Bridging Milk Divide for a Nutritionally Secure India

Why In news?

India's milk consumption varies greatly by income and region, impacting nutrition security and affordability.

What are Key highlights of the article?

- **Milk Consumption Disparities -** Household Milk Consumption
- Higher income groups consume 3–4 times more milk per capita than lower income groups.
- The poorest 30% of households consume only 18% of India's milk.
- Urban areas consume 30% more milk than rural areas.
- Rajasthan, Punjab, and Haryana consume over 300g per day, while Odisha, Chhattisgarh, and West Bengal consume less than 171g per day.
- **Challenges in Milk Access -** Affordability is a key issue; 70% of Indian households would spend 10–30% of monthly food costs to meet the 300g/day intake.
- Affluent urban households overconsume, leading to obesity and health issues.
- Social groups like Scheduled Tribes have the lowest milk consumption.
- **Milk Macronutrients and Micronutrients**- High-quality proteins like casein and whey for muscle development and repair.
- Calcium essential for bone health and osteoporosis prevention.
- Vitamins A, D, B12 for immune function and energy metabolism.
- Essential fatty acids for brain development.
- Natural sugar, lactose.

What are Impact of Malnutrition and Undernutrition Due to Milk Deficits?

- **Nutrient Deficits Impact on Children**- Impaired growth due to lack of essential nutrients.
- **Weakened immunity** - Due to increased infection susceptibility.
- **Cognitive impairment -** Affecting brain development and learning abilities.
- **Maternal Health and Economic Impact of Malnutrition -** Risks maternal health complications & Decreases productivity and increases healthcare costs.

What is the Link between Overconsumption of High-Fat Dairy and Obesity?

- **Caloric Surplus -** Excessive intake of ***high-fat dairy products*** can contribute to weight gain**.**
- **Saturated Fats -** High consumption may increase the risk of ***cardiovascular diseases.***
- **Lifestyle Factors -** Sedentary habits combined with high dairy consumption exacerbate obesity risks.

India’s Dairy Sector – Key Statistics

- India ranks ***1st in global milk production***, contributing 24% of total global milk.
- Milk production: 230.58 million tonnes (2022-23).
- **Per capita milk availability -** 459 grams/day**,** higher than the global average of 323

grams/day.
- Dairy sector contributes 5% to India’s economy and supports over 8 crore farmers, mostly women.

White Revolution & Dairy Industry in India

- **Verghese Kurien -** Known as the '***Father of the White*** Revolution' in India, he was instrumental in transforming India's dairy industry.
- **Operation Flood -** Launched in 1970, it was the world's largest dairy development program aimed at creating a nationwide milk grid.
- **Objectives -** Increase milk production, augment rural incomes, and provide fair prices for consumers.
- **Impact** - Elevated India from a milk-deficient nation to the world's largest milk producer.
- **Cooperative Movement -** Empowered millions of rural dairy farmers through cooperative societies.
- **National Milk Day -** Celebrated on November 26
- Marks the birth anniversary of Dr. Verghese Kurien, the “Father of White Revolution.”
- Organized by the ***Department of Animal Husbandry and Dairying (DAHD),*** Ministry of Fisheries, Animal Husbandry & Dairying.
- **National Dairy Development Board -** It is a statutory body**.** It was declared an institution of national importance by the National Dairy Development Board Act, 1987.
- **Primary Objective -** To promote, finance, and support producer-owned and controlled organizations in the dairy sector.
- It operates under the administrative control of the *Ministry of Fisheries, Animal Husbandry and Dairy.*

What are the Challenges in the Indian Dairy Industry?

- **Fragmented Supply Chains -** Inefficient milk collection, processing, and distribution.
- **Low Productivity -** Poor nutrition, breeding, and veterinary care reduce milk yield.
- **Fodder Shortage -** Climate change and urbanization limit cattle feed availability.
- **Limited Credit Access -** Small farmers struggle to get loans for better infrastructure
- **Milk Quality Issues -** Adulteration and lack of proper testing facilities.

What are the Scope?

- **Improve Animal Productivity -**Better breeding, nutrition, and veterinary care
- **Sex Sorted Semen technology** to increase adoption from 35% to 70% for better cattle breeding
- Free vaccinations for Foot and Mouth Disease (FMD) and **Brucellosis**, with a target to eliminate them by 2030.
- **Address Fodder Shortage -** Promote high-yield fodder crops and sustainable feeding.
- **Increase Credit Access**- Provide easy loans through microfinance and government schemes.
- **Ensure Quality Control -** Set up more milk testing labs and enforce safety standards.
- **Strengthen Cooperatives -**Organize farmers for better pricing and supply chain management. Gujarat cooperative model

Policy Measures

- **PM POSHAN (Mid-Day Meal Scheme) -** Provides nutritious meals to school children, including milk.
- Central sponsor schemes under ***National Food Security Act,2013.***

- **Integrated Child Development Services -** Improves maternal and child health through nutrition support.
- Provides milk and dairy products to pregnant women, lactating mothers, and children under 6.
- **Rashtriya Gokul Mission -** Improves indigenous cattle breeds for better milk production.
- Supports farmers with high-yield breeds and better dairy infrastructure.
- **National Dairy Development Programme -** Strengthens dairy cooperatives and improves milk distribution.

What Lies ahead?

- Strengthen veterinary services, promote vaccination programs, enhance disease surveillance, and early detection systems for livestock, formulate supportive policies, and provide incentives for animal husbandry and dairying investments.
- Enhance ICDS and Anganwadi services by monitoring nutrition, providing counseling, and offering balanced food.

Reference **The Hindu**

SHANKAR IAS PARLIAMENT
Information is Empowering