

A woman in a red sari and blue skirt is smiling and holding a silver milk can. She is standing in a field of yellow flowers, with a tree trunk on the left and a forest in the background. The sky is blue. The text 'The Milky way... over the years' is written in white cursive and sans-serif fonts across the top right.

# The Milky way... over the years



Department of Animal Husbandry and Dairying  
Ministry of Fisheries, Animal Husbandry and Dairying  
Government of India





The  
Milky  
way ...  
over the  
years



सत्यमेव जयते

Department of Animal Husbandry and Dairying  
Ministry of Fisheries, Animal Husbandry and Dairying  
Government of India







“ भारत के गांवों में हरित और सतत् विकास के लिए पशुपालन और डेयरी क्षेत्र एक बड़ा माध्यम है । आज हमारा फोकस देश में संतुलित डेयरी इकोसिस्टम बनाने पर है ।”

श्री नरेन्द्र मोदी  
माननीय प्रधान मंत्री



“ *Nari Shakti* in animal husbandry and dairy farming are not just caretakers of livestock; they are architects of change, building a foundation for sustainable development ”

**Shri Purshottam Rupala**  
Hon'ble Union Minister of Fisheries,  
Animal Husbandry and Dairying





**Dr. Sanjeev Kumar Balyan**  
Hon'ble Minister of State of Fisheries  
Animal Husbandry and Dairying



**Dr. L. Murugan**  
Hon'ble Minister of State of Fisheries  
Animal Husbandry and Dairying







Always, the question.

Glass... half full or  
half empty ?

But the story of Milk in  
India is certainly a full  
glass.

Actually, brimming with  
achievements.

From being a milk  
deficient country when  
we used to import milk  
powder to turn it into  
liquid milk to meet India's  
needs to becoming the  
world's biggest milk  
producer... is a remarkable  
story, indeed.





The dairy sector holds immense significance both globally and in India. Dairy products serve as a cornerstone of human nutrition, providing essential nutrients such as calcium, protein, and vitamins, contributing to overall health and well-being.



The history of the Indian dairy industry dates back to ancient times when the domestication of cattle and buffaloes played a crucial role in providing milk and dairy products for sustenance.







Furthermore, these products have deep-rooted cultural significance, forming a vital part of culinary traditions across diverse societies.



# Atmanirbharta

India attained 'Atmanirbharta' in milk and became the largest milk producing nation in the world in 1998, a position which we have held since then.

Apart from the growing production, there have been developments across the dairy value

chain bettering lives and providing livelihoods to crores of dairy farmers across the country right at the grassroots. These developments have picked up unprecedented pace during the last 10 years.





Indian dairying has witnessed remarkable growth and transformative changes in the past decade. India is now ready to position itself as a key player in the global dairy industry not only in terms of volumes but in every facet of

dairying. A combination of innovative strategies, technological advancements, and policy initiatives has propelled India to new heights.

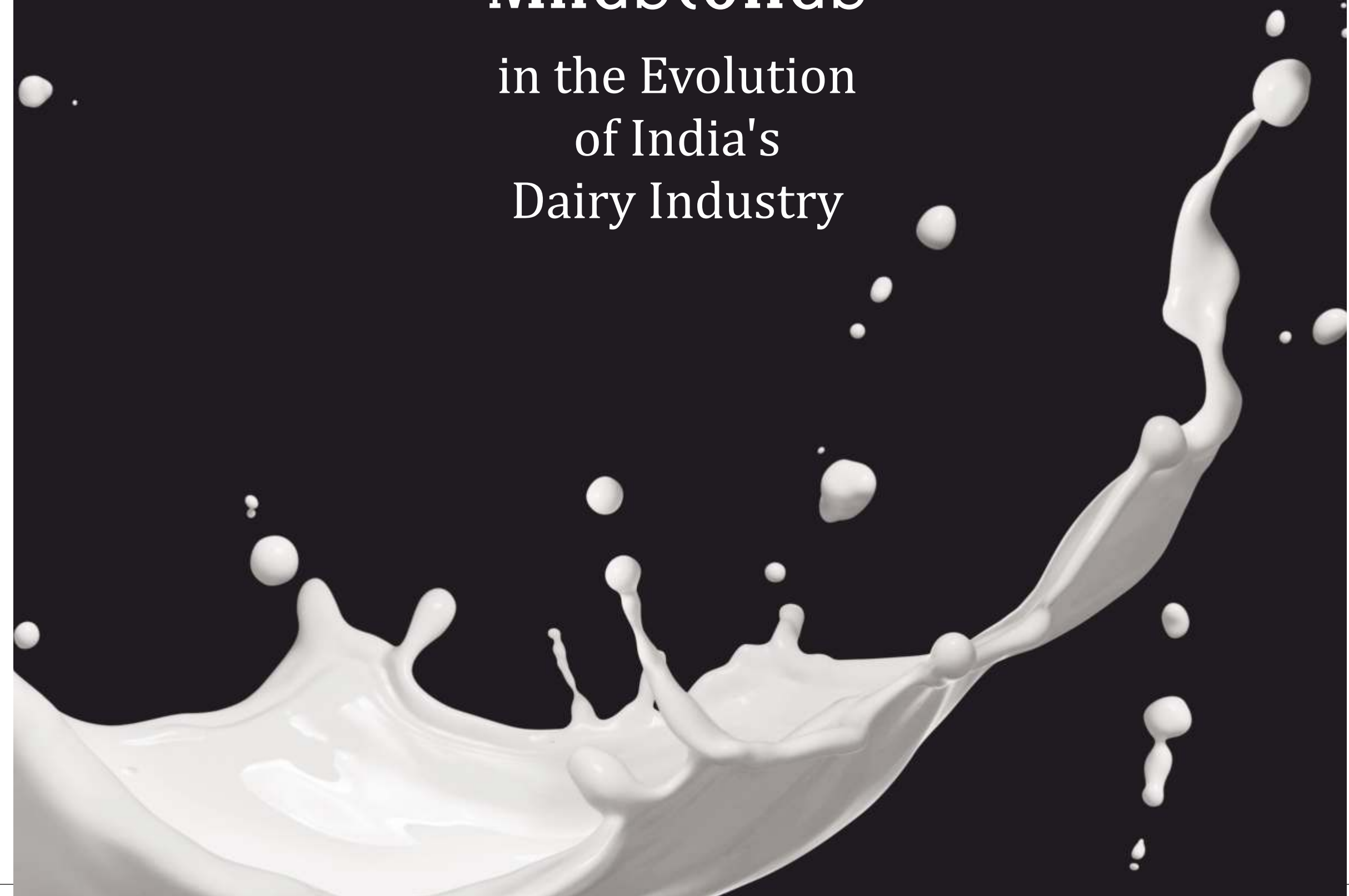






# Milestones

in the Evolution  
of India's  
Dairy Industry



दूध कलेकशन

1946



This marked the beginning of organized dairy cooperatives in India.






1950

The National Dairy Development Board (NDDB) was established by the Indian government to promote, plan, and organize dairy development programs in the country.




1970



'Operation Flood', one of the world's largest dairy development programs, was initiated to transform India from a milk-deficient nation to one of the world's largest milk producers. It was a major turning point in the Indian dairy industry's growth.



# 1970-80

A photograph showing two men from behind, pushing a wooden cart on a dirt path. The cart is heavily loaded with large metal milk cans and a large bundle of green corn stalks. The man on the left wears a blue turban and a white shirt, while the man on the right wears a yellow turban and a white shirt. They are in a rural setting with green fields and trees in the background under a clear sky.

The 'White Revolution', a term used to describe the rapid growth of the dairy industry in India, was fuelled by 'Operation Flood'. This period witnessed significant increase in milk production, dairy cooperatives, and milk processing facilities.





# 2011-19

National Dairy Plan Phase I (2011-12 to 2018-19) helped the country sustain its self-sufficiency in milk post the 'Operation Flood' era. NDDB implemented NDP I, termed as Mission Milk – The Next Revolution. It contributed substantially in achieving the project development objectives of increasing the productivity of milch animals and thereby increasing milk production to meet the rapidly growing demand for milk. It also provided rural milk producers with greater access to the organised milk processing sector.



2014-23



The Indian dairy industry experienced substantial growth, not only as an economic powerhouse but also as a catalyst for rural development, technological advancement, and global recognition. The positive impacts of the dairy sector have extended to various facets of the Indian society, positively influencing the lives of millions of dairy farmers and consumers alike.



Livestock Sector is an important subsector of agriculture in the Indian economy. It grew at a Compounded Annual Growth Rate (CAGR) of 7.93 per cent during 2014-15 to 2019-20 (at constant prices).

As per the estimates of National Accounts Statistics (NAS) 2023 for sector-wise Gross Value Addition (GVA) of agriculture and allied sectors, the contribution of livestock in the total agriculture and allied sector GVA (at constant prices) has increased from 24.32 per cent (2014-15) to 30.67 per cent (2021-22). Livestock sector contributed 5 per cent of total GVA in 2021-22.



## Economic significance of milk







# Highlights



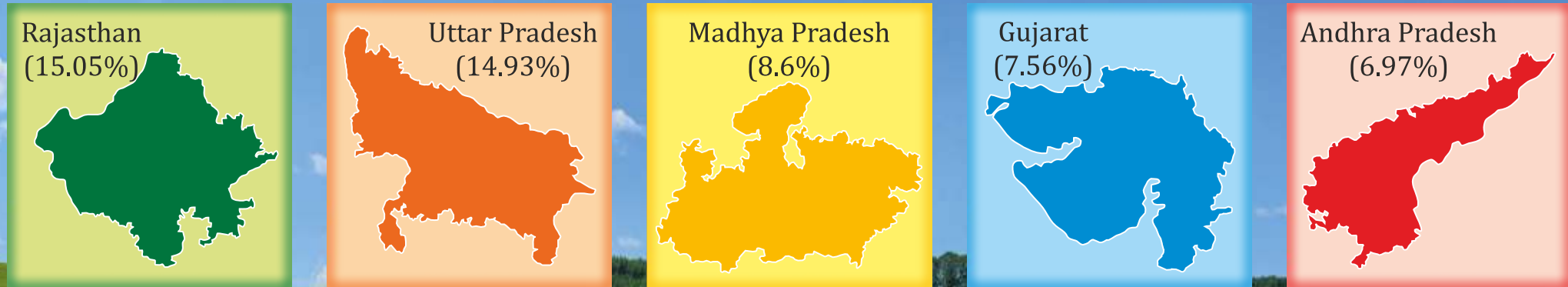
**India** is the **largest milk producer** in the world and its share of the **global milk production** stood at **24%** in 2021-22

**Milk production** in India registered **61% increase** during the last eight years from 2013-14 to 2021-22 and **increased to 221.1 Mn Tonnes** in the year 2021-22





The top 5 milk-producing states are:



\* Maps not to scale

They together contribute **53.11%** to the total Milk production in the country.

India's exports of Dairy products to the world stood at **67,572.99 MT**, worth **\$284.65 Mn** during the year 2022-23





# Growth in Milk Production

2021-22  
**221**  
Mn Tonnes

2014-15  
**146.31**  
Mn Tonnes

Dairy products are the single largest agricultural commodity contributing 5 per cent to the national economy and employing more than 10 crore farmers directly. India is the world leader in milk production contributing 24 per cent to the global milk production.

Milk production in the country has grown at a compounded annual growth rate of about 6.3 per cent, to reach 221 million tonnes in 2021-22 from 146.31 million tonnes in 2014-15.



# Per Capita availability of Milk

2014-18

**307 gms  
per day**

2021-22

**444 gms  
per day**

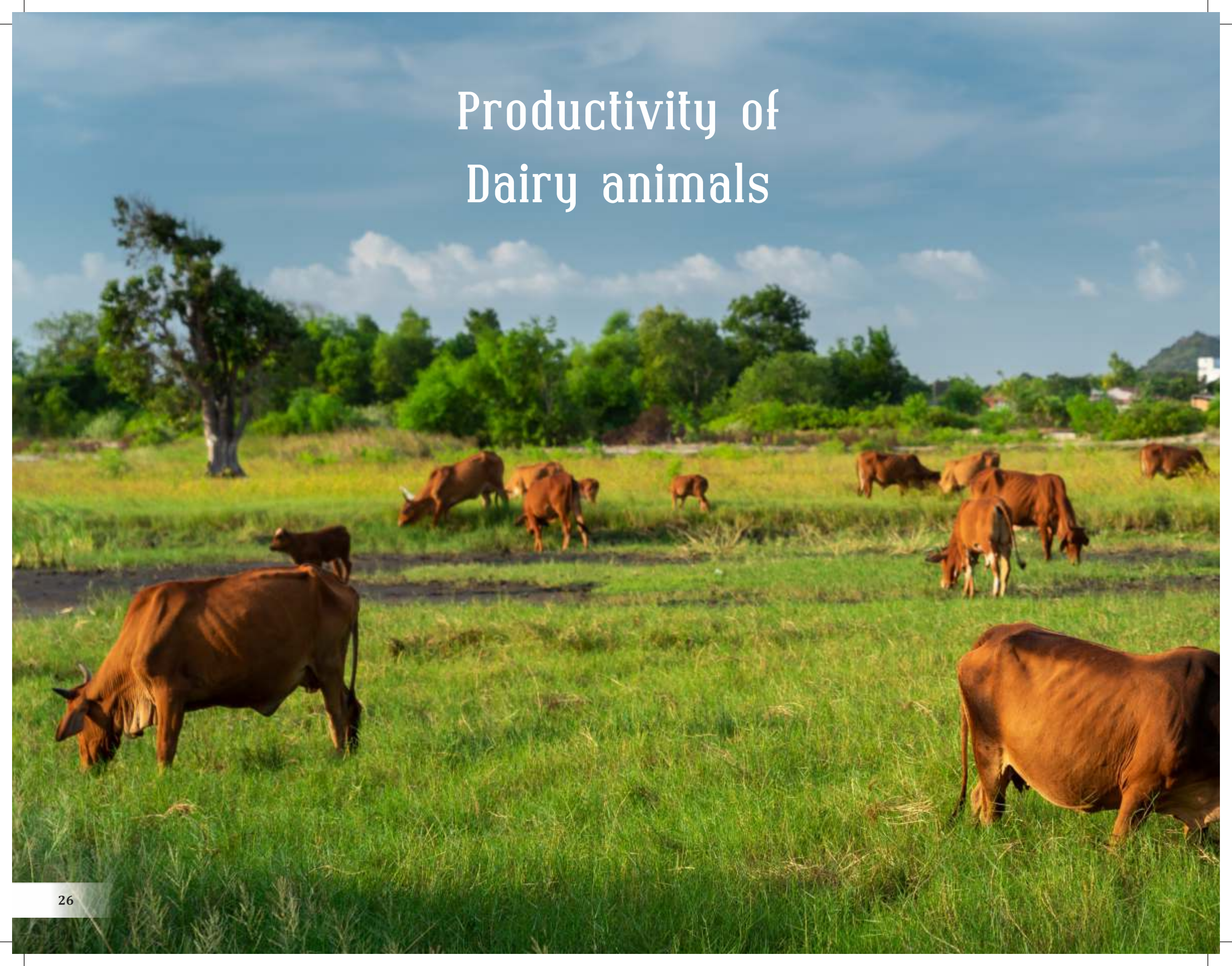
The per capita availability of milk was 444 gram per day in 2021-22 as against the world average of 394 grams per day.

Per capita availability has increased from 307 grams per person per day in 2013-14 to 444 grams per person per day in 2021-22 showing a growth of 38%.

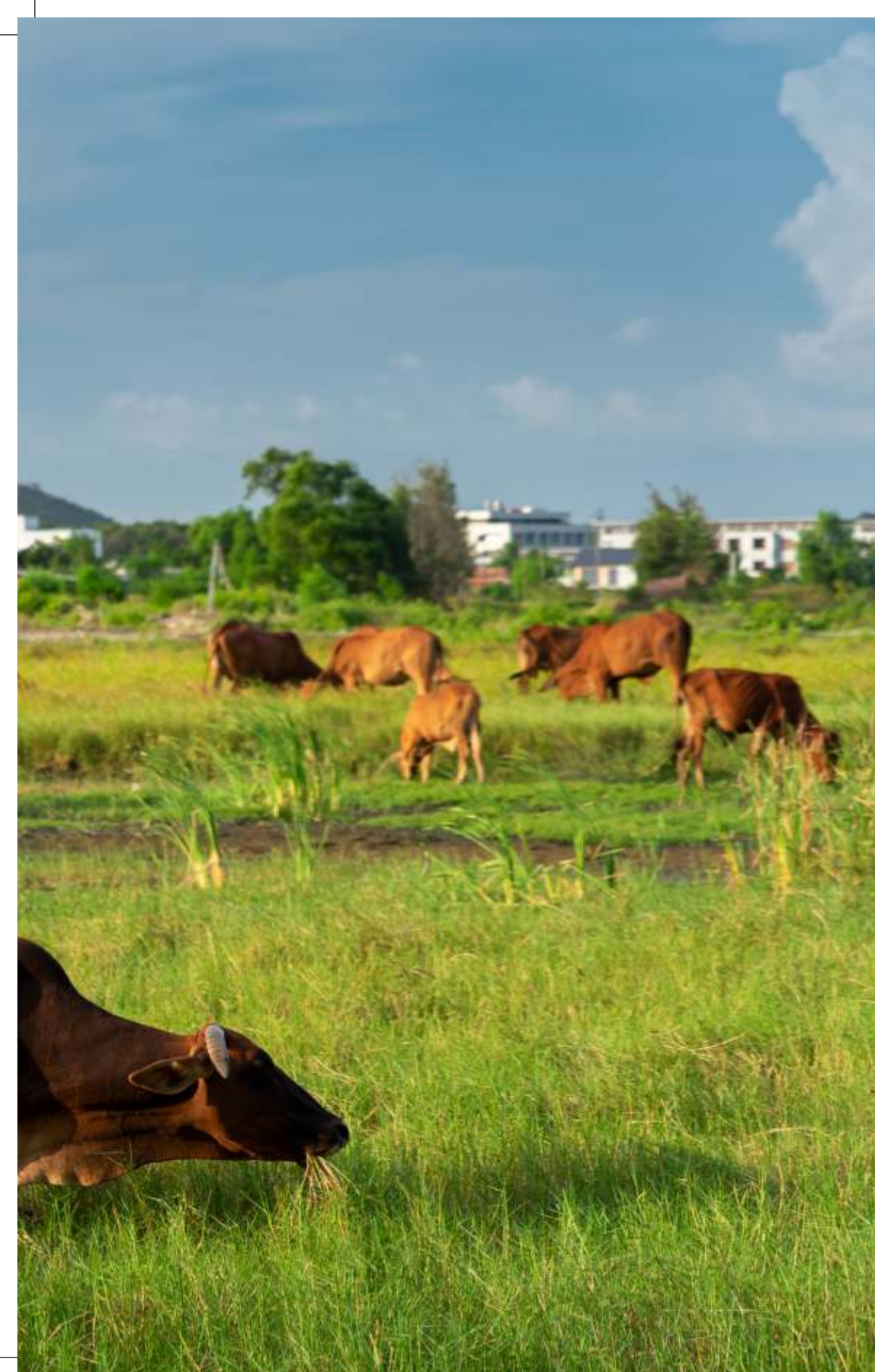




# Productivity of Dairy animals







Productivity of Indian dairy animals is 2048 Kg per year. Among indigenous cattle the average productivity is 4.07 kg per animal per day; while for non-descript cattle the average productivity is 2.83 kg per animal per day and for crossbred 8.32 kg per animal per day.

During the last 9 years average productivity of cattle and buffaloes increased by 24.3% from 1648.17 kg per animal per year during 2013-14 to 2048 kg per animal per year in 2021-22 which is the highest productivity growth in the world.

# Livestock Population

303.76 million\*  
Bovine animals



India has the largest  
milch population  
in the world

148.88 million\*  
goats



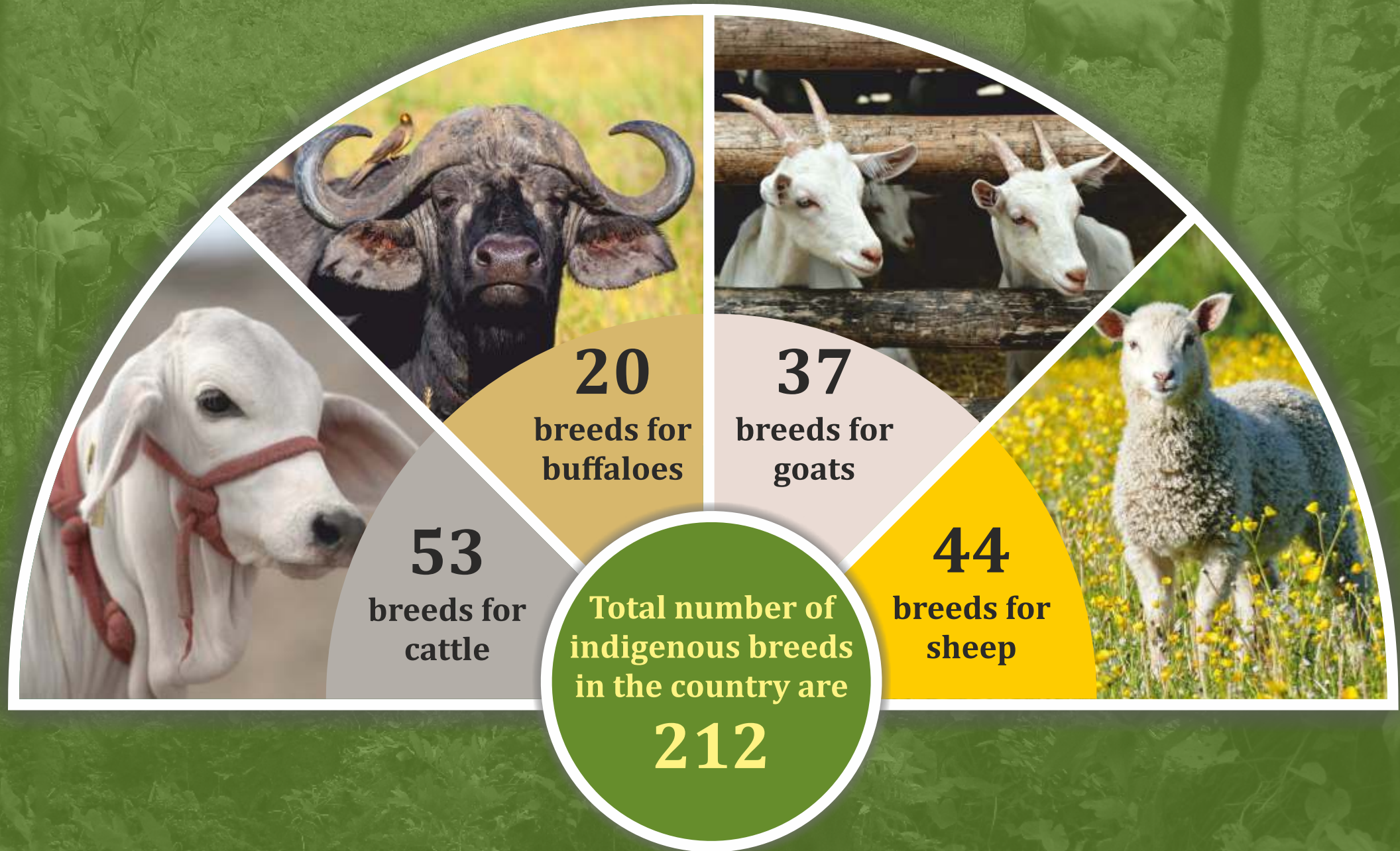
74.26 million\*  
sheep



\* in numbers



# India also has the largest Biodiversity in the livestock sector in the world





# Dairy Exports

The total size of the dairy market was about Rs. 13.17 lakh crore in 2021 and is likely to grow at about 15 % per annum during 2022-27 and is expected to reach about Rs. 30.84 lakh crore by 2027 as per the IMARC 2021 report. The liquid milk market represents about half of the total dairy market in the country. In the total liquid milk market, the share of organised sector has increased from 32 % to 41% in the last 3 years.

It is projected that market for liquid milk will grow by about 16% per annum during next 5-6 years while for products like cheese, flavoured milk, lassi, butter milk, whey and organic milk will grow at more than 20 % per annum.



iStock™  
Credit: fcacofotodigital



## Indian dairy products like

Cheese

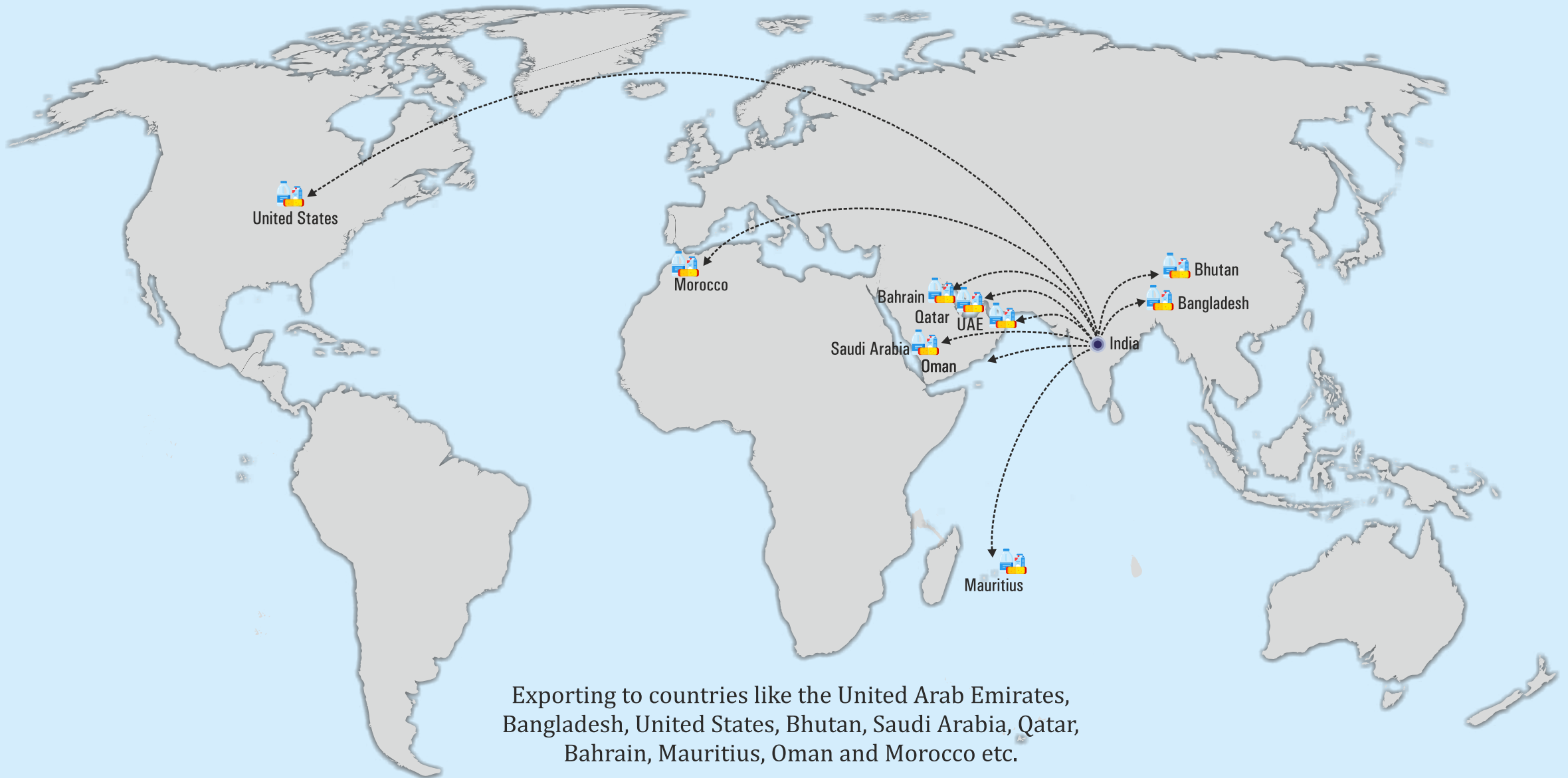
Milk Powder

Casein

Ice Cream

Ghee

have a great demand across continents.



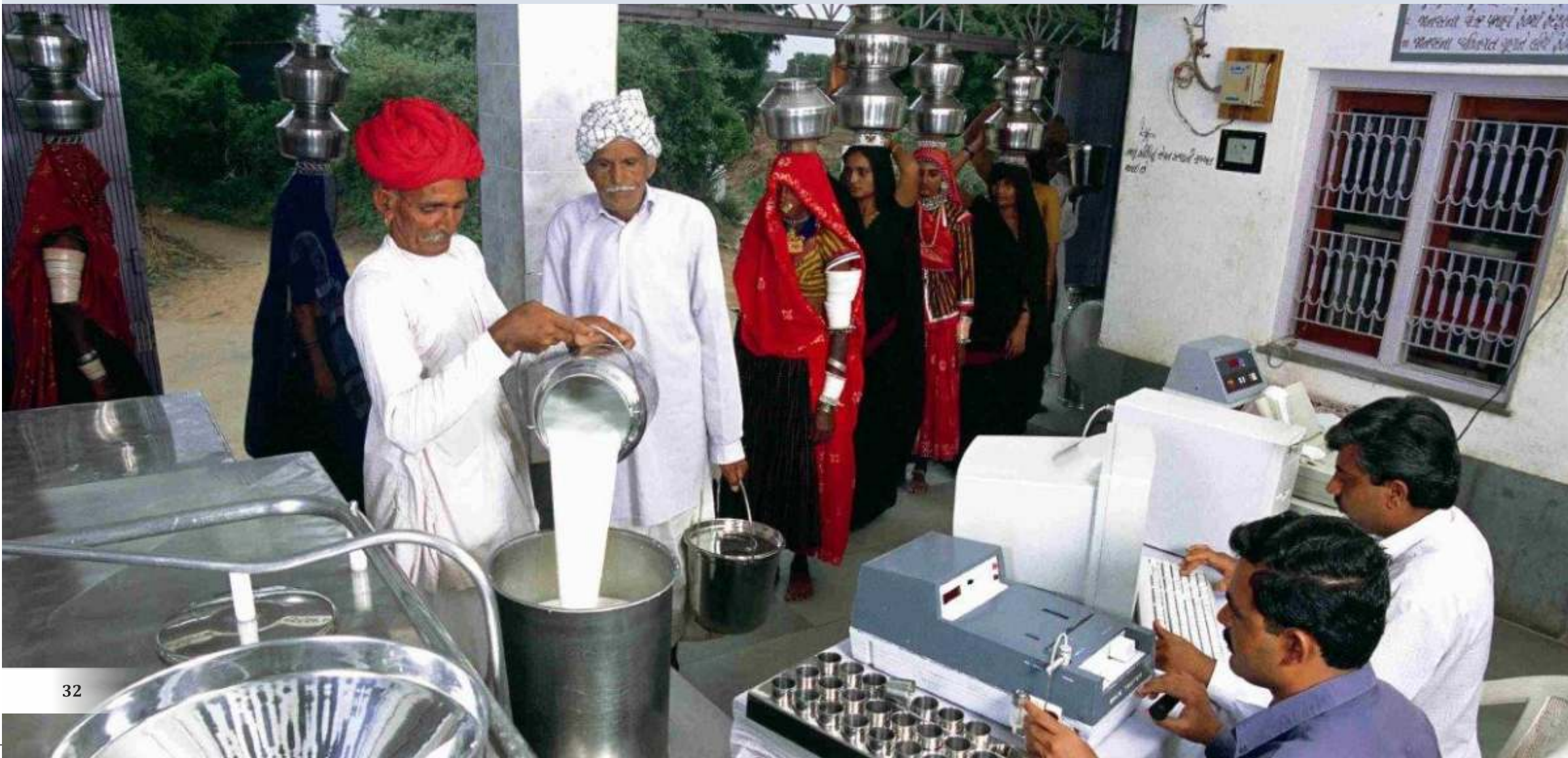
Exporting to countries like the United Arab Emirates, Bangladesh, United States, Bhutan, Saudi Arabia, Qatar, Bahrain, Mauritius, Oman and Morocco etc.



# Support System

The dairy sector in the country is farmer-centric and driven by dairy cooperatives. Dairy cooperatives have been playing an important role in improving the livelihood of dairy farmers across the country. The smallholder milk producers not only get access to market right in their villages but also get support for the inputs.

The dairy farmers receive about 75% of the consumer Rupee, which is the highest in the World. The strength of dairying as a robust livelihood option is not only because it generates stable income but also due to its resilience to shocks, ensuring food security and reduction in inequality in society.







With the interventions of the Government of India dairy cooperatives have grown manifold and are now spread over about 228 thousand villages covering about 18 million dairy farmers across about 575 districts of the country.

Currently, there are  
22 State Federations/Apex Bodies,  
231 Milk Unions,  
28 Marketing Dairies and  
21 Milk Producer Organisations  
operating in the cooperative dairy sector  
in the country.







# The Leap Forward





The Government of India has played a crucial role in driving the dairy sector to unprecedented success, bringing about a wave of change and advancement through a plethora of governmental programs that have had a profound impact on the growth and progress of the dairy industry in India.





# New Vision... milestone steps



Recognizing the importance and immense potential of the livestock sector,  
Government of India created an independent  
Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D)  
in May 2019.



# Breeding and Productivity.





# Science takes the front seat







# Rashtriya Gokul Mission

The Rashtriya Gokul Mission has made remarkable achievements in various aspects of livestock development, bolstering the dairy sector's progress. They include successful artificial insemination programs, advancements in in-vitro fertilization technology, and the introduction of sex-sorted semen production. Rashtriya Gokul Mission's impact on improving the quality and productivity of indigenous breeds is immense.



# Nationwide Artificial Insemination Programme



The mission has successfully delivered artificial insemination services at the farmers' doorsteps, covering 5.92 crore animals and performing 7.39 crore artificial inseminations benefitting 3.86 crore farmers.



# Promotion of IVF Technology



The mission has made substantial progress in promoting in vitro fertilization (IVF) technology, resulting in the production of 18110 viable embryos, 9526 of which were successfully transferred, leading to the birth of 1525 calves.



# Sex-Sorted Semen Production

Introduction of sex-sorted semen production with up to 90% accuracy for female calf production has been a significant achievement. Farmers can avail a subsidy of Rs 750 or 50% of the cost of sorted semen on assured pregnancy.



# DNA-Based Genomic Selection



The National Dairy Development Board has developed INDUSCHIP for selecting elite animals of indigenous breeds, with 25000 animals genotyped using the chip.

Additionally, BUFFCHIP has been created for genomic selection of buffaloes, with 8000 buffaloes genotyped for reference.



# Progeny Testing and Pedigree Selection

Progeny testing programs have been implemented for indigenous cattle breeds like Gir and Swal, along with buffalo breeds like Murrah and Mehsana.





# National Digital Livestock Mission (NDLM)

The government, in collaboration with NDDB, launched the NDLM to improve livestock productivity, control diseases affecting animals and humans, and ensure quality livestock for domestic and export markets.







## Breed Multiplication Farms

Private entrepreneurs are provided a 50% subsidy (up to Rs 2 crore per farm) for establishing breed multiplication farms.



A photograph of a brown cow standing in a green field. The cow has a yellow ear tag with the number '22' on it. The background is slightly blurred, showing a white building and green trees. The text 'Livestock Health and Disease Control Programme' is overlaid on the image in white font.

# Livestock Health and Disease Control Programme

The mission focuses on preventing, controlling, and containing economically and zoonotically important animal diseases through vaccination. A significant number of animals have been ear-tagged and vaccinated against diseases like Foot and Mouth Disease (FMD) and Brucella. Mobile veterinary units have been deployed across States and Union Territories.



**India runs a  
magnanimous  
National Animal  
Disease Control  
Programme**

**It is endorsed as  
the largest ever  
vaccination  
programme  
in the world.**

**Aim is to control  
and eradicate the  
FMD and Brucellosis  
by 2030.**



**2.33 crore animals  
have been vaccinated  
for Brucella**

**25.16 crore animals  
are ear tagged  
for disease control**

**24.18 crore  
animals have  
been vaccinated  
in the 2nd round  
of FMD**



# Door-step Services







MVUs are customized vehicles with diagnostic and treatment equipment , audio visual aids, and basic necessities for animal care

2119 MVUs have been flagged off in 17 States/UTs

1587 MVUs are operational in 11 States

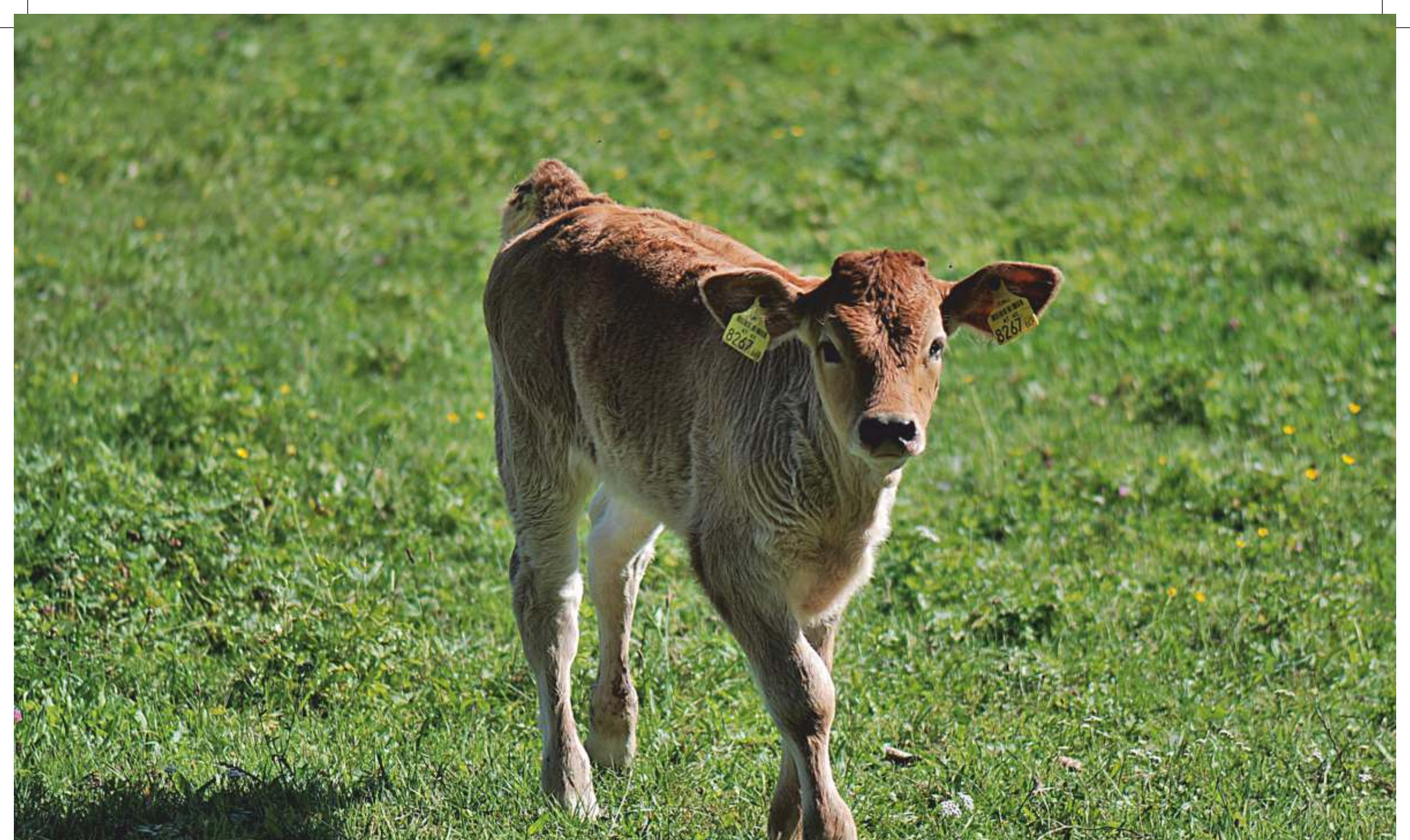


मोबाइल पशु चिकित्सालय  
Mobile Veterinary Clinic

### Mobile Veterinary Unit (MVUs)

In order to increase accessibility of Veterinary. Services at the farmer's doorstep MVUs were pressed in service from 2021-22. MVUs provide veterinary services at the farmer's doorstep based on phone calls received at the call centre

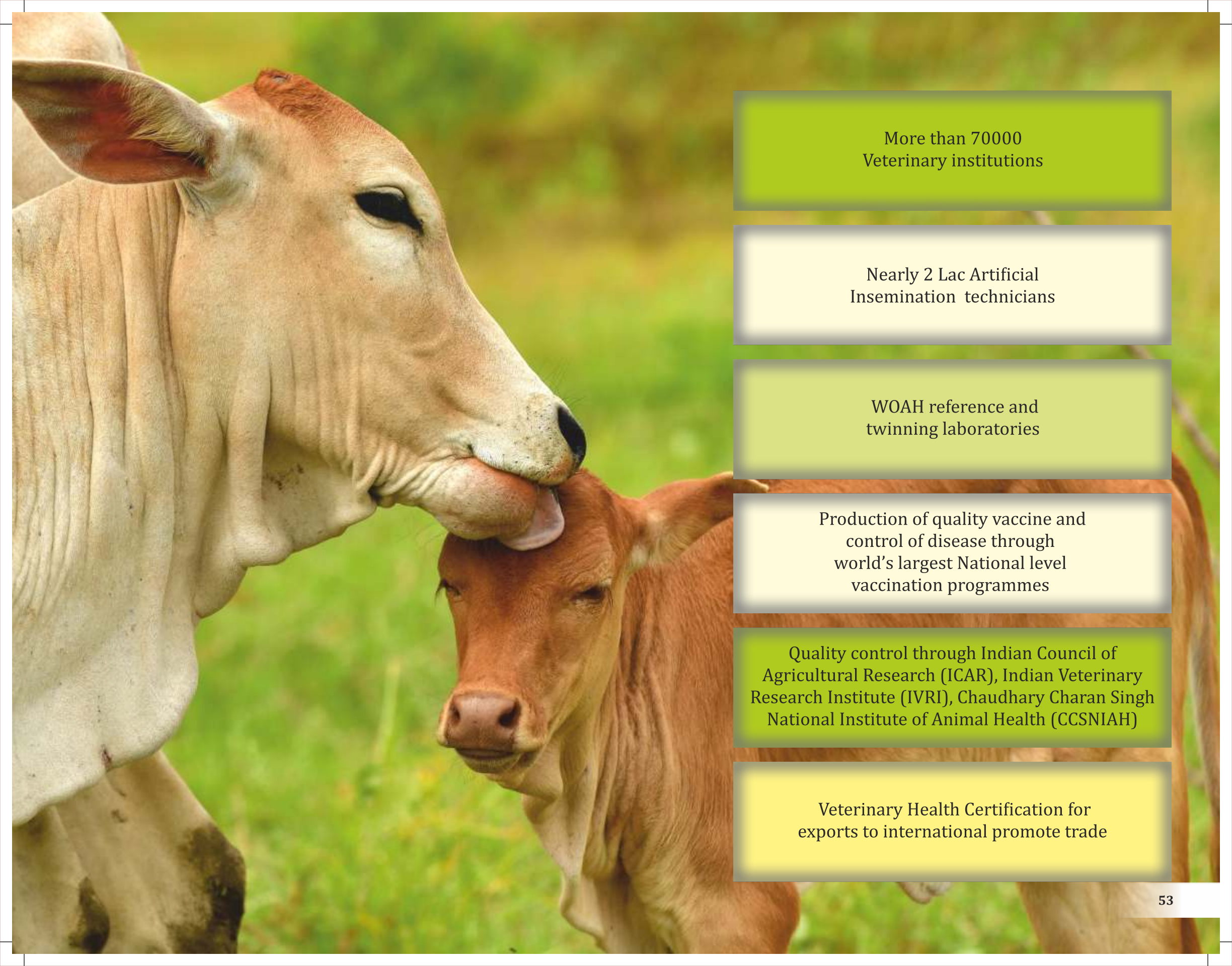




## Veterinary Services and Infrastructure

India has a robust Veterinary Infrastructure, Veterinary Services and doorstep services to livestock farmers. Well knitted Veterinary Services, disease surveillance and diagnosis minimize risks to the food chain, from the 'farm to fork"





More than 70000  
Veterinary institutions

Nearly 2 Lac Artificial  
Insemination technicians

WOAH reference and  
twinning laboratories

Production of quality vaccine and  
control of disease through  
world's largest National level  
vaccination programmes

Quality control through Indian Council of  
Agricultural Research (ICAR), Indian Veterinary  
Research Institute (IVRI), Chaudhary Charan Singh  
National Institute of Animal Health (CCSNAH)

Veterinary Health Certification for  
exports to international promote trade



# National Programme for Dairy Development

This is to strengthen infrastructure for quality milk production including cold chain infrastructure linking the farmer to the consumer. 191 projects in 28 States and 2 Union Territories have been approved with a total cost of Rs. 3053.03 crore



# Dairy Processing & Infrastructure Development Fund

Dairy Processing & Infrastructure Fund focuses on modernizing milk processing, chilling, and value addition infrastructure with a total outlay of Rs. 6776.86 crore.





# Animal Husbandry Infrastructure Development Fund

This fund incentivizes investments in dairy processing, meat processing, animal feed plants, and breed improvement technology with an outlay of Rs. 15,000 crore. Banks have directly sanctioned 322 projects with a total project cost of Rs. 8205.71 crore.









# Kisan Credit Card



5400 3212 7893 2641

Valid  
From 01/22 Expires 12/24

Card Holder Name

Kisan Credit Cards  
Cultivating Dairy Dreams



More than 27.65 lakh fresh Kisan Credit Cards have been sanctioned for dairy farmers associated with milk cooperatives and milk producer companies to meet their working capital requirements.





# Sustainable Dairying







India's small-holder and mixed dairy system of milk production is globally the most sustainable system. The cattle and buffaloes are usually fed agricultural by-products and kitchen leftovers which does not compete with human food production.

During the last 10 years, efforts to promote sustainable dairy farming practices to reduce the carbon footprint have gained momentum. Sustainable feed production, waste management, and energy efficiency have been in focus to make dairying more and more environment friendly.





# Farmer Producer Organisations

‘Formation and  
Promotion of  
10,000  
Farmer Producer  
Organisations (FPOs)’  
is underway in the  
country including  
Fodder Plus FPOs  
and Beekeepers’ FPOs.



# Multi-State Cooperatives

In January 2023, three new national level multi state Cooperative Societies were set up i.e. National Cooperative Organics Limited (NCOL), Bharatiya Beej Sahakari Samiti Limited (BBSSL) and National Cooperative Exports Limited (NCEL).

NCOL will help India realise its potential to become a global leader in organic products under the vision and mission of Local to Global.

The vision of BBSSL is to act as a National level Apex Organisation for producing, processing, storage, marketing, branding, labelling, distribution and research and development of quality seeds produced by the cooperatives/other entities and to offer better prices to farmers as well as other stakeholders.





# Nurturing Dairy Resilience



Cooperative Societies and farmer producer organizations engaged in dairy activities are assisted by providing soft working capital loans to tide over crisis situations on account of adverse market conditions or natural calamities. 60 milk unions across the country have received a helping hand.

NDDB provided Rs 527.13 cr. Interest Subvention for Rs 38,978.51 cr. working capital loans to 60 milk unions at 2% annual interest.



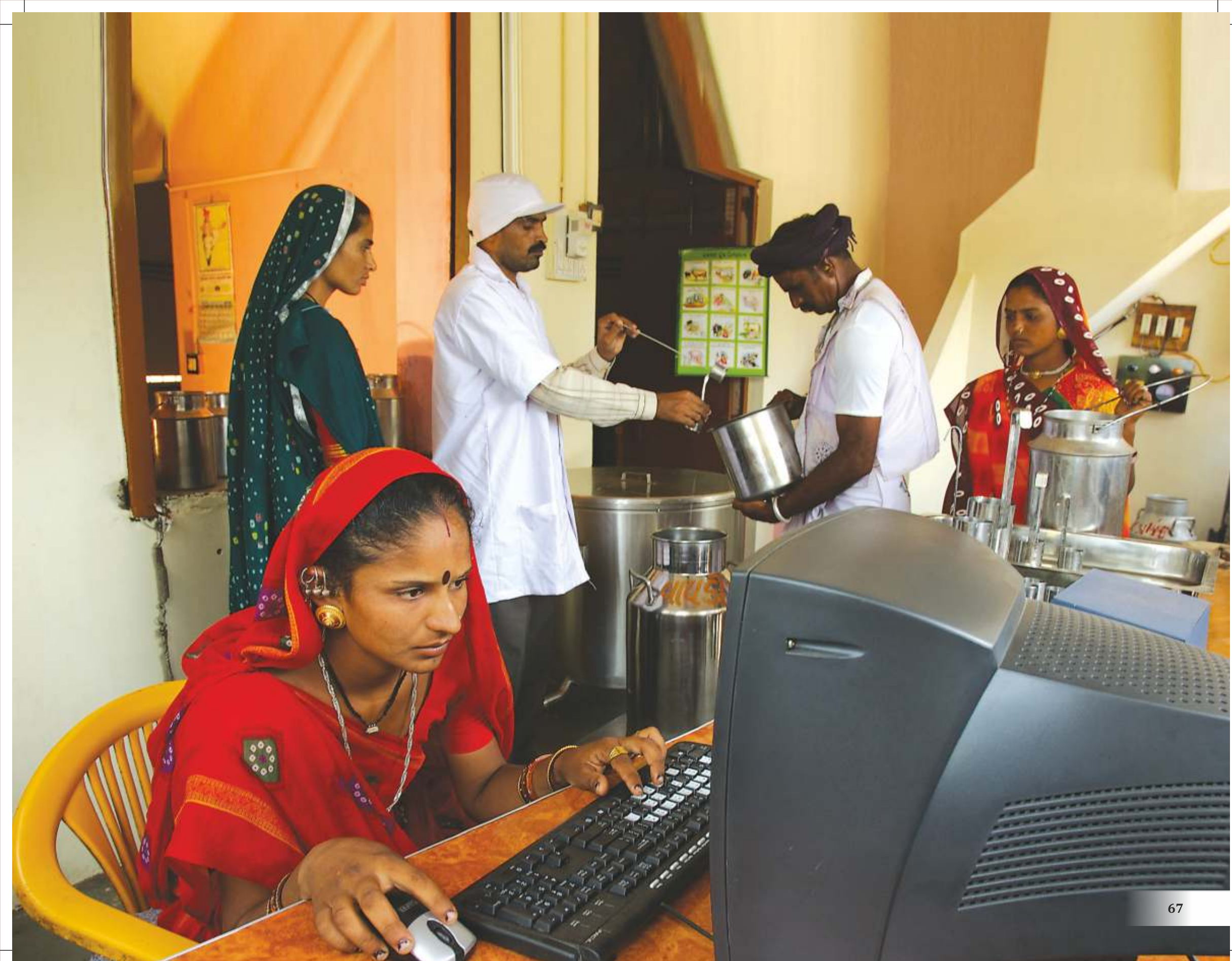


# Women Development to Women-led Development

Dairying is labour intensive and nearly 70 per cent of the workforce in dairying is contributed by women. They primarily engage in taking care of animals. The engagement in dairying helps women gain economic and social empowerment and help them in developing leadership qualities. This plays an important role in furthering women's rights and gender equality, right at the grassroots.









The Co-operatives have provided this unique opportunity to women at the grassroots level providing them social and financial empowerment, instilling confidence and leadership qualities.

Today about 60 Lakh women are members of the Dairy Cooperatives representing almost 34% of the total membership. One-fourth of the women members have been added in the last 10 years. Women participation at such scale is unparalleled in any other large organized sector in the country.











## A-HELP

Accredited Agent for Health &  
Extension of Livestock Production !

Novel model for women  
empowerment in  
livestock Sector.

Trained SHG members serve as  
Livestock Resource Persons and  
Primary Service Providers.







# Promoting Start-ups

Companies and Entrepreneurs with  
new technologies and innovations

The last decade has also seen a surge in dairy entrepreneurship. With the enabling business environment being provided by the Government, more and more young entrepreneurs are venturing into dairy farming and value-added dairy products, introducing

innovation and technology into the sector, and creating niche markets for premium products.

More than 500 start-ups have been identified in various areas of livestock, dairy and animal husbandry.





# National Gopal Ratna Awards

One of the highest National Awards in the field of livestock and dairy sector. Its objective is to recognize and encourage all individuals like farmers (rearing indigenous animals), Artificial

Insemination Technicians and Dairy cooperative societies / Milk Producer Companies / Dairy Farmers Producers Organizations working in this sector.





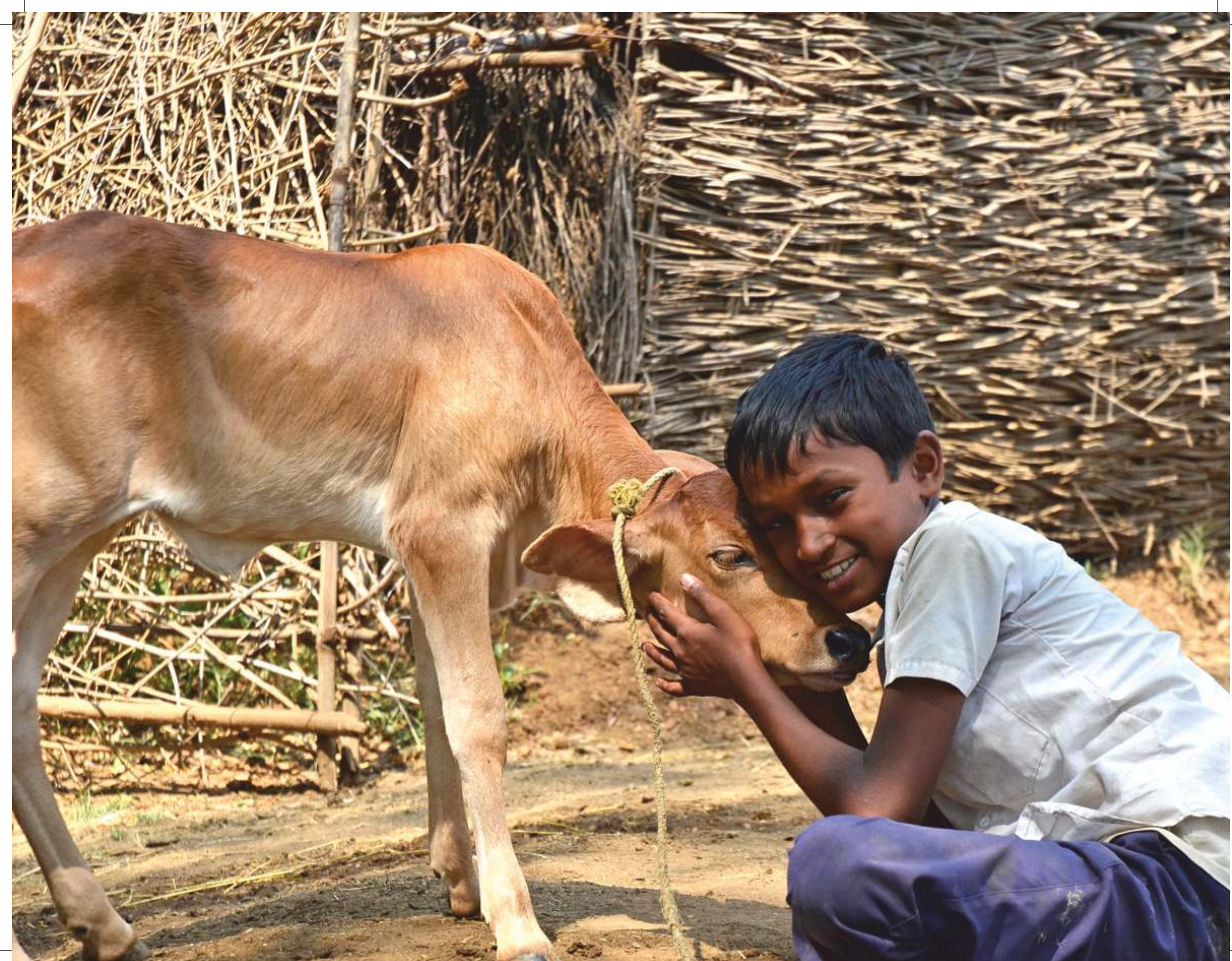




“Success  
in dairy  
development is  
not measured in  
terms of milk,  
but in terms of  
changing  
lives”

-Dr. Verghese Kurien

















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Government of India  
Visit our website [www.dahd.nic.in](http://www.dahd.nic.in)