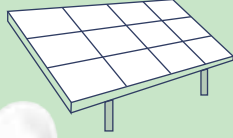




## International Year of Cooperatives

Cooperatives Build a Better World



**NATIONAL  
DAIRY  
DEVELOPMENT  
BOARD**

**60**  
YEARS  
SUSTAINABLE & INCLUSIVE DAIRYING THROUGH COOPERATIVES

ANNUAL  
REPORT

**2024-25**

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# MEMBERS OF THE BOARD



## **MS VARSHA JOSHI**

Additional Secretary (Cattle & Dairy Development)  
Department of Animal Husbandry & Dairying  
Ministry of Fisheries, Animal Husbandry & Dairying  
Government of India



## **SHRI VIKEYIE KENYA**

Chairman  
Nagaland State Dairy Cooperative Federation Limited  
Kohima



## **DR MEENESH C SHAH**

Chairman<sup>1</sup> & Managing Director  
National Dairy Development Board



## **DR N VIJAYA LAKSHMI**

Chairperson  
Bihar State Cooperative Dairy Federation Limited, Patna



## **DR G S RAJORHIA**

Former President  
Indian Dairy Association

<sup>1</sup>Additional Charge of Chairman, NDDB  
As on 31 March 2025

# NATIONAL DAIRY DEVELOPMENT BOARD

Established in 1965 as a registered society under the Societies Registration Act, 1860, later the National Dairy Development Board (NDDB) was constituted as a body corporate in 1987 through an Act of Parliament, amalgamating the undertakings of the Indian Dairy Corporation into its framework. For nearly six decades, NDDB has served as a cornerstone in the advancement of India's dairy sector, fostering producer-owned institutions (POIs) to enhance the livelihoods of millions of dairy farmers, predominantly those who are landless, marginal or smallholders.

Since its inception, NDDB has championed cooperative principles to design and execute programmes that position dairying as a vital instrument for rural development and the improvement of the nation's nutritional standards. A defining milestone in this endeavour was Operation Flood (1970–1996), implemented in three phases through dairy cooperatives. This transformative programme was instrumental in establishing India as the world's leading milk producer by 1998.

NDDB has successfully spearheaded critical national initiatives, including the National Dairy Plan Phase I (NDP I) and the Rashtriya Gokul Mission (RGM), maintaining an unwavering commitment to farmer-centric strategies and cooperative development. The NDP I earned a "Highly Satisfactory" outcome rating from the World Bank, the highest distinction awarded to its funded projects. Through sustained scientific and technological interventions, NDDB continues to fortify the dairy ecosystem, augmenting farmer incomes and reinforcing the cooperative model as the most effective framework for sustainable dairy development.

By providing technical expertise, financial support, and engineering services to dairy cooperatives, NDDB has implemented a range of initiatives, including the revitalisation of promising milk unions, strategic marketing support to bolster dairy cooperatives, and disease control programmes through the Ethnoveterinary Medicine (EVM) and One Health initiatives.

Looking ahead, NDDB remains steadfast in its mission to positively transform the lives of dairy farmers. By embracing innovation, leveraging technology, and fostering cooperation and collaboration, NDDB is poised to address future challenges with resolute determination.





# CHAIRMAN'S MESSAGE



*The year 2024-25 remained decent for dairying, supported by favourable climatic conditions, remunerative prices for dairy farmers, and robust consumer demand*



It is my great pleasure to present the Annual Report of the National Dairy Development Board (NDDB) for the year 2024–25, which has been marked by sustained growth, innovation, and consolidation in India's dairy sector.

The dairy sector has benefited from a combination of favourable factors this year. Good climatic conditions, a stable milk price regime, and a significant reduction in price of most feed ingredients, especially in the latter part of the year, have all contributed to a conducive environment for dairy growth. Government of India's strategic measures, notably the ban on De-oiled Rice Bran (DoRB) exports, have significantly contributed to stabilising cattle feed prices. This initiative has effectively stabilised milk production costs, thereby enhancing the economic viability of dairy farming.

India's milk production has continued to increase and is projected to reach 250 million tonnes for the year 2024–25, solidifying India's position as the world's largest milk-producing nation. Per capita milk availability is expected to reach approximately 490 grams per day, helping improve nutrition and food security nationwide.

Dairy Cooperatives remained the backbone of this progress, demonstrating remarkable resilience despite large inventories of conserved commodities. Milk procurement by cooperatives reached 676 lakh kilograms per day (LKgPD), while average liquid milk sales touched 444 lakh litres per day (LLPD) during the year. Our cooperatives have consistently delivered vital support to the agricultural sector by ensuring seamless procurement services and providing farmers with essential input services, including veterinary and artificial insemination services, vaccinations and high-quality feed and fodder. These efforts have been instrumental in extending the benefits of sustainable development to grassroots communities, strengthening the foundation of rural economies.

NDDB has remained at the forefront of advancing scientific and technological interventions that support sustainable dairy development. Our focus on genetic improvement through genomic selection, reproductive biotechnologies, and conservation of indigenous breeds is yielding tangible results in enhancing productivity. We have promoted enhanced feeding methodologies by promoting ration balancing and the implementation of Total Mixed Ration (TMR) techniques, optimising animal nutrition and improving feed efficiency.

Our animal health programs are strategically aligned with the One Health framework, holistically addressing disease control while reducing the risk of antimicrobial resistance (AMR). Indigenous research advancements have bolstered diagnostic capabilities and biosafety standards, resulting in enhanced animal health management and farm biosecurity. These concerted efforts not only boost productivity but also support the long-term sustainability of the dairy industry.

*India's milk production is projected to reach 250 million tonnes and per capita milk availability approximately 490 grams per day for the year 2024–25.*

The year witnessed further consolidation of key government schemes supported by NDDB. The Rashtriya Gokul Mission (RGM) continues to drive the genetic improvement of indigenous cattle breeds, while the National Programme for Dairy Development (NPDD) focuses on enhancing milk quality, processing, and infrastructure. The Dairy Processing and Infrastructure Development Fund (DIDF) has enabled critical modernisation of facilities, and the Scheme 'Supporting Dairy Cooperatives and Farmer Producer Organisations' (SDC & FPO) has provided much-needed financial support through interest subvention on working capital loans. Under the National Livestock Mission (NLM), we have stepped up efforts to promote fodder production and ensure quality seed availability. The establishment of 100 Fodder Plus FPOs under the 10,000 FPO scheme is strengthening fodder supply chains and ensuring sustainable feed availability for dairy animals.

We are proud to inform that Smt Droupadi Murmu ji, Hon'ble President of India graciously inaugurated pivotal dairy development initiatives virtually in Rairangpur, Odisha. These included the Cow Induction programme, the Giftmilk Programme for school children, and strengthening market support for OMFED. Through NDDB Dairy Services, a not-for-profit subsidiary of NDDB, we are executing a productivity enhancement project, introducing 3,000 high-genetic-merit cows and calves in Mayurbhanj district. Furthermore, technical and financial support is being extended to OMFED to enhance milk procurement and marketing endeavours.

In Washim, Maharashtra, Shri Narendra Modi ji, Hon'ble Prime Minister of India launched NDDB-developed GauSort, a cost-effective indigenous semen sex-sorting technology, and GAUCHIP and MAHISHCHIP, which are genomic chips designed to accelerate genetic selection in cattle and buffaloes, along with other farmer-centric initiatives. These breakthroughs promise to significantly enhance herd quality and milk productivity, contributing to the vision of a self-reliant and technologically advanced dairy sector.

The year 2024–25 represents a pivotal milestone as NDDB enters its Diamond Jubilee year, commemorating

## CHAIRMAN'S MESSAGE

sixty years of unwavering commitment to India's dairy industry. The celebration commenced with the unveiling of the Diamond Jubilee logo, embodying NDDB's dedication to "Sustainable & Inclusive Dairying through Cooperatives".

As part of the continued celebrations, Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation and Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj launched several farmer-oriented initiatives at Anand on 22 October 2024. Key highlights of the event included the laying of foundation stones for NDDB's new office building in Anand, Mother Dairy's Fruit & Vegetable Processing Plant in Itola, Vadodara, and IDMC's Polyfilm Plant in Narela, Delhi. The event also featured the launch of Gir Ghee by Mother Dairy and Badri Ghee by the Uttarakhand Cooperative Dairy Federation, both products incorporating traceability features under the Bharat Pashudhan platform. Several important Memorandum of Understanding (MoU) were signed during the event. These initiatives laid the foundation for the continued strengthening of dairy cooperatives, with several more activities and programmes planned throughout the Diamond Jubilee Year.

During the year, I also had the privilege of meeting Shri Om Birla ji, Hon'ble Speaker of Lok Sabha. We deliberated on numerous innovative initiatives pursued by NDDB

and its subsidiaries. I also informed him about ongoing and planned activities, encompassing improved animal productivity, reinforcement of dairy cooperatives, and procurement of fruits and vegetables undertaken in Rajasthan.

Collaboration with the Ministry of Cooperation has been pivotal in advancing the vision of 'Sahkar-se-Samridhi'. A landmark initiative this year is the White Revolution 2.0, launched jointly by the Ministry of Cooperation and the Ministry of Fisheries, Animal Husbandry & Dairying, with NDDB as a key implementing partner.

This ambitious programme aims to establish approximately 75,000 new Dairy Cooperative Societies (DCS), Multipurpose DCS (MDCS), and Multipurpose PACS (MPACS) in rural areas, thereby enhancing milk production, procurement, and market access at the village level.

Additionally, around 46,000 existing cooperatives will be strengthened by automatic milk collection units, data processing systems, testing equipment, and bulk milk coolers. NDDB has developed a comprehensive action plan in collaboration with state governments and dairy federations to ensure effective implementation and long-term sustainability of these initiatives.

NDDB continues its active engagement with three new national-level multistate cooperative societies i.e National Cooperative Organics Limited (NCOL), Bharatiya Beej



*Smt Droupadi Murmu ji, Hon'ble President of India with Shri Mohan Charan Majhi ji, Hon'ble Chief Minister of Odisha and Shri Dharmendra Pradhan ji, Hon'ble Union Minister of Education during the virtual inauguration of key dairy development programmes in Rairangpur, Mayurbhanj, Odisha*



Shri Narendra Modi ji, Hon'ble Prime Minister of India during the launch of GauSort and GAUCHIP & MAHISHCHIP along with Shri C P Radhakrishnan ji, Hon'ble Governor of Maharashtra; Shri Eknath Shinde ji, Hon'ble Chief Minister of Maharashtra; Shri Shivraj Singh Chauhan ji, Hon'ble Union Minister of Agriculture and Farmers Welfare; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Shri Devendra Fadnavis ji, Hon'ble Deputy Chief Minister of Maharashtra; Shri Ajit Pawar ji, Hon'ble Deputy Chief Minister of Maharashtra; Shri Prataprao Jadhav ji, Hon'ble Union Minister of State for Health & Family Welfare and other distinguished guests at Washim, Maharashtra

Sahakari Samiti Limited (BBSSL), and National Cooperative Exports Limited (NCEL) aimed at organic farming, fostering indigenous seed development and export of dairy products. This initiative goes beyond the dairy sector and represents a strategic expansion of NDDB's role in developing rural cooperative.

NDDB's initiatives are further bolstered through strategic partnerships with eminent domestic and international organisations, including the Suzuki R&D Centre India, the Food and Agriculture Organization of the United Nations (FAO), the Dairy Sustainability Framework, and Sustain Plus Energy Foundation (an affiliate of Tata Trusts).

NDDB persistently delivers management support to dairy cooperatives as managed units across the nation, including Varanasi, Assam, Jharkhand, Chhattisgarh, Manipur, Ladakh, and Maharashtra. Further, at the request of the state governments and milk unions NDDB provided pro bono manpower support to Madhya Pradesh, Goa, Aurangabad, Banaskantha, Himachal Pradesh, Ernakulam and Delhi Milk Scheme

NDDB's subsidiaries continue to play a crucial role in advancing NDDB's mission of promoting cooperatives and strengthening the dairy sector. Each subsidiary, through its specialised functions, complements our collective efforts to enhance rural livelihoods, ensure sustainable dairy development, and empower farmers across the country.

Mother Dairy Fruit & Vegetable Pvt Ltd (MDFVPL) has been instrumental in providing remunerative market access to milk producers while delivering safe and high-quality dairy and food products to consumers. In this fiscal year, MDFVPL achieved a robust turnover of ₹17,386 crore, marking a 16 per cent growth over the previous year.

IDMC Ltd continued to drive growth through turnkey dairy plant installations, advanced refrigeration and farm equipment solutions, and expanded packaging and export capabilities. Strategic infrastructure expansion and a new dairy culture production facility further strengthened 'Aatmanirbharta' and 'Make in India'. IDMC reported a total income of ₹882.00 crore, reflecting its consistent contribution to the dairy sector. During the year, Ready to Use Culture (RUC) technology developed by NDDB was also transferred to IDMC Ltd for commercial manufacturing.

Indian Immunologicals Ltd (IIL), one of the world's largest vaccine producers, recorded a strong performance with a turnover of ₹1,453 crore for the financial year ended 31st March 2025. IIL remains a key vaccine supplier to the Government of India under major national health programs such as ASCAD, UIP, and the Disease Control Programme, while also exporting to over 60 countries globally. IIL continues to strengthen the nation's self-sufficiency in vaccine production through its indigenously developed and manufactured products, including vaccines for FMD, Rabies, Pentavalent, PPR, Hepatitis A & B, among others. Additionally, IIL sustained efforts in developing vaccines for Infectious Bovine Rhinotracheitis (IBR), Measles-Rubella, Lumpy Skin Disease, and Fish Vaccines.

NDDB Dairy Services (NDS), a not-for-profit subsidiary of NDDB, continued to promote inclusive and sustainable dairy development through support to 23 Milk Producer Organisations (MPOs), achieving a combined turnover of ₹9,637 crore. Notably, 16 MPOs were women-led, with 74 per cent of members being women and 65 per cent smallholder producers, collecting over 60 lakh kg of milk per day from over 32,000 villages.



## CHAIRMAN'S MESSAGE

In the area of genetic improvement, NDS operated four semen stations and distributed 426 lakh doses of frozen semen, including significant contributions from indigenous breeds. Beyond dairy, NDS initiated value chain interventions in mango, mustard, and maize, promoting income diversification and strengthening rural livelihoods.

NDDB Mrida Ltd focused on manure management, biogas generation, and organic fertiliser solutions to support sustainable rural energy and dairy systems. In collaboration with Suzuki R&D Centre India, NDDB Mrida propelled the advancement of biogas plant development nationwide. As a national-level implementing agency under the MNRE Biogas Programme, the company facilitated the installation of over 7,000 household biogas units across 13 states, fostering access to clean cooking fuel and alleviating the capital burden on farmers.

In its second year, NDDB CALF Ltd reported a turnover of ₹18.63 crore, offering a wide range of analytical services for food, feed, and dairy products. The Anand-based lab expanded capabilities in genetic testing, disease diagnostics, and breed evaluation for cattle

and buffaloes. Accredited by NABL and recognised by BIS, APEDA, EIC, and FSSAI, it continues to serve as the National and Referral Laboratory for milk and milk products. Over 100,000 samples and 420,000 parameters were analysed during the year.

Today, India is not only 'Aatmanirbhar' in milk production but is recognised globally as the largest milk producer, accounting for nearly 25 per cent of global output. With the continued and systematic application of scientific and technological interventions, supported by both Central and State Governments, India is on the cusp of becoming the undisputed 'Dairy to the World'.

To shape this future, NDDB has formulated Vision 2047, a strategic roadmap steering the sustainable and inclusive transformation of India's dairy sector over the next two decades. Over the next two decades, the sector aims to increase dairy animal productivity from the current 2,080 kg to 5,200 kg per animal annually. It also plans to double the organised dairy sector's coverage, expanding from 1.7 lakh to 3.5 lakh villages. The share of value-added milk products in the cooperative sector is targeted to increase from 25 per cent to 50 per cent.

*Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs; Shri Raghavjibhai Patel ji, Hon'ble Minister of Agriculture, Animal Husbandry, Cow-Breeding and Fisheries, Government of Gujarat; Shri Jagdish Vishwakarma ji, Hon'ble Minister of State for Cooperation, Government of Gujarat and Dr Meenesh Shah, Chairman, NDDB during the lamp lighting ceremony at an event for NDDB's Diamond Jubilee celebration at NDDB, Anand*







*Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Mr Piercristiano Brazzale, IDF President; Ms Laurence Rycken, DG, IDF; Dr Meenesh Shah, Chairman, NDDB & Member Secretary, INC-IDF; Mr Laurent Damiens, IDF Board Member; Shri S Regupathi, Executive Director, NDDB; Shri Manish Bandlish, Managing Director, Mother Dairy and other dignitaries during the First IDF Regional Dairy Conference Asia Pacific 2024 in Kochi, Kerala*

Key interventions to achieve Vision 2047's goals include strengthening dairy cooperatives, enhancing processing infrastructure, ensuring milk quality and safety, improving marketing, increasing animal productivity, and advancing sustainability and circularity practices.

NDDB's holistic disease control models, grounded in the One Health approach, help reduce antimicrobial usage (AMU) and mitigate antimicrobial resistance (AMR), which is a silent pandemic threatening animal and human health. By integrating One Health principles, scaling up

EVM adoption, and prioritising awareness creation, NDDB has significantly helped in advancing India's dairy sector while ensuring inclusive growth and resilience for rural communities.

At NDDB, we are deeply appreciative of the relentless efforts of all stakeholders who have contributed to the progress witnessed this year.

Let us advance this journey with steadfast resolve and collective commitment, as we strive to build a thriving, sustainable, and inclusive dairy ecosystem for India.

*Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs along with Smt J Chinchurani ji, Hon'ble Minister of Animal Husbandry, Dairy Development & Milk Cooperatives, Government of Kerala and Dr Meenesh Shah, Chairman, NDDB and IIL handing over the key of a specially customised rabies task force vehicle to the CAWA Team*



# TRENDS FROM THE DAIRY SECTOR



## DOMESTIC DAIRY SCENARIO

Milk production in the country continued to increase by about 6 per cent per annum, while the per capita availability registered a growth of above 4 per cent during the past 10 years. In 2024-25, milk production in the country is likely to be 250 million tonnes and per capita availability of milk is expected to be around 490 grams per day.

The year proved conducive for dairying, supported by favorable climatic conditions, a reduction in the price of most of the feed ingredients during the latter half, and remunerative prices to dairy farmers.

The Government of India took steps to stabilise input costs, especially for cattle feed. The continuation of the ban on export of De-oiled Rice Bran (DoRB) helped stabilise the prices of cattle feed and thereby cost of milk production & inter alia consumer prices of milk.

Despite being saddled with a large inventory of conserved commodities, the dairy cooperatives continued to procure milk from dairy farmers. Milk procurement by the dairy cooperatives increased to 676 lakh kilogrammes per day (LKgPD), a growth of more than 2 per cent compared to the previous year.



Dairy cooperatives consistently supported dairy farmers by delivering technical inputs and extension services, including veterinary care, Artificial Insemination (AI), vaccinations, balanced cattle feed, fodder seeds, mineral mixtures, and more. The average liquid milk sales of dairy cooperatives was at 444 Lakh Litres per day (LLPD), reflecting a 1 per cent increase over the previous year.

The domestic market prices of conserved dairy commodities such as Skimmed Milk Powder (SMP) and White Butter witnessed a mixed trend during the year. The prices of SMP increased by 5 per cent to trade at ₹ 247 per kg by the end of March 2025. On the other hand, the price of white butter saw an increase of 21 percent to trade at ₹ 414 per kg by the end of March 2025.

## INTERNATIONAL DAIRY SECTOR OVERVIEW

According to the Food and Agriculture Organization of the United Nations (FAO), world milk production was estimated at 982.5 million tonnes in 2024, up 1.6 percent from 2023, primarily due to an increase in milk production in India.

World trade in dairy products was estimated at 86.2 million tonnes (in milk equivalents) in 2024, increased by 2 per cent as that of the year 2023. China, the largest importer, imported 14.2 million tonnes (milk equivalent) of dairy products, down by about 10 per cent from last year due to increased stocks of imported dairy products. The decline in China's imports was compensated by an increase in imports from Southeast Asian countries, African countries, and countries in the Central America & the Caribbean region.

Exports from the European Union, the United States and New Zealand in milk equivalent declined by 4 per cent, 2 per cent and 1 per cent respectively. In contrast, Australia's exports increased by 23 per cent year-on-year, driven by improved export competitiveness resulting from favourable trade agreements.

In the Global Dairy Trade, the price of SMP and white butter witnessed modest increase during the year 2024-25. The average price of SMP increased from around USD 2,546 per MT in April 2024 to USD 2,737 per MT in March 2025. Similarly, butter price also increased from USD 6,569 per MT in April 2024 to USD 7,622 per MT in March 2025.



# TRANSFORMING INDIAN DAIRY SECTOR

NDDDB strengthened its commitment to farmer-centric and innovation-driven dairy development through its collaborative initiatives with various countries and international organisations to advance the dairy sector in the country and offered scalable models for nations with similar smallholder structures, particularly in South Asia and Africa.

## INDIA HOSTS FIRST IDF REGIONAL DAIRY CONFERENCE ASIA PACIFIC 2024

India had the distinct honour of hosting the inaugural IDF Regional Dairy Conference for the Asia Pacific region in Kochi from June 26th to 28th, 2024. The conference, themed "Farmer Centric Innovations in Dairying", was a collaborative effort spearheaded by the Indian National Committee of the International Dairy Federation (IDF). The committee, under the presidency of the Secretary of the Department of Animal Husbandry & Dairying (DAHD), Government of India and with NDDDB serving as its secretariat, comprised various dairy cooperatives, prominent private sector entities, and academic institutions. This significant gathering convened 1,200

leaders, experts, and farmers from 25 nations, including India, to address pressing challenges within the dairy industry, with a particular focus on the Asia Pacific region and the global context.

The conference was formally inaugurated in Kochi, Kerala on June 26th, 2024, by Smt J. Chinchurani ji, Hon'ble Minister for Animal Husbandry and Dairy Development, Government of Kerala, and Shri Gabriel Denwang Wangsu ji, Hon'ble Minister of Agriculture, Horticulture, Animal Husbandry, Veterinary & Dairy Development, Government of Arunachal Pradesh. The distinguished list of attendees



Smt J. Chinchurani ji, Hon'ble Minister for Animal Husbandry and Dairy Development, Government of Kerala; Shri Gabriel Denwang Wangsu ji, Hon'ble Minister of Agriculture, Horticulture, Animal Husbandry, Veterinary & Dairy Development, Government of Arunachal Pradesh; Mr Piercristiano Brazzale, IDF President; Ms Laurence Rycken, DG, IDF; Ms Alka Upadhyaya, Secretary, DAHD, Government of India & President INC-IDF; Dr Meenesh Shah, Chairman, NDDDB & Member Secretary, INC-IDF and other dignitaries during the inauguration of the First IDF Regional Dairy Conference Asia Pacific 2024 in Kochi, Kerala





*Dr Meenesh Shah, Chairman, NDDB briefing Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj at the exhibition during his visit to the IDF RDC 2024*

included Ms Alka Upadhyaya, Secretary, Department of Animal Husbandry & Dairying, Government of India, and President of the Indian National Committee of the IDF (INC-IDF); Her Excellency Ms Kshenuka Senewiratne, High Commissioner of Sri Lanka; Ms Varsha Joshi, Additional Secretary, Department of Animal Husbandry & Dairying, Government of India; Dr Meenesh Shah, Chairman, NDDB and Member Secretary of the Indian National Committee of the IDF; Shri Pranabjyoti Nath, Secretary, Animal Husbandry & Dairying, Government of Kerala; Mr Takayuki Hagiwara, FAO India; Mr Piercristiano Brazzale, President, International Dairy Federation (IDF); and Ms Laurence Rycken, Director General, IDF.

The conference featured 11 sessions covering global and regional perspectives on dairying and innovation, focusing on farmer-centric interventions to enhance productivity, ensure transparency in milk aggregation and foster sustainable practices. From addressing climate challenges

to advocating for One Health principles, these sessions catalysed meaningful dialogue and actionable insights. The deliberations unveiled innovative marketing approaches aimed at nurturing growth and resilience in the dairy sector across the Asia Pacific. In addition, 22 exhibition pavilions showcased dairy farms, processing equipment, and related technologies, while 17 distinct startups displayed their innovations in dairy and allied industries at the event. NDERP Project, SAG—Slow Release (SAG-SR) semen straw and SAG MinVit and MinRich Mineral Mixtures; AMUL's protein-enriched milk & chocolate and Milma's ready-to-drink palada payasum were also launched during the event.

Side events by FAO – IDF – NDDB on Navigating challenges in Dairy Production: Innovations for Sustainable sector transformation; DSF-NDDB on implementing sustainability frameworks in milksheds; and International Year on Camelids were also organised.

## PARTICIPATION AT IDF WORLD DAIRY SUMMIT 2024

An Indian delegation led by Ms Alka Upadhyaya, President, INC-IDF and Secretary, DAHD, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, participated in the IDF World Dairy Summit 2024 and related meetings in Paris, France, during 11-18 October 2024. Ms Upadhyaya participated in the Women's Round-table, Ministers' Panel, and the Dairy Leaders' Forum on Sustainability. Ms Upadhyaya and Dr Meenesh Shah, Member Secretary, INC-IDF and Chairman, NDDB, shared India's perspective and signed the 'Paris Dairy Declaration on Sustainability' during the Dairy Leaders' Forum on Sustainability.

Ms Upadhyaya also received the certificate from the IDF President announcing that India will host the IDF WDS 2027. Ms Varsha Joshi, Additional Secretary, DAHD, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, participated in various meetings

of IDF Standing Committees and Women's Roundtable. Chairman, NDDB, also attended the IDF business meetings, including the IDF Board meeting and National Committees meeting. Officials from NDDB participated in the 'Round-table Discussion – From theory to action at the farm level – How to take animal welfare into account in the dairy sector' and the IDF business meetings.

Asha Mahila Milk Producer Organisation, promoted by NDDB Dairy Services, received the prestigious IDF Innovation Award 2024 in the category 'Innovation in Women Empowerment in the Dairy Sector'. NDDB, along with the Sundarbans Cooperative Milk and Livestock Producers' Union Limited, received the award in the category 'Innovation in Sustainable Farming Practices (Socio-economic Development)'.



Mr Piercristiano Brazzale, IDF President presented a certificate to Ms Alka Upadhyaya, Secretary, DAHD, Government of India & President, INC-IDF and Dr Meenesh Shah, Chairman, NDDB & Member Secretary, INC-IDF announcing India to host the IDF World Dairy Summit 2027 during IDF WDS 2024 held at Paris in presence of Mr Gilles Froment, IDF Board Member; Mr Laurent Damiens, IDF Board Member and Ms Varsha Joshi, Additional Secretary, DAHD, Government of India





*Asha Mahila Milk Producer Organisation, promoted by NDDB Dairy Services, receiving the IDF Innovation Award 2024 for 'Innovation in Women Empowerment in the Dairy Sector'*

## INDIA AT THE IDF CHEESE SCIENCE AND TECHNOLOGY SYMPOSIUM, NORWAY

A delegation of esteemed dairy professionals representing NDDB, Amul, Banas Dairy, Mother Dairy, and the Karnataka Milk Federation (Nandini) participated in the IDF Cheese Science and Technology Symposium, held in Bergen, Norway from June 4th to 6th, 2024.

The symposium's agenda was dedicated to the latest scientific breakthroughs in the dairy sector, with a specific emphasis on the cheese production value chain. The sessions provided comprehensive coverage of critical subjects, including milk and cheese quality, starter

cultures, microbiota, the quality of goat and ewe milk cheeses, innovations in cheese manufacturing processes, sustainable production & packaging and cheese structure and matrix.

The symposium served as a convergence point for nearly 200 scientists from more than 30 nations, facilitating a crucial exchange of knowledge and a collective exploration of emerging developments in the field of cheese science and technology.

## NDDB DELEGATION EXPLORES LIVESTOCK IMPROVEMENT AND DAIRY INNOVATIONS IN NEW ZEALAND

A delegation from NDDB undertook a visit to New Zealand with the express purpose of studying and comprehending its highly advanced dairy farming systems. The objective was to explore pioneering practices that hold potential for adaptation to elevate the efficiency and productivity of the dairy sector in India.

During their visit, the NDDB team conducted observations on the deployment of state-of-the-art technologies across several domains, including animal health management, sophisticated pasture-based feeding systems, and sustainable farming methodologies. A key component of their engagement involved interaction with the Livestock Improvement Corporation (LIC), a notable New Zealand agri-technology cooperative, which is renowned for its comprehensive contributions to herd improvement and dairy farm management. Furthermore, the delegation delved into the integration of digital solutions in farm management, which have been instrumental in streamlining operations and boosting milk yields within New Zealand.

After this visit, Dr Meenesh Shah, Chairman, NDDB along with senior officials from both NDDB and NDS, held a meeting with Mr Todd McClay, Hon'ble Minister of Agriculture, New Zealand. The discussions centered on the exchange of technical staff in critical areas such as animal feed and nutrition, advancements in embryo and semen technologies, and methods for emissions measurement and mitigation. Dr Shah also engaged with Ms Julie Collins, Deputy Director General of the Ministry for Primary Industries, New Zealand, to deliberate on prospective collaborative projects. These included professional exposure visits, the exploration of ethno-veterinary medicines as a viable alternative to antibiotics, and the formation of a unified position on matters of sustainable dairying at international forums.



*Dr Meenesh Shah, Chairman, NDDB with Mr Todd McClay, Hon'ble Minister of Agriculture, New Zealand*



*Officials from NDDB and NDS in discussion with officials from Ministry of Primary Industries, New Zealand; Dairy Companies Association of New Zealand and Dairy NZ in Wellington, New Zealand*





*Dr Meenesh Shah, Chairman, NDDB along with Dr K Anand Kumar, Managing Director, Indian Immunologicals Limited and Shri Jayen Mehta, Managing Director, GCMMF meeting His Excellency Williams Samoei Ruto, Hon'ble President of the Republic of Kenya*

## COLLABORATING TO STRENGTHEN KENYA'S DAIRY SECTOR

Building upon the previous year's initiatives aimed at bolstering the dairy value chain in Kenya, Chairman, NDDB and Managing Director, GCMMF, undertook a visit to Kenya. The purpose of this visit was to explore potential avenues for collaboration, with the goal of leveraging Indian expertise to improve Kenya's dairy sector. The delegation engaged with several key stakeholders, including high-level officials from the Government of Kenya, representatives from the International Livestock Research Institute (ILRI), and members of the High Commission of India in Kenya. The discussions were centered on a range of topics, including the transfer of technical expertise, strategies for increasing milk production, the implementation of fair payment systems for farmers, and the promotion of sustainable dairy farming.

During the visit, Dr Shah and the Indian Delegation had the honour of meeting with His Excellency Williams Samoei Ruto, Hon'ble President, Republic of Kenya. The substantive discussions during this meeting revolved around several critical areas: the provision of vaccines and the establishment of vaccine manufacturing facilities; genetic improvement strategies, with a particular emphasis on the introduction of buffaloes; the provision of dairy equipment and innovative packaging solutions; the promotion of a farmer-centric cooperative dairying model; technologies for biogas and manure management; the enhancement of testing facilities; comprehensive training and capacity building across various functions; and the development of a formal collaborative framework between the two governments.



## INDIA SHOWCASES INNOVATIONS IN LIVESTOCK SECTOR AT FAO REGIONAL FORUM IN THAILAND

The Food and Agriculture Organization of the United Nations (FAO) organised the Regional Forum on Innovations to Support Sustainable Livestock Transformation in the Asia and Pacific Region, which took place in Khon Kaen, Thailand.

Dr Meenesh Shah, Chairman, NDDB, and Dr Abhijit Mitra, Commissioner, DAHD, Government of India, were in attendance, accompanied by other officials.

In a collaborative effort with IDF, NDDB showcased a range of innovative and farmer-centric initiatives at the forum. These initiatives are specifically designed to promote sustainable dairying, to improve milk productivity, enhance profitability, and lowering greenhouse gas emissions. In doing so, these efforts directly contribute to the achievement of the United Nations Sustainable Development Goals (SDGs). Attendees were also apprised about the upcoming ICAR Annual Conference and the IDF/ISO Analytical Week 2025, scheduled at NDDB, Anand from 29th March to 4th April, 2025.



Dr Meenesh Shah, Chairman, NDDB, and Dr Abhijit Mitra, Commissioner, DAHD, Government of India presenting a token of appreciation to Dr Thanawat Tiensin, Assistant Director-General, FAO



Dr Meenesh Shah, Chairman, NDDB; Dr Abhijit Mitra, Commissioner, DAHD, Government of India along with officials from DAHD, Government of India and NDDB at the exhibition



## STRENGTHENING GLOBAL HEALTH TIES: 15 YEARS OF VACCINE PARTNERSHIP IN VIETNAM

Dr Meenesh Shah, Chairman, NDDDB and Managing Director, IIL attended a commemorative event hosted by the Government of Vietnam's vaccine producer Dalat Pasteur Vaccine Company Limited (DAVAC) to celebrate 15 years of partnership between DAVAC, All for Medical Vietnam (AMV) Group, and IIL. This collaboration successfully introduced IIL's Vero cell-based anti-rabies vaccine – Abhayrab in Vietnam.

IIL also donated 10,000 doses of anti-rabies vaccine for economically backward communities in Vietnam's five provinces. This collaboration showcases India's role in international vaccine cooperation and highlights the contribution of Indian institutions in supporting the "One Health" approach through accessible technologies and a commitment to public health.



Dr Meenesh Shah, Chairman NDDDB & IIL with Dr K Anand Kumar, Managing Director, IIL donating 10,000 doses of anti-rabies vaccine to Dr Tran Thi Giang Huong, Head of the Rabies Control Programme, Vietnamese Government in Vietnam



# PRODUCTIVITY ENHANCEMENT

NDDB has continued its efforts to advance scientific interventions in the domains of animal breeding, nutrition, health, and diagnostics. The primary interventions included genetic enhancement through genomic selection, the application of reproductive biotechnologies and breed conservation. The organisation actively promoted better feeding methodologies by implementing ration balancing and advocating for the adoption of Total Mixed Ration (TMR) techniques. Furthermore, animal health strategies were aligned with the 'One Health' framework, placing a strong emphasis on disease control and the reduction of antimicrobial resistance (AMR). Indigenous research played a crucial role in supporting advancements in diagnostics and enhancing biosafety measures. These concerted efforts have been instrumental in improving productivity, strengthening biosecurity, and bolstering the overall sustainability of India's dairy sector.

## ANIMAL BREEDING

NDDB focused on improving the genetic potential of bovine populations through structured breeding interventions. These efforts aimed to improve productivity in both cattle and buffalo herds and support the sustainability of dairy farming.

Genetic improvement was pursued through two key strategies: identifying elite germplasm and distributing superior genetics on a large scale. NDDB implemented genomic selection, sex-sorted semen use, and embryo transfer technology to accelerate genetic progress.

Under the RGM of the Government of India, NDDB led the genetic evaluation of indigenous breeds through the following programmes:

- NDDB implemented the Progeny Testing (PT), Pedigree Selection (PS) and National Milk Recording Programme (NMRP) to enable systematic performance recording and identify high-yielding animals.
- NDDB implemented the Accelerated Breed Improvement Programme (ABIP-IVF) to support rapid multiplication of elite germplasm through advanced reproductive technologies.
- NDDB developed indigenous culture media under the Embryo Transfer Technology (ETT) programme, which improved the success rate of in-vitro embryo production and transfer.

- NDDB promoted the use of sex-sorted semen under ABIP-SSS to increase the number of female calves, which improved replacement rates and long-term herd productivity.

These programmes covered major indigenous and crossbred dairy cattle and buffalo breeds. NDDB used genomic tools to make precise selection decisions. Reproductive biotechnologies helped accelerate the spread of superior genetics.

Together, these efforts strengthened the foundation for sustained genetic progress and breed conservation, aligning with national breeding policy objectives.











*Genomic Selection - way to accelerated genetic improvement in bovines*

## GENOMIC SELECTION OF YOUNG BULLS

NDDB expanded its genomic selection programme to accelerate genetic improvement in bovine populations. The programme focused on expanding the reference population and increasing coverage across indigenous and crossbred dairy breeds.

NDDB genotyped 18,005 cattle and buffaloes that had verified performance records under projects supported by RGM and the Gujarat Biotechnology Research Centre (GBRC). GCMMF also contributed performance-recorded cow samples for genotyping in collaboration with NDDB, further strengthening the reference population.

NDDB genotyped 1,612 young bull calves across multiple breeds — Gir, Sahiwal, Kankrej, Murrah, Mehsana, crossbred Holstein Friesian (HFCB), and crossbred Jersey (JYCB). These calves, produced under Progeny Testing (PT) and Pedigree Selection (PS) programmes, were assessed using GAUCHIP for cattle and MAHISHCHIP for buffaloes. Genomic Breeding Values (GBVs) were used to select bulls for

semen stations, enabling the production of frozen semen to improve the genetic gain through AI.

Genomic selection gained wider adoption among farmers and breeding agencies. NDDB CALF Ltd genotyped 11,835 cattle and buffalo samples and shared GBVs to assist in selecting high genetic merit heifers and bulls. Demand increased for genotype-based breed purity assessment, supporting the identification and conservation of purebred animals.

NDDB maintained a DNA repository of 1,28,826 genotyped cattle of 30 indigenous breeds, 2 crossbred types (Crossbred Holstein Friesian and Crossbred Jersey), and 2 exotic breeds (Jersey and Holstein Friesian). The repository also has 98,979 DNA samples of 12 buffalo breeds, including swamp buffaloes. Of these, 61,632 cattle and 62,928 buffalo were genotyped at the whole-genome level under the strengthening of Reference DNA biobanking. Cattle breeds such as Himachali Pahari, Ladakhi, and Bargur, along with buffalo breeds including Gojri and Bargur, were also genotyped during the year.



## OVUM PICK-UP, IN-VITRO EMBRYO PRODUCTION AND EMBRYO TRANSFER (OPU-IVEP-ET)

Ovum pick-up and in vitro embryo production (OPU-IVEP) gained widespread recognition for propagating superior bovine dairy genetics, particularly in the dairy-developed nations. This technology, with its significant advantage of expediting the genetic enhancement of cattle and buffalo through the rapid multiplication of superior germplasm, held immense promise for transforming the dairy landscape and reorienting dairy farming practices in India.

NDDB's OPU-IVEP-ET facility continued its endeavours to enhance the efficiency of the technique for both cattle and buffalo. In addition to tech-optimisation, the facility focussed on developing skilled personnel, underscoring NDDB's commitment to advancing bovine reproductive technologies while ensuring a proficient workforce. Emphasis was also laid on reducing the cost of technology by developing indigenous OPU-IVEP-ET culture media.

The following outcomes were achieved:

1,812

**VIABLE EMBRYOS WERE PRODUCED FROM ELITE CATTLE DONORS**

790

**EMBRYO TRANSFERS WERE CONDUCTED, RESULTING IN 173 CONFIRMED PREGNANCIES**

72

**CALVES WERE BORN THROUGH THE OPU-IVEP-ET PROTOCOL DURING THE YEAR**

NDDB provided technical support to Amul Dairy, Banas Dairy, and Assam Agricultural University for setting up and operationalising OPU-IVEP-ET facilities.

NDDB implemented the flagship 'Hub and Spoke' model to disseminate OPU-IVEP-ET technology to farmers' doorstep through strategic collaboration with Milk Unions. The

model's objective was to establish the long-term viability of embryo transfer in India by a systematic division of responsibilities. Under this framework, NDDB laboratory functioned as the 'hub', responsible for embryo production and providing essential initial support for OPU and ET procedures in the field. The Milk Unions served as the 'spokes', tasked with identifying elite donors, synchronising recipients, conducting heat detection, executing field embryo transfers, and conducting farmer awareness initiatives.

This 'Hub and Spoke' model was adopted by five major Milk Unions in Gujarat—Amul, Banas, Sabar, Mehsana, and Sumul. The cumulative results included:

1,800

**EMBRYO TRANSFERS PERFORMED AT FARMERS' DOORSTEPS**

280

**PREGNANCIES ESTABLISHED**

194

**CALVES BORN**

At least 25 veterinarians were trained and are now independently conducting embryo transfers, reflecting the success of this capacity-building effort.

With rising demand among farmers, Amul Dairy established its laboratory, while Banas, Sabar and Mehsana MUs were also in different stages of building their laboratories. NDDB played a crucial role in supporting these initiatives, providing expertise and assistance to establish and operationalise these laboratories effectively. These efforts were aimed at enhancing herd genetics, improving productivity and ultimately boosting farmers' incomes by extensively utilising OPU-IVEP-ET.



Forage harvesting for silage making

## ANIMAL FEEDING

NDDB implemented animal nutrition programmes to improve yield and quality of milk, feed efficiency and reproduction performance of dairy animals in cost effective manner.

### PROMOTING BALANCED FEEDING THROUGH THE RATION BALANCING PROGRAMME (RBP)

NDDB maintained its commitment to advancing scientific feeding practices for dairy animals through the Ration Balancing Programme (RBP), ensuring the doorstep delivery of ration advisory services to farmers. Throughout the fiscal year 2024–25, NDDB extended technical support to dairy cooperatives and other implementing partners to bolster RBP initiatives designed to sustainably improve animal productivity.

In partnership with the Aga Khan Foundation (AKF), a non-profit organisation, NDDB enabled the execution of RBP in the states of Bihar and Uttar Pradesh. This collaboration delivered ration advisories to 5,491 animals owned by 4,089 farmers. The adoption of scientific feeding methods led to an average increase in milk yield of 0.26 litres per day per animal, an improvement in fat content by 0.11 units, and a reduction in enteric methane emissions ranging from 8 to 15 per cent (g/kg milk).

The Kolhapur Milk Union also continued to provide ration advisory services across its milkshed. Cumulatively, the union covered 45,817 animals belonging to 23,548 farmers. Scientific feeding under the programme led to an average increase in milk yield by 0.32 litres per day per animal and an enhancement in fat content by 0.29 unit.

To facilitate the National Milk Recording Programme (NMRP), NDDB trained supervisors from 27 implementing agencies to provide ration advisory services to animals enrolled under the programme. Consequently, 1,259 animals were provided with these services during the 2024–25 fiscal year.

In addition, NDDB provided training and capacity-building assistance to 156 officers from various State Animal Husbandry Departments, concentrating on foundational animal nutrition principles and ration balancing through the Bharat Pashudhan platform.



## PROMOTING CONVENTIONAL TOTAL MIXED RATION (TMR)

NDDB introduced an innovative feed delivery solution by developing and standardising the production of conventional packed TMR with the objective of providing year-round access to balanced, ready-to-eat rations for dairy animals.

The first Total Mixed Ration (TMR) plant within the cooperative sector was established at AMUL, supported by financial aid from the Government of India's National Livestock Mission (NLM) and technical expertise from NDDB. In the 2024–25 fiscal year, approximately 550

Metric Tonnes (MT) of packed TMR were produced and distributed to dairy farmers.

To expand this initiative, NDDB assisted other dairy cooperatives in developing and submitting proposals for TMR plants under the NLM. During 2024–25, proposals for two TMR plants were submitted by the Banaskantha and Jaipur Milk Unions. The Banaskantha Milk Union completed its TMR plant's installation during the year, with commissioning slated for 2025–26.



*Conventional TMR plant*

## TECHNICAL SUPPORT FOR FEED AND SUPPLEMENT PRODUCTION

NDDB maintained a central role in assisting dairy cooperatives with the production of safe and balanced compound cattle feed, which is vital for fulfilling the nutritional requirements of dairy animals. Cattle Feed Plants (CFPs) operated by the dairy cooperatives manufactured nearly half of the nation's total compound cattle feed.

To ensure consistent quality, NDDB provided technical support to CFPs, specifically in areas such as least-cost feed formulation (LCF), quality control, and the development of new feed variants. In the 2024–25 fiscal year, three new compound feed variants—Pregnancy Feed, Early Lactation Feed, and Calf Starter—were successfully introduced at the Surat and Jaipur cattle feed plants with NDDB's technical guidance.

NDDB also provided training and capacity-building support to strengthen the capabilities of CFP personnel. In 2024–25, 22 Quality Control Officers from 18 CFPs were trained, focusing on feed formulation techniques, quality assurance, and emerging industry trends in cattle feed manufacturing.

In addition to regular feed production, NDDB continued to support CFPs in producing specialised feed supplements tailored to specific nutritional and seasonal requirements. During 2023–24, NDDB facilitated the production of approximately 959 MT of Samvridhhi, a feed supplement designed to enhance milk fat and SNF content, across 11 feed plants. Furthermore, two CFPs produced 3 MT of Pashu Sheetvardhak, a feed supplement formulated to reduce heat stress in dairy animals during extreme climatic conditions.

## ALTERNATE FEED RESOURCES FOR ANIMAL NUTRITION

NDDB responded to the increasing cost of traditional feed raw materials by exploring the use of locally sourced, unconventional feed ingredients in cattle feed formulations. This initiative was designed to maintain the affordability of compound cattle feed, thereby contributing to the economic sustainability of dairy farming.

NDDB's evaluation of alternative feed ingredients, including black cumin meal, pomegranate peel, and orange pomace, assessed their potential for inclusion in cattle feed. In-vitro analysis of these ingredients demonstrated that they could be safely incorporated into rations at 2 per

cent for black cumin meal, 2 per cent for pomegranate peel, and 4 per cent for orange pomace, without any negative effects on digestibility.

Additionally, NDDB initiated a feeding trial on bakery waste to assess its suitability and optimal level of inclusion in compound cattle feed. These efforts reflected NDDB's continued commitment to supporting cost-effective, region-specific, and nutritionally balanced feed solutions for dairy farmers across the country.

## EVALUATION OF GREEN PADDY STUBBLE SILAGE AS AN ALTERNATIVE TO WHEAT STRAW FOR LACTATING BUFFALOES

NDDB, in collaboration with MILKFED, Punjab and Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana, undertook a pilot study to explore the feasibility of using green paddy stubble as silage in Punjab. This initiative aimed to offer a sustainable alternative to dry fodder—particularly wheat straw—while

addressing the environmental concerns related to crop residue burning, which is prevalent in the region due to labour shortages and narrow harvest-to-sowing windows.

Dry fodder constitutes approximately 50 per cent of animal rations in India, and its scarcity remains a persistent concern. In response, two distinct types of paddy stubble

*Paddy Stubble Silage as a viable and safe alternative to wheat straw*





silage were prepared for comprehensive evaluation: an untreated variant and one fortified with culture and enzymes.

The experimental trials, which encompassed both *in vitro* and *in vivo* assessments, were conducted at the GADVASU dairy farm in Ludhiana. Concurrently, field trials were conducted at the Krishi Vigyan Kendra (KVK) in Barnala and the KVK in Mohali.

*In vitro* analysis demonstrated significantly superior digestibility metrics—including dry matter digestibility, organic matter digestibility, neutral detergent fiber digestibility, and microbial biomass production—for the untreated paddy stubble silage compared to the treated version.

*In vivo* trials, conducted on eighteen lactating buffaloes, showed no significant differences in digestibility parameters across the treatment groups. However, the milk yield was higher in the wheat straw group (10.47 kg/day/animal) compared to both untreated (9.99 kg/day/animal) and treated silage (9.94 kg/day/animal) groups.

The milk fat percentage was statistically comparable between the wheat straw group (6.74 per cent) and the

treated silage group (7.26 per cent) but was notably lower in the untreated silage group (6.63 per cent). Conversely, protein, lactose, and SNF percentages were significantly higher in the treated silage group than in the wheat straw group.

No significant variations were detected in blood and haematological parameters across any of the groups, with all measurements remaining within normal physiological ranges.

The economic analysis revealed that wheat straw-based feeding was the most cost-effective, yielding a net return of ₹269 per day per animal, followed by treated silage at ₹255 and untreated silage at ₹213 per day per animal.

Field trials corroborated that feeding 7–8 kg of paddy stubble silage per day was safe for dairy animals. These results indicated that while wheat straw maintained its economic advantage, paddy stubble silage represents a viable and safe alternative, offering a potential solution to fodder scarcity and contributing to a reduction in environmental impact.

## BOOSTING FODDER PRODUCTION AND CONSERVATION

NDDB supported dairy cooperatives to improve the production, conservation, and utilisation of green and dry fodder, along with agro-industrial by-products. Green fodder remained a cost-effective and nutrient-rich resource essential for improving milk yield and reducing feeding costs.

The following measures were implemented:

- Arrangement of breeder seeds of high-yielding fodder crop varieties from ICAR/State Agricultural Universities.
- Support for quality seed production and distribution through cooperative networks
- Training programmes for farmers on improved agronomic practices to increase fodder yield and nutrient content.
- Promotion of scientific methods for preserving green fodder, such as silage and haylage, and for storing dry fodder.
- Encouragement of region-specific use and preservation of agro-industrial residues and organic by-products (e.g., fruit and vegetable waste).

These measures contributed to increased fodder availability for milch animals and fostered sustainable feeding practices across member dairy unions.





Exchange of MoU between NDDB and SAC-ISRO during Diamond Jubilee Celebration event at NDDB, Anand

## MAPPING OF FODDER RESOURCES THROUGH REMOTE SENSING

NDDB entered into a Memorandum of Understanding (MoU) with the Space Applications Centre, Indian Space Research Organisation (SAC-ISRO), to map fodder resources using satellite-based remote sensing technology. This initiative was designed to overcome the absence of reliable national data on fodder crop area and production, which had been a persistent limitation in the planning and distribution of fodder.

The MoU's objective was to produce real-time, geospatially referenced data to enhance the forecasting and monitoring of green fodder resources. It also enabled the identification of fodder-surplus and fodder-deficit regions, thereby facilitating more equitable distribution and improving supply chain efficiency.

NDDB launched a pilot study in the states of Bihar and Rajasthan as part of the first phase. Ground-truthing exercises were performed to validate the remote sensing data and to establish standardised protocols for a national-level rollout. This initiative reinforced NDDB's efforts in

sustainable fodder management, thereby contributing to national dairy development objectives through data-driven, climate-resilient interventions.

## DEVELOPMENT OF SEED MULTIPLICATION CHAIN

NDDB extended its support to 18 dairy cooperatives, bolstering their fodder seed multiplication supply chain, of which 6 initiated during the Kharif season and 12 in the Rabi season. A total of 17.82 metric tonnes of breeder seeds were successfully procured from various ICAR institutes and state agricultural universities. The selection of these seeds was focused on improved fodder varieties suitable for both green fodder and silage production.

Dairy cooperatives and specialised seed-producing agencies subsequently engaged in the multiplication of these breeder seeds, transforming them into foundation and certified seeds, which significantly increased the overall availability of high-yielding fodder varieties. This strategic intervention directly contributed to enhanced fodder productivity, as measured in metric tonnes per hectare, and improved the accessibility of quality green fodder for farmers.



## AWARENESS ON FORAGE PRODUCTION TECHNOLOGIES

NDDB implemented several initiatives to raise awareness of forage production technologies among milk producers. Improved fodder varieties such as Oat (JO 05-304, PLP-24, SFO-7, SFO-8), Berseem (BL-45, BL-46), and Him Palam Rye Grass-1 were demonstrated at the Fodder Demonstration Unit, Anand.

Training was provided to farmers on cultivating high-yielding hybrids of maize and sorghum for silage, and berseem, lucerne, and oats for green fodder. To support year-round availability, over 78,000 Hybrid Napier stem cuttings were distributed to dairy farmers.

NDDB also provided technical support to Mujkuva Dairy Cooperative Society and Kotyark Gaushala in Gujarat to establish and manage green fodder farms throughout the year.

## WORKSHOP ON ENHANCING FEED PRODUCTION AND PROMOTING UNCONVENTIONAL RESOURCES

NDDB organised a two-day workshop on "Enhancing Feed Production Efficiency, Ensuring Feed Quality, and Promoting the Use of Unconventional Feed Resources" in February 2025. The workshop was inaugurated by Chairman, NDDB and around 100 participants, including technical experts, managers, and quality control staff from milk unions and federations attended the event.

Sessions covered process optimisation, BIS standards, and the inclusion of non-conventional ingredients to reduce costs and enhance sustainability. They also discussed on key challenges in animal productivity, feed shortages and growing diversion of grains for Bio fuel production. Participants visited the Sabarkantha Milk Union's cattle feed plant and the Amul TMR plant to observe best practices.



*Dr Meenesh Shah, Chairman, NDDB during his address at "Workshop on Enhancing Feed Production and Promoting Unconventional Resources"*



## SUCCESS STORY - ENHANCING FODDER AVAILABILITY THROUGH QUALITY SEED PRODUCTION IN BANASKANTHA, GUJARAT

*In the driest of lands, a seed—and belief turned dust into prosperity.*

In the dry, sun-scorched plains of Banaskantha—where farming often meant battling the elements more than tilling the soil—a quiet revolution took root. It wasn't driven by high-tech tools or heavy machinery, but by something far simpler: seeds.

Confronting climatic challenges that endangered the dairy-based livelihoods of thousands, Banaskantha Milk Union, under the National Livestock Mission (NLM), pioneered a self-reliant model centered on cultivating high-quality, locally sourced fodder seeds. What began in 2020–21 with a modest production of 324 quintals of certified seeds rapidly evolved into a robust initiative. By 2023–24, seed production had surpassed 18,000 quintals, with a forward-

looking target of 22,000 quintals established for the 2024–25 period.

The programme's impact, however, extended well beyond mere seed volume. Approximately 43,921 hectares were converted into productive fields, generating nearly 20 lakh metric tonnes of nutrient-rich fodder on an annual basis. In addition to saving ₹15.66 crore in seed procurement costs, more than 41,000 farmers experienced a significant economic transformation, achieving returns ranging from ₹32,000 per acre for maize to ₹66,000 per acre for Lucerne, figures that represent a substantial improvement over traditional crop yields.



## ANIMAL HEALTH

NDDB strengthened animal health strategies to align with national goals of improving farmer incomes through science-based and cost-effective interventions. The focus remained on enhancing productivity, reducing disease burden, and promoting sustainable livestock practices.

One Health-based approaches were adopted to reduce antimicrobial usage (AMU) and address risks linked to

Notable achievements included:

### EVM PRACTICES:

NDDB promoted EVM across dairy cooperatives. This helped reduce dependence on allopathic drugs, resulting in a reduction in antibiotic residues in milk and better animal care.

### CAPACITY BUILDING:

NDDB conducted training for veterinary professionals and farmers on rational drug use and AMR control, One Health, Hoof Management, and Scientific Dairy Husbandry practices.

AMR. These efforts led to better biosecurity and health outcomes for both animals and humans.

NDDB's technical support enabled the implementation of farmer-centric animal health services, contributing to enhanced livestock productivity, improved milk quality, and long-term sectoral resilience.

### DISEASE SURVEILLANCE:

Disease surveillance and diagnostic services were strengthened in partnership with state animal husbandry departments and international organisations like WOA and APHA, UK, supporting early detection and response.

### DISEASE PREVENTION PROTOCOLS:

NDDB supported field validation of low-cost disease prevention and management methods and herd health monitoring.



*Bovine disease screening*

## BOVINE DISEASE SCREENING AND MONITORING

NDDB screened 12,575 bovine samples received from 10 states for six diseases. Out of these, 10,273 samples (81.7 per cent) were received from high-genetic merit bull calves under the Rashtriya Gokul Mission (RGM). An amount of ₹34.38 Lakh was incurred as testing costs for the samples received from RGM projects. A positivity of 1.49 per cent, 14.28 per cent and 0.25 per cent was obtained for brucellosis, Infectious Bovine Rhinotracheitis (IBR) and Bovine Viral Diarrhoea (BVD) from 5,036; 4,504 and 2,568 sera samples tested respectively for these diseases. None of the genital wash samples were positive for Bovine Genital Campylobacteriosis (BGC) and Trichomonosis and, no sera samples were positive for Enzootic Bovine Leukosis (EBL).

## DISEASE CONTROL THROUGH ALTERNATE METHODS (DCAM) PROJECT: COMBATING AMR THROUGH ETHNOVETERINARY MEDICINE

NDDB implemented the Disease Control through Alternate Methods (DCAM) project to address the challenge of antimicrobial resistance (AMR) by championing the use of Ethnoveterinary Medicine (EVM). This project was

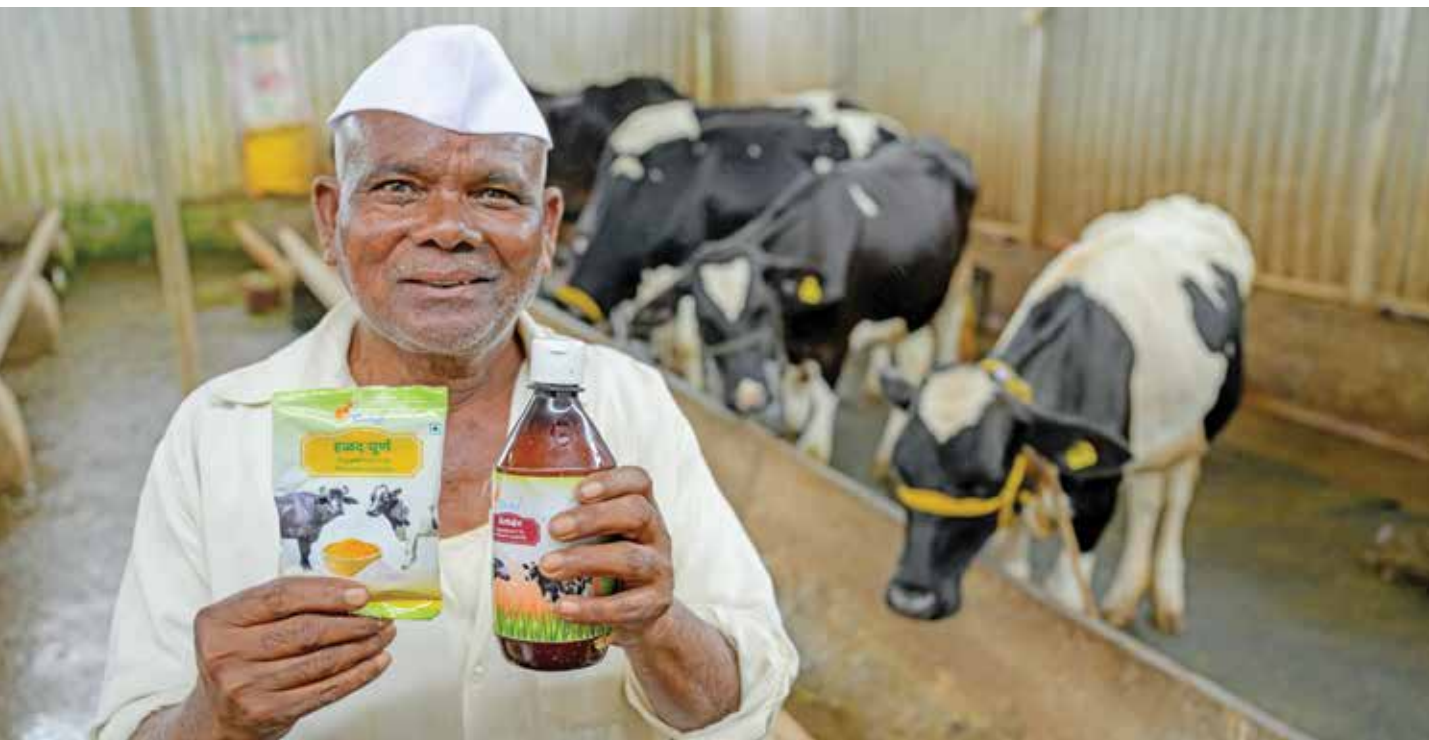
strategically implemented across 16 Milk Unions spanning eight states: Kerala, Karnataka, Maharashtra, Gujarat, Punjab, Assam, Andhra Pradesh, and Uttar Pradesh.

The DCAM project, in alignment with the broader One Health framework, concentrated on optimising antibiotic usage by seamlessly integrating traditional EVM practices into standard livestock healthcare protocols. These focused interventions were designed to curb the inappropriate use of antibiotics and promote sustainable, alternative methods for disease control in dairy farming.

As of March 2025, NDDB had documented over 11 lakh EVM interventions, which collectively achieved a success rate exceeding 80 per cent, thereby underscoring the efficacy of EVM in enhancing animal health while simultaneously diminishing the dependency on conventional antibiotics.

## ONE HEALTH INITIATIVE

NDDB collected mastitis milk samples, swabs from mastitis-affected cows, handlers, and the environment to carry out AMR profiling of the pathogens. A total of 491 samples were collected from farmers' premises covering 14 milk unions and producer organisations under the DCAM project. Pathogens of One Health relevance, namely *E. coli*, *S. aureus*, *Klebsiella* spp and *S. agalactiae* were isolated from the samples. Multi Locus Sequence Typing (MLST) of the isolates is underway to track their transmission dynamics and likely origin (human or animal).



Readily available EVM formulations





*One Health-aligned model to address zoonotic diseases*

## BRUCELLOSIS CONTROL – FOCUSING ON ONE HEALTH APPROACH

The National Animal Disease Control Programme (NADCP) now oversees brucellosis vaccination for female bovine calves. NDDDB's One Health-aligned model addresses this zoonotic disease, which remains underdiagnosed in humans, impairing working capacity and burdening public health. Collaborating with a medical institute, NDDDB has tested over 6,000 farmers and animal health workers. Of these, 140 symptomatic individuals received treatment and recovered. To prevent the threat of transmission, vaccination was complemented by stakeholder awareness creation, proper disposal, disinfection, and animal isolation protocols in suspected cases. These integrated efforts contributed to strengthening both animal and human health outcomes in alignment with the One Health framework.

## MASTITIS AND AMR SURVEILLANCE

A total of 126 milk samples from mastitis-affected cows in the project areas of the Disease Control through Alternate Approaches (DCAM) were subjected to culture and isolation and antibiotic sensitivity testing using automated systems. *Staphylococcus* spp. (27 per cent) and *Streptococcus* spp. (13 per cent) were predominant,

followed by *Enterococcus* spp. (5 per cent), and *E. coli* (1.4 per cent). All isolates showed susceptibility to beta-lactam antibiotics, reflecting effective AMR mitigation through use of ethnoveterinary medicine (EVM) in the project areas.

## QUALITY ASSURANCE AND BIOSAFETY

NDDDB's R&D Laboratory retained its ISO 9001:2015 certification and ISO/IEC 17025:2017 accreditation. The laboratory achieved 100 per cent concordance in international Proficiency Testing programmes for IBR, Brucellosis, BVD, and EBL. Biosafety protocols were updated, and bi-annual risk assessments were carried out. An Institutional Biosafety Committee (IBSC) was formed and registered with the Department of Biotechnology, ensuring compliance with national biosafety standards.

## INDIGENOUS ASSAY DEVELOPMENT

NDDDB's R&D Laboratory developed a PCR-RFLP assay to differentiate between Bovine Herpesvirus-1 (BoHV-1), Bovine Herpesvirus-5 (BoHV-5), and Bubaline Herpesvirus-1 (BuHV-1), addressing cross-reactivity issues in existing serological methods. A real-time RT-PCR assay for Bovine Viral Diarrhoea Virus (BVDV) was also developed and validated in-house, offering a cost-effective alternative to imported kits. These assays strengthened the scalability and sustainability of national BVDV surveillance efforts.



*Dr Meenesh Shah, Chairman, NDDB addressing the "Conference on 'FMD Free Zone in Gujarat'"*

## CONFERENCE ON 'FMD FREE ZONE IN GUJARAT:

DAHD, Government of India, in collaboration with NDDB, organised the "Conference on FMD Free Zone in Gujarat: From Concept to Reality" at NDDB, Anand. The conference was chaired by Ms Alka Upadhyaya, Secretary, DAHD, Government of India, and attended by key stakeholders, including Dr Abhijit Mitra, Animal Husbandry Commissioner, DAHD, Government of India; Dr Meenesh Shah, Chairman, NDDB, Ms Sarita Chauhan, Joint Secretary (Livestock Health), DAHD, Government of India; Shri Jayen Mehta, Managing Director, GCMMF; Ms Falguni Thakar, Director (Animal Husbandry), Government of Gujarat; Dr Bhushan Tyagi, Joint Commissioner, DAHD, Government of India; Dr K Anand Kumar, Managing Director, Indian Immunologicals Ltd; Dr CP Devanand, Managing Director, NDDB Dairy Services and senior officials from the State Animal Husbandry Department of Gujarat, GCMMF, NDDB, regional Milk Unions, and Maahi Milk Producer Organisation. The

conference delved into the importance of collaborative efforts among stakeholders to develop a concrete plan to establish an FMD-free zone in Gujarat. Discussions were held highlighting the significant challenges posed by Foot-and-Mouth Disease (FMD) in both domestic dairy production and the export of milk and livestock products. Drawing from NDDB's successful pilot initiative in Kerala, proper control strategies that can help eradicate FMD and create FMD-free zones in Gujarat were discussed.

## PASHUMITRA CALL CENTRE

NDDB operates the Pashumitra Call Centre, which supports farmers across 25 states and union territories. The centre provided timely guidance on animal health and livestock management. This initiative reaffirmed NDDB's focus on farmer-centric support.



## SUCCESS STORY - REDUCTION IN ANTIMICROBIAL USAGE THROUGH INTEGRATION OF EVM

Antimicrobial agents are essential for maintaining animal health and welfare, mirroring their importance in human medicine. However, the unchecked and poorly regulated use of antibiotics in livestock poses a significant risk to food safety and is a major driver of the global antimicrobial resistance (AMR) crisis. Acknowledging the critical nature of this problem, NDDB has taken a leading role in advocating for Ethnoveterinary Medicine (EVM) as a sustainable and conscientious method for treating approximately 30 prevalent bovine diseases.

In collaboration with Milk Unions (MUs), Producer Organisations (POs) and various research institutions, NDDB's initiatives have produced significant outcomes. A prominent example is the Bengaluru Milk Union in Karnataka, which recorded a reduction of up to 70 per cent in the doses of various antibiotic classes and combinations purchased between 2017–18 and 2022–23. Likewise, the Kolhapur Milk Union in

Maharashtra documented a decrease of up to 68 per cent in antibiotic usage during that same timeframe. These accomplishments were made possible by the widespread adoption of Ethnoveterinary Medicine (EVM) practices at the grassroots level, strengthened by strategic capacity-building programs, public awareness campaigns, and the integration of EVM into routine animal healthcare services.

This success story shows that Ethnoveterinary Medicine (EVM) not only provides farmers with economical and locally accessible remedies but also plays a key part in lowering the use of antimicrobials. In doing so, it contributes to both food safety and worldwide efforts to combat antimicrobial resistance (AMR).



# TECHNOLOGICAL ADVANCEMENT THROUGH RESEARCH & DEVELOPMENT

NDDDB was committed to driving innovation through targeted Research & Development during the year. It promoted technological advancement and built collaborative partnerships aimed at enhancing productivity, genetic potential, and sustainability in the dairy and animal husbandry sectors. These efforts supported the evolution of practices and products, aligning with global standards and 'Make in India' and 'Aatmanirbhar Bharat' visions.



Shri Mohan Charan Majhi ji, Hon'ble Chief Minister of Odisha; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj and Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs during the launch of indigenous IVF media suite 'Shashthi' at Monsoon Meet 2024 in Odisha.



## DEVELOPMENT OF INDIGENOUS IVF MEDIA SUITE

In a significant advancement for its operational capabilities, NDDB, in collaboration with its wholly owned subsidiary, IIL, successfully developed an indigenous culture media suite for use in OPU-IVF-ET protocols. This suite comprises five distinct media formulations, each tailored for a specific stage of in vitro embryo production and embryo transfer.

This strategic initiative was undertaken with the primary objective of mitigating dependence on expensive imported media, thereby enhancing the affordability and accessibility of IVF technologies for Indian dairy farmers. The suite, which has been branded as 'Shashthi', was officially launched by Shri Mohan Charan Majhi ji, Hon'ble Chief Minister of Odisha, and Shri Rajiv Ranjan

Singh alias Lalan Singh ji, Hon'ble Union Minister for Fisheries, Animal Husbandry & Dairying and Panchayati Raj. The launch ceremony, held during the Monsoon Meet 2024 in Bhubaneswar, Odisha, was also graced by Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs, and other esteemed dignitaries.

The introduction of 'Shashthi' contributed to cost reduction in embryo production and expanded access to advanced reproductive technologies. This development supported NDDB's ongoing efforts to improve breed quality through genetic upgradation.

## READY-TO-USE CULTURE (RUC) TECHNOLOGY AND RESEARCH

NDDB developed Ready-to-Use Culture (RUC) technology and successfully transferred it to M/s IDMC Ltd for commercial manufacturing at a newly established RUC plant. Dr Meenesh Shah, Chairman, NDDB & IDMC Ltd, laid the foundation stone for this facility. The plant is equipped with predominantly domestically sourced machinery and possesses the capacity to support producing approximately one million litres fermented milk per day.

NDDB provided comprehensive technical support for equipment selection, installation, protocol design, training, and troubleshooting. This support was instrumental in ensuring the successful transfer and upscaling of the technology to a commercial scale. This initiative, which leverages India's abundant microbial diversity, is aligned with the 'Make in India' vision, aiming to reduce reliance on imports and stimulate domestic production.

R&D efforts focused on formulating cultures for fermented dairy products. Six new formulations were developed using lactic acid bacteria strains. Each showed distinct acidification and sugar tolerance traits, and trials were successfully conducted in multiple dairies.

NDDB also expanded its culture depository by adding seven new mesophilic starter strains. These were sourced from diverse origins and increased the genetic and functional base for future research and commercial use. These activities aligned with NDDB's strategy of strengthening innovation, improving dairy processing, and supporting cooperative growth.



Foundation stone laying ceremony of the RUC plant at IDMC Ltd, Anand



*Dr Meenesh Shah, Chairman, NDDB and Mr Kenichiro Toyofuku, Director, SRDI flagging off the Mobile Milk Collection & Cooling System at IDMC Ltd in Anand*

## MOBILE MILK COLLECTION, TESTING AND COOLING SYSTEM

NDDB, in collaboration with Suzuki R&D Centre India Pvt. Ltd. (SRDI) and IDMC, launched a Mobile Milk Collection, Testing and Cooling System at Anand. Dr Meenesh Shah, Chairman, NDDB and Mr Kenichiro Toyofuku, Director, SRDI flagged off the Mobile Milk Collection and Cooling System. The system integrates automated milk collection,

testing and cooling technologies to maintain milk quality during milk collection, enhancing procurement efficiency from dairy farmers of remote areas. Its operational trial with Ladakh Milk Federation aims to assess performance under field conditions.

## PATENT REGISTRATION FOR INNOVATIONS IN MANURE MANAGEMENT AND ORGANIC FERTILISER PRODUCTION

NDDB registered three patents related to manure management and organic fertiliser production during the year. These innovations were developed to strengthen value chains and standardise quality in by-product utilisation. The patents include:

- A testing system for assessing dung quality
- A method for evaluating bio-slurry quality
- A process for producing granular organic fertiliser from digested cattle dung

The patented process offers a scalable and standardised framework for dung and slurry procurement operations. They enable quality-linked payment systems for farmers by providing objective input assessment methods. The granular fertiliser production method supports the conversion of waste into high-value organic inputs, aligned with climate-resilient and sustainable farming. These patents reflect NDDB's commitment to scientific waste management and income diversification for dairy farmers.



## INTEGRATION OF 'HUB & SPOKE' MODEL WITH PROGENY TESTING PROGRAMME

NDDB has initiated a pilot project to integrate the 'Hub & Spoke' model with the Progeny Testing Programme for the production of High Genetic Merit (HGM) bulls, utilising OPU-IVF-ET technology. This initiative was undertaken as part of the SAG HFCB Progeny Testing Project (PT-ET), under the broader framework of the Rashtriya Gokul Mission.

Traditionally, Progeny Testing (PT) programs have required the nominated mating of a large number of elite females to meet the demand for bull calves for semen production. This pilot project was designed to leverage OPU-IVF-ET technology to produce the required quantity of bulls from a more limited number of elite donors. This approach significantly increased selection intensity and, as a result, enhanced the rate of genetic gain.

In this model, NDDB served as the central 'hub', responsible for embryo production, while Milk Unions such as Sabar, Surat, and Godhra operated as 'spokes'. These milk unions were responsible for providing recipient animals and facilitating field-level embryo transfers.

Embryos produced at NDDB from elite donors were transferred to recipient animals at the participating milk unions. During the reporting period, a total of 400 embryos were produced and transferred, resulting in 124 pregnancies. This pilot project successfully demonstrated the operational effectiveness of the 'Hub & Spoke' model in a field environment and underscored its potential to accelerate genetic improvement through the application of advanced reproductive technologies.

## BuHV-1 SEROPREVALENCE STUDY

NDDB initiated a targeted research study to assess the seroprevalence of Bubaline Herpesvirus Type-1 (BuHV-1) in India. The study specifically focused on buffalo populations, which are considered the virus's natural hosts. Its primary objective was to address diagnostic challenges resulting from cross-reactivity between BuHV-1 and Bovine Herpesvirus Type-1 (BoHV-1), the latter being the causative agent of IBR.

To mitigate the issue of false-positive results in the selection of buffalo bull calves, NDDB conducted a retrospective analysis of 677 samples that had tested positive for BoHV-1. A differential ELISA test was employed to distinguish between the two viral infections. The study determined a BuHV-1 seroprevalence of 29.6% in buffaloes and 6.6% in cattle.

These findings underscore the necessity of improved diagnostic protocols to accurately differentiate BuHV-1 from BoHV-1 within IBR surveillance and control programs. The study further demonstrates NDDB's commitment to evidence-based decision-making and the protection of genetic resources as part of its national breeding strategy.

## INTEGRATED AND INNOVATIVE SAMPLING

NDDB conducted an integrated surveillance programme under the One Health framework to assess the antimicrobial resistance (AMR) and zoonotic risks linked to mastitis pathogens. A total of 220 samples were collected for analysis from various designated project sites, including livestock, farm workers, and environmental sources such as water and sewage.

A digital reporting system was introduced to support real-time tracking. This enabled dynamic monitoring of potential transmission routes and supported timely, evidence-based decision-making.

A cold-chain-free sampling method was also developed using Whatman® filter paper for FMD antibody detection, the results of which were comparable to serum. This field-friendly sample collection method could enable effective and reliable seromonitoring and serosurveillance under the NADCP.

## MULTIPLEX DIAGNOSTICS

NDDB's R&D Laboratory developed a multiplex PCR assay for simultaneous detection of *Theileria annulata*, *Babesia* spp., and *Anaplasma marginale* in bovine blood samples. The assay was tested using 264 field samples and showed diagnostic concordance with standard PCR protocols.

This molecular tool offered an efficient and cost-effective approach for screening major haemoprotozoan infections, supporting timely disease control interventions.

## PRECISION FEEDING OF DAIRY ANIMALS

NDDB undertook a field trial in Anand to evaluate the impact of precision feeding on the productivity of lactating dairy animals. This initiative was designed to move beyond basic ration balancing by integrating advanced nutrient parameters to more effectively address the genetic potential and physiological requirements of dairy cattle.

The study involved 16 lactating cows, and their existing feeding regimens were initially analysed for their nutrient profiles. Based on this assessment, their rations were optimised to balance not only fundamental nutrients—such

as crude protein, total digestible nutrients (TDN), calcium, and phosphorus—but also advanced nutrient parameters such as starch, metabolizable energy, metabolizable protein, lysine, methionine, neutral detergent fiber (NDF), micro-minerals, vitamins A, D<sub>3</sub>, and E, and buffering agents.

The trial resulted in a significant improvement in animal performance. Cows in the precision feeding group recorded an average increase of 1.2 kg/day/animal in milk yield. While nutrient intake and digestibility remained similar between control and treatment groups, animals receiving precision rations exhibited better feed conversion efficiency and enhanced nitrogen utilisation.

Although the feeding cost for the treatment group was marginally higher, the gains in milk yield and composition resulted in a net profit of ₹32 per animal per day, thereby demonstrating the economic viability of the precision feeding methodology.

These findings provided valuable insights for the enhancement of NDDB's Ration Balancing software and supported the development of area-specific feeds, which are tailored to meet regional nutritional needs.

## NEW MILK PRODUCTS AND PROCESS DEVELOPMENT

NDDB supported cooperative dairies through applied research in product development and process improvement. These efforts aimed to meet market trends, consumer expectations, and nutritional requirements.

In response to growing demand for natural sweeteners, NDDB developed ice cream and sweet Dahi by partially substituting the sugar in these products with honey. This partial substitution not only enhanced the flavour and nutritional value but also resonated well with the calorie-conscious consumer base. Industrial trials of these products were conducted at West Assam Milk Producers' Cooperative Union Ltd. (WAMUL—Purabi Dairy), and the final recipes were shared for commercial use.

NDDB also focussed on improving texture and consistency in functional beverages. A stable formulation of a ragi-based milk drink was developed. This addressed earlier issues of sedimentation and uneven texture.







*Dr Meenesh Shah, Chairman, NDDB flagging off the Ro-Ro ferry service for Maahi MPO milk tankers on the Ghogha-Hazira marine route*

## TECHNICAL SUPPORT FOR PRODUCT OPTIMISATION AND INNOVATION IN COOPERATIVE DAIRIES

During the reporting year, NDDB provided technical support to cooperative dairies to enhance their product portfolios and introduce new products. Support was extended to the Kerala Co-operative Milk Marketing Federation (Milma) to optimise the formulation of tender coconut ice cream, with a focus on improving product stability and sensory quality. NDDB assisted WAMUL (Purabi Dairy) in developing a new flavored milk variant, concentrating on extending its shelf life and enhancing flavor retention. Jaipur Dairy received support for the development of a millet-based nutritional meal, aimed at improving its nutritional value and catering to regional dietary requirements. All these interventions were designed to ensure functional efficiency, compliance with food safety regulations, and strong consumer acceptability. These

initiatives are consistent with NDDB's strategic objective of promoting innovation and quality enhancement within cooperative dairy enterprises.

## INDIA'S FIRST RO-RO MILK TRANSPORT FERRY SERVICE

NDDB, along with Maahi Milk Producer Company Limited, innovated the transport of milk through maritime transportation to reduce travel time and cut transport costs, marking a historic milestone for India's dairy industry. This initiative aligned with the Hon'ble Prime Minister's vision of expanding inland waterways for economic growth. Chairman, NDDB, flagged off Ro-Ro ferry service to transport Maahi MPO's milk tankers via the Ghogha-Hazira marine route.

# SUSTAINABILITY AND CIRCULARITY

NDDB strengthened India's dairy and allied sectors through focused initiatives in sustainability, technology, and farmer engagement. Key interventions included decentralised and centralised manure management, carbon credit payments, adoption of renewable energy and methane mitigation using feed additives.

The Board promoted circular practices, biodiversity protection, and capacity building through structured partnerships and demonstration units. These efforts aligned with national goals on climate resilience and rural development and reaffirmed NDDB's commitment to cooperative-led sustainable growth.



MoU signed between NDDB and NABARD in the presence of Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation along with Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj and Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs



## WORKSHOP ON SUSTAINABILITY AND CIRCULARITY IN THE DAIRY SECTOR

Department of Animal Husbandry and Dairying (DAHD), Government of India, organised a workshop on sustainability and circularity in the dairy sector at Bharat Mandapam, New Delhi. The event was designed to promote the integration of circular economy principles throughout dairy operations. It was inaugurated by Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation, in the presence of Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj and Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs along with other distinguished dignitaries.

The workshop fostered discussions on improving resource efficiency, minimising environmental impact, and supporting positive economic outcomes for dairy

producers. Key topics included operational circularity, opportunities for carbon credits for smallholder dairy farmers, and the role of carbon markets in fostering sustainable dairying practices.

NDDB signed MoUs with 25 dairy cooperatives across 15 states for the adoption of decentralised and centralised manure management models. A separate MoU was signed with NABARD to facilitate financial support for sustainable dairy infrastructure. The workshop also marked the release of the "Guidelines on Circularity in the Dairy Sector", the introduction of NDDB's biogas financing scheme, and launch second phase of NDDB-SPEF partnership for financing sustainable dairying interventions.

This workshop reflected DAHD's continued focus on sustainable transformation and contributed to national objectives of climate resilience, cooperative development, and rural prosperity.

## SUZUKI MOTOR CORPORATION SIGNS AGREEMENT WITH NDDB TO EXPAND BIOGAS PLANTS THROUGHOUT INDIA

The Suzuki R&D Center India Pvt Ltd (SRDI), a wholly-owned subsidiary of Suzuki Motor Corporation, agreed with NDDB to expand biogas plants across India. As per the agreement, SRDI will invest in NDDB's wholly-owned subsidiary, NDDB Mrida Ltd. As a joint venture company of

NDDB and SRDI, NDDB Mrida is expected to advance the vision of both organisations by providing clean energy in various forms and organic fertilisers that minimise the use of chemical fertilisers through dung-based biogas models.



Signing of agreement between NDDB, NDDB Mrida Ltd and SRDI in the presence of Mr Toshihiro Suzuki, President, Suzuki Motor Corporation and senior officials of NDDB and NDDB Mrida Ltd

## MANURE MANAGEMENT INITIATIVES

NDDB implemented both decentralised and centralised models to enhance manure utilisation and resource efficiency in the dairy sector. The decentralised model empowered smallholder farmers to convert cattle dung into biogas for cooking, which reduced labor, lowered exposure to indoor smoke, mitigated environmental impact, and created a new income stream from the sale of biogas slurry as organic fertiliser.

In the centralised model, two large-scale biogas plant frameworks were developed. The Banas Model used dung in high-capacity plants to produce Compressed Biogas (CBG) and organic fertilisers. The Varanasi Model, on the other hand, generated steam and electricity for a dairy plant while also producing organic fertiliser.

These systems support renewable energy generation, reduce fossil fuel consumption, and promote circularity within the dairy value chain. To further the objective of sustainable rural development, Chairman, NDDB met with Shri C.R. Patil ji, Hon'ble Union Minister of Jal Shakti, and Shri Shankarbhai Chaudhary, Hon'ble Speaker of the Gujarat Legislative Assembly, to discuss the establishment

of dung-based CBG plants. During the discussion, actionable strategies to boost green energy production were outlined, aligning with the vision of sustainable rural development. The Chairman also highlighted NDDB's initiatives in generating carbon credits from manure management and proposed a collaboration with the government to explore opportunities under relevant support schemes.

## DEMONSTRATION UNIT FOR SUSTAINABLE FARM MANAGEMENT PRACTICES

NDDB took a proactive step towards promoting sustainable farm management practices among dairy farmers and other stakeholders. To showcase an innovative, integrated approach to sustainable dairying, a Demonstration Unit for Sustainable Farm Management Practices was established at NDDB, Anand.

Cow dung from NDDB's OPU-IVEP-ET facility was utilised in a 40-cubic-meter flexi biogas plant, developed jointly by NDDB Mrida Ltd. and Sistema.bio. The biogas generated from this unit was converted into renewable electricity, which powered the cow sheds, thereby reducing dependence on conventional energy sources.



*Dr Meenesh Shah, Chairman, NDDB during a meeting with Shri C R Patil ji, Hon'ble Union Minister of Jal Shakti and Shri Shankarbhai Chaudhary ji, Speaker, Gujarat Legislative Assembly*





Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation along with Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj handing over the first-ever payment of carbon credits to woman farmer member of WAMUL

A circular utilisation model was implemented to ensure the efficient management of digested slurry. The solid fraction was processed into organic fertiliser and used for cultivating green fodder and hay at NDDB's Fodder Demonstration Unit and Fodder Research Station in Itola. The liquid fraction was recycled to prepare slurry from fresh dung, thereby enhancing overall resource-use efficiency.

These interventions resulted in a 41.4% reduction in Greenhouse Gas (GHG) emissions through improved manure management and a 17.5% reduction through renewable energy generation. To support nutritionally balanced feeding, fodder and concentrates were blended into a Total Mixed Ration (TMR) using a 5-cubic-meter TMR mixer developed by IDMC Ltd., which ensured efficient and scientific animal nutrition.

The integrated model encompassed scientific fodder cultivation, balanced feeding, manure management, renewable energy production, and GHG mitigation. This initiative functions as a demonstration and learning hub, providing valuable insights to officials from milk unions, dairy federations, farmers, and other stakeholders. This project reinforces NDDB's commitment, alongside its subsidiaries and partners, to advancing sustainable and circular practices within India's dairy sector.

## FIRST-EVER CARBON CREDIT REWARDS FOR DAIRY FARMERS

As part of NDDB's Diamond Jubilee Celebration in Anand, the first-ever carbon credit payments were presented to dairy farmers from Rajasthan and Assam by Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation. A woman dairy farmer from Rajasthan received ₹63,000 and another from Assam received ₹52,000, symbolising how traditional practices are being transformed into sustainable livelihoods.

Speaking on the occasion, Hon'ble Union Minister of Home Affairs and Cooperation highlighted that this milestone reflects the vision laid out by Shri Narendra Modi ji, Hon'ble Prime Minister of India, of creating "wealth from waste" through the GOBARdhan Yojana. In a significant step towards fruition of this vision, the cow dung once used as cooking fuel with health hazards, is now generating clean energy, organic manure, and carbon credit income.

NDDB's biogas-based Manure Management Programme is being implemented in partnership with the Sustain Plus Energy Foundation (SPEF)- an affiliate of Tata Trusts. More than 1,000 dairy farmers across nine locations in seven states are already participating in this initiative which is making biogas plants financially viable through the monetisation of carbon credits. The programme lays the foundation for wider adoption and expansion across the country.



TMR mixer developed by IDMC Ltd

This initiative stands as a powerful example of how the Hon'ble Prime Minister's vision, supported by NDDB's innovation and cooperative spirit, is enhancing farmers prosperity while contributing to environmental sustainability.

## FEED ADDITIVES FOR ENTERIC METHANE MITIGATION

NDDB recognised that methane, a potent greenhouse gas, was a major contributor to farmgate GHG emissions, primarily produced during enteric fermentation in ruminants. This process represented a gross energy loss of 8–12 per cent of the feed and contributed to nearly two-thirds of total farm-level emissions. Key factors influencing these emissions included feed intake, digestibility, and the nutritional balance of the animal's ration.

To address this, NDDB promoted scientific feeding practices, such as the use of balanced rations and TMR, which reduced methane emissions by 10–15 per cent by improving nutrient utilisation in the rumen and enhancing overall milk production efficiency.

In addition, NDDB initiated the development of innovative feed additives (methane inhibitors) designed to suppress methane production by altering rumen fermentation processes. In-vitro trials conducted by NDDB demonstrated a 16–18 per cent reduction in methane emissions without compromising digestibility.

Following successful in-vivo validation, these additives were proposed for incorporation into compound cattle feed by cattle feed plants or for direct supplementation by dairy farmers.

This intervention reflected NDDB's continued commitment to promoting sustainable and climate-smart dairy farming across India by addressing both productivity enhancement and environmental sustainability.

## CAPACITY BUILDING AND SUSTAINABILITY INTERVENTIONS IN ASSAM

NDDB facilitated two key interventions in Assam to enhance dairy processing infrastructure and promote sustainable organic farming. NDDB provided technical and operational support to WAMUL to double Purabi Dairy's processing capacity. This facility upgrade also included new value-added product lines, which diversified its offerings and improved market reach. This initiative was designed to meet growing consumer demand while simultaneously increasing procurement and income for local dairy farmers.

Additionally, NCOL signed a Memorandum of Understanding (MoU) with North East Dairy and Foods Ltd. (NEDFL) to establish an organic processing unit and a demonstration farm. The initiative plans to train over 1,000 farmers in organic practices that focus on improving soil health, reducing chemical inputs, and supporting certification. The goal is to build a stronger local organic value chain and create rural employment.

These interventions align with NDDB's objective of strengthening cooperatives and promoting rural economic development in the North-Eastern region of India. They have contributed to improved processing capacity and the wider adoption of sustainable farming practices.



## CARBON FOOTPRINT ASSESSMENT OF MUJKUVA VILLAGE

NDDB conducted a comprehensive carbon footprint assessment for Mujkuva Village. The study included a detailed survey of 1,008 households and local institutions to establish a baseline of greenhouse gas (GHG) emissions across various sectors. The assessment covered emissions from transport, cooking energy, agriculture, electricity consumption, livestock, and waste management. The collected data identified key emission sources and will be used to formulate targeted mitigation strategies.

The findings from this assessment will support the planning of carbon neutrality interventions within the village. The report will also serve as a replicable model for similar rural carbon neutrality projects. This initiative underscores NDDB's commitment to promoting data-driven environmental planning within the rural and dairy ecosystems.

## SOLAR PHOTOVOLTAIC PROJECTS

Two solar power projects were commissioned during the year: a 300 KWp installation at Barauni, Bihar, and a 60 KWp system at the Foundation for Ecological Security (FES), Anand. Additionally, four projects are currently under execution: (i) 300 KWp at Bhukhala–Vadgam, Gujarat, (ii) 300 KWp at Agthala–Lakhani, Gujarat, (iii) 25 KWp at IRMA, Anand, and (iv) 50 KWp at NCDFI Office, Vaghasi, Anand.

## SUSTAINABILITY REPORT OF VIDYA DAIRY PROCESSING PLANT, ANAND

NDDB prepared a Sustainability Report on Vidya Dairy, Anand. The report documents initiatives to improve energy and water efficiency, reduce greenhouse gas emissions, manage waste, and support biodiversity. It also presented Vidya Dairy's approach to sustainability through practical training and capacity building. This development sets a benchmark for Environmental, social, and governance (ESG) practices and supported NDDB's efforts to promote responsible dairy operations.

## BIODIVERSITY MAPPING OF NDDB CAMPUS

NDDB implemented a biodiversity mapping project at its campus to document native flora and avifauna. The initiative focused on ecological awareness and conserving indigenous species. A detailed inventory was created, and weather-resistant display boards were installed with species information. These were linked to a digital Biodiversity Map accessed via QR codes through the NDDB website. The project positioned the campus as a living biodiversity repository, reinforcing NDDB's environmental education efforts.



*Dr Meenesh Shah, Chairman, NDDB; Dr Suneeta Pinto, Chairperson, Vidya Dairy, Dr Amit Vyas, Managing Director, Kaira District Cooperative Milk Union Ltd & Board member of Vidya Dairy during the launch of the inaugural sustainability report of Vidya Dairy*

# IMPLEMENTING GOVERNMENT SCHEMES FOR DAIRY DEVELOPMENT

Over the years, NDDB has been an implementing agency for various government schemes. These encompass genetic improvement of bovines, scientific fodder production, feeding management, dairy infrastructure development, quality & food safety management, digitalisation, and more. The goal is to enhance productivity and farmers' income.



Shri Bhupendra Patel ji, Hon'ble Chief Minister of Gujarat inaugurated indigenous sexed semen sorting machine, GAUSort developed by NDDB at Banas Dairy's Dama Semen Production Unit, Deesa in the presence of Shri Shankarbhai Chaudhary ji, Hon'ble Speaker, Gujarat Legislative Assembly & Chairman, Banas Dairy and Dr Meenesh Shah, Chairman, NDDB

## RASHTRIYA GOKUL MISSION (RGM)

NDDB continued the implementation and monitoring of multiple projects under the Central Sector Scheme, an initiative of the Department of Animal Husbandry and Dairying, Government of India. These activities, undertaken in collaboration with State Livestock Development Boards, Milk Federations, Milk Unions, non-governmental organisations, and NDDB subsidiaries, were aimed at accelerating genetic improvement and enhancing overall productivity within the bovine population.

## GAUSORT: INDIGENOUS SEX-SORTING TECHNOLOGY FOR GENETIC ADVANCEMENT

GauSort, an indigenous sex-sorting technology, to enhance the production of female calves and improve farm-level profitability was developed under NDDB's R&D initiative and executed by NDDB Dairy Services, a wholly owned subsidiary of NDDB.

The commercial development of this technology was funded under Rashtriya Gokul Mission of the Department



of Animal Husbandry and Dairying, Government of India. This innovation was launched by the Hon'ble Prime Minister of India on 5th October 2024 in Washim, Maharashtra.

GauSort enabled the production of sex-sorted semen with an accuracy of approximately 90 per cent for female calf births. Earlier, India relied on multinational suppliers, and sex-sorted semen was available at a cost of about ₹1,000 per dose. Indigenisation reduced the cost to approximately ₹250 per dose, making it more affordable and accessible for dairy farmers.

#### THE IMPLEMENTATION OF GAUSORT AIMED TO:

- Increase milk productivity through the birth of high genetic merit female progeny.
- Improve farmer incomes by expanding the population of milch animals
- Reduce unproductive male cattle over time.

#### NDDB OPERATIONALISED THE TECHNOLOGY AT THE FOLLOWING LOCATIONS:

- Alamadhi Semen Station, Chennai, Tamil Nadu
- Central Frozen Semen Production and Training Institute (CFSP&TI), Hessarghatta, Bengaluru
- Dama Semen Station, Banas Dairy

The deployment of GauSort marked a key step toward self-reliance in reproductive technologies and aligned with the national objective of genetic improvement and livestock productivity.

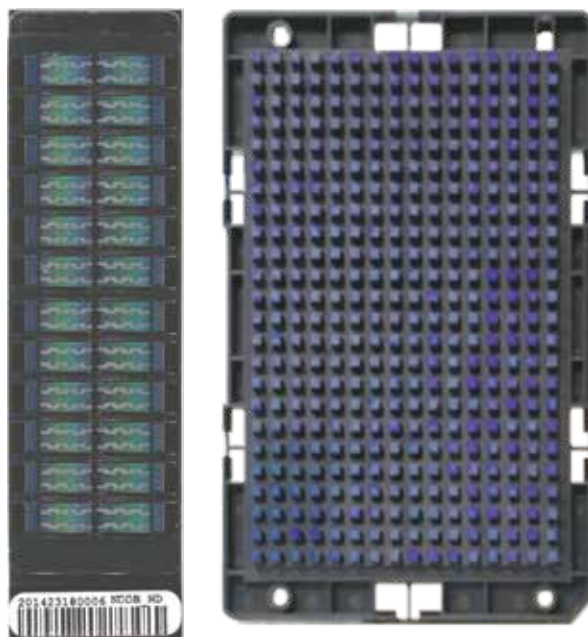
## UNIFIED GENOTYPING CHIPS FOR CONVERGING EFFORTS IN GENOMIC SELECTION

NDDB, ICAR-National Bureau of Animal Genetic Resources (ICAR-NBAGR), National Institute of Animal Biotechnology (NIAB), and BAIF Development Research Foundation (BAIF) entered into a collaborative agreement to produce two unified genotyping chips: "GAUCHIP" for cattle and "MAHISHCHIP" for buffaloes. These chips, created under the Rashtriya Gokul Mission of the Department of Animal Husbandry and Dairying, Government of India, are designed to offer cost-effective genotyping services to farmers. This initiative allows for the early selection of heifers and young bulls. The official launch of "GAUCHIP" and "MAHISHCHIP" was conducted by the Hon'ble Prime Minister of India on October 5, 2024, in Washim, Maharashtra.

The implementation of genomic selection, utilising Genomic Breeding Value (GBV) for milk yield, was a key component. This method facilitated the selection of bull calves for the production of high-quality, disease-free semen for artificial insemination, as well as the selection of female calves for future breeding purposes.

During the year, genomic selection was initiated for Kankrej. Thus, genomic selection services of male and female animals were made available for Gir, Sahiwal, Kankrej, HF CB and JYCB cattle and Murrah and Mehsana buffaloes. The genomic database developed was used for breed purity estimation, screening for genetic disorders, and identification of milk proteins like A1/A2 using a single genetic test, thus reducing cost of selection of best animals.

Semen stations, as well as gaushalas such as Swaminarayan Mandir and Anusuya Gaudham, along with individual farmers, have adopted the practice of selecting animals based on GBVs and breed purity services. This has enabled them to select superior animals and develop their own herds. To facilitate this process, a web portal, [www.genomics.coop](http://www.genomics.coop), was created. This portal serves as a unified point of access, allowing farmers and various organisations to utilise genotyping services and the national genomic database. In an effort to enhance the accuracy of Genomic Breeding Values and lower the cost of genomic testing for farmers, NDDB has also partnered with various organisations to expand the reference population.



Indigenous unified genotyping chips "GAUCHIP" for cattle and "MAHISHCHIP" for buffaloes.

## NATIONAL BOVINE GENOMIC CENTRE FOR INDIGENOUS BREEDS (NBGC-IB)

Phenotype recordings under the PT and PS projects were utilised to support genomic selection efforts. Blood and tissue samples of milk-recorded animals were collected to continue building a robust reference population for genomic evaluation.

A total of 18,363 blood/tissue samples from performance-recorded animals and bulls were collected and processed for DNA extraction. Of these, samples from 14,433 animals were genotyped using the latest versions of GAUCHIP and MAHISHCHIP.

Bull calves from Gir, Sahiwal, Holstein Friesian crossbred, Jersey crossbred cattle, and Murrah and Mehsana buffalo breeds were selected based on their GBVs, contributing to improved precision in the selection of high-genetic-merit animals.

## ACCELERATED BREED IMPROVEMENT PROGRAMME USING IN-VITRO FERTILISED EMBRYOS WITH SEXED SEMEN

This project, undertaken under RGM scheme, aimed to enhance productivity through the multiplication of high-yielding animals using embryo transfer technology. The project was implemented in collaboration with various stakeholders, including Milk Federations, Milk Unions/Producer Companies, State Animal Husbandry Departments, and State Livestock Development Boards.

NDDB, as the principal implementing agency, signed agreements with two service providers—Rahuri Semen Station of NDDB Dairy Services (NDS) and Tropical Animal Genetics (TAG). These service providers were responsible for producing and transferring embryos to the intended beneficiaries, with a projected annual target of approximately 66,000 confirmed pregnancies.





To support technology adoption, the Government of India provided a subsidy of ₹5,000 for each confirmed pregnancy achieved using IVF embryos produced with sexed semen. By March 2025, a total of 28 action plans were approved for establishing 16,390 confirmed pregnancies.

## ACCELERATED BREED IMPROVEMENT PROGRAMME USING SEX-SORTED SEMEN FOR ASSURED PREGNANCY

The Accelerated Breed Improvement Programme, sanctioned under the Rashtriya Gokul Mission (RGM) scheme, was initiated to encourage the use of sex-sorted semen, which offers a 90 percent probability of producing female calves. The programme's objective was to achieve a total of 51.63 lakh assured pregnancies over a five-year timeframe.

NDDB was designated as the nodal monitoring agency for this initiative. In this capacity, it was responsible for establishing the pricing for sexed semen doses, negotiating rate agreements with a select group of suppliers, and overseeing the project's execution by various implementing agencies. As of March 2025, a total of 20.06 lakh sexed semen doses have been supplied under this programme. According to data documented in the Bharat Pashudhan Application, the implementing agencies have performed 3.65 lakh inseminations in the field using sexed semen.

## PROGENY TESTING (PT) AND PEDIGREE SELECTION (PS) PROGRAMMES

PT and PS programmes remained focused on the scientific selection of dairy animals to facilitate genetic improvement.

### PROGENY TESTING

Under the RGM, field-based progeny testing was undertaken in nine states, encompassing Gir, Sahiwal, Jersey, Holstein Friesian crossbred, Jersey crossbred cattle, as well as Murrah and Mehsana buffaloes. During the reporting period, 250 bulls underwent progeny testing, and milk recording was conducted for 50,354 animals.

A total of 496 high genetic merit bulls were procured based on estimated GBV and DNA-based parentage confirmation, and were distributed to semen stations. All selected bulls were subjected to screening for genetic disorders and infectious diseases following the protocols prescribed by the Government of India. Breeding values were estimated for milk yield, fat percentage, solids-not-fat (SNF), protein yield, and reproductive traits. Animal type classification and genetic evaluation activities were integral to the programme, thereby supporting NDDB's objective of promoting sustainable genetic progress through precise and data-driven selection methodologies.

#### DETAILS OF PT PROJECTS IMPLEMENTED UNDER RGM SCHEME:

Sr. No.	State	Name of the EIA	Breed
1	Andhra Pradesh	APLDA	Jersey CB
2	Gujarat	SAG	Murrah
3	Gujarat	SAG	HFCB
4	Gujarat	Mehsana Milk Union	Mehsana
5	Gujarat	Banas Milk Union	Mehsana
6	Gujarat	SAG	Gir
7	Haryana	HLDB	Murrah
8	Himachal Pradesh	HPLDB	Jersey
9	Kerala	KLDB	HFCB
10	Punjab	PLDB	Murrah
11	Punjab	PLDB	Sahiwal
12	Rajasthan	Sri Ganganagar Milk Union	Sahiwal
13	Tamil Nadu	TCMPF	Jersey CB
14	Uttar Pradesh	ABRO	Murrah

## PEDIGREE SELECTION (PS)

Pedigree Selection (PS) programs were implemented to advance the genetic improvement of indigenous cattle and buffalo breeds that possess beneficial traits, including strong dairy potential, adaptability, heat tolerance, and disease resistance. These programmes are intended to serve as a transitional strategy in areas with limited adoption of Artificial Insemination (AI), bridging the gap until AI coverage is sufficient for the implementation of Progeny Testing (PT) programs.

These initiatives, which are part of the Rashtriya Gokul Mission, have supported in-situ conservation and genetic enhancement. This was achieved by identifying

and selecting superior germplasm and simultaneously working to expand access to AI services. Furthermore, the programs were instrumental in disseminating knowledge on sustainable breeding practices at the grassroots level.

During the reporting period, nine PS projects were implemented for the following breeds: Gaolao, Hariana, Kankrej, Tharparkar, and Rathi (cattle); Banni, Jaffarabadi, Nili-Ravi, and Pandharpuri (buffalo). A total of 69,673 AIs were performed, and 7,965 animals were enrolled under milk recording. These interventions have contributed to strengthening the genetic base and productivity of indigenous breeds, thereby enhancing their long-term viability and role in the dairy sector.

### DETAILS OF PS PROJECTS IMPLEMENTED UNDER RGM:

These efforts enhanced the genetic potential and productivity of indigenous breeds and supported sustainable dairy development in targeted regions.

Sr. No.	State	Name of the EIA	Breed
1	Gujarat	SAG	Jaffarabadi
2	Gujarat	Banas Milk Union	Kankrej
3	Gujarat	Kutch Milk Union	Banni
4	Haryana	HLDB	Hariana
5	Maharashtra	MLDB	Gaolao
6	Maharashtra	MLDB	Pandharpuri
7	Punjab	PLDB	Nili-Ravi
8	Rajasthan	RLDB	Tharparkar
9	Rajasthan	URMUL Trust	Rathi







*Milk Recording using Smart Weighing Scale and data capture in Bharat Pashudhan application*

## NATIONAL MILK RECORDING PROGRAMME (NMRP)

NMRP has been implemented as a systematic performance recording initiative designed to address data gaps in underserved regions and support productivity enhancement in cattle and buffalo populations. Developed to complement the geographically limited PT and PS programmes, NMRP facilitates broader breed and geographic coverage while contributing to the expansion of the national genomic reference population.

The programme is executed through 40 milk recording units, each comprising 45 milk recording centres, with an annual target of recording 1.5 lakh animals. Data collection

is conducted in strict adherence to Standard Operating Procedures (SOPs). Village-level milk recorders document milk production and composition traits—including milk yield, fat content, SNF, and protein content—using the Bharat Pashudhan mobile application to ensure real-time data capture.

NMRP includes breeds not currently covered under PT and PS initiatives, enabling comprehensive performance benchmarking across regions and breeds, enhancing the identification and selection of genetically superior animals, and facilitating the estimation of genetic trends. These measures contribute to the strengthening of the national genomic database and support informed decision-making for the sustainable advancement of the dairy sector.

## DETAILS OF NMRP UNITS IMPLEMENTED UNDER RGM:

SN	State	Number of MR		Major breeds of Cattle and Buffaloes to be covered
		Units	Centres	
1	Andhra Pradesh	2	90	Cattle: Ongole, JYCB & Buffalo: Murrah
2	Assam	1	45	Cattle: Lakhimi
3	Bihar	2	90	Cattle: Bachaur & Purnea
4	Goa	1	45	Cattle: Shweta Kapila, HFCB, JYCB & Buffaloes
5	Haryana	2	90	Cattle: Belahi & Haryana
6	J & K	2	90	Cattle: HFCB & JYCB
7	Jharkhand	1	45	Cattle: HFCB & JYCB
8	Karnataka	2	90	Cattle: Pure HF & Buffalo: Dharwadi
9	Madhya Pradesh	5	225	Cattle: Malvi, Nimari, Kenkatha & Buffalo: Bhadawari
10	Maharashtra	4	180	Cattle: Khillar, Red Kandhari, HF, HFCB & Buffalo: Murrah, Jaffarabadi, Pandharpuri
11	Manipur	1	30	Cattle: HFCB & JYCB
12	Meghalaya	1	45	Cattle: HFCB & JYCB
13	Odisha	1	45	Cattle: Bijharpuri
14	Punjab	3	135	Cattle: Pure HF, HFCB & Buffalo: Nili Ravi
15	Rajasthan	4	180	Cattle: Nagori, Nari, Gir, Kankrej, Rathi, Tharparkar
16	Tamil Nadu	3	135	Cattle: Alambadi, Kangayam & Umblacherry
17	Uttar Pradesh	2	90	Cattle: Kherigarh, Gangatiri & Ponwar
18	Uttarakhand	1	45	Cattle: Badri, Sahiwal, HFCB & Buffalo: Murrah
19	West Bengal	2	60	Cattle: Gir, HFCB, JYCB

## BREED MULTIPLICATION FARMS (BMF)

NDDB was responsible for the implementation and monitoring of the Breed Multiplication Farm (BMF) project, which was executed under the RGM. The project's primary objective was to cultivate entrepreneurs who would establish BMFs to produce disease-free, high-yielding elite heifers and cows from indigenous cattle and buffalo breeds. This was accomplished through the application of scientific breeding techniques, including the use of sex-sorted semen and in vitro fertilisation (IVF) technology, with the goal of providing genetically superior female animals to farmers on a cost basis.

As of March 2025, Department of Animal Husbandry and Dairying, Government of India, had approved a total of 169 BMF proposals, of which 132 projects are active. In conjunction with this, subsidy grants totalling ₹83.43 crore were disbursed to 119 project beneficiaries. All approved BMF projects have shown steady progress, with various initiatives advancing through their respective stages of implementation, supported by the continuous monitoring and guidance provided by NDDB.

## SUPPORT TO SEMEN PRODUCTION – STRENGTHENING OF EXISTING SEMEN STATIONS

To ensure the availability of quality frozen semen doses for AI and to develop animal breeding infrastructure of international standards, the Government of India, under the RGM, sanctioned the Strengthening of Semen Station Project. The objective was to support existing semen stations in enhancing the production of quality semen across the country.

NDDB extended its assistance to various semen stations in drafting project proposals for submission. By March 2025, a total of 47 project proposals were approved by DAHD, Government of India, following the successful completion of assessments conducted by NDDB.



## ARTIFICIAL INSEMINATION INFRASTRUCTURE IN THE NORTH-EASTERN REGION

To develop robust infrastructure for the training of AI technicians in the North-Eastern Region (NER) of India, NDDB, at the request of the Assam Livestock Development Agency (ALDA), established a state-of-the-art AI training institute at Khanapara, Guwahati. The institute was inaugurated in June 2023 and provided comprehensive AI training following the standards prescribed by DAHD, Government of India.

NDDB actively monitored and supervised the AI network across the North-Eastern states. A total of 1,683 Multi-Purpose AI Technicians (MAITRIs) were deployed, who collectively performed over 46.62 lakh AIs under this initiative. To strengthen AI service delivery in the region, NDDB conducted comprehensive training on the Bharat Pashudhan App, enabling effective field-level data capture and service tracking.

## EXPANDING REACH OF REPRODUCTIVE TECHNOLOGIES

To augment milk production in key milksheds such as Bapudham (Bihar), Vidarbha-Marathwada (Maharashtra), and Varanasi (Uttar Pradesh), NDDB spearheaded a range of dairy development projects through its wholly-owned subsidiary, NDDB Dairy Services. These initiatives focused on enhancing the productivity of dairy animals and strengthening the overall dairy ecosystem in milk-deficient areas.

Key activities under these projects included the induction of high-yielding animals, establishment of AI delivery networks through MAITRIs (Multi-Purpose AI Technicians), and the implementation of reproductive technologies such as inseminations using conventional and sexed semen, as well as embryo transfer using IVF embryos. These interventions contributed significantly to the sustainable growth and development of the dairy production system in the respective project areas.

In addition to these efforts, several new projects were initiated during the year. These included the establishment of AI networks in regions such as Sheopur (Madhya



*Strengthening semen station for expanding reach of reproductive technologies*

Pradesh), Harit Pradesh Milk Producer Company Limited (Uttar Pradesh), Mayurbhanj (Odisha), Yavatmal and Washim (Maharashtra), Rayalseema (Andhra Pradesh), Gorakhpur and Rohilkhand-Braj (Uttar Pradesh), and Jharkhand.

of Excellence for genetic improvement of indigenous cattle at Tirumala Tirupati Devasthanam, Tirupati. These projects aimed at fostering sustainable dairy development, and promote the conservation and genetic advancement of indigenous cattle breeds in their respective regions.

Further, NDDDB initiated the establishment of a cow sanctuary in Muzaffarnagar, Uttar Pradesh, and a Centre

Name of the Project	No. of animals induced	No. of AI centres established (MAITRIs)	No. of AI performed
Project Gir Varanasi	485	122	194540
Productivity enhancement activities in Bapudham Milk Producer Company Limited	300	106	138643
Productivity enhancement activities in Vidarbha Marathwada	2000	465	319974
Establishment of AI Network in Sheopur		100	54693
Productivity enhancement services in Harit Pradesh Milk Producer Company Limited		170	48297
Productivity enhancement services in Mayurbhanj, Odisha	3000	51	4684
Providing AI Services with Sexed Semen, in Rayalseema, Andhra Pradesh		106	23155
Establishment of AI Network in Rohilkhand- Braj Region of Uttar Pradesh		503	190599
Establishment of AI Network in Gorakhpur, Uttar Pradesh		230	75086
Establishment of AI Network in Jharkhand		330	56789
Establishment of AI Network in Washim- Yavatmal, Maharashtra	4000	59	10806
Providing AI Services with Sexed Semen to animals of women dairy farmers, in Vidarbha- Marathwada region, Maharashtra, Phase- II		-	16583
Animal induction in Washim - Yavatmal, Maharashtra, Phase- II	3000	-	-

## FODDER SEED PRODUCTION UNDER NATIONAL LIVESTOCK MISSION

To enhance the availability of quality fodder seed for dairy farmers, fodder seed production activities continued under the National Livestock Mission (NLM). As the implementing agency, NDDDB provided implementation and monitoring support to dairy cooperatives involved in seed production.

In the year 2024–25, six dairy cooperatives across four states produced a total of 20,923 quintals of certified fodder seed during the Kharif season, with an estimated value of ₹1,829 lakh. During the Rabi season, 10 dairy

cooperatives across seven states undertook seed production activities and were expected to produce approximately 55,129 quintals, valued at around ₹4,851 lakh.

The certified fodder seeds were distributed to milk producers through Milk Federations, Milk Unions, and other Milk Producer Organisations, thereby supporting green fodder cultivation on a significant scale.





Quality seed production for improved green fodder yield

#### FODDER SEED PRODUCTION BY DAIRY COOPERATIVES IN 2024-25

Fodder seed produced in Kharif 2024-25 under NLM				
Sr. no.	State	Name of Dairy Cooperative	Fodder seed produced (in Qtl)	Fund utilised (₹ in Lakh)
1	Rajasthan	Kota Milk Union	898.50	76.74
2		RCDF unit, Bikaner	6223.50	628.84
3	Punjab	Milkfed, Punjab	37.35	2.79
4	Gujarat	Banaskantha Milk Union	7763.61	676.82
5	Karnataka	Bengaluru Milk Union	4000.00	296.00
6		Haveri Milk Union	2000.00	148.00
Total			20922.96	1829.18

Expected Fodder Seed Production in Rabi 2024-25 under NLM				
Sr.no.	State	Name of Dairy cooperative	Expected fodder seed production (in Qtl)	Expected Fund utilisation in (₹ in Lakh)
1	Rajasthan	Kota Milk Union	253.00	26.45
2		RCDF unit, Bikaner	5302.83	422.41
3	Punjab	Milkfed, Punjab	6147.40	539.51
4	Uttar Pradesh	Lucknow Milk Union	2380.40	213.12
5	Gujarat	Banaskantha Milk Union	13590.32	1102.03
6	Bihar	Barauni Milk Union	4618.04	348.30
7		Mithila Milk Union	2966.49	223.14
8		Patna Milk Union	638.40	47.88
9	Andhra Pradesh	Shreeja Milk Producer Company	123.93	12.39
10	Telangana	Mulukanoor Milk Union	19108.00	1916.20
Total			55128.81	4851.43

## NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT (NPDD) COMPONENT A

NDDB has been designated as a State Implementation Agency for Milk Producer Organisations (MPOs) and Farmer Producer Organisations (FPOs) to implement Component 'A' of the NPDD scheme. This is a central sector scheme administered by the Department of Animal Husbandry and Dairying, Government of India. The primary objective of this scheme is to establish or enhance infrastructure for essential services, including quality milk testing equipment and primary chilling facilities. As of March 2025, the Government of India has approved three project proposals from MPOs, with a total project outlay of ₹49.39 crore. This includes a central grant-in-aid of ₹30.98 crore. Additionally, NDDB is providing technical assistance to Milk Unions and Federations, aiding them in the preparation of development of project proposals and the implementation of sanctioned projects.

## PRE-PROJECT BASELINE SURVEYS AND DAIRY DEVELOPMENT PLANNING UNDER NPDD COMPONENT A

NDDB conducted a pre-project baseline survey in Rajsamand district, Rajasthan, in response to a request from the Rajsamand Zila Dugdh Utpadak Sahakari Sangh Ltd. The survey covered 966 households in Ghati, Jeetawas, and Oda villages. Data were collected on household demographics, milch animal holdings, daily milk yield, total production, and marketable surplus. Based on the findings, a baseline report was prepared and submitted to the Milk Union to support proposal development under NPDD Component A.

NDDB developed dairy development plans for Chhattisgarh, Madhya Pradesh, and Goa at the request of their State Governments. These plans aimed to improve animal productivity through scientific breeding, feeding, and health interventions, along with cattle induction. Strengthening of cooperatives was prioritised to ensure fair returns to producers and access to quality milk for consumers. NDDB assumed operational responsibility to ensure effective implementation.







Pre-project surveys and proposals were also prepared under NPDD Component A for WAMUL, EAMUL, PCDF, LDCF, and TCMPF. These proposals were submitted and

approved by the respective authorities. In Assam, NDDB prepared DPRs for new dairy plants in Dibrugarh, Jorhat, Silchar, and Dhemaji to enhance processing capacity with government support.

## NPDD COMPONENT B - DAIRYING THROUGH COOPERATIVES (DTC-JICA) – KEY TO SUSTAINABLE LIVELIHOOD

NDDB is the Implementing Agency for the “Dairying through Cooperatives (DTC)” - Component B of NPDD, a Central Sector Scheme of Department of Animal Husbandry and Dairying, Government of India. The scheme aims to boost the sales of milk and dairy products by enhancing farmers' access to organised markets, upgrading dairy processing and marketing infrastructure, and strengthening institutional capacity. Collectively, these

interventions are intended to increase the income of milk producers in the project areas.

The scheme is being implemented in nine states i.e. Andhra Pradesh, Bihar, Madhya Pradesh, Punjab, Rajasthan, Telangana, Uttar Pradesh, Uttarakhand and West Bengal through Producer owned institutions including Milk Unions, State Milk Federations and Milk Producer Organisations.

### PROJECT SUMMARY

Particulars	Amount (₹ Crore)
Total Project Outlay	1568.28
ODA Loan from JICA	924.56
Grant by Government of India (GoI)	475.54
Participating Institution's contribution	168.18

### APPROVED SUB-PROJECTS

Particulars	Amount (₹ Crore)
Total Outlay of 35 Approved Sub-Projects	1343.00
Loan to Participating Institutions (1.5 per cent p.a.)	821.07
Grant	388.54
Participating Institutions' Contribution	133.39

The Participating Institutions (PIs) have commenced activities under various components such as strengthening of milk procurement infrastructure, processing and manufacturing facilities, Marketing infrastructure, ICT Infrastructure, Productivity enhancement comprising Calf Rearing Programme (CRP), Animal Nutrition Advisory Services (ANAS) & Fodder Development Programmes and Training & capacity development.

The scheme is structured to bring transparency to the milk procurement process and enhance milk quality across the value chain, from the village to the consumer. In addition, the scheme supports the creation of new infrastructure for the production of value-added dairy products, alongside significant investments in marketing and ICT infrastructure to streamline operations. Productivity Enhancement activities such as Calf Rearing Programme (CRP) and

Animal Nutrition Advisory Services (ANAS) are aimed at enhancing milk productivity of milch animals by promoting scientific feeding practices among dairy farmers. Further, the Fodder development activities aim to boost the availability of green fodder while promoting fodder conservation technologies and crop residue management. In addition, comprehensive training and capacity-building programmes are also being conducted for a wide range of stakeholders, including milk producers, field staff, technical personnel, officers, and retailers.

The project is expected to provide better livelihood opportunities to small and marginal milk producers, improve the quality of milk in the value chain, strengthen the processing infrastructure of PIs, increase visibility of cooperative brands in market and build manpower capacity.

## DTC ACHIEVEMENTS

Activity / Parameter	Achievement
New Dairy Cooperative Societies (DCS) formed	~4,900
AMCUs/DPMCUs installed	8,650
Total farmers enrolled as members	~1.26 lakh
– Women members	~92,000
Additional milk procurement	~7.85 lakh kg/day
Number of Animals covered under ANAS	31,000
Number of Farmers trained (Clean milk production, animal rearing, etc.)	~2.0 lakh







Shri Narendra Modi ji, Hon'ble Prime Minister of India inaugurating the product plant of Barauni Dairy constructed under the DIDF, a DAHD, Government of India scheme in the presence of other distinguished dignitaries

## DAIRY PROCESSING & INFRASTRUCTURE DEVELOPMENT FUND (DIDF)

NDDB was the implementing agency for the “Dairy Processing & Infrastructure Development Fund (DIDF)”, a Department of Animal Husbandry and Dairying, Government of India scheme that was implemented from 2018-19 to 2022-23. The disbursement of loans for the

projects under implementation continued during FY 2024-25. The Government of India is providing an interest subvention of @ 2.5 per cent on the loans sanctioned under the DIDF scheme.

Key Highlights	Progress Summary
Total Financial Outlay	₹11184 crore
<ul style="list-style-type: none"> <li>Loan Component</li> <li>End Borrowers' Contribution</li> <li>Project Management &amp; Learning Contribution from Implementing Agencies</li> <li>Interest Subvention by Gol</li> </ul>	₹8004 crore ₹2001 crore ₹12 crore ₹1167 crore
Number of Projects Sanctioned (as on 31 March 2025)	36 projects
<ul style="list-style-type: none"> <li>Total Outlay approved</li> <li>Loan Sanctioned</li> </ul>	₹6730.21 crore ₹4538.40 crore
Loan Disbursement during 2024-25	₹482.37 crore
Cumulative Loan Disbursed (till 31 March 2025)	₹3599.75 crore
Number of projects completed (as on 31 March 2025)	17
Milk Processing Capacity Created (Completed Projects)	10.44 million litres/day

The Government of India has now approved an extension of the Animal Husbandry Infrastructure Development Fund (AHIDF) as part of the Infrastructure Development Fund (IDF), amalgamating the Dairy Processing & Infrastructure Development Fund (DIDF) with it until 2025-26.

The dairy cooperatives have also been included under the AHIDF scheme. One project proposal of Namakkal Milk Union was sanctioned under the AHIDF Scheme during the year 2024-25, wherein NDDB sanctioned a term loan of ₹64 crore. The Milk Union has received interest subvention benefit of ₹0.05 crore @ 3 per cent on the loan disbursed till 31 March 2025.

## INTEREST SUBVENTION TO PRODUCERS' OWNED INSTITUTIONS FOR WORKING CAPITAL LOANS

Due to the challenges faced by the Producers' Owned Institutions (POIs) during the COVID-19 pandemic restrictions, the DAHD, Government of India, introduced a scheme for "Interest Subvention on Working Capital Loans" during the year 2020-21, which was further extended for the period from FY2021-22 to FY2025-26. The scheme is being implemented by NDDB.

The scheme provides a two per cent interest subvention per annum on working capital loans availed by eligible Participating Agencies (PAs) from banks and financial institutions. An additional two per cent per annum interest subvention is provided at the end of the loan repayment period for those who make prompt and timely repayments.

The component of interest subvention has been included under the scheme 'Supporting Dairy Cooperatives and Farmer-Producer Organisations Engaged in Dairy Activities (SDCFPO)',

Through the interest subvention on working capital loans availed from banks and financial institutions, the scheme enabled POs to make timely payments to their producer members.

Key Highlights	Progress Summary
Outlay of the scheme	₹703.00 crore
Interest subvention amount released up to FY 2024-25	₹650.75 crore

## FORMATION AND PROMOTION OF FPOS

NDDB has been designated as the implementing agency for the Central Sector Scheme of "Formation and Promotion of 10,000 Farmer-Producer Organisations (FPOs)". As of March 2025, 126 FPOs (100 Fodder Plus FPOs and 26 Beekeepers' FPOs) have been formed under this scheme.

The Fodder Plus FPOs have reached a total membership of more than 26,000 farmers. NDDB actively provides technical support to FPOs and Cluster-Based Business Organisations (CBBOs) to enhance their capacity. Regional workshops and training programmes are also being conducted regularly for knowledge and experience sharing.







A total of 174 officers from CBBOs and FPOs were trained in fodder production and conservation till March 2025. 80 Fodder Plus FPOs have commenced field activities such as production and sale of green fodder, silage, fodder seeds, and sale of dry fodder, feed, and feed supplements, stem cuttings etc.

NDDB's coordination of fodder seed production under the National Livestock Mission has been instrumental in ensuring that members of Farmer-Producer Organisations (FPOs) have access to high-quality seeds of improved varieties. Through continuous efforts in capacity building and providing support to Cluster-Based Business Organisations (CBBOs) and FPOs, a cumulative turnover of approximately ₹40 crores was achieved by March 2025.

In pursuit of the "Sweet Revolution", NDDB is utilising the dairy cooperative network to established a honey value chain. Honey FPOs have grown to include a membership of around 5,500 farmers. Milk Unions are increasingly participating by offering forward market linkages for honey produced by FPO members, launching it under their established dairy brands. NDDB is also the implementing agency for the "National Beekeeping and Honey Mission" (NBHM), working with Dairy Cooperatives and other partners to establish essential beekeeping infrastructure, including a honey testing laboratory, a processing unit, and

beekeeping equipment. A state-of-the-art Regional Honey Testing Laboratory is currently being established in Kolkata.

## STRATEGIC FINANCIAL ASSISTANCE SCHEME FOR FODDER PLUS AND BEEKEEPING-BASED FPOS

Recognising the formidable challenges that Farmer-Producer Organisations (FPOs) encounter in securing capital investment and meeting working capital requirements, in February 2025, NDDB approved a scheme. This scheme is designed to furnish financial assistance to a select cohort of 10-15 high-potential FPOs on a pilot basis, with the objective of cultivating sustainable and viable business models that can be subsequently replicated nationwide.

The financial assistance provided under this scheme is structured as a 50% grant allocated for the acquisition of capital assets. Additionally, it includes an interest-free loan to address the working capital needs specifically for fodder and beekeeping-related operations. The scheme further

extends financial support through an interest-bearing loan to fund other pertinent activities that do not directly pertain to fodder or beekeeping.

The financial outlay for this scheme outlines a maximum one-time grant assistance of ₹100 Lakh, a maximum one-time interest-free loan of ₹100 Lakh, and a maximum interest-bearing loan of ₹200 Lakh.

It is projected that this initiative will empower the FPOs to significantly expand their business operations and successfully establish replicable business models.

## BHARAT PASHUDHAN

Department of Animal Husbandry and Dairying, Government of India, and NDDB jointly established an end-to-end farmer-centric, technology-enabled ecosystem Bharat Pashudhan under National Digital Livestock Mission (NDLM) for effective implementation of livestock management programs by various organisations in the country.

### IMPLEMENTATION OF BHARAT PASHUDHAN APPLICATION

Phase II of the NDLM / Bharat Pashudhan Application is in progress, and key deliverables are:

- To ensure effective implementation of Bharat Pashudhan Application, State-level PMUs (Project Monitoring Units) established by 15 states (Karnataka, Andhra Pradesh, Maharashtra, Uttar Pradesh, Assam, Kerala, Odisha, Bihar, Uttarakhand, Jammu, Kashmir, Madhya Pradesh, West Bengal, Mizoram, Himachal Pradesh, Telangana). The process is in progress for the remaining states.
- Technical and field support for the implementation of Bharat Pashudhan Application in all 28 states and 8 UTs of the country.

To facilitate effective adoption of the Bharat Pashudhan Application by end-users, around 70 capacity-building programmes were conducted across various states and Union Territories during the year.

### FUNCTIONAL ENHANCEMENTS IN BHARAT PASHUDHAN APPLICATION

To ensure effective service delivery for small ruminants, including sheep, goats, and pigs, a specialised Flock Management functionality was seamlessly integrated into the Bharat Pashudhan Application. This enhancement is designed to be used by both farmers and service providers.

Central sector schemes from the Government of India, such as the National Milk Recording Programme (NMRP) and Surabhi Chayan Shrankhla (SCS), have been successfully onboarded onto the Bharat Pashudhan application. These

It is a cloud-based ecosystem that facilitates field-level workers to upload services delivered to farmers, like animal registrations, farmer registration, change in ownership, AI, pregnancy diagnosis, calving, vaccinations, treatment/e-prescriptions, disease reports, post-mortem reports, milk recordings, etc. This application also gives emphasis on the development of a connected livestock market, closed-loop breeding, disease surveillance systems, and improvement in the traceability of animals and animal products.

The Application is currently live in all 28 states and 8 UTs of the country. In order to meet the Government of India's requirement for livestock traceability, NDDB and the National Research Center on Meat (NRCM), Hyderabad, have signed an agreement to use the Bharat Pashudhan database to establish, oversee, and validate the traceability of the country's livestock data. To fulfil this requirement, provision has been made in the Bharat Pashudhan Application for slaughter houses to upload information regarding antemortem examination, post-mortem examination, animal slaughter, etc.



Sr. No	Training Type	Number of Programmes
1	Bharat Pashudhan App – Online Training	41
2	Bharat Pashudhan App – Offline Training	29
3	PMU Training	5
4	A-HELP Training	10

initiatives, implemented nationwide by DAHD, are aimed at identifying superior germplasm within breeding tracts and institutionalising a systematic approach to milk recording.

The national Bharat Pashudhan database, a comprehensive repository of farmer and animal information, functions as the foundational platform for executing the Government of India's Direct Benefit Transfer (DBT) programs and facilitates the broader digitalisation of central and state-level schemes.



The "1962 Farmers App", which is built upon the Bharat Pashudhan database, was launched by the Hon'ble Prime Minister Shri Narendra Modi ji on March 2, 2024. This application is readily available on the Play Store, and farmers can gain access using their registered mobile number. It functions as a centralised resource for livestock farmers, granting them direct access to essential resources and information. This includes contact details for all nearby AI technicians, the availability of high-quality semen straws for IVF services, educational videos on ethnoveterinary medicines, and a ration-balancing application. The application provides real-time updates on sector-specific schemes and initiatives, thus empowering farmers with the latest developments directly at their fingertips.

DAHD launched the 21st Livestock Census in the country on 25th October 2024, first time using the Census App built on Bharat Pashudhan database.

Bharat Pashudhan logo featured in the tableau of DAHD under the Ministry of Fisheries, Animal Husbandry and Dairying displayed during the 76th Republic Day Parade at Kartavya Path in New Delhi.

These digital initiatives reflected NDDDB's commitment to technology-led service delivery and farmer empowerment.

## KEY STATISTICS

Sr. No	Activity Description	Total Number of Transactions
1	Animals Registered	345437611
2	Owners Registered	92942111
3	Villages Covered	606978
4	Districts Covered	766
5	Organisations Onboarded	267
6	Projects Created	398
7	Treatment Transactions	2372138
8	Vaccination Transactions	1081723918
9	AI Transactions	160129738
10	Calving Transactions	27279845
11	Calves Born	12942079
12	Semen Stations Onboarded	82
13	Total Number of Users	474609
14	Farmer App Users	408949
15	Deworming Transactions	29247242
16	Individual Ration Balancing Transactions	27840446
17	Milk Recording (MR) Transactions	15654756

*Training session for trainers on effective adoption of the Bharat Pashudhan Application*



## QUALITY AND FOOD SAFETY MANAGEMENT

NDDB is focused on promoting and strengthening Quality & Food-safety across the Dairy sector. The Quality Mark, a nationwide initiative on process certification from cow to consumer, continued during the year. To date, 57 dairies out of 118 applicants have been awarded the Quality Mark. Remaining dairies, having embarked on ISO 22000 / FSSC 22000, are in the process of carrying out improvement measures. More dairy cooperatives have expressed their interest in adopting Quality Mark.

NDDB extended technical assistance to the Bureau of Indian Standards (BIS) to introduce the Conformity Assessment Scheme for Milk & Milk Products (CAS MMP). A total of 34 dairies applied under CAS MMP, of which five completed Stage I & Stage II audits successfully with certification. Twenty-two dairies completed Stage I audit and are carrying out improvement measures for Stage II audit. The dairies with Quality Mark are being encouraged to embark on CAS MMP.

NDDB continued its support to regulatory and scientific bodies, including DAHD, FSSAI, Codex Alimentarius Commission (CAC), and FAO. The Dairy Board is the Secretariat for the Indian National Committee of the International Dairy Federation (INC-IDF) and coordinates India's participation in global dairy forums. Technical inputs were provided to BIS through representation on various committees. Support was also extended to the Export Inspection Council in certifying dairy units for export compliance.

NDDB conducted regular training programmes to build capacity in the area of quality and food safety. Participants

included milk producers, dairy plant staff, cooperative board members, and new recruits. Training programmes included Clean-Milk-Production, Quality & Food Safety, and Human Safety.

Under NPDD's "Dairying through Cooperatives" component, senior dairy officials received training on tools such as 5S, Kaizen, and Quality Circles, along with international management systems like ISO 22000 (food safety), ISO 14001 (environment), ISO 50001 (energy), and ISO 45001 (occupational health). These modules promoted the integration of the food safety system with other systems, leading to sustainability.

NDDB continued to support the dairy cooperatives in improving operational efficiency through process improvement, technological intervention, and system introduction. The studies carried out in dairy plants helped MilkFed Punjab reduce losses in milk solids and packaging materials to an acceptable level through targeted interventions.

NDDB undertook studies on laboratory modernisation with the introduction of advanced and rapid testing equipment in order to promote accuracy in testing, ensuring food safety. Technical guidance was provided to DAHD in the formulation and finalisation of specifications for rapid analytical laboratory equipment with stakeholders' consultation.

These efforts reflected NDDB's commitment to ensuring safe, high-quality dairy production through technological interventions, capacity building, and collaborations.



*Training session being conducted on Quality & Food Safety*







# EXPANDING COOPERATIVE COVERAGE UNDER WHITE REVOLUTION 2.0 - REALISING THE VISION OF “SAHKAR-SE-SAMRIDDHI”

Cooperative institutions are recognised as pivotal agents in facilitating rural economic transformation, particularly within the agricultural and allied sectors, by promoting inclusive and equitable growth. The Hon'ble Prime Minister of India has underscored the necessity of leveraging the inherent strengths of cooperatives to evolve them into efficient and competitive business entities, aligned with the vision of "Sahkar-se-Samriddhi".

Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj and Shri Muralidhar Mohol ji, Hon'ble Union Minister of State for Cooperation during the release of Margdarshika (SOP)





To strengthen the cooperative movement and deepen its reach to the grassroots the Union Cabinet had approved the plan to establish 2 lakh new multipurpose PACS (MPACS), Dairy, Fishery Cooperative Societies covering all the Panchayats/ villages in the country over five years, through 'Whole of Government Approach' with the support of National Bank for Agricultural and Rural Development (NABARD), National Dairy Development Board (NDDB), National Fisheries Development Board (NFDB) and State Governments.

In line with the vision of the Government of India, the Ministry of Cooperation collaborated with the Ministry of Fisheries, Animal Husbandry & Dairying, to launch the White Revolution 2.0 (WR 2.0). This initiative seeks to establish a cooperative-centric model for a resilient, inclusive, and sustainable dairy ecosystem. The key objective under WR 2.0 is to enhance the volume of milk procured by the cooperative sector by nearly 50 per cent,

targeting an increase from the current level of 660 lakh kilograms per day to 1,000 lakh kilograms per day by the fiscal year 2028–29. NDDB has been designated as a principal stakeholder in the implementation of this national initiative.

In September 2024, Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation and Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj released the Margdarshika (Standard Operating Procedure) for the formation and strengthening of two lakh new Multipurpose Primary Agricultural Cooperative Credit Societies (MPACS), Dairy and Fishery Cooperatives. The Hon'ble Union Home and Cooperation Minister formally launched WR 2.0 in December, 2024.

NDDB has been entrusted with the responsibility for overall coordination amongst stakeholders for achievement of these objectives. White Revolution 2.0 envisages:

#### WR 2.0 YEAR-WISE BREAK UP:

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
New DCS	13973	18115	13707	15136	14069	75000
Strengthening	4642	13925	11607	9285	6963	46422

#### MILK PROCUREMENT TARGET:

Key Parameter	Base year (2023-24)	2024-25	2025-26	2026-27	2027-28	2028-29
Coop Milk Proc. (LKgPD)	660	720	780	847	923	1007

To initiate the implementation of White Revolution 2.0, NDDB initiated a scheme to support the setting up of 1000 MPACS/ M DCS with financial assistance at a rate of ₹ 40,000/- per MPACS/ M DCS. Under this scheme, till March 2025, NDDB has sanctioned 15 projects across 13 milk unions and one milk producer organisation, covering eight states—Assam, West Bengal, Mizoram, Odisha, Maharashtra, Madhya Pradesh, Uttar Pradesh, and Punjab. Out of the targeted 1,000 MPACS/MDCS, a total of 893 have been approved for support, with an outlay of ₹3.59 crore. As of the reporting period, 388 MPACS/ MDCS have commenced milk procurement operations, collecting approximately 46,000 litres of milk per day from 8,653-member producers.

To give an impetus to the implementation of WR 2.0 across the states, NDDB held sensitisation workshops and provided necessary guidance to dairy cooperatives in availing financial assistance under various Gol schemes. During the period, 12,756 new DCS were formed, and 11,871 existing DCS were strengthened under the WR 2.0.

In addition, WR 2.0 envisions the establishment of multipurpose DCS and village cooperative societies that will provide supplementary services to member farmers, including banking services through micro-ATM facilities, warehousing infrastructure, and other allied support services.

WR 2.0 is expected to significantly strengthen the dairy cooperative network across the country. The programme is projected to stimulate growth within the dairy value chain, facilitate employment generation at multiple operational levels, and enhance the participation of women, who constitute a substantial proportion of primary dairy animal rearers.

By ensuring systematic market access for smallholder dairy producers, WR 2.0 aims to guarantee fair and remunerative pricing mechanisms along with a dependable channel for year-round milk marketing. These interventions are intended to augment the share of the organised sector within the dairy industry, which currently remains predominantly under the influence of unorganised stakeholders.

WR 2.0 is being operationalised with support from the revised National Programme for Dairy Development (NPDD), implemented by the Department of Animal Husbandry & Dairying, Government of India. Under NPDD, financial assistance is being extended for the

establishment of village-level milk procurement systems, milk chilling infrastructure to ensure quality assurance in procurement, as well as training and capacity-building initiatives for stakeholders.

## MODEL BYLAWS FOR MULTI-PURPOSE DCS

THE EXISTING BYE-LAWS OF DAIRY COOPERATIVE SOCIETY ONLY ALLOWS FOR INVOLVEMENT IN DAIRY AND ALLIED ACTIVITIES. AS WHITE REVOLUTION 2.0 (WR 2.0) INVOLVES FORMATION OF MULTI-PURPOSE DCS, NDDDB HAS FORMULATED MODEL BYE-LAWS OF MDCS THAT INCLUDE PROVISIONS FOR ENGAGING IN ADDITIONAL BUSINESS ACTIVITIES AS PER THE REQUIREMENT OF AFFILIATED FARMER MEMBERS.

THE CONCEPT BEHIND THE CREATION OF THIS MDCS BYLAWS IS ROOTED IN THE IDEA THAT DAIRYING WILL REMAIN THE PRIMARY WORK OF THE MDCS, BUT ITS SCOPE WILL ENCOMPASS OTHER ACTIVITIES FOR THE BENEFIT OF ITS MEMBERS. THE SCOPE OF DCS ACTIVITIES HAS BEEN EXPANDED TO INCLUDE ACTIVITIES IN AGRICULTURE, HORTICULTURE, FISHERIES, RENEWABLE ENERGY, BIOGAS, GODOWN, WAREHOUSE ETC. IN ORDER TO PROMOTE GOOD GOVERNANCE IN MDCS, CERTAIN ENABLING FEATURES PERTAINING TO ACTIVE MEMBERSHIP, CAPITAL FORMATION AND PROFESSIONAL MANAGEMENT HAS BEEN INCLUDED. THE BYLAWS HAVE BEEN SHARED WITH MINISTRY OF COOPERATION FOR CIRCULATION TO STATES.

## MULTISTATE COOPERATIVE SOCIETIES

In line with the vision of “Local to Global” and the national objective of “Sahkar-se-Samridhi”, the Government of India established national-level multistate cooperative societies in January 2023. These included the National Cooperative Organics Limited (NCOL) and Bharatiya Beej Sahakari Samiti Limited (BBSSL).

### NATIONAL COOPERATIVE ORGANICS LIMITED (NCOL)

NDDDB continued to support NCOL, which is registered under the Multi-State Cooperative Societies Act, 2002, as an umbrella organisation for cooperatives involved in the production and marketing of organic agricultural commodities. NDDDB is the chief promoter of NCOL, and its Chairman also serves as the Chairman of NCOL. The other promoters include the National Cooperative Development Corporation (NCDC), National Cooperative Consumers’ Federation of India Ltd (NCCF), GCMF, and National Agricultural Cooperative Marketing Federation of India Ltd (NAFED).

During the year, NCOL enrolled 7,086 member societies at the primary, district, and state levels, representing nearly five million farmers. NCOL focused on improving

the commercial viability of organic produce by providing direct market access, positioning products under a unified brand, and increasing availability in both domestic and international markets.

Under the ‘Bharat Organic’ brand, NCOL launched 13 new certified organic products, bringing the total to 24. The expanded portfolio included staple items such as whole wheat atta, brown sugar, jaggery powder, jaggery cube, khandsari sugar, chana dal, brown chana, kabuli chana, toor/arhar dal, moong dal, moong split, moong whole, urad whole, urad split, urad gota, urad dal, rajma chitra, masoor malka, masoor whole, masoor split, turmeric powder, coriander powder, coriander whole, and fenugreek.

These products were made available through SAFAL outlets, general retail stores, and major e-commerce platforms such as Blinkit, Swiggy, Amazon, Big Basket, and Flipkart. A distribution agreement was executed with Mother Dairy Fruit and Vegetable Pvt. Ltd. to ensure product availability across the Delhi NCR region. NCOL initiated plans to expand nationwide distribution to improve consumer access and ensure competitive pricing.





*Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation during the launch of NCOL's Bharat Organic Whole Wheat Atta in the presence of Shri Bhupendra Patel ji, Hon'ble Chief Minister of Gujarat; Shri Shankarbhai Chaudhary ji, Speaker, Gujarat Legislative Assembly; Shri Muralidhar Mohol ji, Hon'ble Union Minister of State for Cooperation and Shri Jagdish Vishwakarma ji, Hon'ble Minister of State for Cooperation, Government of Gujarat*

To strengthen its outreach, NCOL signed a Memorandum of Understanding with 14 State Nodal Agencies. These partnerships enabled capacity building, technical support, and market linkages under the 'Bharat Organic' brand.

To boost exports and promote Indian organic produce globally, NCOL formed a strategic partnership with NCEL. It also collaborated with NDDB Mrida Ltd, a wholly owned subsidiary of NDDB, to facilitate the supply of bio-inputs, promote organic cultivation.

NCOL conducted structured training sessions on Internal Control System (ICS) formation and organic farming

practices. These capacity-building initiatives helped raise awareness at the farmer level and supported the formation of certified organic clusters. Plans were developed to scale these programmes across multiple states to promote standardised organic certification.

#### **BHARATIYA BEEJ SAHAKARI SAMITI LIMITED (BBSSL)**

BBSSL is India's first national-level cooperative dedicated to the seed sector, created by the Ministry of Cooperation. The BBSSL is promoted by IFFCO, KRIBHCO, NAFED, NCDC, and NDDB. Chairman, NDDB, is a board member of BBSSL.



*Exchange of agreement between NCOL and Mother Dairy Fruit and Vegetable Pvt Ltd during NDDB's Diamond Jubilee Celebration event at Anand*



*Dr Meenesh Shah, Chairman, NDDB, and Mr Chetan Joshi, Managing Director, Bharatiya Beej Sahakari Samiti Limited (BBSSL), exchanging an MoU in the presence of Dr Ashish Kumar Bhutani, Secretary, Ministry of Cooperation, Government of India*

BBSSL aimed to increase the production of quality seeds through the cooperative network. The objective was to reduce dependence on imports, enhance agricultural productivity, strengthen the rural economy, promote Make in India, and contribute to Atmanirbhar Bharat.

During the year, BBSSL distributed over 76,000 quintals of certified seeds across 13 states and expanded seed production over 6,500 hectares. It recorded revenue of ₹55.25 crore. BBSSL was empanelled as a Central Nodal Agency under flagship schemes such as the National Food Security Mission (NFSM) and NLM. Its shareholder base grew to over 20,000, reflecting strong farmer engagement.

BBSSL entered into strategic partnerships with institutions such as the Indian Council of Agricultural Research (ICAR), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), and NDDB. A dedicated vertical for traditional and vegetable seed segments was launched to promote sustainability and varietal diversity.

Chairman, NDDB and Managing Director, BBSSL signed a Memorandum of Understanding (MoU) for the bulk supply of fodder seeds to dairy cooperatives by BBSSL, in the presence of Dr Ashish Kumar Bhutani, Secretary, Ministry of Cooperation, Government of India. The MoU aims to create an enabling environment for facilitating the usage of quality seeds of fodder and other crops through the network of dairy cooperatives, milk producer organisations, PACS, and Fodder Plus FPOs. This MoU will ensure high-quality certified seed availability to farmers, provide

technical support, maintain quality standards, provide advisory services to dairy cooperatives and promote awareness of BBSSL's activities and the "Bharat Beej" brand.

BBSSL contributed to building a robust cooperative seed ecosystem, aligned with NDDB's mission of self-reliant, farmer-centric rural development.

## PROPOSED MULTI-STATE COOPERATIVE SOCIETIES

During the "Workshop on Sustainability and Circularity in the Dairy Sector", an event organised by DAHD, Government of India, the Hon'ble Union Home and Cooperation Minister offered strategic guidance. The key areas of focus were extending the reach of input services to benefit a larger number of farmers by integrating them into the cooperative framework, developing a scientific roadmap for the utilisation of fallen cattle and buffalo carcasses, and enhancing sustainability and circularity within the dairy sector through improved manure management.

In direct response to this guidance and as a tangible outcome of the workshop, NDDB is actively working to establish Multi-State Cooperative Societies. The objective of these societies is to materialise these interventions through institutions led by cooperatives. These cooperatives are designed to provide extensive technical



support to primary cooperatives, encompassing the production of optimised cattle feed and supplements from existing or new facilities, the creation of a national supply grid for feed and silage, and the deployment of trained veterinarians and AI workers across various milk sheds.

Ultimately, these cooperatives are positioned to play a critical role in strengthening rural livelihoods, promoting sustainability, and fostering self-reliance through the cooperative framework.

## WORKSHOP ON EXPANDING COVERAGE OF DAIRY COOPERATIVE SOCIETIES (DCSSs)

NDDB hosted a national-level workshop titled “Expanding Coverage of DCSs in the Country”. The event saw participation from key stakeholders of the dairy sector, including senior officials from Ministry of Cooperation, Government of India; Department of Animal Husbandry and Dairying, Government of India; NDDB; Registrars of Cooperative Societies; Milk Commissioners; Managing Directors of State Milk Federations; and CEOs of Milk Producer Organisations (MPOs).

NDDB emphasised the critical importance of replicating successful cooperative models to develop a comprehensive action plan for expanding dairy cooperative coverage. The discussions highlighted the significant role of dairying in enhancing farmer income, with a particular focus on empowering women members. Participants also acknowledged the positive impact of NDDB's interventions and schemes, such as the NPDD, in bolstering village-level infrastructure. The consensus was that universal coverage of dairy cooperatives in all potential villages is a crucial necessity.

Drawing from the successful outcomes of pilot initiatives conducted in previously uncovered regions of Haryana, Madhya Pradesh, and Karnataka, NDDB officially launched a new scheme. This programme is designed to provide support to 1,000 Multipurpose Primary Agricultural Cooperative Credit Societies (MPACS) via milk unions and MPOs. All states were encouraged to actively participate in this scheme, aligning with the national vision of ‘Sahkar-se-Samridhi’.

The workshop contributed to the development of the Margdarshika for WR 2.0, aligning with NDDB's efforts to expand cooperative-led growth in the dairy sector.



*Dr Meenesh Shah, Chairman, NDDB during his address at the Workshop on Expanding Coverage of Dairy Cooperative Societies in Country in the presence of Dr Ashish Kumar Bhutani, Secretary, Ministry of Cooperation, Government of India, Ms Varsha Joshi, Additional Secretary, Department of Animal Husbandry and Dairying, Government of India and Shri Pankaj Bansal, Additional Secretary, Ministry of Cooperation, Government of India*



Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation launching the calendar of annual activities for the International Year of Cooperatives 2025 in the presence of Shri Murlidhar Mohol ji, Hon'ble Union Minister of State for Cooperation; Shri Eknath Shinde ji, Deputy Chief Minister of Maharashtra; Shri Ajit Pawar ji, Deputy Chief Minister of Maharashtra and Shri Babasaheb Mohanrao Patil ji, Minister of Cooperation, Government of Maharashtra

## CELEBRATION OF INTERNATIONAL YEAR OF COOPERATIVES (IYC) 2025

NDDB launched a series of initiatives to commemorate the International Year of Cooperatives (IYC) 2025, as declared by the United Nations General Assembly. The theme, "Cooperatives Build a Better World", highlighted the relevance of cooperatives in achieving sustainable development goals.

The Hon'ble Prime Minister of India, Shri Narendra Modi ji, inaugurated IYC 2025 during the ICA Global Cooperative Conference and General Assembly held in New Delhi.

NDDB organised outreach activities to promote awareness and strengthen the cooperative spirit among dairy farmers. These activities also aimed to expand the cooperative footprint across rural India. NDDB facilitated 587 events, including village-level training sessions for approximately 23,000 participants. These efforts reflected NDDB's commitment to reinforcing the role of cooperatives in driving inclusive rural growth.

## OBSERVANCE OF 71ST ALL INDIA COOPERATIVE WEEK THROUGH "WHEELS OF COOPERATION" CAMPAIGN

NDDB organised a cooperative campaign under the theme "Role of Cooperatives in Building Viksit Bharat" through the "Wheels of Cooperation" initiative. The campaign included participation from Amul Dairy, Baroda Dairy, Sumul Dairy, Amidhara Fruit and Vegetables Cooperative Ltd, Valsad, Godavari-Khore Milk Union, Kopergaon, and Sahyadri Farms, Nashik. It aimed to strengthen inter-sectoral linkages and raise awareness of cooperative-led efforts in agriculture and allied sectors. NDDB facilitated interactions among participants to encourage knowledge sharing, adoption of sustainable practices, and circular economy solutions.

Demonstrations and discussions during the period highlighted best practices in Total Mixed Ration (TMR) feeding, the utilisation of renewable energy for irrigation, efficient manure composting techniques, and soil enrichment using organic inputs. This strategic initiative successfully showcased the significant potential of multi-sector cooperatives in fostering inclusive growth, enhancing rural income, and promoting environmental sustainability.





*Dr Meenesh Shah, Chairman, NDDB along with the leaders and members of Dairy, Manure, Organic and Solar cooperatives of Anand's Mujkuva Village*

## REGISTRATION AND CERTIFICATION OF MUJKUVA ORGANIC FARMERS' COOPERATIVE SOCIETY LTD.

NDDB facilitated the registration of Mujkuva Organic Farmers' Cooperative Society Ltd. in Mujkuva village and enrolled 21 farmers as founding members. All members received first-year organic certification under the Participatory Guarantee System (PGS).

The registration certificate was presented during a formal event attended by Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying and Union Minister of Panchayati Raj; Ms Varsha Joshi, Additional Secretary, DAHD and Shri Meenesh Shah, Chairman, NDDB.

This intervention established a cooperative framework for organic farming at the village level. It is expected to support collective marketing of certified produce, improved access to premium markets, enable better price realisation, promote sustainable farming, improve soil health, and enhance food safety. It also provides a replicable approach for villages pursuing organic transitions, aligning with NDDB's sustainability goals.



*Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Ms Varsha Joshi, Additional Secretary, DAHD, Government of India and Shri Meenesh Shah, Chairman, NDDB presenting the cooperative registration certificate to its members*

# PROFESSIONAL MANAGEMENT AND SUPPORT TO DAIRY COOPERATIVES

NDDDB has been playing a pivotal role in developing the dairy sector in the country over the past six decades by nurturing and promoting Producer Owned Institutions to improve the livelihoods of crores of dairy farmers. At the specific request of state governments, NDDDB has been undertaking management and dairy development activities in various parts of the country. NDDDB is presently managing the operations of Jharkhand Milk Federation (JMF), Varanasi Milk Union, West Assam Milk Producers' Cooperative Union Limited (WAMUL), East Assam Milk Producers' Cooperative Union Ltd (EAMUL), North East Dairy and Foods Limited (NEDFL), The Vidarbha Marathwada Dairy Development Project (VMDDP), Ladakh Dairy Cooperative Federation Ltd, Chhattisgarh Cooperative Dairy Federation, and Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit.







## JHARKHAND MILK FEDERATION (JMF)

NDDB has been managing the operations of Jharkhand State Cooperative Milk Producers Federation Limited (JMF) since April 2014. During the last eleven years of the MoU between NDDB & Government of Jharkhand, there has been a significant improvement in the key parameters of dairy development in the state.

### KEY PARAMETERS OF DAIRY DEVELOPMENT IN THE STATE

Particulars	Unit	(Base Year) 2013-14	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	261	1147
Villages covered	Nos.	261	3409
Active Pourers	Nos.	2335	64563
Milk Procurement	TKgPD	11.48	203.24
Milk Sales	TLPD	11.09	177.72
Milk Bill payments through DBT	₹ Crore	8.92	278.6
Turnover	₹ Crore	-	441

The federation received the first prize from the Indian Dairy Association (IDA) for Best Packaging under the less than 2 LLPD category, recognising its 1 ML packs of Rabri (80 gm) and Gulab Jamun (250 gm). The establishment of a state-of-the-art Central Laboratory was also completed during the year under NPDD.

With the help of NDDB and Sustain Plus, JMF is executing a manure management project through 100 units of Gobar Gas plants, and all are in operation. This initiative, on

one hand, is reducing the drudgery of rural women and on the other harnessing renewable energy resources and producing organic manure from bio gas slurry at the village level itself, which is being used for their farms, resulting in a reduction of carbon footprint. The excess slurry is converted to organic fertiliser in its slurry processing plant.

JMF is implementing the ABIP-IVF-ET project under the RGM of GoI. The main objective of the programme is to produce high genetic breed female calves with 90 per cent

accuracy through sex sorted semen, which can increase milk production in a short period. Till March 2025, JMF has established 27 pregnancies in selected recipients’ animals through this latest technology.

JMF has completed the registration of 2 Fodder FPOs & 2 Honey FPOs in Ranchi and Lohardaga districts, and activities by them have been initiated in 2024-25.

A pilot project for leftover pea pods in Mother Dairy, Ranchi, was undertaken for the production of EPP silage. Under the pilot project, 53.76 MT EPP silage was produced and sold. For further expansion of the project, a project proposal has been sanctioned by the Tata Trust for supporting JMF.

Jharkhand State Implementing Agency (JSIA) undertook the AI activities in Jharkhand to further strengthen the AI operations in the state. JMF through NDS facilitated more than 74000 AIs covering 12 districts of Jharkhand in its 501 AI centers.

## VARANASI MILK UNION

NDDDB continued to manage the Varanasi Milk Union during 2024–25. Under the management of NDDDB, the Union witnessed annual growth of almost 100 per cent (CAGR) in terms of milk procurement by establishing new Dairy Cooperative Societies (DCS) and covering a greater number of villages. The average milk procurement price paid to producers stood at ₹43.93 per kg during 2024-25, registering a growth of 40 per cent over the procurement price of ₹31.30 per kg at the time of takeover. Milk collection and chilling facilities were further strengthened by installing 250 Data Processing Milk Collection Units (DPMCU), 15 Automated Milk Collection Units (AMCU) and 15 Bulk Milk Coolers (BMCU) to improve the quality of milk by ensuring proper chilling. Input services extended to member farmers included the supply of cattle feed, area-specific mineral mixtures, and feed supplements at affordable prices.

### KEY PARAMETERS OF DAIRY DEVELOPMENT

Particulars	Unit	(Base Year) 2021-22	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	238	532
Villages covered	Nos.	238	532
Active Pourers	Nos.	6400	17350
Milk Procurement	TKgPD	9.7	96.7
Milk Sales	TLPD	9.2	20.6
Milk Bill payments through DBT	₹ Crore	11.07	155.1
Turnover	₹ Crore	25.34	206.1







*Dr Meenesh Shah, Chairman, NDDB appraising Shri Manoj Kumar Singh, Chief Secretary, Government of Uttar Pradesh about the progress of Varanasi Milk Union*

The union marketed an average of 20 thousand litres per day (TLPD) of packed liquid milk under the 'Parag' brand during 2024-25, compared to 9.25 (TLPD) at the time of takeover, along with value-added products such as paneer, ghee, curd, and lassi. Annual turnover increased significantly to ₹206 crore in 2024–25, registering a 20 per cent growth over the previous year's turnover of ₹172 crore.

During the reporting period, implementation of the NDERP production module commenced, aiming to automate plant-level operations and integrate production with other union-level processes for improved operational efficiency.

#### **THE UNION RECEIVED THE FOLLOWING FINANCIAL ASSISTANCE FROM NDDB:**

- ₹1,150 lakh as an interest-free loan for civil works related to the new fermented product plant
- ₹97.77 lakh as an interest-free loan for infrastructural augmentation
- ₹164.67 lakh as an interest-free loan and ₹34.33 lakh as a grant under the "Revitalising Promising Producers' Owned Institutions" scheme
- ₹12.90 lakh as a grant under the "Support to Strengthening Market Operations of Producers' Owned Institutions" scheme

These funds were utilised to strengthen procurement logistics, enhance processing infrastructure, and increase brand visibility.

Input services extended to member farmers included the supply of cattle feed, area-specific mineral mixtures, and feed supplements at affordable prices. The union also organised training and capacity-building programmes for dairy farmers, route supervisors, marketing personnel, and prospective employees.

The union marketed an average of 16.33 thousand litres per day (TLPD) of packed liquid milk under the 'Parag' brand, along with value-added products such as paneer, ghee, curd, and lassi. Annual turnover increased significantly to ₹172 crore in 2023–24, registering a 220 per cent growth over the previous year's turnover of ₹54 crore.

The foundation stone for a 50 MTPD fermented product section was laid by Chairman, NDDB. Commissioning work for a 20 MTPD powder plant and a sweet-making section within the dairy premises was also underway during the year.

A dung-based biogas plant installed at the dairy premises supplemented energy requirements, thereby reducing dependence on conventional fuels. This initiative contributed to a reduction in carbon emissions and created an additional income stream for dairy farmers. The intervention also aligned with national objectives under the Swachh Bharat Mission and Green Energy Programme.

Dr Meenesh Shah, Chairman, NDDB, met Shri Manoj Kumar Singh, Chief Secretary, Uttar Pradesh, and updated him on the initiatives of NDDB and its subsidiaries in Varanasi Milk Union. They also discussed the proposed MoUs to be signed between NDDB and Pradeshik Cooperative Dairy Federation / Milk Union for leasing three dairy plants and a cattle feed plant.

## WEST ASSAM MILK PRODUCERS' COOPERATIVE UNION LIMITED (WAMUL)

NDDB continued to manage West Assam Milk Producers' Cooperative Union Limited (WAMUL) popularly known as Purabi Dairy.

### KEY PARAMETERS OF DAIRY DEVELOPMENT

Particulars	Unit	(Base Year) 2008-09	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	65	1346
Villages covered	Nos.	65	3000
Active Pourers	Nos.	1000	51100
Milk Procurement	TKgPD	4.5	161
Milk Sales	TLPD	4.5	136.7
Milk Bill payments through DBT	₹ Crore	4.5	134.04
Turnover	₹ Crore	3.12	307

WAMUL will pay an additional amount of around ₹3.00 crore (₹1.00 per kg) as an additional milk procurement price to the dairy farmers.

This year WAMUL created an additional bulk milk cooling capacity of 56,000 litres in its area of operations by commissioning 08 BMC centres and 16 BMC units on a franchisee basis that played a significant role in further increasing the base of its dairy farmers. WAMUL saw a jump of around 30 per cent in the number of functional dairy farmers that were associated with it during 2024-25 over the previous year.

WAMUL continued to provide various input services such as doorstep AI delivery, distribution of cattle feed and feed supplements at affordable rates besides arranging field demonstrations, training and capacity building programmes for its dairy farmers as the End Implementing Agency of the formal dairy value chain component of the World Bank financed Assam Agribusiness and Rural Transformation Project (APART). As on March 2025, WAMUL reported delivery of 10,84,665 doorstep AI services in 3,393 villages through a network of 373 mobile AI technicians (MAITs) in the districts falling under APART.



Exchange of MoU between NDDB and WAMUL in the presence of Shri Jogen Mohan Ji, Hon'ble Minister of Cooperation, Government of Assam; Shri Pijush Hazarika Ji, Hon'ble Minister of Water Resources, Government of Assam and Dr B Kalyan Chakravarthy, Additional Chief Secretary, Department of Cooperation, Government of Assam





Further, as on March 2025, birth of 4,14,497 calves (of which 212,228 are female calves) have been reported.

In 2024-25, WAMUL sold 4450 tons of cattle feed and 34 tons of mineral mixture. Moreover, during the year, WAMUL had commenced commercial sales and distribution of its cattle feed in the open market. Besides, during the year WAMUL distributed 5.30 lakh hybrid napier slips and around 5 tons of fodder seeds to its dairy farmers. Further, WAMUL arranged selling of around 14 tons of silage to its dairy farmers and undertook 119 numbers of silage demonstrations where around 90 per cent adoption rate by the dairy farmers had been reported. During the year, WAMUL covered around 4000 animals owned by around 2000 dairy farmers across 800 villages in its area of operation through its ration balancing programme (RBP). WAMUL also conducted vaccination and health camps during the year, including Ethno Veterinary camps to safeguard dairy animals against several diseases.

WAMUL has installed 188 solar-powered automatic milk collection systems to fortify its village-based milk procurement activities in an environmentally sustainable manner. A slurry processing center, a joint initiative funded by NDDDB, Sustain Plus Energy Foundation (an affiliate of Tata Trusts), and WAMUL, was successfully commissioned at Maloibari revenue village in the Khetri sub-division of the Kamrup (Metropolitan) district. Furthermore, a Memorandum of Understanding (MoU) was executed between WAMUL and NDDDB Mrida Ltd., a wholly owned subsidiary of NDDDB, to undertake the commercial operations of the slurry processing center. This initiative aims to sell various slurry-based organic manure products

under the brand name "Purabi-Sudhan". The spent slurry will be supplied to the Maloibari center by the Gobar cooperative society, "Sakhi Jaibik Khar Samabai Samittee Ltd.", which is comprised of 100 women beneficiaries. This society was registered as part of the manure management project. During the year, this Gobar cooperative society received a payment of ₹52,000 for carbon credits, which was presented by Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation. Additionally, WAMUL installed 150 flexi-type biogas units, each with a capacity of 2m<sup>3</sup>, with financial support of ₹47 lakh received from the Ministry of New and Renewable Energy (MNRE), Government of India, facilitated through NDDDB Mrida Ltd. under the MNRE biogas programme. WAMUL also executed an MoU with NDDDB for further installations of flexi-type biogas units with the same capacity based on the Zakariyapura model, at an estimated cost of ₹1.70 crore.

WAMUL, in its capacity as a Central Nodal Agency (CNA), received administrative approval amounting to ₹11.76 crore. This funding was granted under Component A of the central sector scheme, the National Programme for Dairy Development (NPDD), to implement activities aimed at strengthening its village-based milk procurement systems. These enhancements are being executed within both its own operational areas and those of EAMUL. Furthermore, during the year, WAMUL was sanctioned a loan assistance of ₹94 crore from NDDDB. This loan is supported by an interest subvention funded under the central sector scheme, the Animal Husbandry Infrastructure Development Fund (AHIDF). The primary objective of this loan is to expand the processing capacity of WAMUL's existing dairy plant in Guwahati from 150 TLPD to 300

TLPD. Additionally, the funds will be used to increase curd manufacturing capacity from 30 MTPD to 50 MTPD and to establish a new ice cream plant with a capacity of 20 TLPD.

Towards the end of the year, the World Bank Country Director, Mr Auguste Tano Kouame had visited WAMUL on 27 February 2025 to see the newly expanded dairy plant facility of WAMUL under APART at the premises of Purabi Dairy in Guwahati. The Country Director was accompanied by Mr Bekzod Shamsiev, Task Team Leader (TTL), APART, Ms Junko Onishi, Lead Social Protection Specialist, Programme Leader, World Bank, Shri Virendra Mittal, IAS, SPD, ARIAS Society, Shri Anand Malhotra, IAS, District Commissioner, Hojai and other key officials of ARIAS Society.

During the fiscal year, a woman dairy farmer, a Dairy Cooperative Society (DCS), and a Mobile AI Technician (MAIT) from our network were honored with the Rashtriya Gopal Ratna Award 2024, conferred on them on National

Milk Day. Furthermore, in March 2025, Shri Bharat Chandra Kalita, a dairy farmer member of WAMUL's management committee, was nominated to receive the Axom Gaurav award, Assam's third-highest civilian honor. This recognition acknowledges his pioneering role as a progressive dairy farmer in instigating a milk revolution in the Bajali district of Assam.

WAMUL successfully launched its new range of flavoured milk in 200 ml SKUs at an event in Guwahati. Throughout the year, WAMUL achieved daily sales of 1,24,300 litres of packed liquid milk and milk-equivalent products, including paneer, sweet curd, plain curd, lassi, cream, ghee, ice cream, and flavoured milk. This performance represents a growth of approximately 21% over the previous year. Additionally, the proportion of milk-equivalent products to packed liquid milk increased by over 3% compared to the prior year. This strong performance enabled WAMUL to record a provisional sales turnover of approximately ₹3,200 million for FY 2024-2025, which is about 19% higher than the sales turnover achieved in the previous financial year.

## EAST ASSAM MILK PRODUCERS' COOPERATIVE UNION LTD (EAMUL)

Under the management of NDDDB since 2023, East Assam Milk Producers' Cooperative Union Ltd (EAMUL) continued to carry out dairy development activities in its operational area covering 13 districts of North Bank Plains and Upper Brahmaputra Valley of Assam.

During this short period of two years of operation EAMUL has expanded its network of Dairy Cooperative Societies, enrolled more and more farmers under the ambit of dairy cooperative, ensured transparent and efficient operations in the milk collection process and established chilling infrastructure with a network of 13 BMC clusters. Regular payment to the milk producers is ensured and made only to their bank accounts through direct benefit transfer.

The milk union continued to provide various input and productivity enhancement services such as doorstep AI delivery, Ration Balancing, animal health services through EVM and distribution of cattle feed, feed supplements and fodder seeds at affordable rates, as well as organising field demonstrations, training sessions and capacity building programmes for its dairy farmers.

During the year, a total of 15,277 AIs were done through a network of 103 mobile AI technicians across 1,076 villages. Supplied 947 MT Compound Cattle Feed and 11.88 MT area specific mineral mixture to the dairy farmers at a reasonable rate. For capacity building of the stakeholders, various training and awareness

### KEY PARAMETERS OF DAIRY DEVELOPMENT

Particulars	Unit	(Base Year) 2022-23	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	0	367
Villages covered	Nos.	0	1046
Active Pourers	Nos.	0	8246
Milk Procurement	TKgPD	0	7.57
Milk Sales	TLPD	0	7.35
Milk Bill payments through DBT	₹ Crore	0	17.12
Turnover	₹ Crore	0	1797



programmes on BMC/DCS management, clean milk production, dairy animal management etc. are also being conducted regularly.

Under the White Revolution 2.0, EAMUL has formed 103 Multipurpose Dairy Cooperative Societies (MDCS) and applied for their registration.

To initiate the milk procurement operations NDDB has sanctioned a grant of ₹ 2.99 crore to EAMUL under NDDB's Revitalising Promising Producers' Owned Institution (RPPOI) scheme. This is in addition to the pro-bono service of NDDB officers deputed (valued at ₹ 1.30 crore till March 2025 for EAMUL alone).

To take forward cooperative dairying across Assam, North East Dairy and Foods Limited (NEDFL), a joint venture company of Government of Assam and NDDB was setup in January 2023. As the apex body, NEDFL will drive dairy development in the state through cluster based cooperative milk unions of Assam. NEDFL handles sales & marketing for all milk and milk products under the brand of "Purabi" and coordinates defence supplies by WAMUL. NEDFL has recorded average sales of 124 TLPD of milk and milk product equivalents in the financial year 2024-25. Two new

product categories (ice-cream and flavoured milk) were launched under the brand of "Purabi".

NEDFL has been allocated land and obtained administrative approvals for the establishment of 3 major milk processing plants- 1 LLPD plant at Dibrugarh, 1 LLPD plant at Jorhat, and 50 TLPD plant at Dhemaji. The implementation of all three projects will be underway soon.

Further, during a conclave on "Dialogue for Holistic Development of Livestock Sectors in the North East Region" held in Shillong, a Memorandum of Understanding (MoU) was signed between NEDFL and the Directorate of Dairy Development, Government of Assam. The signing took place in the presence of Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs, and other distinguished dignitaries. The agreement facilitates the transfer of the Milk Processing Plant located at Ghungoor, Silchar, in the Cachar district, for refurbishment into a 20 TLPD milk processing plant. This new facility will complement the procurement system through a producer company that is to be organised in the Barak Valley by NDDB Dairy Services.



Signing of an MoU between NEDFL and the Directorate of Dairy Development, Government of Assam in the presence of Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj, Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs and other distinguished dignitaries in Shillong

# LADAKH DAIRY COOPERATIVE FEDERATION LTD

Operating under the brand name Ladakh Oma, the Ladakh Dairy Cooperative Federation Ltd was established in October 2023 to transform the dairy sector in Ladakh and empower rural farmers. The Federation is managed by NDDDB through a five-year tripartite Memorandum of Understanding with the Ladakh Administration and the Ladakh Autonomous Hill Development Council (LAHDC). This strategic partnership aims to build a transparent, organised and sustainable dairy value chain, leveraging NDDDB’s managerial and technical expertise.

The milk is processed at a refurbished dairy plant in Leh and marketed as fresh pasteurised milk under the Ladakh Oma brand. It also runs a cooperative retail shop, offering high-quality milk at discounted prices to local consumers. Plans are underway to diversify the product line with curd and paneer.

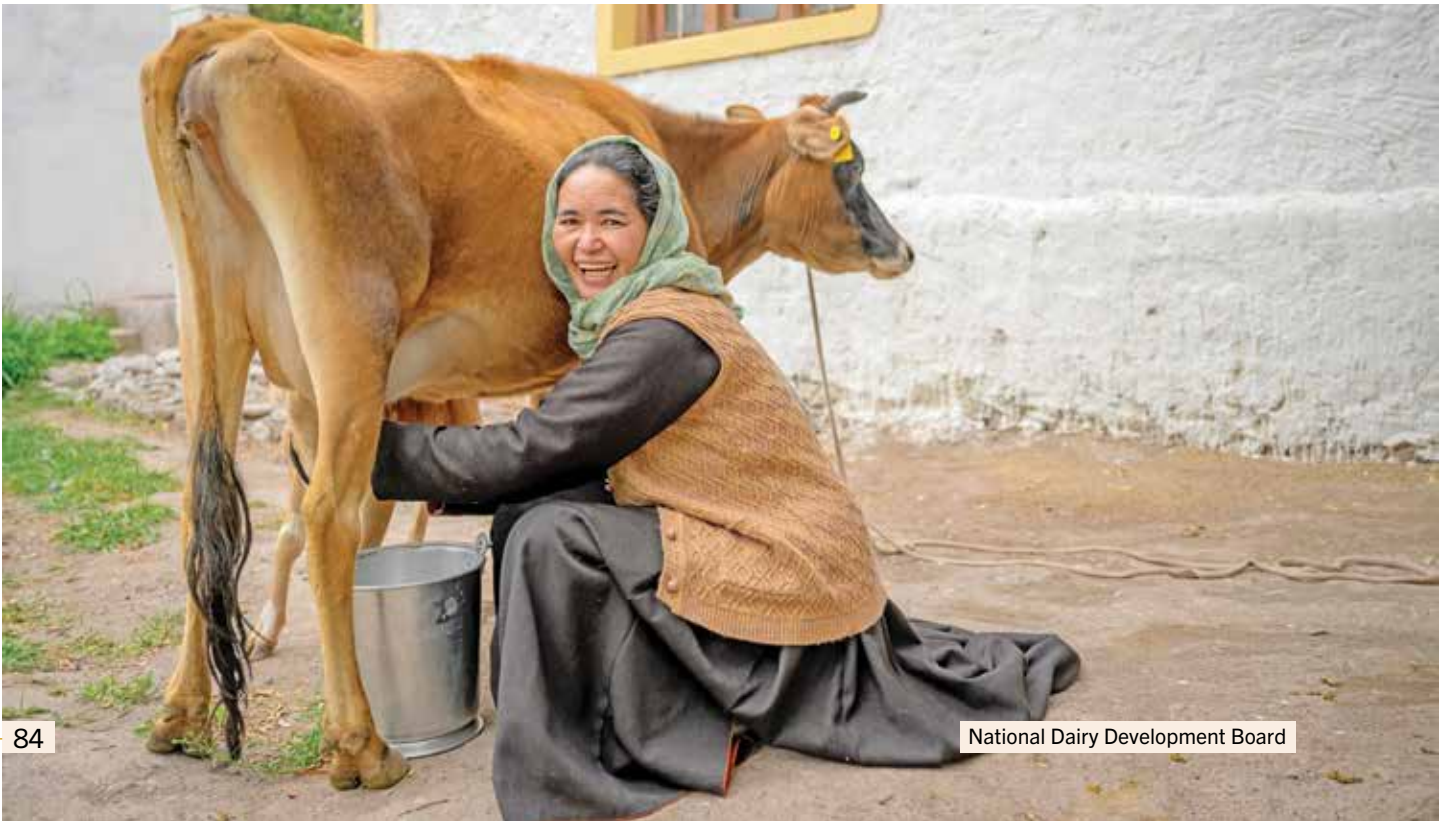
On the financial front, Ladakh Federation has paid over ₹ 4 crore to the milk producers towards milk payment during 2024-25. The federation has also benefited from substantial support through various schemes including ₹5.80 crore

(grant and loan) under the Revitalising Promising Producers’ Owned Institutions (RPPOI) scheme, ₹61.48 lakh from NDDDB for market operations and ₹2 crore from the Ladakh UT Government for plant expansion. Infrastructure development remains a top priority. Key initiatives included a 10 TLPD dairy processing plant in Kargil under the National Programme for Dairy Development (NPDD), installation of modular Bulk Milk Coolers (BMCs) in Kargil and Nubra and Ladakh’s first NABL-accredited quality assurance laboratory. Additional advancements comprise a mobile testing lab, a milk collection vehicle developed with NDDDB and Maruti Suzuki, and hygiene stations to promote best practices in milk handling.

Through these integrated efforts, the Federation is transitioning Ladakh’s dairy sector from an unorganised to an organised ecosystem, delivering better returns to farmers, ensuring reliable supply to institutional buyers like the Army and increasing local access to quality dairy products. The Federation’s commitment to excellence, transparency, and sustainability is setting new benchmarks for cooperative growth and rural prosperity in Ladakh.

## KEY PARAMETERS OF DAIRY DEVELOPMENT IN THE STATE

Particulars	Unit	(Base Year) 2023-24	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	1	24
Villages covered	Nos.	1	24
Active Pourers	Nos.	100	1200
Milk Procurement	TKgPD	0.45	4.5
Milk Sales	TLPD	0.2	6
Milk Bill payments through DBT	₹ Crore	-	4.12
Turnover	₹ Crore	0.617	1.105







Exchange of MoU between Dr Meenesh Shah, Chairman, NDDB and Ms Shahla Nigar, Secretary, Livestock Development Department, Government of Chhattisgarh in the presence of Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation; Shri Vishnu Deo Sai ji, Hon'ble Chief Minister of Chhattisgarh and Shri Vijay Sharma Ji, Hon'ble Deputy Chief Minister of Chhattisgarh

## CHHATTISGARH STATE COOPERATIVE DAIRY FEDERATION

NDDB signed an MoU with the Government of Chhattisgarh and the Chhattisgarh State Cooperative Dairy Federation (CGCDF), in the presence of Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation and Shri Vishnu Deo Sai ji, Hon'ble Chief Minister of Chhattisgarh, and Shri Vijay Sharma ji, Deputy Chief Minister of Chhattisgarh, to manage the operations of CGCDF and its units.

The partnership aims to expand cooperative structures and processing infrastructure while increasing milk production and market access. As part of the initiative, around 3,600 new Milk Producers' Cooperative Societies (MPCS) will be formed, enhancing outreach and farmer engagement. The initiative aims to support inclusive rural development and contribute to NDDB's mandate of cooperative

development. NDDB is working to streamline operations by ensuring timely milk bill payments to farmers, recovering outstanding marketing dues, and implementing an ERP system.

A pilot animal induction project is also underway in six districts—Kanker, Kondagaon, Mahasamund, Sarangarh, Jaspur, and Balrampur—targeting around 325 tribal households. Under this scheme, each tribal woman beneficiary receives support to purchase two milch cows, with 50 per cent grant from the State Government, 40 per cent as a bank loan, and the remaining 10 per cent as beneficiary contribution. The initiative is being implemented by CGCDF through NDS, a wholly owned subsidiary of NDDB.

### KEY PARAMETERS OF DAIRY DEVELOPMENT IN THE STATE

Particulars	Unit	(Base Year) 2024-25	Target 2031-32
Milk Pooling Points/ Dairy Coop Societies	Nos.	636	4600
Active Pourers	Nos.	26000	134000
Milk Procurement	TKgPD	70	700
Milk Sales	TLPD	42	490
Milk Bill payments to farmers	₹ Crore	85.5	-
Turnover	₹ Crore	120.4	-

## MAHARASHTRA RAJYA SAHAKARI DUDH MAHASANGH MARYADIT

An agreement was signed between the Government of Maharashtra and NDDB for the revival of Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit (MRSDMM), Mumbai—the apex organisation in the milk cooperative sector in Maharashtra. As per the agreement, NDDB assumed management of MRSDMM effective from 2nd May 2024.

Following the takeover, key financial obligations such as employee salaries, milk bills, and other payments have been regularised, bringing stability and renewed confidence in the organisation's operations.

In a significant move to support dairy farmers, MRSDMM increased the milk procurement price for cow milk

containing 3.5per cent fat and 8.5per cent SNF. The price was revised from ₹27.50 per litre plus ₹2.50 per litre milk handling charges and actual transportation costs, to ₹34.00 per litre plus ₹3.00 per litre milk handling charges and actual transportation costs payable to member milk unions. As part of the organisational restructuring, a Voluntary Retirement Scheme (VRS) was introduced.

Operational efficiency was further enhanced by reviving the 30 MTPD milk powder plant at Varvand, Pune, which had been non-functional for over a year. The plant is now operational and has successfully processed 190 TLPD of milk for conversion. MRSDMM has shown steady growth in both procurement and sales.

These developments mark a significant step forward in the revival and strengthening of MRSDMM, laying a solid foundation for sustainable growth in Maharashtra's dairy cooperative sector.

### KEY PARAMETERS OF DAIRY DEVELOPMENT IN THE STATE

Particulars	Unit	(Base Year) 2023-24	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	624	636
Villages covered	Nos.	13000	26000
Milk Procurement	TKgPD	93.6	130.51
Milk Sales	TLPD	75.09	82.54
Turnover	₹ Crore	215.86	199.44



Exchange of a tripartite MoU between the Government of Manipur, Manipur Milk Producers' Cooperative Union Ltd and NDDB in the presence of Shri N. Biren Singh ji, Hon'ble Chief Minister of Manipur and Shri Khashim Vashum ji, Hon'ble Minister for Animal Husbandry, Veterinary and Transport, Government of Manipur





*Dr Meenesh Shah, Chairman, NDDB presenting the dairy development plan for Madhya Pradesh to Dr Mohan Yadav ji, Hon'ble Chief Minister of Madhya Pradesh in the presence of Shri Rajendra Shukla ji, Hon'ble Deputy Chief Minister of Madhya Pradesh and Shri Laxman Patel ji, Hon'ble Minister of Animal Husbandry, Government of Madhya Pradesh*

## MANIPUR MILK UNION

A tripartite MoU was signed between the Government of Manipur, Manipur Milk Producers' Cooperative Union Ltd and NDDB on 31 January 2025 for cooperative dairy development in Manipur. The MoU was signed in the presence of Shri N. Biren Singh ji, Hon'ble Chief Minister of Manipur and Shri Khashim Vashum ji, Hon'ble Minister for Animal Husbandry, Veterinary and Transport, Government of Manipur. The MoU was signed by Dr Meenesh Shah, Chairman, NDDB; Shri Michael Achom, Secretary, Animal Husbandry & Veterinary Department, Government of Manipur; and Shri P. Sovachandra, Board of Administrators, Manipur Milk Producers' Cooperative Union Ltd. NDDB will manage the Union from April 2025.

NDDB has consistently provided support to the union through a variety of interventions. Under the Revitalising Promising Producers' Owned Institutions (RPPOI) scheme, a grant of ₹3 crore was disbursed to the Milk Union to refurbish and modernise its dairy processing infrastructure. Technical assistance was also extended to facilitate the development and subsequent market launch of a new milk variant. The Union has also initiated the supply of milk to the Indian Army. A comprehensive Dairy Development Plan has been submitted to the Government of Manipur to achieve cooperative coverage in viable villages and promote integrated dairy activities through Multipurpose Dairy Cooperative Societies (MDCS) and Multipurpose Primary Agricultural Cooperative Credit Societies (MPACS).

## STRENGTHENING DAIRYING IN MADHYA PRADESH

Chairman, NDDB met Dr Mohan Yadav ji, Hon'ble Chief Minister of Madhya Pradesh (MP) in November, 2024 to discuss the implementation of dairy development schemes in MP. The meeting focussed on expanding and strengthening dairy cooperatives in Madhya Pradesh. NDDB expressed its commitment to extend support for increasing milk procurement and marketing, expanding the capacity of dairy plants, improving animal productivity through breeding, nutrition and animal health initiatives.

Chairman, NDDB also called on Shri Shivraj Singh Chouhan ji, Hon'ble Union Minister of Agriculture and Farmers' Welfare, to discuss the farmer-centric activities being undertaken by NDDB and its subsidiaries for the inclusive development of farmers through dairy and agriculture. He was also apprised about NDDB's dairy development interventions in Madhya Pradesh.



*Dr Meenesh Shah, Chairman, NDDB launching the Market Support Programme along with Shri Vijay Amruta Kulange, MD, The Odisha State Cooperative Milk Producers' Federation Limited (OMFED)*

## SUPPORT FOR DAIRY DEVELOPMENT IN ODISHA

During the year, NDDB undertook a range of strategic initiatives in Odisha in collaboration with the Government of Odisha and the Odisha State Cooperative Milk Producers' Federation (OMFED), aimed at strengthening the dairy and livestock sectors through institution-building, programme implementation, and infrastructure development.

On 13 January 2025, Smt Droupadi Murmu ji, the Hon'ble President of India, virtually inaugurated initiatives implemented by NDDB in the Mayurbhanj district of Odisha. Under the Rashtriya Gokul Mission, a Cattle Induction Programme was launched for the distribution of 3,000 high-genetic-merit cattle to identified beneficiaries. To address nutritional challenges among school-aged children, the Gift Milk Programme was introduced, providing 200 ml of fortified flavoured milk daily to 1,200 schoolchildren in Rairangpur municipality. Additionally, the Market Support Programme was launched to strengthen procurement, processing, and marketing infrastructure, to double the State's milk procurement capacity from 5 lakh litres per day to 10 lakh litres per day. The Gift Milk initiative was further scaled up through an MoU between NDDB Foundation for Nutrition and the Rourkela Steel Plant (SAIL), targeting 1,575 additional children during 2025–26.

During the Monsoon Meet held at Lok Seva Bhawan, Bhubaneswar, NDDB signed a tripartite agreement with the Government of Odisha and the Odisha State Cooperative Milk Producers' Federation Limited (OMFED) aimed at transforming the dairy sector in Odisha by undertaking various initiatives, including strengthening and expanding coverage of dairy cooperatives through a comprehensive dairy development plan. The MoU was signed by Dr Meenesh Shah, Chairman, NDDB; Shri Ramashis Hazra, Director, AH&VS, Government of Odisha and Shri Vijay Amruta Kulange, MD, The Odisha State Cooperative Milk Producers' Federation Limited (OMFED) in the gracious presence of Shri Mohan Charan Majhi ji, Hon'ble Chief Minister of Odisha; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs; Ministers of Animal Husbandry and Dairying from 15 States and other dignitaries. In addition, an MoU was executed between NDDB and OMFED for the establishment of a biogas plant at Arilo Dairy, Cuttack, based on the Varanasi model, aimed at promoting circularity and sustainable energy use in dairy operations.



## SUPPORT FOR DAIRY DEVELOPMENT IN GOA

Dr Meenesh Shah, Chairman, NDDB met Dr Pramod Sawant ji, Hon'ble Chief Minister of Goa and extended support in preparing a dairy development plan that would take forward the dairy sector in the state. At the request of the State Government, NDDB provided management support to Goa Dairy for streamlining its operations. A comprehensive dairy development plan was launched with NDDB's support under the NPDD scheme of the Department of Animal Husbandry and Dairying, Government of India, to strengthen existing dairy cooperatives and establish new ones in uncovered areas. Additionally, as part of this collaboration, Goa Dairy signed an MoU with NDDB to establish the Banas Model of Compressed Bio Gas Plant in Goa. With support from the District Mineral Foundation (DMF), Goa 24x7 mobile veterinary ambulance services were introduced in the state. To address the shortage of cattle feed, NDDB Dairy Services began supplying quality cattle feed and silage at lower rates than the prevailing market prices.



*Dr Pramod Sawant ji, Hon'ble Chief Minister of Goa along with Dr Meenesh Shah, Chairman, NDDB and senior officials of NDDB discussing about the Dairy Development for Goa*

## SUPPORT TO OTHER STATES

At the request of respective state governments and milk unions, NDDB has provided manpower support in Goa, Aurangabad, Banas Dairy, Himachal Pradesh Federation,

Ernakulam Milk Union, Delhi Milk Scheme etc. NDDB has also extended and deployed manpower support on pro bono in all the managed units.



## THE VIDARBHA MARATHWADA DAIRY DEVELOPMENT PROJECT (VMDDP)

VMDDP was conceived to ensure dairy development among poor dairy farmers in the drought-prone and suicide-prone Vidarbha and Marathwada regions of Maharashtra, to mitigate farmers' distress and increase farm incomes. This project is being implemented jointly by NDDB, through its wholly owned subsidiary Mother Dairy Fruit and Vegetable Pvt. Ltd (MDFVPL), and Marathvarhad milk producer organisation (MVMPO) and the Government of Maharashtra. An MoU was signed between NDDB and the Government of Maharashtra (GoMH) in December 2013.

Accordingly, in Oct. 2016, Mother Dairy Fruit and Vegetable Pvt. Ltd, a wholly owned subsidiary of NDDB, refurbished the Government Dairy Plant, Nagpur, with an investment of ₹ 30 crore to process 3 LLPD milk and set up a milk procurement network with an investment of ₹ 72 crore to provide forward linkage to the dairy farmers of the region.

### KEY PARAMETERS OF DAIRY DEVELOPMENT IN THE PROJECT

Particulars	Unit	(Base Year) 2016-17	2024-25
Milk Pooling Points/ Dairy Coop Societies	Nos.	310	2497
Villages covered	Nos.	482	3396
Active Pourers	Nos.	8396	32886
Milk Procurement	TKgPD	10	405
Milk Sales	TLPD	3.5	63.53
Milk Bill payments through DBT	₹ Crore	13.76	2391

Subsequently, in direct alignment with the Ministry of Cooperation's objectives to strengthen producer-level institutions at the grassroots level, NDDB instructed its wholly-owned subsidiary, NDDB Dairy Services (NDS), to facilitate the establishment of producer-centric entities. As a result, NDS successfully incorporated "Marathvarhad Milk Producer Company" on January 9, 2025. The milk procurement operations previously managed by Mother Dairy have now been transitioned to this newly formed Milk Producer Organisation (MPO). Shri Nitin Gadkari ji, Hon'ble Union Minister for Road Transport and Highways officially inaugurated the operations of this MPO on March 16, 2025. This event was attended by Dr Meenesh Shah, Chairman, NDDB; Managing Director, NDDB Dairy Services; Managing Director, Mother Dairy; Mrs. Varsha Nanasaheb Chavan, Chairman, Marathvarhad Milk Producer Organisation; and other distinguished dignitaries. The formation of this MPO is intended to institutionalise the procurement network established by Mother Dairy and support its expansion across all 19 districts of the Vidarbha & Marathwada region. This transition would ensure greater farmer ownership, profit-sharing, and empower farmers with a sustainable and self-reliant dairy enterprise. Currently, this MPO has 35,000 women pourer members spread across 3,300 villages of 11 districts of the region. This woman-owned

and led MPO will work towards empowering women dairy farmers of the region to establish dairy business as a sustainable livelihood. The initiative will not only increase farmers' income but will also accelerate women's economic independence.

During the inauguration of the Marathvarhad MPO, the foundation stone for the DHARA food oil packaging station was also laid. Soybean is a major oilseed crop in the Vidarbha region, and rice is another important agricultural crop. Given the potential for oil processing in the area, this plant, set up by Mother Dairy, will directly benefit soybean and rice farmers as well as local processors. The plant's initial production capacity will be 500 metric tonnes per month, with plans to scale up to 1500 metric tonnes. It will be equipped with modern technology to ensure high-quality edible oil production.

Earlier, the Government of Maharashtra issued Government resolution on 16th September 2024 for approval of the phase II of the Vidarbha Marathwada Dairy Development Project with a total outlay of ₹ 328.42 crore, with financial support of ₹ 149.26 crore from Government of Maharashtra, including ₹ 142.82 crore in the form of subsidies by way of direct benefit transfer (DBT) into the bank accounts of beneficiary dairy farmers. It is expected to benefit around 1.0 lakh dairy farmers of the region.





Shri Nitin Gadkari ji, Hon'ble Union Minister for Road Transport and Highways during the inauguration of newly formed MPO 'Marathvarhad Milk Producer Company' in the presence of Dr Meenesh Shah, Chairman, NDDB; Dr C P Devanand, Managing Director, NDDB Dairy Services; Shri Manish Bandlish, Managing Director, Mother Dairy and Smt Varsha Nanasaheb Chavan, Chairman, Marathvarhad Milk Producer Organisation

In Phase II, it is planned to expand the milk procurement operations from the current 11 districts to all 19 districts of the Vidarbha and Marathwada regions. It is estimated that over the next few years, the Marathvarhad MPO will have 75,000 dairy farmers as its members and will procure around 10 Lakh Kg of milk every day by March 2028.

Keeping this in view, Mother Dairy has initiated work on a state-of-the-art mega dairy project in Nagpur. Once completed, this mega-manufacturing plant can process 6 lakh litres of milk every day with a provision for expansion to 10 LLPD. The Value-Added Dairy Products (VADP) such as lassi, mishti doi, flavoured milk, sweets and ghee can also be manufactured in this facility, facilitating market expansion in western and southern India in addition to providing better service to the current customers.

The doorstep AI service being implemented in the project area by NDDB Dairy Services (NDS) under RGM continued

to progress well. Currently, more than 500 AI centres are functional in the ten districts of the project area and around 3.35 lakh AIs have so far been done, resulting in 1.15 lakh pregnancies and 34500 superior calves on the ground.

In alignment with the Government of India's 100 Fodder Farmer Producer Organisations (FPO) scheme, the 'Suchara Fodder FPO' was established in the Wardha district of the project area. This was done in partnership with the Kamalnayan Jamnalal Bajaj Foundation, which served as the Cluster Based Business Organisation (CBBO). Within a brief period of ten months, the Suchara Fodder FPO has grown its member base to nearly 800 equity shareholders. Under the auspices of this FPO, green fodder is being cultivated as the exclusive crop on more than 50 acres of land. Additionally, the FPO procured a high-performance chopper-baler machine, which was used to produce nearly 200 MT of silage during the year.

## INTERVENTIONS FOR STRENGTHENING DAIRY COOPERATIVES

NDDB strengthened DCS and POIs through targeted interventions. The objective was to build institutional capacity, streamline operations, and support sustainable growth of dairy cooperatives.

## REVITALISATION OF PROMISING PRODUCER-OWNED INSTITUTIONS

NDDB introduced the “Revitalising Promising Producers’ Owned Institutions” scheme in 2022–23. The five-year scheme aims to support the select POIs in strengthening their business operations, expanding their market share, and building self-reliant institutions that serve the interests of all stakeholders.

Seven proposals were approved during the year. These included interventions for Bhandara Milk Union, Solapur Milk Union, East Assam Milk Union Limited (EAMUL), Ladakh UT Milk Federation, Manipur Milk Union, Odisha State Cooperative Milk Producers’ Federation (OMFED), and Mahananda Dairy. The combined financial outlay was ₹31.55 crore, comprising ₹11.85 crore as interest-free loans, ₹18.41 crore as grant-in-aid, and ₹1.29 crore as institutional contributions.

In total, 13 projects were sanctioned under the scheme. The approved outlay stood at ₹69.36 crore, which included ₹29.56 crore in interest-free loans, ₹35.67 crore as grant-in-aid, and ₹4.13 crore as contributions from respective institutions. The additional supported institutions were Midnapore Milk Union, Varanasi Milk Union, Ernakulam Milk Union, West Assam Milk Union, Sundarbans Milk Union, and Ferozepur Milk Union. These interventions have helped rejuvenate operations, enhance institutional capacity, and improve overall performance of the supported POIs.



Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation along with Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj and Dr Meenesh Shah, Chairman, NDDB supporting Manipur Milk Producers Cooperative Union Ltd under NDDB's "Revitalising Promising Producers' Owned Institutions"





## MARKETING SUPPORT FOR PRODUCER-OWNED INSTITUTIONS UNDER NDDB MARKETING SCHEME

NDDB implemented the centrally sponsored scheme 'Support to Strengthen Marketing Operations of Producers' Owned Institutions' to improve the market presence and efficiency of dairy cooperatives. The scheme was approved for FY 2021–22 to FY 2025–26 with a total outlay of ₹30 crore.

By the end of FY 2024–25, NDDB had supported 25 POIs. The total sanctioned outlay stood at ₹25.73 crore, with ₹13.72 crore contributed by POIs and ₹12.01 crore released as grant-in-aid by NDDB. An additional ₹3 crore was sanctioned for brand development and consultancy services related to sales and distribution.

NDDB supported the launch of three new cooperative dairy brands: 'Medini' (Midnapore, West Bengal), 'Mulkanur' (Mulukanoor, Telangana), and 'Ladakh Oma' (Leh, Ladakh). Additionally, seven existing brands received assistance for redesigning their branding and packaging. These brands included Parag (Varanasi), Devbhog (Chhattisgarh), Milma (Kerala), Purabi (Assam), Mahanand (Maharashtra), Medha (Jharkhand), and Saras (Rajasthan).

To improve cold chain infrastructure, POIs procured and installed over 1,600 milk coolers. Around 6,000 insulated crates and boxes were distributed. Nearly 100 new retail booths and parlours were set up. Six cooperatives received consultancy on sales and distribution to improve market strategies.

NDDB conducted seven structured training programmes under this scheme, benefiting nearly 250 officials. Regional workshops promoted the professionalisation of cooperative marketing functions. Over 3,000 retailer awareness sessions were held. Support was also provided to expand value-added product portfolios, improving the long-term competitiveness of participating cooperatives.

These efforts reinforced NDDB's continued focus on building sustainable, market-driven dairy institutions.

# DIGITALISATION OF INDIAN DAIRY SECTOR

NDDDB leveraged digital innovation to improve operational efficiency and outreach for dairy cooperatives. Digital platforms were used to disseminate timely and relevant information to milk producers, societies, and federations. These interventions facilitated data-driven decision-making, improved supply chain visibility, and supported productivity enhancement.

Real-time information systems were adopted to increase farmer engagement, ensure traceability, and enable prompt responses to field-level issues. These digital efforts strengthened cooperative systems by encouraging technology adoption and building institutional capacity across the value chain.

*Dr Meenesh Shah, Chairman, NDDDB & NDS in presence of Shri S Regupathi, ED, NDDDB, Shri S Rajeev, ED, NDDDB, Dr CP Devanand, MD, NDS, and Shri Jaidev Biswas, Deputy MD, Jharkhand Milk Federation (JMF) kicking off the NDERP project in IDF RDC 2024 in Kochi*







Dr Meenesh Shah, Chairman, NDDB handing over the Digital Rupee for carbon credit to women dairy farmers in Dungarpur, Rajasthan

## NDDB DAIRY ERP (NDERP)

The NDERP unit concentrated on developing and maintaining a cost-effective, integrated ERP system for the dairy sector. This effort included customising an open-source platform and integrating it with the Automated Milk Collection System (AMCS). Key modules addressed were Accounts, Purchase, Inventory, Sales, Production & Quality, and HR & Payroll. Mobile applications were enabled for distributor access, while digital workflows and Bill of Materials (BOM) integration were used to digitise Mass Balancing and Production processes. The system also supported complex BOM configurations for various milk products.

The NDERP system has been implemented in nine organisations across India to reduce Fat and Solid-Not-Fat (SNF) losses through its digitised Mass Balancing solution. While specific reduction percentages are still being evaluated, the system enables the identification and quantification of losses. This customisation has provided a cost-effective solution that improves operational efficiency and supply chain transparency. The primary collaboration for this initiative is with state and regional milk federations and unions.

## PILOT IMPLEMENTATION OF CENTRAL BANK DIGITAL CURRENCY (CBDC)

NDDB partnered with the Reserve Bank of India (RBI), Punjab National Bank (PNB), and the National Payments Corporation of India (NPCI) to implement a CBDC pilot in Dungarpur, Rajasthan. The project introduced the Digital Rupee, RBI's official digital currency, through wallet-based onboarding and mobile access for rural users.

NDDB enabled the use of Digital Rupee for carbon credit payments to 94 women dairy farmers. This represented the first application of CBDC in the dairy sector, improving transparency and digital financial inclusion. The pilot demonstrated how digital payments and sustainability practices can be integrated to support marginalised communities, in line with NDDB's inclusive development goals.

## SEMEN STATION MANAGEMENT SYSTEM (SSMS)

The SSMS unit developed and deployed a comprehensive software platform designed to standardise and streamline the FSD production process at semen stations, ensuring compliance with the Minimum Standard Protocol (MSP). The platform encompasses several modules, including Bull Lifecycle Management, Semen Production, Quality Control, Sales and CRM, Biosecurity, and Farm and Fodder Management. Integration with laboratory equipment, RFID tags, configurable workflows, and barcode systems has enhanced traceability and accountability throughout the production process.

Currently, 38 graded semen stations across India are utilising the SSMS platform. The implementation of this system has standardised operations, ensured adherence to MSP guidelines, and contributed to improved efficiency, accuracy, and traceability of FSD production. Collaboration for this initiative involves semen stations nationwide, frequently affiliated with state livestock boards or agricultural universities.

## INTERNET-BASED DAIRY INFORMATION SYSTEM (i-DIS)

NDDDB continued to implement and enhance the Internet-based Dairy Information System (i-DIS), a web-enabled platform for structured data management across dairy cooperatives. The system improved data collection, validation, and analysis to support planning and policymaking in the dairy sector.

A simplified version of i-DIS was developed to improve accessibility and usage across participating institutions. Over 250 milk unions, marketing dairies, cattle feed plants, and state milk federations accessed the platform, enabling systematic tracking of key operational and performance metrics.

NDDDB provided technical and advisory support to ensure effective usage of the platform. Refresher workshops were organised for Management Information System (MIS) personnel, focusing on improved data reporting, system use, and analysis.

These digital initiatives contributed to strengthening information systems and governance across the dairy cooperative network.

## MILK ROUTE OPTIMISATION

NDDDB launched a milk procurement route optimisation initiative to improve operational efficiency and reduce logistics costs in the dairy value chain. Milk transport

accounted for a significant share of operating expenditure, prompting a focus on route planning as a cost-saving and sustainability measure.

NDDDB implemented a pilot project under the Vidarbha–Marathwada Dairy Development Project (VMDDP), covering one milk chilling centre. Based on the results, the initiative was extended to four additional centres. The intervention led to cumulative annual savings of approximately ₹45 lakh in transport costs.

To expand the impact, NDDDB developed a web-based solution called the Dairy Route Optimiser (DRO). The tool enabled real-time optimisation of milk procurement routes using spatial mapping and a logistic algorithm. NDDDB provided training and technical support to promote adoption among milk unions and producer organisations.

Implementation by Maahi Milk Producer Organisation resulted in estimated savings of ₹2.2 crore annually. West Assam Milk Union reported annual savings of ₹23 lakh. Adoption of DRO reduced route distances, trip times, fuel usage, and emissions augmenting sustainability efforts.

Further adoption was initiated by Asha, Saahaj, Baani and Harit Pradesh Milk Producer Organisations, Aurangabad Milk Union, and Jharkhand Milk Federation. Initial outcomes indicated cost reduction and better resource use.

## AUTOMATIC MILK COLLECTION SYSTEM (AMCS)

AMCS unit focused on developing and deploying a scalable digital solution for automating milk collection at the Dairy Cooperative Society (DCS) level, aiming to integrate operations across all tiers, improve transparency, streamline processes, and provide real-time data insights. Open-source technology was utilised to enable multi-platform and multi-language functionality, while integration with electronic milk analysers allowed for real-time data collection. SMS alerts were sent to farmers instantly, and mobile applications facilitated live data access.

Currently operational in 12 states, AMCS supports over 25,000 DCS and connects with more than 1.5 million milk producers. The system processes over 6 million litres of milk daily. A full rollout in the Karnataka Milk Federation has demonstrated the system's impact. AMCS has automated previously manual processes, significantly enhancing accuracy and operational efficiency. The deployment has also improved transparency and empowered farmers, supporting better decision-making across the dairy cooperative structure. Collaboration for the AMCS initiative involves state milk federations and district milk unions across 12 Indian states, with field deployments at individual DCS locations.







# EXPANDING DAIRY INFRASTRUCTURE

NDDB provides specialised engineering consultancy services to dairy cooperatives nationwide for the implementation of infrastructure projects. The key activities include conceptualisation, design, planning, execution & commissioning for the establishment of new processing facilities, expansion and modernisation of existing dairy facilities & Institutional Infrastructures. Engineering services are also extended for Cattle feed plants, Bio-Safety (BSL) Labs, Animal Vaccine Production Facilities, Frozen Semen Stations etc. The studies & assessments of existing plants are conducted to modernise, improve efficiency, ensure food safety & optimise product losses. In commitment to green initiatives and reducing carbon footprint, several projects related to renewable energy (Solar energy & Biogas) have been undertaken.



Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation inaugurating the Sabar Milk Union's Cattle Feed Plant build under DAHD's DIDF scheme in the presence of Shri Shankar Chaudhary ji, Hon'ble Speaker, Gujarat Legislative Assembly and Chairman, Banas Dairy; Shri Balvantsinh Rajput ji, Hon'ble Minister for Industries, Government of Gujarat; Shri Raghavjibhai Patel ji, Hon'ble Minister of Agriculture, Animal Husbandry, Cow Breeding and Fisheries, Government of Gujarat; Shri Jagdish Vishwakarma ji, Minister of State for Cooperation, Government of Gujarat along with Members of Parliament & Legislative Assembly, Dr Meenesh Shah, Chairman, NDDB; Shri Shamalbhai Patel, Chairman, Sabar Dairy & GCMF and Shri Jayen Mehta, MD, GCMF





*Shri Venkaiah Naidu ji, Hon'ble Former Vice-President of India along with Dr Meenesh Shah, Chairman, NDDDB and IRMA; Dr Umakant Dash, Director, IRMA; IRMA Board Members and other dignitaries during the inauguration of IRMA's Multi-storeyed Hostel Building*

During the year, six engineering projects were commissioned, which include one Value Added Dairy Product Plant, two Effluent Treatment Plants, one Cattle Feed Plant, a Bull rearing Centre, and an Infrastructure Expansion Project for an Academic Institution. These projects were executed at various locations nationwide. While executing engineering projects, the focus was to implement energy-efficient state-of-the-art technologies with sustainable solutions. In addition, two Solar PV projects have been implemented as an initiative towards Environmental Sustainability.

## MILK PRODUCT PLANT OF CAPACITY 2 LLPD AT BARAUNI, BIHAR

The plant manufactures fermented & various types of indigenous products for Deshratna Dr Rajendra Prasad Dugdh Utpadak Sahakari Sangh Ltd. (Barauni Dairy). The product basket contains fermented products like Plain Curd (20 MTPD), Sweet Curd (1.6 MTPD), Lassi (14 TLPD), and other value-added indigenous products like Paneer (600 Kg/Hr), Khoa (3.8 MTPD), Peda (2.8 MTPD),

Kalakand (1.8 MTPD), Milk Cake (0.6 MTPD), Rasgulla (9 MTPD), Gulabjamun (9 MTPD), Raskadam (0.6 MTPD), Chamcham (2 MTPD) & Sudha Surabhi Rabri (8 MTPD).

The key feature of the plant is its automated paneer line with SCADA-based automation.

The facility was inaugurated by Shri Narendra Modi ji, Hon'ble Prime Minister of India in February 2024.

## INFRASTRUCTURE EXPANSION AT IRMA, ANAND, GUJARAT

NDDDB has executed an infrastructure project for the Institute of Rural Management Anand (IRMA) to build a multi-storeyed hostel building. The building is equipped with the latest firefighting systems for safety, multiple lifts, and other recreational facilities. As a green initiative, a solar PV system and an STP for the treatment of sewage water have been installed.

The facility was inaugurated by Shri Venkaiah Naidu ji, Hon'ble Former Vice-President of India in June 2024.

## ESTABLISHMENT OF BULL REARING CENTRE, AT MALARPURA, KHEDA, GUJARAT

NDDB established a modern bull rearing station with a capacity of 180 animals and a pre-quarantine station with a capacity of 50 animals at SAG Malarpura, along with all the requisite supporting infrastructures and biosecurity facilities. One of the key features of the project is, use of pre-engineered prefabricated sandwiched rigid polyurethane roofing panels, providing cow comfort by reducing heat. The project was completed in May 2024.

## CATTLE FEED PLANT AT HIMATNAGAR, GUJARAT

The project to establish a fully automated state-of-the-art cattle feed plant with a capacity of 800 metric tonnes per day (MTPD) has been executed for Sabar Milk Union at Himatnagar, Gujarat. NDDB has executed the civil works and also provided technical consultancy services for the mechanical works. The plant is equipped with cutting-edge technology to ensure efficient operation and minimise material wastage.

The plant was inaugurated by Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation in November 2024.

## ESTABLISHMENT OF TERTIARY TREATMENT PLANT IN JAIPUR DAIRY, JAIPUR, RAJASTHAN

Following the 3R strategy of Reduce-Reuse-Recycle, NDDB has established a Tertiary Effluent Treatment Plant (500 KLD capacity) with MBR, RO & MVR Evaporation technology for Jaipur Milk Union in Jaipur to achieve a zero liquid discharge policy. The advanced stage of wastewater treatment with 90 per cent recovery helps in reducing the water footprint in dairies. As a result of the project, dependency on water from external sources has considerably reduced. This integrated setup promotes sustainable water management by achieving high recovery, minimising environmental impact, and ensuring regulatory compliance.

## NEW EFFLUENT TREATMENT PLANT (PH II) AT SABAR DAIRY, HIMATNAGAR, GUJARAT

The Phase-II of Effluent Treatment Plant (ETP) project at Sabar Dairy, Himatnagar has been commissioned with a treatment capacity of 2000 KLD, augmenting the existing twin-stream ETP of the same capacity. This expansion has effectively doubled the dairy's overall effluent treatment capability to 4000 KLD.



Modern bull rearing station at Malarpura, Kheda, Gujarat





*Banas Suzuki - Dung Based CBG plant under construction at Bhukhala - Vadgam, Gujarat*

## ENERGY AUDIT AND OPERATIONAL EFFICIENCY STUDY OF DAIRY PLANTS

The dairy industry is continuously focusing towards improving efficiency & competitiveness by optimising the production cost and enhancing product quality. In order to achieve this, NDDB is conducting energy audits and plant studies to improve operational efficiency. NDDB has recently conducted an energy study at Mega Dairy, Bengaluru Cooperative Milk Union Limited.

Major ongoing projects currently aim to enhance efficiency, reduce environmental impact and meeting the growing demand for dairy products in more sustainable manner.

## AMULFED II DAIRY AT RAJKOT FOR GCMF

Establishment of a state-of-the-art fully Automated 20 LLPD dairy and 150 MTPD powder plant at Rajkot, Gujarat has been conceived, with a project outlay of ₹ 990 Crores. The project has been extensively geared up this year to achieve the milestones in timely manner. The project scope also encompasses the UHT Processing-Aseptic Packaging plant of capacity about 4 LLPD, Butter plant of 100 MTPD and Ghee Manufacturing plant of 40 MTPD which will be executed using advanced technologies for energy efficiency based on hygienic designs.

## ESTABLISHMENT OF AUTOMATED DAIRY PLANT AT MOHALI, PUNJAB

A fully automated, state-of-the-art Liquid Milk Processing Plant with a capacity of 5 LLPD is under development for the Ropar Milk Union in Mohali, Punjab. This facility will also have the capability to manufacture 50 MTPD of fermented milk products, such as curd. The project is being implemented with a total outlay of ₹ 280 Crores. The scope of the project includes a dedicated 1500 KLD Effluent Treatment Plant to efficiently process the dairy's generated effluent. The plant's automation is based on Supervisory Control & Data Acquisition (SCADA) technology, which is integrated with a Management Information System (MIS) to automatically monitor, collect, and store operational data.

## AUTOMATED FERMENTED PRODUCT PLANT AT AMRITSAR, PUNJAB

An automated fermented product plant with a total capacity of 2.35 LLPD is currently in progress for the Amritsar District Cooperative Milk Producers' Union in Amritsar, Punjab. The facility is equipped to produce 75 MTPD of curd, 1.50 LLPD of lassi, and 10 TLPD of sweetened and flavored milk products. A key feature of this plant is its ability to manufacture a diverse range of fermented products in various SKUs, including toned milk

curd and double toned milk curd in pouches, cups, and Matkas, as well as various types of lassi such as Sweet Lassi, Spiced Lassi, and Low-fat Lassi. The project is being executed with a total outlay of ₹123.50 Crores.

## CATTLE FEED PLANT AT GULABPURA, BHILWARA

A modern 150 TPD expandable to 300 TPD cattle feed plant having fully automated operations is being executed at Gulabpura, Bhilwara.

The total outlay of the project is ₹63.04 crores.

## ESTABLISHMENT OF COE & BBRC, AT BHILADI, BANAS

With an aim of Multiplication of high-yielding milch animals through scientific breeding, including IVF technology and sex sorted semen, the Centre of Excellence – Banas Bovine Breeding & Research Centre is being set up at Bhildi, Banaskantha District, Gujarat, with an outlay of ₹ 197.20 Crore.

## UPGRADATION OF BIO CONTAINMENT FACILITY AT CCSNIAH BAGHPAT

The institute functions as a national facility for quality assessment of veterinary vaccines and diagnostics. The Institute shall carry out quality control testing of veterinary biological, to provide data for refinement of quality control protocols in terms of vaccine efficacy and safety, and assistance in livestock health programs. The institute is being upgraded & modernised to BSL3 & ABSL3 facilities as per prevailing regulatory guidelines with an outlay of ₹160 Crore.

### FOLLOWING ARE THE LIST OF ONGOING PROJECTS

Project	Capacity	Location
<b>Northern Region</b>		
Establishment of Automated Dairy and ETP	5 LLPD LMP and 15 LLPD ETP	Mohali, Punjab
Establishment of Dairy Plant	50 TLPD (expandable to 100 TLPD)	Rajsamand, Rajasthan
Upgradation and Strengthening of Dairy plant	50 TLPD	Banswara, Rajasthan
Cattle Feed Plant	150 MTPD	Bhilwara, Rajasthan
UHT Plant	25 TLPD	Bhilwara, Rajasthan
Automated Dairy with Value Added Milk Products	1.5 LLPD (expandable to 3 LLPD)	Kangra, Himachal Pradesh
Strengthening of Frozen Semen Station	--	Khanna, Punjab
Fermented Product Plant and Expansion of Sweetened Flavoured Milk Plant	2.35 LLPD	Amritsar, Punjab
Upgradation of Bio Containment Facility & allied repair works at CCSNIAH	--	Baghpat, UP
<b>Western Region</b>		
AMULFED II Dairy	LMP - 20 LLPD, Powder plant - 150 MTPD, Butter plant - 100 MTPD, Ghee Manufacturing plant - 40 MTPD and UHT Processing-Aseptic Packaging plant - 4 LLPD	Rajkot, Gujarat
Cattle Feed Plant (Civil works)	800 MTPD Exp. 1600 MTPD	Himatnagar, Gujarat
BANAS SUZUKI – DUNG BASED CBG PLANT	DUNG - 100 MTPD (1.5 MTPD CBG)	Bhukhala – Vadgam, Gujarat
BANAS SUZUKI – DUNG BASED CBG PLANT	DUNG - 100 MTPD (1.5 MTPD CBG)	Agthala - Lakhani, Gujarat
Infrastructure Project at Sabarmati Ashram Gaushala	--	Bidaj, Gujarat



Project	Capacity	Location
Infrastructure Project for NCDFI	--	Anand, Gujarat
Strengthening of Semen Station	--	SAG, Bidaj
Establishment of Dairy plant with Valued Added Products and Powder Plant at Mother Dairy	LMP – 6 LLPD (Expandable to 10 LLPD), Powder Plant – 30 MTPD, Fermented Products plant – 150 MTPD, Paneer plant – 3 MTPD, Flavoured Milk – 5 MTPD, Ice Cream Plant – 25 TLPD	Nagpur, Maharashtra
Establishment of COE & BBRC, at Bhiladi, Banas	--	Bhiladi, Banas, Gujarat
<b>Southern Region</b>		
Strengthening of Semen Station & Allied works	--	Hessarghatta, Karnataka
New Animal Vaccine Manufacturing plant (FMD+HS) at IIL, Hyderabad		Karakpatla, Telangana
Automated Dairy Plant	2 LLPD	Namakkal, Tamil Nadu
Establishment of (i) Invitro Diagnostic Reagents facility (Brucella and Diagnostics) – GMP grade at IVP, Ranipet, (ii) Pharmaceutical Division (GMP grade) (Ointment and Liniment facility)	--	IVPM, Ranipet, Tamil Nadu
<b>Eastern Region</b>		
Strengthening of Plant Utility Services	--	Barauni, Bihar
Additional work at 5 LLPD Automated Dairy plant	--	Arilo-Govindpur, Odisha
Establishment of Powder plant	20 MTPD	Hotwar, Ranchi, Jharkhand
Establishment of Milk product plant		Hotwar, Ranchi, Jharkhand
Establishment of Dairy plant with value added products	50 TLPD (EXP to 1 LLPD)	Jamshedpur, Ranchi, Jharkhand
Establishment of Dairy plant with value added products	50 TLPD (EXP to 1 LLPD)	Giridih, Ranchi, Jharkhand
Dung based Biogas plant	100 MTPD	Barauni, Bihar
Establishment of Vaccine Production Facility	Anthrax - 5 million doses/ Annum; Enterotoxemia – 20 million doses / Annum	Berhampur, Odisha

Technical Consultancy Services		
Project	Capacity	Location
Milk Powder Plant	120 MTPD	Mehsana, Gujarat
BSL4 Laboratory at GBRC	--	Gandhinagar, Gujarat
Fermented Product Plant	100 Exp. 150 MTPD Curd, 5 Exp. 10 MTPD Yogurt	Rohtak, Haryana
Cow Sanctuary	--	Muzaffarnagar, Uttar Pradesh
Centre of Excellence of Genetic Improvement of Indigenous Cattle	--	SV Gosamrakshana Shala, Tirupati, Andhra Pradesh

TLPD-Thousand Litres per Day; TPD-Tonnes per Day; LLPD-Lakh Litres per Day;

Exp.-Expandable to

# STRATEGIC PARTNERSHIPS FOR DEVELOPMENT

NDDB partnered with reputed national and international institutions to facilitate knowledge exchange, promote technological and process innovations, strengthen institutional and human capacities, and provide evidence-based solutions aimed at enhancing the sustainability of the dairy sector. These efforts contributed to improving productivity, resource efficiency, and climate resilience in dairying, thereby improving the livelihoods of dairy farmers.



## MOU FOR ESTABLISHMENT OF DUNG-BASED BIO-CNG PLANTS IN GUJARAT

NDDB signed tripartite MoUs with Suzuki R&D Center India Pvt. Ltd. (SRDI), The Kaira District Co-operative Milk Producers' Union Ltd. (KDCMPUL) and Mehsana District Cooperative Milk Producers' Union Ltd for the establishment of two dung-based Compressed Biogas (CBG) plants in Gujarat. The collaboration is being expanded to include Banas Dairy, thereby broadening the project's reach. The initiative aims to convert cattle dung into Compressed Biogas and organic fertiliser. It focuses on reducing chemical fertiliser use, lowering greenhouse gas emissions, and producing clean energy.

NDDB would provide technical support, while SRDI would provide financial and engineering expertise. This partnership would encourage innovation in biogas plant design and efficiency. The project also represents a convergence of the dairy and automobile sectors, supporting a circular economy that benefits farmers and is expected to promote environmental sustainability.

The plants are also expected to improve dung utilisation, reduce on-farm methane emissions, and generate clean fuel and high-quality manure. These outcomes align with national goals on energy transition, sustainable agriculture, and waste-to-wealth initiatives.





Signing of tripartite MoU between NDDB, SRDI and TERI

## TRIPARTITE MOU FOR SUSTAINABLE DEVELOPMENT INITIATIVES

NDDB formalised an MoU with The Energy and Resources Institute (TERI) and Suzuki R&D Centre India Pvt Ltd (SRDI) to promote sustainable development in dairy and allied rural sectors. The collaboration focused on renewable energy systems, circular economy models, and efficient waste management practices.

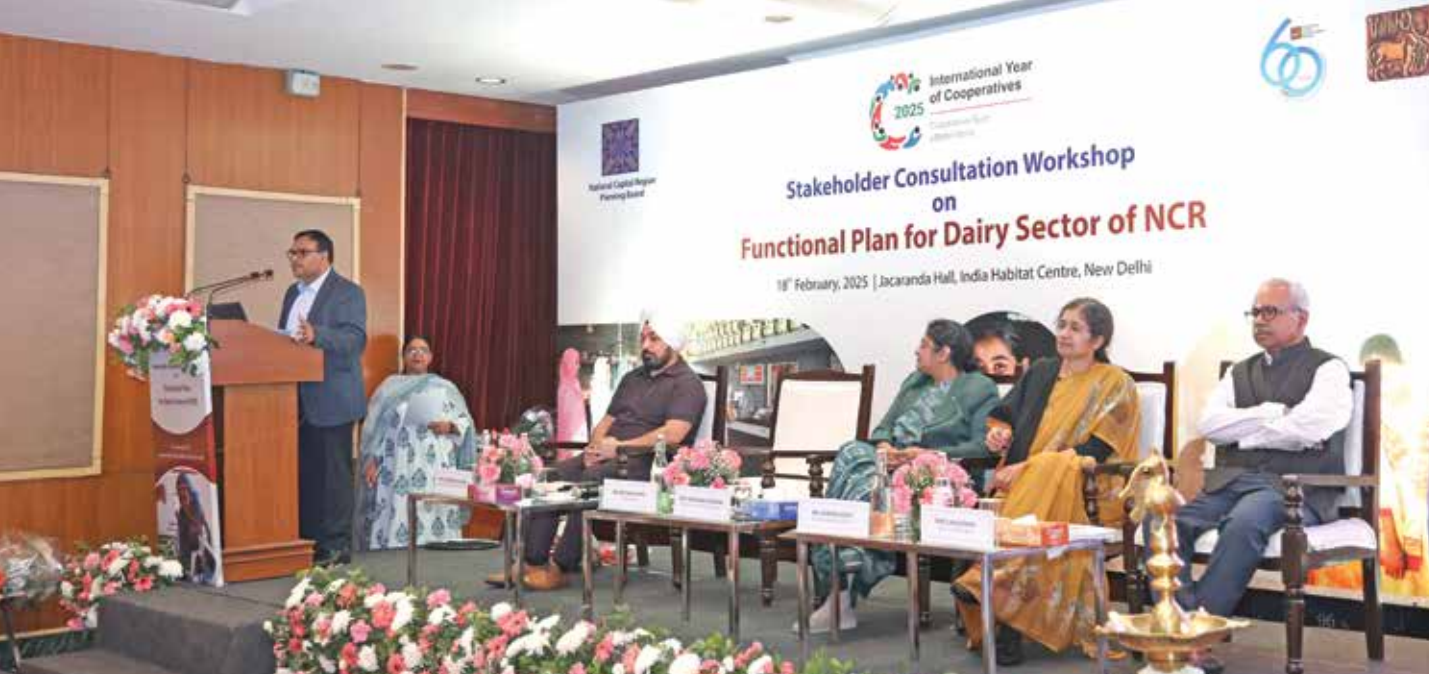
The joint initiative integrated technical expertise from all three organisations to support environmental sustainability and rural development. Key outcomes included promotion of renewable energy, reduction in carbon emissions, and improved waste handling efficiency. This initiative aligned with NDDB's commitment to net-zero dairying.

## MOU SIGNED FOR FIFTH BIO-CNG PLANT IN BANASKANTHA, GUJARAT

NDDB signed an MoU with Suzuki R&D Center India Pvt Ltd and Banas Dairy for establishing the fifth Bio-CNG plant in Banaskantha, Gujarat. This project will extend previous successes in renewable energy generation from cattle dung. This initiative aims to enhance the efficiency of biogas plants and pilot a rural mobility project leading to promotion of circular bio-economy models in the dairy sector.



Signing of MoU between NDDB, SRDI and Banas Dairy for fifth Bio-CNG plant in the presence of Shri Shankarbhai Chaudhary, Hon'ble Speaker, Gujarat Legislative Assembly & Chairman, Banas Dairy; Mr T Suzuki, President, Suzuki Motor Corporation, Japan, Mr Kenichiro Ayukawa, Executive Vice President, Suzuki Motor Corporation, Japan



*Dr Meenesh Shah, Chairman, NDDB during the inaugural address of Stakeholder Consultation Workshop on Functional Plan for Dairy Sector of NCR in the presence of Ms Archana Agarwal, Member Secretary, NCRPB; Ms Varsha Joshi, Additional Secretary, DAHD, Government of India; Shri Jagmohan Singh, Chief Regional Planner, NCRPB and Shri S Regupathi, Executive Director, NDDB*

## CONSULTANCY ASSIGNMENT FOR FUNCTIONAL PLAN PREPARATION UNDER NCR REGIONAL PLAN 2041

Following a competitive bidding process, NDDB was awarded a consultancy project by the National Capital Region Planning Board (NCRPB). The objective of this consultancy is to create a futuristic functional plan for the dairy sector of the NCR, which will be integrated into the broader Regional Plan 2041 for the area. The vision for the draft NCR Regional Plan 2041 is "To provide a long-term plan for development of the technology-driven, future-ready National Capital Region of New Vibrant India, with citizen-centric infrastructure for building an economically prosperous region aligned with sustainable development goals".

The officially notified constituent areas of the National Capital Region (NCR) encompass the entire National Capital Territory (NCT) of Delhi and 24 districts spanning Haryana, Uttar Pradesh, and Rajasthan. As dairy is a significant economic activity within this region, the functional plan is designed to outline a 15-year roadmap for the NCR's dairy sector. The plan aims to make the sector future-ready and aligned with the increasing demand for milk and milk products in the NCR, which will also contribute to providing improved livelihoods for millions of dairy farmers in the region.

NCR is biggest milk market in the country and thus it will help developing vital linkages & synergies between two major pillars of the economy i.e., agriculture and industry, and contribute generously in economic growth of NCR. The Functional Plan preparation exercise would include studies, collection of primary and secondary data, data analysis

and interpolation, formulation of strategies, proposed interventions and identification of projects at regional, sub-regional and local level-within the coverage and overall framework of NCR draft Regional Plan-2041.

The Functional Plan will provide strategies, approaches, guiding principles, list of identified infrastructure projects with cost estimates, location specific proposals/ details, etc., in line with the overall policies and proposals of the draft Regional Plan 2041.

It is expected that there will be a demonstration effect that leads to replication of development strategies in other urban areas in India, as well as potential downstream investment in socio-economic infrastructure in the NCR.

## MOU TO STRENGTHEN THE DAIRY START-UP ECOSYSTEM

NDDB signed an MoU with CHARUSAT Innovative Ventures Foundation (CIVF), Changa, Gujarat, to support innovation and entrepreneurship in the dairy sector. The collaboration focused on strengthening the start-up ecosystem by leveraging NDDB's technical expertise across the dairy value chain.

NDDB extended strategic and technical support to start-ups incubated at CIVF. These included assistance in fodder development, cost-effective processing, and quality assurance in milk handling. The initiative enabled entrepreneurs to adopt NDDB's proven methods in dairy productivity, CFU control, SNF standards, and supply chain optimisation. The MoU would help improve commercial readiness of dairy-focused start-ups through knowledge sharing, capacity building, and practical solutions. This collaboration aligns with national priorities for self-reliant and sustainable rural development.





Exchange of MoU between Dr Meenesh Shah, Chairman, NDDB and Dr R V Upadhyay, Provost of CHARUSAT, in the presence of Shri Ashok Patel, Director of CIVF; Shri Girish Patel, Director of CIVF; Smt Madhuben Patel, Director of CIVF and other dignitaries

## PROMOTION OF RENEWABLE ENERGY IN THE DAIRY VALUE CHAIN

NDDB entered into an MoU with Tata Power Renewable Microgrid Limited (TPRMG) to introduce renewable energy technologies across the rural dairy sector. The partnership aims to deploy decentralised, energy-efficient systems and reduce greenhouse gas emissions.

NDDB and TPRMG agreed to implement solar-based interventions in DCSs, Bulk Milk Coolers (BMC), Milk Chilling Centres, and Processing Units. The plan also

includes integrating dung-based biogas systems into microgrids to improve village-level energy access.

The MoU covered other areas such as biogas-powered cooking, solar dryers, and solar cold storage for milk and perishables. It also includes training programmes on solar technologies for dairy stakeholders. The partnership supports NDDB's goal of achieving net-zero emissions across the Indian dairy sector.



Exchange of MoU between Dr Meenesh Shah, Chairman, NDDB and Mr Manoj Gupta, CEO, TPRMG in the presence of Ms Varsha Joshi, Additional Secretary, DAHD, Government of India and Dr Praveer Sinha, CEO, Tata Power

## IMPLEMENTATION OF DAIRY SUSTAINABILITY FRAMEWORK (DSF) STAGE 1

The Dairy Sustainability Framework (DSF), a global initiative of the dairy sector, aimed to monitor and report sustainability progress in a collaborative and pre-competitive manner. To enhance participation from emerging dairy economies, DSF revised its sustainability reporting methodology under the Stage 1 membership level.

NDDB was actively involved in the pilot testing of the DSF Stage 1 pilot in India. This pilot was implemented in two organisations: Jharkhand State Cooperative Milk Producers' Federation Ltd. (JMF) in Jharkhand and Shreeja Mahila Milk Producer Company Ltd. (Shreeja MMPCL) in Andhra Pradesh. The primary sustainability criterion monitored during this pilot was 'Rural Economies', with a specific focus on tracking payments made to farmers for milk.

In addition to the core indicator, both entities chose to pursue local sustainability programs that reflected their regional priorities. JMF initiated a Manure Management Initiative, while Shreeja MMPCL concentrated on Green Fodder Production utilising Certified Seeds.

As part of the Stage 1 pilot, Local Management Groups (local advisory bodies) were formed, and training on Materiality Assessment was initiated. The participation of JMF and Shreeja MMPCL in the Stage 1 pilot, under the guidance and leadership of NDDB, provided a platform for these organisations to demonstrate measurable sustainability progress and contribute to the global dairy sector's sustainability reporting framework.

## WOAH TWINNING PROJECT AND SEMINAR ON IBR

The two-year WOAH twinning project on IBR diagnostics was successfully concluded with the Animal and Plant Health Agency, United Kingdom (APHA, UK), confirming NDDB R&D Lab's alignment with ISO/IEC 17025 and WOAH diagnostic standards. The project also significantly bolstered quality assurance in IBR diagnosis through the development of a reference sera panel for use in India, among other things. An International Seminar on IBR Control was also held as a part of the project with over 55 participants, which included representatives from WOAH and DAHD, experts from the UK, Ireland, Germany, and Denmark, and scientists from NIVEDI, IVRI, Nepal, and Sri Lanka. The seminar concluded with recommendations for streamlining diagnosis and strategic vaccination for IBR control.



Dr Meenesh Shah, Chairman NDDB during his address at International Seminar on Control of IBR in presence of Prof Falko Steinbach, Head, Mammalian Virology, Animal and Plant Health Agency (APHA), UK and Dr David Graham, CEO, Animal Health, Ireland





Exchange of MoU between NDDB and PNB in the presence of Dr Meenesh Shah, Chairman, NDDB

## MOU WITH PUNJAB NATIONAL BANK TO STRENGTHEN DAIRY SECTOR FINANCING

NDDB signed an MoU with Punjab National Bank (PNB) for providing finance to beneficiary organisations in the cooperative sector, including milk federations/ unions, multistate cooperatives, Producer Owned Institutions and NDDB Subsidiaries. The five-year agreement enabled NDDB to provide technical support, endorse eligible (BOs), and prepare appraisal reports. PNB will provide term loans and working capital assistance in line with RBI guidelines and internal policies. This collaboration is crucial for expansion and development of dairy infrastructure for producer owned institutions. Investing in dairy infrastructure will increase efficiencies of the dairy value chain.

## SCIENTIFIC PARTNERSHIPS TO ENHANCE ANIMAL PRODUCTIVITY

NDDB maintained research partnerships with NIAB, GBRC, BAIF, AAU, Kamdhenu University, autonomous institutes (St. Thomas College, Palai, Kerala), and IIL. The work focused on genomics, diagnostics, reproduction, nutrition, and scientific validation of EVM formulations.

NDDB officers participated in ICAR and national committees on semen station quality. These contributions supported the adoption of international standards.

## FACILITATING EVM PRODUCTION AND ACCESS

NDDB provided technical and financial assistance for the establishment of Ethnoveterinary Medicine (EVM) units in Sabarkantha, Kaira, Banaskantha, and Kolhapur Milk Unions. These units distributed over 8.5 million EVM products on a non-profit basis, making indigenous veterinary care widely accessible and affordable to farmers.

In 2024–25, new EVM units were initiated by the Jharkhand Milk Federation, Varanasi Milk Union, and ABC Salon, further expanding the outreach of EVM solutions. Additionally, research institutions scientifically validated EVM formulations for the treatment of mastitis, immune enhancement, and external parasite control, thereby strengthening the credibility and effectiveness of traditional practices within modern livestock healthcare systems.

# TRAINING AND CAPACITY BUILDING OF HUMAN RESOURCES

NDDB focused on building institutional and individual capacities within the cooperative dairy sector. Capacity development efforts were designed to improve technical skills, strengthen operations, and support long-term sustainability.



Shri Durga Shankar Mishra, former Chief Secretary, Government of Uttar Pradesh during his inaugural address in the presence of Dr Meenesh Shah, Chairman, NDDB and Women Dairy Farmers at Saksham: Nurturing Women Leaders programme in NDDB, Anand





*'Manthan' - A leadership conclave for NDDB and its subsidiaries*

## TRAINING AND CAPACITY BUILDING

NDDB continued to cultivate a vibrant learning ecosystem, designed for capacity building of all key stakeholders in producer-owned institutions, including milk producers, professionals, and policymakers. The training and capacity-building efforts were focused on enhancing productivity, improving efficiency, and promoting sustainable growth across the entire dairy value chain. Capacity building efforts were aimed at developing a skilled workforce capable of adapting to the changing dairy industry landscape and contributing to its ongoing success.

A significant emphasis was placed on training for milk producers. Additionally, for the first time, milk producers from Ladakh participated in a training programme at NDDB, Anand. Over 5600 farmers received training on advanced animal husbandry practices, equipping them with the knowledge on improved animal productivity through modern dairy farming techniques. Notably, women made up over 45 per cent of these trainees, reflecting NDDB's ongoing commitment to women's empowerment and recognition of their vital role in the dairy business.

About 300 Board members were trained during the year on good governance and the role clarity of policy members. The participants included about 80 Board of Directors from 10 FPOs.

The role of professionals in producer-owned institutions is critical, so NDDB focused on upskilling

these professionals in various domains like Business & administration, Procurement & input, Processing, Marketing, Plant Operations, Financial & Strategic Planning etc. Executives from various End Implementing Agencies (EIAs) covered under Government of India funded projects – DTC JICA and A-HELP (Accredited Agent for Health and Extension of Livestock Production) received advanced training at NDDB, thus further contributing to project implementation in their respective regions. More than 450 executives and Master Trainers were trained under DTC JICA & A-HELP. Over 700 dairy plant operators received specialised training in the operation and maintenance of dairy processing facilities.

The nationwide implementation of the A-HELP programme expanded to cover 15 states. About 100 A-HELP training programs were conducted, accrediting over 3000 Pashusakhis as A-HELPS. These accredited individuals now serve as the first point of contact for dairy farmers in their villages.

NDDB has been supporting Micro Training Centres (MTC) in the Vidarbha region and the Sundarbans Milk Union. This year, more than 3000 farmers were trained at these MTCs on scientific animal husbandry practices.

The spirit of inclusivity and women's empowerment was celebrated through the three-day 'Saksham – Nurturing women leadership' event, organised as part of 'International Women's Day' and 'International Year of Cooperation 2025'. This significant programme

brought together 60 women leaders from various Dairy Cooperatives and Milk Producer Organisations, providing a platform for networking, knowledge exchange, and the cultivation of leadership skills.

Embracing the power of digital platforms to enhance reach and accessibility, NDDDB organised specialised 'NDDDB Samvad' programmes for farmers in the Vidarbha-Marathwada Region. The series was conducted in a hybrid mode: digital and classroom, and covered over 400 participants, training them on essential animal husbandry practices and quality assurance.

To facilitate effective adoption and utilisation of the Bharat Pashudhan platform, more than 70 digital training

programmes were conducted, reaching over 4000 users. This initiative is envisaged to empower stakeholders and policy makers with the necessary skills to leverage digital resources for improved livestock management, data-driven decision-making, and enhanced productivity.

Through a multifaceted and impactful approach to training and capacity building, NDDDB continues to empower individuals and institutions across the cooperative dairy ecosystem. This fosters a culture of continuous improvement and drives the sector towards greater efficiency, sustainability, and prosperity.

## SUMMARY OF TRAINING PROGRAMMES CONDUCTED

Conventional/in situ training programmes			
Sr No	Subject area	No. of programmes	No. of participants
A	Cooperative Services		
	Board Orientation Programme	16	229
	Business Development for FPOs	2	31
	Farmers Induction/Orientation Programme	150	5651
	International Programme on Dairy Development through Cooperative Business Model	2	25
	Management Committee Members' Orientation programme	6	113
	Training of Dairy cooperative officials (P&I, Executives)	39	467
	Training/ Refresher for Dairy Cooperative Society Secretary	18	443
B	Dairy Entrepreneurship programme on Animal Rearing	2	52
C	Milk Marketing	6	93
D	National Milk Recording Programme (NMRP)	12	142
E	Operation & Maintenance of Dairy Plants	36	734
F	GeM: Govt. E-Marketplace	1	12
G	Training of Trainers: A-HELP / Regular	14	263
H	Digital Portals and software		
	Bharat Pashudhan/NDLM TOT	36	1267
	Training on NDDDB ERP/AMCS/SSMS/Dairy Surveyor/iDIS	33	452
I	Productivity Enhancement		
	Advanced Scientific Animal Rearing Practices and Management Practices	2	15
	AI Basic / Refresher	35	993
	Animal Health Management	6	217
	Dairy Animal Management	105	3206
	OPU-IVEP ET / Genomic selection and recording	6	77
	Training of Advanced Animal Management Practices	2	53
	Training of Animal Nutrition Supervisors on Productivity Enhancement	1	11
	Training on AN, CRP fodder production and conservation	3	60
	Training on Cattle feed Production & Quality Control	1	19



Conventional/in situ training programmes			
Sr No	Subject area	No. of programmes	No. of participants
J	Quality Assurance & Management Systems in Dairy Plants	21	385
K	Others (includes workshop and seminars)		
	National Milk Day workshop	1	50
	Saksham-Nurturing women leadership	1	60
	Total	557	15120
Programmes Conducted on digital platform			
	Bharat Pashudhan/NDLM TOT	41	2791
	NDDB Samvad for Vidarbha-Marathwada	4	427
	Training on NDDB ERP/AMCS/SSMS/Dairy Surveyor/iDIS	41	236
	Grand Total	643	18574

## HUMAN RESOURCE DEVELOPMENT IN REPRODUCTIVE AND GENOMIC TECHNOLOGIES

NDDB provided training to eighteen veterinarians in advanced reproductive biotechnologies. These included Ovum Pick-Up (OPU), In Vitro Embryo Production (IVEP), and Embryo Transfer (ET). The participants were comprised of ten professionals from Indian organisations and eight from the Government of Kenya. Additionally, one Master's candidate and three Doctoral candidates received specialised training in these technologies.

NDDB engaged in a collaboration under the Fulbright-Nehru Specialist Programme with Dr Jennifer Barfield, an Associate Professor at Colorado State University. Dr Barfield provided technical sessions on embryo

biotechnology, embryo grading, transfer techniques, and cryopreservation. A focused workshop titled 'Grading and Cryopreservation of IVF Embryos' was also organised by NDDB for officers from IVF laboratories throughout India.

In partnership with the Genome Biology Research Centre (GBRC), NDDB conducted training on Genome-Wide Association Studies (GWAS) to improve genomic analysis capabilities. An international training programme on "Genomic Selection, Livestock Identification and Traceability" was held for participants from the Government of Kenya. Refresher training in Axiom microarray genotyping was also held under the RGM programme for representatives from NDDB, SAG, NDDB CALF Ltd., Kamdhenu University, and BAIF.

These initiatives strengthened technical competencies and supported NDDB's objective of fostering innovation in dairy genetics and reproduction.

*Training on Ovum Pick-Up for Veterinarians from Republic of Kenya*





*Demonstration on techniques for hoof disease management*

## HOOF MANAGEMENT TRAINING

NDDB organised a specialised workshop on hoof management at Baani Milk Producer Company. A mobile hoof trimming crate was used to facilitate practical training. Veterinary professionals were trained in advanced hoof trimming techniques and hoof disease management. The training aimed to reduce lameness, improve animal welfare and productivity. This intervention contributed to improved livestock health outcomes and supported NDDB's focus on animal care practices.

## EVM CAPACITY BUILDING UNDER DCAM

A structured training cascade was initiated by NDDB in 2017 under the Disease Control through Alternate Methods (DCAM) project. By the conclusion of the project in March 2025, training had been provided to a total of 276 core veterinarians at the Trans Disciplinary University (TDU), Bengaluru. Furthermore, 1,014 field veterinarians received training through Training of Trainers (ToT) sessions that were facilitated as part of the programme.

To ensure reach at the grassroots level, NDDB also oriented 12,694 animal health personnel at Dairy Cooperative Societies on the principles and applications of Ethnoveterinary Medicine (EVM). This expansive training network facilitated the widespread adoption of EVM practices, providing farmers with accessible and indigenous solutions for livestock healthcare.

## CAPACITY BUILDING IN FODDER SEED PRODUCTION

NDDB organised focused training and capacity-building programmes to strengthen technical expertise in fodder seed production, recognising its critical role in improving green fodder productivity and dairy performance.

NDDB conducted a three-day training programme on fodder seed production at Anand Agricultural University for 25 of its officers, enhancing their technical understanding of seed production practices.

Further, in collaboration with the Indian Grassland and Fodder Research Institute (IGFRI), Jhansi, NDDB organised a five-day advanced training programme on fodder seed production, processing, and storage for 25 officers from 15 Dairy Cooperatives across the country.

These initiatives aimed to build a technically skilled workforce capable of producing and supplying superior-quality fodder seed to dairy farmers, thereby supporting sustainable fodder development at the grassroots level.

## DEVELOPING HUMAN RESOURCES

NDDB focused on strengthening professional growth, employee well-being, and organisational alignment through structured human resource initiatives. Knowledge-sharing forums were organised to enable various NDDB groups to present functional updates to internal teams, improving awareness and encouraging cross-functional collaboration.

NDDB advanced its wellness agenda through NDDB for Fitness programme. Expert-led sessions covered nutrition, office ergonomics, and respiratory health. Under the 'Happy Hours' programme, workshops on happiness, stress management, and holistic well-being were organised to support employee mental health.

The 'LEAD' initiative focused on empowering women employees. It included a field visit to SEWA, Ahmedabad, and sessions on personal finance and professional development.

Digital literacy and cyber awareness were promoted through the 'Techtonics' series. Sessions covered cybersecurity fundamentals and digital well-being. Monthly publications like 'Horizons' and 'The Book Nook' were circulated to foster reading habits and motivational



engagement. The 'Pustakalaya Parikrama' programme showcased themed book displays and interactive sessions to promote a reading culture.

NDDB observed HRD Week with the theme 'Awake, Act & Transform'. The week included expert-led sessions, a Walkathon, a visit to SEWA Ahmedabad, cultural performances, presentations on internal initiatives, and philanthropic activities. A leadership conclave, 'Manthan', brought together 83 officers from NDDB and subsidiaries. The event included strategic presentations and a brainstorming session to identify collaborative action points for better service delivery to dairy farmers.

Capacity Building through training interventions continued during the year. A total of 666 participants from NDDB, its subsidiaries and other organisations underwent training in 47 programmes.

NDDB supported practical learning by offering internships to 53 students from academic institutions. The internships aimed to provide on-the-job training to the students.

Seven 'NDDB Connect – Parichay' programmes were conducted for 157 newly inducted officers from subsidiaries. These programmes included classroom sessions and field visits, helping participants understand NDDB's values and operations.

Further, a new training module, 'Leadership and Culture Building', was introduced for mid- and senior-level officers from NDDB and its subsidiaries. Two programmes were conducted, benefitting 43 participants.

NDDB also hosted two customised orientation sessions under the theme 'Leading Organisational Change', attended by officers from Bank of Baroda and Delhi Metro Rail Corporation. All programmes received positive

feedback, indicating successful delivery of learning outcomes. These efforts contributed to building a skilled and aligned workforce across NDDB and its extended ecosystem.

Subject area	No. of programme	Number of participants
Training for NDDB employees	36	406
Training of officers from PSUs/ PSBs/NDDBs subsidiaries	11	260
<b>Total</b>	<b>47</b>	<b>666</b>

## WELFARE OF SC/ST EMPLOYEES

Concerted efforts are being made for development of SC/ST employees through education, training and secondment to critical assignments, providing them with opportunities for exposure and leadership development.

A total of 63 training nominations for SC/ST employees were processed, covering technical, functional, and general management areas. NDDB provided financial support through reimbursement of educational expenses and procurement of academic materials for meritorious children of SC/ST employees. Awards in the form of cash prizes and certificates were given to recognise academic excellence.

NDDB offices observed Ambedkar Jayanti, commemorating Dr B.R. Ambedkar's contributions. A formal session was organised, which received positive engagement from employees. These initiatives reaffirmed NDDB's commitment to employee inclusion and skill enhancement as part of its organisational development strategy.

Dr Meenesh Shah, Chairman, NDDB flagging off the 'Healthon' during the HRD Week 2025



# VISION 2047 FOR THE DAIRY SECTOR

NDDB has a Vision 2047 for the sustainable and inclusive transformation of the Indian dairy sector and become one of the leading players in the global dairy trade.



Ms Alka Upadhyaya, Secretary, DAHD, Government of India during the inaugural address for Conference on Future Roadmap for Indian Dairy Sector in presence of Dr Meenesh Shah, Chairman, NDDB, and officials from Kamdhenu University, NDRI, GCMMF, Banas Dairy, Central Institute for Research on Buffaloes, ICAR-Indian Grassland & Fodder Research Institute, along with other professionals of the Indian dairy sector



## CONFERENCE ON FUTURE ROADMAP FOR THE INDIAN DAIRY SECTOR

A one-day conference was organised on the Future Roadmap for the Indian Dairy Sector. The key dignitaries included Ms Alka Upadhyaya, Secretary, DAHD, Government of India; Dr Meenesh Shah, Chairman, NDDB and officials from Kamdhenu University, NDRI, GCMF, Banas Dairy, Central Institute for Research on Buffaloes, ICAR-Indian Grassland & Fodder Research Institute, along with other professionals of the Indian dairy sector.

During the conference, the assembly of policymakers, decision-makers, and research institutes deliberated on ways to enhance productivity in dairy animals, increase the share of Value-Added Dairy Products, make dairying in India more sustainable, increase the share of the organised sector, and increase exports of Indian dairy products. The deliberations led to the development of Vision 2047, identifying five strategic goals to align the sector with the nation's development ambitions.

NDDB is steadily progressing towards achieving the milestones of Vision 2047 for the dairy sector. Unlike other sectors, advancing the biological systems of dairy animals necessitates long-term planning, and NDDB has proactively initiated and scaled up various activities in the dairy sector to attain these milestones. The key initiatives undertaken in this direction are outlined below.

### ENHANCING PRODUCTIVITY

To boost annual milk yield from 2,080 kg to 5,200 kg per animal, NDDB is implementing a comprehensive strategy focusing on scientific breeding, improved genetics, and policy support. NDDB is enhancing dairy animal productivity through multifaceted initiatives focusing on animal breeding, health and feeding management. In animal breeding, the organisation is leveraging advanced tools like Genomic Selection and Assisted Reproductive Technologies (ARTs), while also expanding performance recording systems. Key innovations include the development of unified genomic chips (GAUCHIP and MAHISHCHIP), and introducing indigenous technologies like the IVF Media Suite "Sashti" and the "GAUSORT" sex sorting technology. These efforts are designed to increase genetic gain, lower embryo production costs, and make sex-sorted semen more accessible to farmers, promoting sustainable dairying by improving milk production and reducing costs.

NDDB's animal health initiatives are centered on a multi-pronged approach of vaccination, diagnostics, and disease control. The organisation is expanding vaccination coverage for diseases like FMD and Brucellosis, while also enhancing diagnostic capabilities and developing more

cost-effective testing methods. Through collaborations with international partners, NDDB is aligning its diagnostics with global standards. Furthermore, the organisation is championing a 'One Health Approach' with brucellosis control programs and AMR stakeholder workshops. NDDB also promotes Ethno-Veterinary Medicine as a way to support sustainable dairying, all with the ultimate goal of improving animal health and reducing the burden of disease.

NDDB is committed to promoting sustainable dairying through scientific feeding. This includes improving feed conversion efficiency with Total Mixed Ration (TMR) feeding and precision feeding, and addressing fodder deficits by strengthening fodder availability and promoting decentralised silage and fodder enterprises. The organisation is also working to minimise enteric methane emissions by using feed additives and integrated farm practices. These strategic initiatives are aimed at enhancing milk production, reducing operational costs, and fostering environmentally friendly dairying practices.

### EXPANDING THE ORGANISED SECTOR

Increasing the reach of cooperatives from 1.7 to 3.5 lakh villages, especially in underserved regions, with a focus on women's participation and alternative producer-owned models.

NDDB is working to expand the reach of dairy cooperatives across India, particularly in underserved regions, with a focus on increasing women's participation and promoting alternative producer-owned models. As part of the White Revolution 2.0 initiative, NDDB aims to form 75,000 new Dairy Cooperative Societies (DCS) and strengthen 46,000 existing ones by 2028-29, with a target to increase milk procurement to 1,000 lakh kilograms per day. The targets of White Revolution 2.0 has been included for financial assistance under the revised National Programme for Dairy Development (NPDD) of DAHD.

NDDB is achieving this goal by partnering with state dairy federations and milk unions to professionalise and expand cooperative coverage. Currently, NDDB is managing several milk unions and federations across the country, including in Assam, Jharkhand, Chhattisgarh, Maharashtra, Ladakh and Varanasi Milk Union. Additionally, NDDB has signed MoUs for dairy development in states like Odisha and is implementing dairy development programs in regions like Vidarbha-Marathwada in Maharashtra, thereby strengthening the organised dairy sector and onboarding more producers into formal cooperative networks.

### PROMOTING VALUE-ADDED PRODUCTS

Doubling the share of value-added dairy products in the cooperative sector from 25 per cent to 50 per cent and meeting the evolving consumer demands and tap into premium markets.

NDDB is supporting dairy cooperatives in Value-Added Dairy Product (VADP) manufacturing by providing comprehensive assistance in areas such as new product development, analytical methods, starter culture management, and technology adoption. This support aims to increase the cooperative sector's involvement in VADP manufacturing and enhance their product offerings.

NDDB's research and development initiatives are also driving innovation in the dairy sector. Recent developments include creating composite dairy products with millets and honey, leveraging India's microbial diversity to identify novel probiotics and biomolecules, and establishing a dairy innovation centre with state-of-the-art technologies. Additionally, NDDB is promoting farm-level VADP manufacturing by developing small-scale equipment and piloting initiatives to produce farm-fresh products directly at dairy farms or cooperative societies.

### BOOSTING GLOBAL TRADE

Elevating India's share in global dairy exports from less than 1 per cent to 10 per cent by ensuring quality, promoting indigenous products, and overcoming trade barriers.

NDDB organised a conference on "FMD Free Zone in Gujarat – From Concept to Reality" on May 21, 2024, at Anand. The conference brought together officials from DAHD, Government of India; Gujarat Animal Husbandry Department and industry stakeholders to discuss strategies and policy support for establishing an FMD-free zone in Gujarat, aiming to facilitate global trade in dairy and livestock products.

The Cabinet's approval of comprehensive Livestock Health and Disease Control Programme with a total budget of ₹3,880 crore is providing necessary thrust in developing India FMD free. Nine states are in Stage 1 of becoming FMD-free: Punjab, Haryana, Uttarakhand, Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Gujarat and Maharashtra.

Further, the creation and modernisation of the dairy sector, which includes both the forward and backward linkages, are proving beneficial in ensuring the quality of raw milk procured, processed, and marketed by the dairy cooperatives. Government of India schemes like NPDD, AHIDF, SDCFPO, Quality Mark and CAS-MMP are proving very helpful in ensuring the quality of milk and milk products of the dairy cooperative sector.

### ENSURING SUSTAINABILITY

Achieving net-zero greenhouse gas emissions by 2047 through biogas adoption, renewable energy, improved feed practices, and carbon sequestration.

The Indian Dairy Cooperative Sector aims to become Net Zero by 2047. A plan has been proposed to achieve this goal, spanning 20 years (2026-27 to 2046-47) and divided into three phases. The plan's interventions are expected to significantly reduce greenhouse gas emissions in the Indian dairy sector over time.

Dairying holds the potential to not only drive rural prosperity but also position India as a global dairy leader. By empowering farmers, especially women, and integrating sustainability with growth, the dairy sector can play a transformative role in realising the dream of Viksit Bharat 2047.

*Dr K R Trivedi, Advisor, NDDB interacting with the officials of DAHD, Government of India; NDDB and other dairy professionals during the Conference on Future Roadmap for Indian Dairy Sector*









# NDDB FOUNDATION FOR NUTRITION

NDDB Foundation for Nutrition (NFN), established in October 2015 at Anand, Gujarat, is registered as a Society under The Societies Registration Act, 1860 and as a Trust under The Bombay Public Trusts Act, 1950. NFN continued to work towards its objective to provide nutrition support to children through milk and milk products and thereby contribute towards addressing the issue of malnutrition, with active support from NDDB subsidiary companies and other PSUs across the country.

*Dr Meenesh Shah, Chairman, NDDB and IIL during the launch of NFN's flagship Giftmilk Programme at Pollachi, Coimbatore, Tamil Nadu in the presence of Selvi A Catherine Saranya, Sub-Collector, Pollachi; Dr K Anand Kumar, MD, IIL and Shri R Kesavakumar, District Education Officer, Coimbatore*





## GIFTMILK PROGRAMME

NFN's flagship initiative, the Giftmilk Programme, focused on providing 200 ml of flavoured milk—preferably fortified with Vitamins A and D—to children in government schools and anganwadis. In the fiscal year 2024-25, the programme successfully distributed 9.5 lakh litres of milk to more than 66,900 children across 660 schools in 13 states.

### STATE-WISE COVERAGE UNDER GIFTMILK PROGRAMME

S.N.	State	No. of School / Anganwadi	No. of Children	Giftmilk Distribution ('000 litres)
1	Andhra Pradesh	11	2264	7.45
2	Bihar	5	1200	30.08
3	Chhattisgarh	180	14412	197.64
4	Gujarat	18	2300	66.43
5	Jharkhand	55	11200	205.86
6	Maharashtra	45	5070	155.65
7	Odisha	50	2824	38.96
8	Punjab	3	634	5.89
9	Rajasthan	108	1850	10.68
10	Tamil Nadu	43	4136	62.03
11	Telangana	1	358	6.30
12	Uttar Pradesh	121	17115	113.43
13	West Bengal	20	3537	52.55
<b>Grand Total</b>		<b>660</b>	<b>66900</b>	<b>952.96</b>

This initiative was made possible through significant CSR contributions. Key supporters included NDDB

subsidiaries—IDMC Ltd., MDFVPL, IIL & NDS—as well as public sector undertakings like SAIL, Bokaro Power Supply Company (P) Ltd., NBCC (India) Ltd., Yamaha Motor Solutions India Pvt. Ltd., Mazagon Dock Shipbuilders Ltd., The Shipping Corporation of India Ltd., Housing and Urban Development Corporation, and several Milk Producer Companies.

Further solidifying its industry standing, NFN showcased its initiatives at the IDF Regional Dairy Conference in Kochi from June 26–28, 2024. This participation underscored the organisation's dedication to advancing child nutrition within the dairy industry and among its various stakeholders.

## SHISHU SANJEEVANI PROGRAMME

Under the corporate social responsibility initiative of Mother Dairy Fruit & Vegetable Pvt. Ltd., the Shishu Sanjeevani Programme was successfully implemented in the Aheri Block of Gadchiroli District, Maharashtra, with the goal of enhancing early childhood nutrition.

This programme provided a ready-to-eat, semi-solid, fortified nutritional supplement to children aged 3 to 6. Each 40-gram serving contained 18% protein and delivered around 200 kcal of energy, which fulfilled approximately one-third of the daily Recommended Dietary Allowance (RDA) for various micronutrients.

In the fiscal year 2024-25, NFN successfully distributed 7.26 lakh units of Shishu Sanjeevani. This effort benefited more than 4,253 children across 147 anganwadi centers, leading to a notable improvement in the nutritional status of the region's young children.

## GO-GREEN INITIATIVE

NFN is also championing clean energy and sustainable agriculture through its Go-Green Initiative under CSR of various companies. During the year, major agreements executed for installation of household level 2 cubic meter bio-gas plant is given in the table below:

S.N.	Location	Donor Agency	No. of Biogas Plants
1	Bokaro, Jharkhand	Bokaro Power Supply Company Ltd	100
2	Vadodara, Gujarat	Archroma India Ltd	50
3	Mehsana and Gandhinagar districts, Gujarat	Suzuki R&D Center India (SRDI)	285

An agreement was executed among ONGC, NFN, NDDB & Barauni Milk Union to establish a 100 MTPD dung-based biogas plant in Barauni, Bihar. The plant is expected to contribute to rural waste-to-energy conversion and organic fertiliser production.

Through its integrated approach—spanning nutrition and clean energy—NFN is not just addressing immediate community needs but also fostering long-term, sustainable development.

# PROGRESSIVE USE OF RAJBHASHA

Throughout the year, NDDDB diligently advanced its efforts to promote Hindi in official communications, achieving significant progress across various initiatives, which earned notable national recognition.

*Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation presenting the prestigious Rajbhasha Kirti Puraskar (First Prize) for 2023-24 to Dr Meenesh Shah, Chairman, NDDDB at New Delhi*







TOLIC, Anand honouring Dr Meenesh Shah, Chairman, NDDB with Rajbhasha Stambh Puraskar

NDDB was conferred the prestigious Rajbhasha Kirti Puraskar (First Prize) for 2023–24 during the 4<sup>th</sup> Akhil Bhartiya Rajbhasha Sammelan and Hindi Diwas Celebrations at Bharat Mandapam, New Delhi, on September 14, 2024. The award was presented by Shri Amit Shah ji, the Hon'ble Union Minister of Home Affairs and Cooperation, to Dr Meenesh Shah, Chairman of NDDB, at the ceremony.

Additionally, NDDB, Anand, secured two Annual Rajbhasha Awards—First Prize for 2022–23 and Second Prize for 2024–25—for exemplary implementation of the Official Language Policy. Furthermore, the Town Official Language Implementation Committee (TOLIC), Anand, honoured Chairman, NDDB with two 'Rajbhasha Stambh' awards, accompanied by citations.

#### Key activities undertaken during 2024–25 that accelerated Hindi implementation included:

- Quarterly Rajbhasha workshops, with participation from NDDB employees, regional offices and training centres.
- Quarterly Official Language Implementation Committee (OLIC) meetings, followed by focused action on decisions taken.
- Group-wise Hindi review meetings, stressing adherence to check-points of Rajbhasha implementation and use of ICT tools for translation.
- Celebration of Hindi Umangotsav Month across all NDDB offices from 1–30 September 2024.

- Hindi competitions, such as essay writing, poetry recitation, translation, Picture-based Idiom Writing Competition and quizzes were organised and witnessed active participation by the employees.
- A 'Hasya Sadhya' Kavi Sammelan as part of Vishwa Hindi Diwas on January 10, 2025.
- Hindi lectures under the 'Sahitya Samvad' Lecture Series to encourage literary engagement.
- Publication of the Hindi e-magazine 'Srijan'.

To expand the reach of dairy development and allied activities among the public, NDDB also created and disseminated various materials in Hindi through print and digital platforms.

NDDB, Anand maintained its active involvement with TOLIC, Anand, hosting and participating in its half-yearly meetings and events. NDDB employees also contributed poems and articles to 'Ujjawal Anand', a TOLIC Anand's Hindi magazine. A Hindi poetry recitation competition was organised in which employees of various organisations associated with TOLIC participated.

To further encourage Hindi usage, NDDB continued its Hindi Noting and Drafting Incentive Scheme, under which 32 employees received cash awards. Additionally, children of employees scoring 75 per cent or more in Hindi in their Class 10 and 12 board exams were also rewarded.

# GLIMPSES OF KEY EVENTS



**DR MEENESH SHAH  
ADDRESSES IFPRI  
GLOBAL POLICY SEMINAR**

Dr Meenesh Shah, Chairman, NDDB delivered a keynote address at the International Food Policy Research Institute's (IFPRI) Global Policy Seminar, themed "Dairy and Nutrition in the Global South: Potential, Progress, and Challenges Ahead". Dr Shah elucidated critical perspectives on "Dairy Development and Nutrition in India", underscoring India's preeminent position as the world's foremost producer and consumer of milk. He highlighted the dairy sector's pivotal role in advancing gender equity, bolstering rural livelihoods, and fortifying the agrarian economy. Dr Shah attributed the success of India's dairy cooperative framework to its ability to channel 75% of consumer expenditure directly back to producers, thereby enhancing financial stability, social security, and nutritional well-being for over one billion individuals. The seminar served as a vital forum for deliberating strategies to amplify dairy production and nutritional outcomes across the Global South, reaffirming India's leadership in the sector and its steadfast commitment to fostering global dairy development.



**INTERNATIONAL  
WORKSHOP ON LMIC  
PRIORITIES**

NDDB attended an international workshop on Low and Middle Income Countries (LMIC) Priorities, organised by the Centre for Science and Environment (CSE) India at the Anil Agarwal Environment Training Institute (AAETI) in Nimli, Rajasthan. Chairman, NDDB, elaborated on efforts made by NDDB for Productivity Enhancement through scientific interventions, including PT protocols, genomic chip usage, EVM formulations, and biogas & organic manure management for sustainable dairying practices.

Experts discussed the realities and priorities of the Global South on issues such as financing for One Health, AMR implementation in LMICs, food system transformation, and the preventive approach to sustainability.





**CHAIRMAN, NDDB  
HONOURED BY NATIONAL  
ACADEMY OF DAIRY  
SCIENCE**

Dr Meenesh Shah, Chairman, NDDB was conferred a prestigious Fellowship at the VIII Convocation of the National Academy of Dairy Science in Mathura. The ceremony was distinguished by the presence of Vice Chancellors from eminent universities and luminaries of the dairy industry. In his address as Chief Guest, Dr Shah underscored the indispensable role of farmers as the cornerstone of India's dairy sector, while reaffirming NDDB's unwavering commitment to advancing productivity, enhancing animal health, and pioneering digital innovation in dairy practices.



**INAUGURATION OF GOAN  
FEED SECURITY FPO  
OFFICE**

The office of the Goan Feed Security FPO Producer's Company Limited in Ponda, Goa, was inaugurated under the 100 Fodder Plus FPOs initiative, with 317 members at inception. NDDB's Chairman acknowledged the organisation's progress and highlighted the necessity of expanding green fodder production to mitigate regional fodder shortages. A subsequent technical visit was conducted to evaluate fodder cultivation practices and productivity at a model farm managed by an FPO member.



**DR B.R. AMBEDKAR  
JAYANTI**

NDDB observed Dr B.R. Ambedkar Jayanti with participation from the Executive Director, officers of NDDB, and children from Anandalaya. The event featured a lecture on Dr Ambedkar's life and contributions, delivered by Dr Dilip Mehra, Professor and Head of the Postgraduate Hindi Department at Sardar Patel University. This initiative reinforced NDDB's commitment to promoting social awareness and educational values among its community.



**WORLD VETERINARY DAY**

The Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, in collaboration with NDDB, Celebrated World Veterinary Day under the theme 'Veterinarians are Essential Health Workers'. The programme emphasised the critical contribution of veterinary professionals to animal health management and their integral role in advancing India's milk production capacity during the event.

## GLIMPSES OF KEY EVENTS



### WORLD ENVIRONMENT DAY

On the occasion of World Environment Day, NDDB organised a tree plantation programme to demonstrate its commitment to environmental sustainability in the dairy sector. The initiative involved senior leadership and staff participation, reflecting NDDB's emphasis on integrating eco-friendly practices.



### INDEPENDENCE DAY

The National Flag was hoisted at NDDB Anand Campus by the Dr Meenesh Shah, Chairman, NDDB. While addressing the gathering Dr Shah reiterated NDDB's commitment of empowering every farmer and ensuring that they are active partners in India's development journey. He also expressed confidence that the cooperative model will emerge as the most effective path towards realising the vision of a developed India.



### NDDB PARTICIPATES IN WORKSHOP ON DECARBONISING PERISHABLE SUPPLY CHAINS

NDDB engaged in a pivotal workshop on 'Decarbonising the Perishable Supply Chain via Dedicated Freight Corridor', convened by The Energy and Resources Institute (TERI) in collaboration with the Dedicated Freight Corridor Corporation of India Limited (DFCCIL). This event united key stakeholders, including dairy industry leaders from Mother Dairy Fruits & Vegetables Private Limited, Gujarat Cooperative Milk Marketing Federation (Amul), Banaskantha Milk Union Limited, alongside representatives from the Railway Board, and logistics and electric truck manufacturers. Central to the discourse was the adoption of Roll-on/Roll-off (Ro-Ro) services on dedicated freight corridors to bolster supply chain efficiency and environmental sustainability.



### FLAGGING OFF MILK TANKERS WITH NDDB'S DIAMOND JUBILEE LOGO

Dr Meenesh Shah, Chairman, NDDB along with Shri Shamalbhai Patel, Chairman, GCMMF and Shri Vipulbhai Patel, Chairman, Kaira District Cooperative Milk Union Ltd flagging off the road milk tankers with NDDB's Diamond Jubilee logo during NDDB's 59th foundation day, kick starting the Diamond Jubilee celebrations.





### **MAHATMA GANDHI AND SHRI LAL BAHADUR SHASTRI JAYANTI**

NDDB employees celebrated the birth anniversaries of Mahatma Gandhi and Shri Lal Bahadur Shastri at NDDB, Anand. The ceremony commenced with senior officials of NDDB garlanding the portraits of Mahatma Gandhi and Shri Lal Bahadur Shastri. Students of Anandalaya School performed specially curated songs dedicated to the life and teachings of Gandhi ji and Shastri ji.



### **TRIBHUVANDAS PATEL JAYANTI**

NDDB observed the birth anniversary of Shri Tribhuvandas Patel, the visionary leader and pioneer of India's cooperative movement. On this occasion, Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation during his visit to NDDB on Tribhuvandas Patel Jayanti, along with the Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj and Chairman, NDDB offered floral tributes to Shri Tribhuvandas Patel.



### **SARDAR VALLABHBHAI PATEL JAYANTI**

Dr Meenesh Shah, Chairman, NDDB and Senior Officers of NDDB took the National Unity Day pledge on the occasion of the birth anniversary of Sardar Vallabhbhai Patel, the Iron Man of India. On this occasion, they dedicated themselves to preserve the unity, integrity and security of the nation.



### **DAIRY DEVELOPMENT INITIATIVES IN KERALA**

Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs, alongside Dr Meenesh Shah, Chairman, NDDB, and distinguished dignitaries, ceremonially laid the foundation stone for the modernisation of the ice-cream plant at Edappally Product's Dairy, Ernakulam. Additionally, he officiated the inauguration of a 2 MW solar power plant at Ernakulam Dairy, Tripunithura, marking a significant stride towards sustainable infrastructure.

## GLIMPSES OF KEY EVENTS



### NATIONAL MILK DAY

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NDDB and sister organisations paid tribute to Dr Kurien on National Milk Day at its headquarters in Anand. While addressing the gathering, Chairman, NDDB reiterated the vision of Dr Kurien in empowering farmers through dairy cooperatives. He urged all institutions to actively support White Revolution 2.0 by extending the reach of dairy cooperatives to encompass all uncovered gram panchayats and villages. The event was enriched with vibrant cultural performances, and the occasion also honoured the winners of various competitions with felicitations.



### INAUGURATION OF DEMONSTRATION UNIT ON SUSTAINABLE FARMING

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Chairman, NDDB inaugurated a Demonstration Unit for Sustainable Farm Management Practices at Anand. The unit combined biogas generation, organic fertiliser use, and optimised TMR feeding to enhance productivity. Circular farming methods were implemented to promote resource efficiency. The initiative serves as a knowledge hub to promote eco-friendly dairy farming.



### REPUBLIC DAY

On the occasion of India's 76th Republic Day, Dr Meenesh Shah, Chairman, NDDB unfurled the National Flag in the presence of NDDB employees and their family members. Dr Shah emphasised NDDB's pivotal role in achieving the vision of Viksit Bharat through Sahkar-se-Samriddhi. He reaffirmed NDDB's commitment in transforming rural India through the power of cooperatives.





### **NDBB PARTICIPATED IN NATURAL FARMING CONVENTION**

Chairman, NDBB participated in the Natural Farming Convention at Sabar Dairy. The event was graced by Shri Acharya Devrat ji, Hon'ble Governor of Gujarat, Shri Bhikushinh Parmar ji, Hon'ble Minister of State for Food & Civil Supply, Social Justice and Empowerment, Government of Gujarat along with other dignitaries.

The convention underscored the critical synergy between agriculture and animal husbandry in augmenting farmers' income and fostering sustainable rural development. The Governor emphasised NDBB's initiatives in indigenous breed development, genomic-based bull selection, and advanced reproductive technologies, including OPU-IVEP-Embryo and GauSort technology, which have significantly lowered the cost of sex-sorted semen doses.



### **DR KURIEN MEMORIAL LECTURE DELIVERED BY NDBB CHAIRMAN**

Dr Meenesh Shah delivered the inaugural Dr Verghese Kurien Memorial Lecture at the XVII Agricultural Science Congress on "Frontier Sciences and Technologies in Agriculture for Developed India" at GB Pant University. He elucidated Dr Kurien's pivotal role in cooperative dairying, which enabled India's self-sufficiency in milk production through an innovative smallholder dairying model. He highlighted significant milestones in NDBB's journey, including Operation Flood and NDP-I. Additionally, he discussed farmer-centric innovations such as GAUCHIP, MAHISHCHIP, and GauSort, which are designed to promote sustainable and inclusive growth, aligning with NDBB's strategic vision under White Revolution 2.0.



### **INTERNATIONAL WOMEN'S DAY**

NDBB celebrated International Women's Day with the theme "She Shines". The event acknowledged the growing leadership role of women in dairy cooperatives and transition from 'Women involved dairy' to 'Women-led dairy'. Competitions and awareness activities were conducted to promote gender inclusion.

# ENHANCING NDDDB'S EFFORTS – NDDDB SUBSIDIARIES

## MOTHER DAIRY FRUIT & VEGETABLE PRIVATE LIMITED

Mother Dairy Fruit & Vegetable Private Limited, established in 1974 as Mother Dairy, Delhi, under the aegis of 'Operation Flood', was created to address Delhi's liquid milk demand. Mother Dairy remains steadfast in its mission to serve both farmers and consumers, guided by its vision to 'provide quality food and beverages to consumers at affordable prices while ensuring fair returns to producers'. In FY 2024-25, the Company celebrated a significant milestone, marking 50 years of its enduring legacy of trust, quality, and inclusive growth.

In FY 2024–25, the Company posted a turnover of ₹17,386 crore, reflecting a robust growth of 16 per cent over the last fiscal. The dairy segment registered a growth of 15 per cent over the previous year. The year also saw a smooth transition of sales operations from milk-producing organisation including Sahaj (Uttar Pradesh), Baani (Punjab), Shreeja (Andhra Pradesh), and Paayas (Rajasthan), thereby, boosting market expansion efforts.

Strengthening its portfolio, Mother Dairy during the fiscal year became the exclusive partner for distribution & marketing of organic produce from National Co-operative Organics Limited through its designated Safal booths, general trade outlets and e-commerce platforms.

With a steadfast commitment to sustainability, the Company has championed multiple initiatives, including

Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs & Cooperation; Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Prof S P Singh Baghel ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj; Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs; Shri Raghavjibhai Patel ji, Hon'ble Minister of Agriculture, Animal Husbandry, Cow-Breeding and Fisheries, Government of Gujarat; Shri Jagdish Vishwakarma ji, Hon'ble Minister of State for Cooperation, Government of Gujarat; Shri Mitesh Patel ji, Hon'ble Member of Parliament; Ms Alka Upadhyaya, Secretary, DAHD, Government of India and Dr Meenesh Shah, Chairman, NDDDB laid the foundation stone for Mother Dairy's greenfield project at Itola, Gujarat





eco-friendly packaging and the adoption of recycled plastic in secondary packaging. These efforts are projected to eliminate 600 tons of virgin plastic from the system. Since 2018, Mother Dairy has successfully collected, segregated, and recycled approximately 53,500 tons of post-consumer plastic waste.

FY 2024–25 marked a milestone year for innovation at Mother Dairy, with the launch of more than 30 new products aimed at offering safe, healthy, and convenient choices to consumers. As protein gains prominence among health-conscious consumers, the company launched Promilk — an easy-to-use, daily protein product that requires no lifestyle changes and reflects its mission to democratise protein consumption, making it accessible for all.

To captivate consumers and encourage exploration, Mother Dairy introduced an array of new ice cream variants, encompassing celebration packs, single serves, Kulfis, cones, and premium tubs. Its dairy portfolio expanded with pioneering offerings, including India's first set-format High Protein Greek Yogurt, complemented by functional and indulgent products such as Probiotic Chaach, Low-Fat Pouch Curd, and more. Additionally, the company launched a distinctive Gir Cow Ghee with a traceability feature to ensure authenticity.

In the preceding year, the Mother Dairy brand underwent a profound rejuvenation, embodying values of love, care, and compassion. In FY 2024–25, it unveiled the emotive campaign “Mamta Jaisi Shudh, Maa Jaisi Mamta – Mother Dairy, Maa Jaisi” to strengthen consumer trust. The brand further amplified its visibility by partnering with prestigious events such as the IPL, Champions Trophy, and Pro Kabaddi League, fostering deeper connections with sports enthusiasts and enhancing overall consumer engagement.

Through these integrated efforts, Mother Dairy further reinforced its position as a trusted household name—synonymous with quality, innovation, and unwavering consumer focus.

During FY 2024–25, Dhara achieved an impressive 19 per cent revenue growth compared to the previous fiscal year. It also enhanced its outreach initiatives with a dedicated Mustard oil category campaign in key consumption markets supported by a range of BTL initiatives.

Similarly, Safal delivered a strong performance during FY 2024–25, registering a 15 per cent growth in revenue compared to the previous year.

The year witnessed major steps to expand sourcing and distribution, strengthening our farm-to-fork value chain. Ladakh was connected to Delhi-NCR for apricots and apples. Safal introduced Meghalaya Pineapple, Mandarin, and Ginger, and built new sourcing ties in Bihar, Tamil Nadu, and Odisha. These initiatives reflect a steadfast dedication to inclusive growth and regional integration.



*Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation along with other dignitaries launching the Mother Dairy's Gir Cow Ghee with a traceability feature*

Safal further broadened its value-added portfolio by introducing Idli Dosa batter, enhancing convenience for consumers in the NCR.

The fiscal year witnessed a significant expansion of Safal's processing infrastructure with the initiation of two greenfield projects in Gujarat and Andhra Pradesh — dedicated to the processing of fruits, vegetables, and frozen products. The foundation stone for the Gujarat facility was laid by Shri Amit Shah ji, Hon'ble Union Minister of Home Affairs and Cooperation while the foundation stone of Andhra Pradesh facility was laid by Shri N. Chandrababu Naidu ji, Hon'ble Chief Minister of Andhra Pradesh. These facilities will significantly boost Safal's processing capacity and expand its domestic and global presence.

## AWARDS AND RECOGNITION:

- Mother Dairy was recognised among the Top 100 Global Food and Drink Brands by Brand Finance, UK, world's leading independent brand valuation and strategy consultancies.
- The 24th edition of the Effie India Awards, hosted by The Advertising Club, conferred Mother Dairy with the Bronze Award for its 'Maa Jaisi' campaign.
- Dhara, was honoured with the 'Oil Fortification Quality Leap Award' by Millers for Nutrition, a globally recognised industry-led coalition for brand's sustained efforts in promoting oil fortification since 2009.

## IDMC LIMITED

IDMC Limited established in 1978, evolved from a small dairy equipment manufacturer into a key player in the dairy processing and packaging solutions industry.

The company bolstered its expertise in metal fabrication and plastic processing, delivering reliable and cost-effective solutions through the integration of technical proficiency and advanced technologies. These efforts enhanced operational efficiency in dairy plants and strengthened the nation's dairy infrastructure. IDMC recorded a total income of ₹882.00 crore.

The Metal Division played a pivotal role in the company's success, executing turnkey dairy plant installations with capacities ranging from 5,000 to 500,000 litres per day. These facilities encompassed production lines for butter, UHT milk, ice cream, curd, and milk powder.

It developed and commissioned an automated bulk culture preparation system. The division secured an export contract for a 1,000,000 litres per day dairy facility in the United Kingdom and a domestic project for a 2,000,000 litres per day plant with a 100 MT/day butter unit and 3,200 TR ammonia-based refrigeration system. IDMC also commissioned ammonia refrigeration systems with cooling capacities ranging from 50 Tons of Refrigeration (TR) to 1,600 TR.

The farm equipment division installed Herringbone-type milking parlours and supplied a comprehensive range of dairy farm equipment, including TMR mixers, cow collar tags for herd monitoring, digital thawing units for semen straws, and smart weighing machines.

The Plastic Division supplied 15,767 metric tonnes of polyfilm, catering to the packaging requirements of liquid milk, ghee, curd, and buttermilk through a comprehensive range of packaging films. It also provided high-barrier laminates for milk powder and other food products. The division expanded its international market presence by exporting specialised barrier films for UHT milk packaging to African countries. During the Diamond Jubilee celebration of NDDB, Hon'ble Union Minister of Home Affairs & Cooperation laid the foundation stone of IDMC's Polyfilm Plant in Delhi.

IDMC broadened its footprint in the pharmaceutical and biotechnology sectors through the execution of several key projects. The company fabricated and installed four 200-kilolitre (KL) fermenters for penicillin production.



Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj; Ms Varsha Joshi, Additional Secretary, DAHD, Government of India; Dr Meenesh Shah, Chairman, NDDB and IDMC Ltd along with Shri Prakash Maheshwari, Managing Director, IDMC Ltd during the inauguration of the new fabrication shed of IDMC in Anand





*IDMC's Bulk Milk Cooler manufacturing facility*

In India, it commissioned fermentation systems with capacities of 100 KL and 55 KL in the Central and Southern regions, respectively. Furthermore, IDMC secured a turnkey contract for establishing an animal vaccine production facility dedicated to Foot and Mouth Disease Virus (FMDV) and combined FMDV and Haemorrhagic Septicaemia (HS) vaccines. Additionally, an export order was obtained for a 10 KL enzymatic reactor used in antibiotic production.

IDMC advanced its renewable energy efforts through the commissioning of two 100 TPD cattle dung-based biogas plants in Western India. These plants integrated cleaning, compression, and dispensing systems to optimise biogas utilisation and operational efficiency. A 300 TPD cattle feed plant was commissioned in Eastern India.

IDMC manufactured a comprehensive range of equipment for the dairy and allied sectors. The product portfolio included milk silos, Clean-in-Place (CIP) systems, heaters, chillers, pasteurisers, aseptic tanks, and UHT sterilisation units. Advanced technologies such as FAT standardisation units, Continuous Butter Making Machines (CBMM), butter tub filling systems, and Continuous Khoa Making Machines (CKMM) were also supplied. Standard offerings comprised ice cream freezers, fruit feeders, rotary and linear cup fillers, flow components, bulk milk coolers, and indigenous milking machines.

In the past fiscal year, the R&D division has been instrumental in spearheading various product development initiatives. The fabrication of new aseptic tanks with 10 KL and 25 KL capacities and a 4.4 KLPH multiproduct UHT steriliser were key projects. Furthermore, a new series of centrifugal pumps (CLA-30), high-capacity volumetric

cup-filling machines, large pneumatic valves, and a 50 KLPH FAT standardisation unit were launched. A significant collaboration with NDDDB and Suzuki R&D Centre India (SRDI) led to the successful development of a 300-litre mobile milk collection and testing system. The company's commitment to international standards was underscored by securing CE certification for seven products, thereby bolstering its export potential. The filing of two patent applications further highlights our relentless pursuit of innovation and technological leadership.

To address growing market needs, IDMC established a state-of-the-art fabrication workshop fitted with high-capacity cranes and a 26-metre vertical clearance. Shri Rajiv Ranjan Singh alias Lalan Singh ji, Hon'ble Union Minister of Fisheries Animal Husbandry & Dairying and Panchayati Raj inaugurated the facility in August 2024. This facility significantly bolstered the company's ability to produce large-scale tanks and vessels for the dairy and pharmaceutical industries. Additionally, under NDDDB's technical expertise, a production unit was launched to manufacture ready-to-use dairy cultures, enhancing national self-sufficiency in this critical input sector.

IDMC extended consistent support to NDDDB's Foundation for Nutrition through contributions to the Gift Milk initiative. The company also participated in programs promoting healthcare, sanitation, and environmental sustainability. Advanced purity testing equipment for ghee and dairy products was provided to a prominent temple laboratory in South India. Further investments in clean energy included installing 490 kW rooftop solar photovoltaic systems at four manufacturing sites, with an additional 700 kW capacity in progress.

## INDIAN IMMUNOLOGICALS LIMITED

Indian Immunologicals Limited, a wholly owned subsidiary of NDDB, was founded in 1982 to manufacture Foot and Mouth Disease (FMD) vaccine. It was incorporated as a public limited company on October 8, 1999. Over the past four decades, IIL has evolved into a comprehensive ONE HEALTH vaccine producer. With advanced vaccine manufacturing facilities located in Gachibowli, Hyderabad (Telangana), Shameerpet (Telangana), and Ooty (Tamil Nadu), IIL has emerged as one of the world's leading vaccine manufacturers.

The subsidiary has achieved a turnover of ₹ 1,453 Crore during the financial year ended 31st Mar 2025. Including other income, the total revenues recorded are ₹ 1513 Crore.

IIL is among the major vaccine suppliers to the Government of India under various schemes, e.g., Disease Control Programme, Assistance to States for Control of Animal Diseases (ASCAD), Universal Immunisation Programme (UIP) etc. Apart from this, IIL exports its vaccines to more than 60 countries in the World.

While major vaccines like FMD, Anti-rabies, Pentavalent, Blue Tongue, Theileriosis, Cysvax, Classical Swine Fever, PPR, Hepatitis-A, Hepatitis-B, Tetanus Toxoid, etc., are the current revenue contributors for IIL, there is a basket of new products in advanced stages of development.

The company's product development pipeline is both robust and promising. The R&D team is currently focused

on the development of several key vaccines, including a Tetravalent Mastitis vaccine, a Ten-in-one combination vaccine for Canines, and vaccines for Lumpy skin disease, Foot rot in sheep and goats, Td, Tetravalent Dengue vaccine, Hexavalent vaccine, Live attenuated Zika vaccine, Kyasanur Forest Disease (KFD). Other near-term launches include vaccines for Infectious Bovine Rhinotracheitis (IBR), Measles-Rubella, and fish. A notable achievement this year was the collaborative development with NDDB of "Shashthi", an indigenous in-vitro fertilisation (IVF) media. The division is also actively exploring collaborations for the development of new poultry vaccines.

IIL's foreign subsidiary, Pristine Biologicals NZ Ltd, located in Dargaville, New Zealand, was established in 2015. Its primary function is to supply Adult Bovine Serum (ABS), a critical input for the production of FMD and various other vaccines. The subsidiary's contribution has been vital in ensuring the continuous production and supply of the FMD vaccine for the Indian market.

*Single largest contributor to the vaccine security of the nation for human and animal health*







*Mr Christopher Luxon, Hon'ble Prime Minister of New Zealand presented the 'Business Excellence in Marketing' and 'Business Excellence in International Trade with India' to Dr Meenesh Shah, Chairman, NDDDB and IIL; Dr K Anand Kumar, MD, IIL and Dr Vijay Dasari, Director, Pristine Biologicals (NZ) Ltd in presence of Mr Chris Hipkins, Leader of the Opposition of New Zealand in Auckland, New Zealand*

The company has diligently engaged in numerous Krishi Melas across various regions of the country to enhance awareness among farmers. Under its Corporate Social Responsibility (CSR) initiative, IIL continues to extend health coverage to over one lakh cattle in Gaushalas nationwide. IIL has adopted three government schools (two in Laxmapur village and one in Karakapatla village, Telangana state), establishing infrastructure to support student well-being and providing uniforms, school bags, and notebooks.

IIL supports NDDDB Foundation for Nutrition (NFN) flagship activities of Giftmilk for school children and Biogas plants for domestic households. More than 3500 school children and nearly 300 households were the beneficiaries of this CSR activity over the past three years, in the areas of Telangana and Tamil Nadu.

IIL is actively engaged in Kerala to eliminate Rabies. In collaboration with the NGO Compassion for Animals Welfare Association (CAWA), IIL funded the initiative "RABIES FREE KERALA". Under this programme, activities such as vaccinating stray dogs, providing counseling to school children and patients in government hospitals, and raising public awareness were conducted in the Trivandrum, Kollam, and Thrissur districts of Kerala.

In February 2025, Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs, Smt J. Chinchurani ji, Hon'ble Minister for Animal Husbandry and Dairy Development, Government of Kerala and Dr Meenesh Shah, Chairman, NDDDB and IIL, handed over the vaccine kit and the key of a specially customised rabies task force vehicle to the Municipal Chairperson of Kottayam and the CAWA Team.

This past year, IIL was honored to host several distinguished guests, including Shri V.K. Paul, Member of NITI Aayog, and Ms Alka Upadhyaya, Secretary of the Department of Animal Husbandry and Dairying (DAHD), Government of India. Both

Shri Paul and Ms Upadhyaya served as guests of honor at the IIL-sponsored conclave on "Pandemic preparedness and Vaccine Innovation" held in January 2025.

IIL received several prestigious awards during the 2024-25 fiscal year. These include the Most Preferred Workplace Award from Team Markmen Network, the National Award for excellence in Energy Management 2024 from the Confederation of Indian Industry (CII), and two ET Re-Pharma Awards for "Biotech Breakthrough of the year" and "Make in India Initiative" for India's first Hepatitis A vaccine. The company also received the "Most Promising Vaccine Development 2025" award at the Biopharma Excellence Awards India edition 2025, presented by IMAPAC.

## RECOGNITION FOR PRISTINE BIOLOGICALS (NZ) LTD AT THE INDIAN NEWSLINK BUSINESS AWARDS 2024

Pristine Biologicals (NZ) Ltd, a wholly-owned subsidiary of Indian Immunologicals Limited (IIL), received recognition during the Silver Jubilee celebrations of Indian Newslink and the 15th Annual Indian Newslink Business Awards held in Auckland, New Zealand, in November 2024. The subsidiary received awards for 'Business Excellence in Marketing' and 'Business Excellence in International Trade with India'.

Mr Christopher Luxon, Hon'ble Prime Minister of New Zealand presented the awards. The recognition reflected the subsidiary's strength in international marketing and its role in enhancing India–New Zealand trade in biologicals and veterinary healthcare.

## NDDB DAIRY SERVICES

NDDB Dairy Services (NDS), a wholly owned not-for-profit subsidiary of NDDB, was established in 2009. NDS's mission is to enhance farmers' income, productivity enhancement, improve milk quality, ensure environmental sustainability, and integrate rural dairy farmers into the mainstream economy. NDS continues to broaden its horizons by implementing inclusive and efficient models of dairy development.

In FY 2024–25, the collective efforts of the 23 operational Milk Producer Organisations (MPOs) facilitated by NDS resulted in an impressive cumulative gross turnover of ₹9,637 crore.

During the year, the operationalisation of the Marathvarhad MPO in Maharashtra was carried out with the technical and financial assistance of NDS. Srijanee MPO also commenced operations in the financial year with the technical support of NDS.

In furtherance of its mandate to advance the conservation and enhancement of indigenous breeds, the NDDB Dairy Service (NDS) oversees four semen stations, which collectively distributed 425.97 lakh frozen semen doses over the fiscal year. This encompasses 80.39 lakh doses derived from eighteen indigenous cattle breeds and 133.43 lakh doses from eight buffalo breeds, reflecting NDS's steadfast commitment to bolstering genetic diversity and productivity in native livestock populations.

The NDS has championed the adoption of GauSort, an innovative sex-sorted semen technology indigenously developed and ceremonially launched by the Hon'ble Prime Minister on October 5, 2024. Pioneered at the

Parameter	Details
Total MPOs	23
MPOs with all-women membership	16
MPOs led by women Chairpersons	18
Villages covered	Over 37,000 villages
Farmer members	Over 12 lakh
Women members	77% of total members
Smallholder farmers	65% of total members
Share capital contributed	₹242 crore
Milk pooled daily	Over 62 lakh kg

Shri Ganesh Ram Singkhuntia ji, Hon'ble Minister of Forest, Environment and Climate Change Department, Government of Odisha; Shri Gokulananda Malik ji, Hon'ble Minister of State for Fisheries & Animal Resource Development, Micro Small and Medium Enterprises, Government of Odisha; Dr Meenesh Shah, Chairman, NDDB and NDS along with other dignitaries inaugurating the Cattle Induction Programme in Mayurbhanj, Odisha







*Shri Acharya Devvrat ji, Hon'ble Governor of Gujarat being briefed by Dr Meenesh Shah, Chairman, NDDB about activities at SAG, Bidaj*

Alamathi Semen Station with collaborative support from the Department of Animal Husbandry and Dairying (DAHD) and NDDB, this cutting-edge technology enhances the likelihood of female calf births to an impressive 90 percent. Commercial production commenced in January 2025, yielding 3 lakh doses in the fourth quarter, marking a significant milestone in sustainable dairy farming and herd improvement initiatives. In February 2025, Shri Acharya Devvrat Ji, Hon'ble Governor of Gujarat visited the Sabarmati Ashram Gaushala's Semen Station, the world's largest and managed by NDS, witnessing the production of indigenous sex sorting semen-GauSort.

In its pursuit to enhance the quality of livestock NDS inducted and distributed 6,116 high genetic merit animals to farmers across Maharashtra, Karnataka, Goa, Telangana, Madhya Pradesh, Jharkhand, Punjab, and Haryana. Encompassing breeds such as Gir, Sahiwal, Red Sindhi, Tharparkar, Crossbred HF, Jersey, Haryana, Rathi, Murrah, Pandharpuri, and Jaffrabadi, these cattle and buffaloes are elevating milk production and fostering economic integration through breed enhancement and sustainable livelihood opportunities.

NDS in its first full year of cattle feed sales operations achieved a total business value of ₹255.36 crore with a volume of 1,09,868 MT.

NDDB took over the management of three Central Cattle Breeding Farms (CCBFs) situated in Alamathi (Tamil Nadu), Andeshnagar (Uttar Pradesh), and Dhamrod (Gujarat). These facilities were transformed into Centres of Excellence in Dairy Innovation, emphasising advancements in infrastructure, technology, and capacity development. At the Andesh Nagar CCBF, numerous training initiatives were conducted throughout the year, encompassing leadership, conflict resolution, advanced IT applications, personal growth, time management, and specialised sessions on clean milk production, dairy value chains, FSSAI regulations, and digital infrastructure. These endeavors sought to elevate governance, professionalism, and expertise within the dairy ecosystem, particularly among MPO Board of Directors and farmer facilitators.

Acknowledging the critical role of household financial stability, NDS is expanding its developmental scope beyond dairy to include select agricultural value chains that complement the existing practices of producer members. The organisation launched value chain interventions in mango cultivation in Andhra Pradesh, mustard in Rajasthan, and maize in Bihar. These crops, already cultivated by MPO members, were chosen for their significant potential for value addition and robust market connectivity.

## NDDB MRIDA LIMITED

NDDB Mrida Ltd, an unlisted public company incorporated on 1st July 2022, was set up to develop and implement integrated solutions for dung management, biogas generation, and organic fertiliser production. Renewable energy initiatives using cattle dung as the main feedstock were a key focus. These interventions encompassed the development of household-level biogas systems, Bio-CNG units, biogas-based energy applications for dairy and industrial operations, and the commercialisation of organic fertilisers derived from digested slurry.

NDDB entered into a joint venture MoU with Suzuki R&D Center India Pvt. Ltd. (SRDI) to establish and manage biogas plants across various locations in India. This collaboration aimed to harness cattle dung as a sustainable energy source, supporting national goals related to carbon neutrality and decentralised renewable energy generation.

During the Diamond Jubilee Celebration of NDDB, NDDB Mrida Ltd entered into an MoU with NCOL to facilitate the supply of bio-inputs and promote organic cultivation.

NDDB Mrida continued to operate the 100 MTPD plant at Varanasi Milk Union. The plant generated about 8.9 Lakh cubic metres of bio gas which is used as a fuel to the steam boilers at the dairy. The initiative also supported the rural economy by injecting over ₹151 lakh for the procurement of dung from local farmers.

The company functioned as a National Level Programme Implementing Agency under the MNRE Biogas Programme. Strategic partnerships with dairy cooperatives, MNRE, and farmer-focused organisations facilitated the installation

of over 7,000 household-level biogas units across 13 states, including Madhya Pradesh, Maharashtra, Gujarat, Rajasthan, and Uttar Pradesh. These installations helped reduce capital investment requirements for farmers and promoted access to clean cooking fuel at the local level.

The SuDhan brand of organic fertilisers, produced from biogas slurry, saw increased demand compared to the previous year. These fertilisers supported soil health and nutrient recycling.

The company also prioritised inclusive development by enhancing women farmers' participation in dung management and clean energy adoption. These initiatives reflected NDDB Mrida's farmer-centric approach and its commitment to promoting sustainable energy and organic resource management within the dairy sector.

The activities of NDDB Mrida Ltd contributed to the overall objective of building sustainable, decentralised energy solutions that support rural livelihoods and strengthen India's dairy ecosystem.

*Exchange of MoU between NDDB Mrida Ltd and NCOL during the Diamond Jubilee Celebration event at NDDB, Anand*





## NDDB CALF LTD

NDDB CALF Ltd, an analytical laboratory was established as a wholly owned subsidiary of NDDB under the Companies Act, 2013. It completed its second year of operations, reporting a turnover of ₹18.63 crore.

### TECHNICAL SERVICES AND TESTING

NDDB CALF Ltd provided a wide range of analytical services for dairy products, fats and oils, honey, ready-to-eat foods, processed and organic foods, fruits and vegetables, animal feed, mineral mixtures, and vitamin premixes. The laboratory in Anand expanded its technical capabilities to include parentage verification, bovine disease diagnosis, detection of chromosomal abnormalities and genetic disorders, gender estimation, breed purity analysis, and genomic breeding value evaluation for cows and buffaloes.

NDDB CALF Ltd issued certifications validating the performance of analytical kits and devices to equipment manufacturers, distributors, and emerging start-ups. It sustained accreditation under ISO/IEC 17025 through the National Accreditation Board for Testing and Calibration Laboratories (NABL). The laboratory also maintained recognition from BIS, APEDA, and EIC for testing food, agricultural commodities, and water. It continued to function as the National Reference Laboratory (NRL) and Referral Laboratory (RL) for milk and milk products under FSSAI.

The laboratory has also conducted 10th Food Analyst Examination of FSSAI for Western Region of the country.

Throughout the year, NDDB CALF Ltd evaluated over 100,000 samples across chemical, microbiological, and genetic parameters, analysing more than 420,000 parameters in total. The laboratory also provided proficiency testing services, involving over 150 laboratories in India and internationally. These efforts bolstered quality assurance across the sector.

### EXPANSION OF OPERATIONS – KOCHI FACILITY

Under the MoU signed in the previous year, Kerala Cooperative Milk Marketing Federation (MILMA) handed over the management and operations of the State Central Quality Control Laboratory in Ernakulam, Kochi to NDDB CALF Ltd. This lab as a regional centre of excellence will significantly expand the analytical capabilities of NDDB CALF Ltd and provide testing services beyond dairy products like, spices, fishery, tea, coffee, all foods and agricultural products.

*Shri George Kurien ji, Hon'ble Union Minister of State for Fisheries, Animal Husbandry & Dairying and Minority Affairs along with Shri K S Mani, Chairman, Kerala Co-operative Milk Marketing Federation handing over the key of the laboratory to Dr Meenesh Shah, Chairman, NDDB & NDDB CALF Ltd and Shri Rajesh Subramaniam, Managing Director, NDDB CALF Ltd*

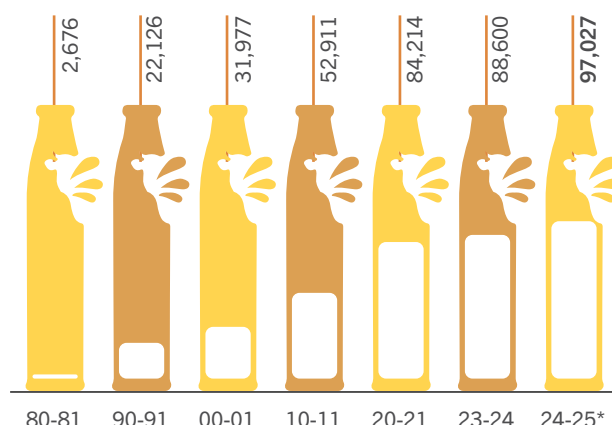


# PROGRESS OF DAIRY COOPERATIVES

## Dairy Cooperative Societies (in numbers)^

### NORTH

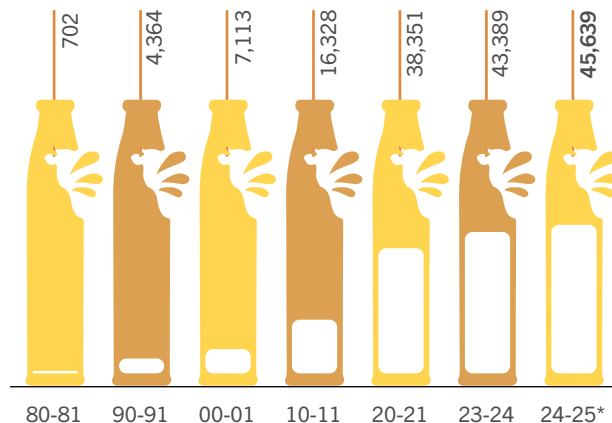
Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Haryana	505	3,229	3,318	7,019	7,837	7,686	7,839
Himachal Pradesh		210	288	740	1,084	1,130	1,214
Jammu & Kashmir		105	**	**	896	1,294	1,775
Ladakh						3	24
Punjab	490	5,726	6,823	7,069	8,539	8,799	9,174
Rajasthan	1,433	4,976	5,900	16,290	21,300	26,493	27,184
Uttar Pradesh	248	7,880	15,648	21,793	40,353	38,753	45,244
Uttarakhand					4,205	4,442	4,573
<b>Regional Total</b>	<b>2,676</b>	<b>22,126</b>	<b>31,977</b>	<b>52,911</b>	<b>84,214</b>	<b>88,600</b>	<b>97,027</b>



Region-wise dairy cooperative societies (North)

### EAST

Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Assam		117	125	155	522	1,093	1,555
Bihar	118	2,060	3,525	9,425	26,275	29,405	31,825
Jharkhand				53	769	1,228	1,228
Manipur						196	196
Meghalaya					30	30	18
Mizoram					42	36	25
Nagaland		21	74	49	52	52	52
Odisha		736	1,412	3,256	6,151	6,523	6,417
Sikkim		134	174	287	587	690	690
Tripura		73	84	84	119	168	178
West Bengal	584	1,223	1,719	3,019	3,804	3,968	3,455
<b>Regional Total</b>	<b>702</b>	<b>4,364</b>	<b>7,113</b>	<b>16,328</b>	<b>38,351</b>	<b>43,389</b>	<b>45,639</b>



Region-wise dairy cooperative societies (East)

^ For Dairy Cooperatives it is Organised (cumulative), includes conventional societies and Taluka unions formed earlier. 2020-21 onwards data includes functional MPPs of MPOs & MPIs of MDFVPL

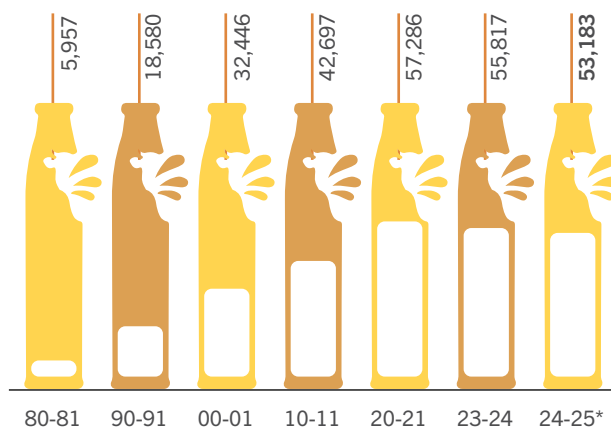
\* Provisional

\*\* Not reported



## WEST

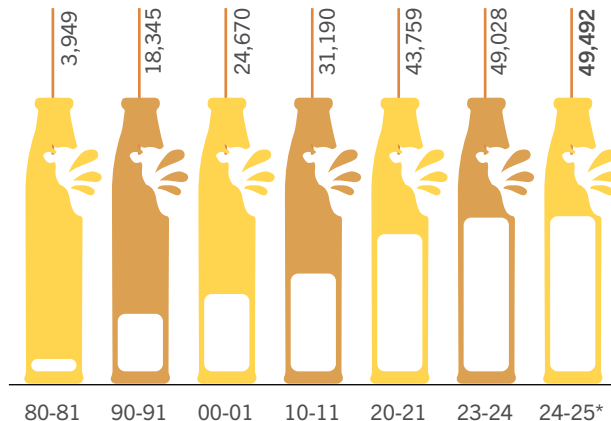
Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Chhattisgarh				757	1,110	991	997
Goa		124	166	178	183	174	181
Gujarat	4,798	10,056	10,679	14,347	22,341	23,018	23,497
Madhya Pradesh	441	3,865	4,877	6,216	10,757	11,641	12,149
Maharashtra	718	4,535	16,724	21,199	22,895	19,993	16,359
<b>Regional Total</b>	<b>5,957</b>	<b>18,580</b>	<b>32,446</b>	<b>42,697</b>	<b>57,286</b>	<b>55,817</b>	<b>53,183</b>



Region-wise dairy cooperative societies (West)

## SOUTH

Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Andhra Pradesh	298	4,766	4,912	4,971	6,458	9,415	9,378
Karnataka	1,267	5,621	8,516	12,372	16,721	17,808	18,117
Kerala		1,016	2,781	3,666	3,337	3,406	3,406
Tamil Nadu	2,384	6,871	8,369	10,079	10,555	11,428	11,610
Telangana					6,581	6,862	6,879
Puducherry		71	92	102	107	109	102
<b>Regional Total</b>	<b>3,949</b>	<b>18,345</b>	<b>24,670</b>	<b>31,190</b>	<b>43,759</b>	<b>49,028</b>	<b>49,492</b>



Region-wise dairy cooperative societies (South)

## GRAND TOTAL

<b>13,284</b>	<b>63,415</b>	<b>96,206</b>	<b>1,43,126</b>	<b>2,23,610</b>	<b>2,36,834</b>	<b>2,45,341</b>
80-81	90-91	00-01	10-11	20-21	23-24	24-25*

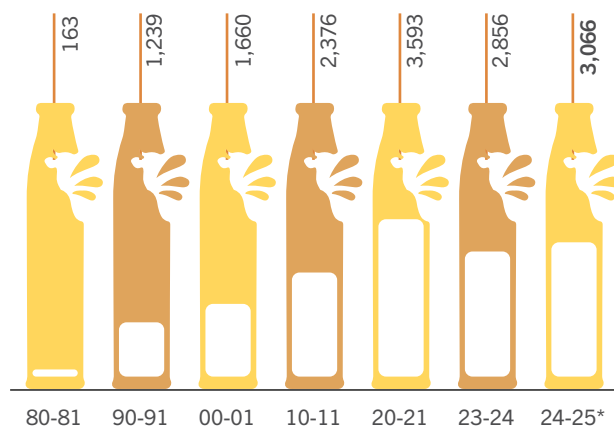
Source: Milk Unions & Federations, NDS

## PROGRESS OF DAIRY COOPERATIVES

### Producer Members (in thousands)

#### NORTH

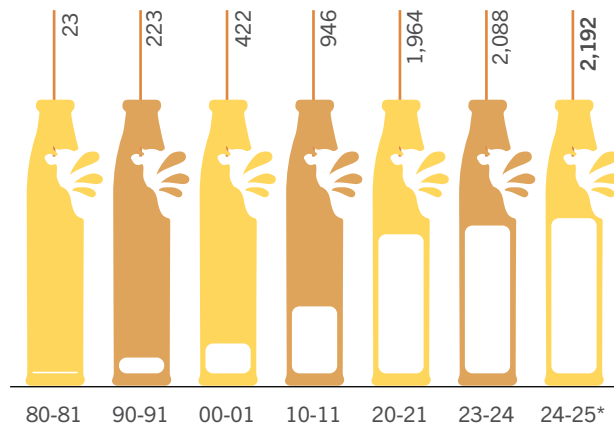
Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Haryana	39	184	185	313	326	328	291
Himachal Pradesh		17	20	32	46	48	49
Jammu & Kashmir		2	**	**	30	63	78
Ladakh						0.3	1.1
Punjab	26	304	370	385	419	402	420
Rajasthan	80	340	436	669	1,044	1,129	1,174
Uttar Pradesh	18	392	649	977	1,568	718	879
Uttarakhand					159	169	175
<b>Regional Total</b>	<b>163</b>	<b>1,239</b>	<b>1,660</b>	<b>2,376</b>	<b>3,593</b>	<b>2,856</b>	<b>3,066</b>



Region-wise producer members (North)

#### EAST

Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Assam		2	1	4	34	58	88
Bihar	3	100	184	523	1,308	1,420	1,477
Jharkhand				1	23	40	55
Manipur						4	4
Meghalaya					1	1	1
Mizoram					1	1	1
Nagaland		1	3	2	2	2	2
Odisha		46	111	187	325	336	340
Sikkim		4	5	10	15	18	18
Tripura		4	4	6	8	6	6
West Bengal	20	66	114	213	247	204	201
<b>Regional Total</b>	<b>23</b>	<b>223</b>	<b>422</b>	<b>946</b>	<b>1,964</b>	<b>2,088</b>	<b>2,192</b>



Region-wise producer members (East)

\* Provisional

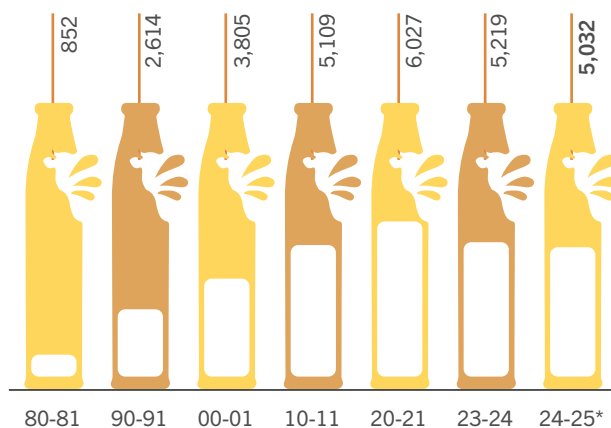
\*\* Not reported

2020-21 onwards data includes pouring members of MPOs & MPGs of MDFVPL



## WEST

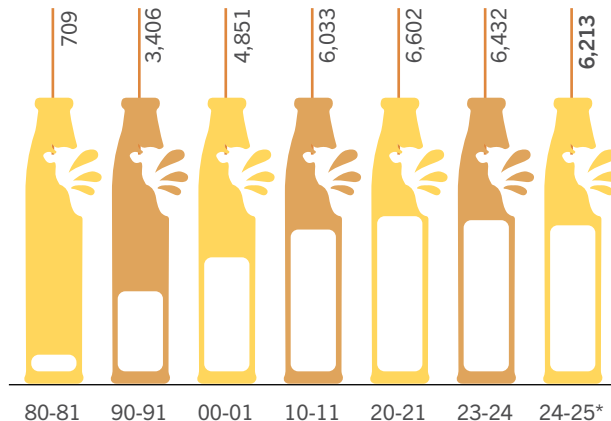
Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Chhattisgarh				31	43	38	38
Goa		12	18	19	19	19	19
Gujarat	741	1,612	2,147	2,970	3,740	3,667	3,684
Madhya Pradesh	24	150	242	271	372	407	401
Maharashtra	87	840	1,398	1,818	1,853	1,089	890
<b>Regional Total</b>	<b>852</b>	<b>2,614</b>	<b>3,805</b>	<b>5,109</b>	<b>6,027</b>	<b>5,219</b>	<b>5,032</b>



Region-wise producer members (West)

## SOUTH

Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Andhra Pradesh	33	561	702	846	661	659	641
Karnataka	195	1,013	1,528	2,124	2,633	2,694	2,647
Kerala		225	637	851	1,025	1,060	1,067
Tamil Nadu	481	1,590	1,957	2,176	1,983	1,705	1,536
Telangana					258	271	279
Puducherry		17	27	36	42	43	43
<b>Regional Total</b>	<b>709</b>	<b>3,406</b>	<b>4,851</b>	<b>6,033</b>	<b>6,602</b>	<b>6,432</b>	<b>6,213</b>



Region-wise producer members (South)

## GRAND TOTAL

<b>1,747</b>	<b>7,482</b>	<b>10,738</b>	<b>14,464</b>	<b>18,185</b>	<b>16,596</b>	<b>16,503</b>
80-81	90-91	00-01	10-11	20-21	23-24	24-25*

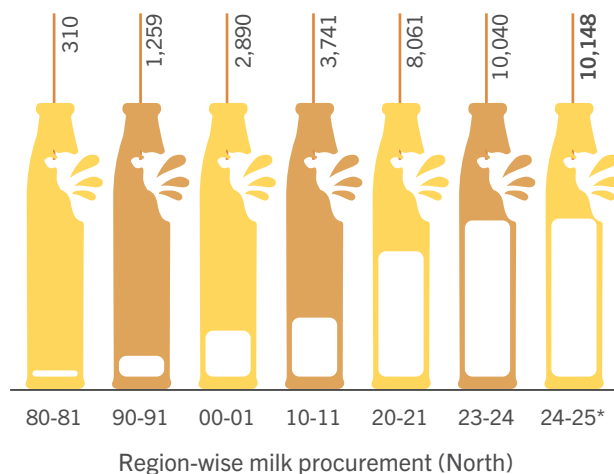
Source: Milk Unions & Federations, NDS

## PROGRESS OF DAIRY COOPERATIVES

### Milk Procurement (in thousand kilograms per day)<sup>#</sup>

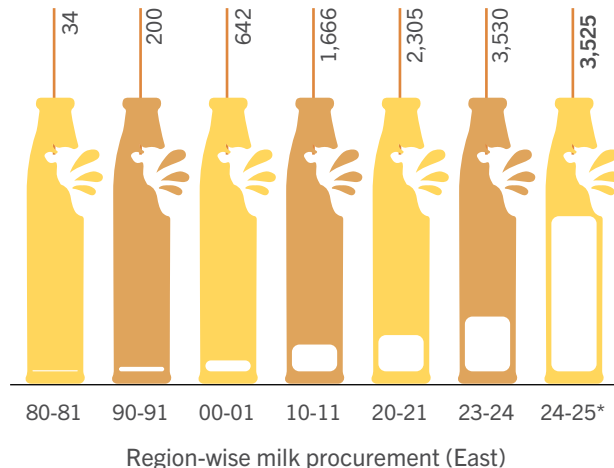
#### NORTH

Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Haryana	33	94	276	511	590	593	509
Himachal Pradesh		14	24	60	92	98	158
Jammu & Kashmir		11	**	**	92	158	187
Ladakh						1	2
Punjab	75	394	912	1,037	2,155	2,344	2,545
Rajasthan	138	364	887	1,629	3,613	4,702	4,506
Uttar Pradesh	64	382	791	504	1,330	1,957	2,028
Uttarakhand					189	189	212
<b>Regional Total</b>	<b>310</b>	<b>1,259</b>	<b>2,890</b>	<b>3,741</b>	<b>8,061</b>	<b>10,040</b>	<b>10,148</b>



#### EAST

Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Assam		4	3	5	29	52	89
Bihar	3	95	330	1,091	1,505	2,391	2,332
Jharkhand				5	134	259	256
Manipur						2	1
Meghalaya					14	11	10
Mizoram					5	2	2
Nagaland		1	3	2	3	3	3
Odisha		41	94	276	366	492	514
Sikkim		4	7	12	40	50	52
Tripura		3	1	2	7	5	5
West Bengal	31	52	204	273	203	263	260
<b>Regional Total</b>	<b>34</b>	<b>200</b>	<b>642</b>	<b>1,666</b>	<b>2,305</b>	<b>3,530</b>	<b>3,525</b>



<sup>#</sup> Includes outside State operations

\* Provisional

\*\* Not reported

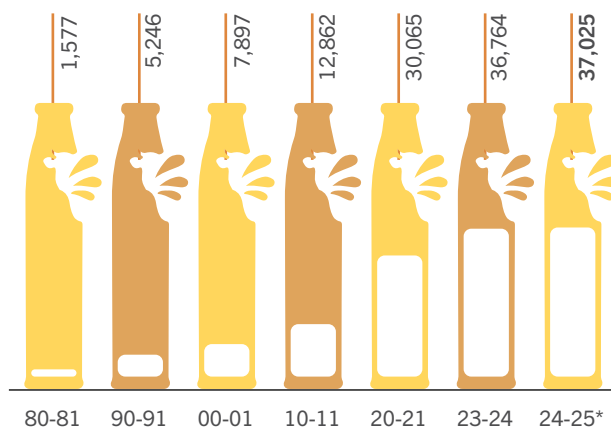
Gujarat's total milk procurement in 2024-25 includes 8,191 TKgPD from outside the State and in 2023-24, the corresponding figure was 9,027 TKgPD.

2020-21 onwards data includes procurement of MPOs & MPGs of MDFVPL



## WEST

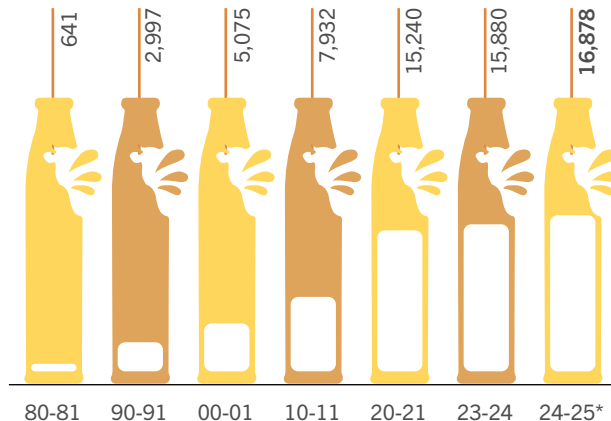
Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Chhattisgarh				25	68	69	69
Goa		16	32	38	55	41	39
Gujarat	1,344	3,102	4,567	9,158	25,237	31,383	31,551
Madhya Pradesh	68	256	319	588	954	1,191	1,025
Maharashtra	165	1,872	2,979	3,053	3,751	4,081	4,341
<b>Regional Total</b>	<b>1,577</b>	<b>5,246</b>	<b>7,897</b>	<b>12,862</b>	<b>30,065</b>	<b>36,764</b>	<b>37,025</b>



Region-wise milk procurement (West)

## SOUTH

Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Andhra Pradesh	79	763	879	1,371	1,742	2,501	2,782
Karnataka	261	917	1,887	3,742	7,879	8,310	8,807
Kerala		185	646	688	1,388	1,293	1,141
Tamil Nadu	301	1,106	1,618	2,097	3,709	3,043	3,367
Telangana					461	676	734
Puducherry		26	45	35	60	56	47
<b>Regional Total</b>	<b>641</b>	<b>2,997</b>	<b>5,075</b>	<b>7,932</b>	<b>15,240</b>	<b>15,880</b>	<b>16,878</b>



Region-wise milk procurement (South)

## GRAND TOTAL

<b>2,562</b>	<b>9,702</b>	<b>16,504</b>	<b>26,202</b>	<b>55,672</b>	<b>66,213</b>	<b>67,575</b>
80-81	90-91	00-01	10-11	20-21	23-24	24-25*

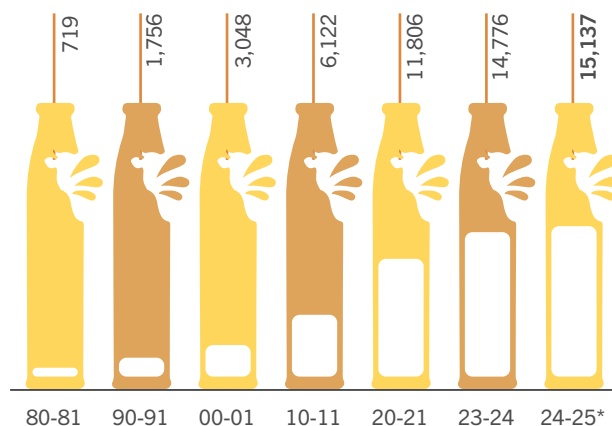
Source: Milk Unions & Federations, NDS & MDFVPL

## PROGRESS OF DAIRY COOPERATIVES

### Liquid Milk Marketing (in thousand litres per day)\*

#### NORTH

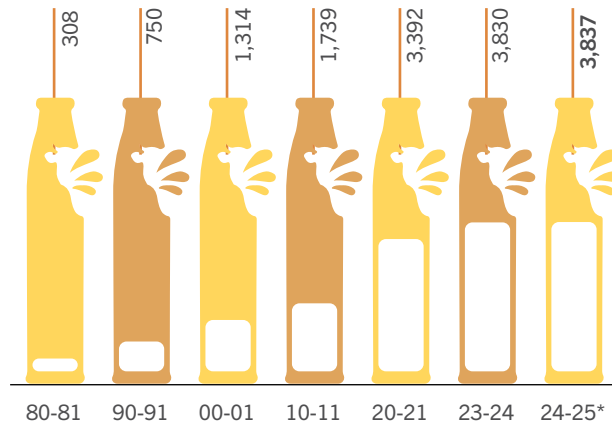
Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Haryana	2	80	108	362	289	278	274
Himachal Pradesh		15	20	23	25	24	24
Jammu & Kashmir		9	**	**	99	130	124
Ladakh						1	3
Punjab	7	139	420	802	1,013	1,289	1,255
Rajasthan	12	136	540	1,505	2,129	2,989	2,989
Uttar Pradesh	1	326	436	380	1,444	2,106	2,247
Uttarakhand					161	154	158
Delhi	697	1,051	1,524	3,050	6,647	7,806	8,062
<b>Regional Total</b>	<b>719</b>	<b>1,756</b>	<b>3,048</b>	<b>6,122</b>	<b>11,806</b>	<b>14,776</b>	<b>15,137</b>



Region-wise liquid milk marketing (North)

#### EAST

Region/State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Assam		10	7	22	59	83	103
Bihar	8	111	324	454	1,269	1,480	1,533
Jharkhand				253	374	423	432
Manipur						2	3
Meghalaya					13	11	10
Mizoram					4	3	4
Nagaland		1	4	3	6	5	7
Odisha		65	98	290	324	334	317
Sikkim		5	7	17	44	51	56
Tripura		6	7	15	9	7	6
West Bengal	17	26	27	41	83	108	111
Kolkata	283	526	840	644	1,207	1,323	1,256
<b>Regional Total</b>	<b>308</b>	<b>750</b>	<b>1,314</b>	<b>1,739</b>	<b>3,392</b>	<b>3,830</b>	<b>3,837</b>



Region-wise liquid milk marketing (East)

# Includes Metro Dairies and outside State operations

\* Provisional

\*\* Not reported

Gujarat's total milk marketing in 2024-25 including outside the State stands at 17,079 TLPD and in 2023-24, the corresponding figure was 16,711 TLPD.

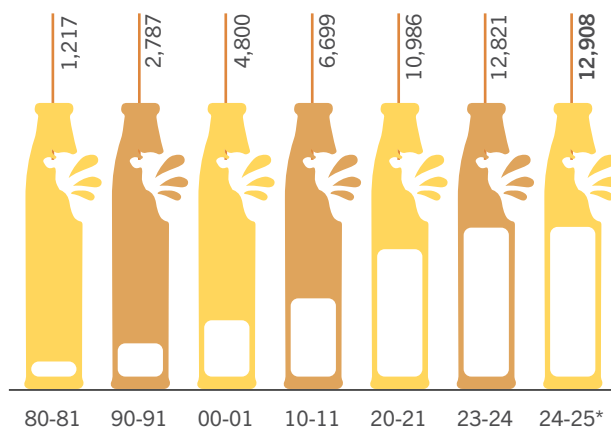
In 2010-11, break-up of sale volume by Maharashtra Milk Unions in Mumbai not available

2020-21 onwards data includes sale of MPOs & MDFVPL



## WEST

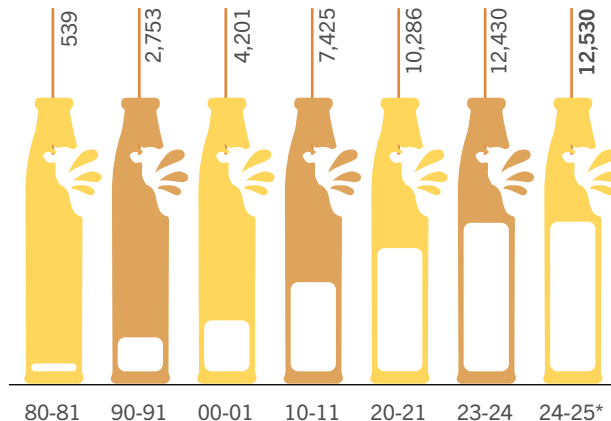
Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Chhattisgarh				34	176	259	263
Goa		36	83	69	57	52	48
Gujarat	210	1,052	1,905	3,237	5,663	6,599	6,720
Madhya Pradesh	39	279	244	495	800	951	932
Maharashtra	18	363	1,178	2,023	1,641	1,931	1,950
Mumbai	950	1,057	1,390	841	2,650	3,029	2,995
<b>Regional Total</b>	<b>1,217</b>	<b>2,787</b>	<b>4,800</b>	<b>6,699</b>	<b>10,986</b>	<b>12,821</b>	<b>12,908</b>



Region-wise liquid milk marketing (West)

## SOUTH

Region /State	80-81	90-91	00-01	10-11	20-21	23-24	24-25*
Andhra Pradesh	19	552	733	1,565	1,346	1,427	1,397
Karnataka	166	889	1,501	2,661	4,261	5,311	5,408
Kerala		223	640	1,092	1,315	1,623	1,635
Tamil Nadu	109	405	559	989	1,175	1,521	1,567
Telangana					878	969	984
Puducherry		22	43	93	92	92	97
Chennai	245	662	725	1,025	1,220	1,488	1,442
<b>Regional Total</b>	<b>539</b>	<b>2,753</b>	<b>4,201</b>	<b>7,425</b>	<b>10,286</b>	<b>12,430</b>	<b>12,530</b>



Region-wise liquid milk marketing (South)

## GRAND TOTAL

<b>2,783</b>	<b>8,046</b>	<b>13,363</b>	<b>21,985</b>	<b>36,470</b>	<b>43,856</b>	<b>44,412</b>
80-81	90-91	00-01	10-11	20-21	23-24	24-25*

Source: Milk Unions & Federations, NDS & MDFVPL

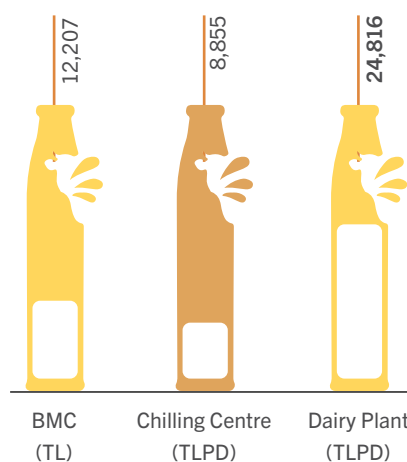
## PROGRESS OF DAIRY COOPERATIVES

### Dairy Cooperatives' Cold Chain Infrastructure (capacity)\*

(March 2025)^

#### NORTH

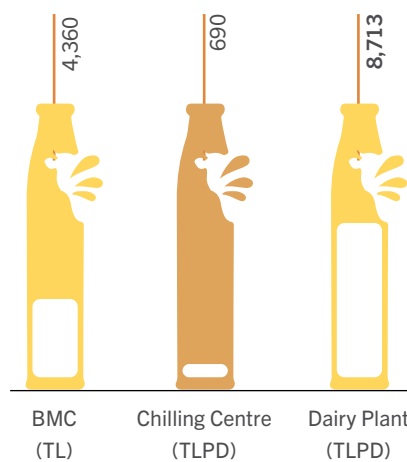
Region /State	BMC (TL)	Chilling Centre (TLPD)	Dairy Plant (TLPD)
Delhi			1,500
Haryana	609	388	8,215
Himachal Pradesh	173	79	180
Jammu & Kashmir	352		250
Ladakh			5
Punjab	2,474	1,132	3,760
Rajasthan	6,710	3,012	5,140
Uttar Pradesh	1,813	4,184	5,510
Uttarakhand	77	60	256
<b>Regional Total</b>	<b>12,207</b>	<b>8,855</b>	<b>24,816</b>



Region-wise cold chain capacity (North)

#### EAST

Region /State	BMC (TL)	Chilling Centre (TLPD)	Dairy Plant (TLPD)
Assam	199		200
Bihar	2,344	410	4,820
Jharkhand	336		840
Manipur	8		20
Meghalaya	22		80
Mizoram	4		35
Nagaland	2		10
Odisha	920	125	1,260
Sikkim	84		105
Tripura	19		64
West Bengal	425	155	1,279
<b>Regional Total</b>	<b>4,360</b>	<b>690</b>	<b>8,713</b>



Region-wise cold chain capacity (East)

\* Provisional

TL: Thousand Litres

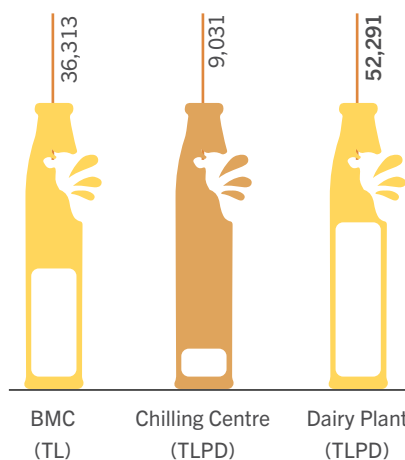
TLPD: Thousand Litres Per Day

^includes infrastructure owned by MPOs & MDFVPL



## WEST

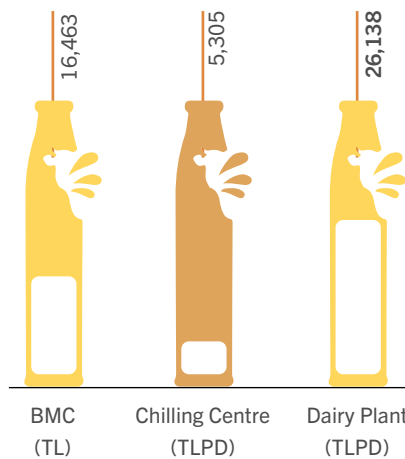
Region /State	BMC (TL)	Chilling Centre (TLPD)	Dairy Plant (TLPD)
Chhattisgarh	129	75	150
Goa	46		110
Gujarat	31,621	5,820	35,240
Madhya Pradesh	1,959	676	2,286
Maharashtra	2,559	2,460	14,505
<b>Regional Total</b>	<b>36,313</b>	<b>9,031</b>	<b>52,291</b>



Region-wise cold chain capacity (West)

## SOUTH

Region /State	BMC (TL)	Chilling Centre (TLPD)	Dairy Plant (TLPD)
Andhra Pradesh	2,858	1,044	4,105
Karnataka	7,461	3,060	11,810
Kerala	1,799	30	3,150
Tamil Nadu	3,408	760	4,818
Telangana	860	411	2,135
Puducherry	78		120
<b>Regional Total</b>	<b>16,463</b>	<b>5,305</b>	<b>26,138</b>



Region-wise cold chain capacity (South)

## GRAND TOTAL

**69,343**

BMC (TL)

**23,881**

Chilling Centre (TLPD)

**1,11,958**

Dairy Plant (TLPD)

Source: Milk Unions & Federations, NDS & MDFVPL

# VISITORS

During FY 2024-25, NDDDB received 2,528 guests from India and Abroad



Mr Brian Lindsay,  
Director, Dairy Sustainability  
Framework



Mr Takao Suzuki,  
Suzuki Motor Corporation and Mr Kenichiro  
Toyofuku, Director, Suzuki R&D Center India



Mr Todd McClay,  
Hon'ble Minister for Agriculture, New Zealand; HE  
Mr Patrick Rata, High Commissioner, New Zealand  
High Commission; Ms Julie Collins, Deputy Director  
General, Ministry of Primary Industries, New  
Zealand; Mr Graham Rouse, Trade Commissioner,  
New Zealand Trade Enterprise



Shri Rajiv Ranjan Singh  
alias Lalan Singh ji, Hon'ble Minister for Fisheries,  
Animal Husbandry and Dairying and Panchayati  
Raj, Government of India



Prof S P Singh Baghel,  
Hon'ble Minister of State for Fisheries, Animal  
Husbandry and Dairying and Panchayati Raj,  
Government of India



Shri Hemant Khandelwal,  
Hon'ble MLA of Betul; Dr Umesh Chandra Sharma,  
President of the Veterinary Council of India; Dr  
Praveen Shinde, Nodal Officer of the Madhya  
Pradesh Gau Sanvardhan Board; and Shri Mohan  
Nagar, Vice President of the Madhya Pradesh Jan-  
Abhiyan Parishad





Mr Daniel Schmit, Managing Director, Simon Freres , Mr Michel Le Cadre, Director General, Simon Freres and Mr Antonie Masson, Sales Director, Simon Freres



Shri Suresh Prabhu, former Union Minister, Chairman of ICFA, Chancellor of Rishihood University, and Rural Development & Agricultural Transformation Specialist



Shri Gokulananda Malik, Hon'ble Minister of State (Independent Charge) for Fisheries & Animal Resource Development, Micro Small and Medium Enterprises, Odisha, Shri Kishore Chandra Pradhani, President, OMFED, Odisha, Shri Vijay Amruta Kulange, IAS, MD, OMFED, Odisha



Mr Toshihiro Suzuki, Representative Director and President of Suzuki Motor Corporation



Professor Adnan Khan, Chief Economist at the Foreign, Commonwealth & Development Office (FCDO) of the Government of the United Kingdom, and Mr Steve Hickling, Deputy High Commissioner to Gujarat and Rajasthan



Shri Ritesh Chauhan, Secretary of Animal Husbandry for the Government of Himachal Pradesh, and Dr Vikas Sood, Managing Director of HP State Cooperative Milk Federation (HP Milkfed)

## VISITORS



Dr Sten Mortensen, Chief Counsellor, Animal Health Unit, Danish Veterinary and Food Administration (DVFA), Dr Camilla Brasch Andersen, Chief Counsellor, Centre for International Cooperation, Danish Veterinary and Food Administration (DVFA) and Dr Helle Palmø, Counsellor, Food and Agriculture, Royal Danish Embassy, New Delhi



Shri Dharambir Singh, Hon'ble Member of Parliament, Lok Sabha



Shri Emil Patel, Grandson of Shri Tribhuvandas Patel, ED (IT Infrastructure) - MD Anderson Cancer Centre, USA



M'ikiara Simon Kiruja, Chairman, Meru Central Dairy Cooperative Union Ltd; Kamunde Eustace Kimaru, Vice Chairman, Meru Central Dairy Cooperative Union Ltd; Mwirigi Edith Nkatha, Honorary Secretary, Meru Central Dairy Cooperative Union Ltd;



Shri Rahul Gupta, Managing Director, Punjab State Cooperative Milk Producers' Federation Limited (MILKFED)



Hon. Wycliffe Ambetsa Oparanya, EGH, Cabinet Secretary, Ministry of Co-operatives and MSME Development, Republic of Kenya; Hon. Titus Khamala Mukhwana, Member of National Assembly, Republic of Kenya; Mr Vincent Marangu, Director Co-operatives Banking Division, Co-operative Bank of Kenya





Dr Pravin Deore, IAS,  
Commissioner (Animal  
Husbandry), Government of  
Maharashtra



Mr Edwin Witlox,  
Country Director, PUM  
Netherlands



Mr Takayuki Hagiwara,  
FAO Representative in India



Biruktayet Assefa,  
Sr. Agriculture Specialist, World Bank;  
Ms Karishma Wasti, Sr. Agriculture Economist, World  
Bank; Endeshaw Assefa, Sr. Technical Expert -Livestock  
Value chain, Ministry of Agriculture, Ethiopia; Kalkidan  
Wondimu, Livestock Identification and Traceability  
Specialist, Ministry of Agriculture, Ethiopia; Addisu  
Abera, Animal Breeding & Genetics Specialist, Ministry  
of Agriculture, Ethiopia and Mr Tesfaye Shewa,  
Environmental safeguard Specialist, Ministry of  
Agriculture, Ethiopia



Mr I V Rao,  
Distinguished Fellow, TERI; Mr Souvik  
Bhattacharjya, Sr. Fellow and Associate Director,  
TERI; Ms Trinayana Kaushik, Research Associate,  
TERI; Ms Aparna Sajeev, Research Associate, TERI  
and Mr Milan Sanghvi, Senior Manager, Maruti  
Suzuki Research and Development



Mr Samuel Sigris,  
CEO, SIG Combibloc

## VISITORS



Dr Ashish Kumar Bhutani, Secretary, Ministry of Cooperation, GOI; Pankaj Bansal, Add. Secretary, Ministry of Cooperation; and Mr Sandeep Kumar Singh, Deputy Secretary, Ministry of Cooperation, GOI



Shri Manoj Gupta, CEO, TataPower Renewable Microgrid Ltd (TPRMG) and Shri Sugata Mukherjee, Head of Operations, TataPower Renewable Microgrid Ltd (TPRMG).



Ms Meera Mishra, Country Director, IFAD; Mr Binod Anand Member high Power Committee on MSP, Corporation Diversification & natural Farming, Ministry of Agricultural & Farmers welfare GoI and Mr Vineet Rai, Chairman, Aavishkar Group



Dr David Graham, CEO, Animal Health, Ireland, and Prof Falko Steinbach, Head, Mammalian Virology, Animal and Plant Health Agency (APHA), UK



Prof. Garry Udy from MPI, New Zealand, Prof. Nicolas Lopez from Massey University, New Zealand and Dr David Hayman from TRG/ABS, New Zealand



Adv. Manikrao Kokate, Hon'ble Minister of Agriculture, Government of Maharashtra







**M K P S & Associates LLP**

Chartered Accountants

# Independent Auditor's Report

To  
The Board of Directors of  
**National Dairy Development Board**

**Report on the Audit of the Financial Statements****Opinion**

1. We have audited the accompanying financial statements of National Dairy Development Board ('NDDB'), which comprise the Balance Sheet as at 31 March 2025, Income and Expenditure account and the Cash Flow Statement for the year then ended, and notes to the Financial Statements, including a summary of significant accounting policies and other explanatory information ('Financial Statements').
2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Financial Statements give the information required by National Dairy Development Board Act, 1987 ('the Act') read with National Dairy Development Board (Administration of Funds, Accounts and Budget) Regulations, 1988 ('the Regulation') and exhibit a true and fair view, in conformity with the Accounting Standards notified by the Institute of Chartered Accountants of India ('ICAI') and accounting principles generally accepted in India, of the state of affairs of the NDDB as at 31 March 2025, its surplus and its cash flows for the year then ended.

**Basis for Opinion**

3. We conducted our audit in accordance with the Standards on Auditing ('SAs') issued by the ICAI. Our responsibilities under those SAs are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the NDDB in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India ('ICAI') together with the ethical requirements that are relevant to our audit of the Financial Statements under the provisions of the Regulation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the Financial Statements.

**Other Information**

4. The NDDB's Management and Board of Directors are responsible for the other information. The other information comprises the information included in the Report of Board of Directors and such other disclosures included in NDDB's annual report but does not include the Financial Statements and our auditors' report thereon. The Other Information is expected to be made available to us after the date of this auditor's report.
5. Our opinion on the Financial Statements does not cover the other information and we do not express any form of assurance or conclusion thereon.
6. In connection with our audit of the Financial Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements, or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

B-301, Western Edge II, Off Western Express Highway,  
Borivali (E), Mumbai - 400066, India.

Website: [www.mkps.in](http://www.mkps.in) | Email: [mumbai@mkps.in](mailto:mumbai@mkps.in) | Board Line : +91 22 35 402 661/579



## Management's responsibility for the Financial Statements

7. Management and the Board of Directors of NDDDB are responsible for the preparation of the Financial Statements in accordance with the Regulation, that give a true and fair view of the financial position, financial performance, and cash flows of NDDDB. This responsibility also includes maintenance of adequate accounting records for safeguarding the assets of the NDDDB and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies, making judgments and estimates that are reasonable and prudent, design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Financial Statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.
8. In preparing the Financial Statements, the Management and Board of Directors are also responsible for assessing NDDDB's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate NDDDB or to cease operations, or has no realistic alternative but to do so.
9. The Board of Directors are also responsible for overseeing NDDDB's financial reporting process.

## Auditor's Responsibility for the Audit of the Financial Statements

10. Our objectives are to obtain reasonable assurance about whether the Financial Statements, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.
11. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:
  - 11.1 Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, to design and perform audit procedures responsive to those risks and obtain audit evidence for material items that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
  - 11.2 Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the NDDDB's internal control.
  - 11.3 Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
  - 11.4 Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the NDDDB's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the NDDDB to cease to continue as a going concern.

## M K P S & Associates LLP

Chartered Accountants

- 11.5 Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 11.6 Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- 11.7 We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

### Report on Other Legal and Regulatory Requirements

12. The Balance Sheet and the Income and Expenditure Account of NDDB have been drawn up as per Schedule 'I' and Schedule 'II' of Chapter II of the Regulation.

As required by the provisions of the Regulation made thereunder, we further report that:

- 12.1 We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
- 12.2 The transactions of NDDB, which have come to our notice in course of our audit, have been within the powers of the NDDB.
- 12.3 In our opinion, the Financial Statement dealt with by this report are in agreement with the books of accounts.
- 12.4 In our opinion, the Financial Statements comply with the applicable accounting standards.

### For M K P S & Associates LLP

Chartered Accountants

Firm Registration No. 302014E / W101061

### Vasudev Sunderdas Matta

Partner

ICAI Membership No: 046953

UDIN: 25046953BMIOZW2042

Place: Mumbai

Date: 1<sup>st</sup> August 2025

B-301, Western Edge II, Off Western Express Highway,  
Borivali (E), Mumbai - 400066, India.

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Website: [www.mkps.in](http://www.mkps.in) | Email: [mumbai@mkps.in](mailto:mumbai@mkps.in) | Board Line : +91 22 35 402 661/579



# Balance Sheet

AS AT 31<sup>ST</sup> MARCH, 2025

₹ in million

PARTICULARS	ANNEXURE	31.03.2025	31.03.2024
<b>LIABILITIES</b>			
NDDB Funds	I	33,465.19	32,972.74
Secured Loans	II	17,087.54	17,880.66
Current Liabilities and Provisions	III	10,213.73	8,398.50
Deferred Tax Liability	XVI (Note 8)	324.48	284.23
<b>Total</b>		<b>61,090.94</b>	<b>59,536.13</b>
<b>ASSETS</b>			
Cash and Bank Balances	IV	9,155.36	6,942.43
Inventories	V	0.21	0.21
Sundry Debtors		229.71	236.40
Loans, Advances and Other Current Assets	VI	34,258.83	31,562.04
Investments	VII	15,638.50	19,130.39
Property, Plant and Equipment	VIII	1,808.33	1,664.66
<b>Total</b>		<b>61,090.94</b>	<b>59,536.13</b>
Significant Accounting Policies forming part of Financial Statements	XV		
Notes to Accounts forming part of Financial Statements	XVI		

In terms of our report of even date attached.

**For M K P S & Associates LLP**  
Chartered Accountants  
Firm Reg No. 302014E/W101061

**For and on behalf of the Board,**

**Vasudev Sunderdas Matta**  
Partner  
Membership No. 046953

**Meenesh C Shah**  
Chairman & Managing  
Director

**S Regupathi**  
Executive Director  
(Operations)

**Amit Goel**  
Group Head  
(Accounts)

Place: Mumbai  
Date: 1<sup>st</sup> August 2025

Place: Anand  
Date: 1<sup>st</sup> August 2025

# Income and Expenditure Account

FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2025

₹ in million

PARTICULARS	ANNEXURE	2024-25	2023-24
<b>INCOME</b>			
Interest		3,566.70	3,351.74
Service Charges	IX	234.11	382.17
Rent and Hire Charges		246.88	257.72
Dividend		399.00	169.84
Other Income	X	299.30	109.82
<b>Total (A)</b>		<b>4,745.99</b>	<b>4,271.29</b>
<b>EXPENDITURE</b>			
Interest and Financial Charges		1,139.58	1,127.38
Remuneration and Benefits to Employees	XI	1,287.06	1,248.00
Administrative Expenses	XII	215.69	203.89
Grants		201.61	161.80
Research and Development		93.10	83.96
Maintenance of Assets	XIII	304.31	276.53
Training Expenses		120.32	53.55
Computer Expenses		153.28	57.03
Other Expenses	XIV	151.05	274.83
Provision for Standard Asset, NPA and Contingency		200.00	200.00
Depreciation	VIII	298.27	165.72
<b>Total (B)</b>		<b>4,164.27</b>	<b>3,852.69</b>
<b>Surplus during the year before tax (C) = (A - B)</b>		<b>581.72</b>	<b>418.60</b>
Less: Provision for Taxation			
Current Tax		181.20	193.10
Deferred Tax	XVI (Note 8)	40.24	4.54
<b>Surplus during the year after tax</b>		<b>360.28</b>	<b>220.97</b>
Less: Appropriations to -			
Special Reserve	XVI (Note 13)	250.53	137.90
Balance carried to General Funds		109.75	83.07
<b>Total (D) = (B + C)</b>		<b>4,745.99</b>	<b>4,271.29</b>
Significant Accounting Policies forming part of Financial Statements	XV		
Notes to Accounts forming part of Financial Statements	XVI		

In terms of our report of even date attached.

**For M K P S & Associates LLP**  
Chartered Accountants  
Firm Reg No. 302014E/W101061

**Vasudev Sunderdas Matta**  
Partner  
Membership No. 046953

Place: Mumbai  
Date: 1<sup>st</sup> August 2025

**For and on behalf of the Board,**

**Meenesh C Shah**  
Chairman & Managing  
Director

Place: Anand  
Date: 1<sup>st</sup> August 2025

**S Regupathi**  
Executive Director  
(Operations)

**Amit Goel**  
Group Head  
(Accounts)



# Cash Flow Statement

FOR THE YEAR ENDED ON 31<sup>ST</sup> MARCH, 2025

₹ in million

PARTICULARS	ANNEXURE	2024-25	2023-24
<b>Cash Flow From Operating Activities</b>			
Surplus during the year before tax		581.72	418.60
Adjustments for :			
Depreciation		298.27	165.72
Provision for Standard Asset, NPA and Contingency		200.00	200.00
(Profit)/Loss on Sale of Investments		53.31	124.41
Interest Income on Fixed Deposit and Bonds Considered Separately		(1,582.05)	(1,789.89)
Dividend Income considered Separately		(399.00)	(169.84)
(Profit)/Loss on Sale of Fixed Assets Considered Separately		(23.53)	(0.37)
Recoupment of Depreciation of Grant Assets		(79.09)	(15.41)
Employee Retirement Benefit		151.03	146.63
Interest and Financial Charges to Banks		59.34	138.37
Premium Amortised on Bonds and State Development Loans		39.16	42.42
		(1,282.56)	(1,157.96)
		<b>(700.84)</b>	<b>(739.34)</b>
<b>Operating Cash Flow Before Changes in Working Capital</b>			
(Increase)/ Decrease in Inventories		-	0.10
(Increase)/ Decrease in Sundry Debtors		6.69	(53.52)
(Increase)/ Decrease in Loans and Advances		(2,656.64)	(7,247.70)
Increase/(Decrease) in Current Liabilities		1,464.21	410.01
		(1,185.74)	(6,891.11)
<b>Cash Flow Generated From /(Used In) Operating Activities</b>		<b>(1,886.58)</b>	<b>(7,630.45)</b>
Tax Refunded / (Paid)		(279.66)	(287.17)
<b>Net Cash Flow Generated From /(Used In) Operating Activities (A)</b>		<b>(2,166.24)</b>	<b>(7,917.62)</b>
<b>Cash Flow From Investing Activities</b>			
Interest Income		1,640.34	2019.95
Dividend Income		399.00	169.84
Proceeds from Maturity / sale of Investments (Bonds)		3,995.92	3,002.09
Purchase of Investments (Shares)		(596.50)	(30.20)
Decrease / (Increase) in FDR's with banks more than 90 days (net)		(3,657.80)	3,486.19
Proceeds From Sale of Fixed Assets		24.53	91.42
Grant Received For Purchase of Fixed Asset/(Grant Refunded)		211.27	3.54
Purchase of Fixed Assets		(442.93)	(187.81)
<b>Net Cash Flow Generated From /(Used In) Investing Activities (B)</b>		<b>1,573.83</b>	<b>8,555.02</b>
<b>Cash Flow From Financing Activities</b>			
Proceeds / (Repayment) of Borrowed Funds		(793.12)	(5,278.33)
Interest and Financial Charges to Banks		(59.34)	(138.37)
<b>Net Cash Flow From Financing Activities (C )</b>		<b>(852.46)</b>	<b>(5,416.70)</b>
<b>Net Cash Flow during the year (A+B+C)</b>		<b>(1,444.87)</b>	<b>(4,779.30)</b>
<b>Cash and Cash Equivalents at the beginning of the year</b>		<b>2,351.87</b>	<b>7,131.17</b>
<b>Cash and Cash Equivalents at the end of the year</b>		<b>907.00</b>	<b>2,351.87</b>
<b>Cash and Cash Equivalents</b>			
Balances with Banks:			
In Fixed Deposits		8,442.07	4,734.18
Less: Deposits with original maturity more than 90 days		8,248.36	4,590.56
		<b>193.71</b>	<b>143.62</b>
In Current/Saving Accounts		713.26	2,208.22
Cash and Cheques on hand		0.03	0.03
<b>Total</b>		<b>907.00</b>	<b>2,351.87</b>
Significant Accounting Policies forming part of Financial Statements	XV	-	-
Notes to Accounts forming part of Financial Statements	XVI		

**Note: Cash Flow Statement has been prepared under the "Indirect Method" as set out in Accounting Standard-3 on Cash Flow Statements.**

In terms of our report of even date attached.

**For M K P S & Associates LLP**  
Chartered Accountants  
Firm Reg No. 302014E/W101061

**For and on behalf of the Board,**

**Vasudev Sunderdas Matta**  
Partner  
Membership No. 046953

**Meenesh C Shah**  
Chairman & Managing  
Director

**S Regupathi**  
Executive Director  
(Operations)

**Amit Goel**  
Group Head  
(Accounts)

Place: Mumbai  
Date: 1<sup>st</sup> August 2025

Place: Anand  
Date: 1<sup>st</sup> August 2025

## NDDB Funds

### ANNEXURE - I

₹ in million

PARTICULARS	31.03.2025	31.03.2024
<b>General Reserve (Note a)</b>		
Balance as per last balance sheet	3,559.61	3,559.61
<b>Grant for Fixed Assets (Note b)</b>		
Balance as per last balance sheet	27.57	39.44
Add: Grant received during the year	212.16	3.54
Less: Recoupment of depreciation	79.98	15.41
	159.75	27.57
<b>Special Reserve under section 36 (1) (viii) of the Income Tax Act, 1961 (Refer Note 13 of Annexure XVI)</b>		
Balance as per last balance sheet	1,762.14	1,624.24
Add: Transfer from Income and Expenditure Account	250.53	137.90
	2,012.67	1,762.14
<b>Income and Expenditure Account</b>		
Balance as per last balance sheet	27,623.41	27,540.35
Add: Surplus after appropriation during the year	109.75	83.07
	27,733.16	27,623.41
<b>Total</b>	<b>33,465.19</b>	<b>32,972.74</b>

#### Notes:

- To promote, plan and organise programmes for development of dairy and other agriculture based and allied industries and biologicals as per the NDDB Act, 1987.
- In accordance with Accounting Standard - 12 - 'Accounting for Government Grants'

## Secured Loans

### ANNEXURE - II

₹ in million

PARTICULARS	31.03.2025	31.03.2024
Bank Overdraft (Secured against lien on fixed deposits with Banks)	666.06	1,316.65
Loan from NABARD (Secured against loan given under DIDF scheme)	13,304.72	14,988.26
Loan for "Dairying through Cooperatives (DTC)" (JICA assisted project) Component-B of NPDD Scheme	3,083.10	1,573.10
Interest Accrued on Loan {"Dairying through Cooperatives (DTC)" (JICA assisted project) Component-B of NPDD Scheme}	33.66	2.65
<b>Total</b>	<b>17,087.54</b>	<b>17,880.66</b>



## Current Liabilities and Provisions

### ANNEXURE - III

₹ in million

PARTICULARS	31.03.2025	31.03.2024
<b>a) Current Liabilities</b>		
Advances and Deposits	97.63	76.76
Sundry Creditors (Refer Note 10 of Annexure XVI)	259.19	162.29
Other Liabilities	163.17	116.63
Net liability on account of Consultancy Project		
Funds received	26,685.23	17,772.40
Add : Due to suppliers for expenses	2,031.73	1,084.62
	28,716.96	18,857.02
Less : Expenditure incurred	21,849.68	15,738.83
Advance to suppliers	1,101.53	216.06
	5,765.75	2,902.13
Add : Payable to NDDB	218.84	321.16
(Per contra, Refer Annexure VI)	5,984.59	3,223.29
<b>b) Fund received for Government of India Projects</b>		
Balance as per last balance sheet	1,984.37	2,746.89
Fund received from Govt of India	4,584.09	4,439.84
Add: Interest income accrued/(Expense)	(37.43)	4.44
Less: Expenditure incurred	5,527.62	3,802.99
Less: Advance to End Implementing Agencies	168.97	1,400.27
Less:NDLM contribution transfer to Grant	193.15	3.54
	641.29	1,984.37
<b>c) Provisions for:</b>		
Non-performing assets (Refer Note 9 of Annexure XVI)	582.13	582.08
General contingency on Standard Assets (Refer Note 9 of Annexure XVI)	128.62	122.57
Contingency (Refer Note 9 of Annexure XVI)	2,097.51	1,903.61
	2,808.26	2,608.26
<b>d) Provisions for:</b>		
Leave encashment (Refer Note 5 of Annexure XVI)	136.04	113.67
Post retirement medical scheme (Refer Note 5 of Annexure XVI)	123.56	113.23
	259.60	226.90
<b>Total</b>	<b>10,213.73</b>	<b>8,398.50</b>

## Cash and Bank Balances

### ANNEXURE - IV

₹ in million

PARTICULARS	31.03.2025	31.03.2024
Balances with Banks		
In fixed deposits (Refer Note a to c below)	8,442.07	4,734.18
In saving account (Refer Note d below)	633.97	2,178.02
In current account (Refer Note e below)	79.29	30.20
	9,155.33	6,942.40
Cash and cheques on hand	0.03	0.03
<b>Total</b>	<b>9,155.36</b>	<b>6,942.43</b>

#### Note: Fixed deposits includes

- ₹ 5194.30 million (Previous Year ₹ 3170.00 million ) placed with Banks which are under lien for the overdraft facility.
- ₹ 1204.00 million (Previous Year ₹ 900.01 million) which are under lien in favour of NABARD for the DSRA account opened for loans availed under DIDF scheme.
- ₹ 143.22 million (Previous Year ₹ 313.22 million) being NDDB share in NDLM project earmarked for NDLM project.
- ₹ 349.74 million (Previous Year ₹ 350.41 million) of fund received for Government of India projects.
- Current accounts includes ₹ 64.17 million (Previous Year ₹ 16.53 million) of fund received for Government of India projects.

## Inventories

### ANNEXURE - V

₹ in million

PARTICULARS	31.03.2025	31.03.2024
Stores, spares and others	1.36	1.36
Project equipments	3.16	3.16
	<b>4.52</b>	<b>4.52</b>
Less : Provision for obsolescence	4.31	4.31
	0.21	0.21
<b>Total</b>	<b>0.21</b>	<b>0.21</b>



## Loans, Advances and Other Current Assets

### ANNEXURE - VI

₹ in million

PARTICULARS	31.03.2025	31.03.2024
Loans and advance to cooperatives		
Milk - Secured (Refer Note a & b below)	30,312.95	26,513.12
Unsecured	16.55	3.22
	30,329.50	26,516.34
Oil - Secured	80.00	80.00
Unsecured (including interest accrued)	578.57	578.57
	658.57	658.57
Loans and advances to subsidiary companies / managed units		
Secured (Refer Note a & b below)	819.67	1,838.19
Unsecured.	679.72	606.49
	1,499.39	2,444.68
Loans and advance to employees		
Secured	0.06	0.09
Unsecured	8.42	6.31
	8.48	6.40
Interest accrued on -		
Loans and advances	1.98	59.52
Fixed deposits and investments	383.00	441.28
	384.98	500.80
Advances to suppliers and contractors	33.15	9.42
Recoverable on account of turnkey projects	218.84	321.16
(Per contra, Refer Annexure III)		
Sundry deposits	17.75	17.65
Income Taxes paid (net of provisions)	925.91	827.45
Prepaid Gratuity (Refer Note 5 of Annexure XVI)	54.74	39.25
Other receivables (Refer Note c below)	127.52	220.32
<b>Total</b>	<b>34,258.83</b>	<b>31,562.04</b>

#### Notes:

- Secured loans are secured against the mortgage of assets and/or hypothecation of stocks/assets.
- Secured loans and advances includes ₹ 25864.20 million (Previous Year ₹ 23575.75 million) given under DIDF scheme & ₹ 2767.30 million (Previous year ₹ 1025.94 million) given under ("Dairying through Cooperatives (DTC)" (JICA assisted project) Component-B of NPDD Scheme)
- Other receivables include grants amounting to ₹ 49.86 million (Previous year ₹ 14.72 million ) awaiting FUCs

## Investments

### ANNEXURE - VII

₹ in million

PARTICULARS	31.03.2025	31.03.2024
<b>Long term investments (at cost) :</b>		
Equity Shares (unquoted) in subsidiary companies:		
Mother Dairy Fruit and Vegetable Private Limited (MDFVPL)	2,500.00	2,500.00
IDMC Limited (IDMC)	283.90	283.90
Indian Immunologicals Limited (IIL)	90.00	90.00
NDDB Dairy Services (NDS)	2,000.00	2,000.00
NDDB Mrida Ltd (Refer Note b below)	-	95.00
NDDB CALF Limited	750.00	750.00
	5,623.90	5,718.90
<b>Equity Share (unquoted) in Joint Venture:</b>		
North East Dairy and Foods Limited (Refer Note a below)	50.00	50.00
NDDB Mrida Ltd (Refer Note b below)	251.60	-
	301.60	50.00
Bonds (quoted) of Government companies, financial institutions and banks (at cost net of amortised premium)	5,854.79	8,306.99
(aggregate market value of bonds is ₹ 5,983.20 million (Previous Year ₹ 8,441.07 million) as at the balance sheet date)		
State Development Loans (quoted) (at cost net of amortised premium)	3,349.21	4,985.40
(aggregate market value of State Development Loans is ₹ 3328.86 million (Previous Year ₹ 4957.73 million) as at the balance sheet date)		
Shares (unquoted) in Co-operatives and Federations	509.10	69.20
Less: Provision for diminution in value of investments	0.10	0.10
	509.00	69.10
<b>Total</b>	<b>15,638.50</b>	<b>19,130.39</b>

## Details of Investment in Subsidiaries

NAME OF SUBSIDIARY	31.03.2025		31.03.2024	
	Number of Shares	Face Value (Per Share)	Number of Shares	Face Value (Per Share)
Mother Dairy Fruit and Vegetable Private Limited (MDFVPL)	25,00,00,070	10.00	25,00,00,070	10.00
IDMC Limited (IDMC)	1,21,44,544	10.00	1,21,44,544	10.00
Indian Immunologicals Limited (IIL) (Refer Note c below)	5,40,00,042	10.00	5,40,00,042	10.00
NDDB Dairy Services (NDS)	20,00,00,000	10.00	20,00,00,000	10.00
NDDB Mrida Ltd (Refer Note b below)	-	-	95,00,000	10.00
NDDB CALF Limited	7,50,00,000	10.00	7,50,00,000	10.00
	<b>59,11,44,656</b>		<b>60,06,44,656</b>	

### Notes:

- Joint venture company incorporated between NDDB and Government of Assam (GoA).
- During the Financial Year 2024-25 Suzuki R&D India Pvt Ltd has contributed 26% of its paid up share capital subsequent to which NDDB Mrida Ltd has become Joint Venture of NDDB.
- Indian Immunologicals Limited (IIL) has issued 4,50,00,035 bonus shares in the year Financial Year 2022-23 for face value of ₹ 10 each



## Property, Plant and Equipment

ANNEXURE - VIII  
₹ in million

Particulars	Gross Block (at Cost)			Depreciation			Net Block	
	As at 01.04.2024	Addition	Deduction/ (Adjustment)	As at 31.03.2025	As at 01.04.2024	For the Year (Adjustment)	As at 31.03.2025	As at 31.03.2024
Freehold Land (Refer Note 1 to 3)	412.49	-	-	412.49	-	-	412.49	412.49
Leasehold Land	64.16	-	-	64.16	16.82	0.75	17.57	47.34
Buildings and Roads	2,072.15	5.64	3.08	2,074.71	1,342.17	59.25	1,399.32	729.98
Plant and Machinery	10.85	89.02	4.44	95.43	7.01	51.90	54.47	3.84
Electrical Installations	193.13	5.06	3.00	195.19	147.32	4.64	148.98	45.81
Furniture, Computers and Others Equipments	920.61	23.75	0.93	943.43	785.00	28.67	812.74	135.61
Software Licence	277.30	386.88	-	664.18	269.18	128.95	398.13	8.12
Rail Milk Tankers	375.64	-	4.62	371.02	289.69	19.58	304.64	85.95
Vehicles	32.96	8.14	0.36	40.74	23.28	4.53	27.45	9.68
<b>Total</b>	<b>4,359.29</b>	<b>518.49</b>	<b>16.43</b>	<b>4,861.35</b>	<b>2,880.47</b>	<b>298.27</b>	<b>3,163.30</b>	<b>1,478.82</b>
<b>Previous Year</b>	<b>4,535.53</b>	<b>155.14</b>	<b>331.38</b>	<b>4,359.29</b>	<b>2,955.09</b>	<b>165.72</b>	<b>2,880.47</b>	<b>1,580.44</b>
<b>Capital Work in Progress including Capital Advances</b>								
							<b>110.28</b>	<b>185.84</b>
<b>Total Fixed Assets</b>								
							<b>1,808.33</b>	<b>1,664.66</b>

### Notes:

1. Land for FMD Control Project amounting to ₹ 0.39 million is obtained from Government of Tamil Nadu by alienation.
2. Freehold land includes land for Oil Tank Farm, Narela amounting to ₹ 17.94 million which has been obtained on perpetual lease for which lease deeds are yet to be executed.
3. Land amounting to ₹ 65.98 million at Kannamangala Horticulture Farm received from Agriculture and Horticulture Department, Government of Karnataka is in the name of the subsidiary company Mother Dairy Fruit and Vegetable Private Limited and transfer of title is pending.
4. Addition includes 50% Government Share amounting to ₹ 193.15 million towards NDLM project.

## Service Charges

### ANNEXURE - IX

₹ in million

PARTICULARS	2024-25	2023-24
Training fees	19.53	22.71
Procurement and technical service fees	189.17	325.46
Testing charges	-	5.23
Fees from consultancy and feasibility studies	24.35	27.58
Royalty and process knowhow fees	1.06	1.19
<b>Total</b>	<b>234.11</b>	<b>382.17</b>

## Other Income

### ANNEXURE - X

₹ in million

PARTICULARS	2024-25	2023-24
Profit on sale of fixed assets (net)	23.53	0.37
Other interest income	49.84	40.98
Excess provision written back	4.26	0.15
Recoupment of depreciation of grant assets	79.09	15.41
Sale of milk	3.18	2.47
Miscellaneous income	139.40	50.44
<b>Total</b>	<b>299.30</b>	<b>109.82</b>

## Remuneration and Benefits to Employees

### ANNEXURE - XI

₹ in million

PARTICULARS	2024-25	2023-24
Salaries and Wages (including ex-gratia)	982.24	944.91
Contribution to Provident, Superannuation fund and Gratuity	199.39	191.36
Staff welfare expenses	105.43	111.73
<b>Total</b>	<b>1,287.06</b>	<b>1,248.00</b>

Remuneration excludes ₹ 57.90 million (Previous Year : ₹ 36.50 million) shown as part of Research and Development expenses.

## Administrative Expenses

### ANNEXURE - XII

₹ in million

PARTICULARS	2024-25	2023-24
Printing and stationery	5.48	6.13
Communication charges	8.54	11.60
Audit fees and expenses (including taxes)		
Audit fees	0.91	0.76
Income Tax audit	0.30	0.22
Out of pocket expenses	0.04	0.05
	1.25	1.03
Legal fees	6.59	7.47
Professional fees	29.69	33.91
Vehicle expenses	7.89	4.99
Recruitment expenses	0.22	0.15
Advertisement expenses	2.37	5.46
Travelling and conveyance expenses	115.78	94.90
Electricity and rent	31.61	33.33
Other administrative expenses	6.27	4.92
<b>Total</b>	<b>215.69</b>	<b>203.89</b>

## Maintenance of Assets

### ANNEXURE - XIII

₹ in million

PARTICULARS	2024-25	2023-24
Repairs and maintenance		
Buildings	214.96	193.44
Others	76.51	69.89
Rates and taxes	10.07	10.51
Insurance	2.77	2.69
<b>Total</b>	<b>304.31</b>	<b>276.53</b>

## Other Expenses

### ANNEXURE - XIV

₹ in million

PARTICULARS	2024-25	2023-24
Premium amortisation	39.16	42.42
Prior period expenditure	16.81	0.69
Loss on Sale of Investment	53.31	124.41
Other expenses	41.77	107.31
<b>Total</b>	<b>151.05</b>	<b>274.83</b>



## Significant Accounting Policies forming part of Financial Statement

ANNEXURE - XV

### 1. Basis of preparation

The financial statements are prepared on accrual basis, using the historical cost convention and Generally Accepted Accounting Principles ("GAAP") in India including accounting standards issued by the Institute of Chartered Accountants of India, as applicable to the Board. The financial statements are presented in Indian Rupees rounded off to the nearest million, unless otherwise stated.

### 2. Use of Estimates

The preparation of financial statements in conformity with the GAAP requires the management to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses and the disclosure of contingent liabilities as at the date of the financial statements. Such estimates and assumptions are based on the Management's evaluation of relevant facts and circumstances as on the date of the financial statements. Management believes that the estimates used in the preparation of the financial statements are prudent and reasonable; however, the actual outcome may diverge from this estimate which is recognized prospectively in the current and future periods. Any changes in such estimates are recognized prospectively in current and future period.

### 3. Asset Classification and Provisioning

NDDDB being a Public Financial Institution follows the guidelines of Reserve Bank of India (RBI) for asset classification applicable to "Systemically Important Non-Deposit taking Company and Deposit taking Company (Reserve Bank) Directions, 2016". Provision for Non-Performing and Standard Assets is made at the rates approved by the Board.

### 4. Revenue Recognition

Interest income on standard assets in accordance with the RBI guidelines is recognized on an accrual basis. Interest income from non-performing assets classified in conformity with the guidelines is accounted on cash basis upon realisation.

Interest income on fixed deposits with Bank and investment in Bonds is recognized on a time proportionate basis.

Income from Services to co-operatives etc. is recognized on proportionate completion basis and in accordance with the terms of relevant agreement.

Sale of milk commodities is accounted for on transfer of substantial risk and rewards, which is on dispatch of the commodities from the warehouse.

Dividend income is accounted for when unconditional right to receive income is established.

Other income is recognized when there is no uncertainty as to its ultimate collectability.

### 5. Grants

- a. Grants relating to fixed assets are initially credited to Grant for Fixed Assets under the General Fund. This amount is recognized in the Income and Expenditure Account on a systematic basis over the useful life of such fixed asset as a recoupment of depreciation on such assets.
- b. Revenue grants received during the year are recognized in the Income and Expenditure Account.
- c. Grants received for specific projects are credited to the Project Funds and is utilized by disbursements for these projects.

### 6. Research and Development Expenditure

Research and Development Expenditure (other than cost of fixed assets acquired) are charged as expenses in the year in which they are incurred. Fixed assets used for the Research and Development purpose with alternate use is depreciated over its useful life based on the Board's policy.

## Significant Accounting Policies forming part of Financial Statement

ANNEXURE - XV

### 7. Employee Benefits

- a. Defined Contribution Plan: Contribution to Provident Fund and Superannuation Fund is made at a predetermined rate and is charged to Income and Expenditure account. Shortfall if any, between the rate prescribed by the Employees' Provident Fund Organisation and actual earnings of National Dairy Development Board Staff Provident Fund Scheme, is contributed by the Board as debit to Income & Expenditure account.
- b. Defined Benefit Plans: The Board's liabilities towards gratuity, compensated absences and post-retirement medical benefit schemes are determined using the projected unit credit method which considers each period of service giving rise to an additional unit of benefit entitlement and measures each unit separately to build up final obligation. Actuarial gains and losses based on actuarial valuation done by the independent actuary carried out annually are recognized immediately in the Income and Expenditure account as income or expense. Obligation is measured at the present value of estimated future cash flows using a discounted rate that is determined by reference to the market yields at the Balance Sheet date on the Government bonds where the currency and terms of Governments bonds are consistent with the currency and estimated terms of defined benefit obligation.

Compensated absences: The Board has a scheme for compensated absences benefit for employees, the liability for which is determined on the basis of an actuarial valuation carried out at the end of the year.

The Board has funded its liability towards gratuity by participating in Group Gratuity cum Life Assurance Scheme of Life Insurance Corporation of India.

### 8. Property, Plant & Equipment (PPE) and Depreciation

Tangible fixed assets are carried at cost less depreciation and impairment loss. Cost comprises of purchase price, import duties and other non-refundable taxes or levies and any directly attributable costs to bring the asset ready for its intended use.

Depreciation on PPE costing more than ₹ 10,000 each is charged on Straight Line Method basis at the rates fixed by the Board. Depreciation is charged for the full year in the year of capitalization and no depreciation is charged in the year of disposal. Each asset costing ₹ 10,000 or less is depreciated at 100 percent in the year of purchase. Depreciation rates, as approved by the Board, for various classes of assets are as under:

ASSETS	Rate (in %)
Factory buildings, Godown and Roads	4.00
Other buildings	2.50
Cold storage	15.00
Electrical installation	5.00
Computers (including software)	33.33
Office and Lab equipment	15.00
Plant and machinery	10.00
Solar equipment	30.00
Furniture	10.00
Vehicles	20.00
Rail milk tankers	10.00

## Significant Accounting Policies forming part of Financial Statement

### ANNEXURE - XV

Leasehold Land is amortized over the duration of lease. Depreciation on the assets located on leasehold land shall be at lower of lease duration or useful life of that asset.

Capital assets under installation / construction are stated in Balance Sheet as "Capital Work in Progress".

#### 9. Impairment of Assets

The carrying value of assets at each Balance Sheet date is reviewed for impairment of assets. If any indication of such impairment exists, the recoverable amount of such asset is estimated and impairment is recognized, if the carrying amount of these assets exceeds the recoverable amount. The recoverable amount is greater of net selling price and their value in use. Value in use is arrived at by discounting their future cash flows to their present value based on appropriate discount factor. When there is indication that an impairment loss recognized for an asset in prior accounting periods no longer exists or may have decreased, such reversal of impairment loss is recognized in Income and Expenditure Account.

#### 10. Investments

Long-term investments are valued as under:

- a) Shares in Subsidiaries, Co-operatives and Federations – at cost of acquisition;
- b) Debentures / bonds in Government Companies, Financial Institutions and Banks / State Development Loans - at cost of acquisition net of amortised premium, if any.

Current investments are valued at lower of cost or market value.

Long term Investments are valued at cost. In case cost price is higher than the face value, the premium is amortised over the remaining period of maturity of the underlying security. Such investments are stated in Balance Sheet at acquisition price less amortised premium.

Provision for any diminution other than temporary in value of investments is made in the year in which such diminution is assessed.

#### 11. Inventories

Inventories including stores and project equipment are valued at cost or net realizable value whichever is lower, cost being worked out on first-in-first-out basis. Provision for obsolescence is made, wherever necessary.

#### 12. Foreign Currency Transactions

Transactions in foreign currencies are recorded at the exchange rate prevailing on the date of the transactions.

Monetary items denominated in foreign currency and outstanding at the Balance Sheet date are translated at the exchange rate prevailing at the year-end. Non-monetary items are carried at historical cost.

Exchange differences arising on foreign currency transactions are recognised as income or expense in the period in which they arise.

#### 13. Accounting for Voluntary Retirement scheme

The cost of voluntary retirement scheme including ex-gratia is charged to the Income and Expenditure Account in the period of separation of employees. A provision for Monthly Benefit Scheme is made for the employees opting for the voluntary retirement scheme in the period of separation of employees and the same is adjusted against the payments made.



## Significant Accounting Policies forming part of Financial Statement

ANNEXURE - XV

### 14. Taxes on Income

Current tax is the amount payable on the taxable income for the year as determined in accordance with the provisions of the Income Tax Act, 1961.

Deferred Tax is recognized on timing differences, being the differences between the taxable income and the accounting income that originate in one period and are capable of reversal in one or more subsequent periods.

Deferred Tax Assets in respect of unabsorbed depreciation and carry forward losses are recognized if there is a virtual certainty that there will be sufficient future taxable income available to set-off such tax losses. Other deferred tax assets are recognized when there is reasonable certainty that there will be sufficient future taxable income to realize such assets.

### 15. Leases

Lease arrangements where the risks and rewards incidental to ownership of an asset vest substantially with the lessor are recognized as operating leases. Lease rent under operating leases are recognized in the Income & Expenditure Account with reference to lease terms.

### 16. Provisions and Contingencies

A provision is recognized when the Board has a present obligation as a result of past events and it is probable that an outflow of resources will be required to settle the obligation, in respect of which a reliable estimate can be made. Provisions (excluding retirement benefits) are not discounted to their present value and are determined based on the estimate required to settle the obligation at the Balance Sheet date. These are reviewed at each Balance Sheet date and are adjusted to reflect the current best estimates. Contingent liabilities are disclosed in Notes to Accounts.

The Board created provisions in respect of loans and other assets prior to the year 2001-02. Based on the movement in underlying assets for which such provision was created, Board reallocates / write back, such provisions based on identified events. Accordingly, the Board creates additional provision or makes allocation of exiting contingency provision for possible diminution in value of its asset or for unforeseen events leading to such liability.

## Notes to Accounts forming part of the Financial Statement

## ANNEXURE - XVI

**1** At the request of the concerned authorities, the NDDB has been managing The West Assam Milk Producers' Co-operative Union Limited., Jharkhand State Cooperative Milk Producers' Federation Limited., Jilha Dudh Utpadak Sahakari Sangh, Varanasi, Ladakh UT Dairy Co Operative Federation Limited, East Assam Milk Producers' Cooperative Union Limited, Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit, Chhattisgarh Rajya Sahakari Dugdh Mahasangh Maryadit and Manipur Milk Producers Cooperative Union Limited. These are separate and independent entities and their accounts are maintained by the respective authorities and audited separately. Further, as per understanding with the concerned authorities, the Board is liable to bear the net cash loss while handing over the management of the Jilha Dudh Utpadak Sahakari Sangh, Varanasi. Necessary provision for cash losses, if any, shall be made at the time of handing over the management at the end of period of MoU with Jilha Dudh Utpadak Sahakari Sangh, Varanasi.

**2** National Digital Livestock Mission (NDLM) is a project under Rastriya Gokul Mission (RGM) as a joint venture (JV) between Department of Animal Husbandry & Dairying (DAHD), Govt. of India (GoI) and National Dairy Development Board (NDDB) having 50% contribution by each.

NDLM project revenue and expenditure for (i) NDDB's share is credited/debited respectively to Income & Expenditure Account of NDDB and (ii) for GoI's share, it is adjusted in "Fund received for Government of India projects" of NDDB. As regards NDLM project Capital Expenditure, for (iii) NDDB's share is fully capitalised in the books and depreciation is charged to Income and Expenditure account of NDDB and (iv) for GoI's share, it is transferred to "Grant for fixed assets" and depreciation to that extent is recouped from the same on annual basis. For Capital Work In Progress ('CWIP'), of GoI's share, it is shown under the "Fund received for Government of India projects".

### 3 Contingent Liabilities:

3.1. Principal amount of claims not acknowledged as debt: ₹ 318.74 million (Previous Year: ₹ 318.74 million)

3.2. Income tax demands (excluding interest and penalty applicable under respective statutory provisions) ₹ 887.76 million (Previous Year: ₹ 1185.93 million)

3.3. Service tax demands ₹ 37.23 million (Previous Year: ₹ 916.50 million)

3.4. Other Demands

		₹ in million	
PARTICULARS	AUTHORITY	2024-25	2023-24
Settlement of Land dues	Land and Land Reform Department, Siliguri	3.94	3.94
Demand for Municipal Tax for Taluka Development Officer, Vadodara Land at Itola		4.73	4.73
Property Tax	Brihan Mumbai Mahanagar Palika, Mumbai	0.31	0.29

Demands presented hereinabove at 3.1 to 3.4 have been contested by the Board before appropriate forums. Future cash flows in respect of the same are determinable only on outcome of judgment / decision of the forums where the demands are contested.

### 4 Segment information:

NDDB is a body corporate constituted under the National Dairy Development Board Act, 1987. As per the objectives set out in the Act, all the activities of NDDB revolve around the Dairy/Agriculture sector which in terms of Accounting Standard-17 on "Segment Reporting" constitute a single reportable segment.

## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

**5 Disclosure as per Accounting Standard 15 (Revised 2005) regarding Employee Benefits is as under:****Employee Benefit Plans****Defined Contribution Plans**

The Company makes Provident Fund and Superannuation Fund contributions to defined contribution plans for qualifying employees. Under the Schemes, the Company is required to contribute a specified percentage of the payroll costs to fund the benefits. The Company recognised ₹ 87.03 million in the current year and ₹ 81.24 million in the previous year ended 31<sup>st</sup> March 2024 and ₹ 58.69 million in the current year and ₹ 54.44 million in the previous year ended 31<sup>st</sup> March 2024 for Superannuation Fund contributions in the Income and Expenditure Account. The contributions payable to these plans by the Company are at rates specified in the rules of the schemes.

**Defined Benefit Plans**

The Company offers the following employee benefit schemes to its employees:

- i. Gratuity
- ii. Post-Retirement medical benefits schemes (PRMBS)
- iii. Leave Encashment

The following table sets out the funded status of the defined benefit schemes and the amount recognised in the financial statements:

(₹ in million)

PARTICULARS	Year ended 31 March, 2025			Year ended 31 March, 2024		
	Gratuity	Post-Retirement medical benefits schemes (PRMBS)	Leave Encashment	Gratuity	Post-Retirement medical benefits schemes (PRMBS)	Leave Encashment
<b>Components of employer expense</b>						
Current service cost	41.72	0.93	38.36	36.93	0.92	33.00
Interest cost	41.15	8.14	49.48	38.77	8.21	46.27
Expected return on plan assets	(43.97)	-	(41.31)	(42.70)	-	(42.64)
Actuarial losses/(gains)	18.21	7.43	24.25	26.45	(1.16)	35.64
<b>Total expense recognised in the Statement of Profit and Loss</b>	<b>57.11</b>	<b>16.50</b>	<b>70.79</b>	<b>59.45</b>	<b>7.97</b>	<b>72.27</b>
<b>Actual contribution and benefit payments for year</b>						
Actual benefit payments	(29.19)	(6.17)	(17.24)	(40.99)	(4.20)	(37.68)
Actual contributions	72.60	-	48.26	46.31	-	6.95
<b>Net asset / (liability) recognised in the Balance Sheet</b>						
Present value of defined benefit obligation	(641.39)	(123.56)	(780.86)	(572.26)	(113.23)	(688.21)
Fair value of plan assets	696.13	-	644.81	611.50	-	574.54
<b>Net asset / (liability) recognised in the Balance Sheet</b>	<b>54.74</b>	<b>(123.56)</b>	<b>(136.04)</b>	<b>39.25</b>	<b>(113.23)</b>	<b>(113.67)</b>
<b>Change in defined benefit obligations (DBO) during the year</b>						
Present value of DBO at beginning of the year	572.26	113.23	688.21	516.97	109.45	616.91



## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

(₹ in million)

PARTICULARS	Year ended 31 March, 2025			Year ended 31 March, 2024		
	Gratuity	Post-Retirement medical benefits schemes (PRMBS)	Leave Encashment	Gratuity	Post-Retirement medical benefits schemes (PRMBS)	Leave Encashment
Current service cost	41.72	0.93	38.36	36.93	0.92	33.00
Interest cost	41.15	8.14	49.48	38.77	8.21	46.27
Actuarial (gains) / losses	15.46	7.43	22.04	20.58	(1.16)	29.71
Benefits paid	(29.19)	(6.17)	(17.24)	(40.99)	(4.20)	(37.68)
<b>Present value of DBO at the end of the year</b>	<b>641.39</b>	<b>123.56</b>	<b>780.86</b>	<b>572.26</b>	<b>113.23</b>	<b>688.21</b>
<b>Change in fair value of assets during the year</b>						
Plan assets at beginning of the year	611.50	-	574.54	569.36	-	568.56
Acquisition adjustment	-	-	-	-	-	-
Expected return on plan assets	43.97	-	41.31	42.70	-	42.64
Actual company contributions (Excluding Contribution made by Gratuity Trust and charges deducted by LIC)	72.60	-	48.26	46.31	-	6.95
Actuarial gain / (loss)	(2.75)	-	(2.21)	(5.87)	-	(5.93)
Benefits paid	(29.19)	-	(17.08)	(40.99)	-	(37.68)
<b>Plan assets at the end of the year</b>	<b>696.13</b>	<b>-</b>	<b>644.81</b>	<b>611.50</b>	<b>-</b>	<b>574.54</b>
Actual return on plan assets	41.21	-	39.10	36.83	-	36.71
<b>Composition of the plan assets is as follows:</b>						
Government bonds	-	-	-	-	-	-
PSU bonds	-	-	-	-	-	-
Equity & Equity related Investments	-	-	-	-	-	-
Others	100.00%	-	100.00%	100%	-	100%
<b>Actuarial assumptions</b>						
Discount rate	6.73%	6.73%	6.73%	7.19%	7.19%	7.19%
Expected return on plan assets	6.73%	NA	6.73%	7.19%	NA	7.19%
Salary escalation	8.50%	3.00%	8.50%	8.50%	3.00%	8.50%
Attrition	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Medical cost inflation	NA	5.00%	NA	NA	5.00%	NA
Mortality tables	Indian Assured Lives (2012-14) ultimate Mortality Rates	Indian Assured Lives (2012-14) ultimate Mortality Rates	Indian Assured Lives (2012-14) ultimate Mortality Rates	Indian Assured Lives (2012-14) ultimate Mortality Rates	Indian Assured Lives (2012-14) ultimate Mortality Rates	Indian Assured Lives (2012-14) ultimate Mortality Rates

## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

## Experience adjustments

(₹ in million)

PARTICULARS	2024-25	2023-24	2022-23	2021-22	2020-21	2019-20
<b>Gratuity</b>						
Present value of DBO	641.39	572.26	516.97	513.59	458.98	449.30
Fair value of plan assets	(696.13)	(611.50)	(569.36)	(472.74)	(421.34)	(418.09)
Funded status [Surplus / (Deficit)]	54.74	39.25	52.39	(40.85)	(37.64)	(31.21)
<b>Post-Retirement medical benefits schemes (PRMBS)</b>						
Present value of DBO	123.56	113.23	109.45	110.75	111.16	81.01
<b>Other defined benefit plans (Leave Encashment)</b>						
Present value of DBO	780.86	688.21	616.91	615.36	542.14	522.08
Fair value of plan assets	(644.81)	(574.54)	(568.56)	(516.09)	(393.49)	(393.45)
Funded status [Surplus / (Deficit)]	(136.04)	(113.67)	(48.35)	(99.27)	(148.65)	(128.63)

PARTICULARS	For the Year Ended 31 March, 2025	For the year Ended 31 March, 2024
<b>Actuarial assumptions for long-term compensated absences</b>		
Discount rate	6.73%	7.19%
Expected return on Gratuity plan assets	6.73%	7.19%
Expected return on Leave Encashment plan assets	6.73%	7.19%
Salary escalation	8.50%	8.50%
Attrition	1.00%	1.00%

The discount rate is based on the prevailing market yields of Government of India securities as at the Balance Sheet date for the estimated term of the obligations.

The estimate of future salary increases considered, takes into account the inflation, seniority, promotion, increments and other relevant factors.

The contribution expected to be made by the Board during FY 2025-26 has not been ascertained.

## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

### 6 Disclosure of related party and Transactions with them for the year ended 31<sup>st</sup> March, 2025 as per Accounting Standard 18

#### a) Related Party and their relationship

##### 1) Wholly owned subsidiaries

IDMC Limited  
 Indian Immunologicals Limited  
 Mother Dairy Fruit and Vegetable Private Limited  
 NDDB Dairy Services  
 Pristine Biologicals (NZ) Limited (wholly owned subsidiary of Indian Immunologicals Limited)  
 NDDB CALF Limited

##### 2) Other enterprises where management has significant influence over the management

The West Assam Milk Producers' Co-operative Union Limited  
 Animal Breeding Research Organisation (India)  
 Anandalaya Education society  
 Jharkhand State Co-operative Milk Producers' Federation Limited  
 NDDB Foundation for Nutrition  
 Varanasi Dugdh Utpadak Sahakari Sangh Limited  
 Ladakh UT Dairy Co Operative Federation Limited  
 East Assam Milk Producers' Cooperative Union Limited  
 NDDB Mrida Limited  
 Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit  
 Chhattisgarh Rajya Sahakari Dugdh Mahasangh Maryadit  
 Manipur Milk Producers Cooperative Union Ltd

##### 3) Key management personnel

Dr. Meenesh Shah                      Chairman and Managing Director



## NATIONAL DAIRY DEVELOPMENT BOARD ("NDDB" or "the Board")

## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

## b) Transactions with related parties

(figures in italic represent previous year figures)

(₹ in million)

Particulars	Interest Income	Purchase of Equity shares	Purchase of Fixed Assets	Purchase of Other Items	Dividend	Rent (Income)	Other income	Grant	Other Expenditure	Current Account Balance outstanding Dr/(Cr)	Advances Balance outstanding Dr/ (Cr)	Loan Disbursed	Loan repaid / Adjusted		Loan Balance outstanding Dr/(Cr)
													Principal	Interest	
Interest	Equity	FA	OP	Dividend	rent	OI	Grant	OE	CA	Advance	LD	LP	Interest	LB	
IDMC Limited	4.67	-	-	-	60.72	0.93	9.30	-	0.23	0.59	-	279.05	38.96	4.67	325.40
	7.64	-	-	-	60.72	0.53	0.16	0.05	0.10	0.02	-	243.23	157.92	7.64	85.31
Indian Immunologicals Limited	40.97	-	-	-	150.01	29.40	10.73	-	7.21	3.32	-	-	121.66	40.97	433.18
	51.34	-	-	-	108.00	29.38	43.80	-	7.38	(0.39)	-	728.45	173.61	51.34	554.84
Mother Dairy Fruit and Vegetable Private Limited	115.04	-	-	-	187.50	145.77	96.42	-	-	41.68	-	1,107.53	2,276.79	115.04	-
	89.52	-	-	-	-	130.97	19.57	-	3.25	84.15	-	1,407.29	238.03	89.52	1,169.26
NDDB Dairy Services	-	-	-	-	-	10.61	21.50	-	1.19	7.70	-	-	55.40	-	307.50
	-	-	-	-	-	13.28	5.10	-	0.26	12.93	-	418.30	55.40	-	362.90
NDDB CALF Limited	-	-	-	-	-	0.41	58.50	-	3.62	75.04	-	-	-	-	-
	-	-	-	-	-	0.41	69.23	-	11.55	120.44	-	-	-	-	-
Total	160.68	-	-	-	398.23	187.12	196.45	-	12.25	128.33	-	1,386.58	2,492.81	160.68	1,066.08
	148.50	-	-	-	168.72	174.57	137.86	0.05	22.54	217.15	-	2,797.27	624.96	148.50	2,172.31

(₹ in million)

Particulars	Interest Income	Purchase of Equity shares	Purchase of Fixed Assets	Purchase of Other Items	Dividend	Rent (Income)	Other income	Grant	Other Expenditure	Current Account Balance outstanding Dr/(Cr)	Advances Balance outstanding Dr/(Cr)	Loan Disbursed	Loan repaid / Adjusted	Interest	Loan Balance outstanding Dr/(Cr)
<b>Other enterprises where management has significant influence over the management</b>															
The West Assam Milk Producers' Co-operative Union Limited	-	-	-	-	-	0.02	2.85	11.78	0.06	0.11	-	15.84	-	-	30.11
	0.09	-	-	-	-	0.14	0.92	14.70	0.02	0.03	-	80.00	80.00	0.09	14.27
Animal Breeding Research Organisation	-	-	-	-	-	0.19	0.03	-	-	0.09	-	-	-	-	-
	-	-	-	-	-	-	0.60	-	-	0.29	-	-	-	-	-
Anandalaya Education Society	-	-	-	-	-	0.52	0.13	-	0.03	0.05	-	-	-	-	-
	-	-	-	-	-	0.48	0.13	-	0.02	0.01	-	-	-	-	-
Jharkhand State Cooperative Milk Producers' Federation Limited	-	-	-	-	-	0.14	3.83	0.05	0.01	0.19	-	-	-	-	-
	-	-	-	-	-	0.17	2.08	2.09	0.01	1.12	-	-	-	-	-
Varanasi Dugdh Utpadak Sahakari Sangh Limited	-	-	-	-	-	-	0.48	5.60	-	(0.68)	115.65	122.87	129.65	-	248.65
	-	-	-	-	-	0.01	0.04	23.90	0.54	(0.43)	-	280.00	37.13	-	255.43
Ladakh UT Dairy Co Operative Federation	0.35	-	-	-	-	-	0.01	29.12	0.11	-	29.30	-	-	0.35	-
	-	-	-	-	-	-	-	3.32	-	-	-	-	-	-	-
North East Dairy and Foods Limited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NDDB Mrida Limited	0.45	156.60	-	-	-	0.04	14.26	38.10	1.16	5.52	-	-	-	0.45	-
	-	-	-	-	-	0.03	12.27	12.00	8.86	5.76	-	-	-	-	-
East Assam Milk Producers' Cooperative Union Limited	-	-	-	-	-	-	-	16.72	-	-	4.84	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit	0.24	-	-	-	-	-	0.02	-	-	0.01	-	-	-	0.24	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chhattisgarh State Co.Operative Milk Marketing Federation Ltd	-	-	-	-	-	-	-	1.03	-	(0.04)	-	-	-	-	-
	-	-	-	-	-	-	0.06	21.67	-	0.02	4.76	-	-	-	-
Manipur Milk Producers Cooperative Union Ltd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1.04</b>	<b>156.60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.91</b>	<b>21.67</b>	<b>124.07</b>	<b>1.37</b>	<b>5.27</b>	<b>154.55</b>	<b>138.71</b>	<b>129.65</b>	<b>1.04</b>	<b>278.76</b>
	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.83</b>	<b>16.04</b>	<b>56.01</b>	<b>9.45</b>	<b>6.78</b>	<b>-</b>	<b>360.00</b>	<b>117.13</b>	<b>0.09</b>	<b>269.70</b>

## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

## Remuneration to Key Management Personnel

	₹ in Million
Dr. Meenesh Shah	7.10
	7.00
<b>Total</b>	<b>7.10</b>
	<b>7.00</b>

Note: Only those related parties with whom transactions have occurred during the current and/or previous financial year have been disclosed.

## 7 Disclosure as per Accounting Standard 19 – 'Leases' (Refer Annexure VIII):

Operating lease arrangements entered into by the Board as a Lessor for following assets:

### a) Nature of Assets leased

(₹ in million)			
CLASS OF ASSET	Gross value of assets as at 31 <sup>st</sup> March, 2025	Depreciation for the year	Accumulated Depreciation as at 31 <sup>st</sup> March, 2025
Buildings and Roads#	1632.68	42.23	1162.50
	1633.00	42.52	1120.58
Electrical Installations#	28.07	0.88	27.14
	30.16	0.89	28.34
Furniture, fixtures, computers and office equipment	8.67	0.00	8.67
	8.70	0.00	8.70
Rail Milk Tankers	340.87	16.55	287.34
	345.49	16.55	275.40
<b>Total</b>	<b>2010.29</b>	<b>59.66</b>	<b>1485.65</b>
	<b>2017.35</b>	<b>59.96</b>	<b>1433.02</b>

# including staff quarters and cold storage  
(Figures in italics represent previous year figures)

These arrangements are cancellable with prior notice to the lessee.

- b) Initial Direct cost relating to leasing arrangements is charged to Income and Expenditure account in the year of arrangement of lease.
- c) Significant Leasing arrangements:

All assets mentioned above are leased out to subsidiaries, federations and others with an option to renew or cancellation of the agreement.



## Notes to Accounts forming part of the Financial Statement

ANNEXURE - XVI

**8 Deferred tax assets have been recognised as per Accounting Standard 22-‘Accounting for Taxes on Income’. Details are as under:**

(₹ in million)

PARTICULARS	Opening Balance as at 1 <sup>st</sup> April, 2024	Adjustment during the year	Closing Balances at 31 <sup>st</sup> March, 2025
<b>Deferred Tax Assets /(Liability):</b>			
Depreciation	1.86	3.39	5.25
	(7.04)	8.90	1.86
Expenditure allowable on payment basis	167.29	23.32	190.61
	149.32	17.97	167.29
Gratuity	(9.88)	(3.90)	(13.78)
	(13.19)	3.31	(9.88)
Voluntary Retirement Scheme	0.00	0.00	0.00
	0.01	(0.01)	0.00
Special Reserve	(443.50)	(63.06)	(506.56)
	(408.79)	(34.71)	(443.50)
<b>TOTAL</b>	<b>(284.23)</b>	<b>(40.25)</b>	<b>(324.48)</b>
	<b>(279.69)</b>	<b>(4.54)</b>	<b>(284.23)</b>

(Figures in italic represent previous year figures)

**Note:**

In line with Reserve Bank of India's (RBI's) Circular No. RBI/2013-14/412 DBOD.No.BP.BC.77/21.04.018/2013-14 dated 20 December 2013, the Board has created Deferred Tax Liability on the Special Reserve under section 36(1)(viii) of the Income Tax Act, 1961.

**9 Disclosure as per Accounting Standard 29 – ‘Provisions, Contingent Liabilities and Contingent Assets’ is as follows:**

(₹ in million)

PARTICULARS	Non-Performing Asset (NPA)	General Contingency on Standard Assets	Contingency	Total
Opening balance	582.08	122.57	1,903.61	2,608.26
	559.34	93.67	1,755.25	2,408.26
Created during the year	0.05	6.05	193.90	200.00
	22.74	28.90	171.61	223.25
Reversed/movement during the year	-	-	-	-
	-	-	(23.25)	(23.25)
<b>Closing balance</b>	<b>582.13</b>	<b>128.62</b>	<b>2,097.51</b>	<b>2,808.26</b>
	<b>582.08</b>	<b>122.57</b>	<b>1,903.61</b>	<b>2,608.26</b>

(Figures in italic represent previous year figures)

## Notes to Accounts forming part of the Financial Statement

## ANNEXURE - XVI

- 10** Based on the information available with Board as on 31<sup>st</sup> March 2025, sundry creditors that are classified as Micro and Small Enterprises under the Micro, Small and Medium Enterprises Development Act, 2006 were of ₹ 28.84 million (Previous Year: ₹ 14.22 million) and there were no overdue to these entities.
- 11** Interest income includes ₹ 2,303.59 million (Previous Year ₹ 1,723.53 million) from Loans & Advances and ₹ 854.36 million (Previous year ₹ 1,144.55 million) from long term Investment.
- 12** All dividends are from long-term investments.
- 13** As per the provisions of section 36(1)(viii) of Income Tax Act, 1961, Special Reserve is created since Assessment Year 2003-04 (the assessment year in which NDDB came into ambit of Income Tax Act, 1961), as NDDB believes that it is eligible for deduction under the said section. However, Income Tax Authorities disallowed such claim for the Assessment year 2003-04 and subsequent years. NDDB contested the same at various appellate forums. Hon'ble High Court, Gujarat decided the matter in favour of the Income Tax Department. NDDB filed Special Leave Petition before Hon'ble Supreme Court and matter is now pending before the Hon'ble Court for disposal. The management of NDDB is of the view that possibility of cash outflow in respect of income tax is remote and based on expert legal opinion, it has a good case; accordingly, NDDB continues to create special reserve in the books of account in the year under report and considered the claim as eligible for tax provision.
- 14** Total capital commitment for capital work for the FY 2025-26 is ₹ 95.88 million (Previous Year ₹ 22.73 million).
- 15** Following capital investment are envisaged during the year 2025-26:

NAME OF COMPANY	₹ in million	Remarks
Bhartiya Beej Sahakari Samiti Limited.	209.90	Additional Share Capital

- 16** The figures of the previous year have been regrouped/re-arranged wherever necessary.

In terms of our report of even date attached.

**For M K P S & Associates LLP**  
Chartered Accountants  
Firm Reg No. 302014E/W101061

**Vasudev Sunderdas Matta**  
Partner  
Membership No. 046953

Place: Mumbai  
Date: 1<sup>st</sup> August 2025

**For and on behalf of the Board,**

**Meenesh C Shah**  
Chairman & Managing  
Director

Place: Anand  
Date: 1<sup>st</sup> August 2025

**S Regupathi**  
Executive Director  
(Operations)

**Amit Goel**  
Group Head  
(Accounts)

# NDDDB OFFICERS

## Head Office, Anand

### Chairman & Chief Executive

**Meenesh C Shah**  
B Sc (DT), PGDRDM,  
Honorary Degree of Doctorate  
of Science

### Chief Executive's Office

**Rajesh Kumar**  
SR MGR, B A (Eco), PGDRM

**Hriday B Darji**  
SCI II, B Tech (DT),  
M Tech (DT)

**Renu Sharma**  
DY MGR, BBA (Mktg & Sales), PGDRM

**Rhythm**  
DY MGR, B.Tech (DT)

### Managing Director

**Meenesh C Shah**  
B Sc (DT), PGDRDM,  
Honorary Degree of Doctorate  
of Science

### Managing Director's Office

**Rajesh Singh**  
SR MGR, BCA,  
PGDM (Mktg & Fin)

**Nikit Bansal**  
MGR, B.Com, CA,  
PGDM (RM-X)

### Executive Directors

**S Regupathi**  
M Com, ICWA, PGDRDM

**S Rajeev**  
B Tech (Industrial Engg), PGDRM

### Executive Director's Office

**Vatsal Patel**  
MGR, B E (Mech)

## Senior General Managers

**V Sridhar**  
BVSc & AH, MVSc (Anim Nutn), MBA

**R O Gupta**  
BVSc, MVSc (Med)

**AV Ramachandra Kumar**  
B E (Comp Engg), PGDM

**S S Sinha**  
B E (Elect)

## Accounts

**Amit Goel**  
DY GEN MGR, B Com, CA

**Vinai Gupta**  
SR MGR, B Com, ICWA,  
PGDM (RM-X)

**Chirag K Sevak**  
SR MGR, B Sc (Maths), PGDCA,  
PGDTP, ICWA, PGDM (RM-X)

**Ashutosh K Mishra**  
SR MGR, B Sc (E&I),  
PGDBA (Fin)

**Rashmi Prateesh**  
MGR, M Com, ICWA

**Swapnil Thaker**  
MGR, M Com, CA,  
PGDM (RM-X)

**Ravindra G Ramdasia**  
MGR, M Com, CA, CS,  
PGDM (RM-X)

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DY MGR, B Com, CA

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## Animal Breeding

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**A Sudhakar**  
SR MGR, BVSc, MVSc,  
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MGR, BVSc & AH,  
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**Siddhartha S Layek**  
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MVSc (LPM), Ph D (LPM)

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MGR, BVSc & AH, MVSc  
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**Karmraj R Jaiswar**  
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DY MGR, BVSc & AH, MVSc. (Animal  
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**Kathan Bhanubhai Raval**  
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DY MGR, B.E. (Metallurgical and  
Materials Engg.), PGDRM

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**1.5 LLPD automated milk  
processing plant with  
VAPs at Dhagwar, Kangra,  
Himachal Pradesh**

**Abhishek Singhal**  
MGR, B Tech (Civil)

**120 MTPD Dairy Whitener/Baby  
Food Milk Powder Plant and  
UHT Plant, Dudhsagar Dairy,  
Mehsana, Gujarat**

**Shailendra Mishra**  
SR MGR, Dip (Civil),  
Dip (Const Tech)

**150 TPD Cattle Feed Plant,  
Gulabpura, Bhilwara, Rajasthan**

**Jay Nagar**  
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**2.35 LLPD Fermented Product  
Plant, Amritsar, Punjab**

**Gaurav Singh**  
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**50 TLPD Dairy Plant, Rajsamand,  
Rajasthan**

**Jasdev Singh**  
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**5 LLPD Automated Dairy Plant  
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**Effluent Treatment Project  
(ETP) (Phase-II), Sabar Dairy,  
Himmatnagar, Gujarat**

**Nirav P Saksena**  
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**Hyderabad Dairy Project, Hyderabad,  
Telangana**

**Pradip Layek**  
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**Mega Dairy, Nagpur, Maharashtra**

**Dhiraj B Tembhurne**  
SR MGR, B E (Civil)

**Milk Product Plant Project,  
Barauni, Bihar**

**Surjeet K Choudhary**  
MGR, B E (Mech)

**New 5 LLPD LMP & 15 LLPD ETP  
at Milk Plant, Mohali, Punjab**

**Tarak Rajani**  
MGR, B E (Civil)

**New Animal Vaccine Plant,  
Indian Immunologicals Limited,  
Karkapatla, Telangana**

**Bibhu Prasad Jena**  
SR MGR, B E (Civil)

**Syed Abdul Rashid**  
MGR, B E (Mech)

**SAG, Ahmedabad**

**Balram Niboriya**  
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**Vaccine Production Plant,  
Berhampur, Odisha**

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**Abbreviations**

**SR GEN MGR:** Senior

General Manager

**GEN MGR:** General Manager

**DY GEN MGR:** Deputy

General Manager

**SR SCI:** Senior Scientist

**SR MGR:** Senior Manager

**SCI III:** Scientist III

**MGR:** Manager

**SCI II:** Scientist II

**DY MGR:** Deputy Manager

**SCI I:** Scientist I

# GLOSSARY

**AAETI** - Anil Agarwal Environment Training Institute

**AAU** - Anand Agricultural University

**ABIP** - Accelerated Breed Improvement Programme

**ABIP IVF-ET** - Accelerated Breed Improvement Programme, In-vitro Fertilisation and Embryo Transfer

**ABIP-IVF** - Accelerated Breed Improvement Programme (ABIP-IVF)

**ABIP-SSS** - Accelerated Breed Improvement Programme using sex sorted semen

**ABS** - Adult Bovine Serum

**A-HELP** - Accredited Agent for Health and Extension of Livestock Production

**AHIDF** - Animal Husbandry Infrastructure Development Fund

**AI** - Artificial Insemination

**AKF** - Aga Khan Foundation

**ALDA** - Assam Livestock Development Agency

**AMCS** - Automatic Milk Collection System

**AMCU** - Automatic Milk Collection Units

**AMR** - Antimicrobial Resistance

**AMU** - Antimicrobial Usage

**Amul Dairy** - Kaira District Co-operative Milk Producers Union Ltd

**AMV** - All for Medical Vietnam

**ANAS** - Animal Nutrition Advisory Services

**APART** - Assam Agribusiness and Rural Transformation Project

**APEDA** - Agricultural & Processed Food Products Export Development Authority

**APHA, UK** - Animal and Plant Health Agency, United Kingdom

**ARIAS** - The Assam Rural Infrastructure and Agricultural Services Society

**ASCAD** - Assistance to States for Control of Animal Diseases

**BAIF** - BAIF Development Research Foundation

**Banas Dairy** - Banaskantha District Cooperative Milk Producers Union Ltd

**BBSL** - Bharatiya Beej Sahakari Samiti Limited

**Barauni Dairy** - Deshratan Dr.Rajendra Prasad Dugdh Utpadak Sahkari Sangh Ltd

**BVD** - Bovine Viral Diarrhoea

**BVDV** - Bovine Viral Diarrhoea Virus

**BGC** - Bovine Genital Campylobacteriosis

**BioCNG** - Bio-Compressed Natural Gas

**BIS** - Bureau of Indian Standards

**BMC** - Bulk Milk Cooler

**BMCU** - Bulk Milk Cooler Units

**BMF** - Breed Multiplication Farm

**BOM** - Bill of Materials

**BoHV-1** - Bovine Herpes Virus Type 1

**BoHV-5** - Bovine Herpes Virus Type 5

**BuHV-1** - Bubaline Herpes Virus Type 1

**BPSCL** - Bokaro Power Supply Company Limited

**BSL** - Bio-Safety Labs

**BTL** - Below The Line

**CAC** - Codex Alimentarius Committee

**CAS-MMP** - Conformity Assessment Scheme for Milk & Milk Products

**CAWA** - Compassion for Animals Welfare Association

**CBBO** - Cluster Based Business Organisation

**CBDC** - Central Bank Digital Currency

**CBG** - Compressed Biogas

**CBHF** - Crossbred of Holstein Friesian

**CBJY** - Crossbred of Jersey

**CBMM** - Continuous Butter-Making Machines

**CCBF** - Central Cattle Breeding Farms

**CFP** - Cattle Feed Plant

**CFSP&TI** - Central Frozen Semen Production and Training Institute

**CGCDF** - Chhattisgarh Cooperative Dairy Federation

**CFU** - Colony-Forming Unit

**CII** - Confederation of Indian Industry

**CIVF** - CHARUSAT Innovative Ventures Foundation

**CIP** - Clean in Place

**CLA** - Centrifugal Pumps

**CKMM** - Continuous Khoa-Making Machines

**CNA** - Central Nodal Agency

**CNG** - Compressed Natural Gas

**CoE** - Centre of Excellence

**COVID-19** - 2019 novel coronavirus

**CRP** - Calf Rearing Programme

**CSE** - Centre for Science and Environment

**CSR** - Corporate Social Responsibility

**CWIP** - Capital Work in Progress

**DAHD** - Department of Animal Husbandry and Dairying

**DAVAC** - Dalat Pasteur Vaccine Company Limited

**DBO** - Defined Benefit Obligations

**DBT** - Direct Benefit Transfer

**DCAM** - Disease Control through Alternate Methods

**DCS** - Dairy Cooperative Society

**DFCCIL** - Dedicated Freight Corridor Corporation of India Limited

**DIDF** - Dairy Processing Infrastructure Development Fund

**DMF** - District Mineral Foundation

**DNA** - Deoxyribonucleic acid

**DoRB** - De-oiled Rice Bran

**DPMCU** - Data Processor based Milk Collection Units

**DPR** - Detailed Project Report

**DRO** - Dairy Route Optimizer

**DSF** - Dairy Sustainability Framework

**DTC** - Dairying through Cooperatives

**DVFA** - Danish Veterinary and Food Administration

**EAMUL** - East Assam Milk Producers Cooperative Union Ltd

**EBL** - Enzootic Bovine Leukosis

**EGH** - Elder of the Order of the Golden Heart.

**EIAs** - End Implementing Agencies

**EIC** - Export Inspection Council

**ELISA** - Enzyme Linked Immunosorbent Assay

**EPP** - Empty Pea Pods

**ERP** - Enterprise Resource Planning

**ESG** - Environmental, Social and Governance

**ET** - Embryo Transfer

**ETP** - Effluent Treatment Plan

**ETT** - Embryo Transfer Technology

**EVM** - Ethno-Veterinary Medicine

**FAO** - Food and Agriculture Organisation of the United Nations

**FCDO** - Foreign, Commonwealth & Development Office

**FDU** - Fodder Demonstration Unit

**FMD** - Foot and Mouth Disease

**FMDV** - Foot and Mouth Disease Virus

**FP** - Filter Paper

**FPO** - Farmer Producer Organisation

**FSD** - Frozen Semen Dose

**FSSAI** - Food Safety and Standards Authority of India

**GAAP** - Generally Accepted Accounting Principles

**GADVASU** - Guru Angad Dev Veterinary and Animal Sciences University

**GBRC** - Gujarat Biotechnology Research Centre

**GBV** - Genomic Breeding Value

**GCMMF** - Gujarat Cooperative Milk Marketing Federation Ltd

**GDT** - Global Dairy Trade

**GHG** - Greenhouse Gas

**GIS** - Geographic Information Systems

**GMP** - Good Manufacturing Practice

**GoA** - Government of Assam

**GoI** - Government of India

**GoM** - Government of Maharashtra

**GWAS** - Genome-Wide Association Studies

**HA** - Hectare

**HACCP** - Hazard Analysis Critical Control Point

**HFCB** - Crossbred Holstein Friesian

**HGM** - High Genetic Merit

**HP Milkfed** - Himachal Pradesh State Co-operative Milk Producer's Federation Limited

**HS** - Haemorrhagic Septicaemia

**IA** - Implementing Agency

**IBR** - Infectious Bovine Rhinotracheitis

**IBSC** - Institutional Biosafety Committee

**ICAI** - Institute of Chartered Accountants of India

**ICRISAT** - International Crops Research Institute for Semi-Arid Tropics

**ICAR** - Indian Council of Agricultural Research

**ICAR** - International Committee of Animal Recording

**ICAR-NBAGR** - ICAR-National Bureau of Animal Genetic Resources

**ICFA** - Indian Chamber of Food and Agriculture

**ICS** - Internal Control System

**IDA** - Indian Dairy Association

**IDF** - International Dairy Federation

**IDF RDC** - IDF Regional Dairy Conference

**IDF WDS-2024** - International Dairy Federation's World Dairy Summit-2024

**IDF WDS-2027** - International Dairy Federation's World Dairy Summit-2027

**i-DIS** - Internet Based Dairy Information System

**IDMC** - Indian Dairy Machinery Company Ltd

**IEC** - International Electrotechnical Commission

**IFAD** - International Fund for Agricultural Development

**IFPRI** - International Food Policy Research Institute

**IFFCO** - Indian Farmers Fertilizer Cooperative Limited

**IIL** - Indian Immunologicals Limited



<b>ILRI</b> - International Livestock Research Institute	<b>LCF</b> - Least Cost Formulation	<b>MoC</b> - Ministry of Cooperation
<b>INC-IDF</b> - Indian National Committee of the International Dairy Federation	<b>LDCF</b> - Ladakh Dairy Cooperative Federation Ltd	<b>MoU</b> - Memorandum of Understanding
<b>IRMA</b> - Institute of Rural Management, Anand	<b>LH&amp;DC</b> - Livestock Health & Disease Control	<b>MP</b> - Madhya Pradesh
<b>IS</b> - Indian Standards	<b>LIC</b> - Life Insurance Corporation of India	<b>MPACS</b> - Multipurpose Primary Agricultural Cooperative Credit Societies
<b>ISO</b> - International Organization for Standardization	<b>LIC</b> - Livestock Improvement Corporation	<b>MPCS</b> - Milk Producers Cooperative Societies
<b>IVEP</b> - In Vitro Embryo Production	<b>LKgPD</b> - Lakh Kilograms Per Day	<b>MPO</b> - Milk Producer Organisation
<b>IVF</b> - In-vitro Fertilisation	<b>LLPD</b> - Lakh Liters Per Day	<b>MR</b> - Measles-Rubella
<b>IVPM</b> - Institute of Veterinary Preventive Medicine	<b>LMF</b> - Ladakh Milk Federation	<b>MRSDMM</b> - Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit
<b>IVRI</b> - Indian Veterinary Research Institute	<b>LMIC</b> - Low and Middle Income Countries	<b>MSP</b> - Minimum Standard Protocol
<b>IYC</b> - International Year of Cooperatives	<b>LMP</b> - Liquid Milk Processing	<b>MSP</b> - Minimum Support Price
<b>JICA</b> - Japan International Cooperation Agency	<b>LSHDCP</b> - Livestock Health Disease Control Programme	<b>MT</b> - Metric Tonne
<b>JMF</b> - Jharkhand Milk Federation	<b>LSD</b> - Lumpy Skin Disease	<b>MTC</b> - Micro Training Centres
<b>JSIA</b> - Jharkhand State Implementing Agency	<b>MAFSU</b> - Maharashtra Animal & Fishery Sciences University	<b>MTPD</b> - Metric Tonne Per Day
<b>JV</b> - Joint Venture	<b>MAITRIs</b> - Multi-Purpose AI Technicians in Rural India	<b>MU</b> - Milk Unions
<b>JYCB</b> - Crossbred Jersey	<b>MAITs</b> - Mobile AI Technicians	<b>MW</b> - Megawatt
<b>KDCMPUL</b> - Kaira District Co-operative Milk Producers' Union Ltd.	<b>MDCS</b> - Multipurpose Dairy Cooperative Societies	<b>NABARD</b> - National Bank for Agriculture and Rural Development
<b>KCMMF</b> - Kerala Cooperative Milk Marketing Federation	<b>MDFVPL</b> - Mother Dairy Fruit & Vegetable Pvt. Ltd.	<b>NABL</b> - National Accreditation Board for Testing and Calibration Laboratories
<b>KFD</b> - Kyasanoor Forest Disease	<b>MDL</b> - Mazagon Dock Shipbuilders	<b>NADCP</b> - National Animal Disease Control Programme
<b>Kg</b> - Kilogram	<b>Mehsana Dairy</b> - Mehsana District Cooperative Milk Producers Union Ltd	<b>NAFED</b> - National Agricultural Cooperative Marketing Federation of India Ltd
<b>KL</b> - Kilo Liter	<b>Milma</b> - Kerala Co-operative Milk Marketing Federation	<b>NBAGR</b> - National Bureau of Animal Genetics Resources
<b>KLD</b> - Kiloliters Per Day	<b>MIS</b> - Management Information System	<b>NBCC</b> - National Buildings Construction Corporation
<b>KLPH</b> - Thousand Liters Per Hour	<b>MIT, Mehsana</b> - Mansinh Institute of Training, Mehsana	<b>NBGC-IB</b> - National Bovine Genomic Centre for Indigenous Breed
<b>KOF</b> - Karnataka Cooperative Oilseeds Growers' Federation	<b>MILKFED</b> - Punjab State Cooperative Milk Producers' Federation Limited	<b>NBHM</b> - National Beekeeping and Honey Mission
<b>KRIBHCO</b> - Krishak Bharati Cooperative Limited	<b>MLST</b> - Multi-Locus Sequence Typing Technique	<b>NCCF</b> - National Cooperative Consumers' Federation of India Ltd
<b>KVK</b> - Krishi Vigyan Kendra	<b>MNRE</b> - Ministry of New and Renewable Energy	<b>NCDC</b> - National Cooperative Development Corporation
<b>KWp</b> - Kilowatt Peak		
<b>LAHDC</b> - Ladakh Autonomous Hill Development Council		

**NCDFI** - National Cooperative Dairy Federation of India Ltd

**NCEL** - National Cooperative Exports Limited

**NCOL** - National Cooperative Organics Limited

**NCR** - National Capital Region

**NCRPB** - National Capital Region Planning Board

**NCT** - National Capital Territory

**NDDB** - National Dairy Development Board

**NDDB-SPEF** - NDDB Sustain Plus Energy Foundation

**NDERP** - NDDB Dairy ERP

**NDF** - Neutral Detergent Fiber

**NDLM** - National Digital Livestock Mission

**NDP I** - National Dairy Plan, Phase I

**NDP II** - National Dairy Plan, Phase II

**NDRI** - National Dairy Research Institute

**NDS** - NDDB Dairy Services

**NEDFL** - North East Dairy and Foods Limited

**NER** - North-Eastern States

**NFDB** - National Fisheries Development Board

**NFN** - NDDB Foundation for Nutrition

**NFP** - Nobuto Filter Paper

**NFSM** - National Food Security Mission

**NIAB** - National Institute of Animal Biotechnology

**NIAH** - National Institute of Animal Health

**NITI Aayog** - National Institution for Transforming India

**NIVEDI** - National Institute of Veterinary Epidemiology and Disease Informatics

**NLM** - National Livestock Mission

**NMRP** - National Milk Recording Programme

**NPDD** - National Programme for Dairy Development

**NPCI** - National Payments Corporation of India

**NRCM** - National Research Center on Meat

**NRL** - National Reference Laboratory

**NZ** - New Zealand

**ODA** - Official Development Assistance

**OH** - One Health

**OL** - Official Language

**OLIC** - Official Language Implementation Committee

**OMFED** - Odisha State Cooperative Milk Producers' Federation

**ONGC** - Oil and Natural Gas Corporation Limited

**OPU** - Ovum Pick-up

**OPU-IVEP** - Ovum Pick-Up and In Vitro Embryo Production

**OPU-IVEP-ET** - Ovum Pick-up, In-vitro Production and Embryo Transfer

**PA** - Participating Agency

**PACS** - Primary Agriculture Cooperative Credit Societies

**PBNL** - Pristine Biologicals NZ Limited

**PCDF** - Pradeshik Cooperative Dairy Federation

**PCs** - Primary Cooperative Societies

**PCR** - Polymerized Chain Reaction

**PGS** - Participatory Guarantee System

**PI** - Participating Institutions

**PMU** - Project Monitoring Unit

**PNB** - Punjab National Bank

**POI** - Producer Owned Institution

**PPE** - Property, Plant and Equipment

**PPR** - Peste-des-Petits Ruminants

**PRMBS** - Post-Retirement Medical Benefits Schemes

**PS** - Pedigree Selection

**PSB** - Public Sector Banks

**PSU** - Public Sector Undertakings

**PT** - Progeny Testing

**QC Circle** - Quality Control Circle

**QPR** - Quarterly Progress Report

**QR** - Quick Response

**RBI** - Reserve Bank of India

**RBP** - Ration Balancing Programme

**RDA** - Recommended Dietary Allowance

**RFID** - Radio Frequency Identification

**RGM** - Rashtriya Gokul Mission

**RL** - Referral Laboratory

**Ro-Ro** - Roll-on/Roll-off

**RPPOI** - Revitalising Promising Producers' Owned Institution

**RUC** - Ready-to-Use Culture

**SA** - Standards on Auditing

**SABAR DAIRY** - Sabarkantha District Co-operative Milk Producers' Union Ltd

**SAC-ISRO** - Space Applications Centre, Indian Space Research Organisation

**SAG-SR** - SAG-Slow Release

**SAI Platform** - Sustainable Agriculture Initiative Platform

**SAIL** - Steel Authority of India Limited

**SCADA** - Supervisory Control & Data Acquisition

**SCI** - Shipping Corporation of India Limited

**SCS** - Surabhi Chayan Shrankhla

**SDCFPO** - Supporting Dairy Cooperatives and Farmer Producer Organisations

**SDGs** - Sustainable Development Goals

**SEWA** - Self-Employed Women's Association

**Shreeja MMPCL** - Shreeja Mahila Milk Producer Company Ltd.

**SKU** - Stock keeping unit

**SMLU** - Sundarban Co-Operative Milk & Livestock Producers' Union Ltd.

**SMP** - Skimmed Milk Powder

**SNF** - Solids Not Fat

**SOPs** - Standard Operating Procedures

**SRDI** - Suzuki R&D Center India Pvt Ltd

**SS** - Semen Stations

**SSMS** - Semen Station Management System

**SS&SM** - Sero-surveillance and Seromonitoring

**ST** - Sequence Types

**Sumul Dairy** - Surat Tapi District Co-operative Milk Producers Union Ltd

**TAG** - Tropical Animal Genetics

**TCMPF** - Tamil Nadu Co-operative Milk Producers' Federation Limited

**TDU** - Trans Disciplinary University

**TDN** - Total Digestible Nutrients

**TERI** - The Energy and Resource Institute

**TKgPD** - Thousand Kg Per Day

**TLPD** - Thousand Litres Per Day

**TMR** - Total Mixed Ration

**TOLIC** - Town Official Language Implementation Committee

**ToT** - Training of Trainers

**TPRMG** - Tata Power Renewable Microgrid Limited

**TR** - Tons of Refrigeration

**TRG** - Technical Reference Group

**TSDDCFL** - Telangana State Dairy Development Co-operative Federation Ltd

**TTL** - Task Team Leader

**UDIN** - Unique Document Identification Number

**UHT** - Ultra-High Temperature

**UIP** - Universal Immunization Program

**VADP** - Value-Added Dairy Products

**VBMPs** - Village-Based Milk Procurement Systems

**VMDDP** - Vidarbha Marathwada Dairy Development Project

**VRS** - Voluntary Retirement Scheme

**WAMUL** - West Assam Milk Producers' Cooperative Union Limited

**WOAH** - World Organisation for Animal Health

**WR 2.0** - White Revolution 2.0



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