

DAILY CURRENT AFFAIRS



31 OCTOBER, 2023



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1.	RASHTRIYA GOKUL MISSION
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RASHTRIYA GOKUL MISSION

SOURCE: DTE WHY IN NEWS?

Focus on Gir Breed: The mission originally aimed to conduct research on numerous high milk-yielding

indigenous bovine varieties such as Sahiwal, Tharparkar, and Red Sindhi, depending on geographical locations, using high-quality semen to impregnate other indigenous breeds. However, in practice, Gir cows became highly popular, particularly in Chhattisgarh and Madhya Pradesh, where they led to significant milk production increases.

➤ **Gir's Adaptability and Milk Yield:** Gir, <u>native to western and central India</u>, is favored for its adaptability across different regions and its high milk production, with purebred Gir cows yielding 18-20 liters of milk daily. Farmers also prefer Gir due to their docile nature, which facilitates milk collection.



Need for Genetically Superior Cows: Experts recommend identifying and breeding genetically superior cows from indigenous breeds rather than focusing solely on a few high-yielding bovine varieties. These cows can then be crossbred to maintain indigenous breed purity and regional traits.

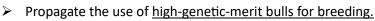
ABOUT RASHTRIYA GOKUL MISSION:

- Launched in December 2014, this mission primarily aims to enhance and conserve indigenous bovine breeds.
- It has continued as part of the Rashtriya Pashudhan Vikas Yojna from 2021 to 2026, with a budget allocation of Rs. 2400 crore.
- Administered by the
 Ministry of Fisheries, Animal
 Husbandry, and Dairying.



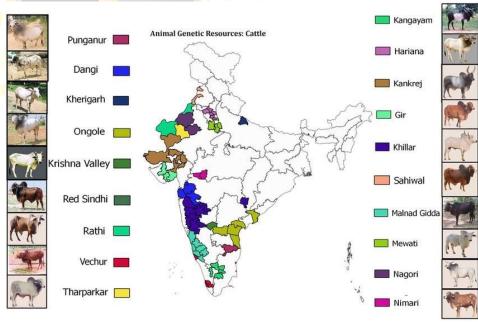
Improve cattle productivity and promote sustainable

 $\ milk\ production\ through\ advanced\ technologies.$



- Widen artificial insemination services by strengthening the breeding network.
- Encourage scientific and holistic conservation of indigenous cattle and buffalo rearing.

SIGNIFICANCE:





- The mission aims to boost productivity and benefit all cattle and buffaloes, with a focus on small and marginal farmers
- It especially empowers women as they play a significant role in livestock farming.

KEY COMPONENTS:

- Availability of High-Genetic-Merit Germplasm.
- > Extension of Artificial Insemination Network.
- Development and Conservation of Indigenous Breeds.
- > Skill Development.
- > Farmers' Awareness.
- Research Development and Innovation in Bovine Breeding.

IMPLEMENTING AGENCY:

The mission is executed through State Implementing Agencies (SIAs), such as Livestock Development Boards.

NOTABLE INITIATIVES UNDER RASHTRIYA GOKUL MISSION:

- 1. **Gopal Ratna Awards:** Recognizing farmers maintaining the finest herd of indigenous breeds and employing superior management practices.
- 2. **Kamdhenu Awards:** Honouring the best-managed indigenous herds managed by institutions, trusts, NGOs, Gaushalas, or breeders' societies.
- 3. **Gokul Grams:** Integrated cattle development centers dedicated to promoting scientific indigenous cattle rearing and conservation.
- 4. National Kamdhenu Breeding Centre (NKBC): A Center of Excellence for the comprehensive and scientific development and conservation of Indigenous Breeds.
- 5. **E-Pashu Haat:** A web portal facilitating information on pet cattle and enabling the trading of bovine animals.
- 6. **Nakul Prajnan Bazaar:** An e-market portal connecting breeders and farmers for quality, disease-free bovine germplasm.
- 7. Pashu Sanjivni: An animal wellness program offering animal health cards, unique identification, and data upload to the National Database.
- 8. Advanced Reproductive Technology (ART): Involves Assisted Reproductive Techniques like IVF/Multiple Ovulation Embryo Transfer (MOET) and sex-sorted semen technique.
- National Bovine Genomic Center for Indigenous Breeds (NBGC-IB): To be established for the selection of highgenetic-merit breeding bulls at a young age using precise gene-based technology.

THE DAIRY SECTOR IN INDIA:

- India's dairy sector is characterized by a "production by the masses" approach, emphasizing the efforts of numerous small farmers with one, two, or three cattle.
- This sector provides livelihoods for over 8 crore (80 million) families across India.
- ❖ India proudly holds the title of the largest milk-producing country globally for the past two decades.
- India's contribution to global milk production exceeds 23%.
- Over the last six years, the **annual growth rate of milk production in India has been 6%**, in stark contrast to the world's milk production growth rate of 1.5%.
- Livestock's contribution to the Agriculture GDP in India ranges from 25% to 30%.
- ❖ The dairy sector contributes 5% to the country's GDP.
- In terms of per capita milk availability as of 2021-22, India boasts 444 grams per day, surpassing the global average.



- The **milk distribution industry** in India is divided into **two sectors:** the <u>organized sector</u>, <u>constituting 40% and encompassing cooperatives and private dairies</u>, and the unorganized sector, which makes up the remaining 60%.
- Similarly, the **milk processing industry** is also split into **two segments**: the <u>organized sector at 20%, and the unorganized sector at 80%.</u>

SIGNIFICANCE OF THE DAIRY SECTOR:

- **Economic Growth:** The dairy sector contributes approximately 5% to the country's GDP.
- **Employment:** Around 80 million households depend on dairy farming for their livelihoods.
- > Tool for Inclusive Growth: Livestock distribution is more equitable than land distribution, with small and marginal farmers owning a significant share.
- **Women Empowerment:** Women participate significantly in the dairy sector, with over 70% involvement.
- Additional Income for Farmers: About 20-30% of total farmer income comes from the dairy sector.
- Savior for Dryland Agriculture: Dairy farming provides opportunities in regions with limited agricultural options.
- Processing Demand: There's a demand for dairy products like cheese and paneer.
- Nutritional Security: Milk is a rich source of nutrients like calcium, magnesium, riboflavin, and vitamin B12.
- Sustainable Agriculture: Dairy farming promotes integrated farming systems, utilizing manure as organic fertilizer.

CHALLENGES TO THE DAIRY SECTOR:

- Informal Sector: A significant portion (70-85%) of marketable surplus milk is sold through informal channels, raising quality concerns.
- Farmers' Share in Benefits: Poor governance of cooperatives leads to farmers not benefiting from high demand.
- Low Productivity per Animal: Indian dairy animals produce an average of 1,700 kg compared to the global average of 2,700 kg.
- Inadequate Healthcare and Veterinary Services: Frequent deadly diseases affect livestock, and there's a lack of diagnostic labs and spurious medicines.
- Fragmented Supply: Dairy production is scattered among many small-scale farmers.
- > Perishability: Dairy products require complex supply chain operations for freshness and safety.
- Infrastructure: Modern cold chain storage and transport facilities are often lacking.
- **Reducing Grazing Land:** Industrial growth has led to a reduction in grazing land.
- Fodder: Issues related to both availability and affordability.
- Limited Financial Resources: The majority of dairy farmers are small-scale with limited financial resources.

GOVERNMENT INITIATIVES:

Government Initiatives	Description
Special Livestock Sector	Merger of schemes into three broad categories: Development Programmes, Disease
Package	Control Programme, and Infrastructure Development Fund.
Development Programmes	Includes Rashtriya Gokul Mission, National Programme for Dairy Development (NPDD), National Livestock Mission (NLM), Livestock Census, etc., as sub-schemes.
Disease Control Programme	Renamed as Livestock Health and Disease Control (LH & DC).
Infrastructure Development Fund	Merger of the Animal Husbandry Infrastructure Development Fund (AHIDF) and the Dairy Infrastructure Development Fund (DIDF).
e-Gopala App	A comprehensive breed improvement marketplace and information portal for farmers.



Unified Dairy Mark	Developed by the Bureau of Indian Standards for ensuring milk quality.
Dairy Entrepreneurship	Implemented through NABARD, aiming to promote entrepreneurship in the dairy
Development Scheme	sector.
Gopal Ratna Award 2021	An award to encourage farmers, artificial insemination technicians, and dairy
	cooperatives.
Quality Mark	Awarded to dairy plants of cooperatives adhering to process standards across the
	dairy value chain.
E-Pashuhaat Portal	Connects breeders and farmers regarding the availability of bovine germplasm.
"Dairy Sahakar" Scheme	Provides financial support by NCDC to eligible cooperatives for activities like bovine
	development, branding, marketing, and exports of dairy products, aligning with the
	objectives of "Doubling the farmers' income" and "Atmanirbhar Bharat."
National Animal Disease	Aims to prevent the spread of diseases like Foot and Mouth disease and Brucellosis
Control Programme	among bovines.
(NADCP)	-

WAY FORWARD:

- > Upstream Supply Management: Ensure reliable, high-quality milk procurement.
- ➤ Milk Processing Opportunities: Explore processing into high-value-added products.
- **Downstream Supply Management:** Develop a secure supply and distribution infrastructure.
- Private Participation: Encourage private sector involvement to boost credit supply and quality.
- Marketing: Organize traders into groups for efficient testing, processing, and storing of milk supplies.
- Value-Addition: Enrich milk with additional nutrients and vitamins.
- **Promote Exports:** Establish rational export policies to enable farmers to get better prices.
- **Dairy Quality:** Focus on clean milk practices, testing infrastructure, cooling facilities, and certification.



THE EXPANSION OF SETTLEMENTS INTO FLOODPRONE AREAS

SOURCE: THE HINDU

WHY IN NEWS?

- Frequent flooding in Indian urban areas.
- Study by the World Bank reveals flood risk is increasing due to urban expansion in flood-prone areas.
- Settlements in such areas have doubled since 1985.

KEY HIGHLIGHTS OF THE REPORT

- Global Settlement Trends:
 - √ Widespread **Expansion:** Many countries, especially East Asia, saw urban settlements grow more in flood-prone areas than dry ones.
 - ✓ Libya's Increase: Libya had an 83% surge settlements

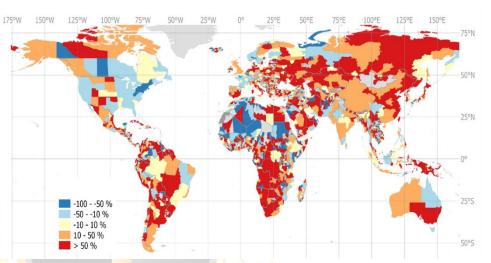


Figure 1 Tracking urban flood exposure: Global trends since 1985

within severe flood zones, notably affected by the 2023 floods.

✓ Pakistan's Growth: Pakistan, facing significant flooding in 2022 and 2023, experienced an 89%. increase in flood-prone area settlements.

Exceptions:

- ✓ U.S. Dry Expansion: The United States notably expanded its dry settlements by 76%, with a 46% increase in the most flood-prone areas.
- ✓ Other Countries: India, France, Sweden, Austria, Finland, Japan, and Canada also had more **growth in dry settlements** than in flood-prone regions.

Indian Context:

- ✓ **Not Among Most Vulnerable Countries:** India is not among the top countries most vulnerable to flood hazards, unlike Bangladesh, Bhutan, China, and Myanmar.
- ✓ High Contribution to Global Settlements: India ranks as the third-highest contributor to global settlements, following China and the U.S.



- ✓ New Settlements Expanding into Flood-Prone Areas: India is the third among countries with new settlements expanding into flood-prone areas, with China and Vietnam ahead. (Data covers 1985-2015).
- ✓ Significant Risk in India: India faces significant risks related to floods, which may exacerbate in the near future.
- ✓ Climate Change Aggravates Monsoons:

 Frequent floods in India are linked to worsening monsoons, driven by climate change. Climate change leads to increased evaporation from oceans, higher atmospheric moisture content, and more cyclonic storms in the waters surrounding India.

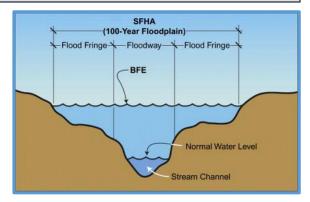


URBANIZATION AND FLOOD

- Population Growth:
 - ✓ Bengaluru's population surged from 1.6 lakh to over a crore between 1901 and 2022.
- Urbanization in Flood-Prone Areas:
 - ✓ This population growth led to urbanization in areas prone to flooding, creating new risks.
- > Concrete Cover:
 - ✓ Increased construction and urban development covered more land with concrete, reducing rainwater absorption into the soil.
- Water Flow Obstruction:
 - ✓ The concrete cover also hindered water flow into canals, elevating the likelihood and intensity of flooding events.

CAUSES OF SETTLEMENTS IN FLOOD ZONES:

- ➤ **Urban Migration: Rapid urbanization** from economic growth pushes settlements into flood-prone areas.
- Economic Constraints: Low-income residents opt for flood-prone areas due to affordability constraints.
- ➤ Regulatory Gaps: Weak enforcement of land-use rules allows settlements in flood-prone areas.
- Cultural Ties: Deep cultural or historical links lead communities to stay in flood-prone zones.
- > Tourism Demand: Despite risks, scenic coastal areas attract resorts, hotels, and recreation settlements.



CHALLENGES REGARDING URBANISATIONS:

- **Risk for All:** Urban expansion into flood-prone areas poses risks for both rich and poor.
- ➤ **Disproportionate Risks:** Low-income residents often settle in flood-prone informal areas, facing higher risks.



Overlooking Geography: Urban expansion neglects local topography and flood-prone characteristics, increasing flood risks.

Regulatory Gaps:

- **Environmental Oversight: Inadequate governance processes** overlook environmental sustainability in urban development.
- > Selective Regulations: Environmental rules primarily target major projects, ignoring smaller locality changes.
- Environmental Impact: Eco-tourism, public structures, and religious buildings on river floodplains harm the environment.

Economic Impact:

- > Substantial Loss: 2023 North India floods and Cyclone Biparjoy in Gujarat could result in Rs 10,000-15,000 crore loss.
- > Bengaluru Floods: The 2022 Bengaluru floods incurred a loss of Rs. 225 crore.

RECOMMENDATIONS OF THE REPORT

Storm-Water Management:

✓ Implement improved storm-water management plans, including the installation of storm-water drains in flood-prone zones.

Resilient Housing:

✓ Enhance the resilience of housing in these areas to withstand floods, with a focus on protecting low-income housing.

Rainwater Harvesting:

✓ Incorporate rainwater harvesting into all infrastructure projects for more efficient water management.

Bioswales Construction:

✓ Develop bioswales along roadsides to collect and filter polluted stormwater runoff, facilitating natural filtration.

Blue-Green Infrastructure:

✓ Promote the development of blue-green infrastructure, which combines ecological restoration, urban design, and infrastructure to address urban and climate challenges.

Geospatial Technology:

✓ Utilize geospatial technology for flood vulnerability mapping and urban planning.

Natural Water Body Maintenance:

✓ Ensure that natural water bodies are regularly desilted and maintained to allow the free flow of excess water.

Comprehensive Environmental Regulations:

√ Apply environmental regulations more comprehensively and prioritize sustainable urban planning.

Stilt Houses:

✓ Consider resilient housing solutions, such as stilt houses, for riverside settlements, with bamboo stilt houses being a suitable choice for flood-prone areas.



PYQs

Q. The frequency of urban floods due to high intensity rainfall is increasing over the years. Discussing the reasons for urban floods, highlight the mechanisms for preparedness to reduce the risk during such events. (2016)

Q. Account for the huge flooding of million cities in India including the smart ones like Hyderabad and Pune. Suggest lasting remedial measures. (2020)

Q. Major cities of India are becoming vulnerable to flood conditions. Discuss. (2016)





PRELIMS POINTERS:

Topic WHY IN NEWS? Improvised Explosive Device (IED) was used in the multiple blasts that took **Improvised Explosive** place at the convention centre of a Christian religious group in Kochi recently. Device (IED) > IEDs are unconventional explosive weapons with various forms and activation methods. They are used by criminals, terrorists, suicide bombers, and insurgents. > IEDs vary widely, from small pipe bombs to sophisticated devices. > Term "IED" became common during the Iraq War (2003). Components include initiator, switch, main charge, power source, and container. Materials used can include fertilizer, gunpowder, and hydrogen peroxide. **Bru Refugees** WHY IN NEWS? For the first time Bru refugees will not participate in elections in Mizoram as they were given permanent settlement in Tripura under a Central government sponsored rehabilitation arrangement. ❖ Bru (Reang) community is indigenous to the Northeast. Mostly living in Tripura, Mizoram, and Assam. Recognized as a **Particularly Vulnerable Tribal Group in Tripura.** Belong to Indo-Mongoloid racial stock. Their language is "Kaubru" with links to the Tibeto-Burman family. Nomadic tribe with hilltop jhum cultivation. Belief in spirits and souls, and predominantly Hindu. Endogamous tradition, with the "RAI" permitting divorce and widow marriage. Exercise > 7th edition of the Kazind exercise. KAZIND-2023 Joint exercise between India and Kazakhstan. > Originally "Exercise PRABAL DOSTYK" (2016), upgraded to "Exercise KAZIND" after the second edition. Now a Bi-service Exercise including the Air Force. Focus on counter-terrorism operations under UN mandate. > Drills include raid, search and destroy, small team operations, and counter-unmanned aerial system. Mahabali Tug WHY IN NEWS? Indian Navy recently commissioned Mahabali Tug Shoft Shipyard Pvt Ltd, Gujarat. ❖ 25-ton Bollard Pull (BP) Tug created by Shoft Shipyard in Gujarat. Commissioned through collaboration between the Ministry of Defence and the Shipyard. ❖ Aids naval ships and submarines in berthing, firefighting, and limited search and rescue. Hostile WHY IN NEWS? Karnataka Forest Department, along with the Wildlife Trust of India, has **Activity Watch** launched the Hostile Activity Watch Kernel (HAWK) system. Kernel Cloud-based information management system for wildlife crime prevention. (HAWK) Manages databases of wildlife crime, criminals, and mortality. System Real-time connectivity for state forest departments. Developed in 2017, launched in 2019 in Kerala, and implemented in Karnataka in 2022.