

Prelim Bits 22-08-2019

Nitrate exposure's impact

- A new World Bank report looks at the impact of water pollution worldwide.
- In that one aspect covered is the long-term impact of 'Nitrate' exposure experienced during infancy.
- Short-term exposure has almost negligible effect on adult height, but cumulative exposure over the first 3 years of life has considerable impact.
- Nitrate pollution is caused by the overuse of nitrogenous fertilisers to boost yields.
- It can be harmful if they leach into water or air.
- In India, the Green Revolution of the 1960s kick-started the use of synthetic fertilisers.
- An infant girl who has been exposed to nitrate levels above the safety threshold in the first 3 years experiences a 1-2cm decrease in her adult height.
- Female adult height in India has increased by approximately 4cm over the last century.
- A 1-2 cm loss means that nitrate exposure in infancy can wipe out almost half of this gain in height.
- The report also found that nitrate levels in groundwater aquifers exceeded permissible levels in more than 50% of the districts across 19 states.

Marriage age for Men and Women

- The Delhi High Court took up a plea that sought a uniform age of marriage for men and women.
 - The petitioner has challenged the law on the grounds of discrimination,
 1. Articles 14 and 21 of the Constitution, guarantee the right to equality and the right to live with dignity.
 2. They are violated by having different legal age for men and women to marry.
 - Currently, the minimum age of marriage is different for men and women.
1. The law prescribes that the minimum age of marriage is **21** and **18** years for men and women, respectively.

- **‘Indian Majority Act 1875’**

1. An individual attains the age of majority at 18.
2. The law prescribes a minimum age of marriage to essentially outlaw child marriages and prevent abuse of minors.

- Personal laws of various religions that deal with marriage have their own standards, often reflecting custom.

- **‘Hindu Marriage Act 1955’**

1. **18** years is the minimum age for the bride and **21** years is the minimum age for the groom.
2. Child marriages are not illegal but can be declared void at the request of the minor in the marriage.

- In Islam, the marriage of a minor who has attained puberty is considered valid under personal law.

- **‘The Special Marriage Act, 1954’** and the **‘Prohibition of Child Marriage Act, 2006’**

1. Prescribe 18 and 21 years as the minimum age of consent for marriage for women and men respectively.

- **Indian Penal Code (IPC)** in 1860,

1. Criminalised any sexual intercourse with a girl below the age of **10**.

- **‘Age of Consent Bill 1927’**,

1. Through this act the provision of rape was amended in 1927.
2. It made marriages with a girl under **12** invalid.
3. The law had faced opposition from Indian leaders who saw the British intervention as an attack on Hindu customs.

- **‘Child Marriage Restraint Act 1929’**,

1. Set **16** and **18** years as the minimum age of marriage for women and men respectively.
2. This law is popularly known as **‘Sarda Act’**.

- It was eventually amended in 1978 to prescribe **18** and **21** years as the age of marriage for a woman and a man, respectively.
- The different legal standards for the age of men and women to marry are a codification of custom and religious practices that are rooted in patriarchy.
- Law Commission argued that different legal standards contributes to the stereotype that wives must be younger than their husbands.
- It also recommended that the minimum age of marriage for both genders be

set at 18.

SARAL

- Ministry of Power and New and Renewable Energy, launched the 'State Rooftop Solar Attractiveness Index' (**SARAL**).
- **SARAL** has been designed collaboratively by,
 1. The Ministry of New and Renewable Energy (MNRE),
 2. Shakti Sustainable Energy Foundation (SSEF),
 3. Associated Chambers of Commerce and Industry of India (ASSOCHAM) and
 4. Ernst & Young (EY).
- It has been developed to evaluate Indian states based on their attractiveness for rooftop development.
- It is the first of its kind index to provide a comprehensive overview of state-level measures adopted to facilitate rooftop solar deployment.
- It currently captures 5 key aspects,
 1. Robustness of policy framework
 2. Implementation environment
 3. Investment climate
 4. Consumer experience
 5. Business ecosystem
- It encourages each state to assess the initiatives taken so far, and what it can do to improve its solar rooftop ecosystem.
- This will help states to channelize investments that can eventually help the sector grow.
- In is also to create more conducive environment for solar rooftop installations and lead to accelerated growth of the sector.
- The Ministry has set a target of 175 GW of renewable energy capacity by 2022,
 1. In that 100 GW solar power is to be operational by 2022, of which 40 GW is expected to come from grid connected solar rooftops.
- Karnataka has been placed at the first rank in the Index followed by Telangana, Gujarat and Andhra Pradesh.

Bhakra Dam

- The Bhakra Beas Management Board (**BBMB**), manages the Bhakra Dam on Sutlej in Nangal, Punjab.
- It has been working hard to manage Sutlej's flow, and reduce the losses

downstream in the recent heavy rainfall.

- Very heavy rain have resulted in the Sutlej river overflowing and wreaking havoc in around a dozen districts of Punjab. `
- The reservoir height is 1,690 feet but the upper limit for water was fixed at 1,680 feet by the BBMB.
- The dam is built on Sutlej River and it is the 2nd tallest dam in Asia after Tehri dam.
- The Gobind Lake, an artificial lake formed on river Sutlej can have enough amount of water to flood the whole of Chandigarh, parts of Haryana, Punjab and Delhi.
- It provides for irrigation and electricity to Haryana, Rajasthan, Gujarat, and Himachal Pradesh.

Management of Bhakra dam

- **BBMB** is assigned for the administration, maintenance and operation of the dam.
 - It was constituted in 1966.
 - The members of the board are appointed by,
 1. the government of India and
 2. the states of Punjab, Haryana, Rajasthan, Himachal Pradesh, Delhi, and Chandigarh.
 - It works for the regulation and operation of Bhakra dam, Dehar hydroelectricity project, Pong dam, Ganguwal and Kotla power station.
 - Its mission is to set high standards in Operation, Maintenance, Renovation & Modernization of Hydel Projects.
1. Transmission, Canal Systems and to exploit New Hydro Power Potential to optimally utilize the existing infrastructure & resources.

Source: PIB, The Indian Express