DAILY CURRENT AFFAIRS

12th May 2025

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Mains Manthan

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Prelims Saarthi

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Why India must get the Caste Census right?

Why in News?

▪ Union Cabinet approved first ever Caste Census

Syllabus

▪ **GS Paper 2** – Indian Polity, Governance & Social Justice

Why India must get the Caste Census right

The Narendra Modi government's decision to include caste enumeration in the next Census is one that is bold, transformative and commendable. Counting caste is not capitulation to identity politics. It is a mirror to the lived realities of millions. It marks a vital step towards evidence-based policymaking to build a more just and inclusive India. A nation that refuses to see itself cannot hope to heal itself.

Post-Independence, India attempted to abolish caste while simultaneously pursuing social justice – a textbook example of policy schizophrenia, as the two goals are fundamentally incompatible. The refusal to count caste in the Census was a corollary of the policy of caste blindness. But the Constitution explicitly mandates the pursuit of social justice through reservations in education, public employment, and electoral constituencies – measures that require precise, disaggregated caste data. Although the Constitution uses the term "class", the Supreme Court of India has repeatedly ruled that caste is a valid, and often necessary, proxy for identifying backwardness and has insisted on detailed caste-wise data to uphold reservation policies.

In his 1955 essay, 'Thoughts on Linguistic States', Dr. B.R. Ambedkar denounced the omission of caste tables from the 1951 Census as an act of "petty intelligence". Visibility in data is the first step toward meaningful inclusion. Caste data collection across all major social groups is essential not only for administering reservations, but also for equity-driven planning, targeted policymaking, and tracking disparities over time. Not collecting it has rendered many of India's marginalised communities invisible in official statistics. Worse, a narrow elite of upper castes and dominant Other Backward Classes (OBCs) has entrenched its grip over wealth, opportunity and power behind the smokescreen of caste anonymity. In hindsight, this ranks among India's gravest policy failures.

A legal and administrative necessity

Since 1951, the Census has enumerated Scheduled Castes (SCs) and Scheduled Tribes (STs) but excluded OBCs, even though all three groups are constitutionally eligible for reservations in education and public employment. The usual justification, that OBCs lack reserved seats in Lok Sabha and State Legislative Assemblies (that SC/ST have) collapsed with the 73rd and 74th Amendments, which mandated OBC reservation (in addition to SC/ST reservation) in electoral constituencies of panchayats and municipalities. Implementing these provisions requires granular, area-wise OBC data. With the introduction of reservations in education and public employment

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Counting caste is a mirror to the lived realities of millions and a vital step toward evidence-based policymaking

for the Economically Weaker Sections (EWS) among upper castes (2019), a comprehensive enumeration of all castes has now become a legal imperative.

India's reservation policy currently operates in an evidence vacuum, leaving it vulnerable to arbitrary demands from powerful caste groups and politically expedient decisions by governments. With reliable caste data, the demands of the Marathas, Patidars, Jats, and others can be assessed transparently and on merit. The limited data we do have reveal deep inequities. According to submissions made by the Government of India to the Justice G. Rohini Commission, just 10 OBC castes cornered 25% of all public jobs and education seats reserved for OBCs, while a quarter of OBC castes secured 97% of the benefits. Shockingly, 38% of OBC castes received only 3% of the benefits, and another 37% got nothing at all.

Hence, caste enumeration is also an administrative imperative – to prevent the elite capture, enable rational sub-categorisation within social groups, and allow a more precise definition of the "creamy layer".

Collection of caste data must go beyond the decennial Census. All periodic government surveys should enumerate OBCs and upper castes alongside SCs and STs. The era of partial counting must end.

Learning from failure and success

In 2010, Parliament unanimously resolved to count caste in the 2011 Census. The 1931 Census had recorded 4,147 castes (excluding the then-called Depressed Classes). The Anthropological Survey of India has identified 6,325 castes. But the Socio-Economic and Caste Census (SECC) of 2011, conducted by the United Progressive Alliance-II government, was a debacle. It produced a ludicrous figure of 46 lakh castes and was never released.

What went wrong? First, the SECC-2011 was not conducted under the Census Act, 1948 and lacked legal authority. Second, it was conducted through the Union Ministries of Rural Development and Urban Development with no expertise for handling a complex socio-anthropological survey. Third, its open-ended questions about caste created confusion. Undertrained enumerators conflated castes, aliases, sub-castes, *gotras*, clan names, surnames and broader caste groups. The result was a chaotic, unusable data set. Was it sabotage or incompetence? Either way, a historic opportunity was squandered.

In contrast, in Bihar's caste survey, enumerators were given a vetted list of 214 castes specific to the State, with a 215th option for

"Other Castes". The survey was well-planned, well-executed, and showed that a credible caste count is entirely feasible.

Blueprint for a successful Caste Census

To avoid repeating the SECC-2011 fiasco, here is what must be done.

First, legal backing. Amend the Census Act, 1948 to explicitly mandate caste enumeration and insulate the process from shifting political agendas.

Second, the right institution. Entrust the exercise solely to the Office of the Registrar General and Census Commissioner of India, and not Ministries that lack domain expertise.

Third, a standardised questionnaire. Use closed-option questions with dropdown menus covering sub-caste, caste (including aliases), broader caste group, and caste-linked surname (optional). Having 'caste' alone as an option can lead to errors since some caste names such as Rao, Naik, Singh or Bhandari span multiple communities. Assign unique digital codes to avoid duplication and semantic confusion (e.g., grouping "Iyer" and "Aiyar" under one code).

Fourth, State-specific caste lists. Develop draft lists in consultation with State governments, sociologists, and community leaders. Publish them online and invite public feedback before finalisation. Use a similar participatory approach for questionnaire design.

Fifth, enumerator training. Conduct region-specific training sessions with mock examples, clear dos and don'ts, and guidance on local caste nuances.

Sixth, digital tools. Equip enumerators with handheld devices that are preloaded with validated caste lists. Restrict data entry to predefined options to minimise human error.

Seventh, representative staffing. To ensure data integrity, deploy enumerators from diverse communities and in areas where they have no conflict of interest.

Eighth, independent oversight. Establish district-level committees to audit samples and monitor data integrity.

Ninth, pilot testing. Run trials in diverse States such as Tamil Nadu, Gujarat, Uttar Pradesh and Assam to refine methodology before nationwide rollout.

In every Census since 1951, the Government has successfully enumerated nearly 2,000 castes and tribes under the SC/ST categories. Counting the remaining 4,000-odd OBCs and upper castes (most of them State-specific) is not only doable but also long overdue. The delayed 2021 Census offers a rare chance to finally close this data gap. The time for denial and delay is over. The time to get the Caste Census right is now.
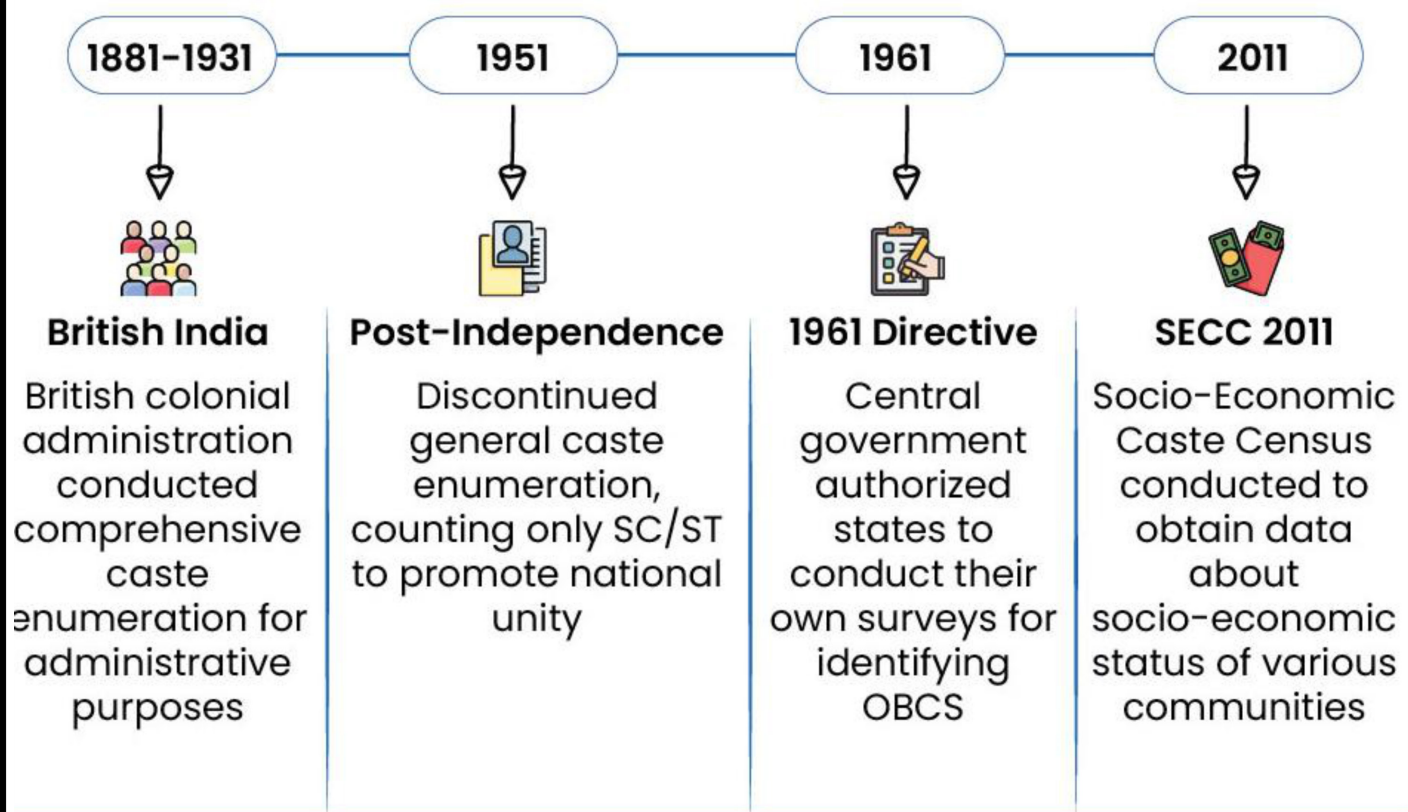
Key Takeaways from the Article

- **Need for Caste Enumeration:**
  - The **Modi government's decision** to include **caste enumeration** in the Census is seen as an **important step** towards evidence-based policymaking that can address **marginalization** and **caste-based discrimination** in India.
  - **Caste data** is essential to ensure that **reservations** and **affirmative actions** are based on **accurate data.**

History of Caste Enumeration in India

1881–1931	1951	1961	2011
British India	**Post-Independence**	**1961 Directive**	**SECC 2011**
British colonial administration conducted comprehensive caste enumeration for administrative purposes	Discontinued general caste enumeration, counting only SC/ST to promote national unity	Central government authorized states to conduct their own surveys for identifying OBCS	Socio-Economic Caste Census conducted to obtain data about socio-economic status of various communities

- **Historical Context and Constitutional Mandates:**
  - The **Indian Constitution** mandates **social justice** through **reservations** in **education, public employment**, and **electoral constituencies.**
  - Dr. **B.R. Ambedkar** denounced the **omission of caste data** in the 1951 Census.
  - The **Supreme Court** has recognised **caste** as a **proxy for backwardness** and has emphasised the need for **detailed caste-wise data** for upholding reservation policies.
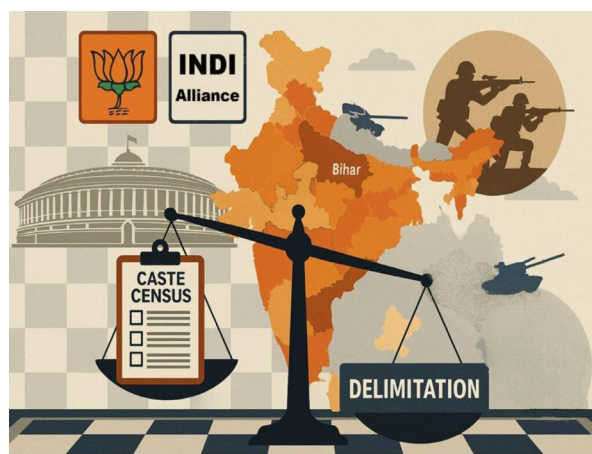
- **Challenges and Failures of the SECC-2011:**
  - The **Socio-Economic and Caste Census (SECC) 2011** failed due to lack of **legal authority, poor execution,** and **confusion in caste data collection.**

Caste-based census

YEAR	OUTCOME
1872	Classified population into Brahmins, Kshatriyas, Rajpoots, other castes based on profession, native Christians, Aboriginal tribes, semi-Hindooised tribes
1901	1,642 castes
1931	4,147 castes
1941	Census curtailed due to World War II
2011*	Over 46 lakh caste names, sub-castes, surnames and gotras. Caste numbers withheld citing inaccuracies.

*socio-economic and caste census

Commissions dealing with issues related to OBCs

Kaka Kalelkar Commission (1953)	Identified 2,399 backward castes, including 837 most backward castes. Recommended caste-based census in 1961. Report rejected. Government says no objective tests for identifying backward class.
Mandal Commission (1979)	Identified OBCs comprise 52% of India's population, granted 27% reservation in government jobs.
Rohini Commission (2017)	Recommends 27% reservation for OBCs be divided into four sub-categories. Finds 97% of jobs and educational seats went to 25% sub-castes. 10% of the 2,633 OBC communities cornered 25% of these jobs, while 983 communities had zero representation.

- **Current Caste Data Gaps:**
  - **Scheduled Castes (SCs)** and **Scheduled Tribes (STs)** have been enumerated since 1951, but **Other Backward Classes (OBCs)** have not been adequately recorded.
  - **Elite capture** and **disparities in benefits** within OBCs remain prevalent due to the lack **of granular caste data.**
  - The **Marathas, Patidars, Jats**, and others have made **political demands for reservations** based on incomplete data.

WHAT HAPPENED TO 2011 CASTE CENSUS?

➤ Following all-party consensus, UPA govt in 2011 decided to conduct a Caste Census, the **first since 1931**

➤ Nearly ₹4,900 crore was spent on the Socio-Economic and Caste Census (SECC)

➤ In 2015, expert group was set up under then Niti Aayog vice-chairman to decide on classification and categorisation of SECC data

➤ In 2016, all data from SECC barring caste numbers was put in public domain. The **caste data still remains unreleased**

➤ In July 2017, the govt told

Parliament that raw caste data from SECC had been given to the social justice ministry, "who is to form the expert group for classification and categorisation of data"

➤ One problem with the SECC data cited by experts is that it has thrown up **46 lakh** castes, sub-castes, clan names and so on. Categorising these is a mammoth task

➤ To avoid this pitfall, enumerators in 2021 will be given a **pre-decided list of castes** so that they can ask households which of them they fall under

- **Blueprint for a Successful Caste Census:**
  - Legal backing
  - Institutional expertise
  - Standardized questionnaires
  - State-specific caste lists
  - Enumerator training
  - Pilot testing

NUMBERS GAME

1881-1931: British Raj included caste enumeration in Census	**2016:** SECC data published, caste excluded
1951: Junked in independent India's first Census, except for SCs and STs	**2018:** Rajnath Singh, then home minister, speaks about OBC data collection in Census 2021
1961: States allowed to conduct surveys to prepare their OBC lists	**2023:** Cong demands an 'up-to-date' caste census
2011: UPA undertakes caste enumeration as a part of Socio-Economic & Caste Census	**2024:** Bihar, Telangana publish caste survey data. Karnataka undertook survey, yet to release data

How Kerala is handling its waste problem?

Why in News?

▪ Waste generation due to increased urbanization

Syllabus

▪ **GS Paper 2** – Governance & Social Justice

How is Kerala handling its waste problem?

What is the 'Vruthi' campaign? How has waste increased in Kerala society? Is this campaign different from the Swachh Bharat Mission? Are decentralised waste management systems better than centralised ones?

EXPLAINER

Tikender Singh Panwar
Ajith Kaliyath
Rajesh. K

The story so far:

Since October 2, 2024, Kerala has been aggressively advocating its latest campaign – 'Vruthi'. Meaning cleanliness of the body and mind, this campaign has involved everyone from all levels, from the Chief Minister and Malayalam film stars to school children, local self-government representatives, bureaucrats, and sanitation workers. In a five-day conclave, titled 'Vruthi 2025: The Clean Kerala Conclave' held at Thiruvananthapuram recently, in which around 25,000 people participated, it was stated by the Local Self-Government Minister that the State had reached formidable success in waste collection from houses – around 75% of houses have been reached, which was just 40% till a year back.

Why was this campaign necessary?

The State of Kerala has achieved a certain standard of hygiene, thanks to the various developmental factors associated with the State in the course of history.

In the early days, the waste generated from consumption (mostly organic) would mostly be put to use in the backyard of the same house (for example, as manure). However, post liberalisation, the materiality of production and consumption changed significantly. Kerala, being a rapidly urbanising society, both spatially and temporally, where the share of agriculture in the State's GDP is less than 10%, consumer behaviour also changed exponentially to market-driven products. The materiality of these new products led to a situation where, not only did the waste generated increase manifold, it also could not be disposed of or absorbed in the backyard. Hence, it started spreading within neighbourhoods and localities.

A senior bureaucrat, who is part of the Kerala Solid Waste Management Project (KSWMP), stated that during the UPSC interview, the foremost issue that she said she wanted to resolve, being head of the district, was waste management. While this was over a decade ago, she observed that this continues to be the foremost issue that many UPSC aspirants want to tackle. It is against this background that collective voices have now started emerging.

It is also to be noted that the basic principles of urban planning in the 17th and 18th centuries emerged and evolved due to a health epidemic – the plague in England. Health continues to be an important driver for urban reforms and hence, the Vruthi campaign is the need of the hour.

What is being done?

When the State government realised that the spirit of personal hygiene had not translated into clean and hygienic public spaces, a high-decibel campaign along with strategic and context-specific interventions was planned by local governments to make Kerala garbage-free. The campaign was titled '*Malinya Muktham Nava Keralam*' (waste-free Kerala), connecting all key stakeholders and agencies working in the domain of waste management.

Recent episodes of the drowning of a corporation sanitary worker in the Amayizhanjan canal at Thiruvananthapuram, along with increasing dog bites, and frequent

outbreaks of Zoonotic diseases in the State, has brought all levels of administration and various sectoral agencies to engage and collaborate with their respective local self-governments. The need for clean and hygienic public spaces was understood as an imperative for healthy living in the State.

While the Kerala government mobilised all key stakeholders, the larger civil society also helped in unlocking many unexplored pathways for this endeavour. These included strengthening the Haritha Karmasena, local government functionaries, locality-based campaigns, art and cultural activities, encouraging a competitive approach within local governments to achieve a 100% garbage-free status, and engaging children, youth, schools, colleges and various voluntary groups.

How is it different from the Swachh Bharat Mission?

The Swachh Bharat Mission (SBM) 1.0 and 2.0 are top-to-bottom mission modes for both rural and urban India. The SBM follows a framework where people at the top level decide how many toilets should be built, how many sewage treatment plants should be constructed, how many waste treatment plants should be sanctioned etc. It was and continues to be a supply-driven chain where cities try to fit themselves in that particular framework.

The *Malinya Muktham Nava Keralam* campaign, on the other hand, is primarily for behavioural change, where massive participation of the people is needed and ensured through various exercises. Moreover, the Vruthi conclave was not speaking the language of a particular technology and was thus technology neutral. It gave importance mainly to

decentralised solutions, while also giving back some positive features of centralised solutions. From the 'Black Soldier Fly' to 'Windrow Composting', the conclave was a platform for cities to customise themselves and decide what solutions are best adapted to them.

Are centralised or decentralised solutions better?

Moving away from the binary of centralised and decentralised form of governance in managing waste, the conclave emphasised lessons learnt from both the successes and failures of centralised and decentralised solutions. There are stories where centralised solutions were a great success – for example, the Guruvayur Municipality's waste treatment. However, it was the mismanagement of centralised systems that led to the failure of waste management initiatives in Kochi, as was evident in the infamous Brahmapuram fires of 2023. Likewise, the successes of decentralised solutions were also discussed. It was stated that this year there has been a phenomenal jump in allocation from the State government to local self-governments for waste management. However, the same could not be effectively deployed owing to huge gaps in their capacities. The Kerala Urban Policy Commission has recommended that professionalisation of services is a key driver for attaining success in urban governance, including waste management.

What lies ahead?

As of now, while there is a visible change, the pattern continues to be linear. The current campaign is driven by the State government owing to the reasons discussed above. The moment the State

government withdraws from it, will the trajectory continue in the same direction? This is a question that needs to be evaluated.

Additionally, Extended Producer Responsibility (EPR) laws need to be strengthened in the country. These laws shift the responsibility of managing a product's waste to the producer, rather than the local government or consumer.

There is also a need to break the current inertia in society; a behavioural change is of utmost importance. 'My waste, my responsibility', is the current slogan coined by the State and this should reach down to every level of governance and structures, including families.

Is building collectives important?

People's collectives have been built at various levels. This would include institutions such as schools, business enterprises, residents' welfare associations, workers' associations etc. Such collectives need to be brought on board the campaign for it to succeed effectively.

Kerala has consistently ranked first in the country on indices relating to human and sustainable development and is currently at crossroads on managing its waste. The way in which it would manage its waste problem, with an open mind and drawing on a large canvas, incorporating worldwide changes, will pave the way for a cleaner and healthier Kerala, which can be a shining model of a new age urban society, not just for the State but for the entire country.

Tikender Singh Panwar is former deputy mayor of Shimla, and member of the Kerala Urban Commission. Ajith Kaliyath is chair and an urban professor at the Kerala Institute of Local Administration (KILA). Rajesh. K is a senior urban fellow at KILA.

Transforming together: Volunteers of the Haritha Karmasena check out art installations made with plastic waste at Kanakakunnu Palace as part of Clean Kerala Conclave in Thiruvananthapuram on April 12. NIRMAL HARINDRAN

THE GIST

▾ When the State government realised that the spirit of personal hygiene has not translated into clean and hygienic public spaces, a high-decibel campaign along with strategic and context-specific interventions was planned by the local government to make Kerala garbage-free.

▾ The Swachh Bharat Mission (SBM) 1.0 and 2.0 are top-to-bottom mission modes for both rural and urban India.

▾ The current campaign is driven by the State government. The moment the State government withdraws from it, will the trajectory continue in the same direction? This is a question that needs to be evaluated.

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Key Takeaways from the Article

- **The Vruthi Campaign:**
  - ◆ **Launched** in October 2024, focusing on **cleanliness** of both body and mind, with significant participation from all sectors of society.
  - ◆ **75% of households** reached for waste collection, up from **40%** in the previous year.

- **Kerala's Changing Waste Problem:**
  - Kerala's waste generation increased due to **urbanization** and **market-driven products** after liberalization.
  - The state's old practice of **backyard waste management** was no longer feasible due to increasing urban consumption.
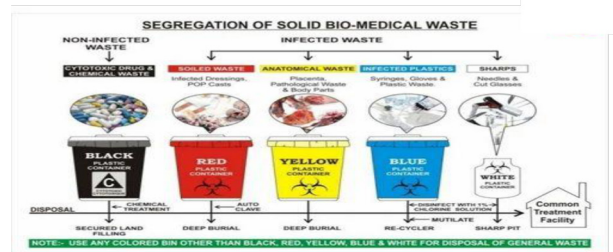
- **Key Initiatives:**
  - **'Malinya Muktham Nava Keralam'** campaign to make Kerala **garbage-free**, emphasizing **decentralized solutions** and community engagement.
  - Collaboration of various sectors like **Haritha Karmasena,** local governments, and voluntary groups.
  - Efforts also focused on addressing health crises and promoting **public space hygiene.**
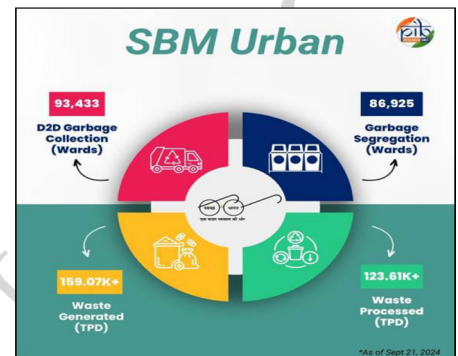
- **Comparison with Swachh Bharat Mission:**
  - **SBM** is **top-down**, focusing on infrastructure and supply-driven models, while **Kerala's Vruthi** is participatory and **behavioral.**
  - Kerala focuses on **decentralized solutions**, emphasizing local adaptation rather than imposing a one-size-fits-all approach.

STEP 1	Treat Data and Load Information
STEP 2	Analyze Time Series and Generate Predictions
STEP 3	Apply Inclusion/Exclusion Criterion to Containers
STEP 4	Generation of Routes Considering All Contraints
STEP 5	Visualization of Best Solution
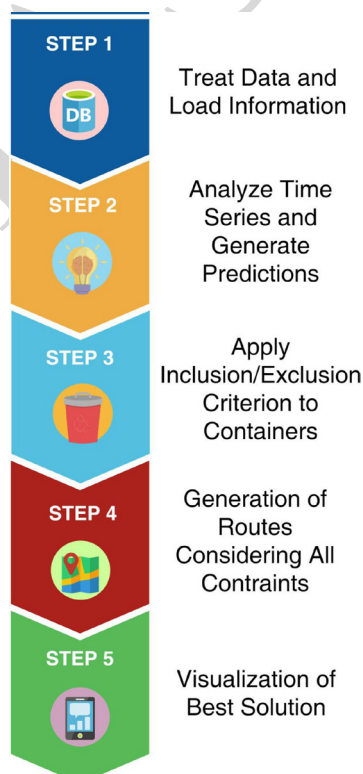
- **Centralized vs Decentralized Waste Management:**
  - ◆ Successes in **centralized solutions** (e.g., **Guruvayur Municipality**) but also failures (e.g., **Kochi Brahmapuram fire**).
  - ◆ Kerala has increased funding to local governments, but there are still capacity-building challenges at the local level.

- **Behavioral Change and EPR Laws:**
  - ◆ **Behavioral change** is emphasized with the slogan **'My waste, my responsibility'**.
  - ◆ The need to strengthen **Extended Producer Responsibility (EPR)** laws to ensure better waste management and producer accountability.

Total Fertility Rate in India remains at 2.0; Bihar & Bengal

Why in News?

▪ Total Fertility Rate in India

Syllabus

▪ **GS Paper 2** – Governance & Social Justice

Total Fertility Rate in India remains at 2.0; Bihar records highest count, Bengal lowest

There has been a gradual decline in the share of population in the age group of 0-14 from 41.2% in 1971 to 24.8% in 2021, shows the Sample Registration System report for 2021 released by the RGI

Vijaita Singh
NEW DELHI

The Total Fertility Rate (TFR), the average number of children born to women over their lifetime, in the country has remained at 2.0 in 2021, the same as in 2020, shows the Sample Registration System (SRS) report for 2021 released by the Registrar-General of India (RGI) on May 7.
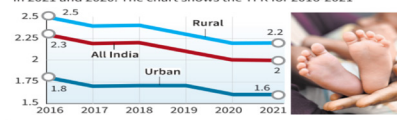
Bihar reported the highest TFR at 3.0, while Delhi and West Bengal reported the lowest of 1.4.

The report said there had been a gradual decline in the share of population in the age group of 0-14 from 41.2% in 1971 to 24.8% in 2021. The "proportion of the economically active population between 15-59 years has increased from 53.4% to 66.2% during the same period", the report said.

The population has gone up from 5.3% to 5.9% for the 65-plus age group and 6% to 9% for the 60-plus age group.

During the 2024 interim Budget, Union Finance Minister Nirmala Sitharaman had announced a high-power committee to consider the challenges arising from "population growth and demographic changes."

Though the committee is yet to be formed, the announcement suggested there has been "fast" population growth in the country, however the SRS data says otherwise.

A comprehensive pattern will emerge after the Census is conducted, pending since 2021 and which was last conducted in 2011.

As Census is usually counted every 10 years, the SRS is the largest demographic survey in the country mandated to provide annual estimates of fertility and mortality indicators at the State and national level.

The survey was conducted in 8,842 sample units across all States, covering about 84 lakh sample population.

Elderly population
Kerala recorded the highest percentage of population in the age group of 60 and above with 14.4% of the total population falling under this category.

Tamil Nadu 12.9% and Himachal Pradesh 12.3% are the other two States with the highest percentage of elderly population, the report said.

On the other hand, Bihar 6.9%, Assam 7% and Delhi 7.1% have the lowest percentage of the population in the age group of 60 and above.

The mean age at effective marriage for females has increased from 19.3 years in 1990 to 22.5 years in 2021.

"It is noteworthy that the replacement level TFR, viz. 2.1, has been attained at the national level, along with Delhi 1.4, West Bengal 1.4, Tamil Nadu 1.5, Andhra Pradesh 1.5, Jammu and Kashmir 1.5, Kerala 1.5, Maharashtra 1.5, Punjab 1.5, Himachal Pradesh 1.6, Telangana 1.6, Karnataka 1.6, Odisha 1.8, Uttarakhand 1.8, Gujarat 2.0, Haryana 2.0 and Assam 2.1," the report said.

A static trend
The Total Fertility Rate (TFR) for the country has remained at 2.0 in 2021 and 2020. The chart shows the TFR for 2016-2021

Source: SRS Statistical Report 2021

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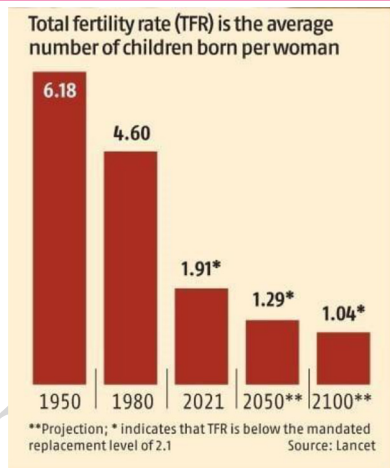
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Key Takeaways from the Article

- **Total Fertility Rate (TFR):**
  - India's national **TFR remains at 2.0** in 2021, indicating **replacement level fertility.**
  - States like **Delhi** and **West Bengal** have the lowest TFR at **1.4**, while **Bihar** records the highest TFR at **3.0**, signaling significant regional disparities in fertility patterns.
  - States like **Kerala, Delhi**, and **Haryana** have reached the replacement level fertility of **2.1.**

- **Demographic Shifts:**
  - The **proportion of children aged 0-14** years has dropped significantly from **41.2% in 1971 to 24.8% in 2021**, indicating a **declining younger population.**
  - The **economically active population** (15-59 years) has increased from **53.4% in 1971 to 66.2% in 2021**, reflecting a growing workforce.
  - The **elderly population (60+)** has risen, with **Kerala** having the highest percentage at **14.4%.**

Total fertility rate (TFR) is the average number of children born per woman

6.18	4.60	1.91*	1.29*	1.04*
1950	1980	2021	2050**	2100**

**Projection; * indicates that TFR is below the mandated replacement level of 2.1
Source: Lancet

2014
- Mission Indradhanush
- Rashtriya Kishor Swasthya Karyakram
- Swachh Bharat Abhiyan

2017
- National Health Policy
- Mental Healthcare Act
- National Strategic Plan for TB Elimination
- HIV and AIDS (Prevention & Control) Act

2019-20
- Surakshit Matritva Aashwasan (SUMAN)
- e-Sanjeevani OPD
- Social Awareness and Actions to Neutralize Pneumonia Successfully (SAANS)

2022
- Pradhan Mantri TB Mukt Bharat Abhiyaan to end TB by 2025
- National List of Essential Medicines Revision
- National Tele Mental Health Programme (Tele MANAS)

2015-16
- Free Drugs and Diagnostic Service
- Maternity Benefits Act - 6 months paid maternity leave
- Pradhan Mantri Ujjawala Yojana
- Pradhan Mantri National Dialysis Programme

2018
- Ayushman Bharat - Health and Wellness Centres
- Ayushman Bharat – PM Jan Aarogya Yojana
- POSHAN Abhiyaan
- Anemia Mukt Bharat Strategy

2021
- COVID-19 Vaccination Programme
- XV-Finance Commission – Health Sector Grants to Local Bodies
- Ayushman Bharat Digital Mission
- Ayushman Bharat – Health Infrastructure Mission
- Medical Termination of Pregnancy (Amendment) Act, 2021

- **Female Marriage Age:**
  - The **mean age at effective marriage for women** has increased from **19.3 years in 1990** to **22.5 years** in 2021, indicating changing social norms around marriage and family life.

INDIA'S PROGRESS IN HEALTH INDICATORS: A REMARKABLE JOURNEY

Maternal Mortality Ratio (MMR):
Declined from 130 per lakh live births in 2014-16 to 97 per lakh live births in 2018-20 (Source: SRS).
83% decline since 1990, outperforming the global reduction of 45%.

Under 5 Mortality Rate (U5MR):
Reduced from 45 in 2014 to 32 in 2020 (Source: SRS).
75% decline since 1990, compared to the global decline of 60%.

Infant Mortality Rate (IMR):
Dropped from 39 per 1,000 live births in 2014 to 28 per 1,000 live births in 2020 (Source: SRS).

Total Fertility Rate (TFR):
Fell from 2.3 in 2015 to 2.0 in 2020, as recorded by SRS and NFHS-5 (2019-21).
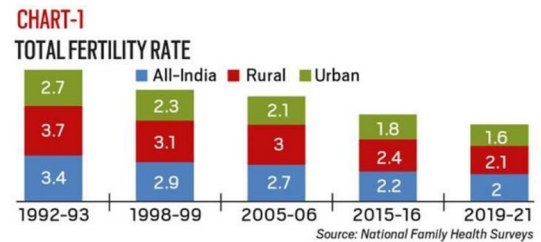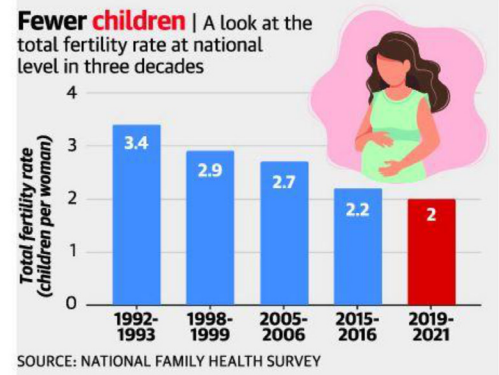Safeguarding the futures of one mother and child at a time.

- **Challenges in Population Growth:**

  - The **Interim Budget 2024** hinted at a **high-power committee** to address challenges arising from **population growth and demographic changes.**

  - **States like Bihar** with high fertility rates and a youthful population require targeted policies in **family planning, education,** and **employment.**

  - **States like Kerala**, facing an aging population, need **social protection** schemes for the elderly.

- **Policy and Economic Implications:**

  - The **shift in fertility patterns** has major **socioeconomic and health policy implications,** such as the need for better healthcare for the elderly and improved employment opportunities for youth.

  - The editorial also suggests that India must manage the **aging population** while leveraging the **youth bulge** for economic growth.

Fewer **children** | A look at the total fertility rate at national level in three decades

Year	Total fertility rate (children per woman)
1992-1993	3.4
1998-1999	2.9
2005-2006	2.7
2015-2016	2.2
2019-2021	2

SOURCE: NATIONAL FAMILY HEALTH SURVEY

CHART-1
TOTAL FERTILITY RATE
■ All-India ■ Rural ■ Urban

	1992-93	1998-99	2005-06	2015-16	2019-21
Urban	2.7	2.3	2.1	1.8	1.6
Rural	3.7	3.1	3	2.4	2.1
All-India	3.4	2.9	2.7	2.2	2

Source: National Family Health Surveys

Indian GreyWolf

Who let the dogs out?

- **Kadbanwadi Grassland:**

  - District?

  - State?

  - Species?

  - IUCN Status?

  - Schedule?

Mogadishu (Places in News)

- Mogadishu

BIG SHOT

Somalia's capital Mogadishu after a heavy downpour on May 10. At least seven people died and major roads were cut off after heavy rains inundated the city's roads, overwhelming a drainage system already straining under a growing urban population. AP

World's longest banana infructescense

- **Discovery of Musa indandamanensis:**
  - ◆ The species has the **world's longest infructescence** (4.2 meters) recorded in the **wild banana family.**
  - ◆ **Musa indandamanensis** was first discovered in 2012 on **Little Andaman Islands**, with the infructescence growing to 3 meters at the time.
  - ◆ **Nat Park - ?**

World's longest banana infructescence found in the forests of Andamans

Shiv Sahay Singh
KOLKATA

An infructescence of about 4.2 metres has been recorded in a species of wild banana from Andaman and Nicobar islands, making it the longest infructescence recorded in bananas across the world. The details of the discovery were published in an international peer reviewed science journal *Botany Letters* earlier this year.

The infructescence was recorded in an endemic species of wild banana, *Musa indandamanensis*, that was first recorded from a remote tropical forest near the Krishna Nala reserve forest on the Andaman and Nicobar islands in 2012 and found mention in a science journal in 2014.

Initially when the species of *Musa indandamanensis* was discovered on the Little Andaman islands by Lal Ji Singh, head of the regional centre of Botani-

A specimem of a long banana infructescence at a museum on Andman and Nicobar Islands.

cal Survey of India in the Andaman and Nicobar Island, the infructescence of the specimens were about 3 metres long. Usually, the infructescence (fruit bunch lux axis) of cultivable species of bananas is about 1 metre long, the scientist said.

A few months ago, Dr. Singh and his team came across the species of wild banana in Campbell Bay in the Nicobar group of islands, and the infructescence recorded was longer than all other specimens recorded in the past. "*Musa indandamanensis* L.J. Singh holds the record for having the long infructescence of banana in general and wild bananas in particular which is an endemic variety found in ANI (Andaman and Nicobar Islands)," reads the paper published by *Botany Letters* earlier this year.

"Though the length of the trees recorded in 2012 and recently are the same, standing at about 11 metres in height, the girth of the stem of the wild banana trees differ. The species recorded from Little Andamans had girth of less than 100 cm, however the specimens recorded from Campbell Bay had a larger girth of about 110 cm," Dr. Singh said.

Specimens on display
After the discovery of the infructescence, specimens have been sent to mu-

seums across the country including the Indian Museum in Kolkata, where a 4.2-metre-long specimen has been on display in the industrial section of the Botanical Survey of India for several months. Another specimen over four metres is in the Andaman and Nicobar Regional Centre museum.

Since the species has been assessed as 'Critically Endangered,' as a part of ex-situ conservation of *Musa indandamanensis,* its saplings have been introduced in the Acharya Jagadish Chandra Bose Indian Botanic Garden in Howrah, Botanical Garden of Andaman and Nicobar Regional Centre, and the Central Regional Centre in Prayagraj. What makes the wild banana *Musa indandamanensis* important is the natural genetic resource for plant breeders to develop high-yielding and disease-resistant varieties.

Prelims PYQs (2016)

Q. Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered? [2016]

(A) Andaman Islands

(B) Anaimalai Forests

(C) Maikala Hills

(D) Tropical rain forests of the Northeast

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