



EDITORIAL: BUSINESS STANDARD

GENERAL STUDIES 3: ECONOMY

DATE: 19.12.2024

TOPIC: AGRICULTURE INCOME

CRYING OVER SPILT MILK

From 6.62 % in FY18, India's milk production growth rate has fallen sharply to 3.78% in FY24

India's Milk Production: Growth Trends and Challenges

Current Trends

- 1. Global Leadership:** India has retained its position as the world's largest milk producer, achieving a total milk output of 239.3 million tonnes (mt) in FY24. This solidifies its dominance in global dairy production.
- 2. Slowing Growth in Milk Production:**
 - The annual growth rate of milk production declined marginally from 3.83% in FY23 to 3.78% in FY24.
 - This slowdown follows a consistent drop in growth rates over the years, with FY18 witnessing a high of 6.62%, FY19 at 6.47%, FY20 at 5.69%, FY21 at 5.81%, and FY22 at 5.77%.
- 3. Shift in Cattle Contributions:**
 - Milk output from exotic and crossbred cattle rose by 8% in FY24.
 - Production from indigenous and nondescript cattle increased by an impressive 45% compared to FY23.
 - However, buffalo milk output declined by nearly 16%, significantly impacting overall growth as buffaloes contribute 45% of the total milk production.

Factors Behind Slow Growth

- 1. Structural Challenges:**
 - The country's dairy sector is hindered by small herd sizes, with farmers typically managing just 2-4 animals per household. This limits economies of scale and efficiency.
 - Landholding sizes have also declined significantly, from an average of 1.08 hectares (as per past census data) to just 0.78 hectares, as per the latest NABARD survey.



2. Adverse Weather Conditions:

- Poor monsoon rainfall in 2023 led to reduced availability of green fodder and a decline in the production of feedmeal crops, both of which are critical for sustaining high milk yields.

3. Post-Pandemic Disruptions:

- The lingering effects of the Covid-19 pandemic disrupted interventions like artificial insemination, adversely affecting herd productivity.

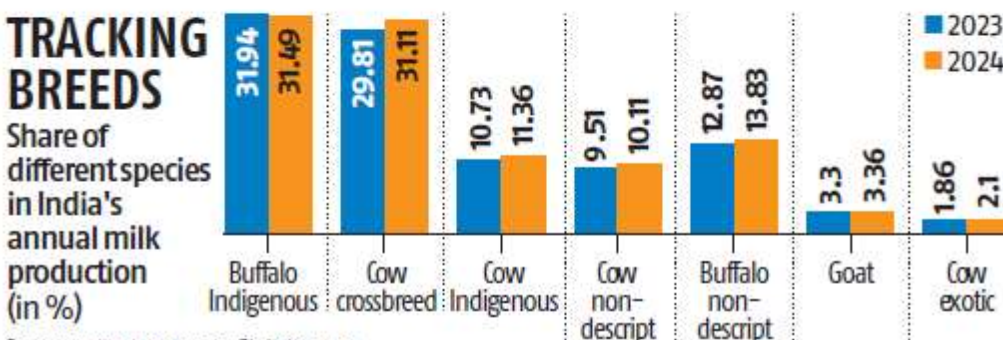
4. Economic Pressures:

- Rising costs of fodder and feed, coupled with low and fluctuating milk prices, have discouraged farmers from investing in productivity-enhancing technologies and practices.

FADING WHITE Milk production, growth rate & per capita availability

Year	Production (in mt)	Per capita availability (in gm per day)	Growth rate (in %)
2017-18	176.35	370	6.62
2018-19	187.75	390	6.47
2019-20	198.44	406	5.69
2020-21	209.96	427	5.81
2021-22	222.07	446	5.77
2022-23	230.58	459	3.83
2023-24	239.3	471	3.78

Source: Animal Husbandry Statistics 2024



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Concerns and Implications

1. Yield Gaps:



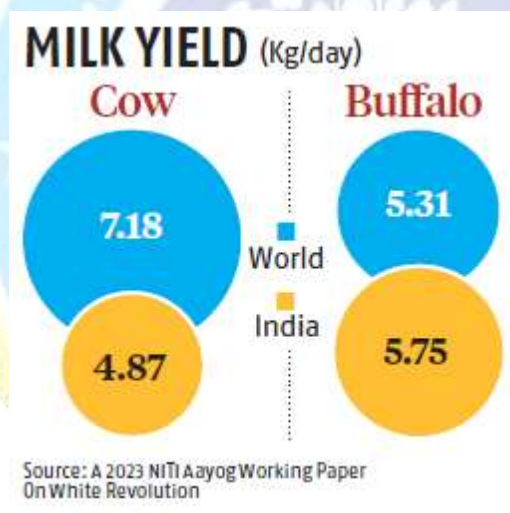
- The average daily milk yield from exotic and crossbred cattle in FY24 was 8.12 kg per animal, compared to only 4.01 kg per animal for indigenous and nondescript breeds.
- India ranks 15th globally in milk yield per lactation, far behind leaders like the United States.

2. Regional Disparities:

- Milk yield per cow varies significantly across states, ranging from a low of 1.49 kg/day in Assam to a high of 13.31 kg/day in Punjab.
- Similarly, buffalo yields range from 1.61 kg/day in Odisha to 9.63 kg/day in Haryana, highlighting stark regional differences.

3. Potential Demand-Supply Imbalance:

- If the growth rate continues to slow, India may face a situation where annual milk production falls short of domestic demand, leading to potential shortages in the future.



Efforts to Boost Productivity

1. Rashtriya Gokul Mission:

- The Mission aims to enhance milk production and productivity through strategic interventions such as:
 - Expanding artificial insemination coverage, with 73 million animals covered and 101.7 million inseminations performed to date.
 - Providing doorstep artificial insemination services free of cost to farmers, benefiting 45.8 million households.



2. Genetic Improvements:

- High genetic merit bulls are being produced to improve the breeding stock of indigenous cattle and buffalo breeds.
- Breeding programs include progeny testing for Gir and Sahiwal cattle breeds, and Murrah and Mehsana buffalo breeds.
- Sex-sorted semen and in-vitro fertilization (IVF) techniques are being implemented, resulting in the birth of 2,019 calves through IVF.

3. Advanced Genomics:

- Unified genomic tools like GauChip (for cattle) and Mahish Chip (for buffaloes) have been developed to facilitate targeted genetic improvements.

4. Farmer Incentives:

- Financial support of up to 50% is provided for sex-sorted semen use, while farmers receive ₹5000 per pregnancy for IVF procedures.
- Additional programs support fodder cultivation, animal feed improvement, and access to credit.

Challenges to Address

1. Low Productivity:

- India's annual milk yield per animal (1,777 kg) is 52% lower than the global average of 2,699 kg.
- Despite a 28% increase in productivity from FY14 to FY20, the yield gap remains substantial.

2. Economic Barriers:

- Rising production costs and shrinking resources (land, water, fodder) discourage farmers from adopting advanced dairy practices.

3. Wide Regional Variations:

- Stark differences in milk yields across states reflect uneven access to technology, training, and inputs.

Recommendations for Future Growth

1. **Focus on Per Animal Yield:** Policymakers and industry stakeholders need to prioritize increasing per animal milk yield rather than relying solely on expanding herd sizes.
2. **Expand Technological Access:** Enhance adoption of cutting-edge genetics, IVF, and genomic tools across regions to bridge yield gaps.



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3. **Strengthen Public-Private Partnerships:** Collaboration between government initiatives and private companies can drive large-scale transformation in dairy farming practices.
4. **Incentivize Farmers:** Provide stable milk prices and greater financial support to motivate farmers to invest in quality inputs and modern technologies.
5. **Enhance Resource Management:** Promote sustainable use of water, land, and fodder to mitigate resource constraints and ensure long-term growth.

By addressing these systemic challenges and implementing targeted interventions, India can sustain its dairy sector's growth, secure food security, and maintain its global leadership in milk production.

Source: https://www.business-standard.com/economy/news/milk-industry-sounds-the-alarm-as-india-s-production-growth-sees-steep-fall-124121700853_1.html

