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**“Contours of a Sustainable  
Animal Feed Market”**

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# **OECD+FAO Agriculture Outlook Report 2021-2030**

- Pattern of global consumption evolving towards higher share of animal products in diets. So, bigger quantities of crops used as feed.**
- Maize + protein meal will remain most important feed commodities; 60% of total feed use by 2030**
- Feed demand for maize to grow by 1.4% and protein meal by 1.2%**
- Demand growth for protein meal projected to slow, due lower protein meal share in feed rations in EU, China. China to use more maize in feed mix**

# OECD+FAO Outlook

- **Globally meat consumption shifting towards poultry; reflects lower poultry prices in low-income developing countries where demand is price-elastic; as incomes recover, demand will recover**
- **Poultry meat will represent 41% of all protein from meat sources by 2030 as consumers are attracted to lower price, product consistency and higher protein / lower fat content.**

# Challenges; and Poultry scores!

- **Disease outbreaks, sanitary restrictions, trade policies will affect evolution and dynamics of world meat market;**
- **Poultry can respond more quickly to market signals due shorter production cycle as compared with ruminants;**
- **Improvement in genetics, animal health and feeding practices can change quickly**
- **As poultry expands, GHG emissions to slow**

# India Production Trends

| • Product  | Milk | Egg | P.Meat |
|------------|------|-----|--------|
| 2017-18    | 176  | 95  | 3.7    |
| 2018-19    | 188  | 104 | 4.1    |
| 2019-20    | 198  | 114 | 4.3    |
| • 2022-23* | 235  | 136 | 6.2    |

(Milk and Poultry meat in Million Tons;  
Eggs in Billion; \* Projected)

# Current and Emerging scenario

- **AH,D,F: average annual growth rate in 5 years till 2020 was 8.6%. Trend to accelerate**
- **Livestock census 2020. Total milch cattle population up by 10.5% to 74.6 million in 2019. Trend to accelerate;**
- **Strong growth in dairy production + feed intensification = 2.4% feed demand growth next ten years;**
- **Protein meal demand to rise by 3% p.a. next 10 years; India to move towards compound feed-based livestock production;**

# **Sustainable Animal Feed Market**

- **Growing animal agriculture enjoys tremendous potential. We need a ‘Sustainable Animal Agriculture Ecosystem’.**
- **You are only as good as your ecosystem and will be as sustainable as the current ecosystem permits – technologies, services, standards, regulation;**
- **Sustainable animal feed market has to be part of sustainable animal agri ecosystem.**

# AIFA's definition of sustainability

- *Sustainability provides continuous, safe and nutritious feed supply for poultry, livestock, fish and pets in a manner that optimizes environmental equality and the use of natural resources, while positively affecting social and economic wellbeing of customers, their communities and their industry.*



# Challenges: raw material for feed

- **Land constraints**
- **Water shortage**
- **Climate change**
- **Low yields of crop**
- **Policy constraints (esp, import)**
- **Lack of tech infusion**

# **Challenges facing Indian feed market stakeholders**

- Uncertainty of raw material / feed availability, affordability, access;**
- Feed price volatility**
- Demand fluctuation**
- Policy environment**
- Plant protein impact on meat demand**

# Suggestion / Solution

- **For assured availability and access: Undertake Contract farming; Establish backward linkages for raw material (maize, soy); Work with FPOs for scale economies; Base contract price on relevant Futures price;**
- **Use ‘On-Call contract’ (type of NTSD contract) where ‘premium’ is pre-decided and contract price will be based on a Futures contract close to maturity.**

# **Suggestion / Solution**

- **To manage feed price volatility: Use commodity exchange to hedge price risk; lock-in profit margin; scientific, time-tested method; Delivery based forward contract.**
- **Use tech for SCM efficiency, customer behaviour study, exim trade etc**
- **Build resilience against future shocks**

# **India's nutrition security challenge and animal protein industry**

- Pervasive under-nutrition; protein deficiency; animal protein can help address challenge; ~ 70% of our population potential consumers of animal protein; but animal protein cost prohibitive; can animal protein compete with plant protein cost-to-cost?**

# Comparative cost of protein sources (indicative)

| • Source       | AvgPrtn content | Price Rs/Kg | Protein Rs/100 gm |
|----------------|-----------------|-------------|-------------------|
| Milk           | 32%             | 60          | 180               |
| Poul meat      | 20%             | 180         | 90                |
| Eggs           | 14%             | 80          | 56                |
| <i>Pulses</i>  | 20%             | 60          | 30                |
| <i>Peanut</i>  | 40%             | 60          | 15                |
| <i>Soybean</i> | 30%             | 40          | 13                |

# **Contours of a Sustainable Animal Feed Market**

- **Optimize resource use (land, water)**
- **Responsible sourcing of raw material**
- **Ensure safe and nutritious product**
- **Ensure traceability and compliance**
- **Lobby policymakers for unambiguous predictable long-term policy regime**
- **Work toward ‘crisis-smart’ animal agri**

# Research Priority

- **Industry should be clear about where it wants to be by 2025 and 2030. Sponsor research study for demand projection; strategy to ensure higher yield per milch animal; ways to promote animal health and nutrition; estimate number of layers and broilers needed; feed demand (corn, soy); vaccines; skill needs; processing capacity; investment; etc.**



**Thank You.**

**Good Luck and God Bless You**

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