

NOTE II

PRICES OF INDIAN FROZEN SHRIMP IN U. S. MARKET- A NOTE ON SEASONAL VARIATION

The supply and consumption of shrimp follow a more or less regular seasonal pattern. Like agricultural products, fishery products have also their period of heavy and less productions on which depend their price movements. The prices of shrimp in any particular market reflect this seasonal behaviour quite often. The supply position of the material also undergoes a corresponding variation. For instance, the monthly cold storage holdings of frozen shrimp in U. S. have shown strikingly uniform pattern over the past several years, the holdings gradually declining during the first half of the year, when domestic supplies are slack and most sales are made from inventories accumulated during the peak production months and from imports. The July-November period, when the cold storage holdings register a gradual increase month after month, is stated to be one of heavy production and imports.

To understand how seasonal variation is reflected in the prices of the Indian frozen shrimp in U. S. Market, corresponding indices for January through December were worked out for the size grades of 16/20, 31/35, 71/90 and 130 up of peeled and deveined shrimp and 26/30 of headless shell on shrimp. These size-grades were selected here to represent the different size ranges, such as big, medium and small. The data considered here pertain to the six year period of 1966-1971 which was treated as equal to 100. The weekly price data are published by the U. S. Department of Commerce in their Fishery Market News Reports, and the same are

consolidated and published as average monthly prices by the Marine products Export Promotion Council. With a few exceptions, the smaller size grades of peeled and deveined shrimp considered here viz. 71/90 and 130 up show price increase during the first half of the year which falls off towards the latter half. The larger size grades of peeled and deveined shrimp and that of headless shell on shrimp considered here appear to be following a reverse type of price movement, lower during the first half and gradually improving in the latter half of the year. These price variations reflect in the seasonal indices of prices mentioned in the table. The table also gives the standard deviations, denoting the extent of variation observed in the indices over the period of study.

The seasonal indices for the prices of frozen headless shrimp, the ex-vessel prices and prices paid to 26-30 count brown shrimp, all in U. S., follow nearly uniform type of movement viz. high during the first five months and gradually declining towards the latter half of the year (Anon, 1967 and 1968). The higher prices during the first half are attributed not only to less production, but to the availability of larger size grade shrimp during this part of the year. As domestic fishing picks up and new crop of small shrimp start appearing, the prices go down. The indices were prepared with 1957-1966 = 100. The price movement of smaller size grades Indian Shrimp is similar to that of U. S. Shrimp while the large size grades of Indian Shrimp do not behave in the same pattern.

The variation between the maximum and minimum indices for the Indian Shrimp is around 8% in all size grades of peeled and deveined variety and about 10% in the case of 26/30, headless shell on variety. As compared to the indices of frozen shrimp which show less than 3% in the case of domestic market in U. S., the indices for Indian frozen shrimp vary much. The price variation during any particular year may be high, but the indices show less variation as they are based on the entire period.

The standard deviations, given in the table, can be seen to be quite high in the case of small size grades. This can be attributed to the high price fluctuations commonly observed in the smaller size grades. Also the period considered here is quite short. The standard deviations can be brought down substantially, when a longer period (at least ten year data) is

covered under this study. The indices arrived at on such data will give a more definite picture of seasonal variation. Meanwhile the indices mentioned in this can be considered as preliminary estimates of the seasonal variation.

The authors are thankful to Dr. V. K. Pillai, Director, Central Institute of Fisheries Technology for the interest he has shown in the work and for permitting to publish this note:

REFERENCES

- Anon, 1967 Shell Fish Situation and Outlook, June-United States Department of Commerce.
- Anon, 1968 Ibid, December.
- Anon, 1971 'Statistics of Marine Products Exports, 1971, Marine Products Export Promotion Council, Cochin-16.

—

Central Institute of Fisheries Technology,
Cochin-11.

K. KRISHNA RAO,
R. GOPALAKRISHNAN NAIR.

TABLE
SEASONAL VARIATION IN THE PRICES OF INDIAN FORZEN SHRIMP IN U. S.

	<i>Peeled and deveined</i>				<i>Headless shell on</i>					
	16 / 20		31 / 35		71 / 90		130 up		26 / 30	
	Seasonal variation	Standard deviation	Seasonal variation	Standard deviation	Seasonal variation	Standard deviation	Seasonal variation	Standard deviation	Seasonal variation	Standard deviation
January	97.2	3.2	96.8	3.2	98.6	9.2	99.5	14.2	95.1	8.4
February	97.2	2.1	95.8	5.0	99.9	8.4	101.0	11.9	95.7	7.8
March	97.1	3.1	96.6	4.3	101.0	7.4	102.7	11.5	97.0	5.4
April	98.2	2.8	99.3	1.4	102.7	7.0	103.5	11.8	100.3	5.3
May	98.6	1.9	99.0	1.4	101.4	5.1	101.9	9.6	101.6	4.3
June	99.4	1.5	99.6	1.6	99.9	3.2	99.0	7.6	104.8	4.4
July	100.1	1.0	100.1	1.9	97.3	4.2	95.9	4.6	100.2	3.6
August	99.9	1.4	99.9	3.0	96.0	5.6	96.4	5.4	98.0	8.6
September	102.2	3.0	102.1	3.6	99.4	5.8	96.7	9.1	102.0	7.2
October	103.3	3.8	102.2	3.4	99.9	7.4	97.4	13.6	103.5	7.7
November	103.9	3.9	102.3	3.6	98.6	7.9	98.3	16.9	101.3	5.6
December	103.5	5.6	103.2	5.8	103.0	11.2	103.0	21.2	101.9	3.6

Krishna Rao and Gopalakrishnan Nair: Prices of Indian Frozen Shrimp in U. S. Market.