Energizing the Collective Wisdom & Rescripting Industry's DNA

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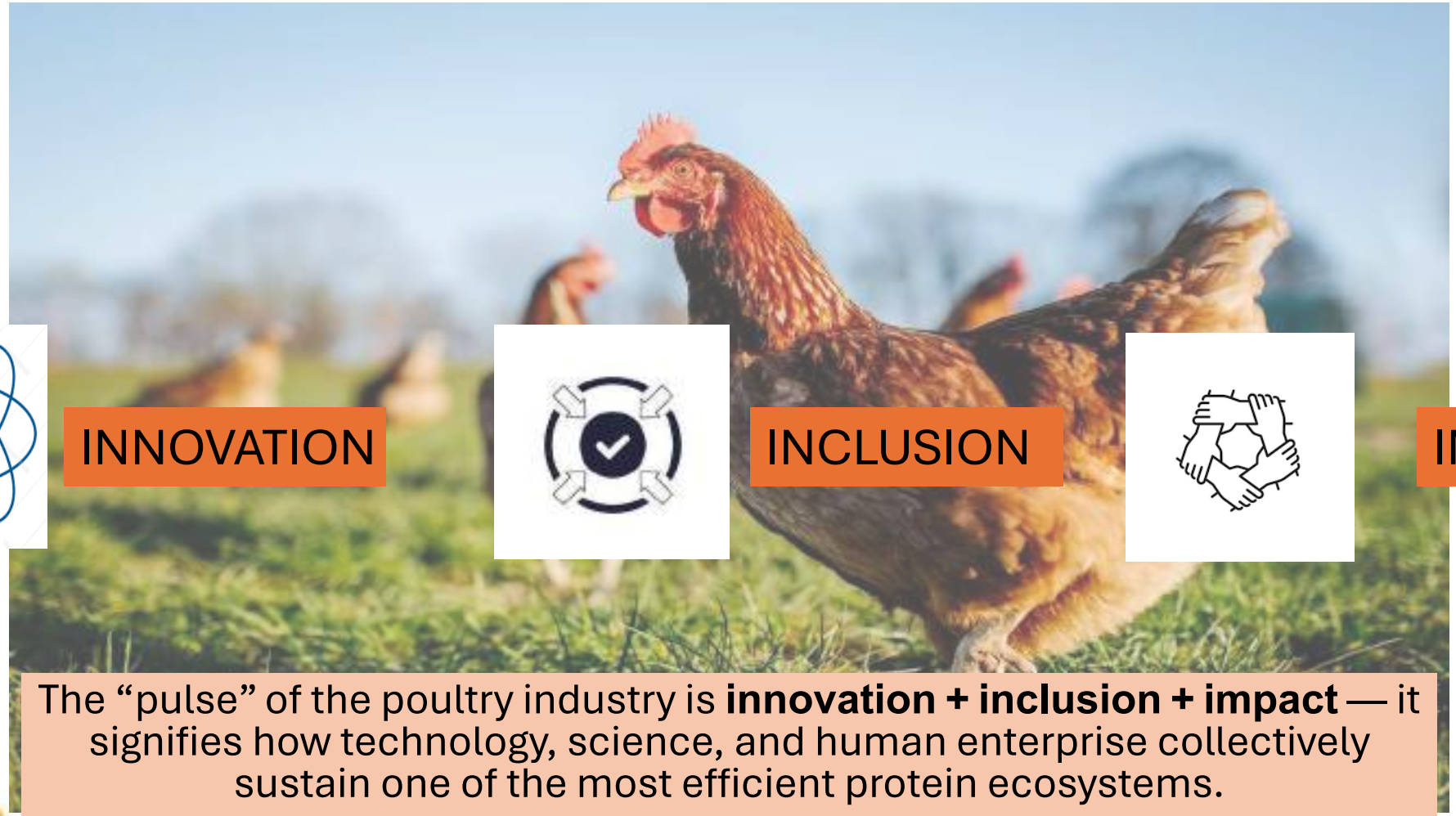
THE PULSE OF PROGRESS- MEASURING GROWTH BEYOND NUMBER



INNOVATION

INCLUSION

IMPACT

The “pulse” of the poultry industry is **innovation + inclusion + impact** — it signifies how technology, science, and human enterprise collectively sustain one of the most efficient protein ecosystems.

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130+ billion eggs/year

6+ million tonnes of broiler meat

30 million livelihoods supported

World's 3rd largest egg producer

When we speak of the *pulse* of progress in poultry, we aren't talking about statistics alone — we're talking about the living rhythm of an industry that breathes innovation every day.

But the real story isn't the scale — it's the sophistication:
How biosecurity, genetic selection, nutrigenomics, and smart farm automation have together redefined efficiency.

And like a true heartbeat, it's dynamic — sometimes racing through market disruptions, steady under pressure — but always *alive* and *adaptive*.

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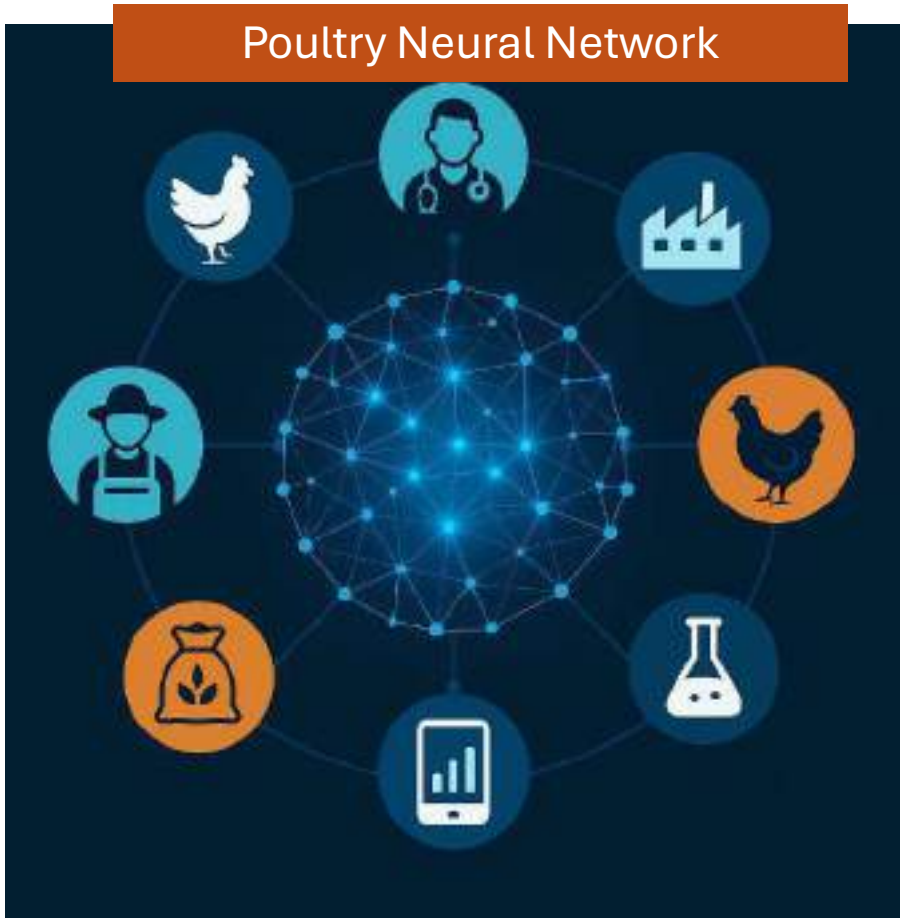
COLLECTIVE WISDOM- THE LIVING INTELLIGENCE OF POULTRY



Progress in poultry is not a solo discovery —

it is the sum of millions of observations, decisions, and shared experiences

that refine the science of feeding a nation.

Poultry Neural Network is made up of *interconnected nodes*.

Each node represents a contributor: farmers, veterinarians, feed manufacturers, researchers, geneticists, processors, and policymakers.

Information continuously flows through these nodes.

The result is **collective wisdom** — the industry's ability to adapt faster, solve problems collaboratively, and innovate sustainably. The stronger and more connected the network, the smarter and more resilient the entire poultry sector becomes.

The poultry neural network is the digital and human brain of the industry — transforming scattered knowledge into synchronised intelligence.

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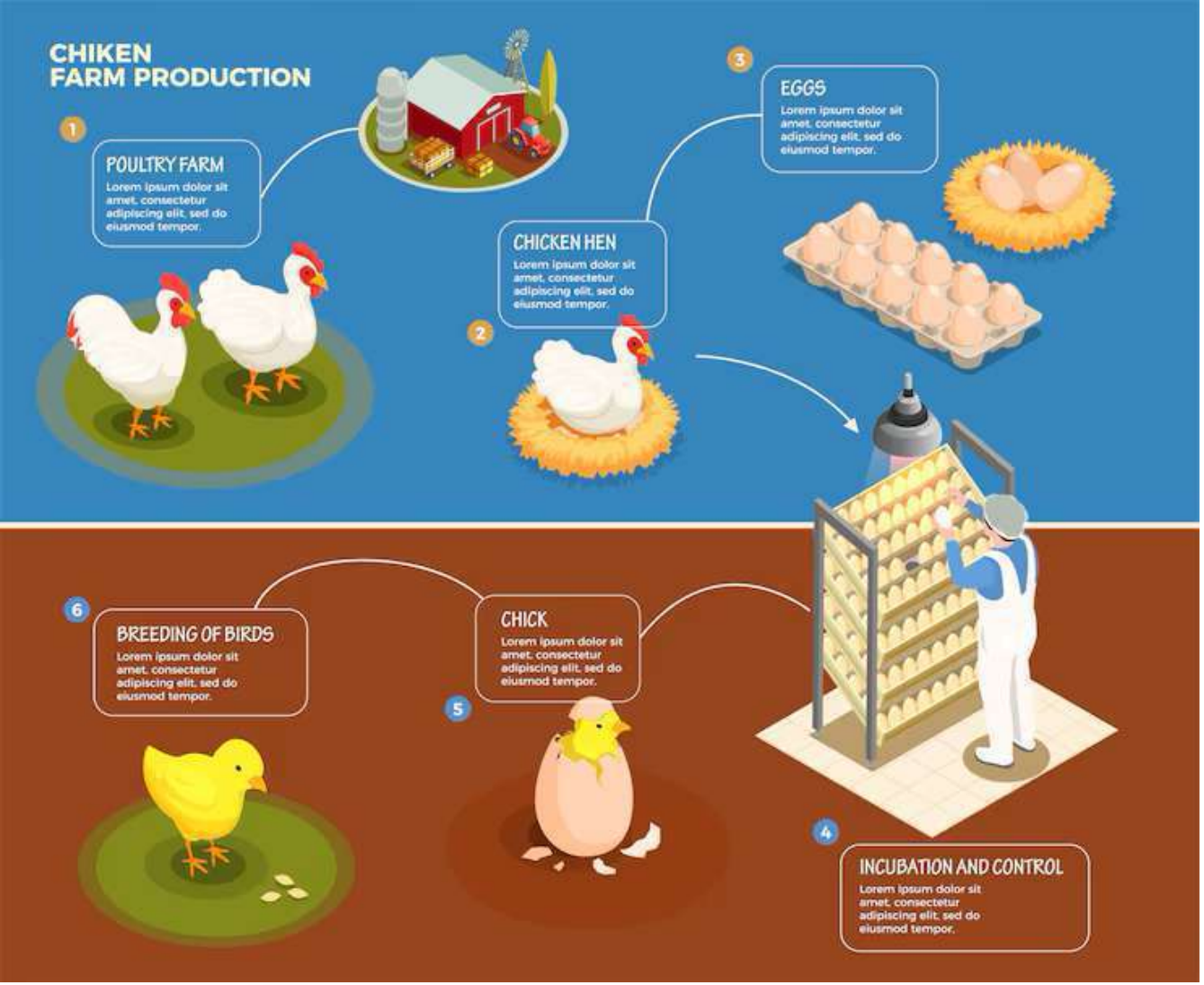
WHY IS THERE A NEED TO ENERGIZE COLLECTIVE WISDOM?

- Fragmented & Unstructured Knowledge Flows
- Data Governance, Trust & Incentives
- Scalability & Inclusion
- Rapid Change ± Complexity
- Translating Knowledge into Practice

For the poultry neural network to truly energise collective wisdom, these nodes must be well-connected, well-resourced, trusted, and capable of translating insights into action. The current challenges primarily concern **connectivity, trust, quality, inclusion, and speed.**



UNDERSTANDING THE POULTRY VALUE CHAIN

Poultry value chain supports
6 million livelihoods.

Input →Production Farm → Trader/Aggregator →Transport (Live Crates) →Wet Market →On-site Slaughter →Consumer — 90%

Hatchery →Production Farm → Processing Plant →Chilling/Cut-Up → Packaging →Cold Chain →Modern Retail/HoReCa →Consumer — 10%

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Each node adds a *different kind* of value:

Stage	Core Value Added	Typical Inefficiencies
Feed inputs	Nutritional & energy efficiency	Poor raw material optimization, price volatility
Breeding / Hatchery	Genetics, chick quality	Uneven chick quality, logistics stress
Farming (Grow-out)	Conversion of feed → meat/egg	Mortality, inconsistent biosecurity, low technology adoption
Processing	Food safety, uniformity	Lack of cold chain, low automation
Distribution / Retail	Accessibility, freshness	Middlemen margins, inconsistent cold storage
Consumer	Nutrition & trust	Low differentiation, poor branding

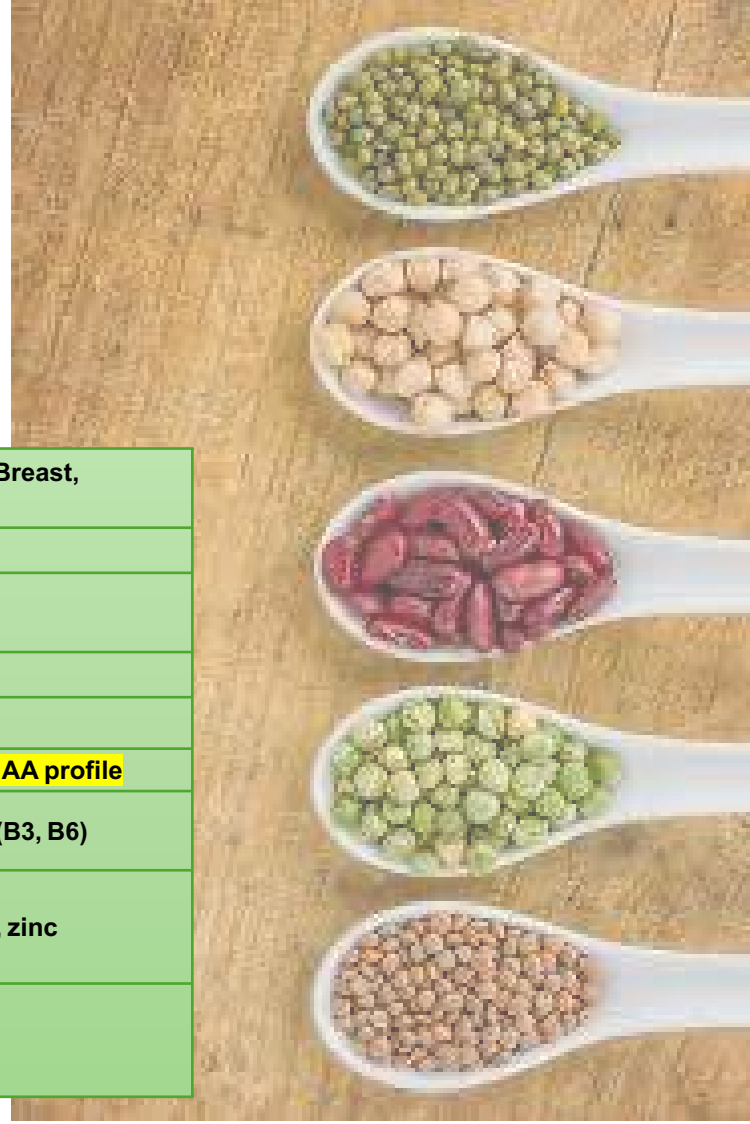
Identifying & Correcting Value Chain Inefficiencies

Type	Example	Correction / Innovation
Technical	Poor FCR, inconsistent egg weight	Nutrigenomics, precision feeding, enzyme optimization
Structural	Fragmented producer networks	Cooperative clusters, integrator-farmer partnerships
Informational	Lack of real-time data	Digital dashboards, IoT-based monitoring
Economic	Unbalanced profit distribution	Transparent pricing models, producer-linked brand development
Perceptual	“Cheap protein” stigma	Brand storytelling, nutritional literacy campaigns

11th Oct, 2025.

PM Dhan Dhaanya Krishi Yojana- Total outlay of **₹24,000 crore**; Mission for Aatmanirbharta in Pulses with an outlay of Rs. **11,440 crore.**

Correcting the Narrative: A Reality Check



Recent policy push for pulses is important — but calling them the primary protein source for Indians is misleading & ignores science and nutrition gaps.
India's true protein engine- Eggs and chicken meat stay neglected.

Nutrient	**Toor Dal (Arhar)** (Cooked)	**Moong Dal** (Cooked)	**Chana Dal** (Cooked)	**Egg (Whole, Boiled)**	**Chicken (Breast, Cooked)**
Protein (g)	~7.0	~7.0	~8.0	**13.0**	**27.0**
Protein Quality (PDCAAS / DIAAS)	0.55–0.60	0.65–0.70	0.65–0.70	**1.00 (benchmark)**	**0.92–1.00**
Digestibility (%)	~65–70	~70–75	~70–75	**>95**	**~95**
Carbohydrates (g)	~20	~19	~20	~1.1	~0
Key Amino Acids	**Low in methionine**	Low in methionine	Low in methionine	**Complete AA profile**	**Complete AA profile**
B-vitamins	Moderate	Good	Good	**Excellent (B12, choline)**	**Excellent (B3, B6)**
Essential Micronutrient Highlight	Potassium, folate	Folate	Folate, manganese	**Vit D, B12, choline, selenium**	**Selenium, zinc**
Anti-nutritional Factors	**Phytates** inhibit protein/mineral absorption	Phytates	Phytates	**None**	**None**

If pulses get a dedicated national mission for "protein security",
***why not give similar impetus** to poultry, eggs and meat?*

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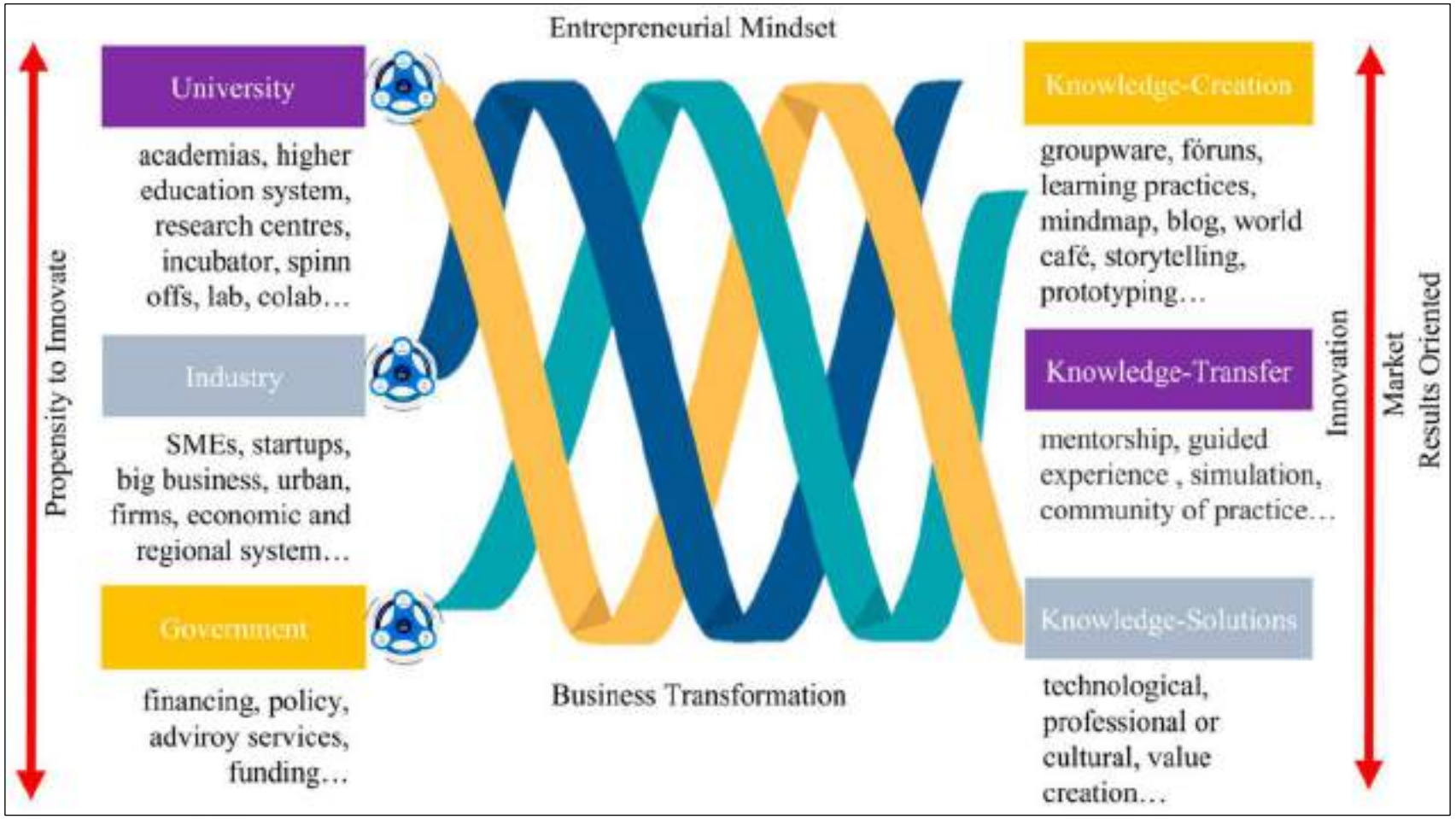
Why ‘Rescripting DNA’?

TRIPLE HELIX APPROACH



The triple helix++ model enables government-industry-academia collaboration to deliver innovation at scale, hence encouraging innovation-led deployment.

Silicon Valley is a flourishing example of the implementation of the Triple Helix Model.

In the emerging context of energy transition, where sector boundaries are blurring, there will be multiple hybridised versions of the triple helix.

FIRST NATIONAL CONCLAVE OF VCs OF VETERINARY UNIVERSITIES AND DIRECTORS OF ICAR ANIMAL RESEARCH INSTITUTES.

ORGANISED BY POULTRY INDIA & MAFSU.

A STEP TOWARDS IMPLEMENTATION OF THE TRIPLE HELIX STRUCTURE.

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Actionable Reforms for Veterinary Education System

INDUSTRY-ALIGNED

Introduce **20% industry-led teaching hours** through guest lectures, internships, and live projects.
Include **value-based training** for professional ethics and accountability in practice

TECHNOLOGY-ENABLED

Encourage **data-driven disease surveillance** and AI-assisted learning systems.
Integrate climate-smart farming and **One Health frameworks** into teaching modules.

ENTREPRENEURSHIP-ORIENTED

Establish **Innovation & Start-up Incubation Cells** in each veterinary university to promote translational research and student entrepreneurship.
Establish **animal husbandry entrepreneurship electives** and business management courses.

OUTCOME-FOCUSED

Restructure programs as **skill and competency-based** rather than purely theoretical.
Encourage **interdisciplinary learning** — linking animal health, economics, climate, and policy.

Skilling Beyond Degrees!

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Reflection — From Resilience to Reinvention

An industry that has mastered survival must now master *transformation.*
Resilience built our foundation; reinvention will build our future.

- From linear supply chains to circular systems.
- From resource-intensive models to regenerative ones.
- From product-driven growth to purpose-driven innovation.

Resilience helped us endure.
Reinvention will help us endure with purpose.
And that begins with understanding the new reality shaping our DNA.

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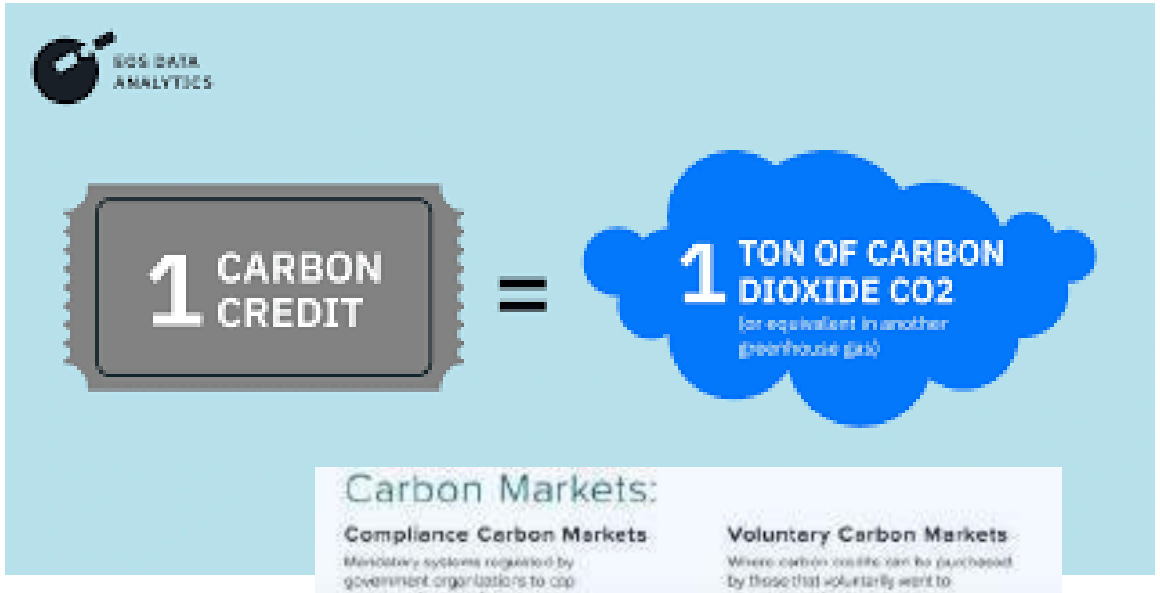
SUSTAINABILITY=COMPETITIVENESS

Energising Sustainability: The Future



What gets measured gets valued —
and
what gets valued gets improved.

Poultry, as one of the world's most efficient protein systems, can be the ***first livestock sector to monetise its sustainability.***

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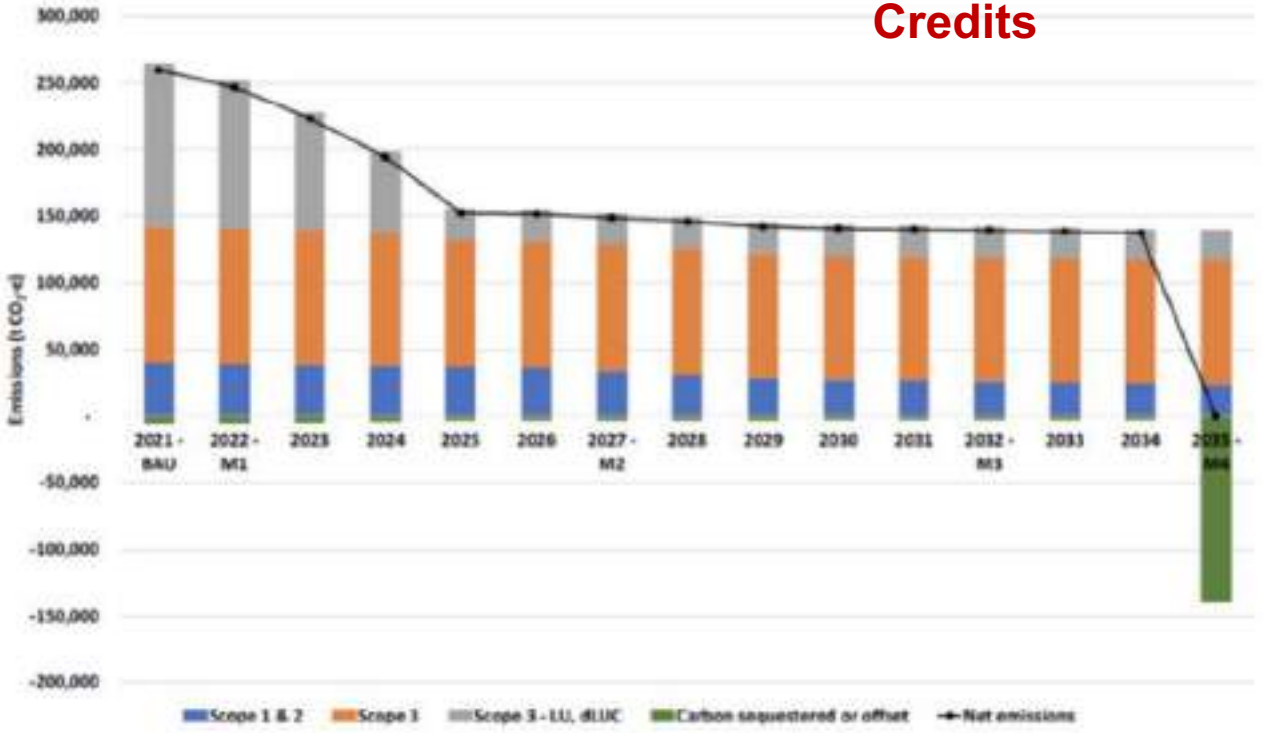
Why the Poultry/Chicken Industry is Relevant for Carbon Credits



Module 1 – low-GHG diet
Module 2 – low-GHG diet, on-site solar
Module 3 (low carbon) – low-GHG diet, on-site solar, energy efficiency
Module 4 (carbon-neutral) – low-GHG diet, on-site solar, energy efficiency, purchased offsets

Figure 1. An example of a low-carbon and carbon-neutral pathway.

Borrowed from Agri Futures Australia

Several emission sources exist in poultry production, and therefore, there are potential pathways for carbon credits or offsets.

- Feed production (crop cultivation, fertiliser use, land use change) → upstream emissions.
- On-farm energy use, heating, ventilation, cooling and lighting.
- **Manure management** (especially nitrogen, methane, and nitrous oxide emissions).
- By-product handling (litter, waste, off-farm transport).
- Processing, packaging, cold chain and transport to retail.
- Opportunity for **sequestration** or **emission avoidance** via the circular economy.

IN SIGHT- EXAMPLES & CASE STUDIES

NEWS RELEASE

[Japan's First Initiative] Green Carbon, Inc. Completes Program-Based Registration of J-Credits for "Livestock Waste-Derived" Projects, Aiming to Generate 7,000 Tons of J-Credits in the First Year.

Through its "J-Credits" system, there is a project in livestock/dairy where **livestock manure management** changes have been registered to issue credits.

- The Brand Promise — Beyond Chicken, Toward Conscience
- Authentic Sustainability — Certified, Not Claimed
- Value Over Volume — Decommoditizing Poultry
- From Product to Platform — Redefining the Category
- Purpose-Driven Profitability

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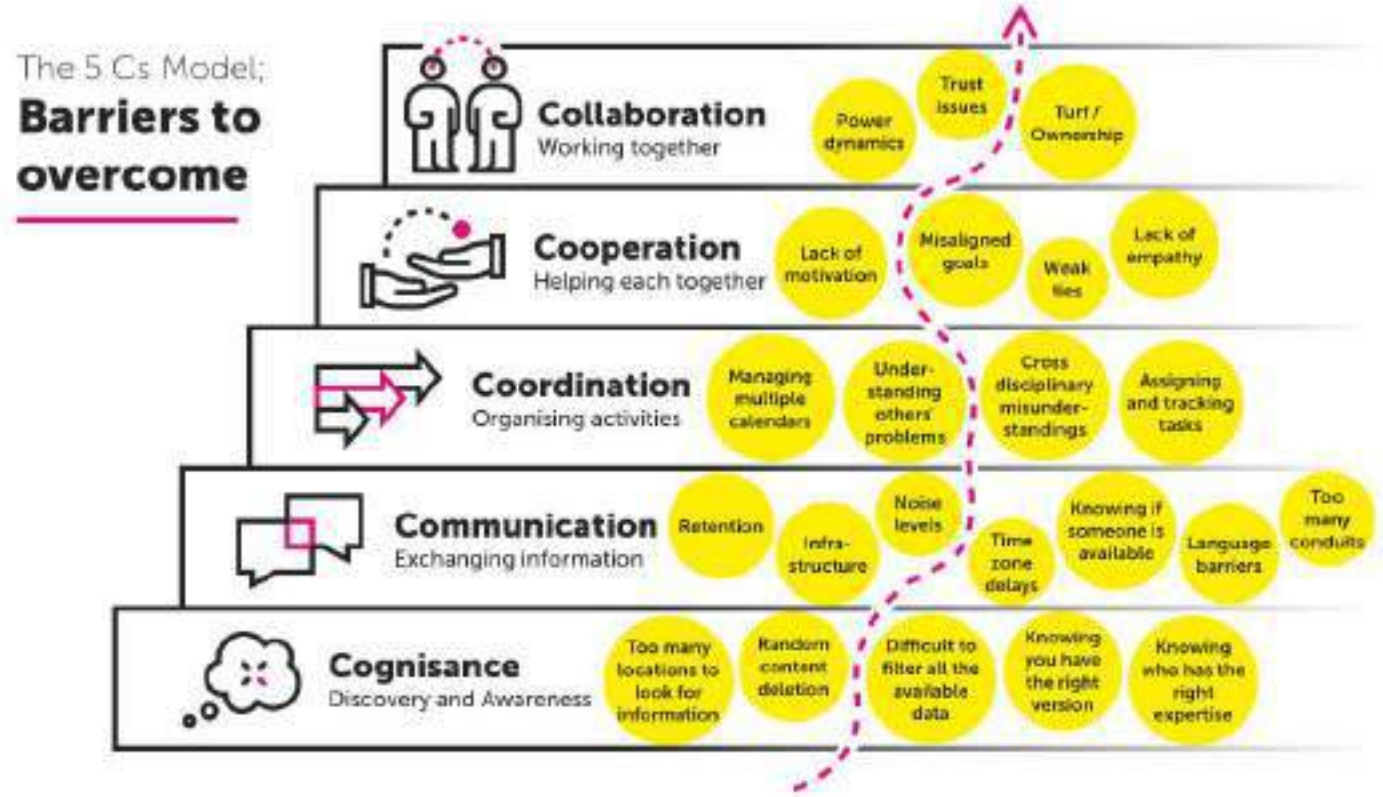
ENABLING COLLABORATIONS- NOW AND HOW?



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Collective Strength: When an Industry Thinks Beyond Companies

The poultry sector thrives on **shared knowledge, shared responsibility, and shared vision**.

- Industry Scale → Collective Impact
- Collective Biosecurity Saves the Sector
- Shared Innovation → Faster Progress
- National Nutrition Impact

A flock flies farther than a bird.
In poultry, progress is not individual — it is **ecosystem-driven**.

INDUSTRY/SECTOR **VERSUS** **COMPANY/ENTITY**

Global Examples of Collective Wins

Country	Collective Poultry Action	Outcome
Netherlands	Cluster model: shared R&D, disease control, efficiency benchmarking	One of highest productivity & lowest antibiotic use in world
Brazil	Unified industry councils + export partnerships	#1 poultry exporter globally

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Building the Future Together —
A Collective Framework for the Next Poultry Revolution

Collectiveness is not about uniformity — it's about unity in direction, diversity in contribution.

Collective Action in Practice

1. **Shared Knowledge Systems**
2. **Shared Responsibility for Climate & Carbon**
3. **Shared Vision for Value Addition**
4. **Technology as Feed Ingredient**
5. **Traceability & Trust**
6. **Circular Value Chains**
7. **Digital Culture**

The Norwegian Salmon Model — where producers ***jointly fund sustainability and marketing research***, then compete on brand and quality.
The result: a **13x growth** in export value (1990–2020). Poultry can mirror this approach.

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THE PLAYBOOK FOR TOMORROW

Our action plan is simple yet powerful:

First, accelerate technology adoption.

Second, scale circular practices.

Third, build open knowledge platforms that allow everyone — from small farmers to large integrators — to learn, share, and grow.

A COLLECTIVE CALL TO ACTION

Our collective wisdom is our superpower — let's use it

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THANK-YOU