DAILY CURRENT AFFAIRS 25-03-2024

GS-1

1. **1.29 by 2050: Impact of India's falling fertility rate**

GS-2

2. **Enforcement directorate**
3. **India - Bhutan relations**

GS-3

4. **World Tuberculosis Day**
5. **World Air Quality Report 2023**

1.29 by 2050: Impact of India's falling fertility rate

Syllabus: GS-1: Population dynamics.

Context:

- *India's birth crisis: What the Lancet forecast of fertility rate dip to 1.29 by 2050 means.*

Major findings of Lancet study:

- *By 2050,* **one out of every five** *Indians will be a senior citizen.*
- *There will be* **fewer younger people** *available to take care of the aging population.*
- *A Lancet study predicts this scenario,* **attributing it to India's declining total fertility rate (TFR),** *which stands at 1.29, far below the replacement rate of 2.1.*
- *This trend indicates a* **rapidly depleting working-age population**.
- *Globally, the* **TFR has more than halved in the last 70 years**, *from around five children per woman in 1950 to 2.2 children in 2021.*
- **In India, the TFR was 6.18 in 1950,** *decreased to 4.60 in 1980, and further declined to 1.91 in 2021.*
- *China is already experiencing the consequences of an aging population, and India is moving in the same direction.*
- *Together, China and India account for more than a third of the world's population.*

Why fertility went down in India?

Factors	Description
Family Planning Programs	*Post-independence initiatives such as the Family Welfare Programme aimed to limit population growth through incentives for smaller families.*
Behavioral Change	*Efforts to shift societal norms towards accepting smaller family sizes, aided by successes in reducing infant mortality rates and improving child health.*
Economic Factors	*Changes in the economic landscape, including a reversal in the inter-generational flow of wealth, influencing decisions on family size and child-rearing costs.*
Female Literacy and Workforce Participation	*Increases in female literacy and participation in the workforce, leading to prioritization of careers, financial independence, and reconsideration of family size.*
Urban Influence on Rural Trends	*Trends observed in urban areas, such as a shift away from traditional child-rearing roles, impacting attitudes towards family*

Factors	Description
	size in rural communities.

The long-term consequences of fertility decline in India include:

- **Increase in Elderly Population:** *With a declining fertility rate, the proportion of senior citizens in the population will rise significantly.*
- *By 2050, it's projected that more than 20% of India's population will be senior citizens, leading to similar demographic challenges faced by China due to its one-child policy.*
- **Labour Force Shortages:** *A decrease in the working-age population due to declining fertility rates could result in labor force shortages, potentially impacting economic productivity and growth.*
- **Social Imbalances from Gender Preferences:** *Gender preferences may exacerbate social imbalances, with potential consequences such as skewed sex ratios and related issues like increased violence against women.*

To address these challenges and prepare for the future, *actions must be taken now, including:*

- **Comprehensive Approach:** *Implementing a comprehensive approach to address future demographic challenges, similar to strategies adopted by Scandinavian countries like Sweden and Denmark.*
- **Support for New Families:** *Providing support for new families, including affordable childcare, investments in healthcare, and initiatives promoting gender equity.*
- **Male Engagement:** *Encouraging greater male involvement in household and caregiving responsibilities to enable women to balance careers with motherhood effectively.*
- **Economic Policies:** *Implementing economic policies that stimulate growth, job creation, and social security reforms to adapt to and mitigate the impacts of declining fertility rates.*

Declining trend worldwide

- *The worldwide trend of declining fertility rates is significant, with researchers estimating that by 2050:*
- *76% of Countries Below Replacement Fertility: About 155 out of 204 countries (76% of the world) are projected to have fertility rates below the replacement level.*

Looking further ahead, by 2100:

- **97% of Countries Below Replacement Fertility:** *The number of countries and territories with fertility rates below replacement level is expected to increase to 198 (97% of the world) by 2100.*
- **Population Shrinkage Prediction:** *In these locations with below-replacement fertility rates, populations are predicted to shrink unless measures such as ethical and effective immigration are taken to offset the decline.*

Practice QUESTION

Q. In light of projections indicating a decline in Indian fertility rates, discuss the implications for population dynamics and propose strategies to mitigate the potential socio-economic challenges. (10 marks, 150 words)

Enforcement directorate

Syllabus: GS-2; Government policies and Interventions, GS-3: Internal Security – Institutes.

Context:

- *Arvind Kejriwal arrested by ED.*

About Enforcement directorate

- *The* **Directorate of Enforcement** *(ED) is an agency in India responsible for enforcing economic laws and combating economic crimes.*
- *It operates under the* **Department of Revenue, Ministry of Finance**, *Government of India.*
- *The ED focuses on investigating and prosecuting cases involving money laundering, foreign exchange violations, corruption, and economic offenses.*
- *Its main goal is to* **reduce the generation and circulation of black money** *and ensure compliance with laws related to foreign exchange and prevention of money laundering.*
- *The agency traces its origins back to May 1, 1956, when it was initially formed as an "***enforcement unit" within the Department of Economic Affairs** *to handle violations under the Foreign Exchange Regulation Act, 1947.*
- *In 1957, this unit was officially renamed the Enforcement Directorate.*

Objective:

- *The Enforcement Directorate's main objective is to* **enforce three key Acts of the Government of India:**
  - *Foreign Exchange Management Act, 1999 (FEMA)*
  - *Prevention of Money Laundering Act, 2002 (PMLA)*
  - *The Fugitive Economic Offenders Act, 2018 (FEOA).*

Special Courts:

- *The Central Government, in consultation with the* **Chief Justice of the High Court**, *designates* **one or more Sessions Courts as Special Courts** *for the trial of offenses punishable under section 4 of the Prevention of Money Laundering Act (PMLA).*
- *These courts are also* **referred to as "PMLA Courts".**
- *Any appeal against an order passed by a PMLA Court can be* **directly filed in the High Court for that jurisdiction.**

Organisation structure:

- *Headquartered in New Delhi.*
- *Headed by the Director of Enforcement.*
- **Regional Offices:***Located in Mumbai, Chennai, Chandigarh, Kolkata, and Delhi.*
- *Each regional office is headed by a* **Special Director of Enforcement**.

India - Bhutan relations

Syllabus: GS-2; International Relations – Bilateral relations.

Context:

- *Prime Minister of Bhutan, H.E Dasho Tshering Tobgay will be on an official visit to India from 14-18 March, 2024 at the invitation of Prime Minister Shri Narendra Modi.*

Key Highlights of Recent India-Bhutan Bilateral Talks:

- **Petroleum Agreement:***Agreement signed for consistent petroleum product supply from India to Bhutan.*
- **Food Safety Collaboration:***Bhutan's Food and Drug Authority and India's FSSAI inked an agreement to boost cooperation in food safety measures.*
  - **Aim:** *Facilitate trade, cut compliance costs.*
- **Energy Efficiency and Conservation:***Memorandum of Understanding (MoU) on energy efficiency and conservation signed.*

- **Objective:** *India to aid Bhutan in enhancing energy efficiency, promoting use of energy-efficient appliances.*

- **Border Dispute Resolution:** *Talks addressed ongoing China-Bhutan border dispute, notably in the Doklam region.*
  - **Significance:** *Implications for regional security discussed.*
- **Bhutan's Regional Economic Hub in Gelephu:** *Plans unveiled for regional economic hub in Gelephu.*
  - **Goal:** *Foster regional development, bolster connectivity.*

Significance of Bhutan for India

Dimension	Significance
Strategic Importance	*- Bhutan acts as a crucial buffer state between India and China, enhancing India's security interests.*
	- Indian assistance in defense, infrastructure, and communication strengthens Bhutan's sovereignty.
	- Cooperation in border infrastructure development ensures Bhutan's territorial integrity.
	- During the Doklam standoff in 2017, Bhutan's collaboration allowed Indian troops to counter Chinese incursions.
Economic Importance	*- Bhutan relies on India as its largest trading partner and major export destination.*
	- India's support in hydropower development significantly contributes to Bhutan's revenue.
	- Financial aid from India facilitates Bhutan's development projects.
Cultural Importance	*- Deep cultural ties, especially through Buddhism, foster strong bonds between India and Bhutan.*
	- India assists Bhutan in preserving its cultural heritage, while Bhutanese students pursue education in India.
Environmental Importance	*- Bhutan's commitment to carbon neutrality is supported by India's assistance in environmental initiatives.*

Challenges in India-Bhutan Relations:

Challenges	Description
China's Growing Influence	*- China's expanding presence in Bhutan, especially along the disputed border, raises apprehensions for India's strategic interests.*
	- India historically safeguarded Bhutan's sovereignty; however, China's influence poses challenges to India's role as Bhutan's key ally.
Border Disputes	*- While the India-Bhutan border has been largely peaceful, occasional border incursions by Chinese forces disrupt stability.*
	- The Doklam standoff in 2017 underscored tensions in the tri-junction area, potentially straining India-Bhutan relations.
Hydropower Projects	*- Bhutan's hydropower sector, vital for its economy, sees significant Indian involvement.*
	- Concerns arise in Bhutan regarding project terms perceived as overly favorable to India, leading to public opposition.
Trade Issues	*- India dominates Bhutan's trade, but concerns exist over the trade imbalance, with Bhutan importing more than it exports.*
	- Bhutan seeks enhanced access to the Indian market to mitigate the trade deficit and promote economic balance.

World Tuberculosis Day

Syllabus: GS-3: General Science – Diseases.

Context:

- *World Tuberculosis Day is observed* **on March 24th** *to raise awareness about TB.*
- **The theme** *of World TB Day 2024 is "Yes! We can end TB!"*

About TB:

- *TB* **primarily affects the lungs** *and is caused by bacterial infection.*

- *It* **spreads through the air** *via particles released during coughing, sneezing, or spitting by infected individuals.*

Causes:

- *Tuberculosis is caused by the bacterium* **Mycobacterium tuberculosis.**
- *While the* **lungs are commonly affected**, *TB can also* **impact other organs like the kidneys, spine, and brain.**
- *Not everyone infected with TB bacteria develops active TB disease.*
- *There are two conditions that may arise:* **latent TB infection (LTBI) and TB disease**.
- *Risk factors for TB disease progression include* **weakened immune systems, diabetes, malnutrition, and tobacco use.**
- **TB is preventable and treatable**, *but it remains a significant global health challenge.*
- *Around a quarter of the global population carries TB bacteria, with 5–10% progressing to TB disease.*
- *People carrying the bacteria without symptoms cannot spread the disease.*
- *Treatment for TB involves antibiotics and can be fatal if left untreated.*

TB symptoms:

- *Latent TB infection typically doesn't show symptoms and isn't contagious.*

TB disease symptoms include:

- *Prolonged cough, sometimes with blood.*
- *Chest pain.*
- *Weakness and fatigue.*
- *Weight loss.*
- *Fever.*
- *Night sweats.*
- *Symptoms may vary depending on the affected organs; TB can target lungs, kidneys, brain, spine, and skin.*

Diagnosis:

- *Early diagnosis is crucial for* **effective TB management.**
- *The* **World Health Organization** *(WHO) recommends rapid molecular diagnostic tests for TB.*
- **Tests like Xpert MTB/RIF Ultra and Truenat assays** *are recommended as initial diagnostic tools.*
- *These tests offer high diagnostic accuracy and help detect TB and drug-resistant strains early.*

- **Tuberculin skin tests (TST***) or interferon-gamma release assays (IGRA) help identify individuals with TB infection.*
- **Diagnosing multidrug-resistant TB** *and HIV-associated TB presents challenges requiring complex and expensive testing procedures.*
- **Children pose diagnostic challenges** *due to the difficulty in detecting TB in this vulnerable population.*

World TB history:

- *World TB Day commemorates the* **discovery of Mycobacterium tuberculosis**, *the bacterium responsible for TB, on March 24, 1882, by Dr. Robert Koch.*
- *The term tuberculosis* **was first coined by Johann Schonlein in 1834**, *although the disease has existed for millions of years, according to the Centers for Disease Control and Prevention.*
- *Throughout history, tuberculosis has been known by different names: phthisis by the Greeks, tabes by the Romans, schachepheth by the Hebrews, and in the 1700s and 1800s, it was called the white plague or consumption due to its characteristic of making individuals appear pale and wasted.*
- *World TB Day serves as an* **opportunity to educate people** *about the global impact of tuberculosis and how to prevent its spread.*

Significance:

- *World TB Day raises public awareness about the health, social, and economic impacts of TB.*
- *It serves as a rallying point to intensify efforts to end the global TB epidemic.*
- *World TB Day educates communities and fosters advocacy for TB prevention, diagnosis, and treatment initiatives worldwide.*
- *The day mobilizes resources and support to combat TB on a global scale.*

World Air Quality Report 2023

Syllabus: GS-3: Air Pollution.

Context:

- *India has been identified as the world's third most polluted country, as per the World Air Quality Report 2023 by Swiss organisation IQAir.*

Overall Air Quality:

- *Only 7 out of 134 countries met the WHO's annual PM2.5 guideline for clean air (5 µg/m3 or less). PM2.5 refers to fine particulate matter, a major pollutant.*

- *124 countries (over 92%) exceeded the WHO guideline.*

Regional Trends:

- **Central and South Asia** *had the most polluted cities globally, with Begusarai, India, ranking as the most polluted metropolitan area.*
- *Africa remained the continent with the* **least air quality data coverage**, *with a third of its population lacking access to information.*
- *Southeast Asia saw an* **increase in PM2.5 concentrations** *due to climate conditions and transboundary haze.*
- *Some countries, including China and Chile,* **showed progress with decreased PM2.5 levels**.

Country Standouts:

- **Most Polluted:** *Bangladesh, Pakistan, India, Tajikistan (top 4).*
- **Least Polluted:** *Finland, Estonia, Iceland, New Zealand (among bottom 5).*

India Specifics:

- *Around 96% of India's population faces PM2.5 concentrations exceeding WHO recommendations by a factor of 7.*
- *Over 66% of Indian cities have annual PM2.5 averages exceeding 35 µg/m3.*
- **Ranked third in global pollution**, *India boasts an average annual PM2.5 concentration of 54.4 micrograms per cubic meter.*
- **Bangladesh and Pakistan** *have surpassed India in pollution levels, securing the top two spots respectively.*
- **Nine out of the top 10** *most polluted cities worldwide hail from India.*
- **India's air quality deteriorated** *compared to the previous year, with Delhi retaining its title as the world's most polluted capital city for the fourth consecutive year.*
- *Begusarai in Bihar claims the unenviable title of the* **world's most polluted metropolitan** *area, recording an average PM2.5 concentration of 118.9 micrograms per cubic meter.*

WHO Air Quality Guidelines Overview:

- *The* **World Health Organization** *(WHO) continually updates evidence-based air quality guidelines to protect public health from air pollution.*
- *The latest update transpired in 2021, amending guidelines initially released in 2005.*

Pollutants Covered:

- *WHO guidelines encompass a spectrum of pollutants, including both particulate matter (PM) and gaseous pollutants.*

- *Covered* **particulate matter includes PM2.5 and PM10,** *along with gaseous pollutants such as ozone (O3), nitrogen dioxide (NO2), sulfur dioxide (SO2), and carbon monoxide (CO).*

Recommended 2021 AQG levels compared to 2005 air quality guidelines

Pollutant	Averaging Time	2005 AQGs	2021 AQGs
$PM_{2.5}$, $\mu g/m^3$	Annual	10	5
	24-hour[a]	25	15
PM_{10}, $\mu g/m^3$	Annual	20	15
	24-hour[a]	50	45
O_3, $\mu g/m^3$	Peak season[b]	-	60
	8-hour[a]	100	100
NO_2, $\mu g/m^3$	Annual	40	10
	24-hour[a]	-	25
SO_2, $\mu g/m^3$	24-hour[a]	20	40
CO, mg/m^3	24-hour[a]	-	4