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POPULATION AND ASSOCIATED ISSUES

In 1952, India was the first country in the world to launch a national program emphasizing family planning to the extent necessary for reducing birth rates "to stabilize the population at a level consistent with the requirement of the national economy." After 1952, sharp declines in death rates were, however, not accompanied by a similar drop in birth rates.

Trends and Data for Indian Population

1. Population Composition:

- 0-14 years: 26.31%
- 15-24 years: 17.51%
- 25-54 years: 41.56%
- 55-64 years: 7.91%
- 65 years and over: 6.72%

2. Rural-Urban:

- Urban: 31.16%
- Rural: 68.84%

3. Median Age:

- Total: 28.7 years
- Male: 28 years
- Female: 29.5 years (2020 est.)

4. Population Growth Rate: 1.1% (2020 est.)

5. Life Expectancy at Birth: 69 years (World Average: 72.81 years)

6. Share in Global Population: The current population of India contributes to 17% of the global population.

7. Projected Rise: According to a recent analysis by *The Lancet*, India's population is forecasted to peak around 1.6 billion in 2048, from 1.38 billion in 2017. It will be followed by a 32% decline to around 1.09 billion in 2100.

8. Indian Population: Approximately 17.85% of the world's population are Indians, which means 1 in every 6 people on Earth live in India.

9. Total Fertility Rate: Due to the sustained family planning program spanning decades, the Total Fertility Rate (TFR) has declined further from 2.2 (2015-16) to 2.0 at the all-India level (NFHS 2019-21). The TFR is 1.6 in urban areas and 2.1 in rural India.

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10. **Immigration:** India is forecasted to have the second-largest net immigration in 2100, with an estimated half a million more people immigrating to India than emigrating out.
11. **Working Population:** The number of working-age adults (aged 20-64) in India is projected to fall from around 762 million in 2017 to around 578 million in 2100. However, India has been forecasted to have the largest working-age population in the world by 2100.
12. **Workers:** According to the National Sample Survey Office (NSSO) conducted in 2011-12, the total workforce is estimated at 41 crores, out of which 33.69 crores were rural workers and 7.72 crores were urban workers.
13. **Urbanisation:**
 - **Current:** 31.16% (2011 Census)
 - **Projected:** By 2036, 38.6 percent of Indians will live in urban areas (National Commission for Population)
14. **The Total Fertility Rate (TFR)** has declined from 2.9 in 2005 to 2.15 in 2021 (SRS).
15. **Replacement Level:** 31 out of 36 States/UTs have already achieved replacement level fertility of 2.1 or less.
16. **Decadal Growth Rate** has declined from 21.54% in 1999-2000 to 17.64% during 2001-11.
17. **The Crude Birth Rate (CBR)** has declined from 23.8 to 20.2 from 2005 to 2017 (SRS).
18. **The Teenage Birth Rate** has halved from 16% (NFHS III) to 8% (NFHS IV).
19. **Longitudinal Ageing Study in India (LASI):** Findings
 - **Population of 60+:** In the 2011 census, the 60+ population accounted for 8.6% of India's population, accounting for 103 million elderly people.
 - **Growing rate:** Growing at around 3% annually, the number of elderly people will rise to 319 million in 2050.
 - **Disease burden:** 75% of elderly people suffer from one or another chronic disease. 40% of the elderly have one or another disability, and 20% have issues related to mental health.
 - The self-reported prevalence of diagnosed cardiovascular diseases (CVDs) is 28% among older adults aged 45 and above.
 - The prevalence of multi-morbidity conditions among the elderly (age 60 and above) is much higher in the states/UTs of Kerala (52%), Chandigarh (41%), Lakshadweep (40%), Goa (39%), and Andaman & Nicobar Islands (38%). The prevalence of single and multi-morbidity conditions increases with age.

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Population Control Theories

1. Malthusian Theory:

- Proposed by Thomas Malthus in 1798 in his work, *Principle of Population*. Malthus predicted that the world's population would grow faster than the rate of food production.
- According to Malthus, population growth is exponential (geometric growth), while food supply grows in a slower arithmetic fashion.
- However, Malthus was proven wrong due to breakthroughs in agricultural technology, particularly in countries like India, which achieved net food surpluses.

2. Big-Push Theory:

- Harvard economist Harvey Leibenstein proposed that population growth negatively impacts incomes.
- The theory argues that when per capita income is low, people are too poor to save, and since investment depends on savings, low savings hinder economic growth.

Factors Affecting Population Growth

1. Geographic Factors:

- **Availability of Water:** Populations are denser where **freshwater** is easily accessible for **drinking, agriculture, and industry**. River valleys are prime examples of densely populated areas.
 - Example: The **Ganga and Brahmaputra plains** in India, the **Nile** in Egypt, and the **Hwang-He and Chang Jiang** rivers in China.
- **Natural Disasters:** Areas prone to **frequent storms, earthquakes, floods**, or other natural disasters tend to have **lower population densities** as people migrate to safer areas.
- **Soil: Fertile soils** support agriculture, leading to higher population densities.
 - Example: **Brahmaputra and Ganga plains** are highly populated due to fertile soil.
- **Minerals:** Areas rich in **mineral deposits** attract populations for employment in mining and associated industries.
 - Example: The **Chhota Nagpur Plateau** in Jharkhand and Odisha is densely populated due to its vast **mineral resources**.

2. Economic Factors:

- **Employment: Urban areas** with more employment opportunities attract **larger populations** compared to rural areas.
- **Economic Activity:** Higher rates of economic activity lead to population growth as people move to areas with better **income opportunities**.

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- Example: **Mumbai** in India and **Osaka** in Japan attract large populations due to economic opportunities.
- **Transportation:** Population growth is linked to **transport infrastructure**. Areas with better transportation networks are more densely populated.
 - Example: The **northern plains of India** have a dense transport network and are heavily populated.
- **Facilities:** Regions with **better living facilities** and higher standards of living attract more people, leading to **higher population densities**.

3. Political Factors:

- **Political Stability:** People are more likely to live in regions with **political stability**, where they can access **welfare provisions** and maintain a **decent standard of living**.
- **War and Conflict:** Wars and **political conflicts** lead to high death rates and **forced migration**. People leave areas of conflict in search of safety.
- **Safety & Security:** Regions with a higher sense of **safety** attract more people, resulting in higher population density.
- **Migrant-Friendly Policies:** Areas with policies that **encourage migration** tend to see population growth.
 - Example: **Article 370** in **Jammu and Kashmir (J & K)** was in force until **July 2019** and contributed to **low population density** in the region due to restricted migration.
- **Government Policy:** **Government policies** can promote or restrict population growth. For example, policies that encourage settlement in specific areas can impact population density and growth rates.

4. Demographic Factors:

- **Fertility Rates:** Regions with **higher fertility rates** experience faster population growth.
- **Demographic Dividend:** Population growth is faster in regions with a **younger population**, as they contribute more to **economic activity**.
- **Migration:** **Migration** due to **better opportunities, land scarcity**, or a shortage of work also affects population growth. People move to regions that offer better livelihoods.

5. Birth and Mortality Rates:

- **Birth rates** and **mortality rates** heavily influence population growth.
- Factors affecting **mortality rates** include access to **quality healthcare** and **lifestyle habits**.
- **Marriage:**
 - **Early marriage** increases the likelihood of having more children and puts a woman's health at risk.
 - **Data:** **43%** of married women aged **20-24** were married before the age of **18**.

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- **Family Planning:**
 - **Contraception** availability helps families manage their desired number of children, reducing family size.

Causes of High Population Growth

- 1. Decline in Death Rates:** As **death rates** decline due to better healthcare, the population grows because **birth rates** remain high.
- 2. Poverty: Poor families** tend to have more children due to fears of child mortality and the need for additional income. More male children are often desired to support the family's economy.
- 3. Religious Beliefs:** In India, deep-rooted **cultural and religious beliefs** encourage large families. Educational facilities are often scarce, and many families rely on ancient beliefs.
 - Example: Indian author **Shobha De** famously said, "God said, 'Go forth and produce,' and we just went ahead and did exactly that."
- 4. Green Revolution:** Advancements in **agriculture** during the **20th century** helped **increase food production**, allowing the population to grow further by reducing food scarcity.
- 5. Technology:** New **technological advancements** and medical discoveries, such as **fertility treatments**, allow couples who struggle with conception to have children, increasing population rates.
- 6. Better Medical Facilities: Vaccines** and medical treatments have reduced diseases that once caused high death rates, tipping the balance between **birth** and **death rates** and contributing to **overpopulation**.
- 7. Child Labour:** In **impoverished families**, children are seen as a **source of income**, leading to more children being born. This leads to fewer educational opportunities and less awareness of **birth control**.
- 8. Migration: Rural-to-urban migration** increases urban population density. **Illegal immigration** from neighboring countries also adds to population growth.
- 9. Poor Family Planning: Illiteracy**, poverty, and lack of knowledge about **family planning** result in large family sizes.
- 10. Child Marriage: Early marriages** are a cultural norm in many parts of India, especially in rural areas. Families often marry off girls as young as **14 or 15**, increasing the likelihood of early and multiple childbirths.

Effects of Overpopulation

1. Social Effects

- **Poverty:** There is a strong link between **poverty**, lack of **education**, and **overpopulation**. Families with fewer resources tend to have more children, perpetuating the **cycle of poverty**.
- **Inequality: Larger populations** mean fewer resources and wealth per capita, which increases **inequality**.

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- **Unemployment:** Overpopulation leads to **fewer jobs** being available, resulting in higher **unemployment rates**.
- **Disease Burden:** Overcrowded living conditions, **malnutrition**, and lack of access to **healthcare** contribute to a high **disease burden**.
- **Social Welfare Burden:** Governments are forced to allocate more funds to **social welfare schemes** rather than capital expenditure, which slows economic growth.
- **Low Life Expectancy:** Overpopulation tends to be more common in **less developed countries**, where **life expectancy** is generally lower.
- **Social Divisions:** Overpopulation creates divisions in society, particularly along **economic** and **social lines**.
- **High Cost of Living:** The gap between **demand and supply** causes the price of essential goods (food, shelter, healthcare) to increase, raising the **cost of living**.
- **Pandemics and Epidemics:** Higher population density increases the chances of **pandemics** and **epidemics** spreading more rapidly.

2. Economic Effects:

- **Pressure on Infrastructure:** **Overpopulation** leads to the overuse of **infrastructure**, such as transportation, housing, healthcare, and education systems. This results in **slums**, **overcrowded houses**, and **traffic congestion**.
- **Conflict Over Resources:** **Conflicts over water** and other resources can increase due to scarcity, potentially leading to **wars**.
- **Resource Utilization:** Overpopulation leads to **over-exploitation** of land, water, and forests.
- **Decreased Production and Increased Costs:** Food production often struggles to keep pace with population growth, causing **inflation** and increasing **production costs**.
- **Depopulation of Rural Areas:** **Urban migration** causes **rural depopulation**, resulting in **under-utilized infrastructure** in rural areas while urban areas face overuse.

3. Environmental Effects:

- **Degradation of the Environment:** Overpopulation leads to the overuse of **coal, oil, and natural gas**, contributing to **pollution** and **climate change**. The rise in vehicles and industrial activities also deteriorates **air quality**.
- **Reduction of Natural Resources:** Overpopulation leads to the **overexploitation of forests, wildlife, and fossil fuels**, causing long-term environmental damage.
- **Water Shortage:** Only **1%** of the world's water is **fresh** and accessible, and overpopulation creates **immense pressure** on global **freshwater supplies**.

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Government Initiatives

- 1. Five-Year Plans:** In **1952**, India became one of the first developing countries to implement a **state-sponsored family planning program**. This program emphasized **natural family planning methods** to reduce population growth.
- 2. Second Five-Year Plan:** Increased the number of **family planning clinics**, but as they were mostly set up in **urban areas**, they did not yield adequate results for the entire population.
- 3. Third Five-Year Plan:** Introduced the use of the **copper-T** as a contraceptive. An independent department called the **Family Planning Department** was established.
- 4. Fourth Five-Year Plan:** Promoted all kinds of **birth control methods**, both **conventional** and **modern**.
- 5. Fifth Five-Year Plan:** The **National Population Policy** was announced in **1976**. Key measures included:
 - Raising the minimum **legal age for marriage** to **18 for girls** and **21 for boys**.
 - **Forced sterilization** was allowed (later abandoned due to controversy).
- 6. Sixth, Seventh, and Eighth Plans:** Focused on **long-term demographic aims** to control the population.
- 7. Ninth Five-Year Plan:** In **1993**, an expert group was established under the chairmanship of **M.S. Swaminathan** to formulate a **national population policy**. By **1997**, the **family planning program** was renamed the **family welfare program**.

Committees on Population Control

- 1. R.K. Mukherjee Committee (1940):** Appointed by the **Indian National Congress** to suggest solutions to halt the population growth that started increasing after **1921**.
- 2. Bhore Committee:** The **Health Survey and Development Committee**, led by **Sir Joseph Bhore**, recommended the **deliberate limitation of family size** to control population growth. It was established in **1943** and submitted its report in **1946**.
- 3. Swaminathan Committee:** Chaired by **Dr. M.S. Swaminathan**, an expert group was formed to draft the **National Population Policy (NPP)**. The policy was implemented in **2000**.

National Population Policy 2000

The **National Population Policy (NPP) 2000** emphasized **voluntary and informed choices** and included comprehensive measures to improve **reproductive health** and **reduce population growth**.

Key Features:

- **Voluntary and Informed Choice:** The policy emphasizes citizens' right to **voluntarily** choose reproductive and health services.

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- **Remarkable Policy:** It provides a roadmap for the next **10 years** to improve **reproductive health, child survival, and maternal health**, and to promote **contraception**.
- **Mandatory School Education:** The policy made **free and mandatory education** up to **14 years of age**, aiming to reduce **dropout rates** for boys and girls.
- **Reducing Mortality Rates:** The policy aims to reduce **infant mortality rates** to less than **30 per 1000 live births** and **maternal mortality rates** to less than **100 per 100,000 live births**. It targets **80% institutional deliveries** and **100% deliveries by trained persons**.
- **Universal Immunization:** Ensures **universal immunization** of all children against preventable diseases.
- **Restraint on Child Marriages:** The policy promotes the legal marriage age of **18 for girls** and **20 for boys**, aiming to reduce **child marriages**.
- **100% Registrations:** The policy mandates **100% registration** of **births, deaths, marriages, and pregnancies** to ensure health planning and prevent **communicable diseases**.

Government Schemes for Population Control

1. Mission Parivar Vikas:

- **Objective:** To accelerate access to **high-quality family planning choices** based on reliable information, services, and supplies within a **rights-based framework**.

2. Saas Bahu Sammelan:

- **Objective:** This initiative aims to hold regular meetings between **new and expecting mothers** and their **mothers-in-law** to discuss and address any concerns related to pregnancy, childbirth, and family planning.

3. Contraceptives Antara and Chhaya:

- Launched on **September 5, 2017** by the Union Ministry of Health and Family Welfare.
- **Antara:** An **injectable contraceptive** MPA.
- **Chhaya:** A **contraceptive pill** available in the public health system to expand contraceptive choices for couples.

4. Santushti Strategy:

- Under this strategy, **Jansankhya Sthirata Kosh** invites private-sector gynecologists and vasectomy surgeons to conduct **sterilization operations** in a **Public-Private Partnership (PPP)** model.

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5. PRERNA Strategy:

- Aimed at raising the **age of marriage** and **spacing the birth of children** to improve the health of **young mothers** and **infants**. It is launched by **Jansankhya Sthirata Kosh** as part of a **Responsible Parenthood Strategy**.

Ways to Control Population

1. Social Measures

- **Social Infrastructure:** **Economic growth**, especially in southern Indian states, along with **education, healthcare, and empowerment of women**, are more effective in controlling population growth than punitive measures.
- **Elderly Care:** Population control may lead to an increase in the **dependency ratio** (the number of dependents per working adult), so the government must provide **savings and insurance** for the aging population.
- **Minimum Age of Marriage:** **Child marriage** is prominent in countries with high populations like **India, Pakistan, and Bangladesh**. Raising the **minimum age of marriage** reduces early childbirth and limits the number of children a woman can have.
- **Raising the Status of Women:** Women should be given **equal opportunities** in society. **Education and economic opportunities** help women gain more control over their reproductive choices, which reduces birth rates.
- **Adoption:** Encouraging **adoption** of orphan children can provide families without biological children with an alternative to costly medical treatments, benefiting both **orphans** and **childless couples**.
- **Social Security:** More people should be covered under **social security schemes** to ensure the well-being of larger families and the elderly population.
- **Spreading Awareness:** People need to be educated about the consequences of having too many children. **Government and non-government organizations** can run **awareness campaigns** to promote family planning.

2. Economic Measures:

- **More Employment Opportunities:** One key to controlling population growth is creating more **employment opportunities**, particularly in **rural areas**, to prevent **disguised unemployment**.
- **Providing Incentives:** Incentives, such as financial, health, or educational benefits, have proven effective in population control. These incentives encourage people to adopt **family planning**.
- **Medical Facilities:** One of the challenges in developing countries is the lack of **accessible medical facilities**. Improved medical infrastructure can significantly aid in controlling population growth.

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3. Political Measures:

- **Adhering to the Cairo Consensus:** The **Cairo International Conference on Population and Development (1994)** emphasized promoting **reproductive rights, empowering women, universal education, and maternal and infant health**. The consensus also urged increasing the **use of modern contraceptives**. **States** should implement these strategies instead of focusing solely on controlling population numbers.
- **Adopting a Women-Centric Approach:** Population stabilization should be **women-centric**, focusing on **gender parity**, delayed marriages, and increased **women's labor force participation**.
- **Seeing Population as a Resource:** India is expected to experience a **slowdown in population growth** over the next two decades, as indicated in the **Economic Survey (2018-19)**. Instead of controlling the population size, India should focus on using the **population as a resource** by ensuring **productive utilization** of its population.

Challenges with Population Control Policies

- **Anti-poor Approach:** Population control policies can disproportionately affect **poorer families**, as they tend to have more children compared to **middle-class families**.
- **Anti-democratic Approach:** Population control measures may infringe upon **individual rights**, especially those related to **reproductive freedom** and the right to make personal choices.
- **India Needs to Look After the Aging Population:** By **2050**, India's population is expected to peak at **1.67 billion** and eventually settle at **1.53 billion** by **2100** (UN's 2022 World Population Ageing Report). As the population ages, there will be an increasing need to care for the **elderly**, making it critical for the government to focus on policies addressing the aging population.
- **Near to Replacement Rate:** India's **Total Fertility Rate (TFR)** is approaching the **replacement level** (around **2.1 children per woman**).
 - For example, the **National Family Health Survey (NFHS)** shows that many urban areas and several states have already reached this **replacement level**.
- **Challenge with the Two-Child Policy:** A **two-child policy** may inadvertently lead to increased **female infanticide** if both children are girls, due to societal preferences for male offspring.
- **Affecting Quality of Life:**
 - Population control policies may inadvertently create challenges for the future. Attempts to address population growth through **exclusionary policies** could worsen **quality of life** rather than improve it in certain states.
- **Against NHRC Order:**
 - The use of **incentives** and **disincentives** in population control has been criticized by the **National Human Rights Commission (NHRC)**.

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- Several Indian states—like **Haryana, Madhya Pradesh, Rajasthan, Chhattisgarh, and Odisha**—introduced such measures in the 1990s and 2000s, which were denounced due to their **discriminatory effects**.
- **Global Examples:**
 - Population control policies in other countries, like **China's One Child Policy**, resulted in **gender imbalances** due to a preference for male children.
 - Stricter population control can have unintended long-term effects and skew the **sex ratio**.

India's Life Expectancy at Birth (2015-19 Period)

- **Increment in Life Expectancy:** Over 45 years, India increased its **life expectancy** from **49.7 years** in 1970-75 to **69.7 years** by 2015-19, adding **20 years** over this period.
- **Still Below World Average:** Despite improvements, India's life expectancy is still below the **global average** of **72.6 years**.
- **State with Highest Life Expectancy:** **Odisha** had the largest increase in life expectancy, growing from **45.7 years** to **69.8 years**. This was followed by **Tamil Nadu**, where life expectancy increased from **49.6 to 72.6 years**.
- **Huge Rural-Urban Variation:** There are **significant differences** between **urban** and **rural** life expectancy within India:
 - **Kerala** is the only state where rural life expectancy is **higher** than urban life expectancy for both men and women.
 - In **Uttarakhand**, this is true for women.
 - **Bihar** and **Jharkhand** are the only states where **male rural life expectancy** is higher than in urban areas.

Conclusion

Overpopulation is a complex issue that requires understanding the **natural environment** and its **interactions** with people. A **national planning commission** for population control is essential to motivate all sections of society to reduce the population size. Without such efforts, overpopulation will continue to pose challenges to India's future growth and sustainability.