

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 statelevel 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.
- \bullet 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.
- \bullet The dam is built on Sutlej River and it is the $2^{\rm nd}$ 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





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