

PASHUDHAN ATLAS

India's Livestock Wealth, Mapped in Data

~100 Data Stories across various sub-sectors - economy, breeds, dairy, meat, eggs, health, fodder, technology, finance, trade and states - **every figure source-tagged, every chart built to be read in under a minute.**



6

Chapters



~10

Sub- sectors



2

Data Stories
per week



~100

Data Stories
per year

Leadership

Shri SP Tucker, IAS (Retd), Former Chief Secretary, GoAP & Vice-Chairman, GFST

Shri Ch Kutumba Rao, Former VC-AP State Plg Board, Vice-Chairman (P4) & Director, GFST

Shri Sanjay Gupta, IFS (Retd), Former Plg Secretary, GoAP and CEO, GFST



FOREWORD

A Sector That Deserved Better Data

India's livestock sector supports over eight crore farmers, contributes ₹ 15 Lakh Cr (roughly 5.5% of national GVA), and has grown faster than almost any other part of the Indian economy over the past decade — yet for most stakeholders, from state policymakers to individual entrepreneurs, a clear, current, trustworthy picture of the sector has been surprisingly hard to find.

The Pashudhan Atlas exists to close that gap. Every one of the Data Stories traces back to a named, dated source — or a clearly cited government or peer-reviewed release. Where the data didn't exist to answer a question we thought mattered, we said so rather than filling the silence with a plausible-sounding number.

What we found surprised us more than once. Kerala generates nine times more livestock value per animal than Jharkhand — not because Kerala's animals are inherently superior, but because of decades of extension services, infrastructure, and farmer education that Jharkhand has not yet had the chance to build. These are the kinds of findings that don't show up in a headline GDP number, but that matter enormously to anyone actually trying to build something in this sector.

This is what data can do when you let it speak honestly: it doesn't just confirm what you already believed. It surprises you. It complicates easy stories. It points toward real, specific opportunities that a single national average would hide completely.

This is a beginning, not a finished picture. We invite readers — government departments, researchers, cooperatives, investors and farmers alike — to use this Atlas, question it, and tell us where it falls short. That is how it gets better.

Because behind every one of these numbers is someone's morning, someone's livelihood, someone's decade of work. We owe that the respect of getting it right.



How To Read The Pashudhan Atlas

UNDERSTAND THE 2-PAGE DATA STORY FORMAT

Every Data Story Follows One Simple, Consistent Format

1st Page

THE STORY

- Headline & One-line gist
- 5 KPI Dashboard
- One main Infographic built to be read in under a minute



2nd Page

THE EVIDENCE

- Five numbered findings
- A full Data Table
- Sources & References



TRUST THE DATA

Our Data Discipline is non-negotiable



Every Number has a Source

The Source and Year are clearly mentioned with every statistic.

Years Are Never Mixed

Census Data, Surveys and Estimates are always labelled separately.

Unknowns are Declared

Where data gaps exist, the Atlas identifies them openly.

KNOW THE EVIDENCE BASE

The Atlas is built only on credible and verifiable sources

Official Statistics

- BAHS, DAHD, GoI
- 20TH Livestock Census
- Annual Admin Reports
- MoSPI National Accounts / State GVA Series
- RBI - KLEMS Employment Database
- World Bank
- FAOSTAT

Livestock Research & Genetics

- ICAR-NBAGR Breed Registration
- ICAR-NDRI, IGFR & ICAR-NIVEDI research publications
- Locally maintained breed databases
- Vety Council of India & State Vety Councils
- Vety Universities
- NGOs

Trade & Policy Sources

- APEDA
- PIB Press Releases
- Lok Sabha/Rajya Sabha, Assembly replies
- Govt of India official reports
- NECC
- NDDB
- Coop / Private Dairies

Scientific Evidence

- Peer reviewed Journals (Lancet, Scientific Reports and Others)



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From Sunrise to Sunset, an Animal Walks Beside ~140 Crore Indians



From the first milking before sunrise to the last meal after dark, 53.68 crore animals and 85.18 crore birds quietly walk through every Indian day - feeding, sustaining and standing beside the people who depend on them.



1

WORLD MILK PRODUCER
2479 Lakh MTs; ~25% of everything the world drinks



₹ 15.06
Lakh Cr

LIVESTOCK GVA, 2023-24
5.5% of India's entire economy



8 CRORE

RURAL HOUSEHOLDS
Depend on Livestock for income and resilience



70%

OF DAIRY WORKERS ARE WOMEN
The quiet backbone of rural India's livestock economy



₹ 63,474
Crores - 2024-25

LIVESTOCK EXPORTS
India's animals reach kitchens on every continent



And behind every animal that walks beside 141.3 crore Indians, someone walks beside the animal.

83,017 Registered Veterinary Doctors

67,596 Veterinary Institutions

Source: Department of Animal Husbandry & Dairying, Basic Animal Husbandry Statistics 2025; DAHD Annual Report 2025-26; 20th Livestock Census 2019; Parliamentary Questions, Lok Sabha/Rajya Sabha; Indian Veterinary Practitioners Register; Census of India Projections- 2025.



Why This Atlas Exists



Livestock rarely makes headlines the way crops, industry or services do. Yet from the moment the sun rises to the moment it sets, an animal is quietly present in the life of nearly every Indian — feeding families, sustaining livelihoods, and building an economy few fully see. This Atlas exists to bring that quiet companionship into the light, one data-backed story at a time.

The scale is genuinely difficult to hold in one's head: 53.68 crore animals and 85.18 crore birds — more than any single other country's population on Earth except China and India itself.

India leads the world in milk by a margin no other country approaches: 2479LMTs, roughly a quarter of everything the planet drinks, achieved not through industrial mega-dairies but through the aggregate effort of tens of millions of smallholder families.

This is fundamentally a livelihood story before it is a production story: roughly 8 crore rural households depend on livestock for income and resilience, with women forming an estimated 70% of the dairy workforce — livestock's economic value is inseparable from who actually does the work.

The sector's ₹15.06 lakh crore GVA makes it one of India's most consistent economic engines: livestock has grown every single year on record, including 2020-21, the one year India's overall GDP contracted — a genuine buffer against national economic shocks.

And behind every animal, a human quietly keeps watch: 83,017 registered veterinary doctors and 67,596 veterinary institutions form the unseen support system that keeps this entire economy healthy — every litre of milk, every meal, every rupee traded ultimately depends on the care given long before any animal reaches a farmer's gate, let alone a family's table.

Data Table

Dimension	Indicator	Value
Foundation	Total livestock population (2019)	53.68Crores
Foundation	Poultry population (2019)	85.18 Crores
Dawn — Milk	Production / PCA / World Rank	2479 LMT / 485 gr/day / #1
Morning — Eggs	Production / PCA / World Rank	14,911 Cr / 106/yr / #2
Evening — Meat	Production / PCA / World Rank	105.0 LMT / 7.51 Kg/yr / #4
Economy	Livestock GVA (2023-24)	₹15.06 lakh crore
Economy	Share of Total & Agri+Allied GVA	5.5% / 30.9%
Trade	Total Livestock Exports (2024-25)	₹63,474 crore
Veterinary Care	Registered Vety Doctors / Vety Institutions	83,017 / 67,596

Source: Department of Animal Husbandry & Dairying, Basic Animal Husbandry Statistics 2025; DAHD Annual Report 2025-26; 20th Livestock Census 2019; Parliamentary Questions, Lok Sabha/Rajya Sabha; Indian Veterinary Practitioners Register; Census of India Projections- 2025.



INDIA'S LIVESTOCK SECTOR

Ten years to \$1 trillion



Three growth pathways, one destination :
even the conservative scenario puts livestock's
dollar value past \$1 trillion by 2038-39 — the
optimistic case gets there by two years sooner
(2036) on its fastest path.



\$177
Billion USD

STARTING POINT
2023-24, all three scenarios begin here



12.8%

BAU - CAGR
Base-case, continuation of the trend



14.8%

HIGH-GROWTH CAGR
If reforms and productivity gains compound



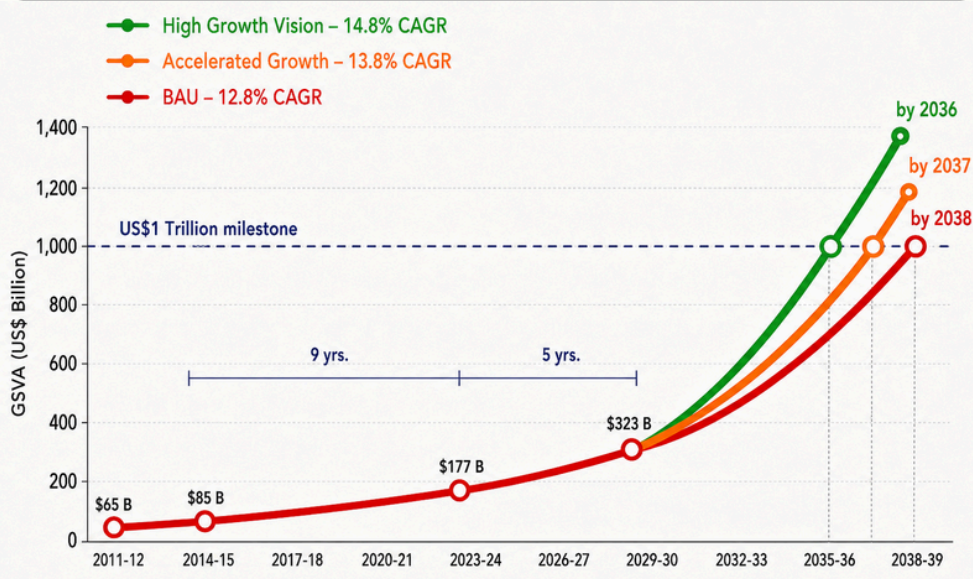
2036-38

\$1 Tr WINDOW
Across all three pathways - just 3 years apart



\$4.2
Trillion USD

BY 2047 @ VIKSIT BHARAT
High-Growth pathway



A 1-2 % point acceleration in CAGR can advance the US\$ 1 trillion milestone by 1-2 years.

- **Doubling is speeding up** — \$85B to \$177B took 9 years; the next double, to \$323B by 2028-29, takes only 5 years.
- **A milestone every 5 years:** ¼-trillion by 2026 · ½-trillion by 2032 · \$1 trillion by 2036.
- **Milestone locked for 2036–2038** — full-potential growth arrives 2 years ahead of BAU @ 14.8% CAGR.

Source: BAHS 2025, DAHD, GoI; Livestock GVA in US\$ computed from MoSPI current-price series; Forward projections (2024-25 onward) are GFST scenario modelling at fixed CAGR assumptions, not official government forecasts.



The \$1 Tr Milestone Is Near-Certain

The trillion is not one big push — it is many gains compounding. Reaching it, and going beyond, depends on turning the various dials across the value chain, state by state.

Same starting line, three speeds: all three scenarios begin at the same \$177 billion (2023-24) — they diverge only in the assumed compound annual growth rate.

The gap is smaller than it looks: the difference between 12.8% and 14.8% CAGR sounds modest, but compounded over 15 years it moves the \$1-trillion crossing by two full years.

A three-year landing window: High Growth crosses \$1T in 2036-37, Accelerated in 2037-38, BAU (the conservative base case) in 2038-39 — a tight cluster, not a wide guess.

Beyond the trillion mark: extending the same three pathways to 2046-47 puts livestock at \$2.8 trillion (BAU), \$3.4 trillion (Accelerated), or \$4.2 trillion (High Growth).

Why the base case is the one to plan around: BAU assumes no major new reform or productivity breakthrough — it is what happens if the sector simply keeps doing what it has done for the past decade.

Data Table

Year	BAU Growth (@12.8%)	Accelerated Growth@13.8%	High Growth Vision@14.8%
2023-24	177	177	177
2025-26	225	229	233
2030-31	411	437	464
2035-36	749	832	925
2036-37	844	947	1061
2037-38	952	1077	1218
2038-39	1074	1226	1398
2046-47	2808	3440	4208

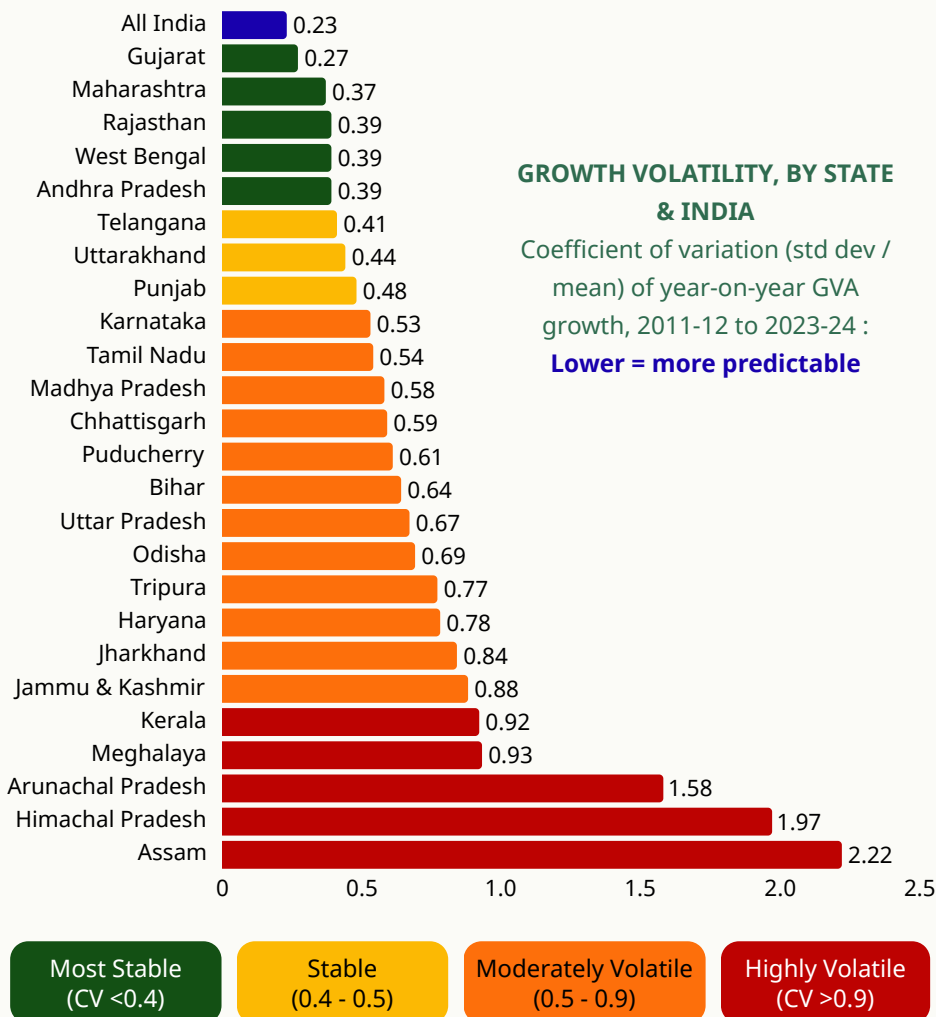
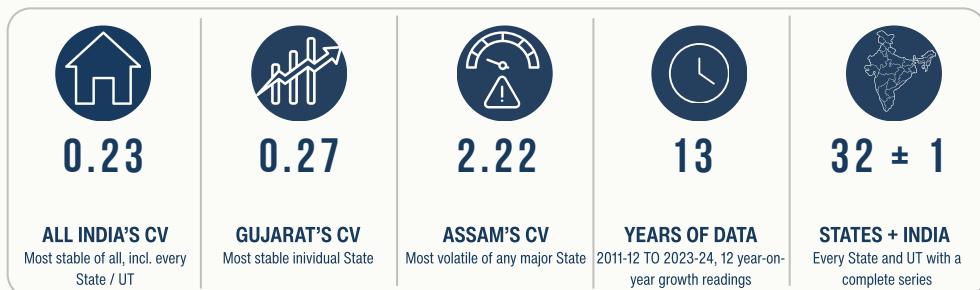
Source: BAHS 2025, DAHD, GoI; Livestock GVA in US\$ computed from MoSPI current-price series; Forward projections (2024-25 onward) are GFST scenario modelling at fixed CAGR assumptions, not official government forecasts.



LIVESTOCK STABILITY RANKING :: INDIA BEATS STATES



India's own national livestock growth is more stable than any individual state's - even Gujarat's. Pooled across the States/UTs the swings that hit individual states average out at the national level.



India's national CV of 0.23 beats every single state individually - a textbook diversification effect : state-level shocks (a drought here, a disease outbreak there) rarely hit every state simultaneously, so they partially cancel out in the national aggregate.



The Diversification Effect, Made Visible



Data Story 01 traced India’s path to \$1 trillion using national-level growth. This story asks a different question : is that national growth genuinely dependable, or does it just average away a much rockier reality underneath?

India’s national CV (0.226) beats every individual state, including Gujarat (0.266)—a genuine diversification effect. With states/uts rarely peaking or dipping together, the national aggregate smooths out volatility no single state achieves alone.

This qualifies how Story 01’s \$1 trillion path should be read at state level: national dependability doesn’t transfer evenly downward. A state budgeting against the national CAGR may be assuming a stability its own history doesn’t support.

Growing fast doesn’t mean growing unpredictably—we checked directly whether states that grow faster also swing more wildly year to year. They don’t. A state can be both quick-growing and dependable; one doesn’t have to be traded for the other.

Three states combine above-average growth with genuine stability—Rajasthan (15.9% growth, CV 0.39), Andhra Pradesh (15.6%, 0.39), and Telangana (14.7%, 0.41) all beat India’s own growth rate while staying in the “stable” band. For long-term investment, this is the rare combination worth naming directly.

The practical takeaway: growth rate alone is an incomplete basis for state-level planning. Rajasthan and Andhra Pradesh offer speed and predictability together; Assam and Himachal Pradesh need a fundamentally different, risk-aware approach even where their average growth looks comparable on paper.

Data Table

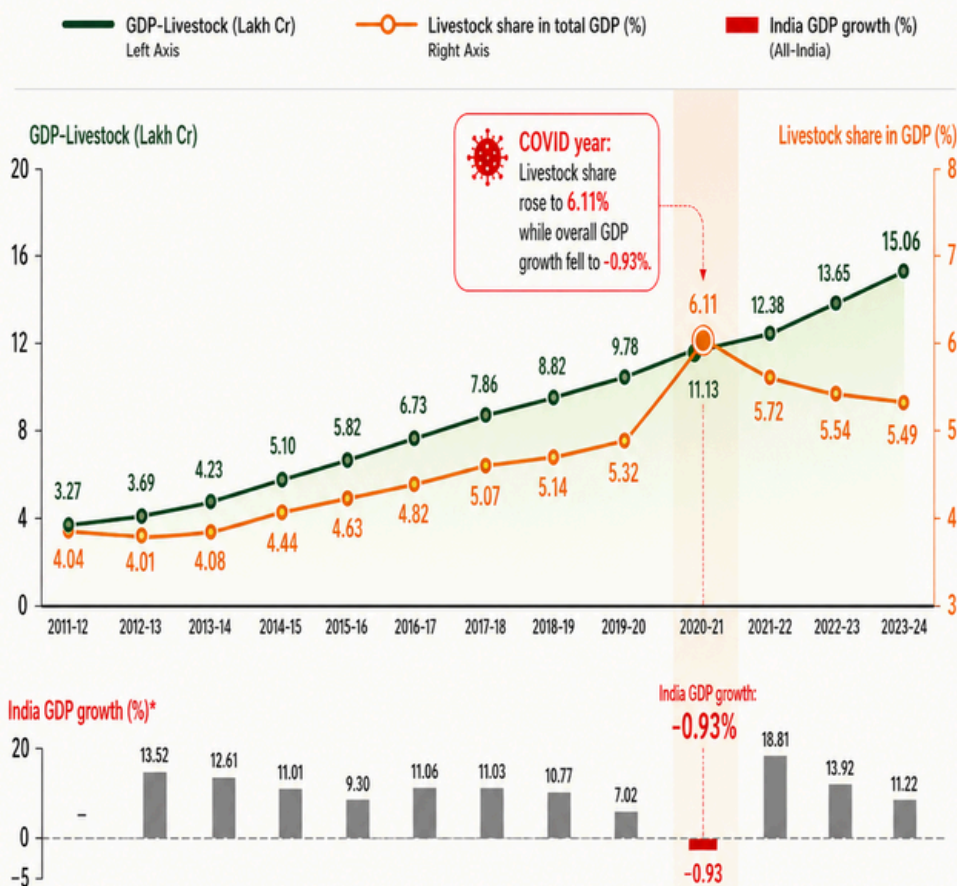
State/India	Mean Growth %	CV	State/India	Mean Growth %	CV
All India	13.60	0.23	Manipur	8.68	0.77
Gujarat	11.93	0.27	Tripura	23.16	0.77
Maharashtra	11.08	0.37	Haryana	6.87	0.78
Rajasthan	15.90	0.39	Jharkhand	15.07	0.84
West Bengal	11.99	0.39	Chandigarh	8.49	0.88
Andhra Pradesh	15.59	0.39	Jammu &Kashmir	11.47	0.88
Telangana	14.75	0.41	Sikkim	17.58	0.89
Uttarakhand	8.37	0.44	Kerala	7.69	0.92
Punjab	9.67	0.48	Meghalaya	10.90	0.93
Karnataka	16.90	0.53	Arunachal Pradesh	11.61	1.58
Tamil Nadu	14.86	0.54	Himachal Pradesh	8.32	1.97
Madhya Pradesh	22.41	0.58	Assam	18.92	2.22
Chhattisgarh	14.99	0.59	Mizoram	10.08	2.45
Puducherry	7.52	0.61	A & N Islands	4.71	2.54
Bihar	16.12	0.64	Goa	10.16	2.74
Uttar Pradesh	12.21	0.67	Nagaland	1.40	13.72
Odisha	11.80	0.69	Delhi	0.38	28.27

Source: GFST Statistical analysis : MoSPI Statewise GVA_Livestock, 2011–12 to 2023–24 annual series. Volatility metrics based on Coefficient of Variation (CV). CV = standard deviation / mean, applied to the series of year-on-year GVA growth rates; States with any missing/zero year excluded.



Livestock: A Recession-Resilient Growth Engine

In 2020-21, India's overall GDP growth stalled to -0.9%; livestock still grew 13.8%, a gap of nearly 14.7 percentage points in the pandemic year, India's only near-contraction year on record.



- Livestock share of total GVA rose from 5.32% (2019-20) to 6.11% (2020-21) - the peak of the series - before easing back as the broader economy recovered.

CONNECTS TO DATA STORY # 01

Livestock's actual growth in its single worst year (13.8%) matches Data Story #01's own "Accelerated Growth" Scenario (13.8% CAGR) exactly - the \$1 Trillion projection is not built on an optimistic assumption alone, it's grounded in a rate the sector has already demonstrated under real stress.



Livestock: The Economy's Floor, Not Its Ceiling



Data Story # 01 introduced this same GVA series. Data Story # 02 showed India's aggregate growth is remarkably stable. This story asks a related but distinct question : when the wider economy actually broke, did livestock break with it?

Livestock's share of GVA peaked exactly when it mattered most — rising from 5.32% (2019–20) to 6.11% (2020–21) as the rest of the economy contracted. This is the same underlying series introduced in Data Story #00's ₹15.06 lakh crore figure.

Stability (Story #02) and resilience (this story) are related but not identical — Story #02 measured whether growth swings consistently year to year. This story asks a sharper question: specifically in the one year everything else broke, did livestock hold? It did — and by the widest margin on record.

The honest second half of this story: GDP outgrew livestock in every year since the pandemic — 2021–22 (18.8% vs 11.2%), 2022–23 (13.9% vs 10.3%), 2023–24 (11.2% vs 10.3%). Livestock isn't the fastest mover in either direction — it's the floor, not the ceiling.

That floor is exactly what Story #02's stability finding predicts — a sector with genuinely low volatility should neither collapse in the bad years nor sprint away in the good ones. The post-pandemic data confirms it: livestock's growth compressed into a narrow 10–12% band while GDP swung from -0.9% to +18.8%.

Why this matters for policy, precisely: a sector that neither contracts in a downturn nor overheats in a boom is a genuine counter-cyclical buffer for rural incomes — the kind of asset worth weighting explicitly in state-level economic planning, not just celebrating in a good year.

Data Table

Year	Livestock GVA Growth	India's GDP Growth	Gap (pts)
2012-13	12.68%	13.52%	-0.84
2013-14	14.61%	12.61%	+2.00
2014-15	20.75%	11.01%	+9.74
2015-16	14.11%	9.30%	+4.80
2016-17	15.49%	11.06%	+4.43
2017-18	16.82%	11.03%	+5.78
2018-19	12.26%	10.77%	+1.49
2019-20	10.87%	7.02%	+3.85
2020-21	13.83%	-0.93%	+14.75
2021-22	11.26%	18.81%	-7.55
2022-23	10.21%	13.92%	-3.71
2023-24	10.32%	11.22%	-0.91

Source: GFST Statistical Analysis. Livestock GVA: BAHS 2025, DAHD, GoI. India GDP Growth: MoSPI National Accounts, current prices.



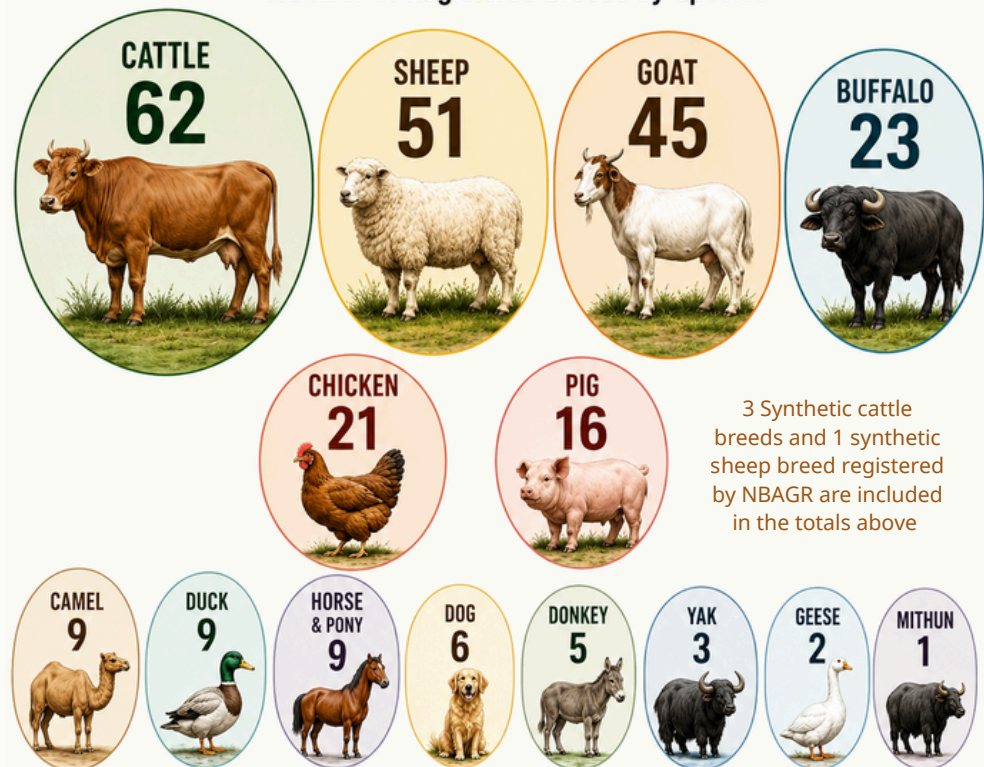
Just 6 of 14 Species Hold 83% of India's Breed Diversity

India has registered 262 distinct livestock and poultry breeds - but that genetic wealth is sharply concentrated. Cattle, Buffalo, Sheep, Goat, Pig and Chicken account for 218 of them.

				
262	110	83.2%	400	30-40 LAKH
REGISTERED BREEDS Across 14 species groups, Aug 2026	BREEDS REGISTERED In Last 12 Yrs (2015-16 to 2026-27)	HELD BY TOP 6 SPECIES Cattle, Buffaloes, Sheep, Goat, Pig and Chicken	DISTRICTS COVERED Across 24 States & 3 UTs	FARMERS INVOLVED Tied to 170 Lakh registered breed animals

THE GENETIC DIVERSITY LANDSCAPE

Number of Registered Breeds by Species



ON THE WORLD STAGE



FAO's global registry (DAD-IS) records over 8,800 distinct livestock breeds of 38 different species across 182 countries - placing India's 262 breeds at roughly 3% of the world's documented diversity. Globally, over 2,400 breeds are already at risk of extinction, and 600 are gone entirely - the backdrop Data Story # 05 examines next, for India specifically.

Source: ICAR-NBAGR, registered breeds as of August 2026; Domestic Animal Diversity Information System (DAD-IS) of the Food and Agriculture Organisation (FAO)



India’s Livestock Diversity Is a Genetic Asset

Data Story # 02 found India’s economic stability concentrated in a handful of states. This story finds the same underlying pattern in a completely different domain — genetic diversity concentrated in a handful of species.

Cattle alone account for nearly a quarter of India’s entire breed registry — 62 of 262 breeds (23.7%), more than double the next largest group (sheep, 51 breeds). This single species carries a disproportionate share of the country’s documented genetic heritage.

Small ruminants form the largest combined pool after cattle — sheep (51) and goat (45) together contribute 96 breeds, 36.6% of the total, reflecting centuries of localized adaptation to India’s most climate-diverse, resource-constrained regions.

This is the same concentration pattern Data Story #02 found in economic stability, applied to genetics — just as a handful of states carried India’s aggregate stability, just six species (cattle, sheep, goat, buffalo, chicken, pig) carry 83.2% of all registered breed diversity. Concentration, it turns out, is a recurring structural feature of this sector, not a one-off finding.

The remaining eight species each hold genuinely irreplaceable genetic material, despite tiny counts — Mithun (1 breed), Geese (2) and Yak (3) are not statistical noise; each represents a unique lineage adapted to specific regions (Northeast India’s Mithun, Himalayan Yak) with no substitute if lost.

110 of these 262 breeds were registered in just the last 12 years — meaning documentation itself is accelerating, not static. This matters directly for Data Story #05, on conservation risk: a breed cannot be protected until it is first formally recognised and counted.

Data Table

Rank	Species	Registered Breeds	% Share of Total
1	Cattle	62	23.7
2	Sheep	51	19.5
3	Goat	45	17.2
4	Buffaloe	23	8.8
5	Poultry (Chicken)	21	8.0
6	Pig	16	6.1
7	Horse/Pony	9	3.4
8	Camel	9	3.4
9	Duck	9	3.4
10	Dog	6	2.3
11	Donkey	5	1.9
12	Yak	3	1.1
13	Geese	2	0.8
14	Mithun	1	0.4
	Total	262	100.0

Source: ICAR-NBAGR, registered breeds as of August 2026



1 in 6 Assessed Breeds Is At Risk - Camels Face It Most



Of 236 registered breeds assessed for conservation status, 38 are Critical, Endangered or Vulnerable. But risk is not spread evenly - camels face it at nearly four times the average rate.



CONNECTS TO DATA STORY # 04

Data Story # 04 found 262 registered breeds and asked how many are actually secure. Here's the answer: 198 are not at risk - but 38 need active conservation attention, and the risk is not spread evenly across species.

Conservation Status by Species, Ranked by Breed Count

Rank	Species	Total Breeds	Status Breakdown (Number of Breeds)				At-Risk (C+E+V)
			Not At Risk	Vulnerable	Endangered	Critical	
1	Cattle	62	53	5	4	0	9
2	Sheep	51	42	5	3	1	9
3	Goat	45	41	1	2	1	4
4	Buffaloe	23	21	2	0	0	2
5	Chicken	21	20	1	0	0	1
6	Pig	16	14	0	2	0	2
7	Horse & Pony	9	4	0	5	0	5
8	Camel	9	3	0	3	3	6
TOTAL		236	198	14	19	5	38

ON THE WORLD STAGE

Globally, FAO's registry shows roughly 27% of the world's assessed breeds are at-risk. India's 16.1% at-risk rate is proportionally lower - but 38 specific breeds still need it named directly, not averaged away.

Source: ICAR-NBAGR, registered breeds as of August 2026; Breed Watchlist 2022; Domestic Animal Diversity Information System (DAD-IS) of the Food and Agriculture Organisation (FAO)



Risk Is Concentrated, Not Uniform

India's breed diversity is substantial, but conservation pressure is not spread evenly across species — some carry it at multiples of the national average.

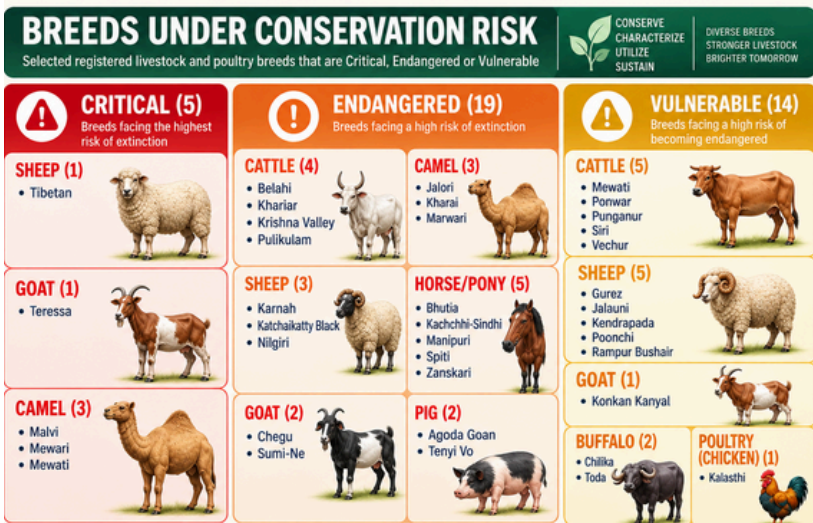
38 of 236 assessed breeds (16.1%) face conservation risk — 5 Critical, 19 Endangered, 14 Vulnerable. The remaining 198 (83.9%) are currently not at risk.

Camels face conservation risk at nearly four times the national rate — 6 of 9 breeds (66.7%) are at risk, including 3 Critical and 3 Endangered, against a national average of 16.1%. No other species comes close to this proportional burden.

Horse & Pony breeds face a narrower but still severe risk — 5 of 9 breeds (55.6%) are Endangered specifically, concentrated in one risk category rather than spread across all three.

Cattle and sheep carry the largest absolute burden, but the lowest proportional one — 9 at-risk breeds each, but against much larger total registries (62 and 51), that's 14.5% and 17.6% respectively — close to the national average, not far above it.

This story is India's data point on a UN global indicator, not an isolated domestic count — SDG Indicator 2.5.2 tracks exactly this question worldwide. Among breeds with a known status globally, FAO reports 27% are at risk (2024); India's assessed rate is 16.1% — a genuinely favourable position, though not a reason for complacency on the 38 breeds that do need it.



National Norms for Livestock Breed Status in India
Normal: >25,000 breeding animals; Insecure: 15,000–25,000;
Vulnerable: 5,000–15,000; Endangered: 2,000–5,000; Critical: <2,000

Data Table

Species	Critical	Endan gered	Vulne rable	Not At Risk	Total	At Risk	At-Risk %
Cattle	0	4	5	53	62	9	14.50%
Sheep	1	3	5	42	51	9	17.60%
Goat	1	2	1	41	45	4	8.90%
Buffalo	0	0	2	21	23	2	8.70%
Chicken	0	0	1	20	21	1	4.80%
Pig	0	2	0	14	16	2	12.50%
Horse/Pony	0	5	0	4	9	5	55.60%
Camel	3	3	0	3	9	6	66.70%
Total	5	19	14	198	236	38	16.10%

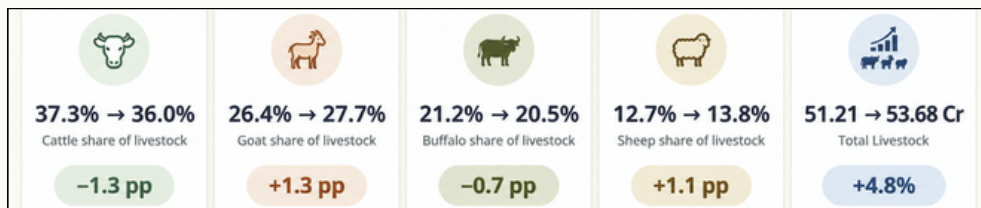
Source: ICAR-NBAGR, Breed Watchlist 2022; FAO SDG Indicator 2.5.2 report, 2024 (global comparison figure, breeds of known status).



India's Livestock Portfolio Is Shifting



Between 2012 and 2019, India's livestock mix shifted toward sheep, goats and poultry - while camels and horses, already flagged as India's most genetically at-risk breeds, saw their populations collapse by more than a third in just seven years.



WINNERS & DECLINERS: 2012 → 2019

Change in population (in crore) and percent change

	Poultry	72.92		85.18	+12.26	+16.8%
	Sheep	6.51		7.43	+0.92	+14.1%
	Goats	13.52		14.89	+1.37	+10.1%
	Cattle	19.09		19.35	+0.26	+1.4%
	Buffaloes	10.87		10.99	+0.12	+1.1%
	Pigs	1.03		0.91	-0.12	-12.0%
	Horses & Ponies	0.06		0.03	-0.03	-45.2%
	Camels	0.04		0.03	-0.01	-37.1%
	Donkeys	0.03		0.01	-0.02	-61.2%

— ----- Change in population (crore) ----- +

100 ANIMALS IN 2012 BECAME...

(population in 2019)

Poultry



117

Sheep



114

Goats



110

Cattle



101

Buffaloes



101

Pigs



88

CONNECTS TO DATA STORIES #00 & #05

Story #00 opened the entire Atlas with 53.68 crore animals and 85.18 crore birds as the foundation of India's ₹15.06 lakh crore livestock economy. This story is what's actually inside that number — and shows the growth behind it also came from goats, sheep and poultry, not solely from cattle or buffaloes. Story #05 found camels face conservation risk at nearly 4x the national rate (6 of 9 breeds, 66.7%) and horse & pony breeds at 55.6% — the two most genetically endangered species in India's registry. This census shows the same two species also had the steepest population declines of the decade: camels -37.1%, horses & ponies -45.2%. The genetic warning light and the population count are pointing at exactly the same animals.

Source: 20th Livestock Census, DAHD, GoI compiled in BAHS 2025. Figures are actual enumerated Census counts, not projections. India's 21st Livestock Census (2024) remains provisional at the State level only; national totals were not yet available at the time of writing.



The Herd Is Being Reshaped From Within

Data Story #02 found India's economic stability concentrated in a handful of states. Data Story #04 found breed diversity concentrated in a handful of species. This story finds the same pattern again — growth concentrated in a few species, while the rest quietly shrink.

The Number Story #00, unpacked: India's 53.68 crore animals and 85.18 crore birds underpin a ₹15.06 lakh crore livestock economy. But growth is uneven: the increase also came from goats, sheep and poultry, not only cattle or buffaloes.

Volume and value tell different stories: Livestock headcount grew only 4.8% between 2012 and 2019, while Story #01 projects livestock GVA growing 12.8–14.8% annually toward \$1 trillion. The gap suggests value growth is being driven mainly by productivity and prices, not animal numbers.

Poultry, sheep and goats led growth: Poultry rose 16.8%, sheep 14.1%, and goats 10.1%, well above the 4.8% overall growth rate. Cattle (+1.4%) and buffaloes (+1.1%) were nearly flat. Five species grew faster than the national average; four did not.

Cattle show a striking contradiction: Story #04 found cattle account for the largest share of India's breed registry — 62 of 262 breeds (23.7%) — yet their population share is shrinking, from 37.3% to 36.0%. Breed diversity and population dominance are moving in opposite directions.

The strongest link is to Story #05: Camels and horses/ponies had the highest shares of breeds at risk — 66.7% and 55.6% — and also recorded the steepest population declines: -37.1% and -45.2%. Genetic risk and population decline are pointing to the same emergency.

Why this matters for Policy : a species can be declining on the population axis, the genetic-diversity axis, or both - and only tracking one hides the other. Camels and horses are currently failing on both counts simultaneously, which makes them the clearest candidates in this entire Atlas for urgent, targeted conservation investment rather than broad-based livestock policy.

Data Table

Species	2012 (Cr)	2019 (Cr)	% Change
Cattle	19.09	19.35	+1.4%
Buffaloes	10.87	10.99	+1.1%
Sheep	6.51	7.43	+14.1%
Goats	13.52	14.89	+10.1%
Pigs	1.03	0.91	-12.0%
Horses & Ponies	0.06	0.03	-45.2%
Camels	0.04	0.03	-37.1%
Donkeys	0.03	0.01	-61.2%
Total Livestock	51.21	53.68	+4.8%
Poultry	72.92	85.18	+16.8%

Source: 20th Livestock Census, DAHD, GoI compiled in BAHS 2025. Figures are actual enumerated Census counts, not projections. India's 21st Livestock Census (2024) remains provisional at the State level only; national totals were not yet available at the time of writing.



India's Milk Revolution: From Scarcity to the World's Largest Producer



In 74 years, India's milk production grew 14.6-fold - from 170 Lakh MT of milk in 1950-51 to 2,479 Lakh MT in 2024-25. What took an entire year to produce in 1950-51, India now produces in less than one month.



THE MILK CALENDAR

How much milk does India produce at today's pace?



1 DAY
~6.8
Lakh MT



7 DAYS
~47.5
Lakh MT



25 DAYS
~170
Lakh MT
≈ India's entire
1950-51 production



1 MONTH
~207
Lakh MT



1 YEAR
2,479
Lakh MT

CONNECTS TO DATA STORIES #00 & #01

Story #00 opened this Atlas citing 2,479 lakh tonnes as part of India's ₹15.06 lakh crore livestock economy and its #1 world ranking in milk — this story is the 74-year journey behind that single number. Milk is also the single largest component of the livestock GVA that Story #01 projects compounding toward \$1 trillion, so this same journey doubles as the historical foundation that trajectory builds on — a sector that grew from scarcity into India's largest livestock sub-sector by value.

Source : BAHS 2025 / DAHD historical milk production series; NDDB Operation Flood documentation; World ranking : PIB/DAHD year-end review.



From 365 Days to 25: The Making of a Dairy Superpower



India's milk story is not just about a bigger number. It is about a country that imported milk powder in the 1950s and 60s becoming, within a single working lifetime, the largest milk producer the world has ever had — by a margin no other country approaches.

The starting point was genuine scarcity: in 1950-51, India produced 170 lakh tonnes of milk for the entire year — a modest, largely subsistence-level output for a nascent nation.

Operation Flood (1970) marks the inflection point: the "Anand pattern" cooperative dairy model was taken national, eventually linking producers to a National Milk Grid reaching hundreds of towns and cities. Production reached 539 lakh tonnes by 1990-91 — already more than three times the 1950-51 level.

The growth has kept compounding, not slowing to a plateau: from 806 lakh tonnes in 2000-01, output more than tripled to 2,478.7 lakh tonnes by 2024-25 — and the single decade from 2010-11 (1,218 LMT) to 2024-25 alone accounts for more than half of that entire increase.

India crossed the United States to become the world's largest producer in 1998 and has held that position for over 25 years since — achieved not through industrial mega-dairies, but through the aggregate effort of tens of millions of smallholder families, most milking one or two animals each.

The clearest way to feel the scale is through time, not tonnes: at today's production pace, India produces its entire 1950-51 annual output in roughly 25 days. A number that once took a full year now takes less than a month — the same transformation, measured in a unit everyone understands.

Data Table

Year	Milk Production	Multiple of 1950-51	Time to Produce 170 LMT
1950-51	170 LMT	1.0×	365 days
1973-74	232 LMT	1.36×	~267 days
1990-91	539 LMT	3.17×	~115 days
2000-01	806 LMT	4.74×	~77 days
2010-11	1,218 LMT	7.16×	~51 days
2020-21	2,100 LMT	12.35×	~30 days
2024-25	2,478 LMT	14.6×	~25 days

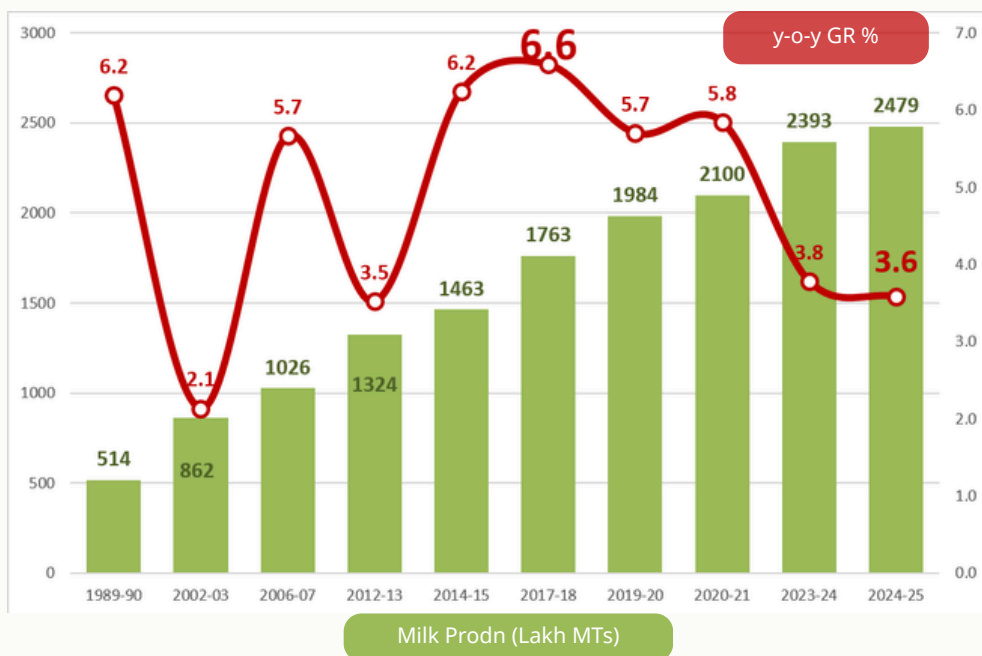
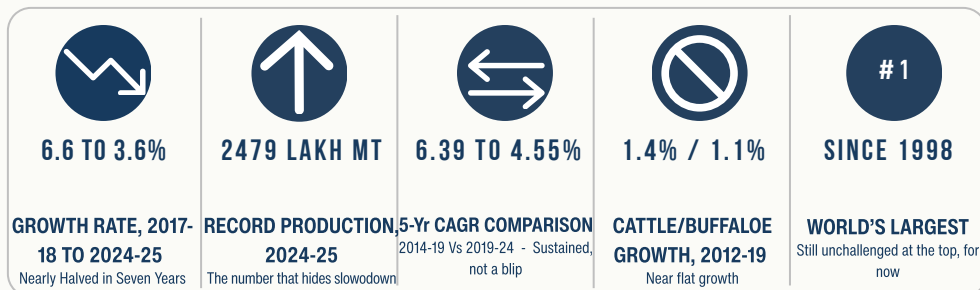
Source : BAHS 2025 / DAHD historical milk production series; NDDB Operation Flood documentation; World ranking : PIB/DAHD year-end review.



India's Milk Growth Rate Has Nearly Halved



India keeps setting new milk production records - 2479 Lakh MTs, the highest ever. But the growth RATE behind those records has fallen from 6.59% (2017-18) to 3.58% (2024-25). Records and momentum are not the same thing.



The 5-year CAGR slowed from 6.39% during 2014–15 to 2019–20 to 4.55% during 2019–20 to 2024–25, indicating a clear moderation in growth.

CONNECTS TO DATA STORY #06

Story #06's Livestock Census found cattle and buffalo populations grew just 1.4% and 1.1% between 2012 and 2019 — essentially flat. You cannot keep growing milk output at 6%+ a year from a bovine herd that barely grows at all. Recent milk growth has to be coming almost entirely from yield and productivity gains — and this story shows even that engine is now losing steam.

Source: Basic Animal Husbandry Statistics (BAHS) 2025, DAHD, GoI — year-wise milk production series. Growth-rate deceleration and 5-year CAGR comparison computed from the source series. Cross-referenced against Data Story #06 (20th Livestock Census, 2019) for bovine population growth context.



A Record Year Can Still Be A Slowdown

Every headline about India's milk sector says the same thing: production hit a new all-time high. That's true every single year, almost by definition, in a series that has grown for seven decades. It is also the reason almost nobody has noticed the growth rate itself quietly losing steam.

The deceleration is real and multi-year, not a single bad year: the 5-year CAGR from 2014-15 to 2019-20 was 6.39% — a genuine boom. The following five years (2019-20 to 2024-25) averaged just 4.55%. That's not noise; it's a sustained, roughly one-third reduction in the sector's growth engine.

2017-18 looks like the high-water mark: year-on-year growth peaked at 6.6% that year and has trended down since, with only partial recoveries — 2019-20 (5.70%) and 2020-21 (5.8%) still looked healthy, but 2023-24 (3.8%) and 2024-25 (3.6%) mark the slowest two-year stretch in the recent series.

Story #06 explains why this was always going to happen eventually: cattle and buffalo — the animals that produce nearly all of India's milk — grew just 1.4% and 1.1% respectively between the 2012 and 2019 Livestock Census. A herd that isn't growing can only sustain 6%+ annual output growth through yield gains (better breeds, better feed, better health) — and yield gains get harder to sustain as the "easy" gains are exhausted.

A base-effect caveat is worth stating plainly: percentage growth naturally looks smaller on a bigger base — going from 170 to 230 lakh tonnes (1950s-70s) is a much easier percentage than going from 2,393 to 2,479 lakh tonnes today. Some of this deceleration is arithmetic, not necessarily a sign of a weakening sector. Both things can be true at once.

Why this matters for policy and for this Atlas's own \$1 trillion story: Story #01 models the broader livestock GVA compounding at 12.8-14.8% annually. Milk is the largest single component of that value. If physical milk output growth continues decelerating toward 3.5-4.5% while value projections assume double-digit compounding, the gap between the two has to be closed by prices, exports, or value-addition — not by more litres. That's a materially different growth story than "more milk," and worth stating explicitly rather than assuming.

Data Table

Year	Milk Prodn Lakh MTs	y-o-y GR %
1989-90	514	6.2
2002-03	862	2.1
2006-07	1026	5.7
2012-13	1324	3.5
2014-15	1463	6.2
2017-18	1763	6.6
2019-20	1984	5.7
2020-21	2100	5.8
2023-24	2393	3.8
2024-25	2479	3.6

Source: Basic Animal Husbandry Statistics (BAHS) 2025, DAHD, GoI — year-wise milk production series. Growth-rate deceleration and 5-year CAGR comparison computed from the source series. Cross-referenced against Data Story #06 (20th Livestock Census, 2019) for bovine population growth context.



India's Largest All-Women-Owned Dairy (SHREEJA)

In 2014, 27 women with no bank account of their own began a dairy at the foothills of Tirumala, Andhra Pradesh. Today ~1.5 lakh women own, govern and profit from the Rs.1200-Crore company they built - India's largest all dairy women.

				
1.5 LAKHS	₹ 1,200 CR	9 LLPD	₹ 6,500 CR	4-15-5000
WOMEN PRODUCER MEMBERS	ANNUAL TURNOVER	AVERAGE MILK PROCUREMENT IN LAKH LITRES PER DAY	PAID DIRECTLY TO MEMBERS SINCE 2014	STATES-DISTRICTS-VILLAGES



WHY THIS STORY MATTERS FOR THE ATLAS

Every other Data Story in this Atlas measures the livestock economy from the outside - census counts, GVA shares, credit gaps.

Shreeja is measured from the inside : what happens to those national numbers when ownership, governance and the bank account all sit with the woman who does the work.

"She doesn't work here. She owns it."

SHREEJA MAHILA MILK PRODUCER COMPANY - 1.5 LAKH WOMEN, ONE OWNERSHIP MODEL



From 27 Women To A Rs.1200-Crore Company



Most milk in India moves through systems where women do the daily work and a male household head holds the passbook. Shreeja was built the other way: the women who supply the milk are also its owners, its bank-account holders, and its board.

A producer-owned enterprise from day one — Promoted in 2014 by NDDDB Dairy Services with market linkage through Mother Dairy, Shreeja began with 27 women near Tirupati — designed from the start to be owned by the women who supply the milk, not merely employ them. Nationally, nearly 70% of India's dairy-farming workforce is women, yet only ~35% are active in dairy cooperatives — the gap Shreeja's ownership model closes.

From 27 women to ~1.5 lakh shareholders — Twelve years on, Shreeja federates roughly 1.5 lakh women producer-members across 4 states, 15 districts and ~5,000 villages — the largest membership of any such institution in the country, procuring 9 lakh litres/day.

The payment is the empowerment mechanism — ₹6,500 crore in milk bills paid directly to members since inception — a transparent, sustained transfer of economic value to rural households that has strengthened financial inclusion and women's standing within their families.

Vertical integration: the ₹280-crore Kuppam plant — Shreeja's own Integrated Dairy & Cattle Feed Plant makes it the first milk producer company in India with an in-house processing and feed facility — plus Mobile Veterinary Units bringing emergency animal care to her door.

Governance and growth that compound — All 11 board seats are elected from among the members themselves. Annual turnover has reached ₹1,200 crore — the financial record of what happens when ownership, governance and the bank account all sit with the same woman.

Data Table

Milestone / Metric	Detail
Founded	2014, by 27 women, near Tirupati, AP
Promoted by	NDDDB Dairy Services; market linkage via Mother Dairy
Women members today	~1.5 lakh — 4 states, 15 districts, ~5,000 villages
Board of Directors	11 of 11 seats — all women, elected by members
Milk paid since inception	₹6,500 Cr, direct to members' own accounts
Kuppam integrated plant	₹280 Cr — dairy processing + cattle feed
Mobile Veterinary Units	Doorstep emergency animal healthcare
Recognition	IDF Innovation Award — Women Empowerment

Source: Shreeja Mahila Milk Producer Company Ltd; Shreejamilk.com;



India's Milk Map Is Quietly Being Redrawn



More than half of India's milk comes from just five states - but Karnataka is growing nearly 4 times faster than the national rate, Rajasthan could overtake Uttar Pradesh's #1 spot within about 2 years, and 5 States are producing less milk than they did seven years ago.



2479

Lakh MTs

INDIA'S MILK PRODUCTION

During 2024-25



54.2%

TOP 5 STATES SHARE

UP, Rajasthan, MP, Gujarat, Maharashtra



9% CAGR

KARNATAKA, FASTEST GROWER

Nearly double the National Rate



5 STATES

PRODUCING LESS THAN IN 2019-20

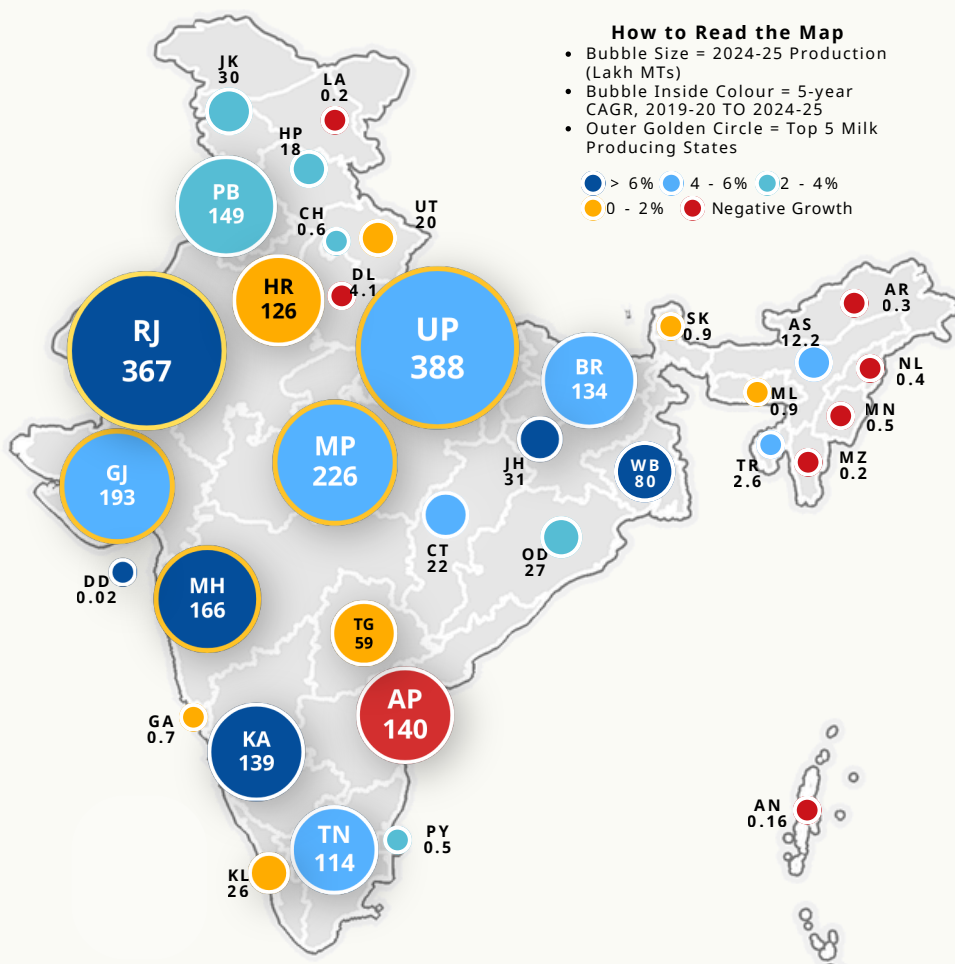
AP, MZ, NL, MN, Arunachal



4.55%

NATIONAL CAGR

2019-20 to 2024-25



CONNECTS TO DATA STORY # 00

Data Story #00 opened this Atlas with India's #1 world ranking in Milk, built on 2,479 Lakh Metric Tonnes of national production. This State-wise breakdown shows that single number is really 36 different, often opposite, State/UT stories - a growing national total can and does coexist with individual states already in outright decline.

Source: BAHS 2025, DAHD, GoI. All growth-rate and concentration figures are GFST's calculations from this underlying series.



Same National Trend, Opposite State Stories

India's milk production is usually reported as a single national figure. Underneath it are 36 separate State/UT trajectories — some accelerating, few shrinking — and the gap between the fastest and slowest of them is widening, not narrowing.

Production remains concentrated, and slightly more so than in 2019-20: the top 5 states (Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat, Andhra Pradesh in 2019-20) held 53.0% of national output; by 2024-25 the top 5 (UP, Rajasthan, MP, Gujarat, Maharashtra — AP has since dropped out of the top 5) held 54.2%. Concentration is not falling as the sector grows.

Karnataka is the standout performer in the entire dataset: production grew from 90.3 lakh MT to 139.0 lakh MT — a 9.00% CAGR, nearly double the 4.55% national rate, and the fastest of any major producing state over this 5-year window. No other large state comes close to this pace.

Rajasthan is close enough to Uttar Pradesh to make the #1 spot genuinely contestable: at current 5-year CAGRs (UP 4.03%, Rajasthan 7.52%), simple extrapolation puts Rajasthan ahead of Uttar Pradesh in roughly 1.7 years. This is a projection from recent trend, not a forecast — growth rates can and do change — but the gap (388.15 vs 367.41 lakh MT, just 5.3%) is close enough that the question is now genuinely open.

Andhra Pradesh's decline is the most consequential finding in this dataset: at -1.79% CAGR, it looks like a modest decline on the list — but AP was a top-5 producer by scale in 2019-20 (152.63 lakh tonnes) and has since fallen out of the top 5 entirely, overtaken by Maharashtra. Its absolute drop since 2019-20 is larger in real terms than the entire annual output of most mid-sized states.

The steepest declines are concentrated in the Northeast, and they have worsened over this shorter window: Arunachal Pradesh's output has more than halved (-15.13% CAGR, a 56% total decline since 2019-20) and Manipur has fallen 45.5% in the same period. Nagaland's decline (-4.41%) is comparatively milder. This is a distinct regional cluster, separate from Andhra Pradesh's scale-driven story, and worth a dedicated look at what's different about dairy economics in these states specifically.

Data Table

State/UT	2019-20 Milk Production ('000 tonnes)	2024-25 Milk Production ('000 tonnes)	5-Year CAGR
Karnataka	9031.49	13897.53	9.00%
Daman,D&N Haveli	1.21	1.84	8.74%
Rajasthan	25573.09	36741.37	7.52%
Maharashtra	12024.26	16625.59	6.69%
West Bengal	5868.61	7954.17	6.27%
Jharkhand	2321.16	3114.66	6.06%
Assam	919.94	1224.08	5.88%
Tripura	198.6	263.69	5.83%
Madhya Pradesh	17108.96	22595.53	5.72%
Tamil Nadu	8759.01	11442.91	5.49%
Chandigarh	48.87	63.77	5.47%
Chhattisgarh	1675.56	2162.16	5.23%
Bihar	10480.33	13397.69	5.03%
Gujarat	15292.35	19293.64	4.76%
Uttar Pradesh	31863.91	38815.34	4.03%
Himachal Pradesh	1530.94	1823.89	3.56%
Jammu & Kashmir	2506.36	2973.89	3.48%
Puducherry	49.5	58.05	3.24%
Odisha	2370.18	2700.96	2.65%
Punjab	13347.56	14874.74	2.19%
Goa	61.43	67.39	1.87%
Haryana	11734.72	12592.75	1.42%
Meghalaya	87.6	93.95	1.41%
Sikkim	83.94	89.35	1.26%
Telangana	5589.8	5935.12	1.21%
Uttarakhand	1844.71	1957.25	1.19%
Kerala	2544.35	2560.58	0.13%
Mizoram	23.53	23.51	-0.02%
Andhra Pradesh	15263.1	13946.13	-1.79%
A&N Islands	18.9	16.17	-3.07%
Nagaland	61.64	49.19	-4.41%
Manipur	89.65	48.89	-11.42%
Arunachal Pradesh	60.63	26.7	-15.13%
Lakshadweep	3.78	0.42	-35.56%
Ladakh	--	23.58	--
Delhi	--	413.51	--
All India	198439.67	247869.98	4.55%

Source: BAHS 2025, DAHD, GoI. All growth-rate and concentration figures are GFST's calculations from this underlying series.



WITH GRATITUDE

Thank You for Walking Through This With Us

You've just spent time with the numbers behind eight crore families' lives — their milk, their markets, their mornings, their quiet resilience. That is not a small thing, and we do not take it lightly.

This is not a book that closes. Two new Data Stories arrive every week — not on a fixed schedule of topics, but whichever story matters most right now. Some weeks that means dairy, others policy, others a single state's own story. We follow the data, not a calendar. Thank you for reading this with us. We hope you'll stay for what comes next.

Tell Us What You Think



This Atlas is built to be questioned

Was this clear and useful?

What would you want to see next on this topic?

Any correction to flag? Two minutes, straight to our inbox.

Reply With Your Thoughts @ admin@gfst.in

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All figures in Pashudhan Atlas are sourced from national and state government publications (including BAHs, Livestock Census, MoSPI, DAHD), Parliamentary and State Assembly records, peer-reviewed research, reputable international and national bodies (including FAO, World Bank, ICAR), and GFST's own field surveys — each cited individually, verified at the time of publication. Data may be revised by originating authorities thereafter. Projections and potential-yield scenarios are GFST's own analytical modelling, not guaranteed outcomes. Survey-based findings reflect the surveyed sample, not a full census, unless stated otherwise. This publication is informational only and does not constitute financial, legal, or investment advice; readers should conduct independent due diligence. Analyses are GFST's own and do not represent any government or partner institution's position.

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