

# Poultry Sector in India

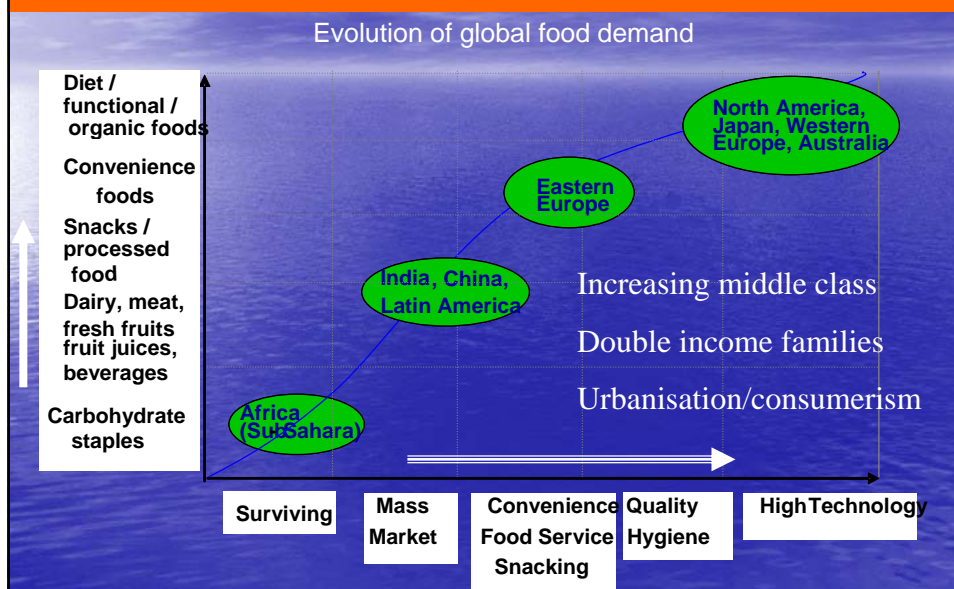
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## Presentation outline

- Current status of egg industry
- Demand & supply projections
- Technology & Supply Chain Concern
- Scope for Integration
- Egg Market Opportunities (India)
- Egg Market Opportunities (international)
- Conclusion

## India Rising High on Food Demand Curve

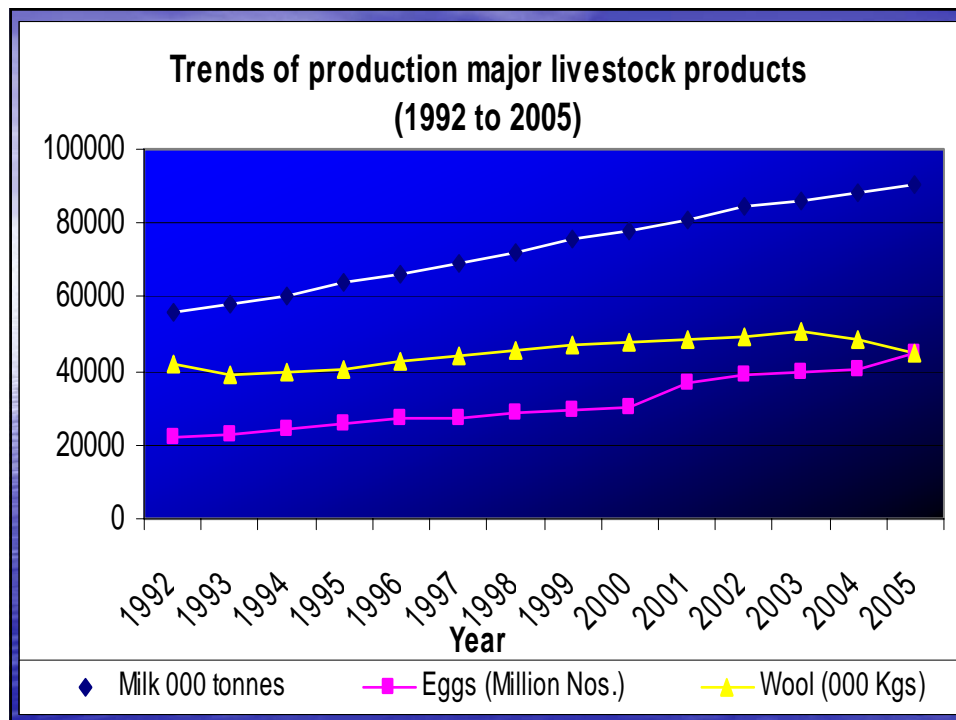


## Status of Egg Production and Marketing

- 70% in organised sector
- 4<sup>th</sup> in world egg production
- 45.2 billion eggs
- 2million people employed
- 11<sup>th</sup> plan target growth rate 10% per annum
- Contributes only 0.5% of world exports-SPS measures
- Highly subsidized EU, USA, Japan and Canada.

## Egg Industry Structure

- **Breeding** of foundation stocks including pure line and grand parent stocks and hatcheries
- Poultry feed manufacturing plants
- **Vertical integration** systems for layer production, processing and marketing
- Poultry marketing through **egg carts**
- Egg labeling and **packaging** stations,
- Egg processing for value addition
- Poultry fast food joints
- Production of "**Specific pathogen free (SPF)** eggs for vaccine production



## Demand & Supply Projections

- Current consumption is just **41 eggs/year**
- ICMR recommendation **182 eggs/year**
- By 2010 estimated demand **180 billion eggs**, supply is just 46 billion eggs
- Rs1,48,000 crore investment is required
- 700 to 800 hatcheries operating in the country
- Farm size is increased 2 to 3 lacs layers/farm
- Productivity 315 to 320 eggs in 52 weeks of production
- Unmet **rural demand**

## Regional Imbalances

- The **western and southern** states have progressed well but the Eastern and Northeastern states have lagged behind.
- Average variable costs of egg production is still lower in case of southern and western states.
- Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Uttaranchal and North Eastern States to be encouraged.

## Technology Gap

- only **5 percent** of the farmers were able to access any information on animal husbandry against **40 percent** of farmers accessing information on modern technology for crop farming (NSSO) in unorganised sector

## Producers Associations-Role

- National Egg Coordination Committee (NECC)-region-wise wholesale egg prices.
- Agro-corpex –direct trading of farmers
- Growing demand from 'Kentucky Fried chicken', 'McDonalds', 'pizza hut' and 'Subway'
- Mid-day meal programs

## Vertical Integration Cost Advantage: Fore in to Hatching Eggs

Average day-old-chick costs in India (Rs.)

REGION	INTEGRATORS	OTHERS
North	NA	11.79
West	8.75	14.00
South	7.89	10.00
East	10.00	NA

## *Backward Integration: Case of Feed Mill*

### Backward integration Poultry feed

- If a farmer can manufacture **his own feed**, the savings can be obtained to the extent of about Rs 2000 per ton.
- Least cost feed formulations based on local agricultural produce

## Potential for Value Added Products -Growth Rate is in Double Digit /Risk Mitigating Strategy

- Whole egg powder, albumen flakes, yolk powder, natural yellow pigment from yolk, lecithin, conalbumin and avidin from eggs used in pharmaceutical industry. Lysozyme, di-calcium phosphate from shell and shell membranes, There are good investment opportunities in all above new innovative ventures
- Growth rate >15% to 30%

## Infrastructure for Egg Marketing

- Infrastructure facilities using modern equipment and machinery for **post-harvest treatment**, processing preservation and marketing of eggs are required.
- Instead of concentrating all marketing efforts in the big urban centers, it is necessary to improve infrastructure and develop **rural markets** where there is a good demand.
- Infrastructure to be enhanced in **backward and low consuming states** like Bihar, Jarkhand, Chattisgarh, MP, Uttaranchal and NE states

## Egg Marketing in Urban India.

- In India, consumer preference is increasing for "clean", "safe", "hygienic" "nutritious" and "properly packed, labeled and presentable" eggs in urban centers.
- Introduction of modern state art technology in processing, packaging, labeling, preservation of eggs is required to improve " quality" for domestic and export markets.
- With economic liberalization and free trade under WTO, the domestic products have to maintain "quality" to face the stiff competition from imported foreign poultry foods.
- Awareness to Children & Women in nutrition

## Egg Marketing in Rural India

- Poor backward and forward linkages are the major bottlenecks
- Schemes to develop rural markets and to remove regional imbalances need to be worked out.
- Surveillance and guidance to farmers for control of poultry diseases
- Technology Gaps will be removed

## Problems in Marketing..

- Under developed markets in **North and East India**
- Contract farming / integration- **documentation of best practices-replicated**
- Marketing of the final product is still under the control of **traders**
- Producer organisations to be strengthened like in **Milk Cooperatives**
- There are few initiatives of **public-private** partnership initiatives in poultry sector

## World International Trade

<b>MAJOR EXPORTERS</b>	<b>VALUE (Rs mill.)</b>	<b>MAJOR IMPORTERS</b>	<b>VALUE (Rs mill.)</b>
USA	11580	Japan	12820
France	11050	Germany	10170
Netherlands	10620	Saudi Arabia	5960
Brazil	6280	CIS	5030
Hungary	4680	Hongkong	4200
Thailand	5840	Other ME	14380
Other Euro	5020	Others	13150

## India's Poultry Exports

Hatching eggs	UAE	(38.0%)
	Oman	(26.8%)
	Kuwait	(5.4%)
Table eggs	UAE	(72.8%)
	Kuwait	(8.3%)
	Oman	(8.3%)
Egg Powder	Japan	(16.0%)
	Poland	(14.5%)
	UAE	(8.9%)
Frozen Eggs	UAE	(83.0%)
	Oman	(5.0%)
	Kuwait	(3.9%)

## India's Exports

- Exports are mainly in table eggs, hatching eggs, frozen eggs, egg powder
- Egg powder exports have faced a major problem due to the **fall of price** (USD 4.00 to 2.5 per kg) in the international market and imposition of **heavy import duty** (USD 0.80 per kg) by the European Union.
- **SPS**

## Consumer Preference in International Market

- In Dubai, our major sales are in the **institutional market** i.e. hotels, restaurants and caterers. **Retail stores prefer eggs from Europe and USA.** Indian eggs are perceived as of **lower quality and are quoted for USD 2 to 3 less per carton** ( 360 eggs ) than the eggs from Europe and USA.

## Consumer Preference in Gulf

The present requirements of importers in Gulf are that the table eggs should have

- **50-55 gram weight,**
- **clean** and uniformly **thick shell** with no visible cracks
- have a **spotless yolk** (yellow colour preferred)
- **Free from Salmonella** and other contagious disease infections
- **Stamped** with date of production, country of origin and date of expiry, using food grade quality ink –**traceability**

## Problems in Exports

- Poultry and poultry products are highly **subsidized by countries like USA and EU** and this factor has impeded India's export of such products not only to these countries but to other countries where they compete with us.
- **Sanitary-phyto-sanitary (SPS)** measures

## Explore Trade Opportunities

- **Services** should be delivered at farmer's doorstep and linked with cost recovery for economic viability.
- **Import of maize and soya**, technology and machinery to be flexible
- **Referral labs** accredited and recognized with global status.
- Status of poultry-agriculture/industry
- Harmonise national standards with **codex standards**
- Try to emphasis on elimination subsidies by developed countries in WTO
- Opportunities in **south and south east Asia and middle east countries**
- exports of **value-added** products rather than raw materials
- Calamity relief fund (bird flue)

## Egg Powder Prospects

- Excessive production in south India is a good opportunity to explore egg powder plants
- Whole egg, yolk and albumen powders
- Problems in the way are **high taxes, excise duty, quality control labs** etc.
- The state sales tax for egg powder is 10% and central sales tax is 4% against. An excise duty of 12.5% is being charged for sale of egg powder in domestic market. These taxes increase the cost of egg powder prohibitively high.

## Measures to Increase Exports

- Infrastructure facilities for **grading, processing, packaging preservation, and marketing with cold chain facilities** will have to be developed Better veterinary inspection, **disease screening and certification** facilities are required at major airports.
- With the onset of WTO agreement, more strict **'quality' and 'hygiene' standards** ( e.g. SPS measures) are being prescribed by countries intending to import poultry products.

## Action Points

- The demand for eggs is growing and **supply is short of demand** in the coming years.
- Try to increase **vertical integration** to reduce cost and increase competitiveness (activities like feed, hatcheries, egg processing). Begin with low cost integration like feed preparation, hatcheries etc.
- To **increase scale** (to take advantage of logistics and branding) contract poultry farming with neighboring small-scale producers will be encouraged
- Enter in to new emerging markets like **contract with large emerging food chains** to supply good quality and clean eggs.
- Fore into **rural markets** through mid-day meal programs etc.
- **Quality and sanitary standards** to be increased to meet export standards and reduce risk of frequent attack of diseases

## Branding Strategies

1. Brand "***Delivered fresh daily***" with date of production/expiry/place of production on the label.
2. ***Quality assurance certificate*** from "National Research Centre for Poultry, (ICAR), Hyderabad.
3. The egg industry has a color palette, in shades from pale yellow to deep gold, and can add marigolds or other foods rich in natural xanthophylls to boost yolk color- "***eggs with golden yolk***"
4. "***eggs vegetarian diet***" -hens get vegetable oil instead of the tallow, lard and ground bones in most commercial feed.
5. "***Organic***" eggs must come from hens fed only organic feed- for export purpose and also to meet needs of high-end food malls.
6. Eggs with ***omega-3 fat eggs***: By feeding hens flax, algae and canola oil, egg farmers have been able to boost omega-3s in eggs from 35 milligrams, the natural level, to 150-225 mg per egg.

## Conclusion

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Thanks