

The Hindu Important News Articles & Editorial For UPSC CSE

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Page 01 & 12 : GS II & III : International Relations & Indian Economy / Prelims Exam

The geopolitical landscape of West Asia has shifted into a high-intensity conflict zone following Iranian attacks on commercial shipping in the Strait of Hormuz and drone strikes on UAE infrastructure. For India, this is not merely a distant diplomatic concern but a direct threat to domestic stability. As the world's second-largest consumer of LPG, India's heavy reliance on imports through the Persian Gulf, coupled with a lack of strategic gas reserves, has triggered an immediate supply deficit, exposing a critical vulnerability in the nation's energy infrastructure.

Global energy concerns mount as Iran hits ships

- Three crew members missing from India-bound Thai cargo ship struck in the Strait of Hormuz
- New Delhi deplores attacks on ships; Iran warns of targeting financial institutions in West Asia
- International Energy Agency members to unlock 400 million barrels of oil from their reserves

Associated Press
 DUBAI/NEW DELHI

Iran attacked commercial ships across the Persian Gulf and targeted Dubai International Airport in the UAE on Wednesday, escalating a campaign of squeezing the oil-rich region as global energy concerns mounted and American and Israeli airstrikes pounded the Islamic Republic.

Authorities were searching for three crew members from India-bound Thai cargo ship *Mayuree Naree*, which was set ablaze off the Oman coast in the Strait of Hormuz after a projectile strike. The Omani Navy rescued 20 from the vessel, according to Thailand's Marine Department.

Taking note of the attack on the ship which was on its way to Kandla in Gujarat, the External Affairs Ministry said it "deplores the fact that commercial shipping is being made a target of military attacks".

"Precious lives, including of Indian citizens, have already been lost in multiple such attacks in the ear-

lier phase of this conflict and the intensity and lethality of the attacks only seems to be increasing", the Ministry said in a statement, adding that targeting commercial shipping and endangering innocent civilian crew members must be avoided.

Four injured

Four people were wounded in Dubai when two Iranian drones hit near the airport, but flights continued, the Dubai Media Office said.

The U.K. Maritime Trade Operations centre, run by the British military, reported an attack on a container ship off the UAE, saying the "extent of the damage is currently unknown but under investigation by the crew."

Separately, Kuwait said its defences downed eight drones and Saudi Arabia said it intercepted five heading toward its Shaybah oil field.

Iran's joint military command said it would target financial institutions in West Asia after the state-run IRNA news agency reported that the state-



Targeted vessel: Smoke rising from the Thai carrier *Mayuree Naree* near the Strait of Hormuz off the Oman coast after an attack on Wednesday. *AFP*

owned Bank Sepah in Tehran, sanctioned by the U.S. over funding armed forces, came under attack early on Wednesday, killing staffers. That would put at risk particularly Dubai which is home to many international financial institutions, as well as Saudi Arabia and the island kingdom of Bahrain.

The ship attacks follow intense American airstrikes targeting Iranian Navy assets and the port ci-

ty of Bandar Abbas on Tuesday.

Oil prices remained well below Monday's peaks but the price of Brent crude, the international standard, was still up some 20% on Wednesday from when the war began, and consumers around the world were already feeling the consequences. In an attempt to manage price jumps, the International Energy Agency said its member countries would unlock 400

million barrels of oil from their reserves, the biggest such release ever.

Ripple effect

Iran has effectively stopped cargo traffic in the narrow strait through which about a fifth of all oil is shipped.

It has also targeted oil fields and refineries in Gulf Arab nations, aiming at generating enough global economic pain to pressure the U.S. and Israel to end

'LPG output up 25%, Centre to address issues'

NEW DELHI

India's production of liquified petroleum gas has increased 25% since the Centre instituted the supply maintenance order on March 8, Sujata Sharma, Joint Secretary at the Ministry of Petroleum and Natural Gas said on Wednesday. The Centre was also working to expand the coverage of delivery authentication code system to 90% of domestic consumers to address issues relating to diversion at the distributor level, she said. **>> PAGE 12**

area, engulfing the top two floors. Lebanon's Health Ministry said four people were wounded.

Israel also warned of Iranian attacks, and sirens rang out in Tel Aviv and elsewhere, but there were no immediate reports of casualties. Saudi Arabia said it had destroyed six ballistic missiles launched toward Prince Sultan Air Base, a major U.S.- and Saudi-operated facility, and intercepted two drones over the eastern city of Hafar al-Batin.

The U.S. military said on Tuesday it had destroyed 16 Iranian minelayers near the Strait of Hormuz, though U.S. President Donald Trump said in social media posts that there were no reports yet of Iran mining the passage.

If the strait is mined, it could take at least weeks to clean it up once the conflict is over.

(With inputs from Kallol Bhattacharjee)

NO NEED TO PANIC: PM
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Key Highlights of the Current Crisis

1. Maritime Escalation in the Strait of Hormuz

Targeted Shipping: The Thai cargo ship *Mayuree Naree*, bound for Kandla (Gujarat), was struck by a projectile, leaving three crew members missing.

Regional Instability: Iran has extended its military footprint by targeting Dubai International Airport and threatening financial institutions in the UAE, Saudi Arabia, and Bahrain.

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Global Oil Response: In response to the 20% surge in Brent crude prices, the International Energy Agency (IEA) has announced the release of 400 million barrels of oil—the largest in history—to stabilize global markets.

2. India's LPG Deficit: The Structural Core

Why is India staring at LPG deficit?

EXPLAINER
M. Kalyanaraman

With LPG shortage hitting day-to-day life in India, data suggest while the nation opted for a dramatic surge in LPG use, especially among poor households, driven by imports, there was no plan to boost long-term, strategic LPG reserves in parallel.

With more than 85% of all of India's imports having to cross Strait of Hormuz to reach the nation's shores and limited back-up storage, the disruption hit quickly unlike in the case of auto fuels where strategic reserves of crude oil and products are equal to two months of consumption.

The Indian LPG system is designed for operational flow, not stockpiling. And there are no concrete proposals currently to increase large underground storage either. The International Energy Agency (IEA) has flagged the lack of such storage as an infrastructural weakness in India.

Surge in domestic gas
IEA figures show India's LPG imports increased threefold from 2011-12 to 2024-25 to some 20 million tonne. Imports constitute some 60% of India's needs. India's import dependency has increased from 47% in 2015 to the current levels.

In FY26, imports had crossed 18 million tonne till January. India's total LPG consumption a month is some 3 million tonne making it the second-largest consumer of LPG in the world. But, the total storage capacity can feed less than half of that monthly requirement and almost all of it in tanks at import terminals such as Ennore.

In terms of long-term storage, India has two un-



In demand: A man sits on an empty LPG cylinder amid supply disruptions following the U.S.-Israeli war with Iran. REUTERS

Total underground storage amounts to 1.4 lakh tonne or less than two days of consumption

derground caverns for LPG - Mangaluru and Visakhapatnam with a total storage capacity of 1.4 lakh tonne. While Visakhapatnam storage was commissioned in 2007, only one has been commissioned since the ramping up of LPG consumption started - Mangaluru with 80,000 metric tonne or just a day's consumption.

The total underground storage amounts to 1.4 lakh tonne or less than two days of consumption. India's daily LPG consumption stands at some 80,000 tonne with more than 85% going to households.

The country has 33 crore domestic LPG connections out of which some 10 crore were added since 2017 through the Pradhan Mantri Ujjwala Yojana (PMUY).

The PMUY scheme sought to offer clean cooking gas to poor people as well, freeing women from the drudgery of firewood-based chulhas, cow-dung and kerosene stoves. The scheme gave deposit-free LPG connections to adult women from poor households and subsidised the

purchase as well. The surge in Indian LPG consumption as well as import dependency is attributed to this scheme.

The MoPNG, in its demand for grants in 2025 in Parliament, said there were no plans for constructing additional caverns, besides the two. The Mangaluru cavern became operational in 2025.

India signed an LPG import agreement with the U.S. in February for 2.2 million tonne per year but the U.S. cargoes take some 45 days to reach India unlike the Persian Gulf cargoes.

Underground caverns
Europe can store roughly 25% of total annual gas consumption, says Christoph Halser, Senior Analyst, Gas & LNG Research, Rystad Energy, an energy research and business intelligence firm in Norway.

"Unlike for oil, where a mandate for 90 days emergency stock equivalent exists, European countries do not have a strategic government-controlled gas reserve and are not required to go by the EU.

The EU imposed storage filling targets for public storage facilities first in 2022, following the outbreak of war in Ukraine.

These mandate member countries to reach 90% filling levels before the winter, with exceptions for

market disruptions and technical constraints," adds Mr. Halser.

India can be broadly divided into three geological zones relevant for such gas storage. The most proven is the Peninsular Shield—the Archean cratonic basement of granite, gneiss and charnockite underlying about 60% of peninsular India.

Both operational LPG gas caverns sit on this rock.

At Visakhapatnam, the storage cavern lies 162 to 196 metre below ground level in Precambrian gneiss, using the hydraulic containment principle.

At Mangaluru, the host rock is granitic gneiss, with the floor at 141 metre below mean sea level. The engineering is proven. The rock is cooperative.

The second zone is the Deccan Traps—the vast basaltic plateau covering some 5,00,000 square kilometre of western and central India. For storage purposes, the traps present challenges. Engineers India Limited, designing a new LPG facility on the west coast, has encountered difficulties.

The third zone is the salt formations of Rajasthan's Bikaner-Barmer belt. These halite deposits can be used as cavern storage.

Cheaper, faster
Salt caverns are cheaper and faster to construct, naturally impermeable, and capable of rapid injection and withdrawal.

A refinery is under construction at Barmer and crude pipelines traverse the region. EIL has signed a partnership pact with Germany's DEEP for salt cavern know-how.

A fourth option—depleted gas reservoirs in the Krishna-Godavari, Cambay and Mumbai offshore basins — is under study.

Import Dependency: Approximately 60% of India's LPG is imported, with over 85% of these imports passing through the volatile Strait of Hormuz.

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The PMUY Impact: The Pradhan Mantri Ujjwala Yojana (PMUY) added 10 crore connections since 2017, bringing total domestic connections to 33 crore. While this achieved social goals (clean cooking), it exponentially increased import reliance without a matching increase in storage.

Operational vs. Strategic Storage: Unlike auto fuels (petrol/diesel), which have 67 days of strategic reserves, LPG storage is designed for "operational flow." Current underground storage (Visakhapatnam and Mangaluru) covers less than two days of national consumption.

3. Geological Prospects for Storage

To mitigate future shocks, India is exploring three primary geological zones for underground storage:

The Peninsular Shield: Stable crystalline rock (Granite/Gneiss) used in existing caverns.

The Deccan Traps: Basaltic rock in Western India (technically challenging).

Salt Formations: The Bikaner–Barmer belt in Rajasthan. Salt caverns are considered faster and cheaper to build than rock caverns.

Related Static Section

I. Geography of the Region

Strait of Hormuz: A chokepoint between the Persian Gulf and the Gulf of Oman. It is the world's most important oil transit channel.

Map Locations to Watch: Bandar Abbas (Iran), Kandla Port (India), Shaybah Oil Field (Saudi Arabia), and the Bikaner-Barmer salt belt (India).

II. Strategic Petroleum Reserves (SPR) in India

Phase I: Facilities at Visakhapatnam (1.33 MMT), Mangaluru (1.5 MMT), and Padur (2.5 MMT).

Phase II: Planned expansion at Chandikhol and Padur to add 6.5 MMT capacity.

Note: SPRs currently focus on Crude Oil, not LPG. The lack of an "LPG Strategic Reserve" is the primary cause of the current domestic shortage.

III. International Energy Agency (IEA)

Status: An autonomous intergovernmental organization based in Paris.

The 90-Day Rule: IEA member countries are required to maintain emergency oil reserves equivalent to at least 90 days of net imports. (India is an "Associate Member," not a full member).

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Analysis of India's Policy Dilemma

The crisis highlights a "Policy Lag" where the expansion of energy access (PMUY) outpaced the development of energy security infrastructure. While India has diversified its sources—signing a 2.2 million tonne agreement with the U.S.—the 45-day transit time from the U.S. compared to the short hop from the Gulf makes it an ineffective solution for sudden maritime blockades.

Conclusion

The attacks in the Strait of Hormuz serve as a "wake-up call" for Indian energy planners. Relying on "just-in-time" imports for a commodity as essential as cooking gas is no longer sustainable in a multipolar, conflict-prone world. For India to safeguard its 33 crore households, it must transition from purely operational storage to a robust Strategic LPG Reserve, leveraging salt cavern technology in Rajasthan and depleted gas fields to build a buffer of at least 15-30 days.

UPSC Prelims Exam Practice Question

Ques: With reference to India's energy security, consider the following statements:

1. A large proportion of India's crude oil imports passes through the Strait of Hormuz.
2. India maintains Strategic Petroleum Reserves (SPR) for crude oil but not specifically for LPG.
3. India is a full member of the International Energy Agency (IEA).

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

Ans: B)

UPSC Mains Exam Practice Question

Ques: India's increasing reliance on imported LPG has exposed structural vulnerabilities in its energy infrastructure. Discuss the causes and possible solutions **(150 Words)**

Page 06 : GS II : Social Justice / Prelims Exam

The Supreme Court of India has furthered the jurisprudence on the "Right to Life" (Article 21) by clarifying the distinction between active and passive euthanasia. In a case involving a 32-year-old patient in a Persistent Vegetative State (PVS) for 12 years, the court ruled that the state's interest in preserving life is not absolute and must yield to individual dignity when medical intervention becomes futile and invasive.

Judge distinguishes between active and passive euthanasia

Krishnadas Rajagopal
NEW DELHI

The distinction between "active" and "passive" euthanasia goes beyond the simplistic binary of "act" versus "omission", Supreme Court judge Justice J.B. Pardiwala said on Wednesday.

"The true distinction between active and passive euthanasia lies not merely in the nature of the conduct, i.e., acts or omissions, but also in the source of the harm that leads to death," Justice Pardiwala said in a judgment.

The judge characterised active euthanasia as causing death by introducing a new, external agency of harm, such as a lethal injection.

"In such cases, death is not the result of the patient's underlying illness, but of an intervention that sets a new chain of events in motion. It is for this reason that active euthanasia



By removing life support, the physician is not creating a new risk of death, the judge said. AP

is understood as an intervention that disrupts the natural path towards death," Justice Pardiwala observed in the judgment.

Underlying condition

Conversely, he explained that passive euthanasia should be understood as allowing death to occur. By withdrawing or withholding life support, the physician is not creating a new risk of death. Rather, the doctors are choosing to al-

low the underlying fatal condition to take its natural course by no longer continuing the medical interventions that were artificially prolonging life.

"The undeniable fact is that the patient's affliction, i.e., the underlying medical condition, is not caused by any act or omission of the doctor. Rather, the underlying condition is due to factors independent of the doctor or their actions," Justice Pardiwala said. However, withdrawing treatment should not violate the duty of care a doctor owes a patient in all circumstances. "The surrendering of any medical effort must not be at loggerheads with the duty of care which joists all medical action," Justice Pardiwala emphasised.

The judgment said active euthanasia involved a "positive, overt act" designed to curtail the natural lifespan and extinguish life.



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Key Highlights of the Judgment

1. Redefining the Active-Passive Binary

Justice Pardiwala clarified that the difference isn't just about "doing something" versus "doing nothing."

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Active Euthanasia: Defined as the introduction of a new, external agency of harm (e.g., a lethal injection). Here, the doctor starts a new chain of events that causes death, independent of the patient's illness.

Passive Euthanasia: Defined as allowing the underlying fatal condition to take its natural course. By withdrawing life support, the physician is not creating a new risk of death but is ceasing to artificially prolong a life that the illness is already claiming.

2. The "Tipping Point" of State Interest

The court addressed the tension between the State's duty to protect its citizens and the individual's right to autonomy.

Subservience of the State: The state's interest in preserving life becomes "subservient" to the patient's dignity when the prognosis for recovery decreases and the invasiveness of medical technology increases.

Futile Technology: Keeping a brain-dead or PVS patient "alive" solely because technology allows for it—without hope of recovery—is viewed as a violation of the Constitutional ideal of dignity.

3. The Moral and Legal Duty of Care

While upholding the withdrawal of treatment, the court emphasized that:

Withdrawal must not violate the doctor's duty of care.

Surrendering medical effort must align with medical ethics and should not be at "loggerheads" with the professional responsibility owed to the patient.

Related Static Section

I. Constitutional Context (Article 21)

Article 21: "No person shall be deprived of his life or personal liberty except according to procedure established by law."

Common Cause vs. Union of India (2018): The landmark 5-judge bench ruling that first declared the "Right to die with dignity" as a fundamental right and legalized Passive Euthanasia and Living Wills (Advance Medical Directives).

'Right to dignified death prevails over interest of the state'

Krishnadas Rajagopal
NEW DELHI

The Supreme Court held on Wednesday that the state's absolute interest to preserve life must become subservient to a patient's right to dignity at a tipping point when medical interventions become increasingly futile and invasive while the chances of recovery keep dropping.

"When the degree of bodily invasion progressively increases, and the prognosis for recovery progressively decreases, there arises a certain point when the state's absolute interest in preserving life must become subservient to the dignity of the individual, though he is unconscious or incompetent," Justice J.B. Pardiwala said in a judgment upholding the withdrawal of life support to a 32-year-old man in a

persistent vegetative state for over 12 years.

The court said that the interest of the state must not be allowed to overpower the dignity which must be equally assured to individuals in the process of life and death.

"Dignity is the most sacred possession of a human being. Its possession can neither be said to lose its sanctity in the process of death nor when death occurs," Justice Pardiwala observed.

Temporarily keeping alive a terminally ill patient who was brain dead or in PVS, solely because doctors are able to leverage the technological advancements in medicine, and compelling such patients to endure a slow, agonising death, cannot fully be compatible with the Constitutional ideal of dignity, Justice Pardiwala said.

II. Important Legal Terms

Persistent Vegetative State (PVS): A condition in which a medical patient is completely unresponsive to psychological and physical stimuli and is kept alive by therapeutic means.

Living Will: A written document that allows a patient to give explicit instructions about their medical treatment in the future when they may be unable to give informed consent.

Parens Patriae: A doctrine that grants the court the inherent power and authority to protect persons who are legally unable to act on their own behalf (often used in euthanasia cases for incompetent patients).

III. Aruna Shanbaug Case (2011)

This was the starting point for the euthanasia debate in India. While the court rejected the plea to stop feeding Aruna Shanbaug, it laid down guidelines for "Passive Euthanasia" for the first time in Indian history, emphasizing that it must be monitored by High Courts.

Comparison: Active vs. Passive Euthanasia

Feature	Active Euthanasia	Passive Euthanasia
Action	Positive act (Lethal injection)	Withdrawal/Withholding of support
Cause of Death	External Agency	Underlying Disease/Condition
Legal Status in India	Illegal	Legal (Subject to guidelines)
Intent	To kill the patient	To stop prolonging the dying process

Conclusion

The judgment serves as a bridge between medical technology and human rights. By ruling that "dignity is the most sacred possession," the court ensures that the law does not force a human being to become a prisoner of medical advancements. It reinforces that the "Right to Life" includes the right to a dignified conclusion of that life, free from unnecessary suffering and invasive intervention when there is no hope of recovery.

UPSC Prelims Exam Practice Question

Ques: With reference to Euthanasia in India, consider the following statements:

1. Passive euthanasia is legally permitted in India under certain conditions.
2. Active euthanasia is legally allowed if approved by the patient's family.
3. The Supreme Court recognized the Right to die with dignity as part of Article 21.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Ans: B)

UPSC Mains Exam Practice Question

Ques: The Supreme Court has interpreted Article 21 to include the right to die with dignity. Discuss the constitutional and ethical dimensions of this interpretation. **(150 Words)**

Distraction & Panic: The use of firecrackers and high-intensity searchlights distracts elephants, making them less likely to notice hazards such as open ditches or oncoming trains.

Movement Patterns: Pursued by squads, elephants lose their natural caution and veer into dangerous, unfamiliar terrain.

2. Statistical Findings vs. Field Perception

The Gap: Field workers and NGOs believed the program was a success because it organized the community and improved relations with the Forest Department.

The Data: 20 years of data from Sonitpur, Assam, showed that villages with active ADSs had a significantly higher elephant death rate than those without.

Human Impact: Interestingly, the study found no discernible impact on human mortality, suggesting that while the squads might not be making humans safer, they are making the environment deadlier for elephants.

3. Policy Proliferation

Despite these findings, ADSs are a part of national guidelines and have been scaled up in West Bengal, Odisha, and Chhattisgarh.

The Union Environment Ministry (2019) had previously noted that ADS operations were often "not systematic" and involved "local mobs," which reduced their conservation effectiveness.

Related Static Section

I. Elephant Conservation in India

Status: The Asian Elephant (*Elephas maximus*) is listed as Endangered on the IUCN Red List and under Schedule I of the Wildlife Protection Act, 1972.

Population: Assam holds the second-largest population in India (over 5,000) after Karnataka.

Project Elephant (1992): A central scheme to protect elephants, their habitats, and corridors, and to address issues of man-animal conflict.

II. Human-Wildlife Conflict (HWC) Mitigation Strategies

Physical Barriers: Solar-powered electric fences, trenches (Elephant Proof Trenches - EPT), and bio-fencing (e.g., chilly fences, beehive fencing).

Technological Interventions: Early Warning Systems (EWS) using infrared sensors or seismic sensors to detect elephant movement.

Compensation Schemes: Ex-gratia payments for crop damage or loss of life to prevent retaliatory killings.

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III. Key Geographical Terms

Sonitpur Landscape: A high-conflict zone in north-central Assam characterized by fragmented forests and tea plantations.

Elephant Corridors: Narrow strips of land that allow elephants to move between two larger habitats. Obstruction of these corridors is a primary cause of HWC.

Critical Analysis: The Need for Evidence-Based Policy

The ADS crisis is a classic example of "unintended consequences" in conservation policy.

Infrastructure vs. Behavior: Building a fence or forming a squad is easier than managing the behavioral ecology of a mega-herbivore.

The Underreporting Bias: The study accounted for the fact that better relations with the Forest Department might lead to more reported deaths, but even after controlling for this, the mortality rate remained high.

The "Disorganized Chasing" Dilemma: WWF-India experts argue that without ADSs, "disorganized chasing" by angry mobs might be even worse. This suggests the need is not to abolish squads but to professionally train them to "herd" rather than "chase."

Conclusion

The findings from Sonitpur mandate a rigorous re-evaluation of India's HEC management strategies. Moving forward, the focus must shift from reactive chasing (which creates a landscape of fear) to proactive corridor protection and non-invasive monitoring. Conservation efforts must be backed by "ground-truthing" and periodic statistical audits to ensure that interventions meant to save a species do not accidentally accelerate its decline.

UPSC Prelims Exam Practice Question

Ques: In the context of wildlife conservation, the term "Elephant Corridor" refers to:

- A. Protected forest areas exclusively reserved for elephants
- B. Routes used by elephants during seasonal migration between habitats
- C. Special breeding centres for elephants
- D. National parks established only for elephant conservation

Ans: B)

UPSC Mains Exam Practice Question

Ques: Human-wildlife conflict has emerged as a major conservation challenge in India. Discuss the causes of human-elephant conflict and suggest measures to mitigate it. (150 words)

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In November 2025, the BIS notified a significant revision to India's earthquake zoning map, which included the creation of a new high-risk category, Zone VI. However, on March 3, 2026, the Centre withdrew these revisions following intense pushback from multiple ministries and the private sector. The core of the issue is not just scientific accuracy, but the massive cost-of-compliance and the feasibility of implementing stricter building codes across India's vast informal housing sector.

Key Highlights of the Zoning Debate

1. The Shift to Probabilistic Assessment

The New Model: India has historically used a "fixed" zoning model. The BIS attempted to shift to the Probabilistic Seismic Hazard Assessment (PSHA).

Why PSHA? It is a dynamic framework used by advanced economies that models risk through probability-based simulations of ground motion rather than just historical intensity.

The Challenge: While scientifically superior, PSHA can lead to more stringent requirements that engineers argue may be "out of sync" with specific site-based evaluations.

2. The Economic & Urban Planning Impact

Zone VI: The proposed revision introduced Zone VI, covering Kashmir, parts of the Himalayan belt, Kutch, and the Northeast.

Cost Escalation: Upgrading a building's design by one zone can increase construction costs by 20%. A two-zone jump can increase costs by 33%.

Informal Housing: Since nearly 80% of Indian homes are in the informal sector, critics fear that overly stringent codes will drive more people toward unregulated, unsafe construction because formal, compliant housing will become unaffordable.

3. Institutional Pushback

The reversal was driven by heavyweights like the Ministry of Housing and Urban Affairs, the Central Water Commission, and the National Dam Safety Authority.

For critical infrastructure like Metros, Dams, and Power Plants, the cost implications of a higher seismic zone rating are astronomical, potentially stalling vital national projects.

Related Static Section

I. India's Current Seismic Zoning (BIS 1893:2016)

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A seismic decision

India needs a holistic, implementable earthquake zoning framework

The Centre's rollback of the revision to India's earthquake zoning by the Bureau of Indian Standards (BIS), follows a major challenge to the methodology used, which some engineers believe are out of sync with site-based evaluations. Yet, the reversal is driven largely by the massive cost and execution implications, as the decision impacts urban planning, disaster preparedness and climate resilience. The current earthquake zoning exercise is an opportunity to disaster- and climate-proof cityscapes, power infrastructure, dams, highways, and homes and offices as India undertakes an urban infrastructure expansion. Getting the zoning framework right has, arguably, never been more important.

At the heart of the debate lies the scientific approximation of possible earthquakes and their intensities, *vis-à-vis* the preparedness of the built environment to withstand them. Globally, most advanced economies and seismically active regions now use Probabilistic Seismic Hazard Assessment (PSHA), a dynamic framework that models earthquake risk through probability-based simulations of ground motion. Until now, India has primarily used a simpler fixed zoning model. The BIS's attempt to move toward this globally accepted framework is, therefore, directionally correct. However, some structural engineers and policymakers argue that the revisions, which were notified in November 2025 and withdrawn on March 3, were too stringent. The proposed framework introduced an entirely new top-risk category, Zone VI, covering most of Kashmir, parts of the Himalayan belt, Kutch in Gujarat and the north-east. Urban planners worry that such zoning could stall developmental and infrastructure activity in already economically fragile regions, and potentially push more housing into the informal sector – which already accounts for nearly 80% of India's homes. Estimates suggest that a one-zone increase could raise costs by around 20%, and two zones by nearly one-third. For major infrastructure such as metro rail systems, dams and power stations, the cost implication could be significantly higher. Pushback to the BIS revisions has come from both the private sector and within government, including the Ministries of Housing and Urban Affairs, Home Affairs, the Central Water Commission and the National Dam Safety Authority. Another layer in this debate is climate. The construction sector in India is among its largest dispersed sources of carbon emissions. While a revision in the earthquake zoning framework is necessary, it requires wider consultation across ministries, regulators and industry stakeholders. Only a holistic and implementable framework can strengthen disaster resilience and address climate mitigation, affordability and execution challenges.

Daily News Analysis

Currently, India is divided into four seismic zones (II, III, IV, and V). Note that Zone I does not exist in the current map as the entire country is considered prone to some level of tremors.

Zone V (Very High Damage Risk): Includes the entire Northeast, parts of Jammu & Kashmir, Himachal, Uttarakhand, Rann of Kutch, and North Bihar.

Zone IV (High Damage Risk): Includes Delhi, Indo-Gangetic basin, and parts of Maharashtra (Koyna).

Zone III (Moderate Damage Risk): Much of the remaining country.

Zone II (Low Damage Risk): Peninsular India (historically considered stable).

II. Key Bodies Involved

Bureau of Indian Standards (BIS): The national standards body of India under the Ministry of Consumer Affairs, Food & Public Distribution.

National Centre for Seismology (NCS): The nodal agency of the Government of India for monitoring earthquake activity. ®

NDMA (National Disaster Management Authority): Responsible for laying down policies and guidelines for disaster management.

III. The Climate-Construction Link

The construction sector is a major carbon emitter. Stricter seismic codes often require more steel and cement—two of the most carbon-intensive industries.

A "holistic" framework must balance structural resilience (earthquake proofing) with climate mitigation (reducing the carbon footprint of the extra materials required).

Comparison: Fixed vs. Probabilistic Zoning

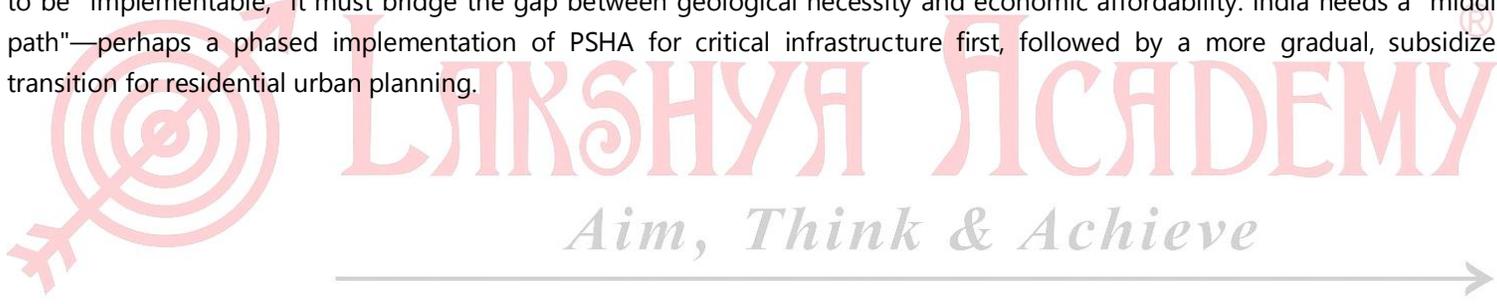
Feature	Fixed Zoning (Current)	Probabilistic (PSHA - Proposed)
Data Source	Historical earthquake intensity.	Probability of ground motion over time.
Complexity	Simple, easy for local builders to follow.	Highly technical, requires site-specific data.

Daily News Analysis

Feature	Fixed Zoning (Current)	Probabilistic (PSHA - Proposed)
Risk Sensitivity	Generalizes large areas.	Can identify micro-risks in specific cities.
Cost Influence	Predictable.	Can lead to sudden, steep cost hikes.

Conclusion

The rollback should not be viewed as a rejection of science, but as a call for consultative policy-making. For a zoning framework to be "implementable," it must bridge the gap between geological necessity and economic affordability. India needs a "middle path"—perhaps a phased implementation of PSHA for critical infrastructure first, followed by a more gradual, subsidized transition for residential urban planning.



UPSC Prelims Exam Practice Question

Ques: The Bureau of Indian Standards (BIS) functions under which of the following ministries?

A. Ministry of Commerce and Industry
 B. Ministry of Consumer Affairs, Food and Public Distribution
 C. Ministry of Housing and Urban Affairs
 D. Ministry of Science and Technology

Ans: B)

UPSC Mains Exam Practice Question

Ques: Discuss the advantages and limitations of Probabilistic Seismic Hazard Assessment (PSHA) compared to traditional seismic zoning methods. (250 Words)

GDP is the final value of all goods and services produced within a year, net of material inputs. Every 5–10 years, the National Statistical Office (NSO) revises the base year to account for shifts in production, consumption, and prices. The 2022-23 revision is particularly significant because the previous series (2011-12) was marred by controversies, including an "overestimation" of growth and a "C" grade from the IMF for data quality.

A revision of GDP and its implications

The revised GDP series with 2022-23 as the base year shows a reduction in the absolute size of GDP and some changes in the production structure of the economy, while the correction in GDP size appears welcome, it remains unclear whether the revision addresses the red flags raised about the 2011-12 series.

ECONOMIC NOTES

R. Nagaraj
Vikash Vaidhya

Annual gross domestic product (GDP) is the sum of the final value of all goods and services produced during a year, net of material inputs. It is the most widely used measure of a country's economic size, GDP, or the economy's gross value added (GVA), is an estimate prepared using a wide range of data on physical outputs and their prices, and this involves numerous statistical procedures. The estimates broadly follow the global templates of the UN System of National Accounts (SNA). The latest revision, with base year 2022-23, follows its 2025 edition.

Roughly every five to ten years, the base year for National Accounts Statistics (NAS) is revised. This includes GDP estimates and other aggregates such as national savings, consumption, and investment.

The revision accounts for changes in what an economy produces and its prices. As the economy expands, the mix of goods and services produced—and their prices—changes. These shifts affect the "real size" of the economy, that is, excluding price rise. Revising the NAS is therefore a complex and massive task, undertaken periodically by the National Statistical Office (NSO) of every country.

Awaited revision
This time, the release of the revised NAS was eagerly awaited as it was being issued after 11 years. The previous revision, with the base year 2011-12 and released in 2015, had prompted many data users—both official and independent analysts—to question the veracity of the GDP estimates.

For some sectors, such as manufacturing, the annual growth rates in the 2011-12 base-year series (when compared with earlier estimates) were not only higher, but the direction of change was also different.

The economic structure reported in the 2011-12 base year series also looked quite different from earlier structures. For example, the size of the non-financial private corporate sector (NFPS) estimated in the 2011-12 series was much bigger than reported previously. Many experts have repeatedly shown that the official GDP growth rates based on the 2011-12 series during the last decade or so are distinctly overestimated. More recently, the International Monetary Fund (IMF), in its review of the quality of economic statistics of its member countries, awarded India a "C" grade for the quality of its NAS, much to the country's embarrassment.

Against this backdrop, the recently released GDP series with 2022-23 as the base year acquired considerable significance. What are the main changes in the new series and why? Here, we will discuss the changes in GDP estimates from the production, reserving a similar discussion on consumption (or expenditure) and prices for another day. Two kinds of comparisons are reported at current prices: first, the annual percentage change between the latest estimates (2022-23 series) and the previous estimates based on the 2011-12 series for the overlapping years 2022-23 and 2022-24; and second, the changes in the GDP shares of principal sectors between the two series for the same years.

Recasting the economy

After an 11-year gap, the National Statistical Office has released a revised GDP series with 2022-23 as the base year, underlying changes in the economy's size and structure.

Chart 1: Decline in size of the economy (%)
(As compared to GDP of 2011-12 series)



Chart 2: Nominal GDP growth rates for the two series (%)
(Growth rates 2011-12 series vs. Growth rates 2022-23 series)

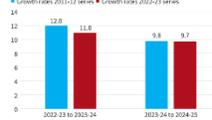
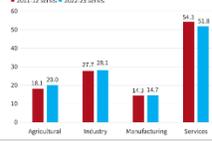


Chart 3: Sectoral shares for 2022-23 (As % of GVA)



Key findings

The revised estimates show that GDP's absolute size has shrunk by about 3–4% in the new series compared with the earlier one (Figure 1). However, the annual growth rates by the new and the old series are not very different (plus or minus one percentage point) (Figure 2). The production structure has also changed somewhat. The GDP shares of agriculture and industry (or the secondary sector) have increased, while the share of services has declined. Within the industry, the share of manufacturing has marginally increased to 14.7% of the economy from 14.3% previously (Figure 3).

At the same time, the absolute size of the manufacturing sector has shrunk by about 1.5–1.6% when compared with the previous series (Figure 4). This decline, though marginal, is significant because this sector was central to much debate during the previous revisions. In terms of institutional classification of GDP, the share of the non-financial private corporate sector (NFPS) has declined by 1.5 percentage points, from 35.4% in the earlier series to 33.9% in the new series for 2022-23. This drop is steeper for 2022-24, with a gap of 1.4 percentage points. This change is significant as the size of the NFPS in GDP has much declined after the previous revision (Figure 5). The household or informal sector's share in the economy has increased



THE GIST

The National Statistical Office released a new GDP series with 2022-23 as the base year after an 11-year gap, amid public questioning of the veracity of the 2011-12 series.

The revised estimates show GDP size declining by about 2.4%, with sectoral composition changing slightly—higher shares for agriculture and industry and a decline in the services sector share.

GDP by institutions indicates a modest contraction in the non-financial private corporate sector and a rise in the household or informal sector's share, but it remains unclear whether the revision addresses all the red flags raised earlier, pending further methodological details.

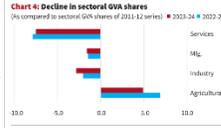


Chart 4: Institutional classification of output 2022-23 (As % of GVA)



Many experts have shown that the official GDP growth rates based on the 2011-12 series during the last decade or so are distinctly overestimated. More recently, the IMF, in its review of the quality of economic statistics of its member countries, awarded India a "C" grade for the quality of its NAS.

marginally compared with the 2011-12 series—by 0.7 percentage points in 2022-23 and by 2.7 percentage points in 2022-24. The rise in the new series is partly or entirely an account of agriculture (Figure 5) (smaller sectors are ignored for brevity).

Interpreting changes
In principle, revising the NAS should not change the absolute size of GDP at current prices, because the underlying economy being measured remains the same. If anything, the revision could enlarge the absolute size, as newer estimates obtained using better data sets and methods—are expected to capture new activities or those that were inadequately captured earlier. Hence, on the face of it, the reduction in the absolute GDP size in the new series appears surprising. However, as mentioned earlier, given the

widely held view of the overestimation of GDP growth rates in the earlier series, the observed reduction may represent a welcome correction.

Such a correction—though it may appear minor—implies changes to our understanding of the economy's performance. For instance, with the reduced (or corrected) GDP size, the goal of attaining a five-trillion-dollar economy, a target set by the Prime Minister in 2019, might be further delayed.

While the correction in the absolute economic size is welcome, it remains unclear whether the revision has addressed all the red flags raised with respect to the 2011-12 series. Likewise, it is not yet clear if the latest revision tackles the questions raised by the IMF in its review.

From what we know, the changes made seem to at least partially look into the issues raised. However, it is possible that the slower or faster growth rates reported in the new series may merely be an account of methodological changes introduced, or a newer dataset used or application of a newer "rate and ratio". Hence, a release of more methodological details of the revision for a fuller assessment of the veracity of the new GDP series is awaited.

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Key Highlights of the 2022-23 GDP Revision

1. Shrinkage in Absolute Size

The Correction: Unlike typical revisions that enlarge the GDP by capturing new activities, the 2022-23 series shows a reduction of 3–4% in the absolute size of the economy compared to the old series.

Interpretation: While surprising, economists view this as a "welcome correction," potentially undoing the overestimation that persisted in the 2011-12 series.

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2. Shift in Production Structure

Sectoral Shares: The shares of Agriculture and Industry have increased in the new series, while the Services sector's share has declined.

Manufacturing: The absolute size of the manufacturing sector shrunk by about 1.5%, though its share of the total GDP rose slightly to 14.7%.

Corporate vs. Informal: The share of the Private Corporate Sector (PCS)—a point of major contention in the last revision—has declined by 1.5 to 3.4 percentage points. Conversely, the Household/Informal sector has seen its share increase.

3. Growth Rates

Despite the change in the total size of the economy, the annual growth rates for overlapping years (2022-24) remain relatively stable, fluctuating only by about ±1 percentage point compared to the previous series.

Related Static Section

I. Basics of GDP Calculation

GVA (Gross Value Added): $GVA = GDP + \text{Subsidies on products} - \text{Taxes on products}$. GVA provides a picture of the economy from the supply/producer side.

UNSNA: India follows the United Nations System of National Accounts, the international standard for national accounting.

II. Importance of Base Year Revision

Capturing Structural Changes: Over a decade, new sectors (like the gig economy or digital services) emerge. Base year revisions ensure these are weighted correctly.

Real vs. Nominal GDP: Revising the base year is essential for calculating Real GDP, which is adjusted for inflation using the prices of the base year.

III. Strategic Implications

\$5 Trillion Target: The absolute reduction in GDP size means the timeline for India to reach the \$5 trillion mark may be pushed further back.

Fiscal Deficit & Debt-to-GDP: A smaller GDP denominator can mathematically lead to a higher reported Fiscal Deficit ratio and Public Debt-to-GDP ratio, potentially affecting sovereign credit ratings if not communicated well.

Comparison: 2011-12 Series vs. 2022-23 Series

Feature	2011-12 Series (Old)	2022-23 Series (Revised)
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Daily News Analysis

Feature	2011-12 Series (Old)	2022-23 Series (Revised)
Data Veracity	Highly debated; accused of overestimation.	Seen as a corrective series.
Absolute Size	Larger (inflated by corporate data).	Smaller by 3–4% (Absolute size).
Corporate Share	Disproportionately high.	Reduced by 1.5 - 3.4 percentage points.
Informal Sector	Inadequately captured.	Marginally increased share (led by Agri).

Analysis of "Red Flags"

The authors argue that while the shrinkage is a move toward realism, it remains to be seen if the methodological flaws of the 2011-12 series (specifically the use of the MCA-21 corporate database) have been fully resolved. The IMF's "C" grade reflected concerns about the "rates and ratios" used to estimate the informal sector from formal sector data. Until the full Methodological Note is released by the NSO, the veracity of the "new" growth story remains under observation.

Conclusion

The 2022-23 GDP revision is a bold step toward statistical transparency. By reducing the absolute size of the economy, the government has prioritized accuracy over optics. However, for India to regain its "A" grade in global economic standing, the NSO must ensure that the new series captures the informal sector through direct surveys rather than mere mathematical proxies.

UPSC Mains Exam Practice Question

Ques: Explain the difference between GDP and GVA. Why does India report both indicators while assessing economic performance? (150 words)

Page : 08 : Editorial Analysis

Holding up half the sky on India's farms

As we celebrated Women's Day on March 8 this year, we also celebrated the International Year of the Woman Farmer (announced by the United Nations Food and Agriculture Organization). It was an opportunity to recognise the contribution of working women to India's agricultural economy. As official statistics do not give a complete picture of the scale of participation, type of work, and economic contribution of women, it is field data that we must turn to. It tells us that while women's labour is central to crop and livestock production, the remuneration to women workers is extremely low and stagnating.

Counting women workers

First and foremost, we lack accurate information on how many women are actually engaged in agriculture, livestock rearing, fisheries and other allied activities. Large-scale labour force surveys (such as the Periodic Labour Force Surveys) are unable to capture women workers accurately because in a largely informal agrarian economy, women's work is often home- or farm-based, unpaid, seasonal, intermittent (even over the course of a single day), and intermingled with care work. For example, a woman respondent may not report herself as a "worker" if her day involves multiple tasks of child care interspersed with animal rearing.

What official labour force surveys tell us is that women's work participation in rural India has risen sharply in recent years. Among rural girls and women aged 15 years and above, 46.5% were in the workforce in 2023-24 as compared to 35% in 2011-12. This still remains lower than the rest of the world: according to the International Labour Office, women's work participation was in the range 57%-63% in a majority of countries.

Hidden behind this statistic that shows a rise in rural women workers lies a less happy reality, namely, that the rise is largely in the count of 'self-employed' women, reflecting a lack of wage employment opportunities. In 2011-12, 60% of rural women workers were classified as self-employed; the proportion rose to 73 per cent in 2023-24. In the same period, the share of women employed as regular and casual wage workers fell. Further, the share of self-employed women working in the agricultural sector rose from 48% to 62%, and, of the total number of self-employed workers in agriculture, women comprised almost one-half (47.2% in 2023-24).

Put together, in 2023-24, there were at least 117.6 million women working in agriculture (of whom 21.7 million were hired workers, 95.1 million were self-employed and 0.8 million were regular workers). The estimated male workforce in agriculture was 127.5 million.

The first sector we consider is crop production. Official statistics cannot tell us the



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is Joint Director, Foundation for Agrarian Studies

share of women workers in total labour deployed in crop cultivation as gender-disaggregated data on family labour are not collected. We provide an answer with data from village-level surveys conducted by the PARI project of the Foundation for Agrarian Studies (www.fas.org.in/pari). From this unique database of 27 villages, we draw on two villages, Palakurichi and Venmani, from Nagapattinam district of Tamil Nadu (studied in 2019) and two villages (Harveli and Mahatwar) from western and eastern Uttar Pradesh (studied in 2023).

As a socio-economic classification of households in these villages is available, we focus on the peasantry and manual worker households, who constitute the majority. We have excluded landlord or capitalist farmer households, and those engaged in business or salaried employment.

In the four selected villages, women accounted for about one-third of family labour (except the village in western Uttar Pradesh where it was lower). When family and hired labour are combined, women accounted for the major share in Palakurichi (61%) and Venmani (57%) in Tamil Nadu, and about 41% in Mahatwar village of eastern Uttar Pradesh. These differences arose on account of several factors including crop choice and farming systems, and the socio-economic composition of households. Nevertheless, the key message is that crop cultivation relies heavily on women's labour.

The second sector is livestock rearing, one of the fastest growing sectors within agriculture, and where women constitute the primary work force. The PARI village studies show that in family-based livestock rearing (particularly milch cattle and poultry), most tasks are performed by women. If a household owned cattle, inevitably a woman participated in livestock labour, spending about 2 hours for every animal reared. At last count, 40 million rural households owned milch animals (All India Debt and Investment Survey, 2018-19), suggesting that around 40 million women were engaged in animal rearing.

The third sector is wage labour. As mechanisation has progressed and aggregate demand for labour in agriculture has declined, so has the demand for women's labour. Our estimates show that the share of women workers in total casual labour employment in crop production ranged from 16% to 71% across the four villages, but was more than one-third in all but the western U.P. village (where labour hiring is more complex given the scale of sugarcane cultivation). And, these women hired workers belonged not only to manual labour households but also to the lower rungs of the peasantry.

Earnings and wages

For a workforce of more than 100 million, the question of remuneration is clearly important.

What is the level of explicit or implicit earnings obtained by a woman worker in agriculture today?

For wage workers, the prevailing wage rate is observable. At today's prices, a woman worker in agriculture earned less than ₹300 a day in all four villages. The gender gap in wages was higher in those regions with overall higher wage levels. Women's wages (₹290) were less than 50% of male wages in the two villages of Tamil Nadu; in the two villages of Uttar Pradesh, women's wages were lower (₹242-₹276) but so were men's wages and the gender gap was narrower.

Official statistics reveal a similar story. In November 2025, according to the Labour Bureau, the average all-India daily wage for agricultural work (sowing/transplanting/weeding) for a woman was ₹384. There were, of course, variations across States, with women workers in Kerala receiving the highest daily wage (₹646). Furthermore, data show that wages corrected for inflation have barely risen over the last decade.

There are no official data on women's earnings in livestock earnings, and we estimated the implicit daily earning, based on income generated from animals over the year (based on production of milk, dung) and total hours of work. In the two U.P. villages, where milch animals were widely held, the implicit daily earning was around ₹100. In short, women earned only two-fifths of the prevailing agricultural wage rate for their labour in cattle rearing.

Turning to crop production, it is difficult to estimate earnings per worker, as many members of a family may contribute to production. Suffice to note that in all four study villages, the return from crop production was low, averaging less than ₹16,000 a year in the eastern U.P. village and less than ₹24,000 in Palakurichi, the Tamil Nadu village. Even if half the income was apportioned to women, their incomes would not be high.

The picture so far

It is clear that women now constitute about one-half of the agricultural workforce in India (the actual number is likely to be higher for the reasons mentioned above). The majority of rural women were self-employed workers, but only 10% of rural women owned land, the primary asset for a cultivator. Turning to agricultural workers, women workers now (21.7 million) exceed the number of male workers (19.7 million), a first-time occurrence in post-Independence India, but wage rates for women are low in absolute terms, with a few exceptions, and reveal a large gender wage gap.

Women workers hold up half the sky in rural India. The Indian state has failed to correctly record the number of women workers, and to ensure that they receive decent wages and all rights as workers.

Women sustain India's farming economy but remain underpaid and undercounted

GS Paper III : Indian Economy - Agriculture

UPSC Mains Practice Question: Discuss the concept of feminization of agriculture in India. What are the major factors responsible for this trend? **(150 Words)**

Context :

As male workers migrate to urban areas for non-farm employment, the responsibility of maintaining India's food security has shifted significantly onto women. Official statistics, such as the Periodic Labour Force Survey (PLFS), show a rise in women's work participation, yet they often fail to capture the complexity of women's roles, which blend farm work with unpaid care and domestic duties.

The Statistical "Invisibility" of Women Farmers

1. Undercounting in Official Data

The Care-Work Blur: Traditional surveys often fail to categorize women as "workers" because their labor is intermittent and interspersed with household chores.

The Rise of the "Self-Employed": While women's participation rose from 35% (2011-12) to 46.5% (2023-24), the majority (73%) are classified as self-employed. This often indicates a lack of formal wage opportunities rather than entrepreneurship.

The "Worker" Milestone: For the first time in post-Independence India, the number of female hired workers (21.7 million) has exceeded male hired workers (19.7 million) in agriculture.

2. Sectoral Contributions

Crop Production: Based on village-level studies (PARI project), women provide the majority of labor in certain regions (up to 61% in parts of Tamil Nadu).

Livestock Rearing: This is a primary domain for women. An estimated 40 million women are engaged in animal rearing, spending roughly 2 hours per animal daily.

Wage Labour: Women are predominantly engaged in labor-intensive tasks like sowing, transplanting, and weeding.

Related Static Section

I. Feminization of Agriculture

Definition: The increasing participation of women in agricultural activities, usually driven by the out-migration of men.

Challenges: Lack of land titles (only 10% of rural women own land), limited access to institutional credit, and lack of "farmer" status which prevents them from accessing government subsidies (e.g., PM-KISAN).

II. Periodic Labour Force Survey (PLFS)

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Daily News Analysis

Launched by: National Statistical Office (NSO).

Objective: To estimate key employment and unemployment indicators (Worker Population Ratio, Labour Force Participation Rate) in shorter time intervals for urban areas and annually for both rural and urban areas.

III. Important Schemes for Women Farmers

Mahila Kisan Sashaktikaran Pariyojana (MKSP): A sub-component of the Deendayal Antyodaya Yojana-NRLM to empower women in agriculture by making systematic investments to enhance their participation and productivity.

Pradhan Mantri Matru Vandana Yojana (PMMVY): Though a maternity benefit scheme, it is crucial for rural women workers who lack paid maternity leave.

The Remuneration Gap: A Detailed Look

Sector	Nature of Earning	Estimated Amount	Comparison/Gap
Wage Labour	Daily Cash Wage	₹242 – ₹384	Often less than 50% of male wages in high-wage states.
Livestock	Implicit Daily Earning	~₹100	Only 2/5ths of the prevailing agricultural wage rate.
Crop Production	Annual Family Return	₹16,000 – ₹24,000	Shared among all family members; very low per capita.

Analysis: The Triple Burden

Women farmers in India face a "Triple Burden":

Productive Work: Agricultural labor and livestock management.

Reproductive Work: Childcare, elderly care, and domestic maintenance.

Structural Barriers: Lack of land rights (land is usually in the name of the male head), which acts as a barrier to accessing agricultural inputs and credit.

Conclusion

The data reveals a stark paradox: women "hold up half the sky" on Indian farms but occupy the lowest rung of the economic ladder. For the International Year of the Woman Farmer to be meaningful, India must move beyond mere recognition. Policy interventions must focus on land titling for women, ensuring equal pay for equal work through stricter enforcement of the Code on Wages, and developing gender-friendly farm machinery to reduce the physical drudgery of female-dominated tasks.