

Marketing Of Poultry Eggs -New Issues And Competitive Challenges

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INTRODUCTION

Indian poultry industry has registered a significant growth during the last four decades. India ranks fifth in the world with annual **egg production** of 1.61 million tones. **Poultry exports** are mostly to Maldives and Oman. Indian poultry meat products have good markets in Japan, Malaysia, Indonesia and Singapore. Over all, Andhra Pradesh counts for maximum egg production. Within Andhra Pradesh, Hyderabad is the city with maximum poultry and hatcheries. Besides the state of Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Gujarat, Madhya Pradesh, Orissa and North Eastern States are the major egg contributors.

Poultry egg processing units have come in a very big way in the country. Karnataka's egg production accounts for 2.5 million eggs / day to 7.5 million eggs, that in Punjab expanded from 5.0 million 15.0 million eggs per day in the past two years. Tamil Nadu was producing 8.0 million eggs / day while Maharashtra 6.0m, Rajasthan 1.5m, Gujarat 2.5m, Madhya Pradesh 4.5m and Orissa 1.5m eggs per day. Egg output in the northeastern states is estimated at 1.5m. Both public and private sector organizations have their contribution in the poultry industry that has made India among the top players. There are about 15 pure line and grand parent franchise projects in India. There are 115 layer and 280 broiler hatcheries producing 1.3 million layer parents and 280 million broiler parents. They in turn supply 95 million hybrid layer and 275 million broilers, day- old chick. Presently, there are only five egg powder plants in India, which is considered insufficient in view of growing export demand for different kind of powder - whole egg, yolk and albumen. The scope of foreign investment and state-of-the-art technology in this field is ,therefore, tremendous. Mainly India exports eggs, egg powder, frozen egg yolk and albumin powder to Europe, Japan and other countries. The authors have analyzed the Marketing of Poultry Eggs with special reference to Andhra Pradesh. The study objectives and methodology is given below.

OBJECTIVES

- ✿ To analyze the issues relating to factors influencing egg productivity, price fluctuations and opinions of egg producers and traders.
- ✿ To analyze the distribution practices and promotional activities of the producers and traders.

METHODOLOGY

For the study, 80 poultry farmers and 320 egg traders were interviewed with the help of a structured questionnaire and schedule. The marketing activities of poultry farmer may be viewed within the scope of marketing principles. These principles lay emphasis on marketing mix encompassing the **Four Ps---Product, Price, Place (Distribution) and Promotion**. Keeping these marketing mix elements in view, an analysis is made to examine the relative importance of these elements in the marketing system of eggs.

PRODUCT

The products of agri-business are obviously tangibles; eggs are tangible and have peripheral attributes such as package, credit and delivery terms, etc. They have an exchange value and are capable of being exchanged between the producer and the consumer. When viewed from all these angles, eggs become a product in the marketing sense of term. There are certain factors which influence the rate of egg production and quality of egg, they are: quality of bird, proper

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housing, proper feed, watering, proper lighting, timely vaccination, debeaking, timely culling, health and maintenance of bio-security measures.

PRODUCT DEVELOPMENT

The move to value added egg products is a very recent development. As a result, many egg products are developed and conveniently used in the daily diet of consumers. A great deal of work has been done in our country to improve egg quality and to standardize the processes for manufacturing convenient egg products such as whole egg, albumen and yolk powder albumen flakes, canned eggs, dehydrated scrambled egg mix, omelette mix and pickled quail egg. Some of the processes developed have been commercially exploited. **Selection of right brand of chicks** is very essential, which will influence the productivity and quality of eggs. Most of the sample farmers stated that it is the prime important factor behind the selection of a particular breed followed by 'feed conversion efficiency', 'low mortality rate', 'after care services provided by the hatcheries' and 'timely availability'. Among the different farm sizes, small farmers reported '**Productivity**' as prime factor in the selection of breed as compared to medium and large farms.

Table 1: Factors Influencing The Selection Of Breed

(No. of Scores)

Factors	Small Farm				Medium Farm				Large Farm				Grand Total	Rank
	1	2	3	Total Scores	1	2	3	Total Scores	1	2	3	Total Scores		
Productivity	8	5	2	36	3	2	1	14	1	1	1	6	56	1
Feed efficiency	6	4	2	28	2	1	1	9	1	1	1	6	43	2
Low mortality	4	2	2	18	2	1	1	9	1	1	1	6	33	3
Timely availability	2	1	1	9	1	1	1	6	1	1	1	6	21	5
After care by the hatchery	3	2	1	14	1	1	1	6	1	1	1	6	26	4

Note: 1= First Preference (Three Points) 2= Second Preference (Two Points) 3= Third Preference (One Point)

With regard to the type of breed (brand of bird) rearing, a little over 77 per cent farmers stated that they are rearing 'Bobcock' only because of its superior quality. And the remaining farmers rearing other breeds also along with 'Bobcock'. With regard to the problems in egg production, a little more than half of the sample farmers (52.50 percent) have expressed that '**High Feed Cost**' is the major problem followed by a 'disease outbreak' (20.00 per cent), 'lack of adequate credit facilities' (6.25 per cent) and 'non-availability of quality feed' (5.00 per cent).

Table 2: Nature Of Problems In Egg Production

(No. of Farmers)

Nature of Problems	Small Farmers	Medium Farmers	Large Farmers	TotalRank	
Disease outbreak	9 (20.00)	4 (20.00)	3 (20.00)	16 (20.00)	2
High feed cost	23 (51.11)	11 (55.00)	8 (53.33)	42 (52.50)	1
Non-availability of quality feed	2 (4.44)	1 (5.00)	1 (6.67)	4 (5.00)	6
Lack of adequate support from the Govt.	4 (8.89)	2 (10.00)	1 (6.67)	7 (8.75)	3
Paucity of electricity	4 (8.89)	1 (5.00)	1 (6.67)	6 (7.50)	4
Lack of adequate credit facilities	3 (6.67)	1 (5.00)	1 (6.67)	5 (6.25)	5
Total	45 (56.25)	20 (25.00)	15 (18.75)	80 (100.00)	

Note: Figures in Parentheses are percentages to the totals of vertical columns & Grand total.

With regard to necessity of bird insurance, 45 per cent of the sample farmers have opined that it is an unnecessary expenditure. 37.50 per cent farmers have stated that despite preventive measures, some acute diseases like Bird-Flu, 'Gumbora' and 'Coryza' will cause huge losses to the birds and felt that the need for insurance of the birds is necessary. And the remaining 17.50 per cent have not expressed anything in this regard. But it is observed that the farmers who have supported the bird insurance are not covering the total birds.

PRICE

Price plays an important role in the marketing mix and significantly contributes to the effectiveness and success of marketing strategy. Prices for highly perishable products like eggs and meat are influenced by the certain factors such as supply and demand position, seasonal fluctuations in consumption, religious taboos and beliefs, availability of substitute products on the one hand and income, consumption patterns, food habits, tastes and preferences of people on the other hand. There are frequent upward and downward trends discernable in the wholesale prices of eggs during the period 2002-2008. From the computation of seasonal indices, it is found that higher prices are offered for eggs during all most all the months except in July and August months for the poultry farms. The difference between seasonal low and seasonal high is found to be 3.19.

Table 3: Seasonal Indices For Egg Prices At Godavari Zone

Month / Year	2002	2003	2004	2005	2006	2007	2008	Median	Seasonal Index
Jan		109.92	117.00	125.60	111.58	149.59	152.75	121.30	121.62
Feb		110.58	116.85	127.41	109.00	154.83	152.75	122.13	122.45
March		111.58	118.00	126.50	109.58	156.33	157.33	122.25	122.58
April		112.75	118.16	126.00	110.90	157.58	160.66	122.08	122.41
May		114.91	119.00	124.91	112.00	159.00	163.33	121.95	122.30
June		116.41	119.00	124.50	114.60	160.18	166.58	121.75	122.07
July	110.25	118.41	119.00	125.48	114.90	162.58		118.70	119.72
Aug	110.41	120.00	118.16	125.48	117.60	161.33		119.08	119.39
Sept	108.92	119.00	122.08	122.33	122.90	158.08		122.20	122.51
Oct	108.16	118.00	124.60	118.90	131.41	153.58		121.75	122.07
Nov	108.33	117.50	125.58	116.50	136.00	153.58		121.54	121.87
Dec	108.66	118.00	125.52	113.92	143.00	152.75		121.76	122.09
Total								1456.49	1461.08
Seasonal High									122.58
Seasonal Low									119.39
Difference									3.19
Seasonal Average									121.84

Note : When a 12 month moving average is taken into account, seasonal indices cannot be obtained for six months in the beginning and six months in the end.

With regard to the method of sale of eggs, 86.67 per cent of large farmers and 50.00 per cent of medium farmers have preferred credit sales only as compared to 15.56 per cent of small farmers. On the other hand, 84.44 per cent of small farmers preferred to sell eggs on cash and cash and credit basis because of the reason that most of their cash sales were made through small wholesalers and they can get NECC price or more than NECC price on cash sales.

**Table 4 : Distribution Of Poultry Farms By Method Of Sale Of Eggs
(No. of Farms)**

Method of Sale	Small Farms		Medium Farms		Large Farms		Total
Cash only	10	(22.22)	4	(20.00)	-		14 (17.50)
Credit only	7	(15.56)	10	(50.00)	13	(86.67)	30 (37.50)
Both cash and Credit	28	(62.22)	6	(30.00)	2	(13.33)	36 (45.00)
Total	45	(56.25)	20	(25.00)	15	(18.75)	80 (100.00)

Note : Figures in parentheses are percentages to the totals of vertical columns & Grand Total.

With regard to level of egg prices at the market, 43.75 per cent of sample farmers have felt that the prevailing prices are more than the cost of production while 22.50 per cent farmers have stated that the prices offered are just sufficient to realize the cost of production and the remaining 33.75 per cent have expressed that the prices are below the cost of

production. 66.25 per cent of total sample farmers have expressed their satisfaction over the market price.

Table 5: Farmers' Opinion About The Stability Of Prices Of Eggs In The Market
(No. of Farmers)

Particulars	Small Farmers	Medium Farmers	Large Farmers	Total
Stable	2 (4.44)	1 (5.00)	-	3 (3.75)
Fluctuating	15 (33.33)	4 (20.00)	2 (13.33)	21 (26.25)
Highly fluctuating	28 (62.23)	15 (75.00)	13 (86.67)	56 (70.00)
Total	45 (56.25)	20 (25.00)	15 (18.75)	80 (100.00)

Note : Figures in parentheses are percentages to the totals of vertical columns & Grand Total.

Out of total sample farmers, 70.00 per cent of the farmers have opined that egg prices are highly fluctuating. Only 13.75 per cent sample farmers have expressed that they are stable. Majority of the sample farmers (66.25 per cent) reported that NECC has been playing pivotal role in getting better prices for their produce. An overwhelming proportion of sample farmers presenting 88.75 per cent have asserted that there is no role of traders in getting better prices for their produce.

Table 6 : Farmers' Responses About The Role Of NECC In Getting Better Prices
(No. of Farmers)

Role of NECC	Small farmers	Medium farmers	Large farmers	Total
Yes	32 (71.11)	12 (60.00)	9 (60.00)	53 (66.25)
No	13 (28.89)	8 (40.00)	6 (40.00)	27 (33.75)
Total	45 (56.25)	20 (25.00)	15 (18.75)	80 (100.00)

Note : Figures in parentheses are percentages to the totals of the vertical columns & Grand Total.

With regard to sources of price information, most of the farmers have stated that 'News paper' is the best source of their price information followed by traders' and fellow farmers.

Table 7 : Traders' Sources Of Price Information

(No. of Traders)

Source	Large Extent		Some Extent		Total	Rank
	Wholesalers	Retailers	Wholesalers	Retailers		
Newspapers	37 (60.66)	93 (56.70)	10 (52.63)	47 (61.84)	187 (58.44)	1
Fellow Traders	5 (8.20)	36 (21.95)	5 (26.32)	12 (15.79)	58 (18.13)	3
Traders Union	3 (4.92)	-	1 (5.26)	-	4 (1.25)	4
Farm Owners	14 (22.95)	35 (21.35)	2 (10.53)	17 (22.37)	68 (21.25)	2
Traders at other markets	2 (3.27)	-	1 (5.26)	-	3 (0.93)	5
Total	61 (100.00)	164 (100.00)	19 (100.00)	76 (100.00)	200 (100.00)	

Note : Figures in parentheses are percentages to the totals of vertical columns.

With regard to low prices for eggs in the market, most of the farmers have stated that '**lack of adequate demand**' for eggs is the prime reason for low prices of eggs followed by 'low consumption', over production, availability of substitute products and lack of price support from the government.

With regard to the frequent fluctuations in egg prices, most of the sample farmers have stated that '**seasonal fluctuations in demand**' is an important factor for frequent price fluctuations of eggs followed by 'decrease in consumption', 'over production', 'perishable nature' of the eggs.

Table: 8 Farmers' Reasons For Low Prices For Eggs In The Market (No. of Scores)

Reasons	Small Farmers				Medium Farmers				Large Farmers				Grand Total	Rank
	1	2	3	Total Scores	1	2	3	Total Scores	1	2	3	Total Scores		
Over Production	5	2	1	20	2	1	1	9	-	-	-	-	29	3
Low Consumption	8	2	2	30	3	2	1	14	2	1	1	9	53	2
Lack of adequate demand	11	2	2	39	4	2	1	17	3	1	1	12	68	1
Lack of price support from the Government	1	1	1	6	1	1	1	6	1	1	1	6	18	5
Availability of substitute products	4	2	1	17	-	-	-	-	1	1	1	6	23	4

Note : 1 = First Preference (Three Points); 2 = Second Preference (Two Points); 3 = Third Preference (One Point)

Table 9 : Factors Influencing Price Fluctuations Of Eggs In The Market (No. of Scores)

Factors	Small Farmers				Medium Farmers				Large Farmers				Grand Total	Rank
	1	2	3	Total Scores	1	2	3	Total Scores	1	2	3	Total Scores		
Seasonal Fluctuations in Demand	12	3	1	43	5	3	1	22	2	2	1	11	76	1
Perishability of Product	3	1	1	12	1	2	1	8	1	1	1	6	26	4
Entry of Traders from other areas	1	1	1	6	1	1	1	6	-	-	-	-	12	5
Over production	4	2	1	17	2	1	1	9	1	1	1	6	32	3
Decrease in consumption	6	2	1	23	2	2	1	11	2	1	1	9	43	2

Note : 1 = First Preference (Three Points); 2 = Second Preference (Two Points); 3 = Third Preference (One Point). Product, and entry of traders from other areas.

DISTRIBUTION

There are three important channels in the distribution of eggs available to poultry farmers in the study.

Channel-1: Poultry farmer - local big wholesaler - Distant big wholesaler - distant semi wholesaler - Retailer - Consumer.

Channel-2: Poultry Farmer- local small wholesaler - Retailer - Consumer.

Channel-3: Poultry Farmer - Retailer - Consumer.

Table 10: Distribution Of Traders By Turnover Of Eggs (No. of traders)

Type of Traders	Turnover in Lakhs (₹)						
	Total	Less than 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	Above 5.0
Wholesalers	80 (25.00)	-	-	2 (2.50)	32 (40.00)	28 (35.00)	18 (22.50)
Retailers	240 (75.00)	206 (85.83)	34 (14.17)	-	-	-	-
Total	320 (100.00)						

Note : Figures in parentheses are percentages to the totals of vertical columns & Grand Total.

Out of the total egg production of total sample farmers (1467.14 millions), 69 per cent sold to local big wholesalers,

29.74 per cent to local small wholesalers and remaining quantity (1.26 per cent) sold directly to the retailers. Further, 54.64 per cent of the total egg production of the small wholesalers, 58.19 per cent of the medium farmers, and 81.62 per cent of large farmers sold to local big wholesalers. Out of the total production of sample poultry farms, 1012.39 million eggs are distributed through local big wholesalers to other states and the remaining 454.75 million of eggs are sold through the local small wholesalers and retailers for the local consumption.

With regard to grading of eggs, 80 per cent of the sample farmers are not following the practice of grading. Most of the large and medium farmers have expressed that when all the eggs (small and big) are sold at the same price, it is unnecessary to grade the eggs. Hence, grading of eggs has not been given much importance in the study area.

Table 11: Factors Influencing Traders Egg Purchases

(No. of traders)

Factor	Large Extent		Some Extent		Total	Rank
	Wholesaler	Retailers	Wholesalers	Retailers		
Local and outside demand	45 (44.45)	37 (36.64)	6 (5.94)	13 (12.87)	101 (100.00)	1
Availability of finance	19 (47.50)	14 (35.00)	2 (5.00)	5 (12.50)	40 (100.00)	4
Supply prospects	3 (15.79)	5 (26.31)	3 (15.79)	8 (42.11)	19 (100.00)	6
Competition	30 (50.85)	21 (35.59)	2 (3.39)	6 (10.17)	59 (100.00)	3
Price position	34 (45.95)	27 (36.49)	3 (4.05)	10 (13.51)	74 (100.00)	2
Perishability nature	10 (37.04)	6 (22.22)	3 (11.11)	8 (29.63)	27 (100.00)	5
Total	141 (44.06)	110 (34.38)	19 (5.94)	50 (15.62)	320 (100.00)	

Note: Figures in parentheses are percentages to the totals of horizontal columns.

With regard to the total value of sales turnover made by the sample wholesalers and retailers, out of the total sample, 64.38 per cent traders have an annual turnover of less than ₹ one lakh. It is found that all the retailers have an annual turnover of less than ₹ two lakhs. On the other hand, all the wholesalers have an annual turnover of more than ₹ three lakhs due to their volume of business.

With regard to factors influencing traders' egg purchases, **local and out side demand is the most important factor**, determining the quantity of purchases to be made by the traders. Out of 63 traders, 44.44 per cent of wholesalers, 36.51 per cent of retailers have reported this factor to a large extent, while 6.35 per cent wholesalers and 12.70 per cent retailers have considered this factor to some extent in deciding the volume of eggs to buy.

With regard to traders' sources of purchase of eggs, all the sample wholesalers and 22.08 per cent retailers are buying eggs directly from the farmers. 77.92 per cent of sample retailers are buying eggs through small wholesalers because of the reason that retailers' small scale buying has made them less prone to deal with poultry farmers. Most of the farmers have preferred big wholesalers to sell their eggs. Most of the sample farmers (55.00 per cent) have stated that 'regular demand' from the big wholesalers is the prime reason for preferring them in the sale of eggs. Large scale buying followed by 'security of market' and 'prompt payment' are the other reasons for preferring big wholesalers to that of small wholesalers.

With regard to sales realization, all the sample farmers in the study area have complained that often, it is consuming nearly one month to settle the payment on credit sales. Most of the farmers have expressed their dissatisfaction over the delayed payment of the traders. With regard to the sales realization from the buyers, 66.88 per cent traders have made immediate payment. It is more in retailers (77.92 per cent) and only 33.75 per cent in wholesalers.

PROMOTIONAL ACTIVITIES

The promotional activities of sample poultry farmers and traders are examined covering personal selling and sales promotion as they are popular in egg marketing in the area under study. Though advertising and word-of-mouth are important elements of promotion mix, they are not taken into account as none of the farmers/traders have adopted these two methods. An overwhelming proportion of the sample farmers (88.75 per cent) have employed the sales people in marketing their eggs. The remaining portion of the farmers (11.25 per cent) have not employed sales people as they can perform the selling independently.

With regard to the size of the sales force, most of the farmers (82.50 per cent) have one to two sales people. Out of the

Table 12: Distribution Of Farmers By Size Of Sales People
(No. of Farmers)

Number of Sales People	Small Farmers	Medium Farmers	Large Farmers	Total
0	7 (15.56)	2 (10.00)	-	9 (11.25)
1	32 (71.11)	12 (60.00)	5 (33.33)	49 (61.25)
2	6 (13.33)	5 (25.00)	6 (40.00)	17 (21.25)
3	-	1 (5.00)	2 (13.33)	3 (3.75)
4	-	-	2 (13.34)	2 (2.50)
Total	45 (56.25)	20 (25.00)	15 (18.75)	80 (100.00)

Note : Figures in parentheses are percentages to the totals of vertical columns & Grand Total.

total sample farmers, 48.75 per cent have employed their farm servants and 40.00 per cent have involved their family members and the remaining 11.25 per cent have not employed sales people and undertook the sales job independently. 75 per cent of medium farmers and 86.67 per cent of large farmers are assisted by their farm servants as compared to 24.44 per cent of small farmers.

Majority of traders (66.88 per cent) have employed sales people and the remaining have not employed sales people. Out of the total sample traders, 41.25 per cent have associated their family members and 25.63 per cent are using their office staff as sales force while the remaining 3.12 per cent performed the selling job independently. Out of the total traders(340) who have employed sales force, 206 (64.38 per cent) traders have employed only one sales person and eight wholesalers (2.50 per cent) have reported that they have appointed more than one sales person. Out of the total 240 retailers, 202 retailers (84.17 per cent) have appointed sales people limited to only one because of small size of their establishments.

SUGGESTIONS

The Indian poultry industry is well equipped scientifically and technologically. It is in no way inferior to any developed country, as far as poultry production is concerned. In fact, Indian poultry farmers, inspite of several problems, are capable of achieving more than 97 percent peak egg production for 3 or 4 weeks, more than 300 eggs per hen-housed. All these achievements are due to better management practices followed by the farmers, close interaction with the birds; which many developed countries are lacking due to mechanization and shortage of manpower. Poultry industry in India is growing at a rapid rate, disproportionate to the demand for poultry products. Therefore, the need of the hour is “**market development**”. During the past three decades, the poultry industry has grown several fold, yet there is no change in the marketing strategy. Marketing of eggs in India today is no different from that of potatoes. In fact, it is even more primitive in that eggs are sold by numbers generally, regardless of size. In view of this, the following suggestions are made to overcome the present problems which are hampering the growth of the poultry industry.

(i) Most of the developed countries, which are faced with the problem of excessive production of eggs have evolved, through a process of trial and error, their own systems of marketing. With the establishment of 'Egg Boards' in Australia and England, the egg marketing system was streamlined. In India also, earlier there was a proposal for establishment of 'National Poultry Development Board' to safeguard the interests of both the consumers and producers. The Board should focus on conducting detailed survey and market research on seasonal fluctuations in supply and demand, source and mode of transport, holding area and condition of holding stock in the market, nature of business transaction, distribution channels, types of middlemen involved, consumers preference, price spread, grading and quality control, sales outlet, export potential and forecast about future demand and supply etc., which are essential to streamline egg marketing. Hence, the proposal for National Poultry Development Board be revised and given a concrete shape on the lines of NDDB, since there is an urgent requirement of a body like this for the survival of poultry industry.

(ii) The majority of layer farmers in India are small-to-medium in size and do not, on their own, have adequate bargaining power. One possible instrument of change, therefore, is the formation of poultry farmers cooperatives at village and district levels and perhaps marketing federations at the state level. Such cooperative bodies could more effectively handle the logistics of preservation, storage and transportation of eggs, for which facilities are currently

inadequate. Consider the wide fluctuation which prices of eggs are subject to change throughout the year, the need for an effective cold storage infrastructure is imperative. This will help to regulate the supply in response to the fluctuating demand. This certainly does not imply that we do away with the wholesaler completely not at all. He is a vital link in the marketing process to cater to traditional markets. A greater understanding and cooperation between producers' associations and wholesalers is essential to the success of the marketing effort.

(iii) The supply of chicks should be on par with the requirement of the industry, so that the problems of over production can be curtailed. The government, through its policies, should regulate the expansion of the hatcheries in poultry, so that the unplanned and abnormal expansion and growth can be controlled in the interest of all in poultry. Poultry farmers, and their associations should come forward voluntarily to take necessary action in this regard.

(iv) The important raw materials in poultry feed like maize, soyabean meal, rice bran and groundnut extractions are in short supply and their prices are enormously increasing year after year. The maize, being critical component of poultry feed, government and state departments of agriculture be approached to make special efforts and programmes to augment production of maize as a coarse grain.

(v) As a matter of fact, poultry has no status as such today. Neither poultry has been treated as industry nor agricultural activity. The government should equate poultry with agriculture and extend all benefits to poultry farmers. Only Maharashtra state in the country has declared poultry as agricultural activity and providing all the benefits like power supply on subsidised rates to the poultry. It is necessary to declare poultry as agricultural activity in Andhra Pradesh and other states also.

(vi) The W.H.O. and I.C.M.R have recommended a minimum of 180 eggs per person per year to maintain better health; but our per capita consumption is only 35 eggs per year. Hence, we have to increase per capita consumption of eggs. If people are convinced to take at least one egg per week, consumption raises from the present level of 35 to 52 eggs. To increase consumption of eggs along with other methods, road side tea stalls and snack stalls / carts, should be induced to sell boiled eggs, *egg bajji*, egg noodles and other egg based fast foods at prices on par with vegetarian items. Hoteliers and restaurant owners should be urged to sell egg and chicken products at prices lower than other meat dishes since the basic cost of egg and chicken is lower than other meats.

(vii) The Government support would also be sought in the rationalization of the tax and tariff structures on chicks, feed, power, the import of feed ingredients etc., and extending incentives such as freight subsidies for the export of poultry products. The taxes on any product, which provides nutrition, should not be imposed whether it is egg, vegetable or meat. Hence, eggs may be considered for exemption of taxes. Such exemption leads to price reduction that ultimately creates increased demand for eggs since price and quantity demands are inversely related.

(viii) The New India Assurance Company should popularize its poultry insurance scheme and educate the farmers about benefits and other salient features of the scheme. With the changing scenario of poultry in the country, the views of Industry be taken into account in formulation of insurance schemes.

(ix) Banking sector has been supporting poultry mainly for the initial investment and for the initial cycle of working capital. Subsequent requirements of the poultry farmers are given less or no importance resulting in difficulties to run the poultry farms. Hence, the banking sector should review the present situation and extend liberal appropriate financial assistance to poultry farmers.

(x) The poultry industry is facing difficulties in finding suitable people to supervise professional activities such as feeding, breeding, disease control operation, etc. The industry is not able to get adequately trained poultry personnel such as poultry geneticists, nutritionists, pathologists, poultry technologists and other middle level technical people from the agricultural universities. With the tremendous growth of the poultry industry, it also requires trained personnel to manage and provide technical help as well as service to the industry. Therefore, the agricultural universities / ICAR need to produce required poultry scientists and technical people in various disciplines to be absorbed by the growing poultry industry in future. Veterinary council of India and Agricultural Universities should start short term diploma or certificate courses to have proper managers / supervisors/ technical staff for poultry farms.

(xi) As the seasonal fluctuations are conspicuous in egg prices, the scope of support price for eggs is to be considered. Price support for several food items is not uncommon in a developing country like India. The government declares from time to time, the support prices for various agricultural products to ensure that the price does not fall below the cost of production. Since poultry farms are very much dependent on agricultural products, same policy should be adopted for poultry and poultry products. It is believed that a price support operation, when properly planned and executed, will not result in any major losses for the poultry business.

(xii) There is no reliable data or statistics available on poultry production at farm and hatchery level as well as consumption in India. There is an imperative need to maintain reliable statistics from breeding companies to farmers level, atleast to stress upon the government to come to the rescue of the industry at critical times. The Animal Husbandry departments at the Centre and State level should play a key role in this direction and help suitable policy formulation.

(xiii) In a developing country like India, poultry production by rural masses should not be neglected at the cost of intensification of commercial poultry production. In fact, rural poultry production is being recognised as an important instrument of socio-economic upliftment of the weaker sections of the society. While mass production is inevitable, production by masses cannot be neglected in India, as it creates employment and generates income to people, particularly the poor.

(xiv) It is true that poultry is not a high profit business. To make it economically more viable, the industry should think of adding new product lines such as egg shampoo. Although some units are producing egg powder, there is less demand for it. Size is an important aspect in egg buying considerations. Small size eggs are not easily disposed off in the market. Such small size eggs can be used for producing egg pickles - where size does not matter much. Adding these value added product lines in poultry industry synchronize demand pattern of seasonality in egg market and help reducing volatile fluctuations in the egg prices.

(xv) The rural and village markets in India are not explored properly for poultry products. There is a great potential to tap the unexplored rural market for poultry. As a welfare measure, central government and state governments should think of introducing boiled eggs in mid-day meals for school children, students' hostels and those who are working in public sector organizations. Private sector organizations can also think of supplying boiled eggs to their employees. As a result, sales volume of eggs increases and accordingly brings profit to farmers.

(xvi) In the coming decades, 'consumerism' will dominate the Poultry market. The rising population of middle income group whose awareness in the selection of poultry products like eggs and poultry meat is changing considerably. Many of them need clean, fresh and graded eggs, dressed chicken, frozen chicken, cutup-parts, boneless chicken etc., preferably branded in the coming years. As a result, poultry industry will emerge into buyers market in the coming years. So, the poultry marketing sector need to keep this point in view and supply poultry products to the consumer not only with hygienic concern, but also at an affordable and reasonable price.

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