy indicates that despite economic growth, tax collections are stagnant due to structural leakages, tax evasion, or poorly structured tax slabs.
- **Revenue Deficit Financed via Fiscal Deficit:** A highly critical fiscal health indicator. The revenue deficit occurs when day-to-day operational expenses exceed everyday income. When a state uses more than 50% of its fiscal deficit (total borrowed money) to finance its revenue deficit, it is essentially **borrowing money to pay for current consumption** (like administrative costs and short-term subsidies) rather than borrowing to create productive assets. It is equivalent to a household taking out a personal loan to pay its grocery bills instead of buying land or investing in education.

- **Main Arguments and Substantive Parts**
- **The Expenditure-Side Asymmetry**
- The fundamental crisis in state budgets lies in the rigid nature of their spending. A disproportionate amount of state revenues is locked into committed liabilities, leaving negligible fiscal space for growth-inducing capital investments.
- **Empirical Realities:** Highly urbanized and welfare-heavy economies show extreme strain. For instance, as visible in public finance white papers, certain states like Kerala have seen committed liabilities consume up to **77%** of their total revenue receipts, leaving capital expenditure compressed to a microscopic **1.3%**. Similarly, in Tamil Nadu, committed liabilities take up **64%** of revenue receipts, capping capex at **1.44%**.
- **The Contingent Liabilities Drag:** Beyond direct expenses, states face a massive backlog of outstanding dues and structural liabilities stemming from loss-making Public Sector Enterprises (such as state electricity DISCOMs), which continually bleed the public exchequer.
- **The Revenue-Side Compression**
- Simultaneously, states are experiencing an erosion in their capacity to raise internal resources. There is a visible slowdown in the growth of states' Own Tax Revenues relative to their economic size.
- **Declining OTR-to-GSDP Ratios:** The performance of OTR compared to Gross State Domestic Product has shown a worrying downslide. In historical terms, states like Tamil Nadu have seen their OTR-to-GSDP ratio recede from a high of **8.94%** in 2006-07 to a projected low of **5.45%** in recent cycles. Kerala has experienced a similar contraction from **6.94%** down to **6.41%**.
- **The SGST Bottleneck:** A major reason behind this structural stagnation is the underwhelming buoyancy of the State Goods and Services Tax (SGST), which has failed to deliver the robust organic growth originally anticipated during its implementation phase.
- **Unhealthy Structural Deficits and Divergent Trajectories**
- The manner in which states utilize their borrowed funds points toward systemic fiscal deterioration.
- **Borrowing for Consumption:** Post-pandemic temporary improvements have rapidly faded. The number of major states reporting a genuine revenue surplus fell from nine in 2022-23 down to just five. Conversely, the number of major states spending more than **50% of their fiscal deficit** just to fill gaps in their day-to-day revenue accounts grew sharply from four to eight.
- **The Great Divergence:** There is a stark contrast between different regional economies. Mineral-rich or structural-surplus states like Gujarat, Jharkhand, Madhya Pradesh, Odisha, and Uttar Pradesh have consistently managed to hold onto revenue surpluses. On the other end of the spectrum, highly industrialized or consumer-heavy states like Maharashtra, Haryana, and Rajasthan consistently report substantial revenue deficits hovering close to or over **10%** of their fiscal calculations.
- **The Welfare Dilemma: A Counter-Perspective**
- It is vital to look at why this expenditure expansion is happening. This spending is not merely arbitrary populism; it is driven by deep macroeconomic realities. The contemporary Indian economy faces an acute challenge in generating an adequate volume of productive, formal-sector jobs, a crisis compounded by rapid technological shifts and automation.
- Consequently, state governments face severe political and social pressure to expand welfare architectures—including income supplements, free grain distribution, electricity subsidies, and subsidized public transport. While these initiatives place a heavy strain on the fiscal balance, they function as essential economic shock absorbers for vulnerable citizens. The issue, therefore, is not the existence of welfare, but the absolute lack of a disciplined, long-term framework to regulate its scale, targeting, and funding mechanism.

- **Historical Evolution of the Issue**
- **Pre-Independence Era (Colonial Centralization):** Under British rule, financial administration was heavily centralized. The Government of India Acts of 1919 and 1935 gradually introduced the concept of provincial autonomy and provincial tax spheres, but the financial architecture remained fundamentally skewed in favor of the center, leaving provinces with inelastic revenue sources like land revenue.
- **The Post-Independence & Planning Era (1950–1990s):** With the creation of the Republic, Article 280 established the Finance Commission to handle the vertical and horizontal sharing of central taxes. However, the parallel rise of the Planning Commission created a dual-track transfer mechanism. Centralized planning often compromised the fiscal flexibility of states, rendering them heavily reliant on discretionary central schematic grants (Centrally Sponsored Schemes) to fund local development.
- **The FRBM Paradigm Shift (2003 Onwards):** Driven by the macroeconomic crises of the late 1990s—when state-level fiscal deficits skyrocketed—the Central Government passed the Fiscal Responsibility and Budget Management (FRBM) Act in 2003. This forced states to subsequently enact their own State-level FRBM legislations, imposing a strict **3% ceiling on Fiscal Deficit-to-GSDP ratios** and mandating the elimination of revenue deficits. This successfully brought down macro-deficits for a decade but led to a legacy of artificial expenditure compression, often hitting capital investments hardest.
- **The GST Structural Shock (2017):** The rollout of the Goods and Services Tax represented the biggest tax reform in independent India. States willingly surrendered a vast portion of their indirect taxing autonomy (VAT, entry tax, luxury tax) in exchange for a pooled, destination-based SGST system. To ease the transition, the center guaranteed a **14% protected revenue growth rate** for five years via a transitionary compensation cess.
- **The Post-Pandemic and Contemporary Phase (2020–2026):** The expiration of the GST compensation mechanism coincided with the massive structural shock of the pandemic. State revenues crashed to near-zero growth during 2019-21, followed by an artificial, base-effect-driven revenue rebound (surges of **25%** and **13%** in successive years). By 2024-2026, the growth trajectory permanently cooled to a modest **6.8% to 7.3%** range. Deprived of central compensation and hit by stagnant tax buoyancy, states are now grappling with high welfare costs and an urgent, renewed call for structural fiscal consolidation.


AXIA
IAS ACADEMY
COMPREHENSIVE ANALYSIS: STRESS IN STATE FINANCES - THE NEED FOR FISCAL CONSOLIDATION
THE REVENUE CRUNCH: DECLINING RESOURCE AVAILABILITY
REVENUE
OTR-to-GSDP RATIO
10
8
6
4
2
8.94%
8.94%
5.45%
6.8%
Post-Covid revenue growth deceleration → 25% to 6.8%
Stagnant SGST Performance
Declining Own Tax Revenue (OTR)
Buoyancy Issues
THE EXPENDITURE TRAP: COMMITTED LIABILITIES SQUEEZE
REVENUE RECEIPTS UTILIZATION
HIGH COMMITTED LIABILITIES (Pensions, Salaries, Interest) (64-77%)
LIMITED CAPITAL EXPENDITURE (CAPEX) (1.3-1.4%)
MULTIPLIER EFFECT
STRUCTURAL CHALLENGES: BALANCING WELFARE & DEBT
Free Food Grain
Free Electricity
EXPANDED WELFARE
Jobless Growth
JOB
Technological Change
MACROECONOMIC PRESSURES
• Rising Debt Levels
• Increasing Revenue Deficit
• Increasing Retomation
• Debt financing Consumption
SCALING & COMPOSITION FRAMEWORK
WAY FORWARD: ROADMAP FOR FISCAL CONSOLIDATION
FISCAL STABILITY & LONG-TERM GROWTH
1 AUGMENT REVENUES (Improved SGST, User Charges)
2 RESTRUCTURE EXPENDITURES (Efficiency in Spending)
3 DISCIPLINED WELFARE FRAMEWORK
4 TARGETED CAPITAL EXPENDITURE
AXIA IAS ACADEMY
axiaiasacademy.com
+91 6002-417488

- **Logical and Philosophical Base**
- The debates surrounding state finances are not merely technical or mathematical; they represent deeply entrenched arguments between competing schools of socio-economic thought:
- **The Monetarist and Neo-Classical Fiscal Prudence Principle**
- This perspective views the state through the lens of strict financial discipline. It operates on the logic that structural deficits are inherently dangerous. Borrowing to finance day-to-day consumption (Revenue Deficit) is viewed as a clear failure of governance.
- The underlying philosophy is rooted in **intergenerational equity**: if a government borrows extensively today to fund short-term subsidies and administrative salaries, it is effectively placing a heavy tax burden on future generations. These future citizens will be forced to service accumulated debt without inheriting any productive infrastructure (like schools, dams, or industries) to help generate the income needed to pay it off.
- **The Keynesian Welfare State Model**
- Conversely, this school of thought views public finance as an active instrument for social justice, structural redistribution, and economic stabilization. It argues that in a developing economy plagued by high inequality, underemployment, and technological displacement, the state cannot afford to be a passive bookkeeper.
- Spending on income support, free public utilities, and basic healthcare is not viewed as wasted consumption, but as a crucial investment in human capital and social safety nets. From this viewpoint, a rigid adherence to mathematical deficit targets (like the 3% FRBM ceiling) during times of economic distress is counterproductive, as it forces harmful cuts to vital public systems.

Dimension	Core Analytical Impact on Sub-National Governance
Social	Stagnant capital investment directly degrades the quality of basic public goods. When over 70% of resources go into salaries and interest, public schools, rural clinics, and sanitation infrastructure suffer from underfunding. While direct cash transfers protect immediate household consumption, they cannot substitute for the long-term, structural social security provided by strong public institutions.
Political	The political economy has shifted toward a competitive race for short-term electoral gains, often termed "populist regionalism." Political parties frequently prioritize immediate financial incentives (such as power subsidies or direct cash payouts) over long-term projects like irrigation or urban drainage networks. This creates a challenging cycle where structural economic prudence is penalized at the ballot box.
Legal & Constitutional	This crisis exposes structural vulnerabilities in India's asymmetrical federalism. Under Article 246 and the Seventh Schedule, states handle expansive social responsibilities (Public Health, Education, Agriculture, Police), yet their financial options remain structurally constrained. Furthermore, under Article 293, the Central Government holds sweeping powers to control state borrowing limits, frequently sparking constitutional friction over the scope of regional financial autonomy.
Ethical	There is an ethical tension between fulfilling immediate duties to current citizens and ensuring long-term fiscal sustainability. Prioritizing short-term populist expenditure at the expense of infrastructure maintenance represents a structural misallocation of public resources. This compromises a state's ability to handle future crises, such as climate emergencies or demographic shifts.
International	Global credit rating agencies (like Moody’s, Fitch, and S&P) calculate sovereign risk by evaluating the **General Government Debt**, which combines the debt of both the center and all states. Chronic fiscal weakness at the state level lowers India’s overall sovereign credit rating. This drives up borrowing costs for Indian firms in international markets and deters long-term Foreign Direct Investment (FDI) in key infrastructure projects.
Economic	High state deficits trigger a classic **crowding-out effect**. To fund their revenue gaps, states must issue a large volume of state development loans (SDLs), absorbing a vast portion of banking system liquidity. This drives up market interest rates, making credit more expensive for private entrepreneurs and slowing down the broader corporate investment cycle.

- **Linkages with NCERTs**
- **Class XII: Macroeconomics – Chapter 5: *Government Budget and the Economy***
  - *Connection:* This chapter defines revenue receipts, capital receipts, revenue deficits, and fiscal deficits. Understanding these definitions is essential for analyzing how states misallocate borrowed funds to cover operational revenue gaps.
- **Class XI: Indian Economic Development – Chapter 6: *Employment: Growth, Informalisation and Other Issues***
  - *Connection:* Explains the structural reality of jobless growth and the expansion of the informal workforce in India. This background helps explain why states face immense pressure to expand welfare spending to provide basic economic security.
- **Class XI: Indian Constitution at Work – Chapter 7: *Federalism***
  - *Connection:* Examines the constitutional distribution of financial powers between the Union and the States, highlighting the financial asymmetry that often leaves states dependent on central transfers.

- **Linkages with UPSC CSE Syllabus**
- **GS Paper II (Governance and Polity):** *Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.* It directly illuminates Centre-State financial friction and the work of the Finance Commission.
- **GS Paper III (Economic Development):** *Government Budgeting; Mobilization of resources, growth, development and employment.* This is the primary syllabus match, focusing on state debt metrics, OTR optimization, FRBM compliance, and structural spending patterns.
- **UPSC Essay Paper:** Highly relevant for essays focused on economic choices, such as *"Welfare State vs. Fiscal Responsibility"*, *"The Dynamics of Cooperative Federalism"*, or *"Short-term Populism as an Obstacle to Long-term Development"*.
- **GS Paper IV (Ethics and Aptitude):** Ethical dilemmas regarding public resource spending, balancing immediate populist demands against future financial stability, and the principle of equity in public financial management.
- **Optional Subjects:** Crucial for students with **Economics Optional** (Paper-II: Public Finance and Indian Economy) and **Public Administration Optional** (Financial Administration: Control over Public Expenditure, Budgeting).

- **Way Forward**
- **1. Formulating a Standardized Welfare & Expenditure Framework**
- States must implement a transparent framework to categorize and regulate public spending. A clear line must be drawn between **productive welfare** (investments in healthcare, direct education stipends, and nutrition) and **unproductive subsidies** (such as untargeted utility waivers). Welfare initiatives should feature explicit sunset clauses and be rigidly targeted using data analytics platforms like the Jan Dhan-Aadhaar-Mobile (JAM) trinity to minimize leakages.
- **2. Broadening and Enhancing Own Tax Revenues (OTR)**
- States need to look beyond central transfers and strengthen their internal tax collection systems. This can be achieved by:
- Deploying AI and big-data tools within state tax departments to cross-reference data and detect SGST evasion.
- Modernizing land registries and implementing a transparent, GIS-mapped property tax system to boost municipal and state revenues.
- Periodically revising user charges for public utilities (like water and irrigation services) for higher-income segments to ensure administrative cost recovery.
- **3. Institutionalizing Peer-to-Peer State Learning Mechanism**
- As highlighted by the divergent performance across states, a formal institutional platform should be established—potentially under the aegis of the NITI Aayog or the Inter-State Council. This would enable states facing high revenue deficits (e.g., Maharashtra, Rajasthan) to study and adapt the successful resource management models of states that consistently run revenue surpluses (e.g., Odisha, Gujarat), particularly in managing mineral wealth and rationalizing administrative costs.
- **4. Aggressive Overhaul of State-Level PSEs and DISCOMs**
- The financial drain caused by loss-making state public sector enterprises must be stopped. States should strictly tie any financial assistance or bailout packages for state power DISCOMs to measurable operational improvements, such as reducing Aggregate Technical and Commercial (AT&C) losses, installing smart prepaid meters, and implementing timely tariff revisions via independent regulatory bodies.

- **UPSC Civil Services Examination (Mains)**
- **GS Paper III (2023):** "What is the main bottleneck in the mobilization of resources by the state governments in India? Suggest measures to overcome this structural constraint."
- **GS Paper II (2021):** "Analyze the financial relations between the Centre and the States in India in the post-GST era. How has the abolition of the GST compensation cess protection impacted state fiscal autonomy?"
- **GS Paper III (2019):** "Enumerate the internal and external factors that have led to the rising fiscal stress of state governments in recent times. How do state development loans (SDLs) impact macroeconomic stability?"
- **GS Paper III (2016):** "Women, child and elderly-focused welfare schemes are essential for inclusive growth, but they face severe funding shortages due to the rigidities of committed expenditures in state budgets. Critically analyze."

[VITAL SIGNS]

Ramanan Laxminarayan

Do not encourage people to have children unless...

Prosperity depends less on how many workers a society has than on what those workers know and can do. HT ARCHIVE

...the State builds human capital while improving the lives of working women so they can balance work with raising a family

Falling fertility rates offer much fecundity for rather questionable ideas, it would seem. With Andhra Pradesh's total fertility rate falling to around 1.5 children per woman — well below the replacement rate — chief minister N Chandrababu Naidu recently announced that his government would pay ₹30,000 for a third child that a couple has and ₹40,000 for a fourth, to reverse the state's anticipated future decline in population. The scheme follows an earlier ₹25,000 offer for a second child. Naidu says the fertility decline raises fears of a shrinking and ageing population. He has gone further still, lifting the old bar on candidates with more than two children contesting local elections and floating the idea of barring those with fewer than two from running at all. With the rules still being written, it is worth asking five questions before going down this path.

The first is how many people Andhra Pradesh, India, or, indeed, the world should hold. The world's population has increased from roughly two billion people a century ago to more than eight billion. That growth has come with a vast environmental footprint, from habitat loss to depleted rivers and aquifers. Nationally, nearly 600 million people face high to extreme water stress. India now extracts more groundwater than the US and China combined.

Meanwhile, annual per-capita water availability has fallen from roughly 5,000-6,000 cubic metres around the time of Independence to about 1,500 cubic metres today, pushing the country into the category of being water-stressed, with further declines projected. A smaller population would make both Andhra Pradesh and India more livable.

The second is timing: Naidu's concern may be premature. India's population is still projected to grow for four more decades, peaking near 1.7 billion in the early 2060s before it begins to fall. To step on the population accelerator now is misplaced foresight. Japan, Korea, and China entered population decline after becoming rich. Their challenge is preserving prosperity; India's remains creating it. The country's per-capita income is roughly $2,600, against the $10,000 China crossed before aging began to feature in policy discussions.

The third is whether pronatalism is the right approach in India. The argument is that more workers and more talent translate into more wellbeing for all. People do create value, but only if the country is able to educate them and ensure good health. Despite historically high school enrolment and two decades of education reform, roughly half of all children in Grade 5 still cannot read a Grade 2 text, and fewer than a third can do simple division. These are gaps that no number of IITs or AIIMSs can fill. Spending on early childhood and maternal nutrition, quality teachers, and functioning primary health centres would do far more for the state's future than paying for births. But the real solutions are slow, unglamorous, and probably not poll-worthy.

The fourth is what a falling population does to per capita income. Should the decline be feared at all, or planned for? The same falling fertility now alarming Naidu is what, a few decades ago, powered the East Asian miracle, when smaller child cohorts and a large working-age population lifted savings and income per head. Yet similar demographics were not helpful in much of Latin America, where young workers were neither well educated nor productively employed. Prosperity depends less on how many workers a society has than on what those workers know and can do. For Andhra Pradesh, the challenge is, therefore, not avoiding population decline at any cost, but ensuring that each successive generation is more productive than the last.

The fifth question, assuming the goal really is to raise births, is whether a payment is the right mechanism. South Korea, which tried the hardest to pay its way out of low fertility, spent well over $200 billion on baby bonuses and birth incentives in a 15-year span but recorded a drop in its fertility rate, to roughly 0.7. In contrast, France and the Nordic countries restructured the cost of raising children with subsidised childcare and parental leave shared by both parents. Naidu's announcement of paid maternity leave for women employees across all their deliveries may be far more effective as a policy than baby bonuses.

Perhaps the unspoken worry is that Andhra Pradesh will be overrun by migrants from the North if its own population is in decline, but that is simply a consequence of belonging to a union. Helping Bihar and Uttar Pradesh with development and the jobs that follow is a better bet than trying to raise birth rates in Andhra Pradesh. India has always had internal migrations going back thousands of years and it has nearly always helped the nation grow stronger.

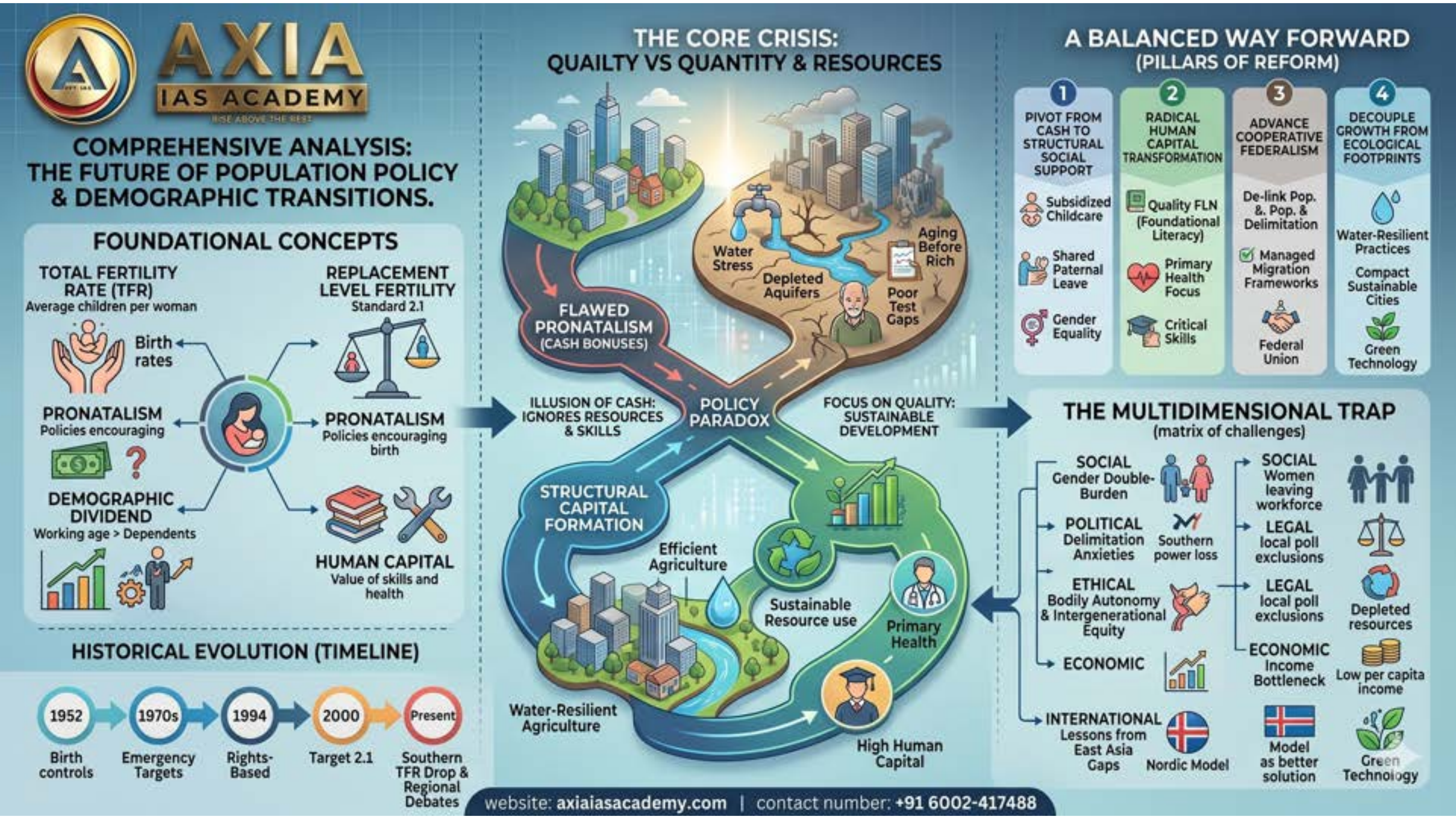
Naidu is right that demographic change is coming and that governments should think about it. But it demands deeper thinking than a reflexive cheque. Building Andhra Pradesh's human capital while improving the lives of working women so they can balance work with raising a family is the surer path.

Ramanan Laxminarayan is president, One Health Trust. The views expressed are personal

- **Key Terms and Explanations**
- **Total Fertility Rate (TFR)**
- **Definition**: The average number of children a woman is expected to have during her reproductive years (usually defined as ages 15–49), based on current age-specific fertility rates.
- **UPSC Perspective**: It serves as a vital index for long-term population growth trajectories and demographic planning. For instance, if a region's TFR drops to 1.5, it signals a rapidly aging society where future generations will be significantly smaller than the current working-age bracket.
- **Replacement Level Fertility**
- **Definition**: The specific TFR at which a population exactly replaces itself from one generation to the next, without factoring in migration. Globally, this value is standardly pegged at 2.1.
- **UPSC Perspective**: The 0.1 above a whole number accounts for childhood mortality and structural gender imbalances at birth. When a state falls below 2.1, it enters a phase of sub-replacement fertility, which eventually translates into a shrinking domestic labor pool over subsequent decades.
- **Pronatalism**
- **Definition**: An economic or social philosophy that encourages human reproduction and childbearing through public policy, cultural incentives, or legal frameworks.
- **UPSC Perspective**: Traditionally, India practiced anti-natalism (population control). However, several states are pivoting toward pronatalism—using direct financial payouts or altering local governance criteria—to artificially induce higher birth rates due to fears of demographic contraction.
- **Demographic Dividend**
- **Definition**: The economic growth potential that results from strategic shifts in a population’s age structure, specifically when the share of the working-age population (15 to 64 years) is larger than the non-working/dependent share (under 15 and over 65).
- **UPSC Perspective**: This dividend is never automatic. It is a fleeting window of opportunity that yields economic returns only if the large working-age cohort is productively employed, healthy, and highly skilled.
- **Human Capital**
- **Definition**: The collective intangible assets of individuals, including their education, foundational skills, health, emotional well-being, and specialized training, which add economic value to a nation’s productive capacity.
- **UPSC Perspective**: Moving away from viewing population as mere "headcount," human capital focuses on individual capability. For example, a single highly trained engineer or doctor contributes significantly more to the GDP than multiple under-skilled workers facing structural unemployment.

- **Main Arguments and Substantive Parts**
- **The Illusion of Cash-Driven Population Growth**
- **The Inefficacy of Financial Subsidies**: Direct cash transfers offered to families for having a third or fourth child fail to reverse structural fertility declines. Global case studies reveal that pumping billions into direct baby bonuses yields negligible improvements in TFR.
- **International Evidence**: South Korea's investment of over $200 billion in baby bonuses and birth incentives still resulted in a record-low fertility rate of roughly 0.7. This demonstrates that financial handouts cannot offset the long-term, structural costs of raising children in modern economies.
- **The Overlooked Crises of Carrying Capacity and Resources**
- **Severe Ecological Overdraft**: Artificially accelerating population growth ignores India's acute resource constraints, particularly regarding water security. Over 600 million citizens currently navigate high-to-extreme water stress, and the nation extracts more groundwater than the United States and China combined.
- **Dwindling Per Capita Availability**: At the time of Independence, India's annual per capita water availability stood between 5,000 and 6,000 cubic meters. Today, this has plummeted to approximately 1,500 cubic meters, pushing the country into a structurally water-stressed category. A stabilizing or smaller population is actually more sustainable under these ecological constraints.
- **The Crucial Missing Metric: Quality Over Quantity**
- **The Myth of Headcount Prosperity**: True economic prosperity is not determined by the sheer size of a domestic workforce, but rather by what those workers know and can execute. Simply adding more citizens to an economy without fixing systemic educational and health failures creates structural unemployment rather than wealth.
- **Deep Educational Deficits**: Despite achieving high gross school enrollment rates over the past two decades, foundational learning remains weak. Roughly half of all children in Grade 5 are unable to read a basic Grade 2 text, and fewer than one-third can perform simple mathematical division.
- **Misaligned Demographic Timing**
- **The Rich vs. Poor Aging Paradox**: Developed East Asian nations like Japan, South Korea, and China transitioned into population decline *after* achieving high-income status, crossing thresholds of $10,000 in per capita income before experiencing severe aging.
- **India's Unique Challenge**: India's per capita income hovers around $2,600, while its national population is projected to grow for another four decades, peaking near 1.7 billion in the early 2060s. Trying to artificially accelerate birth rates at this stage represents misplaced foresight, as the economy risks aging before it gets rich.
- **Structural Solutions vs. Regional Anxieties**
- **The Failure of Financial Checks**: Instead of direct cash transfers, nations that have successfully managed work-life balances—such as France and the Nordic countries—restructured the baseline societal costs of child-rearing through universal subsidized childcare and shared parental leave.
- **Addressing the Migration Phobia**: Sub-national anxieties that low-fertility states will be "overrun" by migrants from high-fertility northern regions like Bihar and Uttar Pradesh ignore the core philosophy of a constitutional union. Internal migration balances regional labor deficits and has historically strengthened national economic resilience.

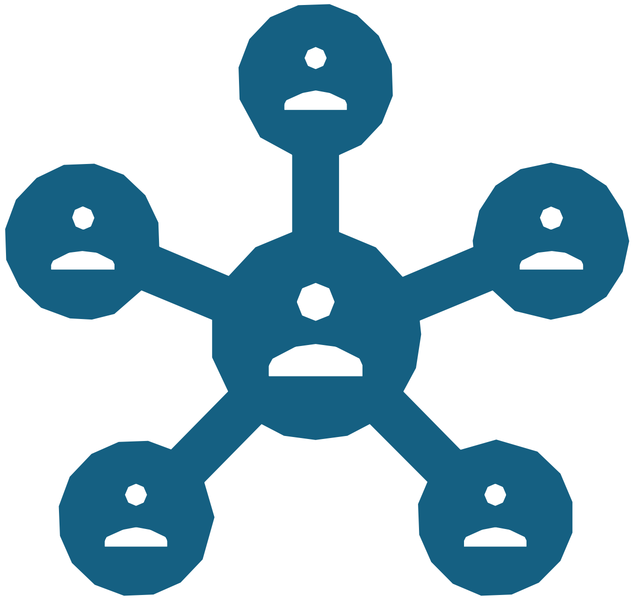
- **Historical Evolution of the Issue**
- **The Early Phase of Post-Independence Anti-Natalism (1950s–1960s)**
- **The Pioneer Nation**: In 1952, India became the first country in the developing world to launch an official National Family Planning Programme. The primary focus was reduction-centric, aimed at lowering birth rates to match the resources of a young, economically strained democracy.
- **Clinical to Extension Approach**: The policy evolved from a passive clinical approach to an active community extension model in the 1960s, introducing various contraceptive methods to combat extreme poverty and food insecurity.
- **The Coercive Turn and the Emergency Backlash (1970s)**
- **Target-Driven Mandates**: The mid-1970s, particularly during the Internal Emergency (1975–77), witnessed a shift toward aggressive, target-driven population control. Massive state-sponsored sterilization camps were established, frequently relying on coercion.
- **Policy Scarring**: This heavy-handed state overreach created an enduring political backlash, making the term "Family Planning" highly sensitive and forcing subsequent governments to rename the portfolio to "Family Welfare."
- **The Rights-Based Paradigm Shift (1990s)**
- **The Cairo Consensus (1994)**: The International Conference on Population and Development (ICPD) in Cairo completely transformed global and domestic policy. India moved away from rigid macro-demographic targets toward a focus on women's reproductive health, bodily autonomy, and informed choice.
- **Target Free Approach**: In 1996, the target-based monitoring system was officially dismantled at the grassroots level, replacing top-down bureaucratic mandates with decentralized health care planning.
- **Enactment of the National Population Policy (2000)**
- **The Holistic Framework**: The National Population Policy (NPP) 2000 sought to achieve replacement-level TFR (2.1) by 2010 through a voluntary, target-free strategy. It integrated maternal nutrition, child survival, and accessible healthcare into population stabilization.
- **Long-Term Stabilization**: The policy established a long-term macro goal: achieving a stable population by 2045, which was later amended to 2070 to align with changing regional demographics.
- **The Present Paradox: Emerging Regional Pronatalism (2020s)**
- **The North-South Demographic Divergence**: By the mid-2020s, India successfully brought its national TFR down to 2.0. However, this success is highly uneven. Southern and Western states have seen fertility rates plummet to sub-replacement levels (~1.5), while specific northern states still lag above the replacement mark.
- **The Political Pivot**: This uneven decline has triggered sub-national anxieties regarding regional delimitation, political representation, and resource allocations by the Finance Commission. Consequently, states like Andhra Pradesh are exploring pronatalist policies, marking a complete reversal from decades of national population control strategies.


AXIA
IAS ACADEMY
COMPREHENSIVE ANALYSIS: THE FUTURE OF POPULATION POLICY & DEMOGRAPHIC TRANSITIONS.
FOUNDATIONAL CONCEPTS
TOTAL FERTILITY RATE (TFR)
Average children per woman
REPLACEMENT LEVEL FERTILITY
Standard 2.1
Birth rates
PRONATALISM
Policies encouraging
PRONATALISM
Policies encouraging birth
DEMOGRAPHIC DIVIDEND
Working age > Dependents
HUMAN CAPITAL
Value of skills and health
HISTORICAL EVOLUTION (TIMELINE)
1952
Birth controls
1970s
Emergency Targets
1994
Rights-Based
2000
Target 2.1
Present
Southern TFR Drop & Regional Debates
THE CORE CRISIS: QUAILTY VS QUANTITY & RESOURCES
FLAWED PRONATALISM
(CASH BONUSES)
Water Stress
Depleted Aquifers
Aging Before Rich
Poor Test Gaps
ILLUSION OF CASH: IGNORES RESOURCES & SKILLS
POLICY PARADOX
FOCUS ON QUALITY: SUSTAINABLE DEVELOPMENT
STRUCTURAL CAPITAL FORMATION
Efficient Agriculture
Sustainable Resource use
Primary Health
Water-Resilient Agriculture
High Human Capital
A BALANCED WAY FORWARD
(PILLARS OF REFORM)
1
PIVOT FROM CASH TO STRUCTURAL SOCIAL SUPPORT
Subsidized Childcare
Shared Paternal Leave
Gender Equality
2
RADICAL HUMAN CAPITAL TRANSFORMATION
Quality FLN (Foundational Literacy)
Primary Health Focus
Critical Skills
3
ADVANCE COOPERATIVE FEDERALISM
De-link Pop. &. Pop. & Delimitation
Managed Migration Frameworks
Federal Union
4
DECOUPLE GROWTH FROM ECOLOGICAL FOOTPRINTS
Water-Resilient Practices
Compact Sustainable Cities
Green Technology
THE MULTIDIMENSIONAL TRAP
(matrix of challenges)
SOCIAL
Gender Double-Burden
POLITICAL
Delimitation Anxieties
Southern power loss
ETHICAL
Bodily Autonomy & Intergenerational Equity
ECONOMIC
INTERNATIONAL
Lessons from East Asia Gaps
Nordic Model
SOCIAL
Women leaving workforce
LEGAL
local poll exclusions
LEGAL
local poll exclusions
Depleted resources
ECONOMIC
Income Bottleneck
Low per capita income
Model as better solution
Green Technology
website: axiaiasacademy.com | contact number: +91 6002-417488

- **Logical and Philosophical Base**
- **The Malthusian vs. Cornucopian/Boserupian Conflict**
- **The Resource Limitation Logic**: The conceptual framework relies heavily on classic Malthusian concerns regarding finite natural resources, as evidenced by India's acute groundwater depletion and falling per capita water levels. It argues that physical ecosystems possess rigid carrying capacities that cannot support unchecked population expansion.
- **The Counter-Logic of Labor Value**: In contrast, pronatalist state policies operate on a Cornucopian or Boserupian framework, which assumes that population growth stimulates technological innovation and that "every extra mouth comes with two hands" to generate economic value.
- **Amartya Sen's Capability Approach vs. Utilitarian Demographics**
- **Rejecting Human Instrumentalism**: The core philosophical foundation aligns with Amartya Sen's Capability Approach. It critiques the utilitarian view of human beings as mere economic instruments or demographic "headcounts" meant to fill future factories or balance state balance sheets.
- **The Goal of Development**: True development lies in expanding substantive human freedoms, health outcomes, and cognitive capabilities. The focus must be on the qualitative enhancement of individual lives rather than the quantitative expansion of population cohorts.
- **The Philosophy of Sequenced Development: "Get Rich Before You Age"**
- **The Temporal Logic**: A fundamental tenet of economic philosophy is that a nation's macroeconomic enrichment must precede its demographic aging. If a society ages while its average citizen is poor, it lacks the fiscal surpluses required to fund comprehensive social safety nets, geriatric healthcare, and automated industrial transitions.
- **Misplaced Acceleration**: Attempting to boost fertility rates when the base per capita income remains low is seen as a logical error. It risks diverting scarce public capital away from vital infrastructure investments into ineffective, direct cash subsidies for childbearing.
- **Constitutional Unionism and Federal Trust**
- **The Logic of a Unified Nation**: The argument rejects sub-national anxieties regarding demographic dilution by drawing upon the political philosophy of cooperative federalism. It views the nation-state as an integrated economic union where regional labor deficits are naturally corrected through internal migration.
- **Ethical Cohabitation**: Attempting to engage in competitive regional breeding to maintain political representation violates the spirit of a harmonious federal social contract, replacing collaborative national development with a zero-sum demographic race.

- **Multidimensional Analysis**
- **Social Dimension**
- **The Gender Double-Burden**: Pronatalist policies that offer cash payouts without structural changes place an unequal burden on women. Without institutional support, women are forced to balance formal employment with traditional expectations of domestic child-rearing, often pushing them out of the workforce.
- **Foundational Learning Deficits**: The social fabric suffers when educational expansion prioritizes school enrollment over actual learning outcomes. Generating large cohorts of youth who lack foundational literacy and numeracy leaves them vulnerable to structural underemployment and deepens social inequalities.
- **Political Dimension**
- **Delimitation and Representation Anxieties**: The uneven decline in TFR across India has created political friction. Southern states fear that their historical success in implementing national population stabilization policies will penalize them during future parliamentary seat redistributions (delimitation), reducing their political power relative to higher-growth northern states.
- **Resource Allocation Tensions**: This demographic divergence strains fiscal federalism. Criteria used by the Finance Commission to allocate tax revenues often face criticism from states with lower TFRs, who argue that population-weighted metrics penalize governance efficiency and reward demographic management failures.
- **Legal Dimension**
- **Local Governance Disqualifications**: Several Indian states historically enacted statutory rules disqualifying candidates with more than two children from contesting local body elections. Abruptly reversing or flipping these rules to penalize individuals with *fewer* than two children creates legal uncertainty and challenges principles of administrative consistency.
- **Maternity Benefit Disparities**: Existing legal frameworks, such as the Maternity Benefit Act, provide stratified protections that vary by employment sector. Relying on simple financial bonuses for additional births without establishing legally enforceable, universal parental leave for both mothers and fathers undermines comprehensive labor law reform.
- **Ethical Dimension**
- **Bodily Autonomy vs. State Engineering**: Using financial incentives or electoral rules to influence family planning raises ethical questions about state overreach. Treating reproductive choices as levers for macroeconomic planning compromises an individual's right to bodily autonomy and privacy.
- **Intergenerational Resource Equity**: In an era of acute groundwater depletion and environmental degradation, encouraging larger families raises distinct ethical concerns regarding intergenerational justice. It risks depleting finite, non-renewable natural assets like aquifers, leaving future generations with an unsustainable ecological deficit.
- **International Dimension**
- **Lessons from East Asian Failures**: Global experiences demonstrate that direct cash incentives fail to reverse sub-replacement fertility trends. South Korea's significant investments in baby bonuses achieved little, showing that cash handouts cannot fix deep-seated anxieties over high housing costs, competitive education systems, and intense workplace pressures.
- **The Success of the Nordic Structural Model**: In contrast, countries like France, Sweden, and Norway have maintained more stable fertility rates by avoiding direct cash bonuses. Instead, they focused on structural welfare models, including universal subsidized childcare, long-term parental leave shared equally between parents, and flexible work cultures that support working mothers.
- **Economic Dimension**
- **The Human Capital Trap**: Simply increasing the headcount of the workforce does not guarantee economic growth. If young workers enter the market without adequate skills or health, they shift from a demographic dividend into a major fiscal dependency, straining public finances through underemployment.
- **The Per Capita Income Bottleneck**: India's current per capita income profile ($2,600) limits its capacity to manage a rapidly aging society. Unlike advanced economies that accumulated substantial national wealth before their demographic curves flattened, India must invest its scarce public funds directly into high-yield human capital infrastructure rather than low-yield cash incentives.

- **Linkages with NCERTs**
- **Class 12 Sociology: *Demographic Structure of Indian Society***
- **Core Concepts**: This chapter outlines the demographic transition theory, TFR, replacement levels, and the concept of demographic dividend.
- **Relevance**: It provides students with the foundational background needed to analyze why India's current population growth is slowing down. It also helps contextualize the shift from historic anti-natalist control policies to modern regional pronatalist anxieties.
- **Class 12 Geography (Fundamentals of Human Geography): *Human Development***
- **Core Concepts**: Explores the qualitative parameters of human development, focusing on capability expansion, health accessibility, and longevity over simple population growth metrics.
- **Relevance**: Directly supports the argument that a nation's prosperity depends on what its citizens can do (human capital) rather than headcount. It connects to arguments against simple cash incentives for childbearing.
- **Class 11 Economics: *Indian Economic Development* (Chapter: *Human Capital Formation in India*)**
- **Core Concepts**: Differentiates between mere population growth and qualitative human capital formation, showing how investments in education, health, and on-the-job training drive GDP growth.
- **Relevance**: Helps students analyze the economic failures of East Asian or Latin American cohorts when investments in primary health and foundational literacy are neglected.



- **Linkages with UPSC CSE Syllabus**
- **General Studies Paper I (GS-1)**
- **Syllabus Topic**: *Population and Associated Issues; Poverty and Developmental Issues; Urbanization, their problems and remedies.*
- **Application**: Perfect for analyzing changing sub-national demographic profiles, the social consequences of falling TFRs, and how migration patterns reshape urban spaces.
- **General Studies Paper II (GS-2)**
- **Syllabus Topic**: *Welfare Schemes for Vulnerable Sections; Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources; Issues and Challenges Pertaining to the Federal Structure.*
- **Application**: Highly relevant for evaluating the structural limitations of direct cash handouts versus sustainable investments in primary education and maternal health. It also provides a useful framework for addressing North-South federal disputes over delimitation and resource allocation.
- **General Studies Paper III (GS-3)**
- **Syllabus Topic**: *Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment; Conservation, Environmental Pollution and Degradation, Water Security.*
- **Application**: Ideal for examining demographic dividends, employment quality, and productivity trends. It also highlights the resource constraints India faces, such as groundwater depletion and water stress.
- **General Studies Paper IV (GS-4) & Essay Paper**
- **Syllabus Topic**: *Human Values; Ethical Dilemmas in Public Policy; Gender Justice.*
- **Application**: Useful for structuring essays on demographic transitions and resource management. It also addresses ethical questions regarding state intervention in family planning versus individual bodily autonomy.

- **Way Forward**
- **Pivot from Cash Incentives to Structural Social Support**
- **Universal Subsidized Childcare**: Governments should move away from short-term financial payouts for births and instead invest in accessible, high-quality, state-subsidized early childhood care facilities. This reduces the career penalties faced by working mothers.
- **Shared Paternal Leave Mandates**: Public and private labor frameworks should implement non-transferable parental leave policies for both fathers and mothers. This structural shift helps balance childcare responsibilities and encourages greater female labor force participation.
- **Implement a Radical Human Capital Transformation**
- **Prioritize Foundational Literacy and Numeracy (FLN)**: Educational budgets should pivot from simple school enrollment numbers to achieving core learning outcomes. Strengthening early primary school education ensures that future generations develop genuine productive economic capabilities.
- **Strengthen Primary Healthcare and Nutrition**: Public investments should target maternal nutrition and primary health centers (PHCs) rather than direct baby bonuses. Ensuring healthy development during a child's first 1,000 days does more to safeguard future economic productivity than cash incentives for birth.
- **Advance Cooperative Federalism and Embrace Migration**
- **De-link Population Metrics from Political Representation**: The Union must design creative federal safeguards for upcoming delimitation exercises, ensuring that states are not politically penalized for successfully meeting national population stabilization goals.
- **Establish Managed Migration Frameworks**: Host states should build welcoming institutional environments for internal migrant labor. Providing inter-state portability of social security benefits, secure housing, and language support helps naturally balance regional labor deficits.
- **Decouple Economic Growth from Ecological Footprints**
- **Adopt Water-Resilient Agricultural Practices**: Agriculture must transition away from water-intensive crop cycles in naturally water-stressed zones through micro-irrigation systems and direct-seeded rice methods. This preserves dwindling groundwater resources.
- **Focus on Compact, Sustainable Urban Planning**: Urban centers must prioritize circular water management, rainwater harvesting, and green infrastructure. This helps cities accommodate shifting internal populations without exceeding local ecological carrying capacities.

UPSC CSE Civil Services Examination (Prelims & Mains)
Civil Services Examination (Mains)

•**2019 (GS-1)**: "Empowerment of women is the key to control population growth." Discuss.
•**2018 (GS-3)**: To what extent is the demographic dividend in India a reality, given the low levels of human development and high rates of underemployment? Critically analyze.
•**2016 (GS-1)**: Discuss the main objectives of Population Policy 2000 and the stagewise measures to achieve them.
•**2014 (GS-1)**: Critically examine whether the growing population of India is a cause of poverty or poverty is the main cause of population growth in India.
•**2013 (GS-1)**: Critically examine the effects of globalization on the aged population in India.

Civil Services Examination (Prelims)

•**2021**: With reference to India, consider the following statements:

- Medical Council of India's consent is mandatory for generic drug prescription.
- The National Population Policy 2000 aims to achieve a stable population by 2045. *Which of the statements given above is/are correct?* (Answer: Dependent on specific year adjustments, conceptually tracks NPP targets).

•**2016**: With reference to the 'National Intellectual Property Rights Policy', consider the following statements... [Theme: Human Capital & Innovation Assets].
•**2012**: Which of the following can prove to be a demographic dividend for India? (a) High birth rate (b) Low death rate (c) Growth in the share of working-age population (d) Decline in total population *(Answer: c)*