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Constraints faced in distribution and retailing of conventional eggs in Hyderabad district of Telangana

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Abstract

Marketing systems and functions in India are inadequate thus increasing in the challenges in egg distribution and retailing. This study, therefore, explores the primary marketing systems of Conventional eggs and what are the challenges involved in distribution and retailing. Double (2) stage sampling technique was used in selecting the respondents for this study. Primary data was collected using a questionnaire. The result revealed that there are two types of firms organised and unorganised which have mostly same channels to distribute the eggs. Furthermore, constraints in retailing have been collected from 100 respondents in the study area among them major constraints are Size issues, Customer awareness, D1 amage, Ethical issues, Seasonal demand, Price fluctuations. Building new Inventory, Planning New Stock Points, Planning sales according to the demand etc which can mitigating supply deficits are strongly recommended.

Keywords: Distribute, D1 amage, Ethical issues

1. Introduction

Poultry farming has deep roots in human history, evolving from the agrarian era to become a vital component of the global food industry. This industry encompasses the breeding and raising of domesticated birds like chickens, ducks, turkeys, and geese, primarily for the production of meat and eggs. In recent years, the poultry sector has seen remarkable growth, driven by factors such as increased demand for poultry products, technological advancements, and supportive government policies.

India, in particular, has witnessed significant growth in its poultry industry. While crop production has been on a steady rise, egg and broiler production has surged at an astonishing rate of 8 to 10% annually. As a result, India has emerged as the world's third-largest egg producer, after China and the United States. The COVID-19 pandemic further increased the importance of eggs as an affordable and protein-rich dietary option.

Poultry farming holds immense potential for small rural farmers, offering job opportunities and requiring relatively low capital investment. Layer chickens, in particular, have become a popular choice for small-scale farmers due to their prolific nature and adaptability to various climates and altitudes.

In India, Andhra Pradesh stands first in the production of eggs, while Telangana is the third largest in egg production, with Hyderabad serving as a significant hub for poultry and hatcheries. Other notable contributors to egg production include Karnataka, Maharashtra, Gujarat, Madhya Pradesh, Orissa, and the North Eastern states. Additionally, India has been actively exporting poultry products, contributing to its agricultural and economic growth.

Eggs are a versatile and affordable source of essential nutrients, including vitamins A, B, D, E, and K, along with minerals like phosphorus, selenium, calcium, and zinc. They contain six grams of protein and are known for their delicious taste, digestibility, and diverse culinary applications. India offers various types of eggs, which including conventional eggs, brown eggs, free-range eggs, organic eggs, and fortified eggs, catering to different consumer preferences according to their own preferences.

The distribution and retailing of conventionally produced eggs in Hyderabad, like many other major cities, comes with difficulties.

The cost and nutritional richness of eggs fuel their popularity as a dietary staple. However, the process of moving these eggs from farms to consumer’s plates is filled with difficulties that influence not just the businesses involved, but also the quality and accessibility of this vital food supply. This study explores, complicated network of challenges that conventional egg distribution and retailing encounter in Hyderabad, shining light on the different variables that influence this vital link in the food supply chain.

To identify the constraints in the distribution and retailing of conventional egg in Hyderabad.

2. Methodology

2.1 Study Area

For the present study, Hyderabad district is selected purposively as it is a major market for eggs in Telangana, located in the south and sixth largest city of India with a coordinates of 17.387140 latitude and the longitude is 78.491684 with a GPS coordinates of 17° 23' 13.7040" N and 78° 29' 30.0624" E. with a large population of over one crore, and the demand for protein-rich foods like white table eggs is growing in the city. The Hyderabad egg market consists of a diverse range of players, including small-scale farmers, large-scale egg producers, wholesalers, and retailers.

2.2 Data Collection

A double staged sampling technique is used to collect the data. The first stage consists of collecting information about constraints faced in distribution of conventional eggs from NECC, Organized Firms and Unorganized Traders. The second stage involves the collection of data from 100 retail outlets by random sampling technique.

2.3 Data Analysis techniques

2.3.1 Garrett’s Ranking Technique

Garrett’s ranking technique will be used to indicate the constraints faced by the firm and the distribution partners in the distribution of white table egg. In this technique rank is converted into percent position by using the formula given below.

$$\text{Percent position} = 100 \times (R_{ij} - 0.5) / N_j$$

Where, R_{ij} = Ranking given to the i^{th} attribute by the j^{th} individual. N_j = Number of attributes ranked by the j^{th} individual.

2.3.2 Likert’s Scale Technique

A Likert’s Scale is a type of rating scale used to measure attitudes or opinions. With this scale, respondents are asked to rate items on a level of agreement which ranges from Strongly agree (5) to Strongly disagree (1).

3. Results and Discussion

In general, there are some challenges in egg distribution because of the fragility of the eggs or time management or price fluctuations etc. may causes some distributions in the distribution. For this purpose, respondents are asked some of the questions based on the questionnaire.

3.1 Primary Distribution Channels for eggs Used by the firms

Table 1: Primary Distribution channels for eggs

Type of Channel	Organised Firms	Unorganised Firms
Primary channel	Own outlets, Retail, Wholesales	Retail, own outlets

It is found that from the above table 3.1 Unorganised Firms have retail and Own outlets as their primary distribution channel. For Organised Firms Including Own outlets and retail it also has Wholesales as their primary distribution channels.

3.2 General constrains faced in distribution of White table eggs

Table 2: General constrains faced in distribution of White table eggs

S.no	Organised Firms	Unorganised Firms
1	Price Fluctuation	Price Fluctuation
2	Physical Damage	Labour Shortage
3	Storage	Storage
4	Labour Shortage	Physical Damage

From the above table 3.2 we get to know that from the responses of the firm executives there are some of the constraints according to them which occur generally in distribution. It is observed that Price fluctuations are the common constraints for every firm. Following Physical damage, Labour shortage and Storage.

3.3 Specific challenges they face while distribution of White table eggs

Table 3: Specific challenges they face while distribution of White table eggs

Rank	Organised Firms	Unorganised Firms
1	Fluctuation in demand	Fluctuation in demand
2	New Market Accessibility	Climate
3	Climate	Cost of transportation
4	Cost of transportation	New Market Accessibility

From the above table 3.3 It is observed that other than general constraints there are some of the specific challenges that are faced by the firms during festival times or any pandemics times. These specific challenges are Fluctuation in demand, Climate, New Market accessibility, Cost of transportation. The above table indicates the specific challenges according to the firm’s perspective.

3.4 Ranking of constraints based on their perception of the retailer of three firm.

This study consists of 100 respondents who are into retailing of eggs. Each person is interviewed on specific questionnaire which helps in finding out what are the challenges that are faced while retailing of eggs. From the information they have given I have sorted out some of the major constraints which are Price fluctuations, Size issues, Damage percentage, Ethical issues, Seasonal demand, Customer Awareness and asked them to give rating on Likert scale which is from Strongly Disagree to Strongly Agree.

Table 4: Ranking of constraints based on the perception of the retailer.

Factors	Organised Sector			Unorganised Sector		
	Total	Average	Rank	Total	Average	Rank
Size issues	4570	67.2	1	2200	68.8	1
Customer awareness	4395	64.6	2	2115	66.1	2
Damage	2975	43.8	6	1600	50	5
Ethical issues	4120	60.6	3	1385	43.3	6
Seasonal demand	3845	56.5	4	1955	61.1	3
Price fluctuations	3655	53.8	5	1745	54.5	4

From above table 3.4 it is observed that factors like Size issues and Customer awareness are common constrains while retailing of eggs which was ranked first with the Garrett score of Size issue Organised Firms (4570), Unorganised Firms (2200) Customer awareness Organised Firms (4395) Unorganised Firms (2115). Other constraints for retailers are mentioned in decreasing order with their Garrett score, according to Organised Firms Ethical issues (4120), Seasonal demand (3845), Price fluctuation (3655), Damage (2975) points. For Unorganised Seasonal demand (1955), Price Fluctuations (1745), Damage (1600), Ethical issues (1385) points.

4. Conclusion and Recommendations

From this study we get to know about the marketing system, constraints of Conventional eggs of the firms in Hyderabad District of Telangana. The result identified marketing channels for conventional egg firms in the study area. Furthermore, all constraints identified by the respondents were very significant and thus affected conventional egg marketing processes. From the result obtained, recommendations are made in order to improve the marketing system and to Increase the sales of conventional egg traders; thus, the following were suggested

- Implement effective inventory management systems to minimise waste and ensure timely delivery of eggs while retaining their quality to overcome storage difficulties.
- Plan and arrange new semi stock points which help in storage and easy access to nearby market.
- Consider planning the production of products during festive season or implementing special discounts to influence the demand and maximise income.
- Consider branding of eggs to specifically avoid frauds in the name of the firm. Which help in maintaining the authenticity of the firm.

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