

Vertical Integration Paving Way to Organised Retailing in Indian Poultry Industry

R.Karthikeyan¹, Dr. V.R. Nedunchezian²

¹Research Scholar, Anna University – Chennai (Coimbatore Region).

²Professor, KCT Business School, Coimbatore.

ABSTRACT: The Indian poultry-meat industry has been growing at a very rapid rate in recent decades, by transforming gradually from unorganized, small-scale backyard farming into large-scale, organized farming. The poultry industry is one of the fastest growing sectors in India with the growth rate of 20% per annum with the ever increasing population. The objective of this paper is to elucidate organized retailing of the poultry industry by vertical integration and the subsequent retail boom in India. This paper also discusses the initiatives taken by the major poultry players' (Integrators) in the industry with reference to Indian market conditions.

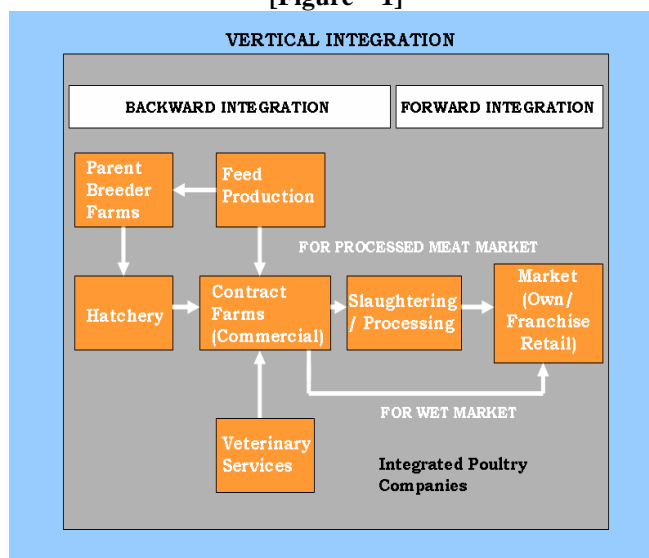
Keywords— Poultry, Egg, Integration, Vertical, Backward Integration, Retailing

I. INTRODUCTION

India has is the world's second largest emerging economy and with this it has a large and rapidly expanding poultry sector. Poultry in agriculture segment is one of the fastest growing sectors in India with an average growth rate of 6 percent in egg production and 12 percent for broiler production per annum. Among many key factors are responsible for driving the recent growth of the Indian poultry sector, First and foremost is the rise in consumer demand for poultry , which is driven by both income growth and changes in prices of poultry meat relative to other goods. Second, the structure of India's poultry market is witnessing a sharp change. In particular, integration of poultry production in a vertical manner and appropriate marketing methodology has lowered costs of production, marketing margins, and consumer prices of poultry-meat.

This shift in process of traditional poultry supply chain to vertical integration has paved way to better value creation of poultry products. This may rightly be called as commodity branding of poultry products.

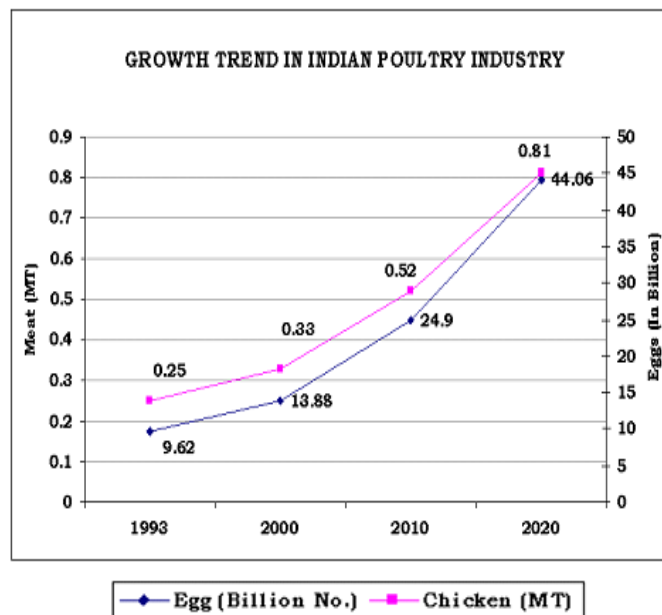
[Figure – 1]



The future pace of vertical integration in the industry is such that there is likelihood of a growth in pace at which consumers shift from a preference for live birds to a processed (chilled or frozen) products, a shift that will enable poultry integrators to expand their market reach and scale of operations and hence improve upon market capitalization. According to an Ernst and Young (E&Y) presentation, the food processing industry in India is expected to grow 30-40 per cent as against the present 15 per cent in the upcoming decade. The estimated annual growth of chicken meat will be 0.81 Metric Tons in the year 2020.

The preference of Indian customers is typically towards fresh chicken meat, which is generally slaughtered in small corner shops. There is a noticeable difference in price between processed and wet market dressed chicken. Processed chicken commands a healthy 20% to 30% premium over wet-market dressed chicken. Since Indian consumers are price conscious, they prefer dressed chicken. Moreover, the widespread perception amongst Indian consumers is that live is fresh and processed is old. However, it is observed that the processed poultry meat market (Chilled/ frozen, cut chicken) is limited, and largely confined to institutional sales.

[Figure -2]



Source: <http://www.indiastat.com>

The focus has now started to shift to processed chicken and is currently around 30,000 tonnes with a market size of 2 billion Rupees. Annual growth is estimated at 15% to 20%. As the improvements are being witnessed, many private companies have started investing in processing plants in recent times and some leading integrators also have started to market branded packed chilled chicken products at retail level in India. Processing companies are also offering a wide range of healthy and nutritious value added, ready to cook snacks that are attractively priced and processed under the most stringent hygienic conditions in start of the art manufacturing facilities. Market capitalization of processed meat, the frozen non-vegetarian snacks segment is growing at an estimated 25% to 30%.

II. MARKET DYNAMICS IN INDIAN POULTRY MEAT INDUSTRY

Poultry occupies a crucial place in India as the eggs and chicken meat are important and rich sources of protein, vitamins and minerals. Moreover, Chicken is the most widely accepted meat in India. The constraints due to being a religious taboo unlike beef or pork are also a helping factor. The prices of chicken meat are much lower when compared with that of mutton or goat meat. Many Indian families in urban areas have begun to accept eggs as a regular supplementary part of their vegetarian diet. The forecast surveys also indicate a great opportunity for this sector with the prediction that as the present younger generation goes to the adulthood, the acceptability and demand for eggs and chicken meat in next decades is likely to increase many-folds very rapidly.

III. PROCESSED POULTRY DEMAND

Processed poultry products that include chilled or frozen products and processed items currently account for only a small share of urban household consumption and also a negligible share of rural consumption. Chilled whole birds and parts can be found in markets and higher end shops in major cities and are consumed in a few institutional settings that include restaurants and hotels. Frozen birds and parts which are more difficult to find at the retail level can be found in shops located across the major cities, and are also marketed by processors who directly market them to hotels and restaurants. Frozen, processed items, such as heat-and-serve dishes are often found in high-end shops in the major cities.

[Table – 1]

Segment	Size -Output / Value	Projected Growth	Penetration	Percentage organised Players
Dairy Products	US \$ 375 Million	15%	37%	55%
Fruits & Vegetables	2.33 Million Tonnes	20%	10%	48%
Meat & Poultry	US \$ 13 Million	10%	6%-10%	5%
Fisheries	6.4 Million Tonnes	20%	12%	-
Packaged Foods	US \$ 2 Billion	8%	3%	80%

As only a few firms are involved presently in this market, the size, perhaps be more accurately measured. Dressed and frozen products were produced by about 12 firms operating with semi or fully mechanized dressing plants and freezing facilities. Frozen poultry products produced and consumed annually in India totals to about 12,000 tons or about 1-1½ percent of total consumption depending on the estimate of total consumption used.

The live-bird market is most likely to continue to dominate in India at least for next few years. Moreover, the demand for chilled and frozen birds shall continue to expand in an institutional manner, but movement by household consumers to chilled or frozen products would most probably be slow. Customers prefer Chilled meat to frozen meat, and growth in consumption of chilled meat is seen to help facilitate the transition towards a frozen bird market. Sensing the opportunity in this chilled meat market, most of the poultry integrators in Southern, Western, and Eastern India have already started marketing dressed and chilled products and have plans to expand sales to both institutional and retail customers.

[Figure– 3]



Hotels, restaurants, and fast food establishments, including McDonald's, Pizza Hut, Dominos, KFC, Marrybrown, Subway and also many indigenously developed fast food brands are some of the current and future sources of growth in the institutional segment.

IV. VERTICAL INTEGRATION PAVING WAY TO ORGANISED RETAILING:

A number of new approaches by the poultry integrators may foster growth in the retail segment, which includes the establishment of integrator-owned or franchised chilled/frozen poultry shops, sales counters in existing food shops and home delivery services for chilled/frozen poultry products. With the recent advent of retail stores that are mostly concentrated in Southern India, is also likely to support growth in the retailing of chilled/frozen poultry products. Here we are discussing some of the examples of organized retailing activities in-line with Vertical integration in Indian market.

4.1. SUGUNA POULTRY FARM LTD:

Suguna Group, India's largest poultry enterprise, launched its outlet of a chain of quality chicken retail stores under the brand name *Suguna Daily Freshh*. This brings the total to 27 stores including Tamil Nadu and Kerala.

[Figure– 4]



India as we know is the third largest egg producer and fifth largest poultry meat producer in the world. Indian poultry market is very huge with an estimated market size of about Rs 20,000 crore (Business line). Another fact that Indian market is highly fragmented and dominated by local players. In the poultry market, the frozen meat market was around Rs 7500 crore. It was in this market where some amount of branding activity seen. In this context, Suguna's story becomes relevant. Suguna came into a difficult market with a difficult idea. Branding chicken! But through worthy and hefty investments in the media, Suguna was able to create a mind space for itself.

Suguna started to promote itself on quality and tenderness. Due to easy availability of live birds, Indian consumers prefer live birds to frozen meat. Suguna was able to make its brand prominent in this market also. Then the company entered into another lucrative market of selling branded egg. Each year India produces around 47 billion eggs worth Rs 10,000 crore. The market is growing at a rate of 15% in a year (Economic Times). The brands are Suguna Pro, Suguna Active, Suguna Heart, Suguna Shakthi. Since its eggs price is almost 50% more than the usual eggs, Suguna had to show some differentiation in the product to justify the premium. The eggs were clean, more shining and uniform in terms of size/shape and in good packaging. In branding commodity, a marketer should be able to justify the premium and Suguna was able to do just that. Catering to the needs of high cholesterol patients, Suguna also has expensive range of eggs under the variant *Suguna Heart*, which contains less cholesterol and rich in Omega-3 fatty acids.

Suguna's processing plant situated at Udumalpet in Tamilnadu, India. The processing plant is one amongst the most modern and technologically advanced units in India. It has an operational capacity to process 3600 birds per day and 1500 metric tonnes per month. Suguna's Processing plant is closely monitored by Export Inspection Agency (EIA) and Meat Food Products Order (MFPO) by the Ministry of Food Processing Industries, Government of India as it is approved by the government for exports.

4.2 SHANTHI POULTRY FARM LTD:

Shanthi Poultry Farm (P) Ltd., one of the leading poultry group in integrated farming in South India. The Processing culminates at a well-planned freezing and packing facility. Necessary measures is taken to ensure that the packing and shipping process confirms to stringent international quality norms that cater to international market including the Middle East, Europe and America. The typical processing of chicken at Shanthi Poultry follows a cycle that begins from the adult birds to packing and freezing.

[Figure– 5]



The choice of expanding facilities has given them the impetus to setup their own retail outlets. They are setting up full-fledged company, owned and franchisee outlets across south India as part of their expansion. Major share of their production capacity contributes to Exports. With an established presence across the Middle East, they are now ready to establish them further in US and Europe.

The processing unit uses advanced machinery imported from The Netherlands. The processing is done in a hygienic environment that adheres to standardized methods and benchmarks that are followed in the food processing industry. Packing is systemized through fully automated machines. Their operations are in-line with GMP (Good Manufacturing Practices) & GHP (Good Hygienic Practices) which is being attuned in comply with HACCP standards. They have been conferred with the coveted HALAL Certification that is an evidence for their high quality products.

4.3. VKS FARMS PVT LTD

VKS FARMS has recently entered the broiler integration business. The venture that was started primarily to cater to the rising demands of the domestic and international poultry market is now using the integration model of growing chicken, which is a widely successful one. The company owns a full value chain that starts from parent breeders, hatcheries, and commercial broiler farms, feed mills, chicken processing plant and retail chain outlets.

[Figure-6]



These companies from India, largely exports poultry and due to this fact they are planning to extend the reach of Indian Chicken throughout the globe. The processing plant for exports and domestic market is set up on par with international standards near Coimbatore, equipped with the best machines in the world to produce highest quality of processed chicken.

VKS FARMS egg division was started in 2002, in Namakkal District of Tamilnadu. The company has developed swiftly as the largest exporter of chicken eggs from India and it holds 70% of the market share of egg exports from India. This is primarily due to the company's well-established supply chain. The company's farm fresh eggs have customers from Middle East, Africa and Asia. Moreover, the company is among the first to explore new territories across Africa and Asia.

The company has a full in-house infrastructure to handle egg exports of any volume. A few other unique things about them are that they also produce paper cartons and moulded paper pulp trays, which are the primary packing materials and the full logistics cold chain to deliver top quality fresh eggs to all customers. VKS FARMS have ventured into retailing through retail outlets called 'VKS Farms Pvt. Ltd.'. Having started in 2007 at Coimbatore, today they are in the process of setting up an entire chain of poultry integration from parent bird to retail units to reach the customers. In Tamilnadu alone, it is having fifteen retail outlets.

4.4. VENKY'S (INDIA) LIMITED

Venky's (India) Limited sells its processed and further processed chicken under the brand name *Venky's*. Venky's is the first national brand in the processed chicken segment and down the years, has become synonymous with nutrition, quality, and high standards in hygiene. It is a preferred supplier to the Indian outlets of McDonalds, KFC, Pizza Hut, and Domino's.

The product range includes Fresh Chilled Chicken, Frozen Chicken (Whole, Boneless and Portions), and several Economy products. Venky's Mintomein (freezer-to-fryer, microwaveable and cold cuts) has found wide appeal among homemakers by being in the ready to cook segment.

[Figure-7]



The processing plant is situated at Kamshet, right between the commercial centers of Pune and Mumbai. The unit is a fully automated set-up equipped with a dressing facility imported from the Dutch company Stork. The plant has a dressing capacity of 4000 birds an hour with an equivalent capacity for further cut-ups and automatic deboning.

All birds at the processing plant are slaughtered as per Islamic Rites (Halal) and only healthy chickens are used to process for easy to cook chicken products. The material and spices used at plant is procured from certified Vendors. The production system ensures highest food safety at all times and is monitored for its critical points by food experts.

4.5. REAL GOOD CHICKEN (GODREJ-TYSON)

Godrej Tyson Foods is a joint venture between Godrej Agrovet Ltd., a part of the Godrej Group and Tyson Foods Inc. The company is India's premier poultry and vegetarian products manufacturer and marketer with strong value-added brands such as Real Good Chicken and Yummiez. The venture combines Godrej's hygienic supply chain and strong value-added brands with Tyson Foods' expertise in processing and product development to create great-tasting, safe, and healthy products. The company also offers India's expanding foodservice industry and universe of modern retailers, innovative poultry solutions and world-class products customized to local tastes.

[Figure-8]



Godrej Tyson's focus is on serving the growing demand for quality poultry in India with processed chicken, value added chicken products and to complement these, a very strong vegetarian range. Godrej Tyson, having a Strong Supply Chain is also the best sales and distribution network in the industry. Godrej is the first company to market fresh chilled chicken in India. They have state-of-the-art, HACCP certified, processing plants in Bangalore & Mumbai. Trained food technologists supervise all processes. 100% safe and guaranteed wholesome products are produced by Godrej Tyson foods. They follow the industry best food safety standards, tracking, research & technology. *Real Good Chicken* brand is market leader for fresh poultry in India with 20% market share in processed poultry.

4.6. SKM EGGS

SKM Egg Products, which is processing over 1.4 million eggs per day is one of Asia's largest and most sophisticated plants using the best of the equipments and technology. The company has several accreditations to its credit including ISO 17025 (Laboratory), ISO 9001:2000, BRC (British Retail Consortium), HALAL and HACCP. The plant produces a range of egg products like albumen powder, yolk powder and egg powder blends. It is also currently exporting the same to over 21 countries. With the establishment of branches at The Netherlands and Japan, the company has also increased its global presence considerably.

SKM Egg Products has launched SKM Best Eggs, pesticide-free, antibiotic-free eggs. The company that hitherto concentrated in the international market selling powdered egg now entered in the domestic market with the brand name *SKM Best Eggs*. The company is committed to supply clean, healthy and quality eggs to Indian market in the Western countries.

Further, the birds are fed with 100% vegetarian diet (Like soya, maize etc.) only that is free of antibiotics and pesticide residues that is strictly monitored by the ISO 17025 Lab. The Lab also has full-fledged facilities with validated and approved SOPs for testing Physico-Chemical parameters and is designed to fulfill the requirements of food testing as per the norms of EU and has got world class instruments for testing the Organo-Chlorine pesticides, antibiotics and heavy metal residues in the egg. Hence, SKM BEST EGG is completely safe and residue free and is on par with eggs sold in most advanced countries.

[Figure-9]



Further in SKM, the egg also under goes a variety of further tests and scans in highly sophisticated imported grading machines and equipments that cost over Rs. 35 million to ensure it is free from dirt, crack, leak and blood-spots. These machines also sort the eggs to uniform weight and size, and then the date of lay is printed on each egg itself. The eggs are then put through UV disinfection process to neutralize / minimize the growth of microorganisms, consuming eggs those are untreated and contain high level of micro-organisms often leads to vomiting and diarrhoea. Finally, the UV disinfected eggs are placed in paper pulp egg holders in lots of 6s or 4s and shrink wrapped and labeled. The eggs are available in the retail store shelf on the 3rd day of laying. If the eggs are not sold-off within 7 days, the company itself will replace by fresh stocks. This is a unique feat achieved by SKM to ensure that the customers get only the fresh eggs at all times.

SKM BEST EGGS is priced just a few paises marginally higher than the eggs sold loose in the market, a paltry price considering all the efforts that goes into making it. The company will also ensure that these eggs are available across all class of retails stores / kirana stores, supermarkets and even petty-shops. The above-discussed examples are paving way to organized retailing in Indian poultry industry. The most of the poultry companies are adopting the vertical integration business model for their operation.

V. CONCLUSIONS

Rapid growth of Indian poultry industry is driven by a combination of rising incomes, young and urbanizing population and declining real poultry prices. The vertical integration in the poultry industry and the retail boom in India are paving way to organized retailing. Besides, government's support in terms of basic infrastructures like adequate warehouse/cargo space, efficient cold-chain system and exemption from excise duty on branded poultry products, simplified policies and efficient marketing network are essential for promoting domestic market prospects of poultry products. It is imperative for the Ministry of Food Processing Industries, Agricultural and Processed Food Products Export Development Authority (APEDA), poultry producers-cum-processors, food processors, food scientists-technologists, extension specialists and other stakeholders to identify and address the constraints to evolve, appropriate mechanism for the transformation of the nascent poultry processing and product development sector into a dynamic, vibrant and versatile enterprise.

The vertical Integrated approach is identified to create an efficient poultry production-cum-processing and interface for accelerating the pace of growth of Indian poultry industry.

REFERENCE

- [1]. Animal Husbandry and Dairying - 11th Five year plan (2007-12) by Government of India Planning commission, New Delhi.
- [2]. Ayyagari, V. (2001) Genesis, Development and Propagation of Vanaraya and Grampriya Germplasm for Rural Poultry Production. Ibid p.7-14.
- [3]. Birthal, P.S., and V.K. Taneja. (2006). Livestock sector in India: Opportunities and challenges for smallholders. Paper presented in the international workshop on Smallholder livestock production in India: Opportunities and challenges. Indian Council of Agricultural Research, New Delhi; and the International Livestock Research Institute, Nairobi. New Delhi: January 31-February 1, 2006.
- [4]. Delgado, C., C. Narrod, and M. Tiongco. (2008). Determinants and implications of the growing scale of livestock farms in four fast-growing developing countries. IFPRI Research Report # 157. Washington, D. C.: International Food Policy Research Institute.
- [5]. Devarajan, S. (1981). Profitability of broiler production in the environs of coimbatore city. Poultry Guide, 18 (9) : 35-38.
- [6]. Mehta, R., M. Saqib, J.George (2002), "A Case Study of select processed food products in India", RIS Discussion Paper # 34/2002.
- [7]. Mohanty, S. & Rajendran, k. (2003). 2010 vision for Indian poultry. International Journal of Poultry Science, 2(2): 139-143.
- [8]. Ramaswami, B., P.S. Birthal, and P.K. Joshi. (2006). Efficiency and distribution in contract farming: The case of Indian poultry growers. MTID Discussion Paper 91. Washington, D.C.: International Food Policy Research Institute.
- [9]. Rath, M., S. Nayak and Iqbaluddin (2001) "Strategies for Future Development of Poultry Industry: Policies/Strategies and Constraints of Poultry Development in India", paper presented at, South Asian Regional Conference, Pune, 24-26 September, 2001.
- [10]. Shah, Deepak (2001), 'Indian Dairy Industry: Present Status and Future Prospects', Productivity, Vol. 42, No. 3, October - December, pp. 474-483.
- [11]. Yeshoda Devi And Kanchan, V. S., (2006), Study of chicken consumption pattern and consumer preference for processed chicken in Coimbatore. Indian Journal of Marketing, February 2007, XXXVII : 2.