International Journal of Chemical Studies

BN Chaudhary
Ph.D. Research Scholar,
Department of Agril. Economics
A.N.D.U.A. &T. Kumarganj,
Ayodhya, Uttar Pradesh, India

RR Verma
Assistant Professor, Department
of Agril. Economics A.N.D.U.A.
&T. Kumarganj, Ayodhya, Uttar
Pradesh, India

Vikas Singh Sengar
Ph.D. Research Scholar,
Department of Agril. Economics
A.N.D.U.A. &T. Kumarganj,
Ayodhya, Uttar Pradesh, India

Riyaz Ahmad
Ph.D. Research Scholar,
Department of Agril. Economics
A.N.D.U.A. &T. Kumarganj,
Ayodhya, Uttar Pradesh, India

Naveen Kumar
Ph.D. Research Scholar,
Department of Agril. Statistics
A.N.D.U.A. &T. Kumarganj,
Ayodhya, Uttar Pradesh, India

GP Singh
Professor & Head Department of
Agril. Economics A.N.D.U.A.
&T. Kumarganj, Ayodhya, Uttar
Pradesh, India

Price spread and marketing efficiency of broiler marketing in Gorakhpur district of U.P.

BN Chaudhary, RR Verma, Vikas Singh Sengar, Riyaz Ahmad, Naveen Kumar and GP Singh

DOI: https://doi.org/10.22271/chemi.2020.v8.i5b.10412

Abstract
Poultry industry can play very important role in improving the nutritional standards of the country. Currently the total Poultry population in our country is 729.21 million numbers (as per 19th Livestock Census, year 2012) and egg production is around 74.75 billion numbers during 2015-16. The current per capita availability (2015-16) of egg is around 63 eggs per year and per capita consumption of poultry meat 3.1 kg per year (National Nutrition Institute). The poultry meat production is estimated to be 2.69 million metric tonnes. Poultry sector accounts for about 1 per cent of the India GDP and 10 per cent of the livestock GDP. The purposive cum random sampling technique was applied for the selection of district, blocks, villages and respondents. From the selected villages the list of all the poultry farmer prepared and then categorized into three size groups on the basis of their number of raising poultry birds *viz.*, Small size group – Less than 1000 birds, Medium size group –1000 – 2000 birds and Large size group – above 2000 birds From a list of 100 poultry owners' farms (50 layer and 50 broiler farms) was selected randomly following the proportionate random sampling technique. The primary data regarding production and marketing in respect of broiler meat and eggs obtained through suitable designed schedule while secondary data collected from books, journals, reports and records of district and blocks headquarters. The data from poultry owner will be collected through survey methods by direct personal interview. Producer's share in consumer's price were 91.86, 85.41 and 73.52 per cent in marketing of Broiler in channel I, II and III respectively, comparing the efficiency index of all three channel in broiler marketing, it also concluded that channel I was most efficient then rest of two channel. Price spread came to Rs. 8.72, Rs. 14.99 and Rs. 27.66 per kg in channel I, II and III respectively, with accounted for 9.17, 15.18 and 26.48 per cent of the consumer's price. Producer's share in consumer price was highest (91.86) in channel I followed by channel II (85.41) and channel III (73.52). Marketing efficiency of broiler in channel –I obtained 11.06, channel –II 6.59 and channel-III 3.77. In present study examined that channel –I more efficient in compression with channel –II and channel-III. The present study in titled Price Spread and Marketing Efficiency of Broiler Marketing in Gorakhpur District of U.P., The data pertained for the agricultural year 2018-2019.

Keywords: price spread, marketing efficiency, marketing channel

Introduction

Livestock are not only source of employment, income and food but also critical to strong socio-culture linkages in countries like India. In livestock sector, the poultry sector is dynamic industry with new production methods of poultry products. Chicken and eggs are inexpensive-sources of protein among all animal products. Therefore, the poultry industry can play very important role in improving the nutritional standards of the country. Poultry production in India has taken a quantum leap in the last four decades, emerging from an unscientific farming practice to commercial production system with technological interventions. Egg production at the end of the Tenth Plan (2006 -07) was 50.66 billion numbers as compared to 66.45 billion at the end of the Eleventh Plan (2011-12). Currently the total Poultry population in our country is 729.21 million numbers (as per 19th Livestock Census, year 2012) and egg production is around 74.75 billion numbers during 2015-16. The current per capita availability (2015-16) of egg is around 63 eggs per year and per capita consumption of poultry meat 3.1 kg per year (National Nutrition Institute). The poultry meat production is estimated to be 2.69 million metric tonnes. Exports of poultry products are currently at around 566 crore in 2015-16 as per Agricultural and Processed Food Products Export Development Authority (APEDA).

Corresponding Author:
BN Chaudhary
Ph.D. Research Scholar,
Department of Agril. Economics
A.N.D.U.A. &T. Kumarganj,
Ayodhya, Uttar Pradesh, India

The Meat production has registered a healthy growth from 2.3 million tons at the end of Tenth Five Year Plan (2006-07) to 5.5mt at the end of the Eleventh Five Year Plan (2011-12). Meat production in the beginning of Twelfth Plan (2012-13) was 5.9 million tons which has been further increased to 6.2 million tons in 2013-14. (Annual reports 2014-15 Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, and Government of India). Currently poultry industries have strength of 215 million layers and 1600 million broilers. Poultry sector accounts for about 1 per cent of the India GDP and 10 per cent of the livestock GDP. National Institute of Nutrition (NIN) Hydrabad (ICMR) recommended a balanced diet should contain 30gms. Of eggs and 30gms. Of meat/day. This would amount to 180 eggs/year and 11 kg broiler meat per capita per year. India's per capita consumption of eggs was 33 and 625gms poultry meat per year in 1976.

Methodology
Sampling design: The purposive cum random sampling technique was applied for the selection of district, blocks, villages and respondents.
i) Selection of the district
The Gorakhpur district selected purposively to avoid the operational inconvenience and constrains of money and time of the investigator.
ii) Selection of the blocks: A list of all blocks falling in Gorakhpur district was prepared and two blocks selected purposively on the basis of higher poultry population.

iii) Selection of villages: A list of villages of the selected blocks was prepared separately and15 villages from each block having high density of poultry birds selected randomly.
iv) Selection of poultry farm respondent: From the selected villages the list of all the poultry farmer prepared and then categorized into three size groups on the basis of their number of raising poultry birds *viz*.,
a) Small size group – Less than 1000 birds
b) Medium size group –1000 – 2000 birds
c) Large size group – above 2000 birds

From a list of 100 poultry owners' farms (50 layer and 50 broiler farms) was selected randomly following the proportionate random sampling technique.
The wholesalers, traders, and retailers, five each was selected to the study of poultry products marketing in system area.

Method of data collection
The primary data regarding production and marketing in respect of broiler meat and eggs obtained through suitable designed schedule while secondary data collected from books, journals, reports and records of district and blocks headquarters. The data from poultry owner will be collected through survey methods by direct personal interview.
Statistical tools: Suitable statistical tools used analyze the data and presentation of result.
Period of enquiry: The data pertained for the agricultural year 2018-2019.

Result and discussion

Table 1: Inter-channel comparison as a whole for broiler birds

S. No.	Items	Channels (Rs. /kg.)					
		Channel-I		Channel-II		Channel-III	
		Rs.	%	Rs.	%	Rs.	%
1.	Net price received by the poultry owner	87.27	91.86	84.34	85.41	76.78	73.52
2.	Marketing cost incurred by the poultry owner	8.72	9.17	0.61	0.62	0.70	0.67
i.	Transportation cost	-	-	-	-	-	-
Ii	Processing cost	7. 46	7.85	-	-	-	-
iii.	Labour charges	0.57	0.60	-	-	-	-
iv.	Miscellaneous charge	0.66	0.69	-	-	-	-
3.	Poultry owner sale/retailer purchase price	-	-	84.94	86.02	77.48	74.19
4.	Marketing cost incurred by wholesaler	-	-	-	-	2.86	2.74
i.	Transpiration charges	-	-	-	-	2.20	2.11
ii.	Labour charges	-	-	-	-	0.66	0.63
5.	Wholesaler's net margins	-	-	-	-	6.95	6.65
6.	Wholesaler's sale price or Retailer's purchase price	-	-	-	-	87.28	83.57
7.	Marketing cost incurred by the retailer's	-	-	7.31	7.40	7.61	7.29
i.	Transportation charges	-	-	2.17	2.20	2.31	2.21
ii.	Processing charges	-	-	2.95	2.99	3.10	2.97
iii.	Miscellaneous charges	-	-	2.19	2.22	2.21	2.12
iv.	Retailer's net margins	-	-	7.08	7.17	9.54	9.13
8.	Price spread	8.72	9.17	14.99	15.18	27.66	26.48
9.	Gross marketing margin	-	-	7.08	7.17	16.49	15.79
10.	Gross marketing cost	8.27	9.17	7.91	8.01	11.17	10.70
11.	Retailer's sale price / Consumer's purchase price/consumer price	95.00	100.00	98.75	100.00	104.44	100.00

The price spread (marketing cost + market margin) of broiler in the study area worked out and presented in table-1. It depicted from the table that the price spread came to Rs. 8.72, Rs. 14.99 and Rs. 27.66 per kg in channel I, II and III respectively, with accounted for 9.17, 15.18 and 26.48 per cent of the consumer's price. It also evident from the table that the producer's share in consumer price was highest (91.86) in channel I followed by channel II (85.41) and channel III (73.52). Table1 revealed that marketing cost in channel I, channel II and channel III 8.27, 7.91 and 11.17 respectively, Gross Marketing margin higher in channel III (16.49) followed by channel-II (7.08). Price spread higher in channel-III followed by channel –II and channel –I. It evident that price spread it means a number of middle men available in market. Channel –I more efficient because producer's share in consumer price was highest i.e. 91.86 per cent.

Table 2: Marketing efficiency of broiler under different channels

Channel	Value of the product ((consumer price) (Broiler) (Rs./kg)	Marketing cost+ Marketing margin (Broiler) (Rs./kg)	Marketing efficiency
I	96.44	8.72	11.06
II	98.73	14.99	6.59
III	104.44	27.66	3.77

Table 2 depicted that marketing efficiency of broiler in channel –I obtained 11.06, channel –II 6.59 and channel-III 3.77. In channel-I, channel-II and channel-III the value of product were found 96.44, 98.73 and 104.44 Rs. respectively. Marketing cost + marketing margin in broiler farm were found in channel-I, channel-II and channel-III, 8.72, 14.99 and 27.66 respectively, It observed that channel –I more efficient in compression with channel –III and channel-II.

Summary and conclusion
It concluded from the results that producer's share in consumer's price were 91.86, 85.41 and 73.52 per cent in marketing of Broiler in channel I, II and III respectively, comparing the efficiency of all three channel in broiler marketing, it also concluded that channel I was most efficient then rest of two channel. Price spread came to Rs. 8.72, Rs. 14.99 and Rs. 27.66 per kg in channel I, II and III respectively, with accounted for 9.17, 15.18 and 26.48 per cent of the consumer's price. Producer's share in consumer price was highest (91.86) in channel I followed by channel II (85.41) and channel III (73.52). Marketing efficiency of broiler in channel –I obtained 11.06, channel –II 6.59 and channel-III 3.77. In channel-I, channel-II and channel-III the value of product were found 96.44, 98.73 and 104.44 Rs. respectively. It concluded that channel –I more efficient in compression with channel –II and channel-III.

Reference
1. Abdurofi I, Ismail MM, Kamal HAW, Gabdo BH. Economic analysis of broiler production in Peninsular Malaysia. International Food Research Journal. 2017; 24(2):761-766.
2. Dinesh V, Sharma A. Marketing Margin, Price Spread and Marketing Efficiency Analysis on Different Poultry Farms. International Journal of Current Microbiology and Applied Science. 2019; 8(6):1039-1046.
3. Elizabeth ES, Anthony L. Economic Analysis of Broiler Production in Karu Local Government Area, Nasarawa State, Nigeria Journal of Agriculture and Veterinary Science. 2019; 12(3):49-56.
4. Pant D, Singh SK. Economics of broiler. Raising Indian Poultry Sciences. 2002; 37(2):153-154.
5. Sanjiv Kumar. Marketing efficiency analysis a case of broiler marketing in Anand district of Gujarat, International Journal of Commerce and Business Management. 2014; 7(1):186-190.
6. Singh VP, Sharma VK, Sidhu MS. A study of costs, margins and price spread in marketing of broilers in Punjab, Indian Journal of Poultry Science. 2013; 48(3):366-370.