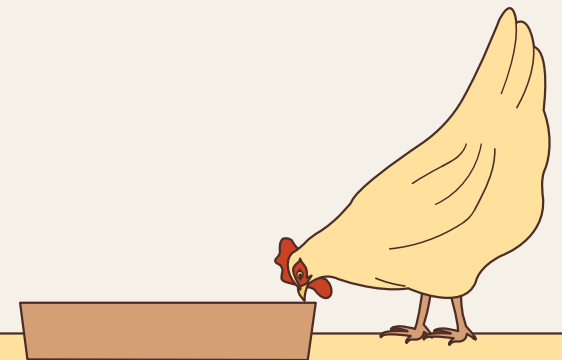
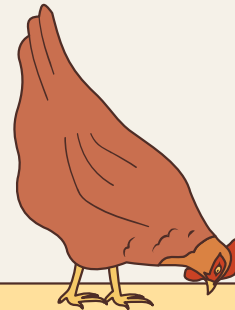
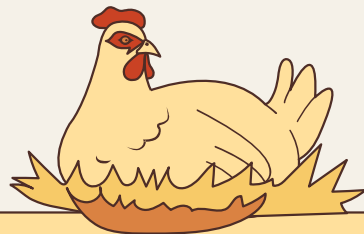
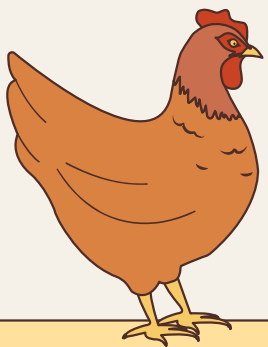


NOVOCAN KNOWLEDGE DAY

INDIAN POULTRY

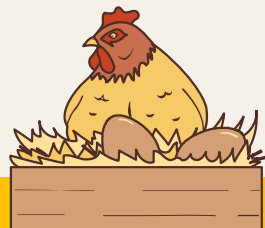
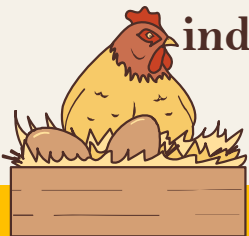
PAST , PRESENT & FUTURE

Dt : 6th Feb. 2024



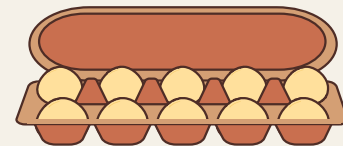
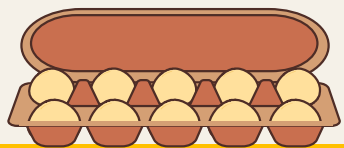
POULTRY IN INDIA – PRESENT STATISTICS

- Total Egg Production in India for 2022-23 is estimated at 138.38 billion , commercial poultry egg production at 118.16 billion and 20.20 billion for backyard poultry.
- Total meat production for country for 2022-23 is estimated at 9.77 MMT, Poultry meat is 4.995 MMT , i.e 51.13%.
- As per GOI, India stands 3rd in world for Egg production and 5th in world for chicken meat.
- The Indian poultry market size is INR 1905.3 billion in 2022 and growth rate is 6.77% for eggs (DADF) and 7%-8% for chicken meat (industry estimate).
- Per capita egg consumption annually 101(DADF) and chicken meat 4.8/5 Kgs (on industry estimated placement of 500 crore DOC).



POULTRY AT A GALANCE

- Generates direct employment to 25000 layer and over 1 million broiler farmers and indirectly to over 5 million jobs.
- As per “National Action Plan for Eggs and Poultry” prepared by DADF , 30 million rural households involved in backyard poultry
- The price of poultry products have risen the least in the last three decades .
- Poultry farming ensured farmers of Maize and Soya farmers get better prices



INDIAN POULTRY IN 70'S

- During 70's poultry was merely a back yard activity with very low productivity and high mortalities.
- The rural households , specially poor were suffering from protein malnutrition characterized typically by stunted growth in children.
- Poultry was subsistence activity and birds were kept more to meet domestic requirement and for consumption on special days for family members and guests.



PROBLEMS OF POULTRY FARMERS

**DEPENDENCE ON
IMPORTS FOR DOC
VACCINES ETC**

**LOW CONSUMPTION
OF EGGS**



**SMALL FARMS AND
LOW PRODUCTIVITY**

**INADEQUATE
INFRASTRUCTURE**

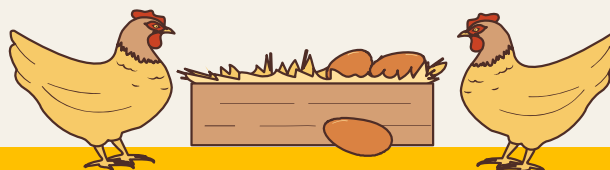


EGG PRODUCTION OVER THE YEARS

(AS PER DADF "BASIC STATISTICS FOR 2023-24")

YEAR	EGG PROD	HUMAN POP	PER CAPITA
1950 - 51	183	35	5
1960 - 61	288	43	7
1968 - 69	530	52	10

1970/71 VH under Dr. B.V. Rao with relevant technology gave thrust for commercial layer farming.



FATHER OF INDIAN POULTRY



“My dream is to see India as the No.1 country on the poultry map of the world in terms of Quality , Value , Productivity and Management.”

Dr. B.V.Rao



FULLY INTEGRATED BUSINESS MODEL



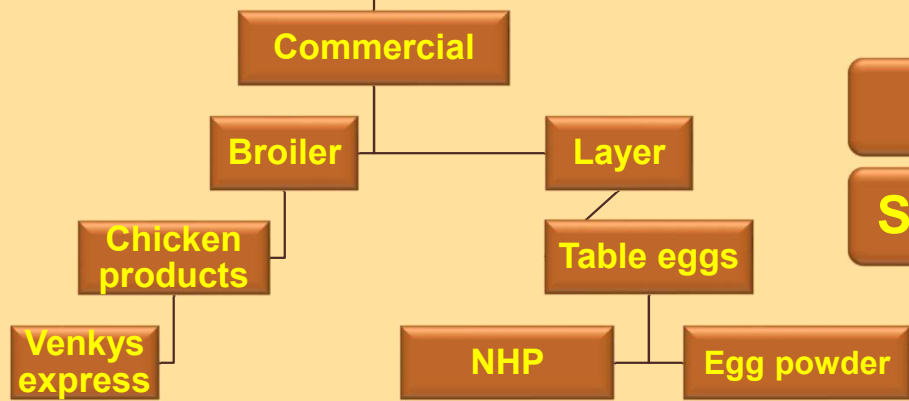
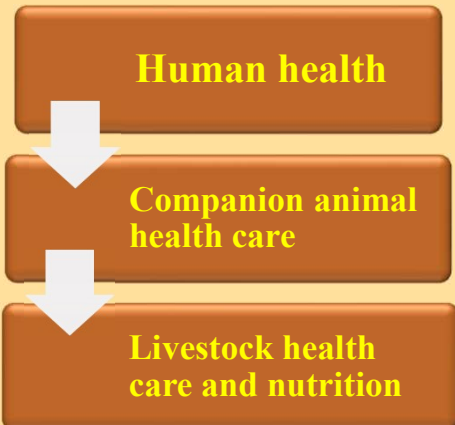
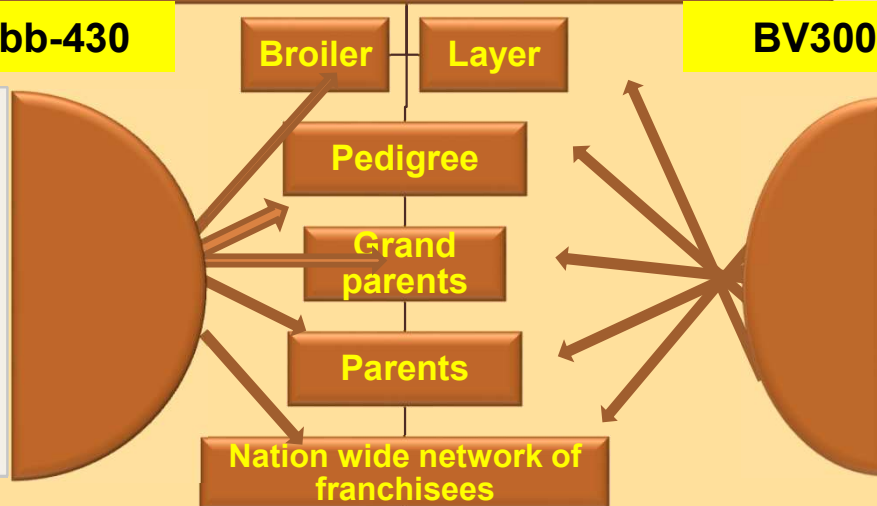
Pure line research programme

Vencobb-430

BV300

- Poultry biologicals
- Vitamin premixes
- Bio-security solutions
- SPF eggs
- Pharmaceuticals
- Poultry equipments

- Dr.B.V.Rao IPMT
- PDRC & Satellite Lab's
- Technical and extension services
- Vaccines research and development centre



DR. B. V. RAO A VISIONARY

**PURE LINES
FARMS LAYER &
BROILER**

**POULTRY PROCESSING
PLANT, - EGG POWDER
PLANT**

**POULTRY
EQUIPMENT,
INCUBATORS**

**POULTRY DISEASE
RESEARCH
CENTER**

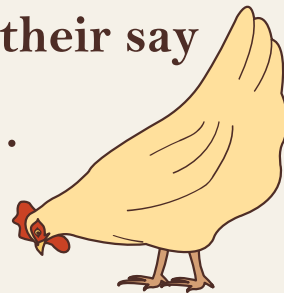
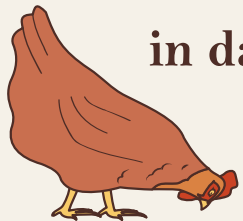
**VETERINARY
HEALTH SERVICE.**

**VACCINES,
BIOLOGICALS,
PHARMACEUTICALS**

**MARKETING
CHANNELS - NECC,
BROMARK**

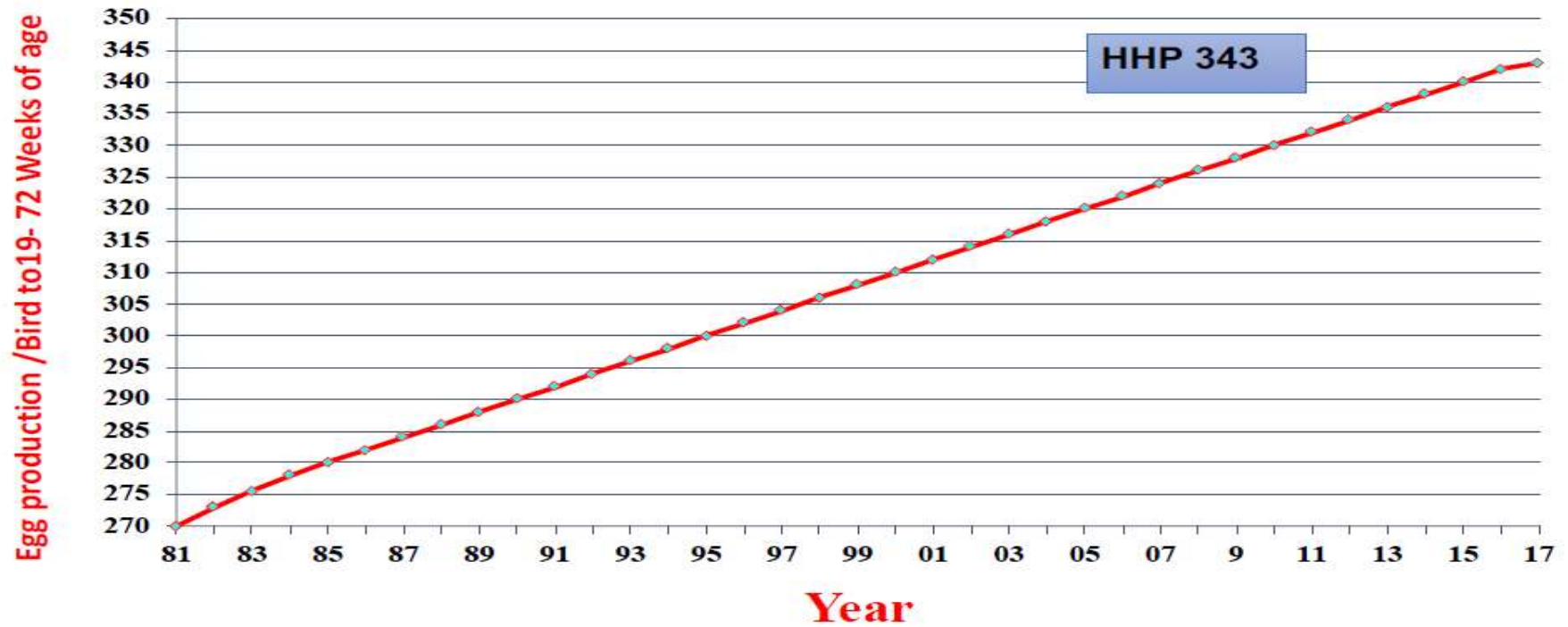
VH – TOTAL POULTRY SUPPORT

- **Dr . B. V. Rao with the concept of “Total Poultry Support ” established VH Group to provide complete knowledge and services to establish a new poultry farm for any entrepreneur .**
- **VH had provided from project report, design and supervision , breeds adapted to Indian agro tropical conditions, technical services , PDRC services, Vaccines and AHP , and continuous R & D for improvements in productivity.**
- **Under NECC at all major centres Farmers provided a platform to have their say in daily ex farm gate price with a slogan of “ My Egg My price My life .**



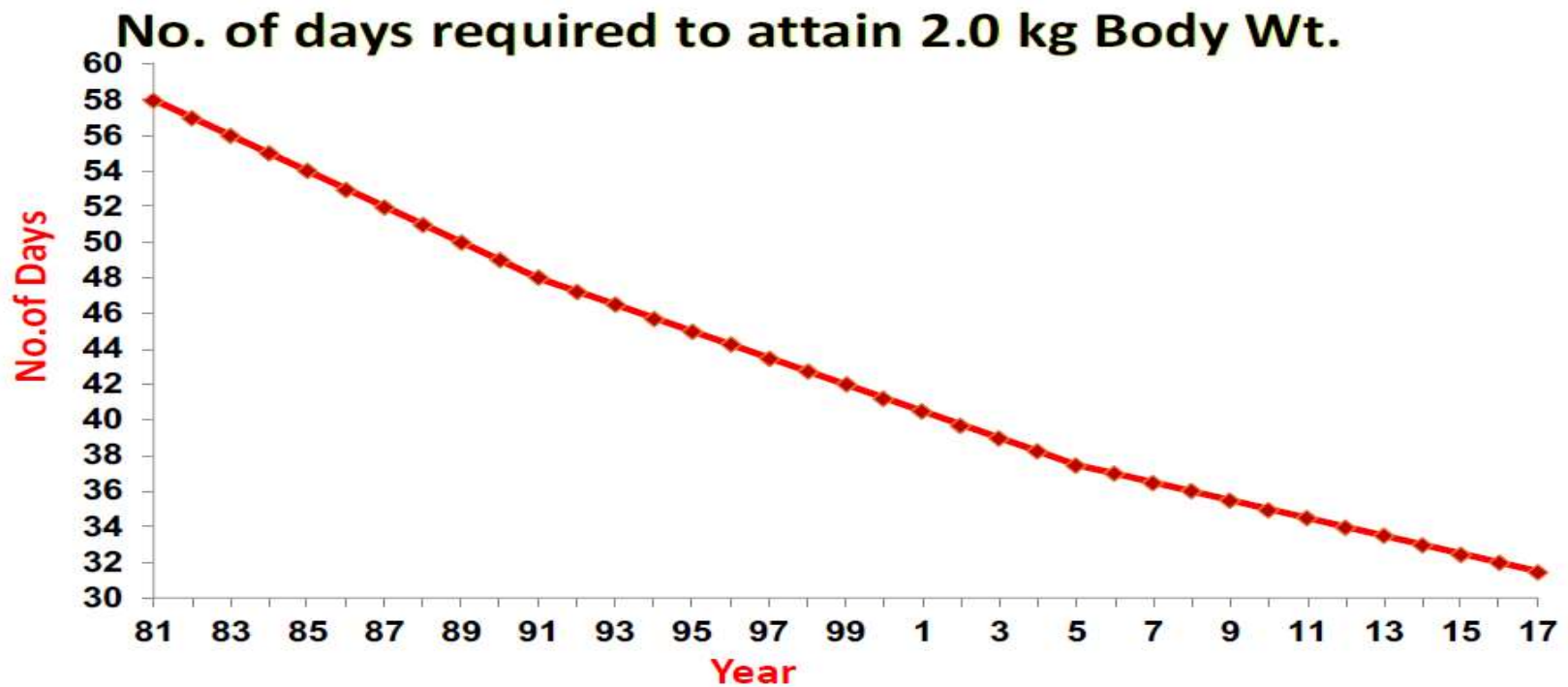
GENETIC GAIN IN BV300

Genetic Gain in BV300 Improvement in Egg Number 1981 - 2017



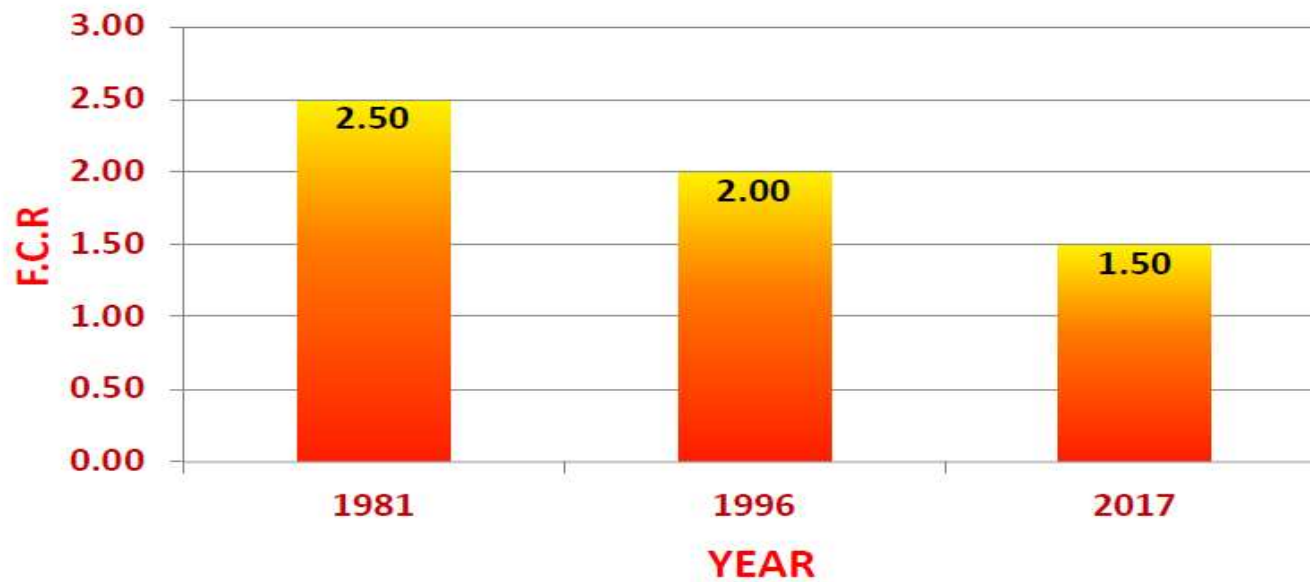
GENETIC IMPROVEMENT (VENCobb BROILERS)

GENETIC IMPROVEMENT (Vencobb Broilers)



GENETIC IMPROVEMENT (VENCobb BROILERS)

Genetic Improvement (Vencobb Broilers) In F.C.R – Feed Conversion Ratio(2.0 Kg Body Wt.)



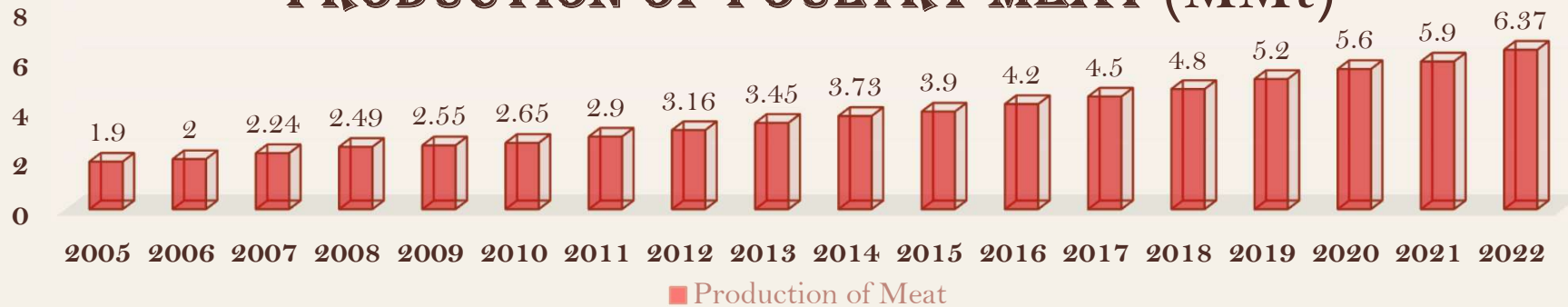
CONSUMER PRICES FOR EGGS

Sr. No	Country	Eggs (12) in USD
1	United States	4.51 \$
2	Russia	1.21 \$
3	China	1.83 \$
4	Brazil	2.08 \$
5	Mexico	2.12 \$
6	Singapore	2.95 \$
7	UAE	3.00 \$
8	Sri Lanka	2.08 \$
9	Japan	1.83 \$
10	Bangladesh	1.20 \$
11	Pakistan	1.01 \$
12	Nepal	1.47 \$
13	India	0.95 \$

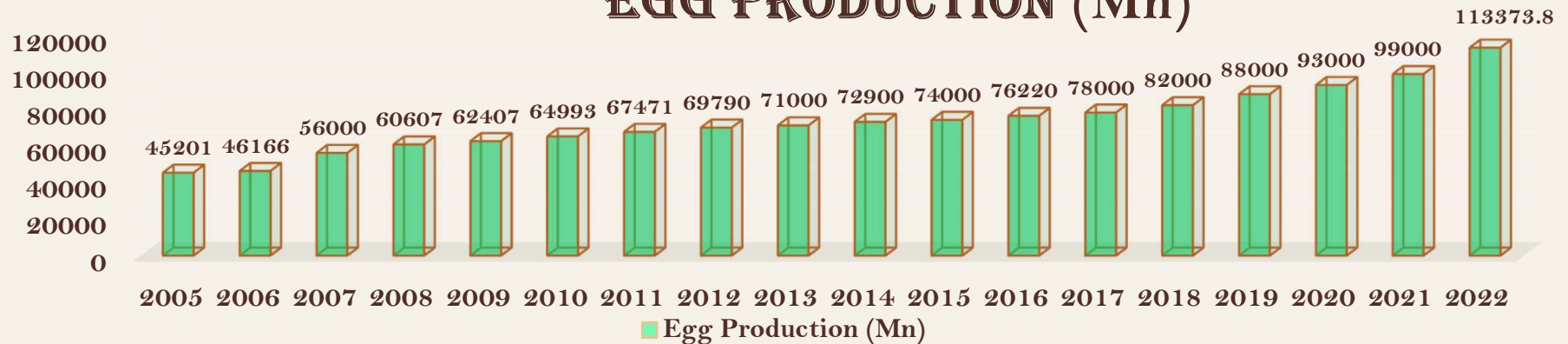
Source : www.numbeo.com

ANNUAL EGG AND POULTRY MEAT PRODUCTION

PRODUCTION OF POULTRY MEAT (MMt)

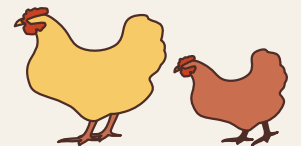


EGG PRODUCTION (Mn)



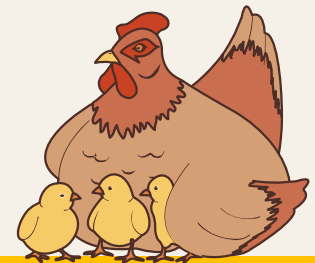
INDIAN POULTRY— FROM 80S TO TILL DATE

- Both the layer and broiler segment are growing for the last 5 decades i.e., 5% - 7% in layers and 7% - 8% in broilers.
- While initially production came up in pockets where technology & inputs were readily available, over the decades, both layers and broilers new centers came nearer to consumption.
- While neighboring countries like Bangladesh, Pakistan, Middle-east imported technology of Europe or US, India under the leadership of Dr.B.V.Rao and Smt.Anuradha J Desai believed in acclimatization of the breeds to Indian agro climatic conditions.



INDIAN POULTRY– FROM 80S TO TILL DATE

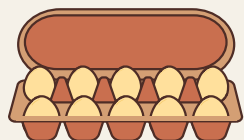
- This enabled farmers to go for cost friendly open sheds and use of local feed ingredients but still get best productivity irrespective of farm size and under varying agro climatic conditions.
- The Industry also acknowledges constant help and encouragement received from Research Institutes like PDP, Veterinary universities, State and Central governments in building this Vibrant sector .



GROWTH IN AVAILABILITY OF EGG AND PER CAPITA

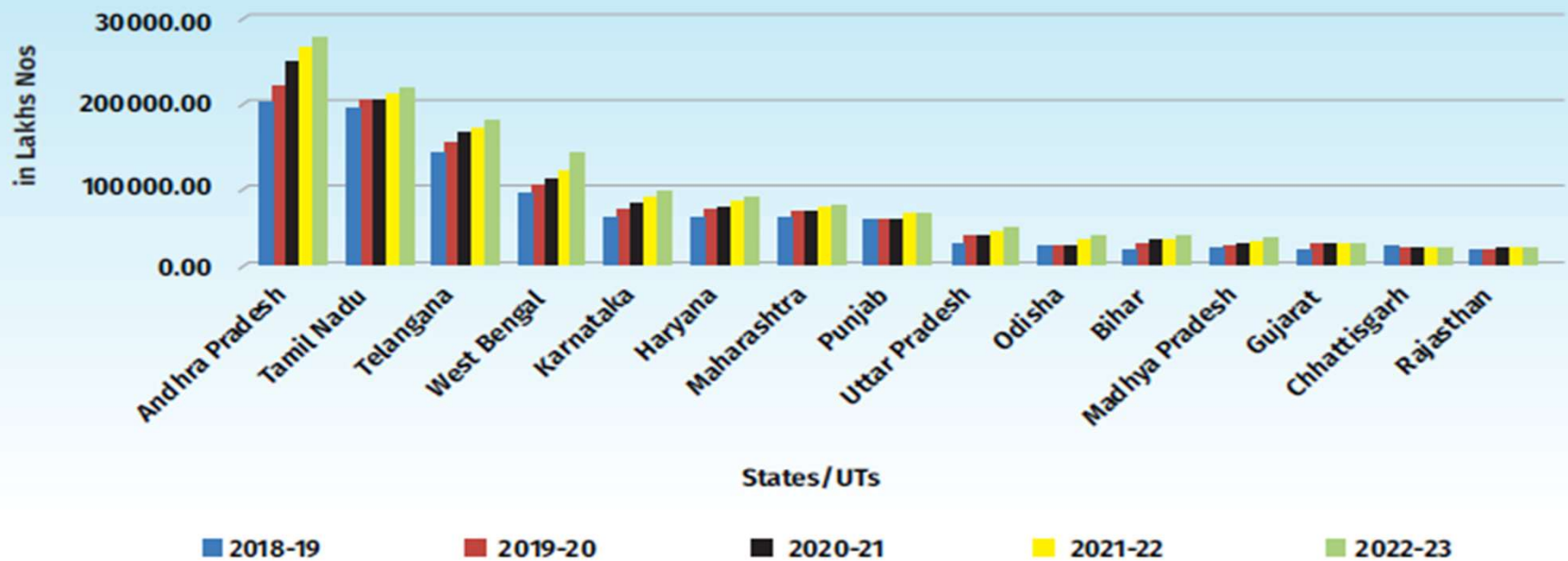
(In Crores)

YEAR	EGG PROD	HUMAN POP	PER CAPITA
1989 – 90	202	82	25
1990 – 00	304	100	30
2009 – 10	602	117	42
2019 – 20	1438	133	86
2022 – 23	1383	138	101



STATE WISE EGG PRODUCTION 2018-19 TO 2022-23

GRAPH 2.15: EGG PRODUCTION DURING 2018-19 TO 2022-23 OF SELECTED STATES



TOP 5 STATES FOR EGG PRODUCTION

The top 5 Egg producing states contributing to 65% of total production are

States	% in India
Andhra Pradesh	20.13 %
Tamilnadu	15.58 %
Telangana	12.77 %
West Bengal	9.93 %
Karnataka	6.51 %



POULTRY IN INDIA – PRESENT STATUS

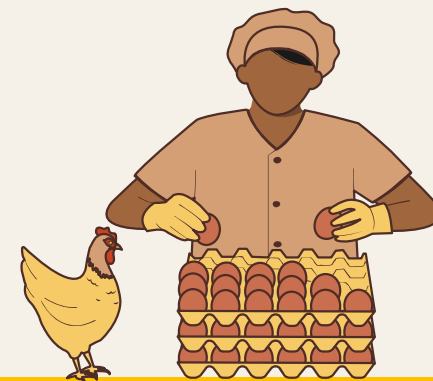
With reference to Layer placement and consumption for Eastern States.

States	Monthly Doc Placement	Birds in Laying	Daily Egg Production	Daily Egg Consumption	Shortage
West Bengal	10	150	120	300	180
Odisha	5.5	83	65	75	10
Jharkhand/Bihar	0.5	7	5	50	45
Assam & Meghalaya	1.0	15	10	60	50
Total	17.0	255	200	485	285

GROWTH PATTERNS - INDIA

YEAR	BROILER PLACEMENT
1970	4 Million
1980	30 Million
1990	200 Million
2000	800 Million
2010	2600 Million
2020	3960 Million
2022	4800 Million
2025	????
2030	????

Source : Sri Raghava Rao , Kohinoor Hatcheries



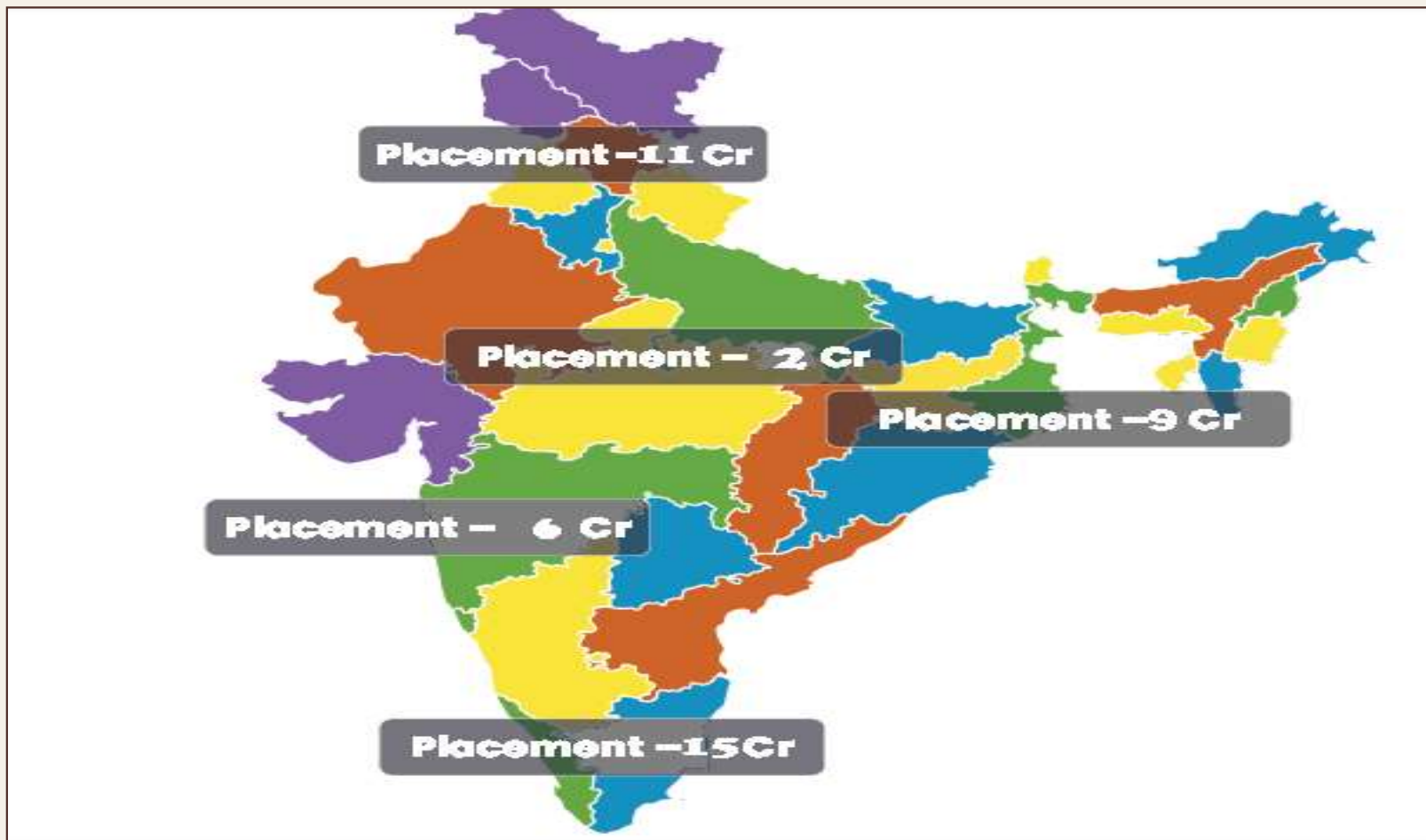
ZONE WISE – BROILER 2023 -24

Average Monthly Placement

Zone	Total Broiler DOC (Crores)	Under Contract Farming (Crores)	%	Under Regular Farming (Crores)	%
North India	11.5	7.5	65%	4	35%
West India	6	4.5	75%	1.5	25%
South India	17	15	88%	2	12%
Central India	2	1.5	75%	0.5	25%
East India	8.5	6.5	76%	2	24%
Total	45	35	78%	10	22%

INDIAN POULTRY – PRESENT STATUS

BROILER CHICKS PLACEMENT – 45 CRORES/MONTH



POULTRY IN INDIA – PRESENT STATUS

With specific to placement in East division the estimate for month wise broiler DOC placement for 2023 -23

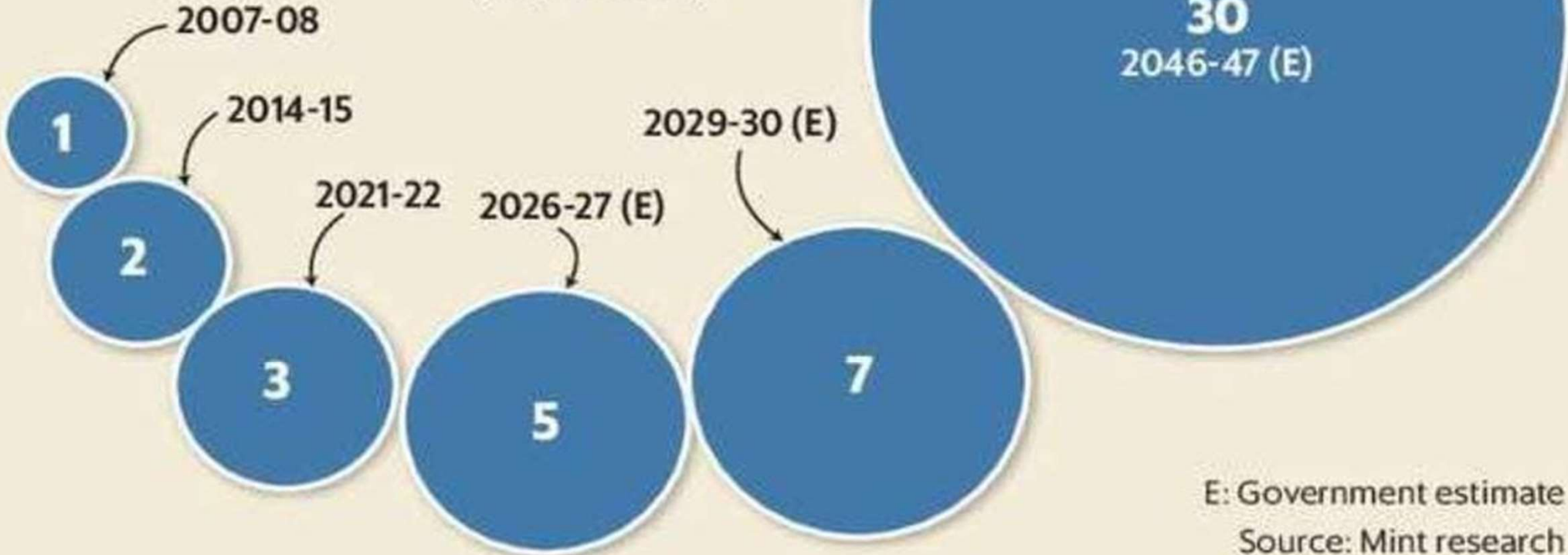
States	INT	Chick Sale	Total
West Bengal	409	105	514
Odisha	166	38	204
Jharkhand	42	33	75
Assam & Meghalaya	120	18	138
Total	737	194	931

India's GDP milestones

Becoming a \$7 trillion economy by 2030 is an aspirational target

mint

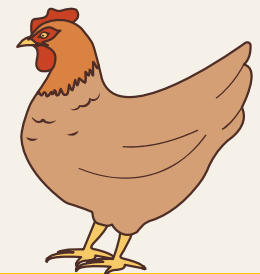
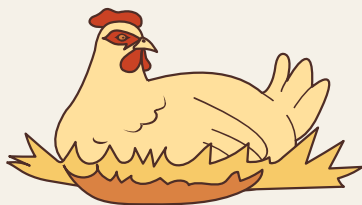
India's GDP
(in \$ trillion)



E: Government estimate
Source: Mint research

POULTRY SECTOR – FUTURE POTENTIAL

- Eggs & Chicken , an affordable quality protein for removing malnutrition in the country and acceptable to all sections of society.
- Huge Employment provider , specially small and marginal farmers in rural India.
- Key Sector in Agriculture for “ Doubling the farmers income “ .
- Good opportunity to play a prominent role in world export market for poultry & its products.



POULTRY SECTOR – FUTURE POTENTIAL

- Poultry future is very promising as per capita low specially central India and East where close to consumption poultry will grow at a much higher growth rate.
- Per capita consumption 101 eggs while NIN recommends 180 eggs .
- To cater to growing human population who are aspirational and with growing incomes poultry consumption shall grow even in the coming decade .
- Layer farming will be with individual farmers and broiler with corporates and large multi-state players
- Processed chicken , branding and sale through Swiggy / Zomato shall spread and volumes will grow in significant manner as seen post Covid .

FUTURE BUSINESS MODELS IN BROILER FARMING

	1995	2005	2010	2020	2030
Backyard / Individual farming	95	40	20	10	4
SME Category	5	50	50	25	11
Corporate	-	10	25	40	50
MNC Status / Conglomerate	-	-	5	25	35

FUTURE CHALLENGES

Concern : I

AVAILABILITY OF CEREALS FOR GROWTH

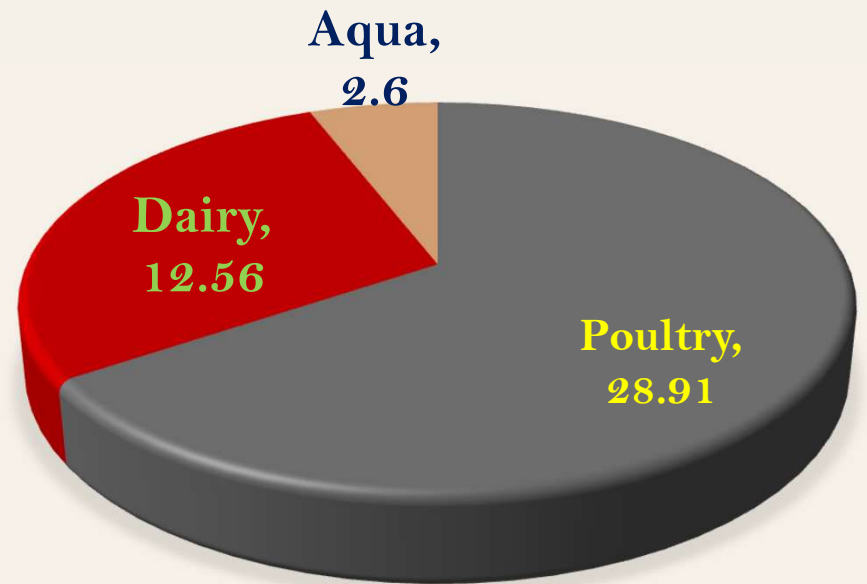
ANIMAL FEED INDUSTRY IN INDIA

Indian Poultry Feed production 28.91 million MT growing and the industry growing by 7-8% year on year.

Dairy compound feed production is approximately 12.56 million MT in India (Altech 2022 global survey)

Aqua feed production is 2.6 million MT in India.

ANIMAL FEED PRODUCTION IN MILLION MT



INDIAN AGRICULTURE CHALLENGE

- **Land constraint , small holding per individual.**
- **Water shortage and Low area under irrigation.**
- **Climate and vagaries of monsoon.**
- **Local varieties and Low yields of crops.**
- **Lack of GM varieties and mechanization.**

INDIAN POULTRY FUTURE CHALLENGES

MAIZE & ETHANOL

- While the maize acreage and productivity is stagnant, the demand for corn by different users groups is steadily increasing leading to sky rocketing of corn prices
- Government policy to use corn / broken rice for Ethanol production will lead to further shortage of cereals and corn availability and availability will be a **major challenge** for the growth of industry for the coming years.
- The non availability of broken rice , Ragi , Jowar at affordable prices for Layer farmers is adding further demand for Maize and fueling the prices

MAIZE & ETHANOL

- **Maize production 30/31MMT and per Ha productivity is 2.8 MMT as per industry . Government figures claim 34.6 MMT and productivity 3.4 T/Ha.**
- **Maize consumed for Ethanol 0.8 MMT is 2023-24, targeted 3.4 MMT in 2024-25 and 10 MMT by 2027-28.**
- **Government proposes to procure Maize at MSP rates and supply to Ethanol plants.**
- **Poultry needs 16 MMT of Maize in 2023 -24 and increases of 1 MMT per year for growth.**

MAIZE & ETHANOL

- **Commodity finance at Bank interest enable corporates / big players by in season and stock for off season use thereby ensure maintain efficient cost of production.**
- **Exports : 2.68 MMts export in 2020-21 , 3 MMts average exports per year.**
- **Starch : With firm international prices the capacity expansion from present 5.2 Mts to 6.5 Mts and purchasing 4 MMts of Maize.**
- **Human consumption , Cattle feed and Aqua also buy significant Maize**

MAIZE CONSUMING SECTORS (MMT)

Poultry Feed	16.15
Cattle Feed	2.0
Starch	4.6
Human Cons	1.85
Distilleries	2.5
Exports	3.0
Losses / Wastage	1.0
Total	31.45

MAIZE REQUIREMENT – INDIA (M.TONS)

Year	Production	Poultry Requirement
2010 – 11	21.73	
2015 – 16	22.57	
2020 – 21	31.65	
2021 – 22	32.40	15
2023-24	34.6	16.5
2027 – 28	??	22-23 MMt

MAIZE REQUIREMENT POULTRY

Year	Broiler	Layer
2022	$4800 \times 3.6 \text{ Kg} \times 60 \% = 10.368 \text{ Mt}$	$550 \times 42 \text{ Kg} \times 25\% = 5.775 \text{ Mt}$
2025	$5880 \times 3.5 \text{ Kg} \times 60 \% = 12.348 \text{ Mt}$	$610 \times 42 \text{ Kg} \times 25 \% = 6.405 \text{ Mt}$
2030	$7700 \times 3.4 \text{ Kg} \times 60 \% = 15.708 \text{ Mt}$	$740 \times 41 \text{ Kg} \times 25 \% = 7.585 \text{ Mt}$

SOYA REQUIREMENTS – INDIA (M.TONS)

Year	Production Bean	Poultry Requirement
2010	12.73	
2015	8.57	
2020	12.61	
2022	13.16	6.57 Meal
2025	??	7.60
2027	??	8.40

SOYA REQUIREMENTS FOR POULTRY

Year	Broiler	Layer
2022	$4800 \times 3.6 \text{ Kg} \times 22 \% = 3.801 \text{ Mt}$	$550 \times 42 \text{ Kg} \times 12\% = 2.772 \text{ Mt}$
2025	$5880 \times 3.5 \text{ Kg} \times 22 \% = 4.527 \text{ Mt}$	$610 \times 42 \text{ Kg} \times 12 \% = 3.074 \text{ Mt}$
2030	$7700 \times 3.4 \text{ Kg} \times 22 \% = 5.759 \text{ Mt}$	$740 \times 41 \text{ Kg} \times 12 \% = 3.640 \text{ Mt}$

FUTURE CHALLENGES

Concern : II

OTHER CHALLENGES AND TIMELY SOLUTIONS

CHALLENGES FOR POULTRY

- ❖ Emerging new disease challenges due to high density of multispecies in poultry pockets i.e ILT, REO , LP , HP etc.
- ❖ Lack of skilled and unskilled manpower in poultry farms.
- ❖ Difficulty in getting approvals for new poultry farms from different authorities i.e village , pollution board , state & central authorities
- ❖ Increasing interference from activists for running of poultry farms
- ❖ Increasing cost of transportation and wide gap between different production centers supplying in big metros

DIFFICULTIES TO START NEW POULTRY UNIT

- **Approval from Multiple authorities to start a new Poultry Farm.**
 - ✓ **Gram Panchayat**
 - ✓ **DTPC Approval**
 - ✓ **Pollution Board Clearance**
 - ✓ **Irrigation Department Clearance.**
 - ✓ **Department Of Mining .**
 - ✓ **Electricity Department .**
 - ✓ **Department Of Labour.**

- **Registration with Department of AH , State Government ??**

- **Can We have Single Window Clearance for Poultry Farm like many industries on Fast Track ? ?**

Additional Consumption of Eggs in PM Poshan Scheme in North & Central India

GOVERNMENT SCHEME DETAILS

Sl.No	State	Mid Day Meal	Anganwadi	Tax	Electricity Subsidy	Water
1	Andhra Pradesh	5/week	6 months to 3 years 4; 3 to 6 years 4; pregnant & lactating mothers 4/week			
2	Arunachal Pradesh					
3	Assam	1	-			
4	Bihar	1	-			
5	Chhattisgarh	2	2			
6	Goa					
7	Gujarat					
8	Haryana					
9	Himachal Pradesh					
10	Jammu & Kashmir	1	-			
11	Jharkhand	2	3			
12	Karnataka (7 districts)	2	-			
13	Kerala	1	-			
14	Madhya Pradesh					
15	Maharashtra					

GOVERNMENT SCHEME DETAILS

SI No	State	Mid Day Meal	Anganwadi	Tax	Electricity Subsidy	Water
16	Manipur					
17	Meghalaya					
18	Mizoram					
19	Nagaland					
20	Orissa	2	5			
21	Punjab					
22	Rajasthan					
23	Sikkim					
24	Tamil Nadu	5	3			
25	Telangana	3/week	6 months to 3 years 16; 3 to 6 years 30; pregnant & lactating mothers 30/month	Rs.100/year per farm(G.Panchayat & Municipality)	Rs.2/unit	
26	Tripura	2	1			
27	Uttar Pradesh				Rs.1,200/month	
28	Uttarakhand	1	-			
29	West Bengal	2	3			

GOVERNMENT SCHEME DETAILS

Sl.No.	Union territories	Mid day meal	Anganwadi	Tax	Electricity Subsidy	Water
1	Andaman & Nicobar Islands					
2	Dadra and Nagar Haveli					
3	Daman and Diu					
4	Lakshadweep					
5	Puducherry	3	2			
6	Delhi (National Capital Territory)					
7	Chandigarh	1	-			

- ✓ Under the Mid Day Meal scheme there are 11 crores beneficiaries. If weekly 2 eggs are implemented, consumption will be for 32 weeks, 704 crore eggs per annum.
- ✓ Under the Anganwadi scheme 10.26 crores beneficiaries. If weekly 2 eggs are implemented, consumption will be for 52 weeks 1,065 crore eggs per annum

POULTRY, GOVERNMENT & SCIENTIST COORDINATION

- **Effective surveillance for timely diagnose of new disease challenges .**
- **Fast track process for early solutions.**
- **Effective coordination between IVRI, Scientists and Vaccine manufacturers for right vaccine and schedule.**
- **Monitor results and feedback from Industry for constant upgrading**
- **Ease in import of media, serum, equipment, Lab wares.**
- **Facilitate export of Vaccines by Government intervention with neighbouring countries.**

GOVERNMENT SUPPORT

- **Contribution of AHIDF – Animal Husbandry Infrastructure Department found for 3 more years as farmers putting up infra like feed mills, Hatcheries and EC Sheds.**
- **Clarification on rules of Animal Welfare Board that Poultry & Fish are not “Animals “ and shops be allowed to dress in retail shops.**
- **Promotion of Eggs and Chicken by Govt. as healthy food to build immunity in Schools and Hospitals.**

CONCLUSION

For Poultry Sector healthy growth the farmers request both Central & State Government to :

- 1) Ensure availability of Maize and DoSoya as required for coming years.**
- 2) The price of principal feed ingredients be comparable to international prices (CBOT) and allow imports, GM varieties**
- 3) Surveillance and timely Vaccine solutions to counter Emerging diseases.**
- 4) Government to advice to States to include Eggs in noon meal Scheme.**
- 5) Remove Constraints for Poultry Exports and “ Zoning ”.**
- 6) Government Schemes like AHIDF to be continue**

THANKS!



Thank You

