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ANALYSIS OF PRICE FLUCTUATION OF EXPORTED ANIMAL PRODUCTS BY INDIA USING LASPEYRES PRICE INDEX

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ABSTRACT

Animal products and by-products are a rich source of carbohydrates, proteins, fats, vitamins A, B and D, Calcium and Iron. India's animal products export prices have declined from 2013 to 2017. The present research paper aims in analyzing the price fluctuation of exported animal products in recent years. The Laspeyres price index for the year 2015 – 2016 is 106.26 % and for 2016 – 2017 is 77.67 %. The year 2014 – 2015 is considered as base year. The findings of the present research exhibits that the percentage inflation of animal products export prices from 2014 – 2015 to 2015 – 2016 were 6.26 %, while the percentage export prices of animal products have decreased from 2014 to 2017 by -22.33 %. Some constructive measure should be taken in respect to increase the export prices of Indian animal products. This can be achieved by improving the quality of storage, processing and packaging facilities. Through the following measures Indian animal products quality will be better than its competitor and this will elevate the export prices of the animal products in the international market.

KEY WORDS

Laspeyres price index, Honey, Diary Products, Albumin.

INTRODUCTION

Animal products basically cover foodstuff that are of animal origin or foodstuffs that contains a component of animal origin. Animal by – products basically cover meat, bone meals, pet food, milk and milk products, rendered fats, gelatins and collagens etc. Animal products and by-products are a rich source of carbohydrates, proteins, fats, vitamins A, B and D, Calcium and Iron (Murphy S. P. and Allen L. H., 2003).

Animal Products plays an important role in the socio - economic life of India. India has developed a rich source of diverse animal products including milk, meat and eggs. It has become one of the largest producers of milk in the world with 18.48% share of total global milk production. India also accounts for about 5.25 percent of the global egg production and also the largest population of milch animals in the world. India has not only been supplying its domestic market and its growing population but has also become a major exporter of these products (Isah Musa Ahmad and V. R. Kiresur, 2016).

India's animal products export prices has declined from 2013 to 2017. The reasons behind the decline are rejection of Indian animal products due to excessive use of chemicals banned by America and European Unions and lack of good storage, processing and packaging facilities. Many developing countries have increasingly become competitors of India in export of animal products in international market. And also, the Indian nodal agency for food safety, Food Safety and Standards Authority of India (FSSAI), can regulate domestic market and imports but cannot regulate exports and does not have any jurisdiction over the people involved in the business of animal products (http://agriexchange.apeda.gov.in, 2018).

Indian exports of animal products have dropped lacking demand and the negative impact is being felt through decline in the value of Indian animal products in

International market (Mridul Mohan and Geethanjali Nataraj, 2015)

Thus, the present research paper aims in analyzing the price fluctuation of exported Indian animal products in recent years. It will also attempt to uncover various means to improve the export and accordingly the value of the Indian animal products in the international market.

MATERIALS AND METHODS

The following data is being obtained from the Reference. (http://apeda.gov.in, 2018)

Table 1 Exported animal products prices in different years.

Products Name	Animal Products					
	2014 – 2015		2015 – 2016		2016 – 2017	
	Quantity in Metric Ton	Price in Rs (Lakhs)	Quantity in Metric Ton	Price in Rs (Lakhs)	Quantity in Metric Ton	Price in Rs (Lakhs)
Honey	1	1.80	1	1.84	1	1.21
Dairy Products	1	1.64	1	2.13	1	2.20
Albumin	1	7.58	1	7.74	1	5.15

The Laspeyres price index formula is as follows

$$I = \frac{\sum p_n q_o}{\sum p_o q_o} \times 100$$

P = Price of the Commodity, Q = Quantity of the Commodity, o = Base year and n = Current year under study. (Santhanam S. et. al., 2010)

The above depicted formula is being implemented on the data obtained from the reference.

RESULTS

Table 2: Laspeyres price index for the year 2015 – 2016.

Products Name	2014 – 2015		2015 – 2016		P_nQ_o	P_oQ_o
	Q_o	P_o	Q_n	P_n		
Honey	1	1.80	1	1.84	1.84	1.80
Dairy Products	1	1.64	1	2.13	2.13	1.64
Albumin	1	7.58	1	7.74	7.74	7.58
Total					11.71	11.02

For the year 2015 – 2016 the I_L = 106.26.

Table 3: Laspeyres price index for the year 2016 – 2017.

Products Name	2014 – 2015		2016 – 2017		P_nQ_o	P_oQ_o
	Q_o	P_o	Q_n	P_n		
Honey	1	1.80	1	1.21	1.21	1.80
Dairy Products	1	1.64	1	2.20	2.20	1.64
Albumin	1	7.58	1	5.15	5.15	7.58
Total					8.56	11.02

For the year 2016 – 2017 the I_L= 77.67.

Table 4: Percentage of price fluctuation over the years.

Years	Laspeyres price index	Percentage of Price fluctuation rate	Prices of Animal Product have decreased from 2014 to 2017 by -22.33.
2014 – 2015	100	--	

2015 – 2016	106.26	6.26
2016 – 2017	77.67	-28.59

CONCLUSION AND DISCUSSION

The Laspeyres price index for the year 2015 – 2016 is 106.26 % and for 2016 – 2017 is 77.67 %. The year 2014 – 2015 is considered as base year. The findings of the present research exhibits that the percentage inflation of animal products export prices from 2014 – 2015 to 2015 – 2016 were 6.26 %, while the percentage export prices of animal products have decreased from 2014 to 2017 by -22.33 %. The fluctuation of animal products is tremendous year after year. The present research work is a foremost research work and must be considered as a baseline research with a scope for future addition and analysis of data.

The export prices of the animal products have decreased due to increased competitiveness in the international market. Some constructive measure should be taken in respect to increase the export prices of Indian animal products. This can be achieved by improving the quality of storage, processing and packaging facilities. Also, Indian nodal agency for food safety, Food Safety and Standards Authority of India (FSSAI) must be given additional powers to regulate the export standards of animal products and to bring under jurisdiction the people involved in the business of animal products.

Through the following measures Indian animal products quality will be better than its competitor and this will elevate the export prices of the animal products in the international market.

REFERENCES

http://agriexchange.apeda.gov.in

http://apeda.gov.in

Isah Musa Ahmad and V. R. Kiresur, (2016). Demand and Supply of Livestock Products in India and Nigeria. The Task of Food Security. Int. Jour. of Innovative research and Development. Vol. 15 Issue 6. Pg No. 91 – 100.

Mridul Mohan and Geethanjali Nataraj, (2015). Understanding continuing decline in Indian exports. Indian economy, ORF, 1.

Murphy S. P. and Allen L. H., (2003). Nutritional Importance of Animal Source Foods. J. Nutr. 133.

Santhanam S., Rudramurthy Sharada, Pal Subhabaha (2010). Statistics for Management, Sikkim Manipal University of Health, Medical and Technological Sciences, Gangtok, Sikkim, Pg. No. 360 – 369.

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