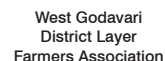




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Global Forum for Sustainable Transformation

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Banjara Hills, Hyderabad 500034, Telangana, INDIA.

GFST www.gfst.in

GFST VISION & CONCLAVE ROAD MAP

HARNESSING TECHNOLOGY FOR SECTORAL TRANSFORMATION

Action-Oriented: From conclaves to implementation

Inclusive: SHG-focused rural empowerment

Tech-Forward: AI/ML, IoT, Blockchain integration

Scalable: AP models -> National blueprints

1

17-June 2023

DEEPTech/GOVTECH INNOVATION CONCLAVE STRATEGY FOR INDIA @ 100 YEARS

Envisioned India as the world's top economy by 2047, urging tech-driven inclusive growth, demographic management, and strong public-private partnerships.

2

5-6 December 2024

DEEPTech/GOVTECH INNOVATION - HEALTH CARE AI - SHAPING THE NEXT ERA OF GOVERNANCE

- Created Virtual PMU, Developed AI/ML-powered digital stack for health sector, CoE for MedTech
- Delivered actionable insights through GovTech solutions
- Sustained post-event engagement with 90-day implementation support

3

17-18 February 2025

DEEPTech/GOVTECH INNOVATION CONCLAVE - AQUACULTURE INNOVATION TECH 2.0

- Adoption of precision aquaculture technologies
- Policy frameworks for value addition & geo-tagging
- Entrepreneurship development in blue economy

4

13-14 May 2025

DEEPTech/GOVTECH INNOVATION CONCLAVE - ANIMAL HUSBANDRY TECH AI 2.0

- Hands-on approach with farmer surveys
- Wearable Sensors for livestock health monitoring
- DeepTech/Blockchain for supply chain transparency
- **Outcomes:**
 - Strengthened global market positioning
 - Laid foundation for 20% sectoral growth

5

25-26 June 2025

DEEPTech/GOVTECH INNOVATION CONCLAVE - TOURISM

- Vision to Transform AP into AI-powered tourism hub
- Tech Interventions: Smart pilgrimage experiences, Cultural tourism digitization, Infrastructure modernization

6

24 - 25 July 2025

DEEPTech/GOVTECH INNOVATION CONCLAVE - LOGISTICS

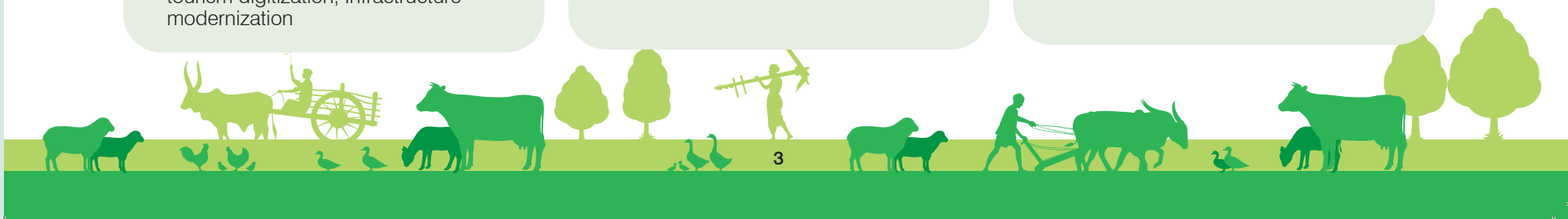
- Leveraging AP's 1028km coastline
- Developing smart supply chains
- Enhancing port-hinterland connectivity

7

August 2025

DEEPTech/GOVTECH INNOVATION CONCLAVE - POVERTY ERADICATION

- Empowering 1.2 Crore SHG Women
- SHG-Driven Transformation, and DeepTech/GovTech Innovation for Sectoral Advancement



PREFACE

PIONEERING TECHNOLOGIES FOR A FUTURE BEYOND POVERTY

The Global Forum for Sustainable Transformation (GFST) is an apolitical and non-profit think tank focused on shaping governance through DeepTech, GovTech, and data-driven policy reforms. By empowering communities, especially women through SHGs, and applying AI/ML solutions, GFST aims to revolutionize governance and accelerate socio-economic development.

A COMPREHENSIVE APPROACH TO POVERTY REDUCTION

GFST's strategy targets poverty reduction through a technology-driven, four-pronged approach. We aim to transform the livestock sector and create sustainable rural prosperity by empowering women via SHGs, leveraging Animal Husbandry for economic growth, and using AI/ML for data-driven decisions and real-time monitoring.

INNOVATIVE TECHNOLOGIES FOR INCLUSIVE GROWTH

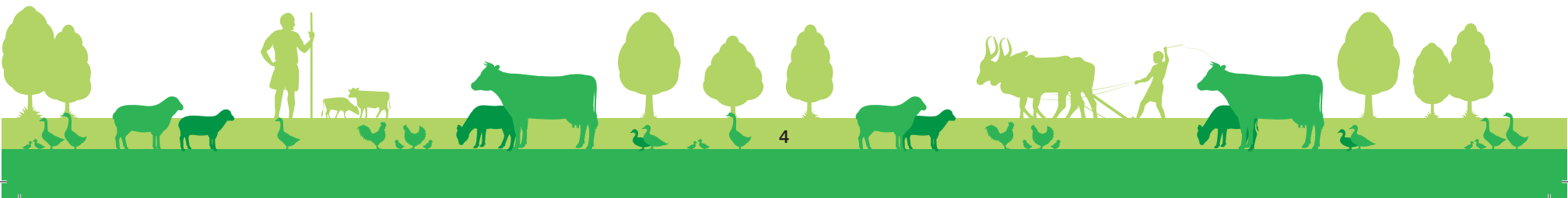
Through collaborations with governments and industry leaders, GFST is utilizing AI/ML, IoT, blockchain, and wearable sensors to revolutionize productivity, health monitoring, and financial access in the livestock sector. These solutions foster entrepreneurship and enable data-driven decision-making for growth.

SCALING IMPACT WITH LIVESTOCK TECH 2.0

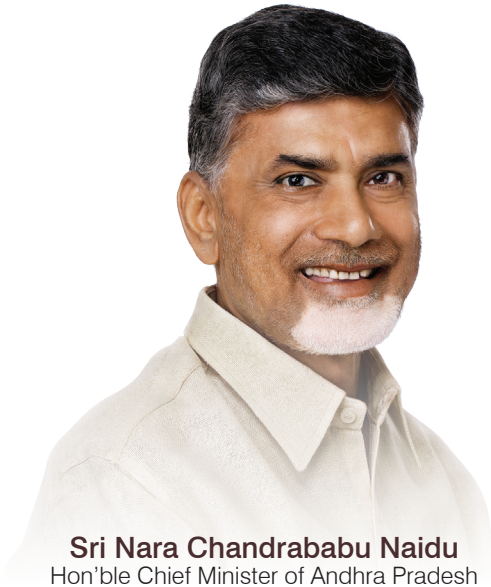
Building on past successes, GFST launches Livestock Tech 2.0, aiming for 20% annual growth and doubling AP's livestock sector GVA to Rs.3.6 lakh crore by 2029. Empowering farmers, SHG women, and agripreneurs, this initiative is setting the stage for scalable rural value chains, leveraging cutting-edge technologies to drive transformative change.

This is not just discussion—it's action. And we are just getting started.

The Global Forum for Sustainable Transformation (GFST) employs Rapid Survey Methodology and Unified Methodological Protocols (UMP) to develop standardized SOPs and universal toolkits. Designed for cross-sector interoperability, these tools integrate historical data and future projections, enabling agile, data-driven governance across various sector. GFST's framework ensures rigor, scalability, and alignment with global sustainability priorities.



CHIEF PATRON'S MESSAGE



Pioneering Livestock-Led Prosperity

Andhra Pradesh is spearheading an agrarian revolution by harnessing technology, entrepreneurship, and agritech startups to transform livestock farming. Through Public-Private-People Partnerships (P4), the state is addressing critical gaps in animal healthcare, breeding, and market access. Digital platforms enable the Uberization of knowledge delivery, equipping farmers with real-time insights. Cutting-edge innovations—such as AI/ML-driven disease prediction, blockchain traceability, and drone-based biosecurity—are advancing precision farming. Mobile Veterinary Clinics provide telemedicine, while breakthroughs like sex-sorted semen (SSS) and IVF enhance genetic potential, promote elite calf rearing, and fodder development, accelerating progress towards Swarna Andhra Pradesh @ 2047.

Empowering Rural Entrepreneurs, Building Ecosystems

At the core of this vision is entrepreneurship, converting farmers into agripreneurs. Climate-resilient animal shelters under MGNREGS combine employment generation with modern infrastructure, while SHG-led community fodder banks and subsidized equipment demonstrate the P4 model's impact. By nurturing agritech startups in precision farming and IoT, we are cultivating a dynamic ecosystem for rural innovation. This inclusive approach integrates informal livelihoods into structured enterprises, ensuring every farmer benefits from sustainable growth.

Global Leadership Through Sustainable Tech

By 2047, Andhra Pradesh aims to emerge as a global benchmark for technology-driven livestock excellence. Our strategy—powered by AI analytics, real-time governance, and international collaborations—prioritizes sustainability and equity. The Uberization of knowledge democratizes access, while entrepreneurship empowers 25 lakh SHG women and FPOs. Together, we are building a future where technology breaks barriers, livestock drives rural prosperity, and Andhra Pradesh leads the world in sustainable agricultural innovation.



S.P. Tucker, IAS (Retd.)
Vice Chairman & Director



Cherukuri Kutumba Rao
Director



Sanjay Gupta, IFS(Retd.)
Chief Executive Officer



Sridhar Seshadri
Director, Global Foresight & Innovation



Shreeram Iyer
Director, Global Impact



GFST's Tech-Powered Approach to Sustainable Animal Husbandry



Sri K. Atchannaidu
Hon'ble Minister for AHDD&F

Strengthening Rural Livelihoods Through Tech-Enabled Animal Husbandry

Animal husbandry stands as the backbone of Andhra Pradesh's agrarian economy, and the need for diversification into secondary and tertiary sectors has never been more urgent. The future lies in empowering women, farmers, and agripreneurs to achieve greater outcomes through technology and a supportive ecosystem. GFST, as a catalyst for sustainable transformation, is leading this charge, creating a dynamic environment for entrepreneurship and innovation.

Building Smart Livestock Ecosystems: Insurance, Credit, and Collective Knowledge

By promoting tech interventions, such as subsidized access to technology, credit facilities, and insurance, we are fostering an ecosystem that allows smart farmers and women to thrive. Through the Uberization of knowledge, we are ensuring that every stakeholder, from the government to startups and tech companies, comes together to create a seamless, collaborative environment.

Swarna Andhra @ 2047: AI-Driven Transformation for AP's Livestock Sector

Guided by the vision of Chief Patron Shri N. Chandrababu Naidu, GFST's mission aligns with Viksit Bharat and Swarna Andhra @2047, ensuring that we are shaping a prosperous, inclusive future. By leveraging AI/ML-driven data insights and fostering real-time collaboration through a five-year action plan, we are empowering the people of Andhra Pradesh and transforming the livestock sector for the better. This conclave is not just an event; it's the start of a transformative journey towards economic resilience and growth.



Sri K. Vijayanand, IAS
Chief Secretary to
Government
Government of
Andhra Pradesh



**Sri B. Raja Sekhar,
IAS (Retd.)**
Spl. Chief Secretary to
Government
AHDD & F Department
Government of Andhra
Pradesh



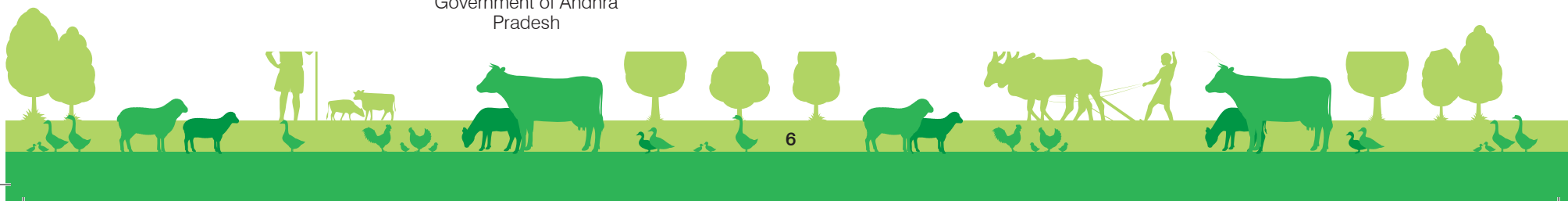
Dr T. Damodar Naidu
Director - AH Department
Government of Andhra
Pradesh



Dr M. Srinivasa Rao
CEO - AP Livestock Devt
Agency
Government of Andhra
Pradesh



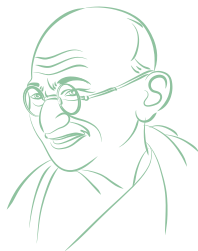
Dr Y. Simhachalam
Addl DAH, SMILE,
Government of Andhra
Pradesh



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From Vision to Reality: A 5-Year Blueprint for Livestock Excellence

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*THE GREATNESS OF A NATION CAN BE JUDGED
BY THE WAY ITS ANIMALS ARE TREATED*

CHAPTER 1: PIONEERING THE FUTURE

FIRST-OF-ITS-KIND DEEPTech LIVESTOCK GOVERNANCE MODEL

Livestock Landscape at a Glance



25 lakh SHGs &
15 lakh Farmers



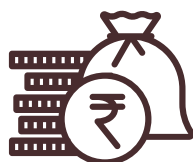
Density: **66 Sq Km.**
Avg. Holding: **4**
Humans per Milch Animal: **16**
Bovines per 1000
Humans : **218**



3132 Vety Institutions,
6390 RSKs, VBRI,
SMILE, Farms



2091 Vets
8539 Paravets



GSVA: Rs. **1.69 lakh Cr**
11.5% of GSDP



2548.74 Cr
(Rank #1)
PCA : 479/Yr

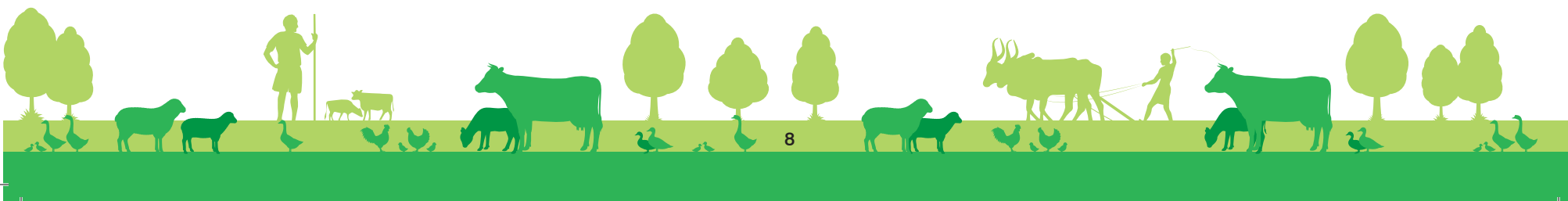


10.68 L MT
(Rank #5)
PCA : 20 Kg/Yr



139.94 L MT
(Rank #7)
PCA : 719 Gr/Day

Leveraging DeepTech and data-driven governance to transform Andhra Pradesh's livestock sector into a high-productivity, farmer-empowered ecosystem.



From Data to Strategy

Leveraging the Livestock Census 2019 & 2025 Projections for Scalable Sectoral Growth

Rapid Survey Methodology, GFST-Driven SOPs, and a Universal Toolkit to Standardize Sector-Neutral Data Solutions

Cattle (-11.4%) & Buffaloes (-15%)

Decline Focus: Reduction in non-descriptive (ND)/low-yield breeds due to low profitability.

Strategic Shift: State prioritizes high-yield breeds (crossbreeds, Murrah buffaloes).

Outcome: Fewer animals but higher productivity (e.g., milk yield/animal to rise from 2.1K kg, 3.5K kg).

Sheep (+11%) & Goats (+4.6%)

Growth Drivers: High demand for mutton, low maintenance, and Government support.

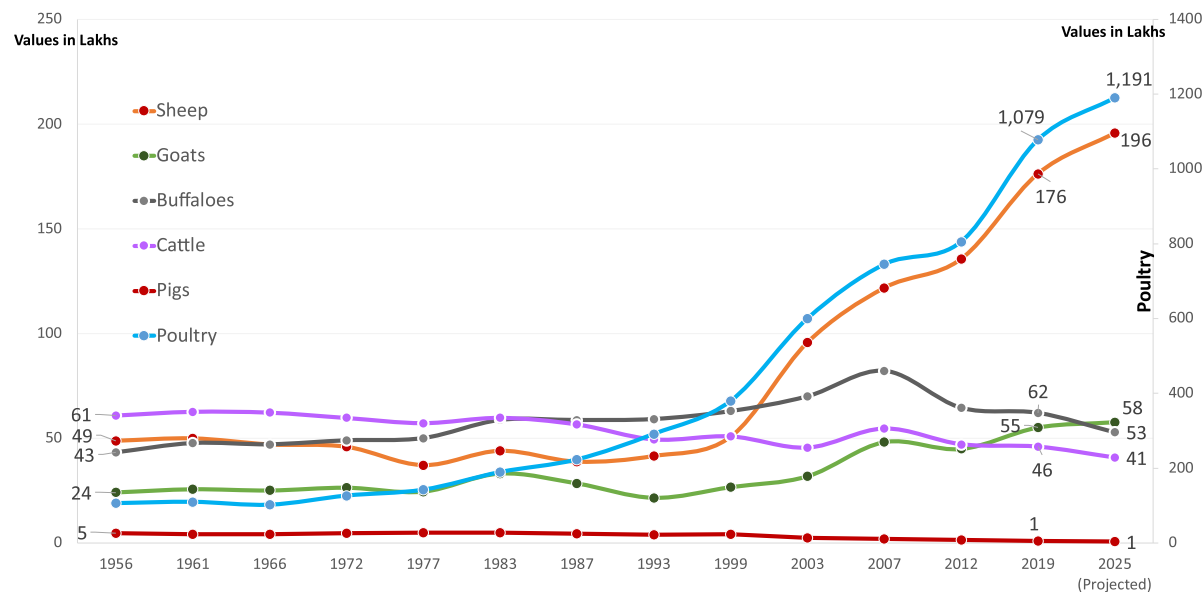
Implication: Small ruminants dominate as economic lifelines for rural households.

Poultry (+10.4%)

Boom Factors: Rising demand for eggs/meat, fast production cycles, and commercial scalability.

Total Livestock (+2.9%)

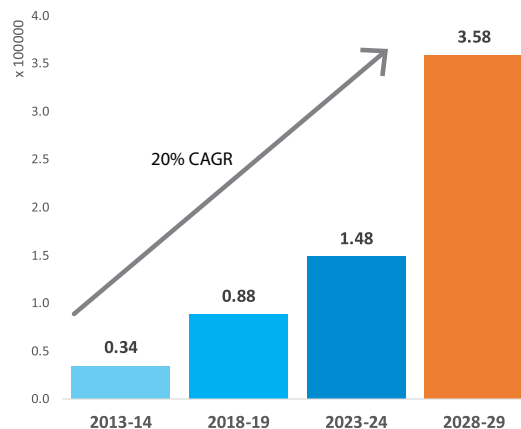
Net Growth: Driven by sheep, goats, and poultry offsetting cattle/buffalo declines.



Strategic breed optimization and small ruminant/poultry focus to drive productivity growth while ensuring rural livelihood security

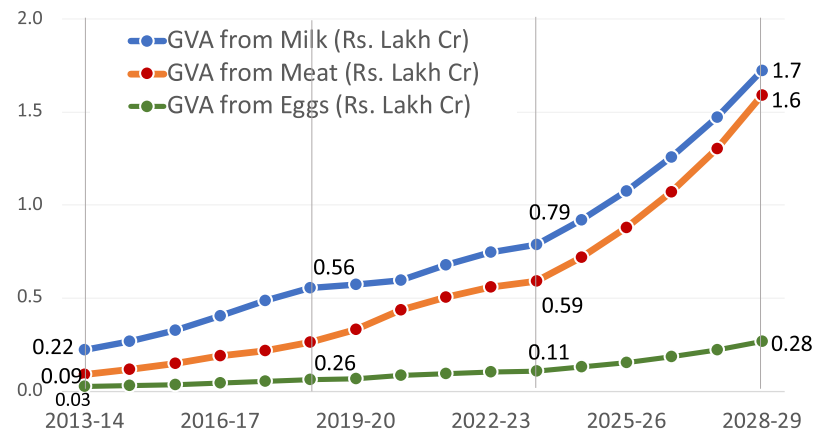
Livestock Sector

Rising to Rs.3.6 Lakh Crore GVA by 2028-29
20% CAGR Fueled by Tech-Driven Interventions



- Gross State Domestic Product (GSDP) from 2013-14 to 2028-29. The values show a sharp increase in the GSDP over the years, with a projected figure of Rs.3.6 lakh crore in 2028-29 @ 20% CAGR during 2023-24 to 2028-29
- With the necessary technological interventions, achieving a 20% CAGR in the sector is within reach. The 20% CAGR suggests robust economic growth, highlighting the potential for significant expansion in the livestock sector's contribution to the overall economy.

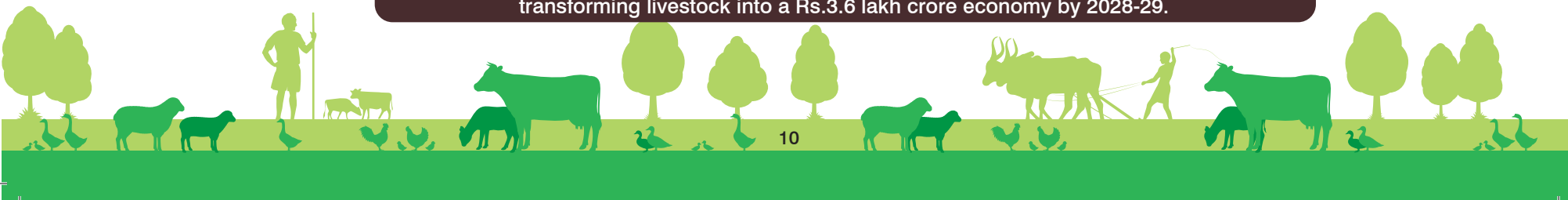
The rapid growth in sheep and poultry populations is expected to increase further on the current pace of meat production.



- Gross Value Added (GVA) contribution from three segments of the livestock sector: Milk, Meat, and Eggs, represented over previous years (2013-14 to 2028-29).
- An upward trajectory for all three categories, with milk showing the highest growth followed by meat and eggs. By 2028-29, the GVA from milk is projected to reach around Rs.1.7 lakh crore, meat around Rs.1.6 lakh crore, and eggs around Rs.0.28 lakh crore.

Although the bovine population is declining, increasing milk yield per animal is likely to ensure continued growth in overall milk production

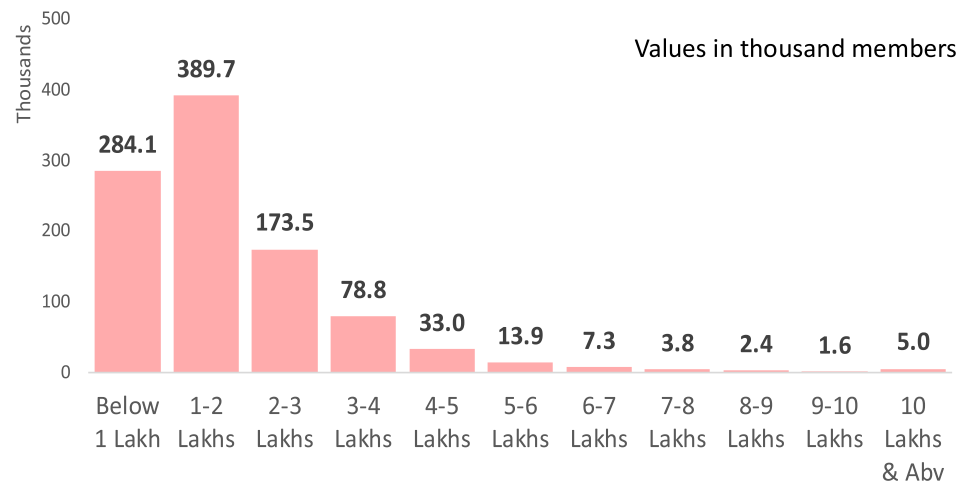
Tech-driven intensification and breed optimization to achieve 20% sectoral growth, transforming livestock into a Rs.3.6 lakh crore economy by 2028-29.



Building Resilient Rural Economies

BY EMPOWERING SHG WOMEN THROUGH LIVESTOCK BASED ENTREPRENEURSHIP

	Income Group	SHG Members	Total Income in Crore Rs.	Avg. Income in Rs
1	Below 1 Lakh	2,83,321	1,823.41	64,358
2	1-2 Lakhs	3,87,339	5,327.48	1,37,540
3	2-3 Lakhs	1,63,402	3,830.57	2,34,426
4	3-4 Lakhs	70,119	2,319.24	3,30,757
5	4-5 Lakhs	27,319	1,175.93	4,30,444
6	5-6 Lakhs	12,384	653.96	5,28,068
7	6-7 Lakhs	7,036	439.84	6,25,125
8	7-8 Lakhs	3,618	264.13	7,30,034
9	8-9 Lakhs	2,211	183.65	8,30,617
10	9-10 Lakhs	1,543	143.45	9,29,683
11	10 Lakhs & Abv	4,615	819.14	17,74,944
	Total	9,62,907	16,981	1,76,349



1. Huge Opportunity Base- Andhra Pradesh has 1.09 crore SHG women, with 87% earning below Rs.3 lakh and 33.6% below Rs.1 lakh annually. A vast base ready for targeted economic upliftment.
2. Animal Husbandry: A Proven Pathway- 75% of SHG women in livestock focus on dairy, earning ~Rs.1.8 lakh/year. Mini Poultry Farms yield the highest incomes (~Rs.2.8 lakh/year), showing clear growth areas.
3. From Subsistence to Prosperity: The Lakhpati Didi Vision- Backyard dairy, poultry, and goat rearing can quickly move women to Lakhpati Didi status (Rs.1 lakh+ incomes)...50,000 women in AP already earn Rs.10 lakh+, proving the potential.
4. Enablers for Scale: Credit and Support Systems- Rs.50,000 DBT inflows and a Rs.1 lakh crore SHG credit plan over 5 years support expansion. Scaling insurance and credit access will unlock entrepreneurship at scale.
5. A Clear Path Forward-Focused livestock activities, financial access, and tech adoption can drive women from poverty to entrepreneurship and asset ownership.

The goal: not just survival — but leadership.

Targeted livestock entrepreneurship programs for SHG women can transform rural economies, with 50,000+ already achieving Rs.10 lakh+ incomes through poultry and dairy initiatives.



CHAPTER 2: DATA DRIVEN INSIGHTS

AI/ML BASED DATA ANALYTIC INSIGHTS

Livestock Activities: Economic Feasibility & Sustainable Livelihood Opportunities

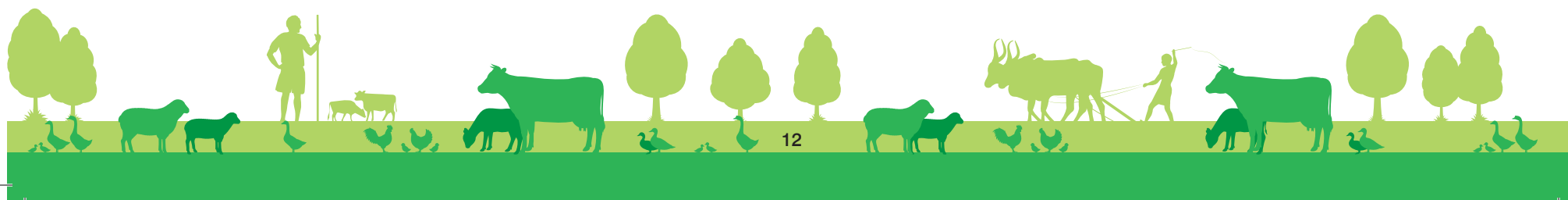
Comparative Analysis of Investment, Returns, and Farmer Suitability for Poverty Alleviation

Total sample of livestock farmers covered across the state during the survey between (21-25 April 2025): 101,657, Of this 40% are SHG-linked Farmers (40,572) and 60% are Non-SHG Farmers (61,085)

Category	Total Animals	Total Farmers	Total Investment (in Cr)	Total Income (in Cr)	Avg. Livestock Holding	Annual Investment in Rs./ Animal	Annual Income Rs./ Animal	Income/ Investment
Sheep & Goat	17,67,901	24,103	220	431	73	1,246	2,439	2.0
Dairying	3,59,590	80,659	988	1,773	4	27,468	49,318	1.8
Backyard Poultry	3,42,989	10,578	22	37	32	627	1,077	1.7
Pigs	3,800	115	2	3	33	6,309	8,345	1.3
Commercial Poultry	29,51,999	337	78	80	8,760	264	272	1.0
	54,26,279	1,15,792	1,310	2,325	47	2,414	4,285	1.8

Category	Feasibility Rating	Key Reason	Feasibility
Sheep & Goat	★★★★★ (Very High)	Best return on investment	Suitable for small holders with moderate average holdings (73 animals)
Dairying	★★★★★ (High)	High income despite high cost	ideal for farmers with lower herd sizes but reliable market access.
Backyard Poultry	★★★★ (Moderate)	Low-cost, scalable, SHG-friendly	Ideal for SHGs and marginal farmers, though absolute returns per animal are modest.
Piggery	★★★ (Moderate-Low)	Good returns, but low adoption and high per-unit cost	Suitable for Tribal communities
Commercial Poultry	★ (Low)	Very low income margins	Needs optimization or scale to become sustainable.

Prioritizing sheep/goat and dairy enterprises offers optimal returns, while backyard poultry presents scalable SHG opportunities for rural upliftment.

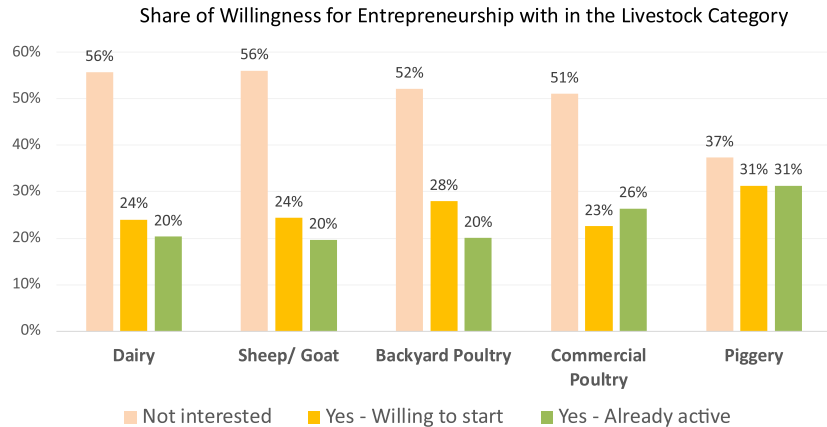


DATA DRIVEN INSIGHTS

AI/ML BASED DATA ANALYTIC INSIGHTS

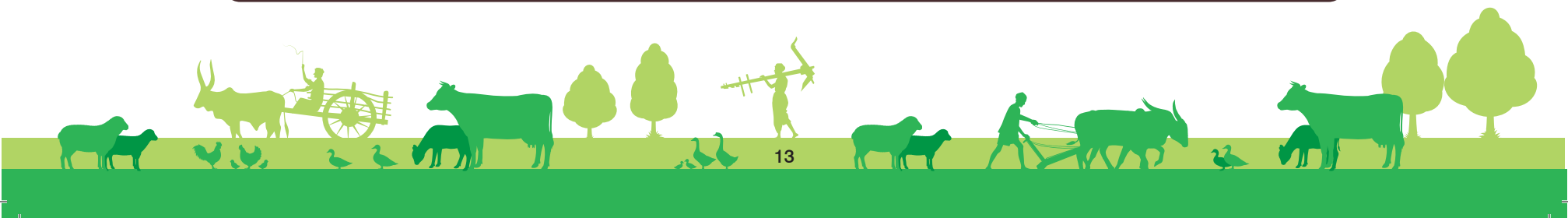
Livestock Sector Engagement: Participation Trends, Challenges, and Poverty Alleviation Opportunities

- Piggery has the highest active participation (31%) and also more (32%) willing to start.
- Commercial poultry has the highest percentage of current activity among poultry types at 26%, despite lower overall interest.
- Backyard poultry rearing, practiced by 87% (4,760/5,460) of Non-Lakhpati Didis in the below 1 lakh income group, serves as a critical tool for poverty alleviation by providing low-barrier income opportunities. With 28% (1,530 women) willing to adopt the activity, scalable sustainable models—such as SHG-led training, eco-friendly feed systems, and community healthcare access—can enhance resilience and reduce vulnerability. Strengthening these initiatives could transition households toward the 1-3 lakh bracket while ensuring environmental and economic sustainability through resource-efficient practices, aligning with long-term livelihood security and equitable growth.
- Dairy and Sheep/Goat sectors have the highest disinterest, with 56% of respondents not interested in each. 47.5% of Dairy farmers reported high input costs/ lack of grazing lands, 12.8% remunerative price and 8.2% labour shortage
- Across all sectors, a significant portion (20–31%) are already active, showing existing engagement that can be built upon with support.



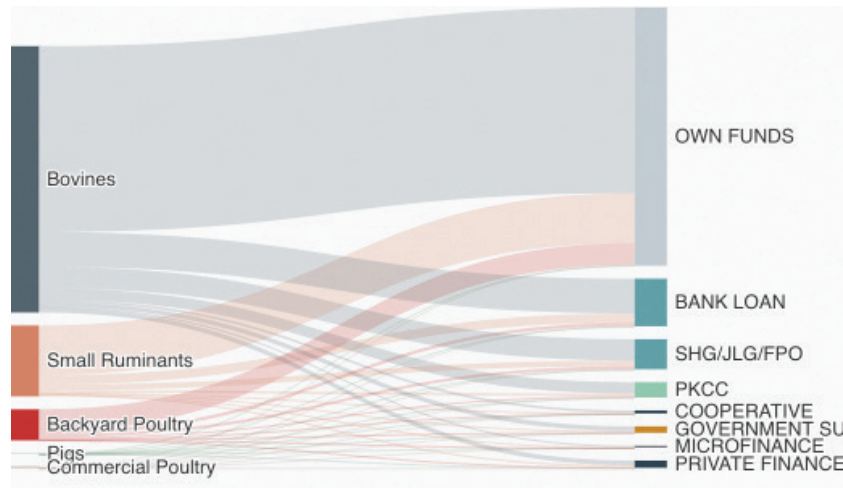
Willingness to Become Livestock Entrepreneur Vs Annual Income						
Entrepreneurial Willingness	1-50k	50k-1L	1L-3L	3L-5L	5L-10L	10L-50L
Not interested	8787	15344	44144	11988	6034	1167
Yes - Already active	2670	4803	16085	4658	3088	909
Yes - Willing to start	3004	5319	19433	6745	3382	816

Targeted support for backyard poultry and piggery can effectively reduce rural poverty, leveraging their high adoption rates and low entry barriers among low-income groups.



DATA DRIVEN INSIGHTS

AI/ML BASED DATA ANALYTIC INSIGHTS

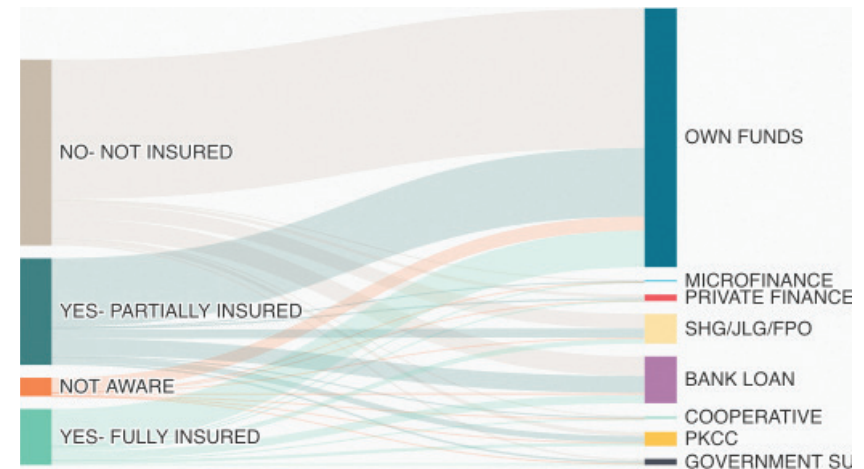


Source of Investment Vs Livestock Category

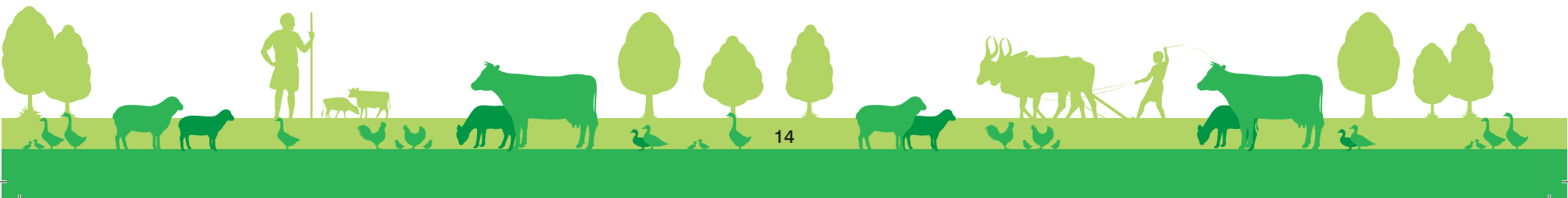
- Livestock farmers rely heavily on own funds, with minimal access to institutional credit such as bank loans, SHG/JLG/FPO financing, or government subsidies.
- SHG-based financing and subsidies are underutilized, pointing to systemic gaps in awareness, accessibility, and delivery.

Insurance Vs Source of Investment

- Own fund investors are largely uninsured or partially insured—indicating a major risk exposure.
- Bank loan users have better insurance coverage, but gaps still remain.
- Insurance awareness is low among those using SHGs, private finance, and microfinance.
- PKCC users show moderate insurance uptake, offering potential for scaling.
- Cooperative and government-subsidy beneficiaries remain underinsured despite being in formal systems.



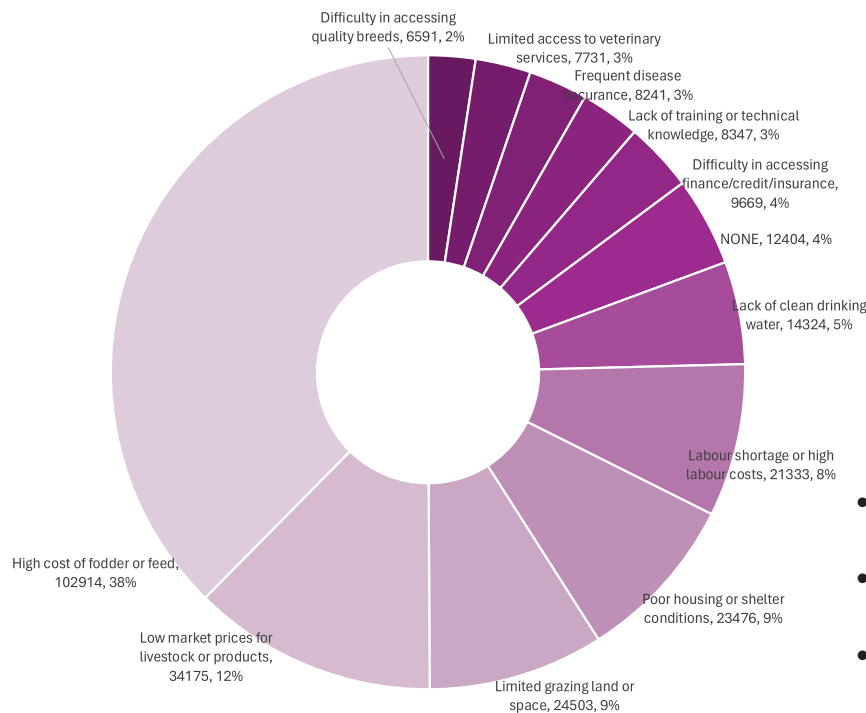
Strengthening institutional credit linkages and targeted insurance schemes can mitigate financial risks and enhance resilience for livestock-dependent households.



DATA DRIVEN INSIGHTS

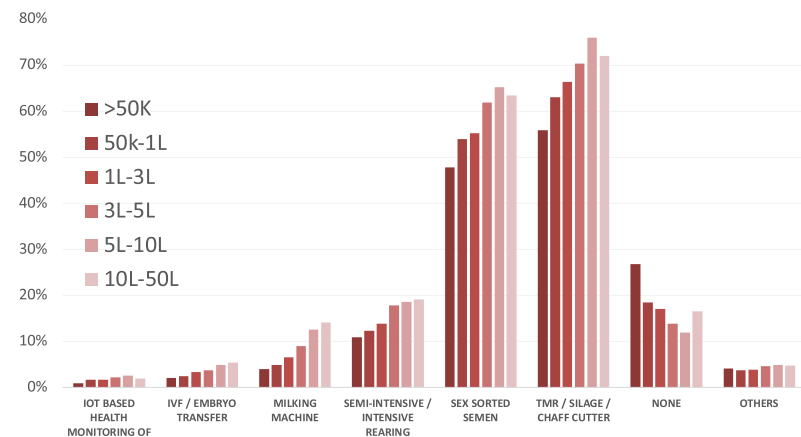
AI/ML BASED DATA ANALYTIC INSIGHTS

Critical Challenges for Livestock Farmers



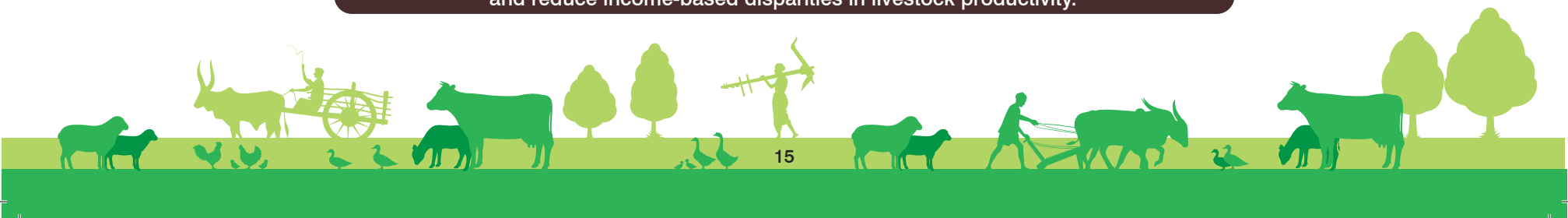
- High Input Costs and Infrastructure Gaps
- Limited Access to Services and Knowledge
- Market and Labor Constraints Hindering Enterprise Viability

Technologies Adopted Vs Income Groups



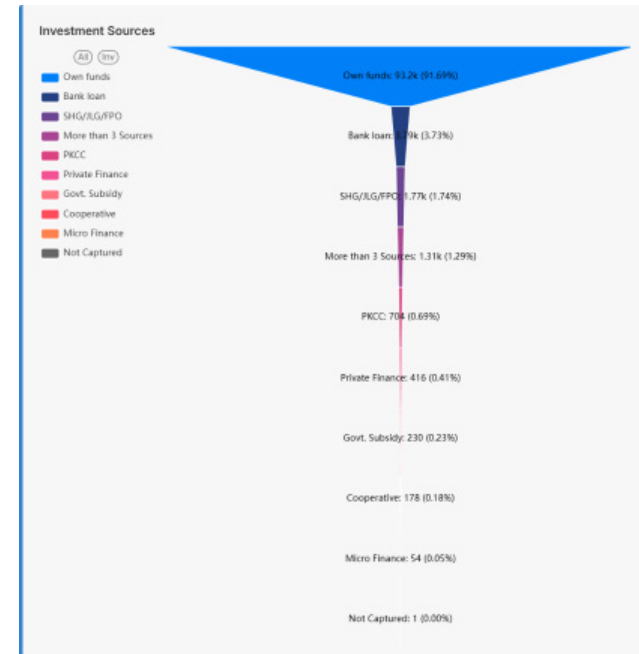
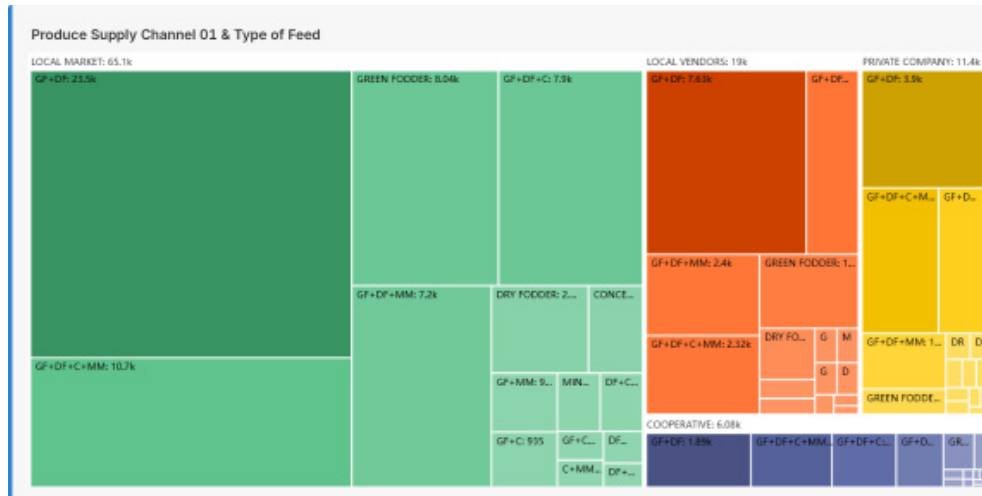
- Higher income groups adopt more advanced technologies like milking machines and semi-intensive rearing at significantly higher rates.
- Sex-sorted semen and TMR/silage/chnaff cutters are widely adopted across all income groups, with usage increasing as income rises.
- Low-income groups show the highest percentage of “no technology adoption”, indicating financial or accessibility barriers.
- IoT health monitoring and IVF/embryo transfer have the lowest adoption across all income levels, even among higher earners.
- Overall, technology adoption strongly correlates with income, reflecting that financial capacity drives modernization in livestock practices.

Targeted subsidies and capacity-building programs can bridge technology adoption gaps and reduce income-based disparities in livestock productivity.

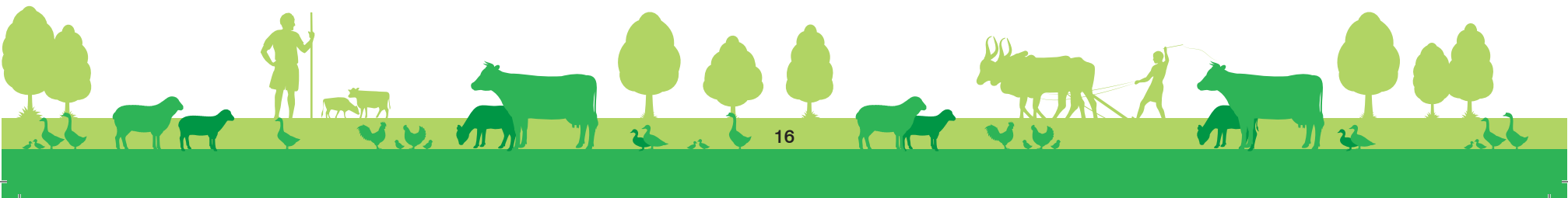


DATA DRIVEN INSIGHTS

AI/ML BASED DATA ANALYTIC INSIGHTS



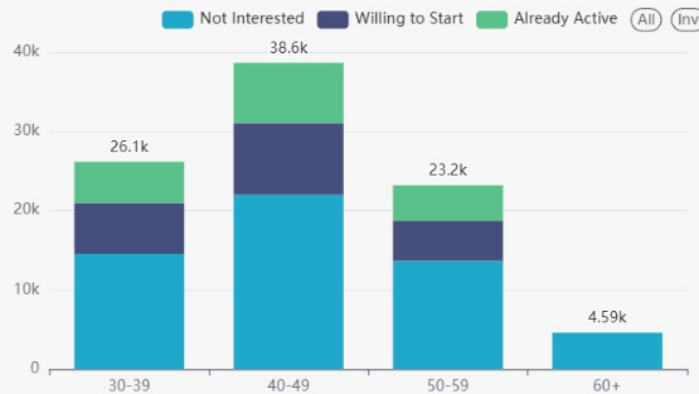
Targeted infrastructure development for SHG and Non-SHG livestock farmers can significantly improve productivity and livelihood security.



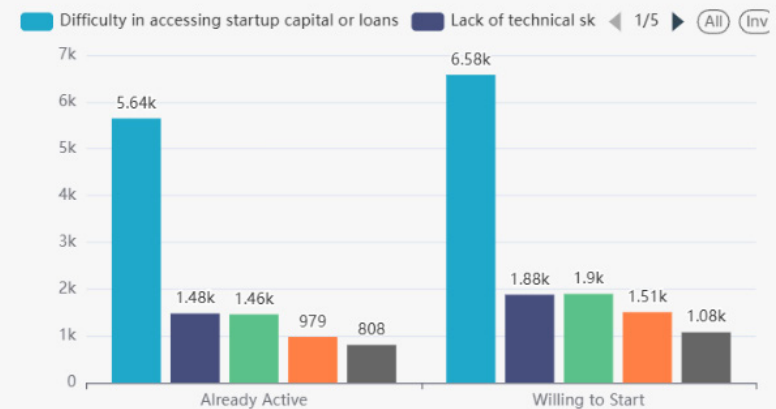
DATA DRIVEN INSIGHTS

AI/ML BASED DATA ANALYTIC INSIGHTS

Entrepreneurship by Age



Entrepreneurial Challenges



Age-specific interventions and targeted support programs are needed to address the varying needs and participation rates across different demographic groups in livestock activities.

Entrepreneurial



CHAPTER 3: THE 5 YEAR ACTION PLAN

GVA FROM RS.1.7 TO 3.6 LAKH CRORE & EMPOWERING 25 LAKH SHGS

Economic Growth Targets

Action: Achieve 20% CAGR in livestock sector

Impact: GVA doubles from Rs.1.70L Cr to Rs.3.60L Cr

Action: Boost credit flow by 50%

Impact: Rs.15K Cr available for tech adoption

Action: Nurture 100 agritech startups

Impact: Solutions for IoT health monitoring, fodder tech

Livelihood & Socio-Economic Impact

Action: Empower 40L stakeholders (25L SHG women + 15L farmers)

Impact: Livestock-dependent incomes secured

Action: Create 1L entrepreneurs

Impact: Fill gaps in fodder, vet services, tech

Action: Tribal piggery units + women-led sheep cooperatives

Impact: Diversified income for marginalized groups

Productivity & Nutrition Goals

Action: 100% Sex-Sorted Semen (SSS) + IVF adoption

Impact: 60L elite calves; 5L high-yield cattle

Action: Improve breeds/nutrition

Impact: Milk yield +67% (2,100kg, 3,500kg/animal)

Action: Expand poultry & small ruminants

Impact: Eggs: 200/yr per capita (+83%) & Meat: 35 kg/yr (+74%)

Sustainability & Green Initiatives

Action: Seaweed feed additives

Impact: Methane emissions 40-60%

Action: Ethno-veterinary practices

Impact: Low-cost, eco-friendly disease control

Action: Maize cultivation for feed

Impact: Reduce poultry feed imports

Technology Integration

Action: AI/ML disease prediction + IoT sensors

Impact: Real-time livestock health monitoring

Action: Blockchain traceability

Impact: Transparent supply chains

Action: WhatsApp-based RTGS

Impact: Instant farmer advisories

Future-Ready Infrastructure

Action: 10L acres green fodder

Impact: Year-round fodder security

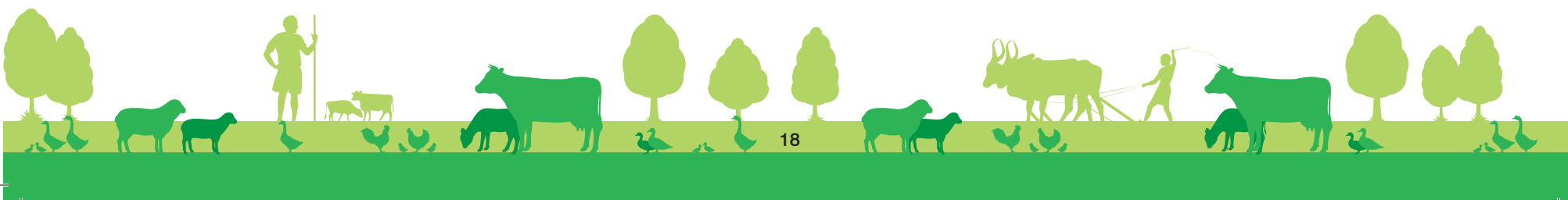
Action: Automated milking systems

Impact: Precision farming at scale

Action: 100% livestock insurance

Impact: Risk-proofed farmers

Andhra Pradesh: Pioneering Excellence in Elite Cattle, Buffalo, Sheep & Goat Breeding — Transforming Livestock Future by 2030



FOUR-PRONGED LIVESTOCK ENTREPRENEURSHIP FRAMEWORK FOR INCLUSIVE GROWTH

Livestock Entrepreneurship Development Framework

1

Low-Cost, High-Impact Micro-Enterprises

Investment: Rs.20,000 - 50,000

Annual Income: Rs.1 - 2 lakh

Target: 25 Lakh Non-lakpati SHG Women

Examples: Backyard poultry, goat rearing, small-scale dairy

2

Integrated Farming for Livestock Farmers

Investment: Rs.3 - 6 lakh

Annual Income: Rs.5 - 10 lakh

Target: 15 lakh farmers

Approach: Crop-livestock synergies (e.g., fodder + dairy)

3

Medium-Investment, Medium-Return Models

Investment: Rs.1 - 3 lakh

Annual Income: Rs.3 - 6 lakh

Target: 1 Lakh Agripreneurs

Examples: Semi-commercial poultry, sheep cooperatives

4

High-Return Commercial Projects

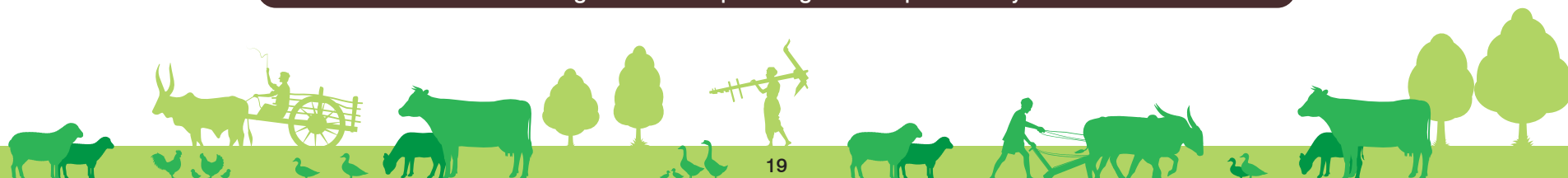
Investment: Rs.5 - 15 lakh

Annual Income: Rs.15+ lakh

Target: 50,000 High Potential Entrepreneurs

Examples: Dairy processing, meat value chains

Scalable livestock entrepreneurship models with tiered investment approaches can drive inclusive rural growth while optimizing sectoral productivity.



CHAPTER 4: LIVESTOCK GOVERNANCE 360°: AI-POWERED REAL-TIME DASHBOARD FOR ACTIONABLE INSIGHTS

TRANSFORMING LIVESTOCK MANAGEMENT THROUGH SMART MONITORING & COLLABORATIVE DECISION-MAKING

Project Management Unit (PMU):

A dedicated team overseeing implementation, coordination, and data-driven decision-making. Ensures alignment with targets, identifies bottlenecks, and accelerates outcomes.

Performance Analysis:

Tracks KPIs (e.g., milk production, vaccination, fodder supply) against predefined targets. Enables proactive interventions through trend analysis and predictive insights.

Workbook at Field Functionary Level:

Ground-level data capture via digital tools ensures accuracy and accountability. Empowers frontline workers with real-time updates and actionable tasks.

Participatory Situational Analysis:

Engages stakeholders (farmers, SHGs, FPOs) to ground decisions in local needs. Combines field insights with dashboard analytics for adaptive governance.

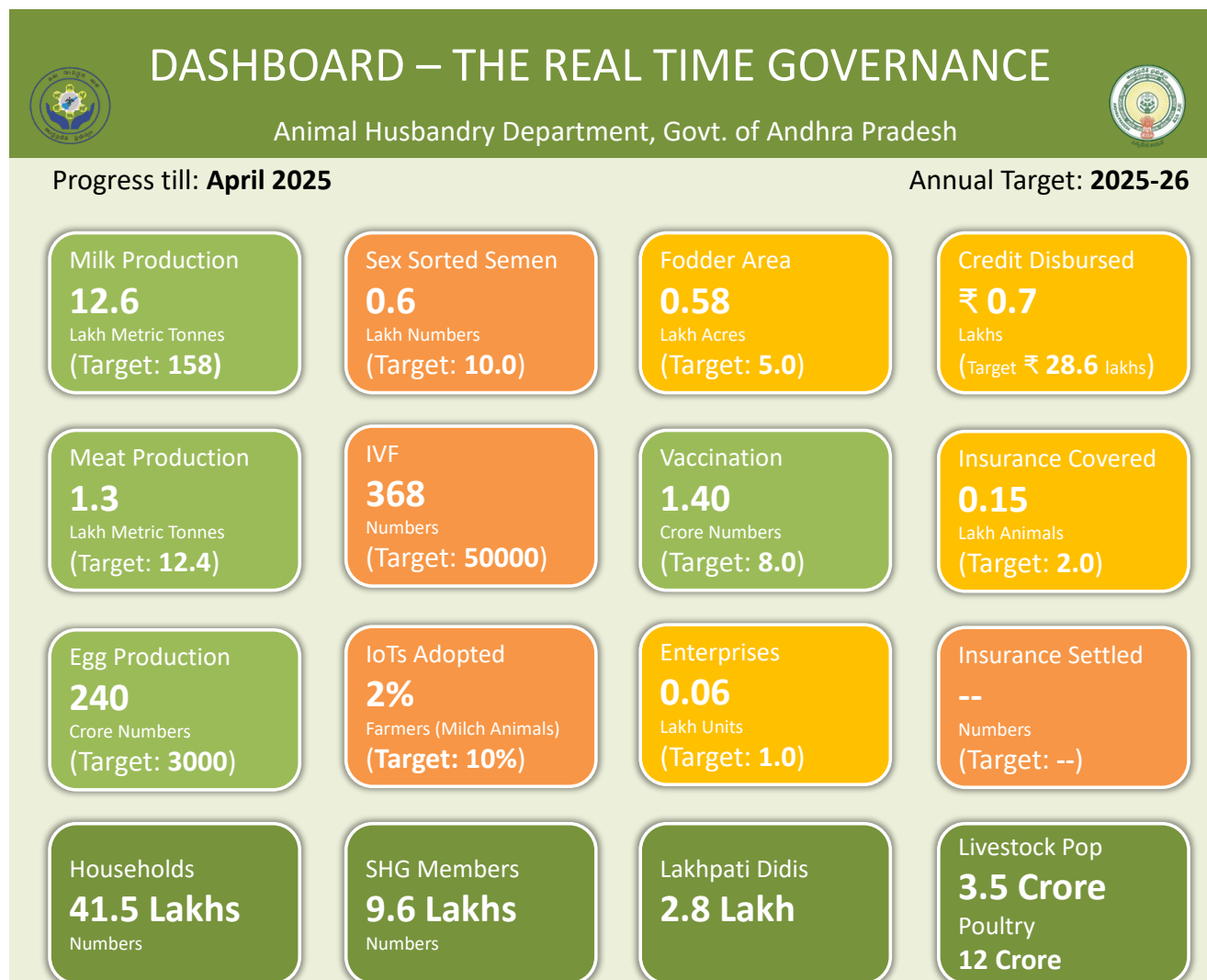
Dashboard: The Engine of Real-Time Governance:

Live Monitoring: Tracks progress (e.g., 20% milk production achieved) and flags delays (e.g., 1% IVF target).
Decision Acceleration: Alerts PMU to prioritize lagging sectors (e.g., fodder at 12% of target).
Stakeholder Empowerment: Shares data with households (41.5L), SHGs (9.6L), and FPOs (10/80) for collaborative action.

Integrated digital governance combining real-time dashboards, field-level data capture, and participatory analysis accelerates livestock sector outcomes while ensuring transparency.

INNOVATING FOR IMPACT

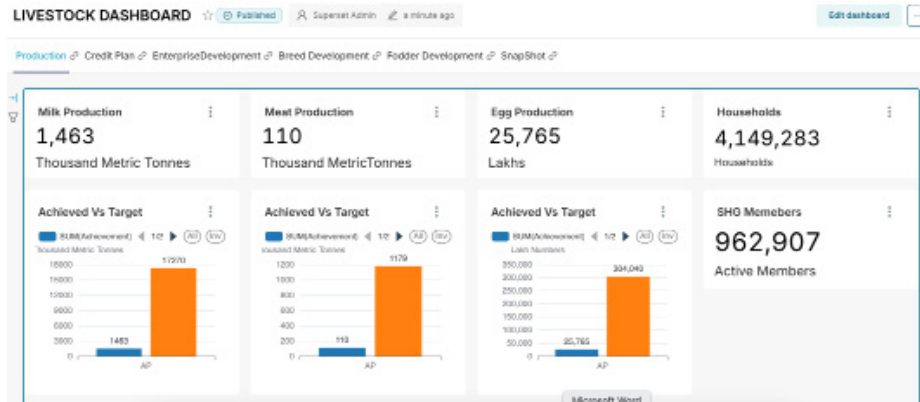
AI, DASHBOARDS, AND REIMAGINED SMART GOVERNANCE



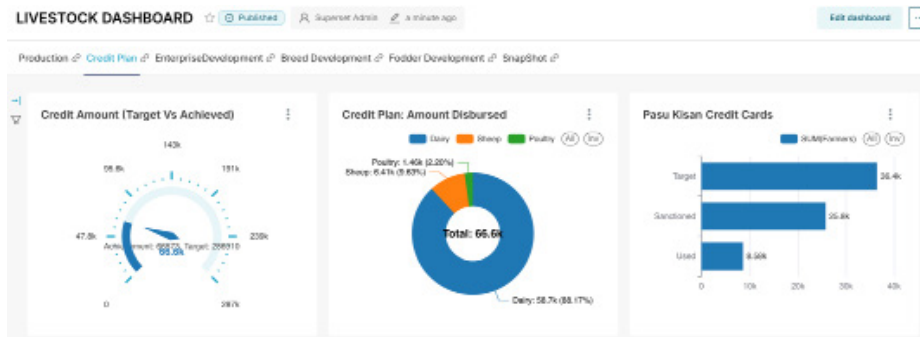
Real-time digital governance with performance dashboards accelerates livestock sector transformation through data-driven decision-making and accountability.

INNOVATING FOR IMPACT

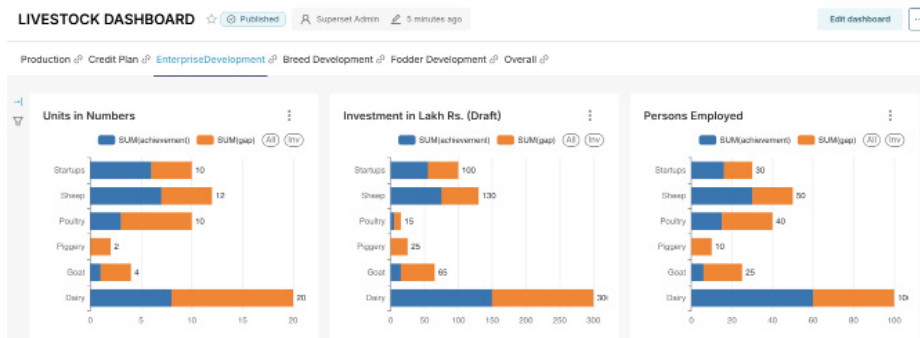
AI, DASHBOARDS, AND REIMAGINED SMART GOVERNANCE



Screen to review the target and status of milk, meat and eggs production. District wise progress also can be viewed in the same screen



To review the Credit plan and actual credit disbursement and Pashu Kisan Credit cards



To review the Artificial Insemination

Integrated digital dashboards enable real-time monitoring of livestock productivity, credit flows, and breeding programs for data-driven policy implementation.



CHAPTER 5: CORE OBJECTIVES OF THE CONCLAVE



Zero Poverty

25 Lakh Non-Lakhpatti Didis to become Lakhpatti Didis : Promote low-cost, high-impact SHG livestock models for rural income generation



Entrepreneurship Promotion

50,000 Livestock Entrepreneurs to be promoted : Support training, financing, and market access through integrated supply chain management



Technology Adoption

Foster FPOs, Startups & showcase AI, IoT based animal planning & monitoring, telemedicine, and advanced breeding technologies (AI, IVF, sex-sorted semen)



Global Best Practices

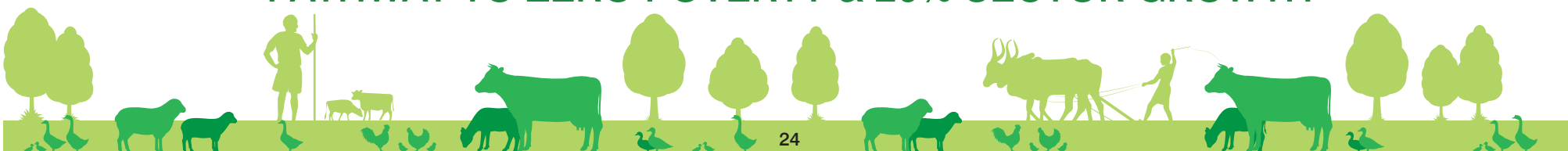
Knowledge exchange on One Health, Circular Economy, AI-driven herd management, Advanced Reproductive Technologies, feed & fodder management, smart supply chains, product value addition, climate resilience, etc.



20% sectoral growth & top national ranks powered by

– Predictive analytics for animal productivity, Credit plan, Tailored financial products for dairy/poultry/meat sectors, and Blockchain-enabled traceability

EMPOWERING WOMEN THROUGH LIVESTOCK PATHWAY TO ZERO POVERTY & 20% SECTOR GROWTH



KEY THEMES FOR CONCLAVE



Zero Poverty and Women-Led Entrepreneurship

Strengthening Self-Help Groups (SHGs) and promoting women-led livestock enterprises for inclusive economic growth. Developing livestock-based poverty alleviation programs targeting marginalized communities, particularly in backward areas.



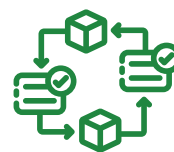
Advanced Breeding, Health, and One Health Approach

Implementing Sex-Sorted Semen, In-Vitro Fertilization (IVF), and genetic improvement programs for higher productivity. Strengthening disease forecasting, preventive vaccination programs, mobile veterinary clinics, and zoonotic disease control through One Health initiatives. Expanding animal shelters and welfare programs under initiatives like Gokulam for cattle, sheep, and poultry development.



Feed and Fodder Development for Sustainable Productivity

Large-scale adoption of Total Mixed Ration (TMR), silage, and high-yielding fodder crops to bridge feed shortages. Promoting fodder entrepreneurship models through AHIDF (Animal Husbandry Infrastructure Development Fund) and farmer cooperatives. Implementing community-based fodder banks and decentralized feed production units for year-round feed availability.



Infrastructure, Value Addition, and Market Integration

Strengthening cold chain logistics, processing units, and GI-based branding for dairy, meat, and poultry products. Expanding livestock-based MSMEs, promoting value-added dairy and meat processing units, and linking small farmers to export markets. Establishing livestock product retail chains, e-commerce integration, and digital marketing support for rural entrepreneurs.



Technology, Credit, and Policy for Livestock Growth

Deploying AI, IoT, blockchain, and precision farming technologies for efficient livestock management. Expanding access to livestock insurance and credit schemes for risk mitigation. Strengthening data-driven governance, policy implementation for feed & fodder/ dairy/sheep & goat/ poultry, and capacity building for veterinary professionals and farmers.

WHY ATTEND THE CONCLAVE?

Unlock Tech-Driven Opportunities:

Learn how AI, IoT, blockchain, wearable sensors, WhatsApp based services, Real Time Governances and drones are revolutionizing livestock management, boosting productivity, and reducing risks.

Network with Key Stakeholders

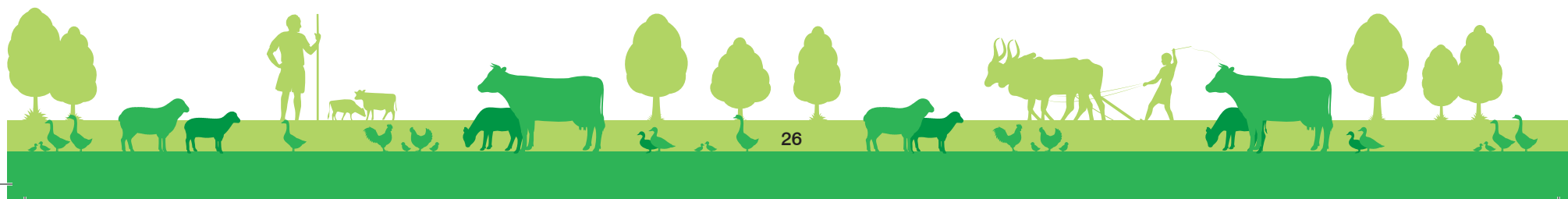
Engage with the policymakers, national/global experts, Agritech startups, and SHG leaders shaping Andhra's agrarian future.

Access Growth Partnerships

Explore collaborations with FPOs, banks, market linkages, and tech adoption.

Drive Rural Prosperity

Gain insights into AP's 5-year roadmap to double livestock GVA (Rs. 1.70 lakh Cr to Rs. 3.60 lakh Cr) and empower 40 lakh rural stakeholders.



AGENDA

Zero Day (12-05-2025)

INTERNAL LAB & ROUND TABLE WITH EXPERTS & FARMERS / SHGs / NGOs

Internal Lab on 10 Thematic Areas
with AHD, DRDA, APDDCF Officials +
Progressive Farmers (Dairy/Sheep &
Goat/Poultry) + SHG Women + NGOs

Day 1 (13-05-2025)

FORMAL INAUGURATION OF CONCLAVE

- Interactive session continues up to lunch
- Formal inauguration of the Conclave by Hon'ble AH Minister
- Presentation by Groups

Day 2 (14-05-2025)

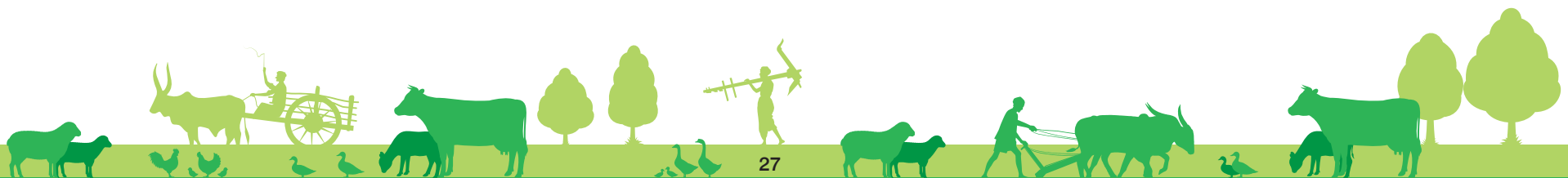
HCM INTERACTION & LAUNCH OF 5 YR ACTION PLAN

Presentation by Groups

Release of Strategy Document
by HCM

Awards to best farmers
and SHGs

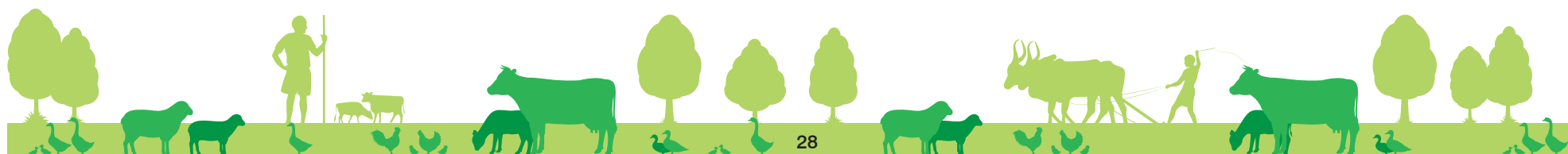
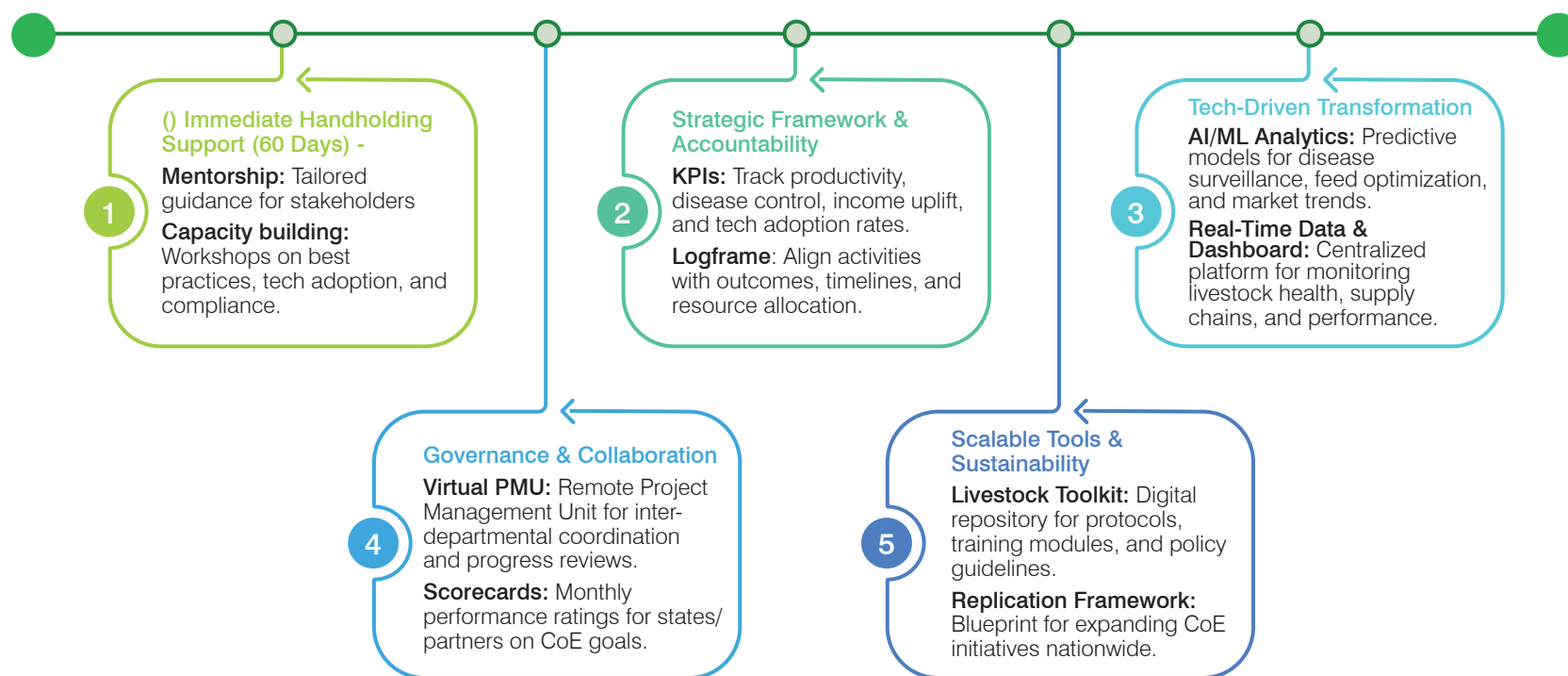
Q & A / HCM Message



CHAPTER 6: NEXT-GEN LIVESTOCK GOVERNANCE

POST-CONCLAVE STRATEGY FOR AI-DRIVEN LIVESTOCK TRANSFORMATION

Post-Conclave Steps for Livestock Conclave: Centre of Excellence (CoE) at GFST





ANNEXURE: STRATEGIC LEVERS

10 TRANSFORMATIONAL SHIFTS IN BREED IMPROVEMENT, FODDER SECURITY, TECH INTEGRATION, AND SHG EMPOWERMENT

Driving Transformation in Livestock: A Change Management Journey- 10 thematic groups

Create Urgency – Build Coalition – Form Vision – Mobilize Army – Remove Barriers – Deliver Quick Wins – Sustain Growth – Institutionalize Change

Low-Hanging Fruits (Quick Wins) 3-6 months

Breed Development
(use of sex sorted semen)

01

**Stall feeding -
Fodder development**
(SERP)

02

Poultry Promotion
(both backyard and
commercial)

03

**Small Ruminant
Development**

04

**Credit Plan, Insurance
Support** (NABARD,
RBI)

05

Reasons: Easy interventions with fast measurable impact
(productivity, cash flows, trust-building)

Medium-Term (Strategic Push) 6-18 months

10

**Real Time Governance
& Technology
Adoption**

09

**One health, Climate
Resilience, Sustainable
Development**

Reasons: Complex changes needing infrastructure, behaviour change,
large-scale coordination across sectors

Long Term Goals/ Transformation 2-5 years

08

Market Linkages
(Infrastructure,
market linkages)

07

Enterprise Development
(Startups, Cattle, Sheep,
Goat, Piggery, Poultry farms)

06

**Organizational
Development
Capacity buildings**

Reasons: Require system changes, SHG/entrepreneur
mobilization, building networks and skills

Andhra Pradesh - Leading India's Tech & AI Powered Livestock Revolution

Transforming Livestock Sector Growth for Poverty Eradication & Next-Gen Solutions



S.P. Tucker, IAS (Retd.)
Vice Chairman & Director

Strategic Partnerships & Scalable Frameworks

GFST works pro bono with governments to co-develop transformative systems anchored in a structured 5-Year Strategy & Action Plan. Through methodologies like Rapid Survey Methodology and Unified Methodological Protocols (UMP), GFST creates standardized SOPs and toolkits that enable cross-sector interoperability and data-driven governance. Aligned with global sustainability goals, this model offers a replicable blueprint for systemic transformation.

Catalyzing Sectoral Growth & Visionary Redesign

As Chief Secretary, I spearheaded the growth of the Livestock sector's GSDP from Rs.0.43 lakh crore to over Rs.1 lakh crore, during 2014-19 establishing it as a pillar of rural prosperity. Building on this legacy, the Global Forum for Sustainable Transformation (GFST) introduces Livestock 2.0—an evolution of the groundbreaking 2014 Livestock 1.0 initiative. This vision redefines animal husbandry as an integrative engine for rural resilience, aligning agriculture, horticulture, and microenterprises within a circular economy. By eradicating poverty, amplifying Self-Help Group (SHG) engagement, and prioritizing resource efficiency, Livestock 2.0 seeks systemic, inclusive growth, ensuring India's development narrative leaves no community behind.

DeepTech-Driven Agricultural Revolution

At the heart of this transformation is DeepTech innovation. Advanced tools like Sex-Sorted Semen enhance genetic quality, while real-time data dashboards enable agile, evidence-based governance. Fintech integration and structured credit access empower farmers to adopt value-added practices, access formal markets, and leverage models like the National Egg Coordination Committee (NECC) for brand development. This tech-powered ecosystem bridges rural potential with global opportunities, fostering precision, scalability, and transparency across supply chains.

Financial Inclusion & Sustainable Entrepreneurship - Next Era of Fintech

Livestock 2.0 prioritizes tailored financial solutions for SHGs and smallholders, de-risking ventures through credit linkages and market-ready frameworks. By nurturing dairy cooperatives, organic horticulture, and circular bio-economies, the initiative transforms animal husbandry into a profitable, climate-resilient livelihood. This strategy aligns with national goals of equitable growth, elevating rural incomes while advancing environmental sustainability.

Collaborative Roadmap for Systemic Change

GFST proposes a 5-Year Action Plan to institutionalize these reforms through multi-stakeholder collaboration, policy coherence, and grassroots capacity-building. I am committed to mobilizing national/global partnerships to scale this model into a replicable blueprint for sustainable development. By uniting innovation, inclusion, and governance, we can transform rural economies—one village, one innovation, and one life at a time. Together, let us convert vision into enduring impact.



SPONSORS

Srinivasa Farms

Mr. Suresh Chitturi

Vice Chairman and Managing Director



The origin of Srinivasa Farms dates back to 1965. We have been a brand leader in the Indian Poultry Industry since five decades. With a strong foundation based on a powerful vision and extraordinary leadership, combined with an uncompromising focus on technological excellence and proven operational efficiency, we are also a preferred and trusted partner among our stakeholders, who include farmers, entrepreneurs, scientists, experts, investors, corporations, customers, employees and strategic partners.

At Srinivasa, we are passionate about food. We believe food is more than just an experience. It's a vehicle for good health and nourishment. Our Purpose is to Provide Quality and Affordable Nutrition and it defines our existence. Our areas of operations include Poultry Production, Poultry Breeding (Layer & Broiler), Animal Feed Production, Soya Extraction, and Mega Food Park. With diverse portfolio of products and services, we currently have operations in Telangana, Andhra Pradesh, Tamil Nadu, Karnataka Maharashtra, Madhya Pradesh, Chattisgarh, Gujarat, Rajasthan, Haryana, Punjab, Uttar Pradesh, Bihar, West Bengal, Assam and further expanding rapidly across pan India.

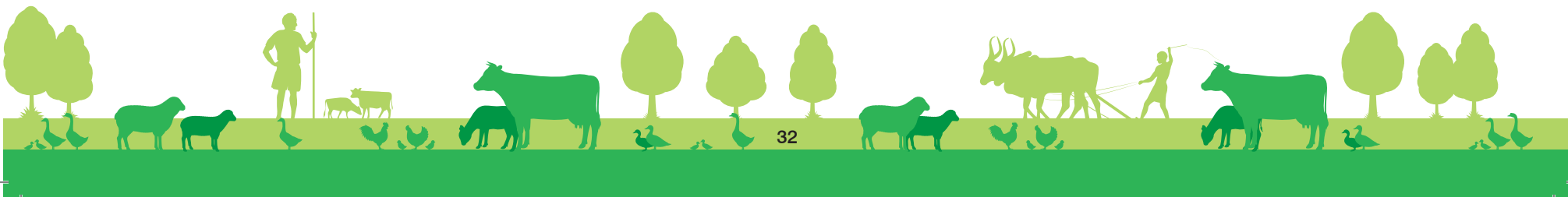


Kamadhenu Feeds Pvt. Ltd.

Kamadhenu Feeds Pvt Ltd. was founded by Shri B. Venkateswara Rao in 1988 and is a privately-owned family business that specializes in the manufacture of compound cattle feed in the name of KAMADHENU CATTLE FEED.

We are one of the leading, most trusted Animal Feed manufacturers in South India for over 3 decades. The market base is fast growing and Kamadhenu Feeds expands its production capacity to 1,50,00 MT/ annum in 2019 with its latest state-of-the-art new facility in Veeravalli.

We are, and have been, the authorized main Vet Feed Suppliers for major dairies such as Heritage Co-operative, Vijaya Dairy, Mulkanoor Dairy (largest women run dairy in India), NDDDB (for its requirements in South India and also many large-scale dairy owners having around 100 to 150 Milking animals. Many large-scale and small-scale dairies tie up with Kamadhenu for their Vet Feed.



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GFST



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Dr. P. Sambasiva Rao



Dr. Ch. Srinivasa Raju



Mr. GMVGK Bangaru Raju



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Mr. Anand Sharma



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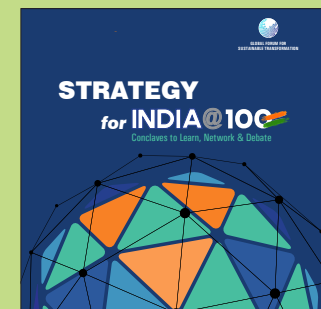
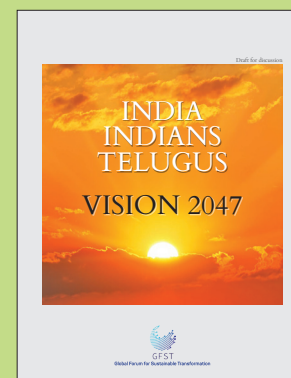
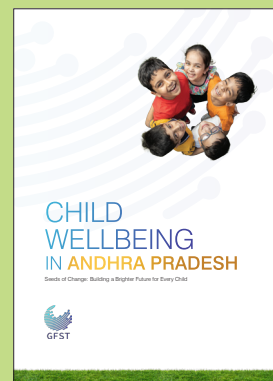
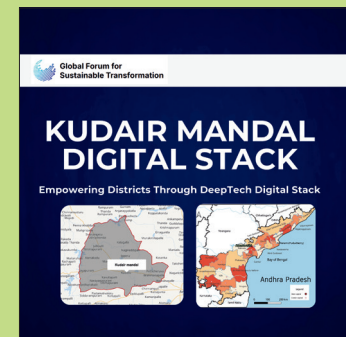
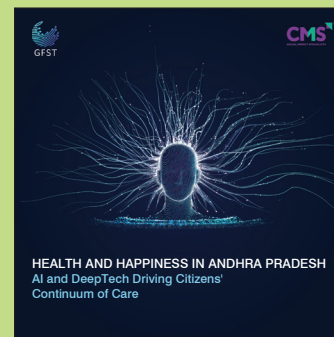
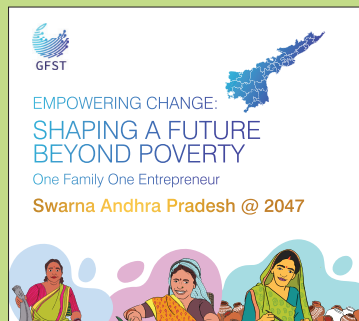


Mr. Binish Thomas



Mr. Saurabh Sharma

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