

# GENNXT ENTREPRENEURSHIP IN INDIA'S ANIMAL PROTEIN SECTOR

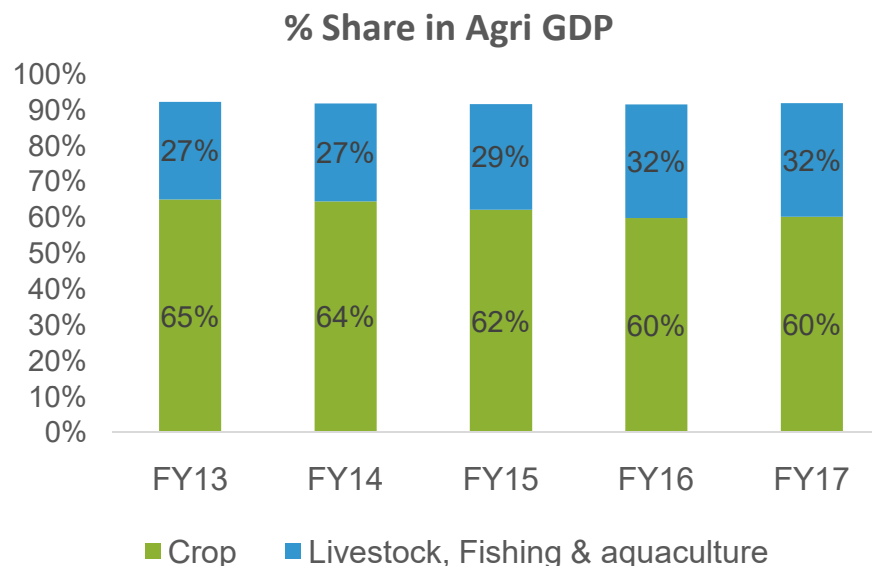
September 2018



# LIVESTOCK SECTOR – FUTURE IS BRIGHT !

# LIVESTOCK GROWTH RATE IS OUTSTRIPPING AGRI GDP GROWTH

**SALIENCE OF LIVESTOCK\* SECTOR IN AGRI-GDP HAS BEEN INCREASING AND IS EXPECTED TO BE MORE PROMINENT IN FUTURE**



**1.01%**

Rate at which Crop Agriculture GDP grew b/w 2011-12 to 2016-17



**6.63%**

Rate at which Animal Agriculture GDP grew b/w 2011-12 to 2016-17

**As per the latest data print for Q1 FY19 - ~45% of Agri GVA was contributed by livestock, forestry and fisheries. Livestock, forestry & fisheries sector registered a growth of 8.1% in Q1 FY19 as against overall Agri-GVA growth of 5.3%<sup>1</sup>**

Source: National Account Statistics 2018;  
Calculated on Gross Value Added by Crop & Livestock agriculture (INR Crore) At constant prices [2011-12]

Source: 1.MOSPI

\*Livestock includes fishing & aquaculture.

# GROWTH NOT A CHALLENGE FOR LIVESTOCK SECTOR

## CASE IN POINT – SHRIMP EXPORTS FROM INDIA



22% CAGR of shrimp exports from India (FY12-FY18)\*

17-18% Expected CAGR of shrimp feed market (FY17-FY20)<sup>1</sup>

\$7.08 Bn Value of marine exports from India

68% Of total marine exports is from cultured shrimp exports\*

4.97 lakh tons Total production of shrimp in India (FY16)

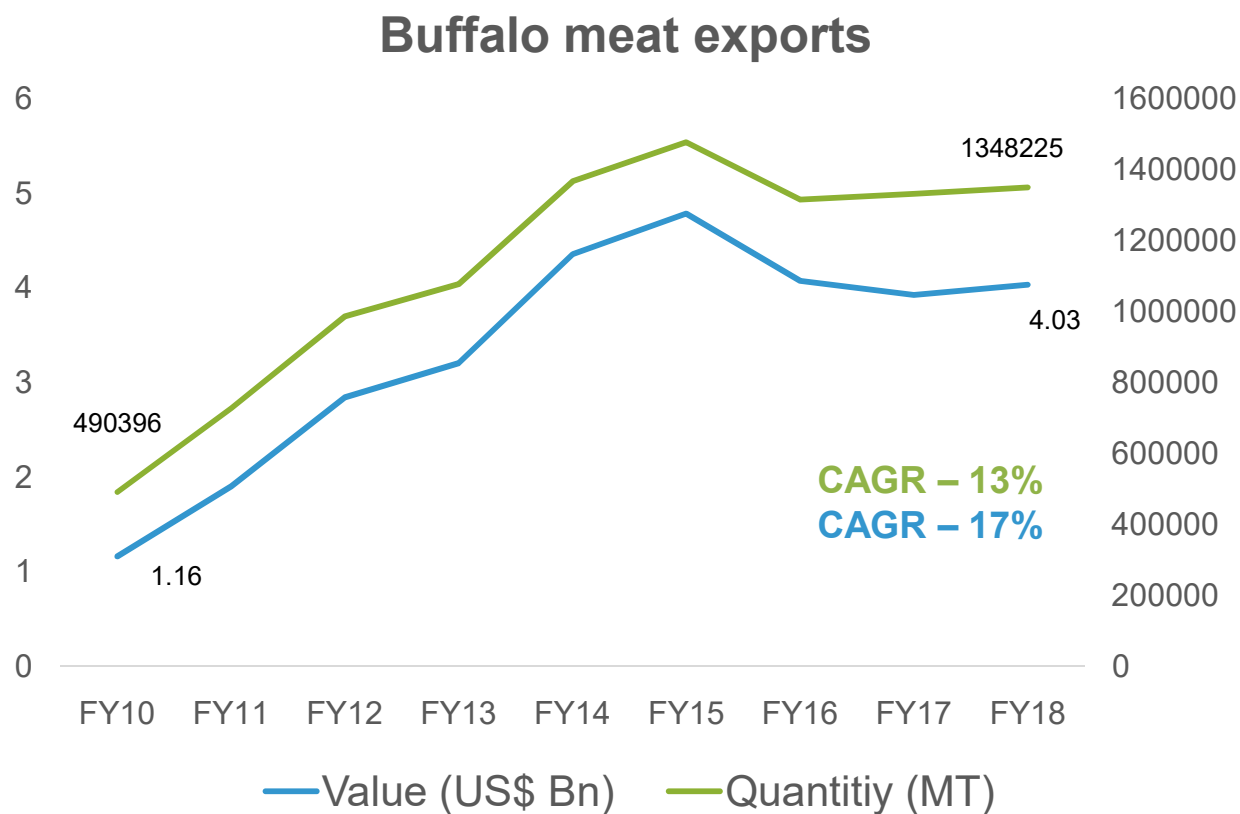
*\*in terms of value in US\$*

**1. In terms of value in Rs.**

Source – MPEDA

# GROWTH NOT A CHALLENGE FOR LIVESTOCK SECTOR

## CASE IN POINT – BUFFALO MEAT EXPORTS FROM INDIA



Source - APEDA

# DRIVERS IN PLACE FOR AN ACCELERATED FUTURE GROWTH

## LIVESTOCK DEMAND WILL KEEP ON INCREASING

### I. *Absolute population addition*



### II. *Rising per capita income*



### III. *Increasing animal protein consumption*



# LIVESTOCK CONSUMPTION WILL GET MORE FORMALIZED

## HOUSEHOLD'S HAVE CONTINUED TO SWITCH FROM HOMEMADE TO MORE CONVENIENT PACKAGED OPTIONS

### CURD

#### HOMEMADE CURD



1 kg cost – INR 50-60

Monthly Household consumption:  
4-5 kgs

#### PACKAGED CURD



1 kg cost – INR 100-200

Monthly Household consumption:  
4-5 kgs

Packaged organized curd market in India -~INR 121bn

### WHEAT FLOUR 'ATTA'

#### HOMEMADE ATTA



1 kg cost – INR 35

Monthly Household consumption:  
15-20 kgs

#### PACKAGED ATTA



1 kg cost – INR 45

Monthly Household consumption:  
15-20 kgs

Packaged organized Atta market in India -~INR 140 bn

### DOSA BATTER

#### HOMEMADE DOSA BATTER



1 kg cost – INR 30

Monthly Household consumption:  
2-4 kgs

#### PACKAGED DOSA BATTER



1 kg cost – INR 75

Monthly Household consumption:  
2-4 kgs

ID Fresh, a new player, has revenue of - ~INR 2bn in 4 years

**NOT JUST THE UBER-RICH CLASS, BUT MIDDLE-CLASS HHs OF INDIA HAVE BEEN SHIFTING TO CONVENIENCE-BASED PRODUCTS BY PAYING A CONVENIENCE PREMIUM**

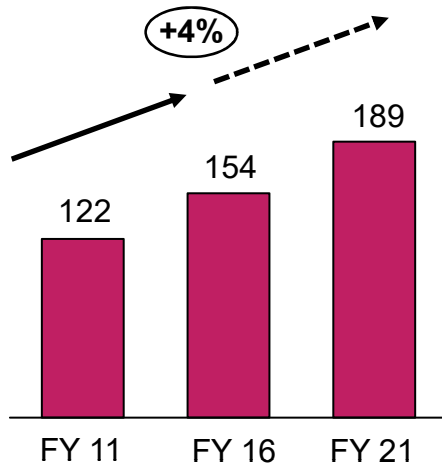
# GAVL – SOLVING FOR INDIA’S GROWING FORMALIZED ANIMAL PROTEIN DEMAND



CREAMLINE DAIRY

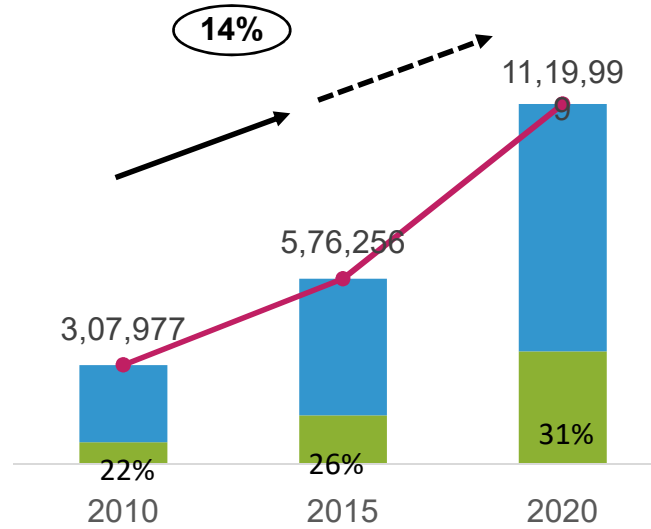


# INDIAN DAIRY GROWTH



**Milk Production Volume  
(Million MT)**

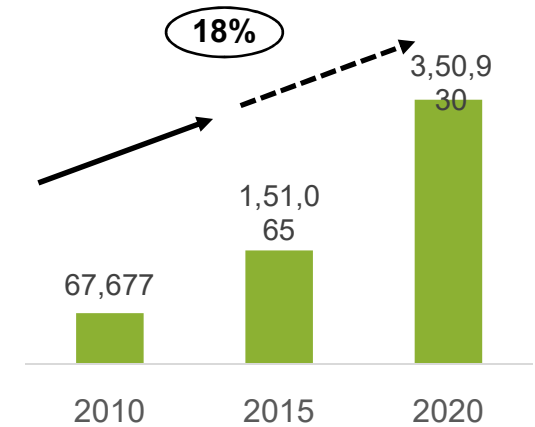
- Productivity Gains (2.5%)
- Cattle Population Growth (1.5%)
- Fragmented as high land prices prohibit large farms



**Dairy Market Value  
(Rs Crore)**

Organised Unorganised Total

- Increase in per capita consumption
- Proliferation of Value added products
- Price Inflation

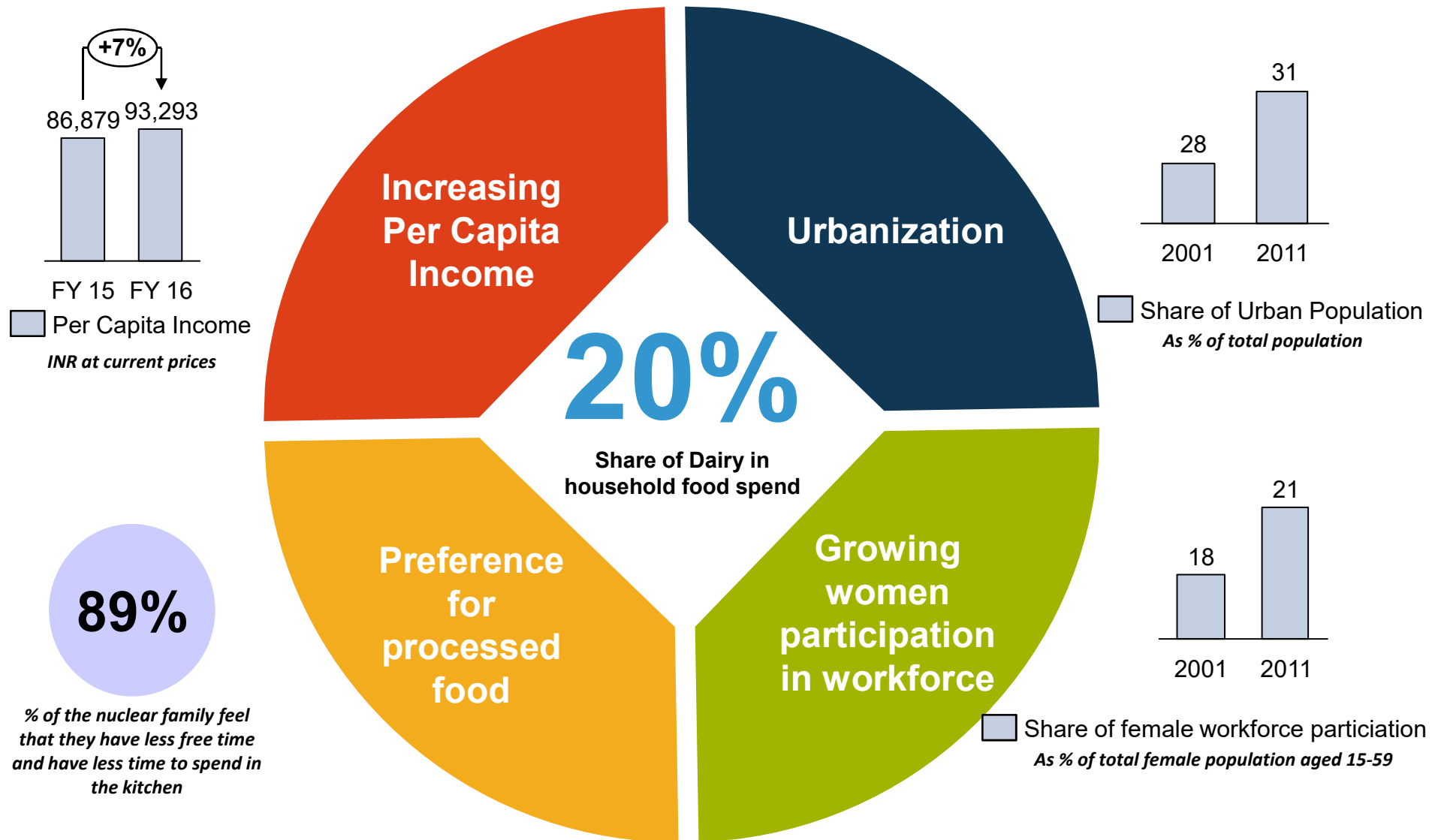


**Organised Dairy Market Value  
(Rs Crore)**

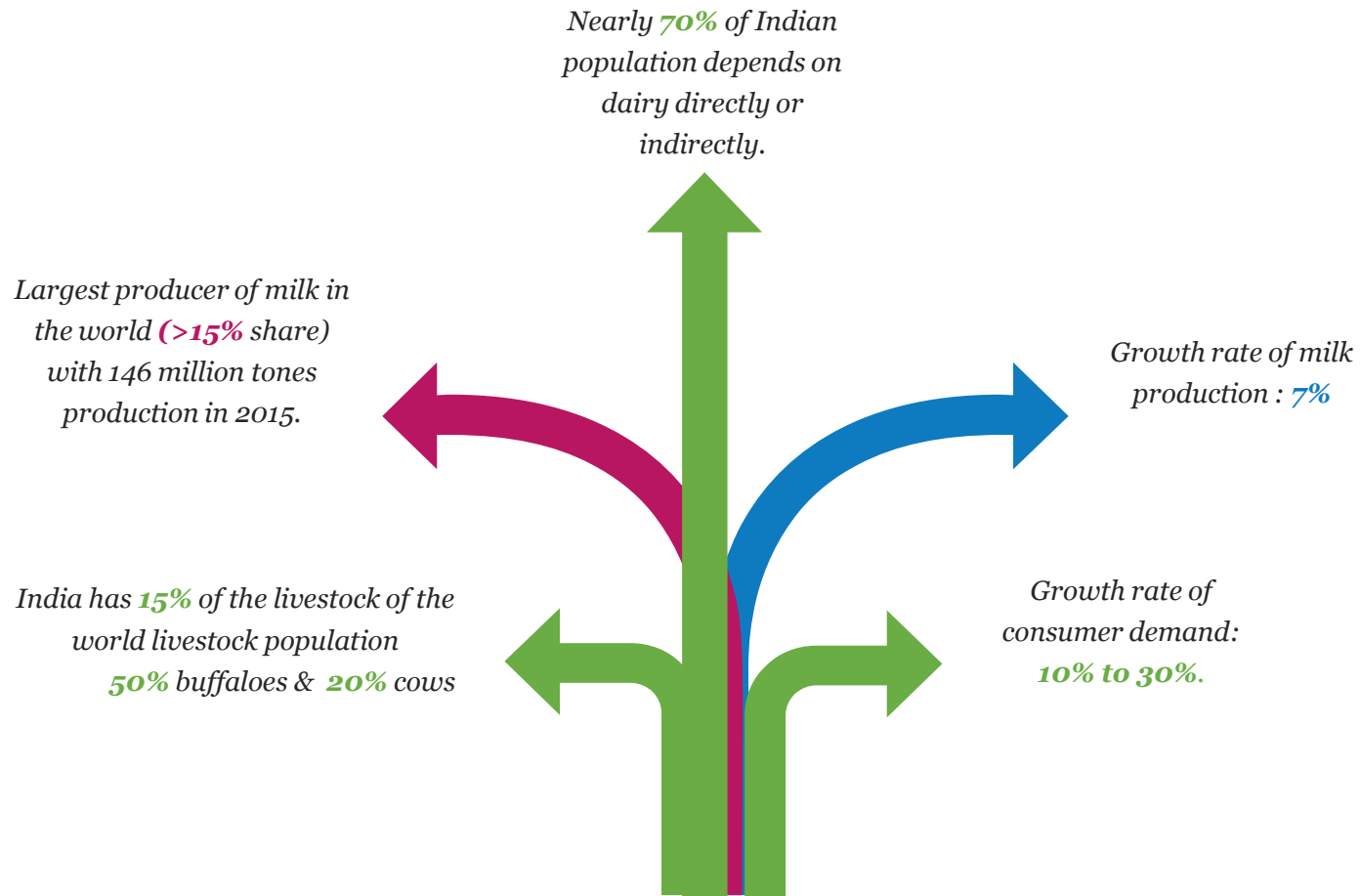
- Rising income and affordability
- Greater acceptance of packaged food
- Investments in cold chain (procurement and sales)

Source: NDDB, IMARC Research, AMBIT Dairy Report

# CONSUMER MEGATRENDS DRIVING PROCESSED FOOD DEMAND



# WHAT MAKES DAIRY ATTRACTIVE?



# WHAT IS DRIVING DAIRY GROWTH?



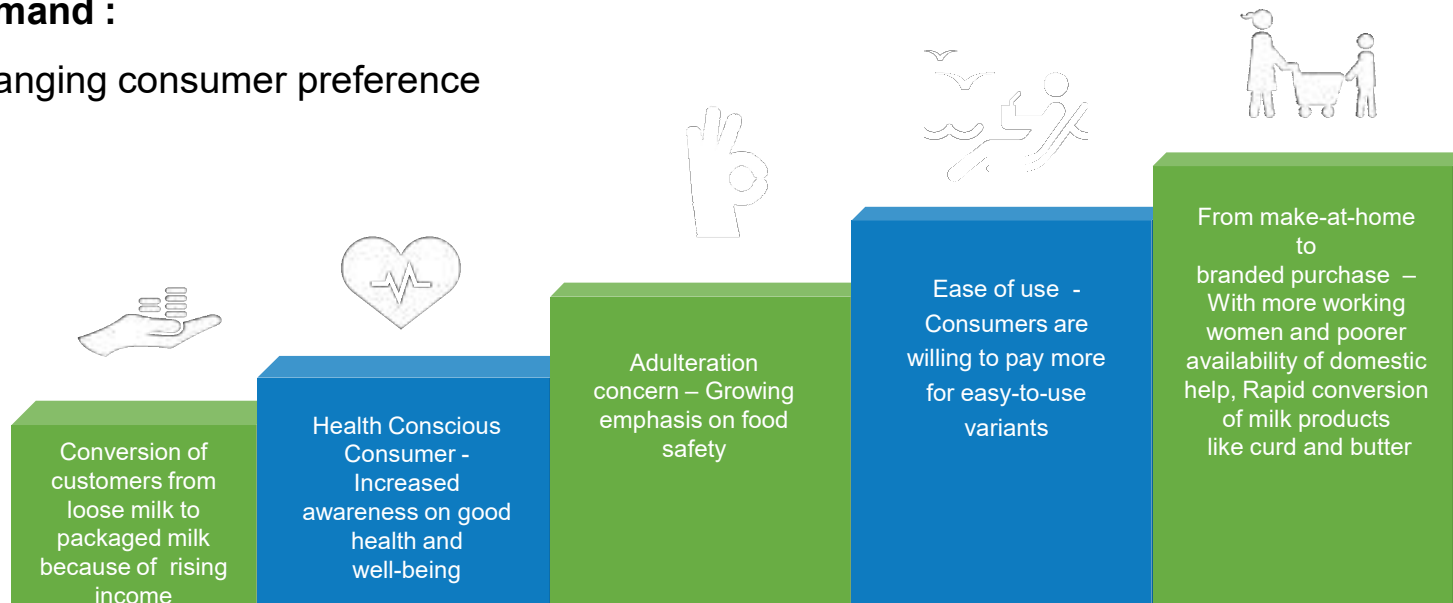
Dairy sector has been steadily growing

A large 79% of milk consumption is still unbranded, giving huge possibilities for branded dairy.

## Most important factors for Increase in

### Demand :

Changing consumer preference

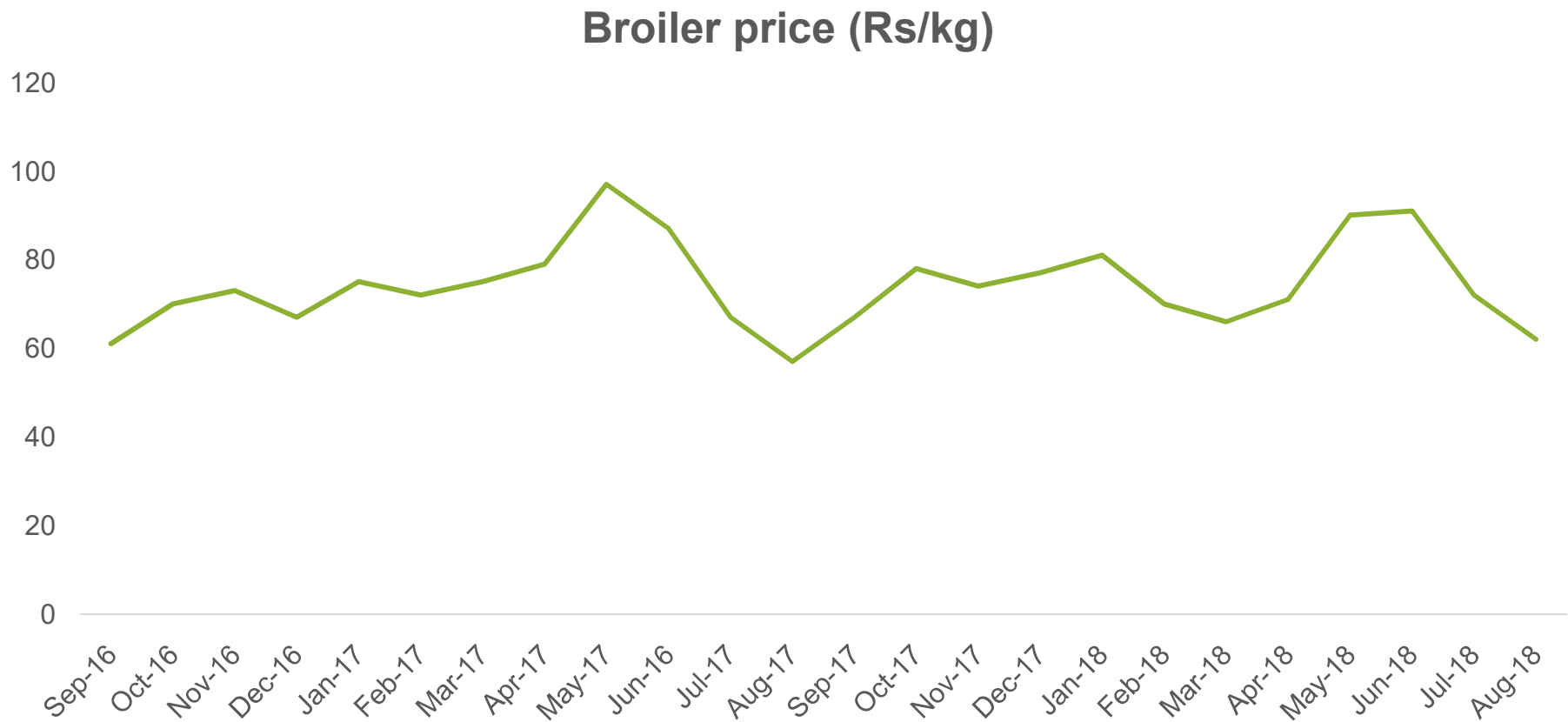


# GAVL – SOLVING FOR INDIA’S GROWING FORMALIZED ANIMAL PROTEIN DEMAND



**GODREJ TYSON**

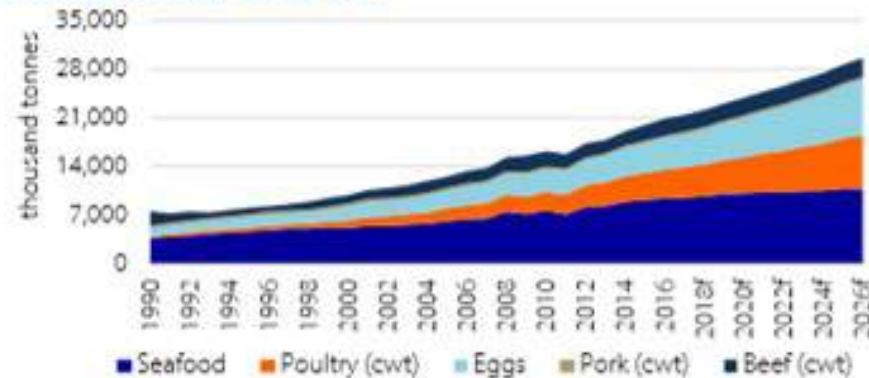
# VOLATILE BROILER PRICES - A DRIVER FOR BRANDED ANIMAL PROTEIN MARKET



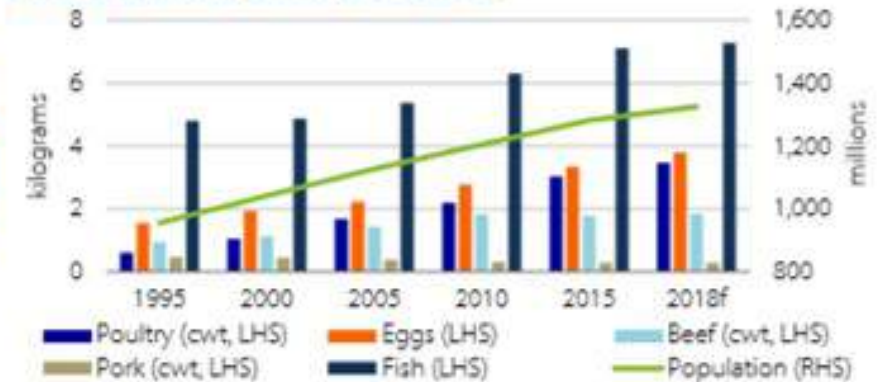
**Note - Broiler prices are monthly averages for Punjab, Delhi and Pune locations**

# INDIA'S ANIMAL PROTEIN DEMAND IS DRIVEN BY A GROWING POPULATION AND GDP

**Poultry & eggs will continue to gain market share over other animal proteins, 1990-2026f**

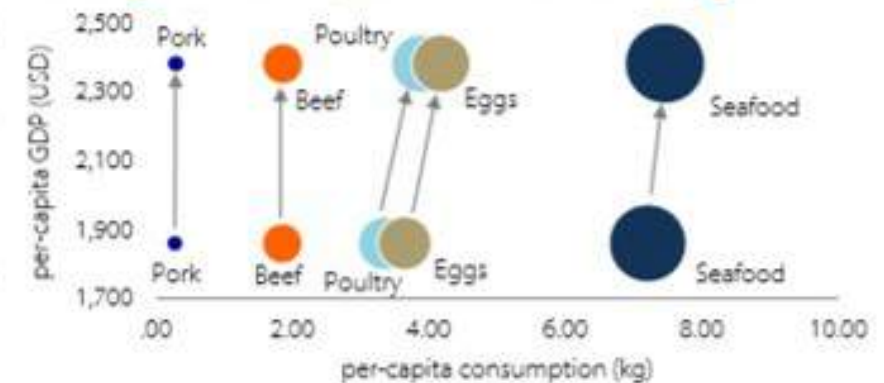


**Demand is driven by population growth and the shift to cheaper animal protein, 1995-2018f**



- India is the second-largest animal protein market in Asia, after China.
- Consumption is dominated by seafood, poultry, and eggs. Beef and pork play a smaller role as a result of religious constraints.
- Per-capita consumption growth lags compared to other Asian countries, given the significant number of vegetarians. Future growth is driven by population size and increase in purchasing power.
- Poultry and egg consumption is forecast to expand by 19% and 18%, respectively, between 2017 and 2020 vs. 7% for seafood and 3% for beef.
- Forecast risks may include dumping of chicken leg quarters, disease outbreaks, government regulations, and a poor monsoon.

**Poultry and eggs are the fastest growing proteins through 2020 – although volume-wise, seafood will remain the largest\***

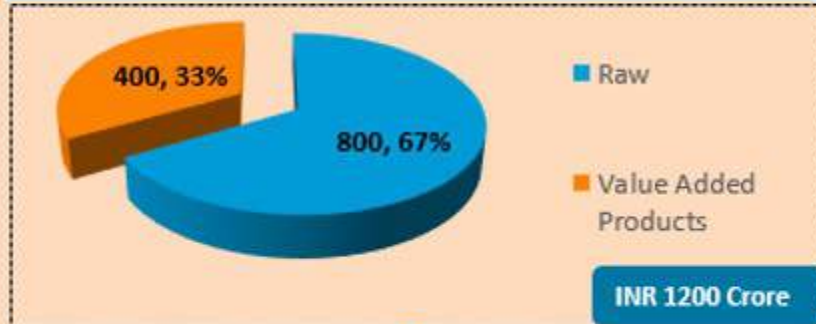


Source: Rabobank 2018  
 \* Note: Bubble size reflects total demand.

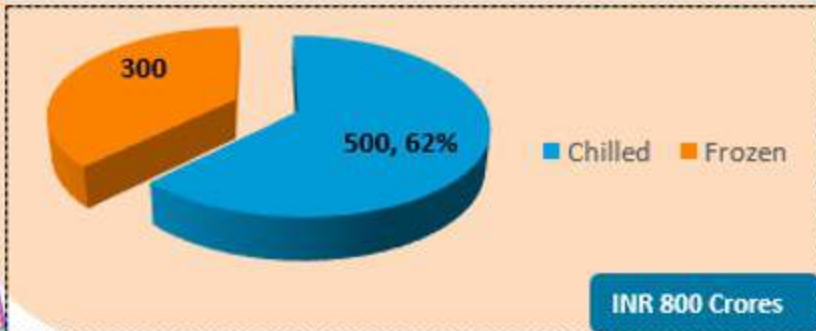


# PROCESSED POULTRY PRODUCTION IN INDIA

Overall Processed Poultry Meat Production in India (In Value) – Split by Type



Overall Raw Poultry Production in India (In Value) – Split by Type

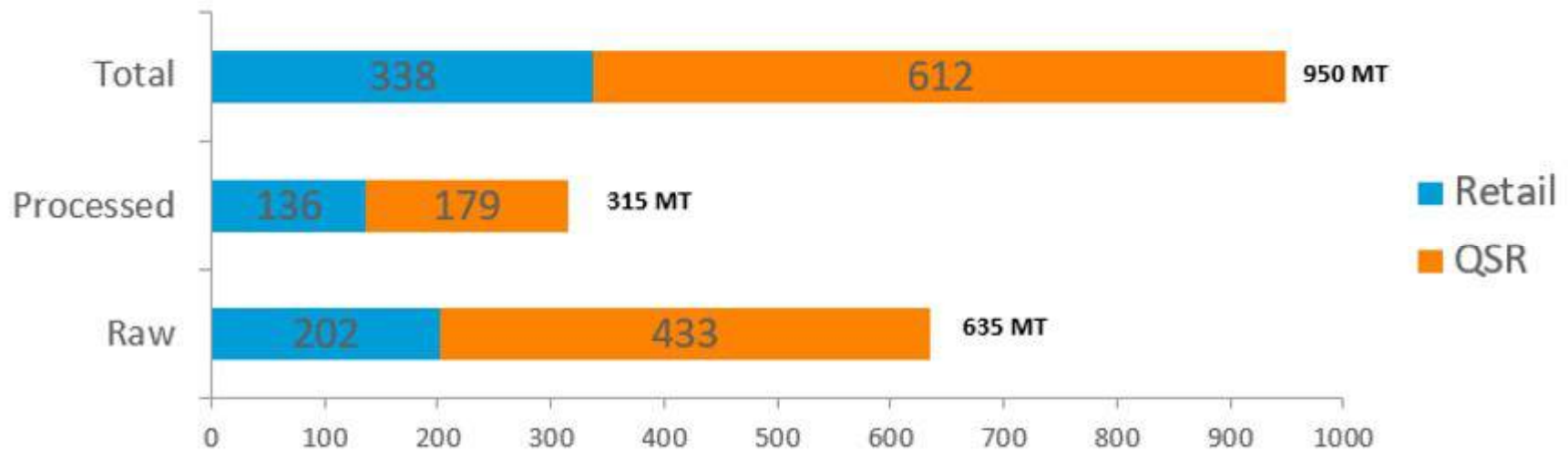


Source: Primary Research; Nielsen Analysis

- ❑ The market for processed poultry food in India is estimated at INR 1200 Crore
- ❑ The market for chilled poultry product is estimated at INR 500 Crore
- ❑ Chilled whole birds and parts are sold in markets and shops in major cities
- ❑ Acceptance of chilled meat is higher than that of frozen meat, yet growth in chilled meat consumption could help to accelerate the transition to frozen poultry products
- ❑ The well-known brands available nationally in the frozen poultry meat category are: Venkey's, Yummiez, Sumeru, Suguna, Keya, Republic of Chicken
- ❑ Fresh poultry meat brands available in only certain markets are: Real Good Chicken, Zorabian, Suguna, Venkeys



# IN RECENT YEARS, THE DEMAND FOR FROZEN OR CHILLED MEAT PRODUCTS FROM HOTELS, FAST FOOD RESTAURANT CHAINS AND URBAN CONSUMERS IS ON UPWARD SPIRAL IN INDIA



Nielsen

# 3 ESSENTIALS FOR FUTURE GROWTH

### 3 ESSENTIAL PILLARS TO MAKE THE MOST OF OPPORTUNITIES OFFERED BY LIVESTOCK SECTOR



**CAPITAL**



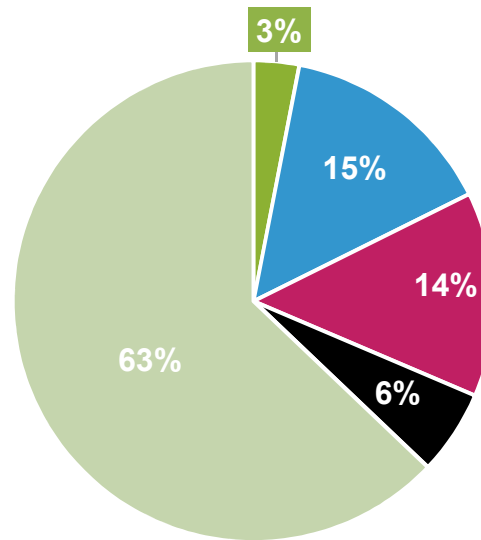
**TALENT**



**TECHNOLOGY**

# CAPITAL : CURRENT CAPITAL TRENDS FOR LIVESTOCK SECTOR

Sub-sector % share in the recent capital raising activities for Agri sector



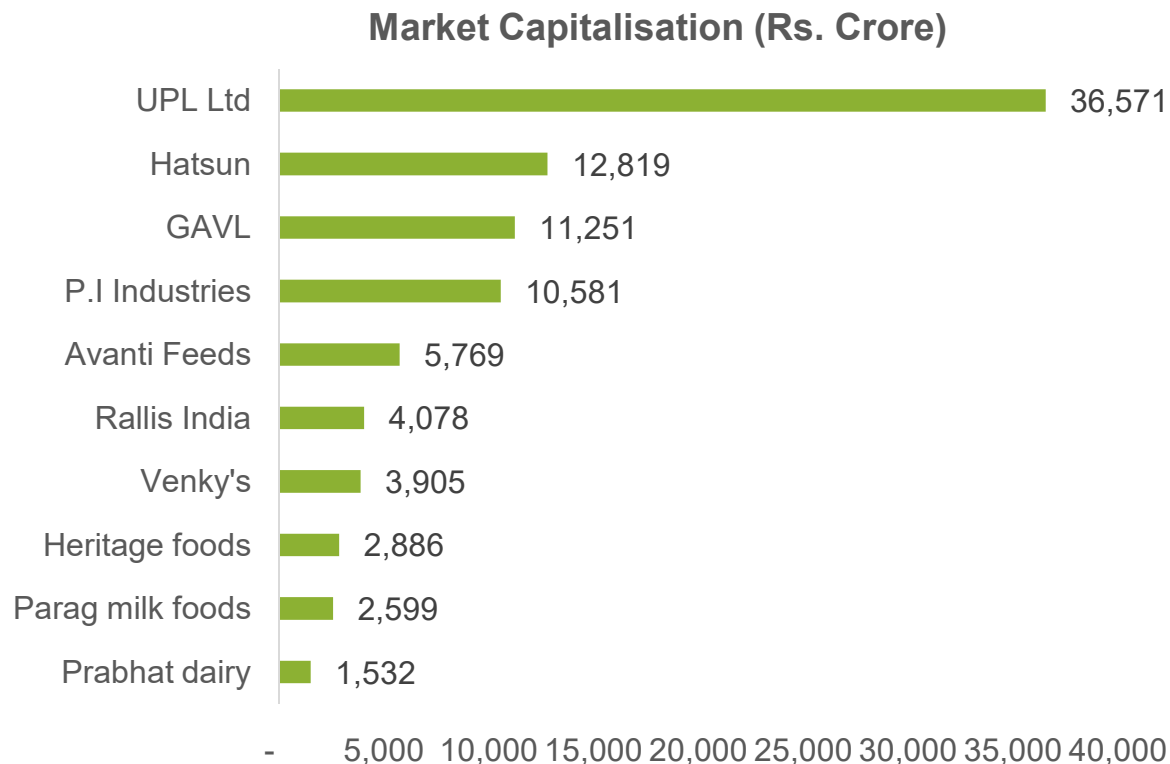
- Agricultural and Farm Machinery
- Agricultural Products
- Fertilizers and Agricultural Chemicals
- Livestock
- Packaged Foods

**LIVESTOCK CLAIMS FOR A VERY SMALL SHARE IN THE CAPITAL POOL FOR AGRI-SECTOR**

Source – Capitaliq – Public offering, private placement and M&A data (1994 to 2018)

# GAVL'S RECENT CAPITAL RAISING ACTIVITY RECEIVED OVERWHELMING RESPONSE

## GAVL'S IPO WAS OVERSUBSCRIBED 96 TIMES



## GAVL'S DIVERSIFIED BUSINESS HAS CREATED IMMENSE VALUE IN A SHORT TIME SINCE LISTING

# TALENT : ATTRACTING & RETAINING TALENT WILL PLAY A CRUCIAL ROLE

## SUPERIOR TALENT IS MORE PRODUCTIVE

*As per a Mckinsey report – superior talent is up to eight times more productive than the general workforce in any organization.*

## SUPERIOR TALENT IS SCARCE

*Failure to attract and retain top talent was the number-one issue quoted in the Conference Board’s 2016 survey of global CEOs—before economic growth and competitive intensity.*

***“The single biggest constraint on the success of my organization is the ability to get and to hang on to enough of the right people.”***

**- Jim Collins**

# TALENT : ENTREPRENEURSHIP IN LARGE CORPORATES

## *GAVL's DRILLED DOWN P&L RESPONSIBILITY MODEL*

**1**  
**MANAGING DIRECTOR**  
Responsible for Company's  
overall P&L

**5**  
**BUSINESS HEADS**  
Responsible for individual  
business's P&L

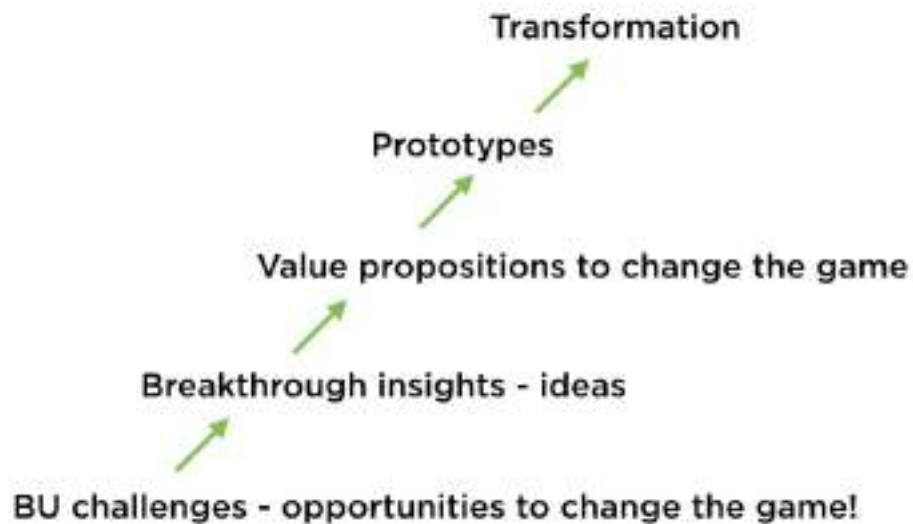
**4-7**  
**(for each business)**  
**REGIONAL HEADS**  
Responsible for P&L's of  
respective geographies

## *GAVL's REWARDS MODEL*

- GAVL's Economic Value Added (EVA) based rewards model offers its employees a share in value creation of their respective business's P&L.

# TALENT : GAVL's CHANGE THE GAME INITIATIVE

**If you have an idea, we want to hear it!**



We will work together and implement a feasible proposal

We want you to work on this and share with us

We discussed this today in the Innovation Workshop

Every Idea is Important (Big or Small)!

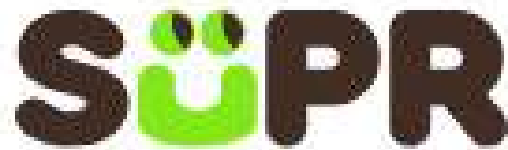
Think Beyond Product & Technology

Everyone can Win  
You are not competing



# TECHNOLOGY : DISRUPTION IN ANIMAL PROTEIN DISTRIBUTION

*THESE ON-LINE DELIVERY START-UPS ARE CHANGING THE GAME FOR ANIMAL PROTEIN DISTRIBUTION*



# TECHNOLOGY : INNOVATIONS IN SUPPLY-CHAIN AND BIG DATA FOR LIVESTOCK SECTOR



- Tessel provides cold chain, cold storage and last mile delivery logistic solutions.
- Tessel's PLUGnCHILL range of products eliminates the use of fossil fuel for cold chain transport systems using their proprietary energy storage technology.
- These solutions not only reduce the running costs of these units by 60% but also reduce diesel consumption by 1000 liters per small vehicle per annum.



- Stellapps is an end-to-end dairy technology solutions company
- Company's innovative applications and state-of-the-art mechanization tools leverage Internet of Things (IoT), Big Data, Cloud, Mobility and Data Analytics to improve Agri- supply chain parameters.
- Data is acquired via sensors embedded in Milking Systems, Animal Wearables, Milk Chilling Equipment & Milk Procurement Peripherals

# TECHNOLOGY : GENNEXT FOR LIVESTOCK BUSINESS

## UPCOMING GLOBAL TECHNOLOGY TRENDS IN FEED INDUSTRY

### **Swap heat for radio waves in grain drying process**



- Leaves more nutritional elements in feed ingredients
- More economical compared to traditional drying process
- Undertaken by USA based DryMax solutions



### **Insect protein production using organic waste**

- Viable alternative to organic waste being dumped in landfills
- Uses food waste as a substrate for feeding insect larvae that are in turn used to produce a protein that can replace fishmeal in chicken and fish feed.

### **Shrimp feed to battle EMS disease**



- USA based Cargill has developed shrimp feed to battle Early Mortality Syndrome (EMS) disease
- The feed is reported to be made out of fermented vegetables.



### **Software to boost poultry farm profits**

- USA based Cargill has developed dynamic predictive software tool named – TechBro Flex
- Based on input data - the software is reported to generate different pathways for producers to meet set economic goals.

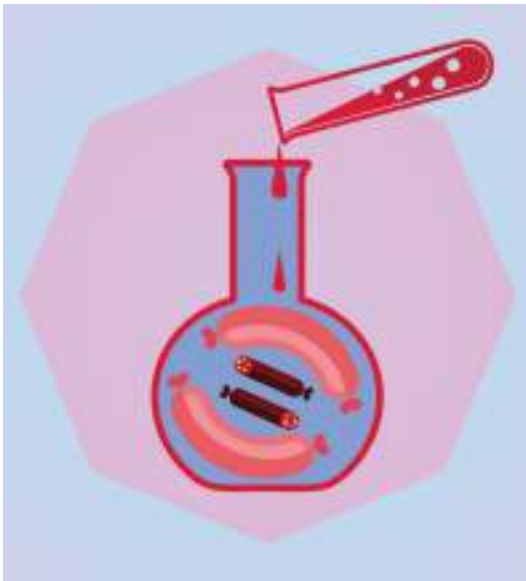


### **Waste water usage to generate algae**

- Undertaken by US based company Clearas
- One of the downstream markets explored for the algae generated is animal feed.

# TECHNOLOGY : GENNEXT FOR LIVESTOCK BUSINESS

## LAB MEAT – A FUTURE MORE NEARER THAN WE THOUGHT !



- Union minister Maneka Gandhi recently made a case for laboratory-grown meat in a conference – ‘Future of Protein in India’
- Animal welfare organisation Humane Society International (HSI) India and the Centre for Cellular & Molecular Biology (CCMB) in Hyderabad joined hands this year to develop laboratory grown meat in India.
- Following which, laboratory grown 'clean meat' may become available in India by 2025
- Lab meat can cause disruption in feed industry – with its obvious implication being reduction in animal feed demand
- Globally, companies like Hampton creek (Just Inc), Finless Foods and Future meat are working in this space.

## CONCLUSION : FOCUS ON THESE PILLARS IS IMPERATIVE



CAPITAL



TALENT



TECHNOLOGY

***WITHOUT FOCUS ON THESE ESSENTIAL INGREDIENTS, OPPORTUNITIES IN THE LIVESTOCK SECTOR CANNOT BE HARNESSSED OPTIMALLY.***



THANK YOU FOR YOUR TIME AND CONSIDERATION