Vol IV
No. 1

ISSN 0019-5014

MARCH
1949

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

PRICE SPREADS IN MARKETING OF AGRICULTURAL PRODUCE

by

G. D. AGRAWAL

AGRICULTURAL COLLEGE, KANPUR.

Slogans may be alright in Politics but their use in academic field may be misleading. The fact that the farmer gets only -|9|3 out of a rupee paid by the consumer for wheat was sloganised after the publication of the Report on the Marketing of Wheat in India in 1937. It caught the heading of various contributors on the subject. It served the purpose well so far as it succeeded in focussing the attention of people towards the need for improvements in agricultural marketing but it went beyond its limits when economists and administrators began to draw conclusions that the income of the farmers can be doubled by regulating markets and by organising co-operative markets which implied that all of the remaining -6|9 in the rupee went into the pocket of the middlemen.

The mere fact of a small share of the farmer out of the consumer's rupee should not frighten us or be treated as a criterion for bad state of affairs as the spread-over is dependent on the number and quality of different services performed before a product reaches the consumer's hands. In U.S.A. where agricultural marketing is well organised, the farmer's share of the consumer's dollar varied from 77% in the case of eggs to only 10% in the case of Soda Crackers in 1939 while it was 77% and 15% respectively in 1945. The following table shows the farmer's share of retail produce in 1939 and 1945 for different commodities in U.S.A.

TABLE I

Farmer's Share of Retail Produce in U.S.A.

Commodities	YEAR	
	1935-39	1945
	Per Cent	Per Cent
Eggs	77	77
Butter	68	83
Beef	56	80
Milk	55	62
Potatoes	50	58
White flour	43	49
Apples	41	52
Beet Sugar	30	48
Canned Tomatoes	16	27
White bread	12	19
Corn flakes	11	22
Soda Crackers	10	15

Before studying the marketing cost spreadover in India it is necessary to emphasise certain features of her agricultural economy which greatly influence it. In spite of development of transport and communication facilities and the policy followed to assign the country the role of exporter of unprocessed agricultural produce in the world trade from the middle of the last century, her farming is still a subsistence one to a large extent. The food crops account for about 80% of the total cultivated area. The following table gives the percentage of the various agricultural products sold in the market.

TABLE II

Total production and marketing of major Agricultural Crops in India, (Market Survey Reports of Govt. of India)

S. No.	Crop	Year of publication	Total estimated yield		Per cent.	
			Production	Value in rupees	Retained in villages	Marketable surplus
1.	Wheat	1937		64,00,00,000	45	55
2.	Linseed	1938		5,00,00,000	20	80
3.	Rice	1941		276,00,00,000	60	40
4.	Ground-nut	1941	tons 28,00,000		15	85
5.	Milk	1941	maunds 61,08,00,000	180,00,00,000	17	83
6.	Potatoes	1941	4,91,08,700 tons		27	73
7.	Gram	1945	43,00,000		55.7	44.3
8.	Barley	1945	26,52,000		74	26
9.	Sugar-cane	1945	5,52,54,000		82.6	17.4
	Gur	1945			13	87

The holdings are very small, 50% of them being less than 5 acres. The village roads have so far been treated as 'nobody's child.' Most of the villages have no road connection for vehicular traffic, the only method of moving the produce from such villages being as head loads and on pack animals. The road connections from villages to primary markets become impassable during four rainy months. It has been calculated that the cost of transport per maund per mile is 1½ annas, 9 pies and 1.5 pies for pack animals, bullock carts and motor trucks respectively.

It is, therefore, clear that because of the small quantities of produce available for sale with the farmers and inadequate transport facilities, the cost of assembling is relatively more in comparison with other countries. The uniformity of quality is also difficult to manage.

The farmer's share of the consumers' price is dependent on a number of factors as given blow:—

1. *Unit of Production*—In the case of small innumerable producers the cost of assembling would be great.

2. *Transport facilities and Method of Haulage*—Poorly developed inadequate roadways enhance the cost of transport considerably. The movement of produce as headloads or on pack animals is wasteful of labour and very expensive.

3. *Specialisation of production* — When different regions specialise in producing different crops, the spreadover margin is increased as a result of enhanced cost of transport, larger number of intermediary markets and storage because of increasing separation in time and space between consumers and producers. In the case of self-sufficient production economy there is saving in expenses on these items but that may be somewhat offset by increased assembling costs of small lots from a large number of producers and extra expenses in standardising and grading. That is why in primitive societies the farmer's share in the final unit value of his product is much greater even though his total net return is less. This is very much true in the case of Indian farmers, a large portion of whose farm produce is consumed in many regions within the locality itself. Data on this aspect are lacking but it will be quite interesting to collect such statistics on regional basis. The National Planning Committee in their Report on Rural Marketing and Finance remark, "After the general problems connected with the marketing of a particular crop have been tackled for the whole country, on the basis of marketing surveys, there would, in our view, still remain plenty of scope to carry on regional investigations on scientific lines, on which real progress very largely depends."

4. *Number of Intermediary Markets and Quality of Marketing Services:* The larger the servicing and the number of intermediary markets the more the marketing charges. In 1939 the grain growers in U.S.A. received only about 13 cents out of the consumer's dollar spent for bakery and cereal grain products. Retailing took 18.9, wholesaling 10, processing 52.3, transportation 4.1, local assembling 1.0 and terminal cess contractors 0.7 cents. Whereas wheat is delivered to us in India uncleaned and ungraded, almost in the same condition as it is obtained on the threshing floor, the services are so advanced in U.S.A. that the consumer gets door to door delivery of bread properly sliced. He has only to open the packet, butter

the slices and get ready for his breakfast. A small share of the consumer's money in such a case does not show any loss on the part of the farmer but is a result of more services to the consumer and consequently increased total cost to him.

5. *Respective organisations of Producers and Marketmen and State regulation of Markets*: These also influence the farmer's share especially in the countries where farmers are backward and uneducated as in India. It is estimated* that after the market charges were regulated under the Punjab Agricultural Produce Act passed in 1939, they have decreased from Rs. 2|5|6, to Rs. 1|14|9 per Rs. 100 worth wheat in Lyllapore market or by -|6|9 per cent. The commission, brokerage, weighing charges, *Palledari,* and *rolai* have adjusted while miscellaneous deductions including 'chungi' charged by commission agent and charity deductions have been abolished. The charges for weighing, *paledari* and *rolai* have been levied on the basis of value of the produce instead of on quantity as before. Producers by forming organisations can effect economies in transport charges and other market expenses. The volume for sale being larger it can be sold on more competitive rates and their margin can thus be raised. It is, however, necessary that the organisation be efficient and members educated, intelligent and active enuogh to exercise proper control on its working. In the absence of these requisites the advantages expected of such an organisation may be merely of theoretical value which unfortunately is the case with many co-operative marketing unions in India. The risks in holding off the produce from the market in the hope of getting better price is so great and profits thereby so uncertain that it is hardly worth attempting. The generally held belief therefore that the producers' organisations would be able to obtain for the farmer benefit of increase in price usually noticeable after a few months after the harvest period needs to be discouraged. Although the students of Agricultural Marketing are still taught this as one of the advantages from the farmers' marketing unions, "experience has shown abroad that over a number of years the farmer marketing his crops in the season gets more or less the same price as he would get after waiting and watching." A. H. Garside, Economist of the New York Cotton Exchange in his book 'Cotton Goes to Market' shows how the theory that prices of cotton at harvest time are usually lower than those prevailing later in the season and that speculators receive the difference does not always work out in practice.†

6. *Turnover:* Preponderance of small markets and a very large number of traders as middlemen reduce the amount of business both in the case of market centres and traders and add to difficulties in enforcement of marketing regulations. The service charges therefore increase or in face of

* *Rural India*, Sept. 1948, p. 292.

† National Planning Committee—Rural Marketing & Finance, pp. 121-22.

competition if charges are not increased, certain malpractices creep in to cover the margin of expenses and cost of the establishment. Proper system of roads and development of transport facilities will eliminate a larger number of small markets. The problem of excessively larger number of middlemen which, according to the Census Report of 1931, was 8,33,953 for the principal earners, 57,598 for their total working dependents and 1,44,061 for those following the occupation as subsidiary to others under Grain and Pulse-dealers and must have added one-fifth more to it by now, is linked with the unbalanced distribution of occupations in India. 'When there are very few avenues open to earn a livelihood, many are tempted to have a hand in the distribution business and thereby scrape together a small income. The surplus number when it is weeded out, will, it may be presumed, have to be dealt with in the same manner as the surplus population which now crowds in our agriculture.'

7. *Value*—In the case of commodities with high prices, inspite of high marketing expenditure, its ratio to total value is comparatively less and the producer's margin of consumer's rupee is larger and vice versa as will be clear from the example of the spreadover in the case of Ghee and Potatoe.

Results of the study of spreadover in different markets in U.P. in 1946-47 are summed up in the Appendix. Table No. 3 (Appendix I) refers to cases where intermediary markets are not involved and Table No. 4 (Appendix II) deals with commodities passing through intermediary markets.

It is therefore clear that whereas some reduction in marketing expenses can be effected by regulation of markets and marketing charges particularly if it succeeds in checking various malpractices, substantial economy is possible only by improving transport, market-news service and education of the farmers. As already mentioned, improved transport will reduce a large number of markets, middlemen and assembling expenses. It will enable the farmers to take their produce to more important markets for sale. In case of perishable commodities there is great scope of economy by improving cold storage facilities, encouraging preservation industries and provision of improved packing or better containers.

It is however necessary to emphasize that all these improvements, even if they succeed in raising the producer's margin by an anna or two in a rupee should be taken to mean a great success. It is quite wrong to entertain any belief or such high hopes as to either double the farmer's income by improving marketing system or by replacing the individual marketing with group marketing i.e., Co-operatives. The scope for economy in marketing costs is more limited than what many are wont to believe at present.

APPENDIX I

TABLE 3

Spreadover of Consumer's Price per Maund (1947-48)

S. No.	PARTICULARS	WHEAT Consuming Market :— Collectorganj, Kanpur. Distance 40 mles. (transported by Bullock cart).		GUR Consuming Market :— Sisamau, Kanpur Distance 28 miles		GROUNDNUT Consuming Market :— Oil Mills, Kanpur. Distance 8 miles		POTATOE Consuming Market :— Parade, Kanpur. Distance 20 miles		LINSEED Consuming Market :— Oil Mill, Kanpur. Distance 12 miles		ARHAR Consuming Market :— Pulse-manufacturer, Kanpur. Distance 8 miles	
		Cost per maund in Rupees	Per Cent. to Consumers' price.	Cost per maund in Rupees.	Per Cent to Consumers' price	Cost per maund in Rupees	Per cent to Consumers' price	Cost per maund in Rupees	Per Cent to Consumers' price	Cost per maund in Rupees	Per cent. to Consumers' price	Cost per maund in Rupees	Per Cent. to Consumers' price
1.	Producers' Price	22 13 9	81.14	10 10 8	79.1	13 4 4	85.0	3 9 3	57.2	16 0 0	89.4	11 9 6	87.2
2.	Handling and cartage from village to assembling Market	2 4 0	7.98	0 11 6	5.3	0 8 0	3.2	1 0 0	16.0	0 12 0	4.3	0 6 0	2.8
3.	Marketing Charges paid by Seller	0 15 0	3.32	0 9 6	4.4	1 3 8	8.0	0 5 9	5.8	0 9 6	3.2	0 8 0	3.8
4.	Beopari's margin (if any) ..	..	..	0 11 3	5.3	..	..	0 6 0	6.0	..	..	0 6 6	3.0
5.	Marketing charges paid by the Buyer	0 8 0	1.77	..	..	0 6 4	2.5	0 3 0	3.0	0 6 6	2.1	0 4 3	2.0
6.	Handling and Carting to Retailers' or Consumers' place	0 2 0	0.46	0 6 3	2.9	0 3 0	1.2	0 4 0	4.0	0 3 0	1.0	0 2 6	1.2
7.	Retailer's margin	1 8 0	5.33	0 6 3	2.9	..	..	0 8 0	8.0	..	..	..	..
8.	Consumer's Price	28 2 9	100	13 7 5	100	15 9 4	100	6 4 0	100.	17 15 0	100	13 4 9	100

N.B.—(1) Assembling charges paid by seller include Octroi duty also. Octroi duty is not paid according to quantity or quality of the produce brought in the market but it depends upon the number of animals used in bringing the produce. Octroi duty is payable at the rate of Re. 1/- per cart of two bullocks and it increases at the rate of -/8/- per one additional bullock used.

(2) The seller pays at the rate of 19 chattanks per maund of food grains or oil seeds sold in the market. These 19 chatanks include all marketing charges, e.g., Tolai, Dharmada, Palledari, etc.

(3) Ground nut and linseed was directly purchased by oil mills, and therefore, the column of 'Retailer's margin' has been left blank. Similarly Arhar was purchased by wholesale dealer who converts it first into pulse and then pulse is sold to the consumers. Therefore, in case of Arhar the wholesale-dealer and Arhar Pulse Manufacturer has been taken to be Arhar Consumer.

(4) The market charges paid by the buyer also include the broker's charges which are paid at the rate of -/4/- per 100 rupees worth of produce purchased. The commission charges payable by the buyer are calculated at the rate of 3 pies per rupee of produce purchased.

(5) In case of Gur, Potatoe and Arhar, the produce in the market was not sold directly by the producer. The village Beopari (Itinerant dealer) purchased the produce from the producer in the village and sold the same in the Collectorganj market, thereby making a profit of Re.-/11/3, -/6/- and -/6/6 per maund respectively.

APPENDIX II
TABLE 4
Spreadover of Consumer's Price (1945-46)

S. No.	PARTICULARS	GRAM Assembling Market: Banda; Consuming Market: Kanpur.		JUAR Assembling Market; Banda; Consuming Market, Khatauli		GROUNDNUT Assembling Market. Kanpur Consuming Market. Calcutta		GUR Assembling Market: Muzaffarnagar. Consuming Market. Lala Musa. (Punjab)		POTATOES Assembling Market: Farrukhabad. Consuming Market. Kanpur		GHEE Assembling Market: Khurja (U.P.) Consuming Market. Calcutta	
		Cost per Maund in Rupees	Per Cent to Consumer's Price.	Cost per Maund in Rupees	Per Cent to Consumer's Price.	Cost per Maund in Rupees	Per Cent to Consumer's Price.	Cost per Maund in Rupees	Per Cent to Consumer's Price.	Cost per Maund in Rupees	Per Cent to Consumer's Price	Cost per Maund in Rupees	Per Cent to Consumer's Price.
1.	Producer's price in the Market	6 12 6	77.4	4 12 0	55.3	13 12 9	76.6	9 2 0	73.0	6 10 0	75.1	205 12 0	86.43
2.	Assembling charges paid by the Seller	0 3 6	2.6	0 4 0	2.9	1 3 8	6.9	0 3 0	1.5	0 4 9	3.3	4 2 6	1.71
3.	Assembling charges paid by the Buyer	0 1 9	1.0	0 1 6	1.1	0 6 4	2.1	0 3 9	1.9	0 4 6	3.2		5.05
4.	Cost of storage and margin of Stockist	..	..	1 11 0	19.5	..	..	..	..	..	..	12 2 0	..
5.	Booking and other assembling expenses at the Centre ..	0 2 6	1.9	0 2 6	1.8	..	..	0 6 0	3.0	0 5 0	3.3	8 5 0	3.50
6.	Freight charges upto Destination	0 8 3	6.0	0 15 0	10.9	1 6 2	7.6	1 2 0	9.0	0 4 6	3.2	4 0 0	16.80
7.	Cost of handling and transport upto wholesaler's godown at consuming Centre ..	0 3 6	2.6	0 1 0	0.8	0 3 0	1.1	0 3 0	1.5	0 3 6	2.4	0 6 0	0.16
8.	Wholesaler's Margin ..	0 3 0	2.2	0 4 0	2.9	1 0 0	5.6	0 8 0	4.0	0 6 0	4.1	1 8 0	0.63
9.	Retailer's Cost	0 4 6	2.8	0 3 0	2.1	..	..	0 12 0	6.1	0 8 0	5.4	2 0 0	0.84
10.	Retailer's Margin	0 5 0	3.5	0 4 0	2.8	..	..						
11.	Consumer's Price	8 12 6	100	8 9 0	100	17 15 0	100	12 9 9	100	8 14 3	100	238 3 6	100

N.B. :—(1) Producer's price in the market includes the net price received by the producer and the transport charges incurred in bringing the produce up to the Assembling Centre.

(2) More than half of the total charges payable by the Seller for Juar and gram at Banda and for Potato at Farrukhabad are incurred in kind. Though the actual quantities of charges incurred in kind are fixed, yet the receiver seldom sticks to them. The charges are incurred without weighment which invariably amount to 1½ times to 2 times of the actual quantity fixed. In this case the estimated price is on the basis of fixed quantity of kind payment.

(3) It was observed in case of Potato at Farrukhabad that almost every seller has to pay a "Batta" in addition to other charges. 'Batta' is a deduction in kind which is made on account of inferior quality of produce. The actual quantity of Batta to be made is fixed by the market Dalal, who usually intervenes when the weighment of the produce is in progress and higgling between the seller and the buyer takes place. The quantity of Batta fixed varies from 2½ mds. to 3 mds. of produce which is payable to the buyer. We have not made any allowance for Batta.

(4) In all cases except Juar the commodities were purchased in the assembling markets in the immediately post-harvest months and were exported for sale at the consuming markets during the same season. Juar was purchased by the wholesaler and stockist in the assembling market in the month of January 1946. It was stored upto the month of June and then was sold in the last week of June, 1946 to the whole dealer of the consuming centre. Cost of storage and margin of stockist in this case have therefore been included.

PRICE SPREADS IN AGRICULTURAL MARKETING

By

PROF. K. N. VASWANI.

The study of price spreads in agricultural marketing is undoubtedly the most vital study in as much as the very essence of all improvement in agricultural marketing, the primary and principal objective of all efforts at improved marketing, lies in so arranging things in the sphere of marketing as to ensure a larger proportion of the price falling to the share of the cultivator or the primary producer, gaining for him a large share in the consumer's rupee, and if one may say so, avoiding the larger price spread, and limiting it, so that the main or the lion's share goes to the primary producer or cultivator, the man who toils and labours and eats his bread in the sweat of his brow, and letting only a small proportion of price, spread to others engaged in the activities of marketing, and that, for essential services rendered on an economic and equitable, not on an extravagant and exploitative basis.

How to enlarge the share of the producer in the consumer's rupee? How to avoid the present unfair and illegitimate, uneconomic and exploitative price spread in agricultural marketing, where at present the primary producer gets at times just 21 per cent of the retail price or a little over 3 annas of the consumer's rupee, as in the case of marketing of Coorg oranges from Nilgiris at Trichinopoly; or just 58 per cent of the consumer's rupee as in the marketing of Hansa Rice at Nagpur for rice from Raipur? This really, is the central problem, the chief objective and aim of all efforts at improved agricultural marketing.

That the primary producer, the cultivator or the grower gets an inadequate return for his produce for the sweat of his brow is an admitted, acknowledged fact. He has suffered all the world over, in as much as his share in the consumer's rupee has been disproportionately small, inequitably inadequate, the machinations of middlemen having robbed him of his due share, he being no match for the tricks or arts of the middlemen. He is a cultivator and a grower, not a merchant or bargainer. Cultivation requires quite a different temper from that of bargaining and trading. Apart from this inherent incapacity or disability, his circumstances all the world over, have been such as to put him at a disadvantage. Usually he has lacked staying power; harvest prices are proverbially lower than prices later on when the glut in the market has cleared up. Often he has had to accept low price for he is in debt or has to make a fixed payment like land revenue or land rent.

These disabilities are specially oppressive and over-powering in respect of our masses of millions of cultivators, who have, apart from this occupation on land, no other alternative source of living, and for whom, the only alternative to starvation, is work on the land, under whatever conditions it has to be done, however poor the returns. The choice is between starvation and death or work on land, whatever little returns it may bring.

And since our country still predominantly remains an agricultural country and has to remain mainly an agricultural country for quite a long time to come, despite our efforts to make rapid progress on the industrial path; considering the vast millions who have their source of sustenance in agriculture and who are consequently adversely affected by a low share of the consumer's rupee that falls to the producer; considering also that the avowed object of all our national planning is the raising of the standard of living of our masses and effecting an increase in their income, our national income per capita, it is obvious that the most potent single step that can help in this matter, and that is therefore of urgent and supreme importance, is the endeavour to increase the producer's share in the consumer's rupee. The effect of this will be immediate, and the programme must receive first priority, as this will prove redolent of results in the short period, almost at once, and the steps required to be taken are not difficult or uncertain, complicated or admitting of any dispute as to their validity or effectiveness, or their productivity in respect of beneficial results.

It will be the object of this essay to study the present price spreads in agricultural marketing, to seek, to analyse and scrutinise these, to judge whether the spread of the price in the different directions or channels is justifiable and equitable, necessary or economical, altogether beneficial to society or even worth condoning as a necessary evil for a temporary period, as also to account for the existing trends in price spreads, and to indicate to what extent and by what steps, the spread of price can be altered or reversed, so as to ensure a larger share in the consumer's rupee or the retail price, for the producer, without at the same time, doing away with any essential services performed in the process of marketing, for the benefit of the consumer, by any essential agency.

While the essence of improved agricultural marketing in India today, generally in the world at all times, is the securing of a fair share of the consumer's rupee to the producer, it has of course not to be forgotten that improved agricultural marketing must in a larger and wider sense, also include the securing of a fair quality of produce to the consumer at a fair price; and also include the broader consideration of national welfare and development. But at present we are, and will be concerned here, with the essence and the core of agricultural marketing today and specially in the present conditions in India.

We may therefore begin now with the consideration of the present or existing trends in price spreads in agricultural marketing and scrutinise the data available and study the different factors and forces at play, which determine these price spreads and claim a share in the retail price or the consumer's rupee, with a view to see what the data reveal—which of the forces or agencies play an essential part or perform a real service and are consequently legitimate and justifiable; and which others are superfluous or exploitative so that they deserve to be expropriated or extinguished or exterminated; and how best we can avoid or eliminate them and readjust our market process or activity to the end of making it efficient as well as equitable, beneficial to the producer, whose interest must be the pivot of the policy and beneficial also to the consumer and in general conducive to national good and our country's development and betterment.

We find that there is a variety of factors and forces which govern and determine the price spread in agricultural marketing, the more prominent among those forces being the factor of freight rate, the price for distance across which a commodity is carried; the degree of processing that the commodity needs as altogether essential before being marketed, is just another of these important factors. Thus where a thing is sold, and when or in what form and at what stage of its processing it is marketed, are considerations which affect the price spread.

If there is local marketing and the carrying of a commodity over long distance is avoided, naturally the share of the producer in the consumer's rupee is larger. The incidence of freight may be considered a major factor affecting price spread. Thus in the case of the marketing of wheat, the share claimed for the cost of freight was found to vary from about 2 per cent or just under 4 pies in the consumer's rupee in the case of wheat from Hapur to Delhi to 19 per cent or 3 annas in the consumer's rupee in the case of wheat from Indore to Bombay; and significantly the producer's price in the first case was over 83 per cent, over 13 annas of the consumer's rupee; in the second case it was 67 per cent, rather less than 11 annas of the consumer's rupee. In the case of Jowar marketed at Raichur in Hyderabad State, in one case the freight claimed 19 per cent of the consumer's price or 3 annas in the consumer's rupee.

In the case of marketing of rice the share claimed on account of cost of freight from the consumer's price was found to range between 1½ per cent or 2 pies in the consumer's rupee, in the case of rice from Kalyan to Bombay, to over 13 per cent, more than 2 annas of the consumer's rupee in the case of rice from Bolepur (Bengal) to Delhi. It was found that in the first case the producer's price came to nearly 77 per cent of the consumer's price, the producer getting over 12 annas of the consumer's rupee, while in the second case the producer's price was rather less than 58 per cent of the

consumer's price, the producer getting in this case just over 9 annas from the consumer's rupee.

In the case of rice locally distributed at Cuttack, despite the retail margin of nearly 6½ per cent or 1 anna of the consumer's rupee, it was found that the producer's price was the highest recorded in the course of the last survey on the marketing of rice in India, being nearly 78 per cent of the retail or consumer's price, nearly 12½ annas of the consumer's rupee. The last report on the Marketing of Rice in India estimated the producer's price to be between 71 and 72 per cent of the consumer's price or 11½ annas in the consumer's rupee—exclusive of interest charges paid by the producer. The actual share of the producer, if interest charges are taken into account, it concluded, comes to annas 0-8-3 of the consumer's rupee, or 51½ per cent of the consumer's price.

The producer's price in the case of marketing of hand-pounded rice had a tendency to be usually higher, chiefly for the reason that ordinarily hand-pounded rice was locally distributed and its marketing did not involve its being carried over long distances; the spread of the consumer's price, over freight charges, was therefore avoided or limited.

The price spread on account of the freight factor was observed to range between about 4 per cent in the case of Coorg oranges from Nilgiris sold at Trichinopoly, to about 33 per cent in the case of Nagpur oranges despatched to Delhi. In the case of grapes the range was between 4 per cent in the case of Nasik grapes sent to Bombay and 13 per cent in the case of Krishnagiri grapes sold at Madras.

Reference has been made above to the degree of processing pre-requisite for marketing a commodity, or the stage of processing at which the commodity is marketed, as being one of the important factors affecting price spread in agricultural marketing. If an agricultural commodity can be marketed straight away without much processing the question does not figure as important, for instance in the case of wheat, where it is marketed usually as wheat and not as flour, this being the accepted or approved practice. But in the case of rice, it is a different matter. The crop is harvested in the form of paddy and while it can be sold as paddy, ordinarily in use, the thing consumed is rice, which is paddy after it has been milled or hand-pounded. Thus processing of paddy into rice, whether milled or hand-pounded, is almost a necessary stage or requirement in the marketing process. Whoever does this processing must incur some cost, which he must recover; he would probably also claim a margin of profit on this processing. If the producer himself does not market his produce after processing, then he stands to lose, for a portion of the consumer's price spreads to the processing costs and processing margin, and the producer's share in the consumer's rupee is diminished to that extent.

The profit margin on hulling or milling was found to range from about 2 to 8 per cent of the consumer's rupee. It thus swallowed up about 4 pies to over 14 pies in the consumer's rupee, which would otherwise be added to the producer's share, if he milled his own paddy, and having had it milled, himself put it on the market as rice. In case of Hansa Rice from Raipur (C.P.) to Nagpur, a comparative study of the producer's price revealed that the producer who sold his crop as paddy received just under 58 per cent of the consumer's price while the producer who milled his paddy and marketed it as rice, received 68 per cent of the consumer's price—a difference of a clear 10 per cent of the consumer's price. The last report on the marketing of rice in India estimated that if a cultivator had his paddy milled and himself sold it as rice an increase of income amounting possibly to 5 or 6 crores of rupees could be expected.

The weight of this truth has been recognised and it is now an accepted principle that processing by the cultivator should be encouraged to let him divert the price spread or processing costs or margin to himself and thus add to his producer's price and to this end, it is considered desirable to offer to producers facilities for processing at reasonable rates—the chief means being through a co-operative agency. In the course of a tour of Central Provinces recently, with the object of collecting data for the revision of the report on the Marketing of Rice I was glad to be told at one of the producing markets at Balaghat, which I visited, that a mill by a Co-operative Society specially for facility to the producers had been established to encourage processing by the producers on a basis of reasonable charges. A great deal however remains to be done in this direction, but the direction is quite clear and the advantage is quite obvious and the benefit to accrue is enormous.

An analysis of the price spread discloses that in the consumer's rupee the following are among the principal co-sharers:—

(1) Producer
(2) Middleman
(3) Miller
(4) Wholesaler
(5) Retailer

We have been considering the producer's share and have given some attention to the miller and his share for processing costs and margins. The wholesaler's margin in the case of rice in different markets in various provinces and states of India was found to vary from 2 to 7 per cent of the consumer's price and the retailer's claim came to between 4 to 9 per cent of the consumer's price in the different areas. In the case of wheat the retailer's share of the price spread ranged between 3 to 6 per cent in the different areas in India.

The retailer's share in the consumer's rupee ranged between 8 to 34 per cent in the case of bananas and in the case of grapes it was 55½ per cent in one instance of grapes sold at Madras. In the case of oranges the retailer's share in the consumer's price was found to vary from about 8 per cent to about 42 per cent. In this last case of Coorg oranges from Nilgiris being sold at Trichinopoly, the retailer claiming about 42 per cent of the consumer's price, it was found that the producer's share in the consumer's price came to just under 21 per cent.

This data in regard to marketing of fruits, makes it abundantly clear that the retailer's share of the consumer's price in the marketing of fruits is strikingly large and the producer's share is by contrast pathetically small. A special effort to avoid this glaring discrepancy appears to be called for, though we must of course not lose sight of the fact, that in view of the present defective arrangements for packing and storage the retailer of fresh fruit does probably have to bear certain expenses and incur certain losses, which are not attendant upon the retailer of other more durable commodities.

There is but one way in which the producer can divert this price spread on account of the wholesaler's and retailer's margin to himself, and that is the way of co-operative marketing which rightly and legitimately is now regarded to be the aim and objective of organised efforts at improved marketing, being the main means for effecting the major changes needed in the interest of improved marketing. While beginnings in this sphere have been made, a great deal yet remains to be done; a great way we still have to go in this direction; we appear now only to have seen the right path, or just glimpsed it; we have hardly yet put our feet firmly on this path,—treading the path with vigorous and confident steps is still unfortunately a dream for us. But this dream must become a reality if the producer's better standard of living, an increase in his income, is to become a reality and a fact.

Till this dream becomes a fact, till this vision is translated into practical achievement, the only way of helping the producer is to limit the wholesaler's and retailer's margin on the basis of reasonable legitimate charges for essential services performed on an equitable and economic basis. During the period of controls, government did lay down on the basis of study, certain prescribed limits as being proper wholesale and retail margins, to ensure that a larger proportion of the price did not spread to these, to the detriment of the producer, whose share would consequently suffer a diminution.

If based on scientific study and careful calculation and consideration of relevant factors, regulation of these charges or laying down of these margins would certainly help in solving the problem in as much as while assuring

legitimate returns for services performed to the wholesaler and retailer, it would yet help avoid the undue spread of price on account of these factors, safeguarding the interests of the producer, who is and must be our primary, and for the present even both the first and the last concern of ours, in our planning of improved agricultural marketing.

In the study and analysis of price spread in agricultural marketing the next claimant to our attention is and must be the middle-man's share in the consumer's rupee. The middle-man functions at various stages in the marketing process and perhaps almost at every stage—at the assembling stage as also at the distribution stage; and his share is a total of assembling costs and margins, distribution costs and margins and includes a variety of items of charges for handling, carting, weighing, packing, storing, brokerage, commission and also if we take a realistic view of Indian conditions, includes probably finance costs and interest charges. For, in India, we do not have that type of specialisation which we assume on the basis of our knowledge of the prevalent system and practice in western countries.

In India, often, the financier is also the assembling agency,—why often, he, almost invariably, is the assembling agency; and it is not rare that the assembling merchant or the assembling middleman is really the agent or representative of the distributing party. Thus finance, assembling and distribution are all, not only inter-linked intimately—they are often parts of just one organisation, limbs of just one concern, links in activities of one enterprising firm or partnership or even an enterprising individual, who finances, assembles and acts as agent for a distributing agency, or in the reverse way, being the distributing party, employs an assembling agency, and in order to have facility in assembling of produce, also arranges to finance the producer.

We must therefore now try to see what portion of the price, spreads to the middleman for his various services, and to what extent it is justified. That he performs certain functions cannot be gain-said; weighing, packing, transporting, handling, storing, bringing together buyer and seller, sorting or some kind of grading, financing,—all these, some one has to do; and all these involve costs which must be paid and borne; the only question is, whether the charges are reasonable, legitimate or unconscionable; and also in certain cases whether all the services performed are really needed, necessarily required or are avoidable.

It has been seen that there are certain deductions made, there are certain charges levied during the process of assembling, which are unfair, for instance certain deductions for impurities, refractions (Karda) even if the impurities are not present in the commodity to that extent; there are certain charges made for Dharmada; or certain expenses of the market function-

aries and their servants, (over Rs. 3|- per Rs. 100|- in U.P.) which really are not justified, for they are mere exactions and in no way connected with any service performed in respect of the commodity marketed.

At times there are losses regularly borne by the producer, due to short weights and measures in certain markets, due to dishonesty of market functionaries. There are sometimes heavy charges, not justified, for, not providing any facilities to the producer, by market committees, who do not spend anything for the benefit of the producer, for facilities for his bullocks, carts or even for himself, for drinking water or anything of this kind.

All these things have to be considered; for, these various unnecessary levies swallow up a part of the consumer's price and reduce the share of the producer in the consumer's rupee. All these spread the price to themselves, on their own illegitimate account, diverting it from the legitimate account of the producer.

The remedy, perhaps the all sovereign remedy, and now the accepted remedy, is the regulation of markets, even where markets are private or municipal; and better still the institution of Regulated Markets under legislation providing for prescribed charges for services performed, also laying down the procedure for marketing, and ensuring a fair deal to the producer, by putting on the market committees certain representatives of the producers themselves, who will be vigilant, and who, knowing where the shoe pinches, will be able to indicate what should or should not be done.

Regulation of markets avoids most of the evils of disorderly or dishonest marketing, providing facilities for inducing orderly marketing, making things simple for the innocent, unsophisticated producer, by laying down fixed, scheduled charges, so that no unfair advantage is or can be taken of the ignorance of the illiterate producer. The weights and measures in use are to be certified ones. The current prices are put up in the market for information. The brokerage or commission rates are laid down and so also handling and weighing charges, and the market functionaries are also licensed and therefore comparatively more reliable and amenable to control and liable to action if they mis-behave or cheat. There is arrangement for swift machinery for deciding of disputes in an amicable and fair manner. On top there is the control of government and the awe which accompanies it, though in ordinary practice, it is to be expected that the local committee would do every thing.

PRICE-SPREADS IN MARKETING OF AGRICULTURAL PRODUCE

By

DR. V. V. SAYANNA.

Department of Economics, University of Bombay.

Statement of the problem:—By the term "Price-spread", we mean the spread or the margin between the actual cost of production (exclusive of costs of distribution) and the retail price of consumer goods, or more precisely, it is the difference between the price paid by the consumer and that obtained by the producer of a commodity. It is often described as the share or the proportion which a farmer or primary producer derives out of the consumer's rupee. Recent investigations made in the U.S.A. reveal that out of the consumer's dollar expended on food stuffs, only 42 cents go to farmers and 58 cents to marketing costs, while on price of meat 60 cents go to middlemen. Retail prices of bread and cereals were estimated to cost about 143% to 975% higher than the average price of wheat on the farms. In the case of processed goods, the spread is much wider and canned foods sell at 5 to 7 times higher than the value of their primary products. Out of the consumer's money spent on different commodities, costs of marketing agencies in India were found as follows: grapes (73.60%) oranges[1] (57.72%, tobacco (43.87%), potatoes (43.87%), eggs (37.5%), rice (33.20%), wheat (31.5%) and so on.[2] From these figures it is obvious that a large part of the consumer's rupee is consigned towards charges of the intervening agencies between the producer and the consumer, and in a good many cases the cost involved in carrying a thing from the producer to the consumer is by far larger than the cost involved in producing the thing itself. Therefore, one might be led to conclude that there must be, *prima facie,* something wrong somewhere, if distribution costs more than production. Indeed, there must be "excessive wastes, inefficiency or large profits" or a combination of all the three in the processes of distribution which demand for an over-all reorganisation of our marketing system, not only in the interests of the consumer and the producer but for stimulating production and with it the economic well-being of society.

Its nature—some general considerations:—It may be clearly stated that the expanding role of marketing in no way be looked upon as wasteful, since the economic function of distribution is as important as production of goods. As a matter of fact, high percentages of distribution costs by themselves do not imply high profits or inefficiency in the line of marketing. On the contrary, if high costs of marketing are the result of addition of new utilities

1. *Note:*—According to B. B. Mukherjee (*Vide* his "Agricultural Marketing in India," p. 12), the precentages accruing to the middlemen on various kinds of fruit in the Bombay Province were as follows: Guava (66.4%) and Oranges (46.6%) from Poona; Musambi (71.4%) and Papaya (63.1%) raised in Nagar and Nasik, respectively.
2. Refer to Table No. 1 quoted in the paper.

or services to goods in the process of distribution, they are desirable, for they (space, time and form utilities or allied services) enhance the value of the original commodity purchased by the consumer and expand its market for the producer. For example, increased specialisation in the growth of agricultural produce may lead to an increase in costs of transporting goods over long distances, and yet, if they are grown in efficient low-cost producing tracts the lower costs of production may more than compensate the high transport charges in the aggregate. Again, owing to the advances made in methods of canning and quick-freezing, many perishable goods like fruits and vegetables, butter, eggs, fish and meat which were formerly available only in particular seasons or so are now preserved and made available for consumption almost in all times and places. Similarly, processing, wrapping, packing, grading or handling them in convenient units and forms impart another set of values to the goods. Doubtless, all these result in extra expenditure of money which may widen the price-spreads in marketing. Since they represent new values added to the commodities and a saving of labour and expenditure in the house, they should not be construed as uneconomic or unproductive but as substantial positive social gains in as much as they make goods portable and presentable to the consumers. But when we commonly talk of high price-spreads in marketing of agricultural produce, we have entirely something different in our minds. We have in mind the existence of a host of intermediaries in assembling and marketing of agricultural commodities who compete with one another to scrape off some profit or other without rendering any corresponding services; and, if they do, they do them inefficiently in a faulty framework of the existing marketing conditions. We address ourselves, therefore, in the following pages to ascertain to what extent this notion is justified and in what ways significant improvements can be effected for reduction of marketing costs.

Price-spreads of some commodities in India:—Very little research is done in the past on the problem of price-spreads in India, because the system of maintaining accounts of costs of production or sale proceeds is not customary with the large bulk of the illiterate peasantry, while it is difficult to obtain necessary facts and figures from the wholesalers, the retailers and others, since they will be naturally reluctant to disclose to others information relating to their profit margins and their trade dealings. The table on page 211 contains estimated percentages of shares accruing to various agencies for twelve products.

From a close examination of the figures in the table, it may be seen that there is no uniformity in the proportions that go to different items, and consequently the price-spreads vary widely from commodity to commodity or similar products in the same time of production. The causes for the variations in the percentage make-up of the price-spreads are many. These dif-

Table No. 1 Price-spread of different commodities from producer to consumer in India.[1]

Description of items.	Sugar (1)	Potatoes (2)	Rice (3)	Wheat (4)	Linseed (5)	Groundnut (6)	Grapes (7)	Oranges (8)	Coffee (9)	Tobacco (10)	Milk (11)	Eggs (12)
(a) Producer's Share ..	65.17	56.13	66.80	68.5	79.35	76.70	26.40	32.48	64.77	42.18	64.75	62.5
(b) Freights etc. ..	10.71	11.9	6.56	17.0	9.4	8.53	8.95	16.3	..	6.66	..	..
(c) Miscellaneous ..	9.18	6.8	17.20	9.3	9.35	16.77	11.55	26.54	14.07	34.46	..	..
(d) Wholesaler's margin..	5.36	5.4*	3.19	1.9	1.9	..	..	*	6.90	16.70*	14.75†	..
(e) Retailer's margin ..	9.58	18.6	6.25	3.3	..	..	44.90	24.68	9.40	..	20.50	..
Total ..	100	100	100			100						

ferences closely depend on the nature of produce, special distribution of producing areas, developments in communications and transport of goods, extent of credit and storage facilities etc. available to the farmer, marketing organisation and government regulation, and on the general layout of the physical marketing system as well as on the economic price-determining set-up which regulates agricultural production, distribution and consumption in the country. Strictly speaking, any detailed study on the problem of price-spreads has to be undertaken commodity-wise, taking at least each of the important commodities individually in some of the major markets, since both costs and methods of marketing differ as amongst different products. Such a venture is, of course, not physically possible here, in the limited space at our disposal. The second point to be noted is that the marketing margins are wider in respect of processed and manufactured goods as compared to those of agricultural products like wheat, rice and other cereals and 'dals' (Bengal grams, green and black grams etc.) because the latter reach the consumer more or less in the same form as they leave the farms, while the former undergo certain processes before they reach the consumer with the consequence that the chain of middlemen may be lengthened, each having a claim of his own on the consumer's rupee. Generally speaking, the costs of transport occupy a greater role in marketing of agricultural produce due to their large bulk or perishability. Lastly, fluctuations in price-spreads are not so great as fluctuations in prices of agricultural produce. In fact, the marketing costs are more or less stable as contrasted with fluctuations in

1. See "From the Farmer to the Consumer: a Study of Price-spreads" by M. C. Munshi New Delhi, 1945, p. 34.

N.B.—The following is adduced by the author by way of explanation in the construction and various other items in the table. "The table is constructed from the figures given in the Marketing Reports. The price-spread of each of these commodities has been presented in the reports for 5 to 10 separate markets in the country to represent conditions in all parts of the country. To arrive at some generalisations valid for whole India, averages of all the charges in different markets have been taken and then separate items have been re-arranged and grouped together in a form in which shares of different agencies in marketing represented as percentages of the consumer's price, can be compared for different commodities. Items *(a)*, *(b)*, *(d)* and *(e)* are self-explanatory. Other marketing, assembling, weighing, taxation charges, etc. have been summed up under 'miscellaneous.'

The sum of the percentages may not come to exactly 100 because in some cases % shares have been statistically interpolated and also because separate figures for certain items have not been available. Whenever the total does not come upto 100, it is because some figures have not been available even with the help of statistical interpolation. Also small figures have been added to 'miscellaneous,' after interpolation to make up the total wherever possible."

* Interpolated by subtracting all other items from 100.

† Here it refers to the collector's margin.

agricultural prices, as some of the components like costs of transport, rents of warehouses, Octroi duty and other taxes or market levies change only slowly and to a small extent in a period of time. As for profits of the retailers and the wholesalers, it is well-known that motivated as they are in pursuit of business for private profit-making, in a period of declining prices they try to reduce the prices paid to farmers keeping their profit margins in tact as far as possible. In a period of depression, it is clear, that the farmer's lot will be miserable in the sense that he gets lower prices for his produce in absence of corresponding reductions in freight charges, land revenues assessment and local taxes, and the profits of middlemen. It follows, that the need for elimination of individual middlemen in the marketing system by organising an integrated system of group action of producers and consumers can, at no time, be more urgently felt than during a period of slump.

Factors entering into high marketing costs in India:—At the outset, it may be noted that in majority of cases, the produce is disposed of on the farms or in the villages themselves. In the U.P. 30% of the wheat grown is sold in the village, in Lyallpur the percentage is 52, while in Attock district (Punjab) it is as high as 98. As for paddy 89% is sold in villages in Bihar, 72% in Bengal and 89% in Madras. Village sales account for 79% in respect of cotton in Sind, 81.4% in Khandesh, 51% in Central Gujarat, 80.5% in the Punjab. The All-India average of the percentage of linseed taken to the markets for sale by the cultivators themselves is only 20% as against 40% sold by landlords and 35% by businessmen.[1] It is partly due to the lack of development of proper communications and *pacca* roads in the rural side and also due to the state of poverty and indebtedness on the part of the peasantry which prevent them from withholding their produce till they can get reasonable prices. Loans are advanced on the lien of crops, and sales are effected soon after the crop is harvested, when the prices are usually low. It is often pointed out that one of the reasons for high costs of marketing of agricultural produce, is the costs of transport particularly the apathetic policy of the railways. For example the difference between the price of Punjab wheat at Lyallpur and of the same wheat at Calcutta is Rs. 1-1-7 per maund of which Rs. 1-0-4 is due to railway freight alone. The average rail freight paid per dozen of eggs is Rs. 0-0-6 which represents about 15% to 17% of the producer's price.[2] There has been considerable increase in the rates since 1940, more than one time. Strong grievances also exist against differential rates of freights charged by the railways which are considered as—"favouring exports and imports to the detriment of the home trade" and to the indigenous agricultural produce. It is observed by the Agricul-

1. Quoted from 'Rural Marketing and Finance' by National Planning Committee Series, Bombay, 1947, Ch. III, p. 42.
2. Quoted from 'Rural Marketing and Finance' by National Planning Committee Series, Bombay, 1947, Ch. III, p. 58.

tural Marketing Adviser, that with the introduction of special rates on agricultural produce, the market for the products will expand which may ultimately bring more traffic to the railways. The suggestion may be implemented as soon as possible.

The second pertains to profits of middlemen. Inquiries made in the U.S.A. show that earnings of capital engaged in marketing operations range between 2% to 4.4% in some cases and it is maintained that they do not account for a very large part of the margin between farmer and consumer. Table No. 1 shows that the wholesaler's margin ranges from 1.9% for wheat and linseed to 16.70% in case of tobacco; whereas the retailer's margin is 3.3% for wheat rising to as much as 44.90% for grapes. Tables below further adduce that the largest single item in the costs of distribution is the cost of retailing.

Table No. 2 showing division of Consumer's food dollar, 1935.[1]

Description of item	Percentage
Farmer's share	41.1
Processer's share	20.1
Wholesaler's share	9.0
Retailer's share	24.5
Transportation	5.3
Total ..	100.0

Table No. 3 showing division of total marketing costs in U.S.A. 1929.[2]

Description of item	% of total costs of distribution
Manufacturer's distriubtion cost	24
Transportation cost	23
Wholesaler's cost	18
Retailer's cost	33
Miscellaneous	2
Total ..	100

It may be incidentally noticed that the shares of middlemen, wholesaler's or retailer's, are greater in manufactured articles than in food stuffs or raw products. The profit margins are low for cereals and other non-commercial agricultural products, for the simple reason that their markets are well organised, they can be conveniently handled in large bulk, and as they are important crops they have an assured demand and the farmers too have sufficient market information about them. There are indications to corroborate the view that the number of these middlemen are increasing in their numbers perhaps more than necessary, while the number of people employed in production tend to decrease with the increased application of mechanisation and technological developments.[3]

1. *Vide*, "The Structure of the American Economy" Part 2, Basic Characteristics, U.S. National Resources Committee, p. 379 quoted by G. S. Shepherd, Marketing Farm Products Iowa, 1946 Ch. 15, p. 213.
2. Table adopted in Marketing of Farm Products, *Ibid.*
3. Cf. ,'Does distribution cost too much?" by P. W. Stewart and J. F. Dewhurst, The Twentieth Century Fund, New York, 1939, Ch. I, p. 9.

Note:—The material available in the references quoted is freely used by me especially in utilisation of primary data.

Further, deductions are made on many occasions and for reasons religious, charitable and customary, which although amount to little by themselves account for considerable portions and when added up all together reduce the share of the farmer. The octroi and terminal taxes, and other market charges also contribute to raise the price of the goods to the consumer. For instance, it is found that a terminal tax of 0-15-0 per bale of lint is levied on all exports of cotton by rail or road at Amraoti and the charge at Dhulia is 0-8-0 per bale. The Octroi duty collected at Raichur on all grains taken out for sale or sold in the City is 0-2-0 per maund. According to the All-India marketing reports, the incidence of the market charges also is considerable and differs from market to market. "In the Colony markets in the Punjab these are as low as Rs. 2-1-3 per Rs. 100; but in the Central and eastern markets of the U.P. the total charges may amount to as much as Rs. 7-3-0 per Rs. 100"

Due to lack of proper storage facilities, wastages occur on account of climatic conditions or destruction caused by rats and insects in course of marketing. Some of the malpractices such as fraud in weights, multiplicity of marketing charges and unauthorised deductions are reduced to a minimum by establishment of regulated markets. Regulated markets exist at present in Bombay, Madras, C.P. and Hyderabad. The C.P. Cotton and Grain Markets Act as amended in 1932, the Madras Commercial Crops Markets Act, 1933, the Hyderabad Agricultural Markets Act, 1939 and the Agricultural Produce Markets Act in the Bombay Province may be mentioned in this connection. Researches are to be projected to assess the working of these Acts and to contrast the benefits derived by sales in regulated markets as against the work done through co-operative societies. The Agricultural Produce (Grading and Marketing) Act, 1937, defines standards of quality and lays down methods of marking of prescribed grade designations regarding products included in the schedule. The 'AGMARK' is recognised as a guarantee for quality and has become increasingly popular in agricultural marketing.

Conclusion:—The middlemen perform certain well-discernible functions in marketing of agricultural produce and our chief attention must be directed therefore not at undermining or reducing the services rendered by the independent intermediaries but on effectively taking over those functions by a well-organised integrated system of wholesaling and retailing by the farmers and the consumers themselves largely through co-operative means. Duplication in marketing services, unnecessary advertising costs due to undesirable competition, and inefficiency of operating units in distributon have to be set right. Provision of efficient marketing information service, raising the standard of producer and consumer knowledge with regard to production of crops in relation to demand and national requirements and a balanced distribution of their purchasing power among different goods and services,

control of speculation and future dealings, proper grading and standardisation through state regulation of markets, and wise price policies will surely go a long way to reduce marketing costs and to pave the way for an era of a full-fledged socialised marketing system. Marketing-problems no doubt constitute a part—only a part—of the many problems of the Indian farmers who are largely subsistence farmers rather than surplus producers. And in fact, the major problems of the Indian agriculture today consist of production problems concerning increasing production, liquidating poverty and ensuring to the farmer and the farmhand a minimum standard of living in the immediate future.

COSTS OF MARKETING COTTON IN THE BOMBAY KARNATAK

By

SHARAD CHANDRA MERH,

University School of Economics, Bombay.

It is startling for an average man to learn that many marketing economists are not convinced that marketing costs are too high or marketing profits too excessive. In recent years, an idea has taken deep roots in the minds of the public that modern methods of distribution are wasteful and inefficient with the result that distribution costs are higher. The grower feels that he is deprived of his due share and the consumer thinks that he is a victim of profiteering and waste.

The high costs of marketing do not necessarily mean inefficiency and waste. Higher costs of marketing are largely due to the fundamental changes in the economic organisation of the country. Localization of production has no doubt reduced the costs of production but has increased marketing costs. It may mean that production costs are so low in the areas far from the market that these low costs more than offset the high costs of marketing. Production has been cheapened so much that distribution is now a costly element. Distribution has to bear more expenses to influence the consumers' demand. Another feature of our complex economy is that labour saving mechanical production has displaced a good number of persons who were employed in agricultural production. Finding themselves displaced, they have rushed to the distributive organisation. Moreover, distribution with the exception of transportation remains largely a hand industry. There are wastes and risks in distribution, inadequate facilities for handling goods and also lack of standardisation. There is much duplication of services: hence the costs are higher.

The solution of the problem lies only in an all round improvement of the marketing system—and not in any one haphazard measure. It is absolutely necessary to avoid wastes and risks. Marketing system may be compared to a chain of several links, any one weak link of which impairs the whole chain. For instance, bad grading increases the loss in transportation and storage, increases risks, increases credit costs, increases expenses of selling and finally it increases the total costs of marketing. Each link must be carefully studied with a view to improvement. It costs less to sell standardised goods than an unstandardised one; it costs less to sell one variety than many, it costs less to sell large quantities than small quantities and it costs less to sell a commodity that has an established demand than one which has not.

It will not be out of place to mention here that marketing costs can be reduced by shortening trade channels, reducing the number of middlemen, by providing better grading so that there may not be any loss during the transit by reducing the expenses of storage and insurance, by curtailing the expenses of selling and finally by providing enough credit facilities to the grower. The hope lies only in better organising the agricultural marketing. The people, the State and all other parties should combine to bring down the expenses of distribution as they have done in respect of production costs. People should co-operate among themselves and with the Government and should see the problem through. The State should also come forward with its legislative measures to control trading in agricultural commodities in order to bring down the costs of marketing. Regulation and co-operation can only remedy this great problem and the hope lies in them only.

An effort has been made in subsequent pages to examine briefly the costs of marketing the cotton crop in the Bombay Karnatak and to evaluate the efforts on behalf of the trading community, the Government and the people towards better marketing and lower distribution costs. Here it will suffice to say that the grower of cotton in this region is a little lucky as much improvement has been made towards better marketing conditions thhrough the establishment of markets. Co-operation has also brought out similar results. The results is that cotton is the only commodity which is so economically marketed. Trading in cotton is much better organised than that in any other agricultural commodity in India.

An effort has been made both by the State and by the people in the Bombay province particularly to improve marketing of cotton with the result that cotton growers of the Bombay Karntak are able to fetch as much as 88% of the consumer's price. Cotton is probably the most economically marketed commodity in India. It does not however mean that the entire system is perfect and there is no scope for making further improvements.

Price spreads are not the only tests of a successful marketing system. Lower margins to the middlemen may compel them to resort to other malpractices which may be still more harmful. A view has been expressed that "if the middleman cannot obtain a fair return through legitimate trade practices, he will want to make an extra rupee on the sly. The absence of adequate profit margin for the intermediary is really at the root of the evil practices of adulteration and watering of cotton."

The three districts of Bijapur, Belgaum and Dharwar, comprising the Bombay Karnatak, are famous for their cotton cultivation and though there has been a decrease in the average in the recent years, these three districts alone account for a little less than 50% of the Province's cotton area. Cotton is grown over 5,08,192 acres of land in this region, and plays an important role in the economy of the region. The district of Bijapur, famous for the cultivation of the Jowari and the Jayawant cotton, has two centres—Bagalkot and Bijapur—where growers come to dispose off their cotton crop. Gadag and Hubli are the centres in the Dharwar district and Bailhongal in Belgaum. These five markets are very old cotton centres and at present they are regulated under the Bombay Agricultural Produce Markets Act of 1939 as amended in 1948. The growers usually bring the seed cotton in their own carts to these markets and dispose it off through *adatyas*. Representatives of the various up-country mills (mostly Bombay) and of the various Bombay merchants make purchases of seed cotton, get it ginned and pressed and despatch these bales to their clients. Most of the cotton grown in the Karnatak finds its way to the big cotton market at Bombay through these channels.

To estimate the costs of marketing cotton we have to take into account all the expenses from assembling to the final sale including the processing charges. The following figures show the actual cost of marketing one candy of cotton i.e. 784 lbs in two full pressed bales—from these respective markets to the Bombay wholesale market:—

TABLE NO. 1.

	Bijapur			Bagalkot			Gadag			Bailhongal.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1. Price of kapas*	479	12	0	757	13	11	560	0	0	872	0	0
2. Adat and other charges	3	0	0	4	10	3	3	6	0	3	6	6
3. Cartage from market to the ginning factory	3	8	0	1	12	0	2	10	0	1	11	0
4. Ginning charges	24	0	0	28	0	0	20	0	0	21	0	0
5. Labour charges in the Gin	2	0	0	5	0	0	5	0	0	1	8	0
6. Pressing charges	18	0	0	24	0	0	20	2	0	24	0	0
7. Commission	....			....			3	8	0	9	9	6
8. Station charges	0	8	0	0	10	6	1	12	0	1	0	0
9. Railway Freight	11	0	0	18	8	0	15	0	0	12	3	0
10. Bombay Expenses	6	12	0	6	12	0	6	12	0	6	12	0
	548	8	0	847	4	8	638	2	0	953	2	0

* Prices have been given to get an idea of the percentages of the costs of marketing.

The growers who bring their cotton to sell in these markets have to incur some merchandising and incidental expenses. And to evaluate the grower's share we have to deduct those expenses from the price of seed cotton. These expenses are octroi, market cess, weighing charges etc. Moreover, item No. 10 in the above table has to be split up. The Bombay expenses include godown rent, *mukadami,* insurance and cartage. So, before we actually apportion the costs it would be advisable to find out the exact amount which a grower has to pay before selling his crop. Following are the charges which a grower has to pay before he sells his produce:—

TABLE NO. 2.

	Bijapur	Bagalkot	Gadag	Bailhongal
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Municipal Octroi	0 12 0	1 2 0	1 8 0	1 11 0
2. Market cess	0 4 6	0 4 6	0 4 0	0 4 6
3. *Adat* charges	3 2 6	3 4 6	3 1 0	3 6 6
4. Weighing charges	0 4 6	0 4 6	0 4 0	0 4 6
5. Hamali	1 2 0	0 15 9	1 0 0	1 2 0
6. Surveying charges	....	0 2 3	0 2 0	....
7. Stocking charges	....	0 4 6	0 4 0	....
8. Godown Rent..	0 13 6	0 9 0	0 8 0	0 9 0
9. Insurance	0 9 6	1 11 0	2 0 0	1 2 0
	7 0 6	8 10 0	8 15 0	8 7 6

These charges are fixed by the regulated market committees in these markets and the seller (grower) has to pay these before he actually gets the sale proceeds. Besides, the purchaser has to pay *adat* charges as mentioned in Table No. 1. Other items in the table are self evident except the last item. These Bombay expenses are fixed by the Bombay *Muccadums'* Association and are chargeable as follows:—

	Rs. a. p.	
1. Mukadami @ Rs. 2 per bale	4 0 0	per candy.
2. Jatha Rent@As. 4 per bale	0 8 0	„ „
3. Insurance @ Rs. 1-10 per candy	1 10 0	„ „
4. Cartage from station to the godown @ As. 5 per bale	0 10 0	„ „
Total	6 12 0	per candy.

We can now regroup all these expenses in a different manner. Mukadami is essentially a commission charge; so it should be grouped with market charges payable by the buyer and the seller. The following table shows the costs incurred on different items for 1 candy of cotton in respective markets.

TABLE NO. 3.

	Bijapur	Bagalkot	Gadag	Bailhongal
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Producer's share	472 11 6	749 3 11	551 1 0	863 8 6
2. Middlemen's charges	14 0 6	17 4 3	19 13 0	25 2 0
3. Processing charges	44 0 0	57 0 0	45 2 0	46 8 0
4. Railway Freight	11 0 0	18 8 0	15 0 0	12 3 0
5. Misc. including handling	6 12 0	5 4 6	7 2 0	5 12 6
	548 8 0	847 4 8	638 2 0	953 2 0

The figures of this table can be condensed further into percentage in respect of each market and an average for the Karnataka for comparative study. The following table represents the above figures in percentages.

TABLE No. 4

	Bagalkot	Bijapur	Gadag	Bailhongal	Average
1. Producer's share . ..	88.42%	86.16%	86.35%	90.6%	87.87%
2. Middlemen's charges..	2.05%	2.55%	3.10%	2.64%	2.59%
3. Processing charges ..	6.74%	8.02%	7.08%	4.87%	6.68%
4. Railway Freight ..	2.15%	2.00%	2.35%	1.29%	1.95%
5. Misc.	0.64%	1.27%	1.12%	0.60%	0.91%

The growers of cotton in Belgaum district who bring cotton crop to Bailhongal realise as much as 90.6% of the total costs and in other markets the grower's share ranges between 86.16% and 88.42%. On an average it costs only 12% to market the Karnatak cotton in Bombay. The middlemen's charges are not very high and in all the four markets in consideration these charges are between 2% to 3%. One of the major share of costs goes to the processors i.e. ginners and balers. In Bijapur, the ginning and processing costs together account for 8.02% of the total costs while these charges are little less in other three markets. There are two operations in this processing—ginning and pressing—so costs are higher. Railway freights from these places to Bombay (F.O.R.) come to about 2% and miscellaneous items to about 1% of the total costs. The detailed figures for each market are given in the abovementioned table and they are self explanatory. In short, growers are fairly lucky to get as much as 88% of the total costs while middlemen account for a little more than 2%. Processing charges are definitely high—may be on account of higher labour wages and it costs 6.68% to gin and bale the cotton. It costs 1.95% to move baled cotton from the Karnatak to Bombay and then at Bombay there are certain expenses as we have mentioned earlier.

This however does not mean that marketing arrangements are perfect in the Karnatak and that there is no scope for improvement. But one thing is quite certain that conditions in this respect are much better than probably in any other part of the country. The growers of cotton realise a better share than those of any other agricultural commodity in India. This will be seen from the following figures regarding grower's share in respect of some of the major agricultural commodities:—

TABLE No 5

	Producers' share	Freight etc.	Misc.	Wholesalers' margin	Retailers' margin
Sugar	65.17%	10.71%	9.18%	5.36%	9.58%
Rice	66.80%	6.56%	17.20%	3.19%	6.25%
Wheat	68.5%	17.0 %	9.3 %	1.9 %	3.3 %
Linseed	79.35%	9.4 %	9.35%	1.9 %	....
Groundnuts	74.70%	8.53%	16.77%	....	....
Tobacco	42.18%	6.66%	34.46%	16.70%	....
Potatoes	56.13%	11. 9%	6. 8%	5.4 %	18.6 %

Cotton growers secure a better percentage of the consumers' price due to (1) Keen competition in Cotton trade (2) Regulated Markets (3) Co-operative Marketing.

There exists a lively competition in the cotton trade which is evident from the fact that cotton merchants or their representatives are seen moving in the remotest parts of the country in search of cotton. And this keen competition in the trade keeps the costs of marketing low. As an author has observed "Thanks to the keen competition in the trade, probably an indication of veiled unemployment, the middlemen's functions are performed at the lowest possible cost." If price spreads are taken as our guide, probably there is no other commodity in India which is marketed as economically as cotton. And the Bombay Karnatak is no exception to it. Due to the organised trading in cotton on the whole, the costs of marketing are definitely lower. But there are other reasons too and there are improvements made in the marketing system by regulation and co-operation.

Improvement by Regulation.

The Bombay Cotton Markets Act was passed in the year 1927 and was first applied to Dhulia in the West Khandesh district and to Bijapur and Bailhongal in the Karnatak. The object of the Act was to enable the grower to fetch better money returns at minimum costs. The results were encouraging and it was proposed to extend this regulation to other crops also. The Bombay Cotton Market Act of 1927 was repealed in 1939 and the Bombay Agricultural Produce Markets Act of 1939 was passed. And this Act was immediately brought into force in Bijapur, Bagalkot, Gadag, Hubli and Bailhongal markets. The Act of 1939 was intended to regulate the marketing of almost all the agricultural commodities but immediate steps were taken in respect of cotton and groundnuts only.

The Act of 1939 provided for the constitution of the market committees for each market consisting of not less than 12 and not more than 15 members of which one third of the members were to be the representatives of agriculturists. Trading outside the notified market was made an offence. Markets organised under this Act are called "regulated markets". The market committee, consisting of representatives of the agriculturists, merchants and local authorities, is entrusted with the management of the market. A special disputes committee attends to disputes and exercises a healthy check on the prevailing system. Licences are issued to brokers, weighmen and other market functionaries and their remunerations are also fixed by the market committee. Arrangements are made for displaying the latest price quotation from Bombay for the information of sellers. A regular record is kept of relevant information such as arrivals and prices etc. These market committees have fixed the rate of various market charges—to charge more than that is an offence. These market committes have elimina-

ted certain unnecessary middlemen and regulated the remuneration of the rest. All the arbitrary allowances and deductions have been stopped. These committees have fixed the rates of the godown rent and of insurance charges also. The committees from time to time carry on propaganda campaign about the quality of cotton to be grown and about other malpractices. The committe sees that the grower is not put to any inconvenience.

The effect of this regulation has been that the marketing system on the whole has shown definite improvement. Various unnecessary intermediaries, their remunerations, various unauthorised deductions and allowances have been eliminated. Weighment of cotton *docras* by licenced weighment in the presence of the cultivator has safeguarded the interests of the growers against false weighing. Inspection of kapas *docras* by *adatyas* and arranging them according to variety and quality have helped the sellers to fetch better prices for better qualities. Payment being properly made as rates settled in auction sales for the weights properly recorded, the sellers have little to complain about rates and weights. The illegal charges such as "Tala", "Sutali", "Postage", Education and Dharmadao funds have been stopped. The system of allowances like Ganapati, Gunda and Katri have been strictly prohibited. The disputes committees speedily settle disputes as regards quality etc., to the benefit of the grower as well as the purchaser. Buyers also feel it convenient to buy cotton in an organised manner and hence pay better prices.

The following table shows the monetary gain received by a grower due to regulation at Bijapur:—

COSTS OF MARKETING

	KAPAS (224 lbs.)		LINT (224 lbs.)	
	Pre-regulation	After Regulation	Pre-regulation	After Regulation
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Adat	0 8 0	0 8 0	1 0 0	1 0 0
2. Hammali	0 0 9	0 0 9	0 1 3	0 1 3
3. Godown charges	0 0 10	0 0 4	0 1 6	0 0 9
4. Weighing charges	nil	0 0 2	nil	0 0 3
5. Market Cess	,,	0 0 3	,,	0 1 0
6. Education Fund	0 0 6	nil	0 1 0	nil
7. Dharmadao	0 0 6	,,	0 1 0	,,
8. Bola Sample	0 2 0	,,	0 3 0	,,
9. Tala	0 1 0	,,	0 1 9	,,
10 Sutali	0 0 1½	,,	0 0 1½	,,
11. Hundavali	0 0 1½	,,	0 0 1½	,,
12. Postage	0 0 2	,,	0 0 3	,,
Total	0 14 0	0 9 6	1 10 0	1 3 3

(This table is taken from the note on the working of the Bijapur Market prepared by the Bijapur Agricultural Produce Market Committee, 1946.)

Thus there is a saving of Rs. 0-4-6 and 0-6-9 in the case of seed cotton and lint cotton respectively per 224 lbs. Over and above this, the *bardan* price of Rs. 2/- for kapas and lint is paid back to the growers after regulation. In Gadag too, we find a saving of Rs. 5-7-0 per *nag* of seed cotton and Rs. 2-10-0 per *nag* of lint. Actual figures are not available for the other markets but on making enquiries, we came to know that there has been much saving after regulation. The unauthorised cash charges and deductions in kind were a common feature in almost all the markets of Karnatak but the Bombay Agricultural Produce Markets Act of 1939 has completely eliminated them.

Improvement by Co-operation.

Co-operative marketing is often recommended as a means of securing a larger percentage of the consumer's rupee for the producers. There are co-operative associations which are doing valuable work in the field. The most important amongst them are the Cotton Sale Societies at Gadag and Hubli. The Hubli and the Gadag Co-operative Societies were started in 1917 and they serve a large area. They have introduced grading of cultivator's cotton and have made use of the auction system for realising top prices. These societies have made a great contribution to the work of distribution of improved varieties of seeds. The total value of sales of the Hubli Cotton Sale Society amounted to Rs. 7,63,000 in 1944-45. The total value of sales of cotton and other commodities by the Gadag Cotton Sale Society during the same year amounted to Rs. 2.75 million. There are three other cotton sale societies in the Dharwar district besides those at Hubli and Gadag. In Bijapur district there are two cotton sale unions—one at Bijapur and another at Bagalkot and one cotton sale society at Bijapur. The Belgaum district Sale and Purchase Union has been doing good work at Bailhongal. All these societies undertake the propagation of improved seed, collection of cotton and arrangement for its grading and then disposing the cotton by auction sales. These cotton sale societies and unions finance their members for current agricultural operations.

The object of these co-operative associations is to sell the cultivators' cotton at the highest possible price and at the lowest costs, to encourage members to grow pure and high class cotton, to market it in the best possible conditions and lastly to obtain and supply to its members pure seeds and other agricultural requisites. The growers are definitely benefited by these societies. Weighment is done in their presence and a receipt is passed as soon as cotton is brought to the society's depots. The auction system enables the growers to realise adequate premium for improved varieties. The net profits, which otherwise go to the middlemen, are distributed among members according to the quantity of cotton brought for sale. This naturally increases the grower's share. These societies provide loans on low rate

of interest to the members. Buyers also are benefited from these societies. They get cotton of superior quality in big lots properly graded and properly weighed. They do not mind paying a little more for superior grade cotton offered to them in an arranged form. It has been noticed that graded cotton realises Rs. 2/- to Rs. 3/- premium over ungraded cotton.

There are still many small and medium size markets which are not touched by the Government regulation or control. Co-operative marketing has not made much progress. Cotton marketing is yet not wholly free from watering and adulteration. Cotton travels ungraded till it reaches the terminal market. There are no licenced warehouses which can give physical and financial accommodation. Improvements are thus necessary in many directions.

One of the first points to be dealt with is the reduction of the ginning and pressing charges which account for 6.67% of the total costs. The charges for ginning and pressing, not withstanding high labour wages, are a little higher and there is a need for reducing them.

Secondly the cotton growers who produce cotton of better quality than the average handled in the market, do not receive much more than growers who grow cotton below the average. This defect can be remedied only by the wide use of impartial classification service to the growers along with an adequate information on prices. This would provide the consumers with better cotton and tend to increase the income of the growers as a group. Finally, the adoption of net weight trading by removing the inducement to increase the tareweight, would tend to simplify the marketing process as well as to reduce costs.

PRICE SPREADS IN THE MARKETING OF AGRICULTURAL PRODUCE

by

K. G. SIVASWAMY,
Madras.

A great deal of experience has been gained during the last five years as a result of procurement by the state either directly by a state staff or normal channels of private trade or co-operative societies. This experience throws light on the various devices adopted for increasing the margin of profit between the producer's price and the consumer's price. But before dealing with this experience we have to note certain features of producer-trader relationship under Indian conditions. The Indian producer does not take his produce to an assembling centre, has no storage facility and is in a

hurry to sell his produce immediately after harvest owing to his credit needs. The Indian middleman takes the risks of destruction or deterioration in storage, suffers by fall in market values, by changes in demand, and by misjudging market trends. Further, the smallness of the holding, the large distances to be covered in collecting the produce for marketing, the inequalities in yield, and the perishable nature of the produce make the merchant's task difficult and costly. The middleman's service is therefore an indispensable social function. What we have to consider is whether his profits are fair and service is efficient.

Another fact has to be noted. The middlemen have well-established margins. Supposing there is a price decline, they lower the price to the producer. The consumer's price does not fall as much as the producer's and does not rise too in the same proportion when the producer's price rises in periods of rising prices. The reason for the producer being affected more in times of decline in prices is that in village dealings the merchants can combine and dictate. Further the consumer does pay a higher price for a commodity he desires but this is not reflected in the prices paid to the producer.

Let me tabulate the experiences in marketing under food controls. As the conference is meeting at Hyderabad, let us begin with the Hyderabad Commercial Corporation and its working. The Hyderabad Commercial Corporation had the facility of using Government godowns on a rent not exceeding 3% on the capital outlay. It had the benefit of purchasing at a levy price which was less than the ceiling price. The owner of surplus paddy had to take it to the godowns of the Hyderabad Commercial Corporation at his cost. The retail seller paid for transport from these godowns. Yet, the Hyderabad Commercial Corporation was allowed for sales a margin of three rupees for 3 maunds at the purchasing centre for jowar. In the province of Madras where wholesale merchants or co-operative stores arranged for storage, the average margin allowed for 3 maunds was not more than Rs. 2. Again the average cost of transport from secondary markets by the Hyderabad Commercial Corporation worked to another Rs. 3. On the whole, the difference between the producer's price and the wholeseller's price was not more than Rs. 4 on the average for 3 maunds in the province of Madras while it was Rs. 6 for the Hyderabad Commercial Corporation.

Again the producer's price for rice was Rs. 2 for 3 maunds while it was sold between Rs. 33 and 35 at purchasing centres and Rs. 44 in deficit areas. The average transport charge of Rs. 10 per 3 maunds was certainly excessive.

Again there were two different prices for 'mota' rice and 'kichri' rice. The excessive price for 'kichri' rice fixed by the Hyderabad Commercial Corporation amounted to Rs. 42 in primary markets and Rs. 52 in secondary markets.

The working of the Hyderabad Commercial Corporation showed the need for godowns near village centres if the primary seller of surplus grain and the retail trader were not to be burdened with heavy transport charges.

As regards trade in pulses, the vagaries in prices were a puzzle. The ceiling price for "tur" and "mung" worked to Rs. 9.84 and Rs. 11.07 respectively. But Mysore paid in June 1946 per maund F.O.R. loading station at Hyderabad Rs. 13-12-0 and Rs. 18-4-0 respectively which amounted to more than 50% of the ceiling price. Again the Food Report of fasli 1353 itself admitted that "there was justification for the Corporation to claim a share in the interest of the cultivators (This share was not passed on to cultivators—writer) as the prices of pulses were not controlled and the traders in recepient administrations and Hyderabad were making large profits." Naturally the Food Advisory Council in July 1946 protested against the purchases of pulses by the Hyderabad Commercial Corporation as it led to a rise in price for the local consumer. Neither was any principle followed in the fixation of surcharges on pulses. For Bombay and Madras it was 12 annas per palla, and Mysore had to pay Rs. 1-12-0 and Rs. 2-12-0 for "tur" and "mung".

An examination of the price spread in Mysore under controls showed that the milling charge worked to Rs. 1-8-0 for 2 maunds of rice while it was not more than one rupee in South Kanara and Malabar and 14 annas in Cochin where the Government completely controlled the milling operations.

In Coorg an excessive margin was enjoyed by the Coorg Federation, the Merchant's Association, the five mill-owners approved by the Government, and the private licensed merchants. This State was a surplus area. Owners brought their paddy to the milling centres at their cost. This was a distinct gain to the merchants. But yet the latter got a margin of Rs. 2 per maund while the milling charge was not more than seven annas. As compared to the margin allowed in Madras, that in Coorg was practically double.

In Goa the price of imported rice was Rs. 18-8-0 per maund while in Malabar it was Rs. 12. This was because Goa did not have its own agency for purchases at importing centres, and paid a high price for Sind rice.

In the province of Madras the following margins are broadly allowed. To the price for imported rice at the exporting centre and railway freight the allowances added are:

(1) Incidental charges as handling, transporting, godown rent, risk insurance, short weight—4 annas per maund.

(2) Profit to the wholesale merchants—3 annas per maund.

(3) Sales tax at Rs. 1-9-0 per cent—3 annas.

(4) Free supply of the gunny.

The retail merchant pays for transport and gunny and sales tax and is allowed a profit of 4 annas per maund.

As regards procured rice within the district, the Collector has a certain amount of discretion in giving these allowances. This led in Malabar to the grant of an excessive allowance to the wholesale merchants. While the price of rice per bag of 2 maunds could not be more than Rs. 21, it amounted to Rs. 23-1-0. Certain districts have shown that it was possible to work on a wholesaler's margin of one rupee per maund. This happened in South Kanara Central Co-operative wholesale stores. The state of Cochin tightened the margin to the same figure as it directly managed distribution.

A recent example of an excessive margin of profit to wholesale merchants under the control scheme has happened in Madras. The price of paddy has been fixed as 1st sort and 2nd sort paddy. On the first sort paddy, the margin of profit between the producer and the consumer price works to 33%, while it is only 12% on the second sort paddy. The wholesale merchant gets in addition the husk which he can sell at a high price. All these variations indicate that the standard allowances provided under the rules are more strictly applied to retailers than wholesale marchants. In general it might be said about Madras that the wholesaler's margin was far higher than that for the retailer. Under normal trade it will be the reverse of this in as much as the retailer has to make profit out of a smaller turn-over.

Further when margins were fixed and controlled, the primary seller of produce (owner of land or rentier), and the wholesale and retail merchants began to adopt other devices for making a profit. Selling wet paddy which sometimes sprouted in the godowns of the importing merchants or mixing hay and mud were the sharp practices of the land-holders. Mixing deliberately a definite percentage of stones and mud in rice in the supplying rice mills was a common practice which no buyer dared to question as other buyers were waiting to buy such bags. Black market sales by wholesalers owning rice mills were another source of profit.

In co-operative wholesale stores adulteration was not possible. They made their profit—I was told at Cuddaph on 10th Dec. when I visited the co-operative wholesale store—in two ways. One goes by the name of 'standardisation.' This means that the imported rice was remeasured and the quantity in excess as compared to bags with smaller quantity was appropriated by the staff. Another loophole was inherent in the trade in rice. A certain percentage had naturally to be allowed as deficiency for shrinkage and wastage by rats and insects. A rigid control of this percentage in co-operative stores proves a hardship. Discretion to the management in this respect may lead to abuse. This of course is unavoidable.

The Marketing Adviser's report on the marketing of rice in India gives figures of the margins in distribution. This explains the margins when normal

trade channels were in operation. The share of the producer was 66.8%, freight 6.50%, miscellaneous charges 17.20%, wholesaler's margin 3.19% and retailer's margin 6.5%. It is the miscellaneous charges that comprise unconscionable exactions. There are handling charges for cleaning, loading, unloading, weighing, measuring, filling and stitching the bags. There are also deductions for loss in weight for impurities and dryage. When a trader buys in the village, he deducts 10% for shrinkage. There are also charities and miscellaneous payments to servants.

The miscellaneous charges are high because the primary producer or rentier does not take clean produce to an assembling centre. With the introduction of grading and public markets these charges will become less and less.

It is often considered that co-operative marketing will be less costly. But this will not be so. The private merchant may sell at a less price to the consumer as he can depend on adulteration to make up the loss. He can sell at different prices too. He maintains very few accounts. He uses family labour for the conduct of the shop. But institutional marketing cannot act these ways. It should keep accounts, sell pure articles at uniform price and employ an efficient staff. Naturally it can sell only at a higher price than in the market unless government steps in to convict private traders for sharp practices, standardises grades of articles and fixes prices.

Cocoanut Products

Having said this much about grain marketing, I shall deal with the marketing of some commercial crops.

The same feature of a larger allowance for the wholesale merchant to make up for the losses owing to poor quality and want of grading is noticeable here too. There are allowances for merchants in the purchase of cocoanuts as some of them are undersized or deaf. A general allowance of 30 to 50 nuts per 1,000 is also made. The price of nuts is governed by its quality and the prevailing price for oil. The price of green husk and proximity to markets also influence the wholesale price of nuts. Retail prices vary considerably according to supply and demand.

As regards copra, the merchants deduct the price for moisture, tender cups, foreign matter etc. They further take small percentage as deduction for short weight. The village traders take a greater percentage on this account. Until the copra quality is standardised and the commodity is sold through central markets, varying margins comprising unconscionable exactions are bound to exist.

The margins too have to be lowered in the case of cocoanut oil owing to competition of Colombo oil. Colombo oil is manufactured out of nuts of

better oil content. Unless the Indian producer improves the quality of his nuts by better manuring, the Indian oil is bound to be more costly.

Freight charges again influence exports. It is cheaper to export oil from Colombo to Bombay and other major parts than from Cochin.

Oil prices are affected too owing to forward sales. There is also brokerage to be paid which works to 4% in Cochin. Merchants make deductions of about 1 to 2% of the oil when paying the price in the state of Cochin. Owing to variations in the state control of cocoanut products in different provinces and the competition of foreign markets, the margins in this trade have been a gamble. The price of oil too decreases in consequence of its poor quality. While the miller in Ceylon supplies oil in iron drums, the miller in India supplies it in casks. The exporting merchant has to decant and refill it in drums for the purchase of which he has to invest in large sums. Without proper standardisation, copra and oil will only fetch a low margin and merchants are sure to exploit the market under such conditions.

Arecanut

The writer of this note had opportunities to study the arecanut market in the Cochin state. The arecanut trade is a big gamble. It will be unprofitable for the grower to get into it in view of violent fluctuations in the profits of the trade. The small cultivator takes loans on standing crops and makes over the arecanut to processors who take them to recognised markets. The processor can dictate any price according to the needs of the seller. Prices are fixed arbitrarily. Owing to the distrust among the dealers, stocks are held up at various stages. There are highly organised monopolies in this trade in the state of Cochin. Storage facilities are few. In the absence of a central market a correct idea of supply and demand cannot be formed.

Cashewnut

The state of Cochin contributes 16.2% of nut production in India. Various agencies operate in this trade, in this state. Middlemen take cashewnut plantations on contract and sell the produce to wholesalers in big assembling centres. Village traders also collect and deduct 3 to 5% of the weight as allowance. The wholesale merchants sell through brokers to factories. The latter have formed themselves into a corporation to sell to certain companies in the U.S.A. More markets have to be explored if monopoly buying is to be avoided. The cashewnut marketing report has referred to the excessive charges in Cochin for merchandising as compared with Palasa, Quilon, Calient, and Malwan. The merchandising charges include commission, brokerage, charity, and miscellaneous charges. There is also the practice of indiscriminate mixing of all quality of nuts and soaking them in water prior to sales with a view to increase the weight. Cashewnuts of Cochin are exported to Quilon and Mangalore for the processing of kernels and re-exported to Cochin for shipment.

Conclusion.

1. Excessive margins of profit in the marketing of food grains is due to the transfer of duties such as cleaning and grading from the producer to the trader.

2. As the merchants can combine and dictate to the producer, a general fall or rise in the price does not affect the consumer price so much as that of the producer.

3. Under the present system of controls the wholesaler's margin in food grains ought to be reduced and the retailer's increased.

4. Milling charges can equally be reduced.

5. The working of the Hyderabad Commercial Corporation shows the great need of publicity, economy, proper location of godowns with a view to reduce costs of transport, and the prevention of sharp practices.

6. Where margins are controlled, the quality deteriorates and abuses creep in, by way of deficiencies of stock.

7. The so-called miscellaneous charges of private merchants will cease only with standardisation, grading, and sale in public markets.

8. Co-operative marketing will be more costly to the consumer than private marketing.

9. The problems in the marketing of coconut are not merely those of standardising copra and oil but also relate to freight charges, poor yields of low quality, foreign competition, and speculative trading.

10. The arecanut trade is a huge gamble among traders, each trader mistrusting the other, and this consequently leading to deferred sales and financial locking up of funds. The poverty of the cultivator puts him at the mercy of the processor. Correct ideas of supply and demand cannot be formed so long as there are no central markets.

11. The cashewnut trade is an example of excessive charges of merchandising owing to want of proper organisation for collection of nuts. It is uneconomic to transport these nuts to long distances for processing and bring them back to the very centres of production for shipping purposes in Cochin.

PRICE SPREADS IN THE MARKETING OF BANANAS FROM RAVER TALUKA (East Khandesh; Bombay Presidency) TO DELHI DURING 1947-48

by

S. G. PATIL, M.A.,LL.B.
Indore Christian College.

The area under bananas has been steadily increasing in Raver Taluka. Out of its total cultivated area 1,21,710 acres, that under bananas from 1942 to 1948 has been as follows:-

Year	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48
Area in Acres	1534	1552	1725	2931	3538	4630

Despite heavy losses in transport, sale etc., the tendency towards extension of the area under bananas persists due to the following reasons:—

1. The sudden and remarkable increase in demand for bananas created by World War II still continues due to deficits in supplies of other food stuffs. The pre-war average rate was Rs. 30/-per hundred bunches. Now it is Rs. 100/-. Thus the price has risen by more than three times.

2. There is inverse relation between the quality of soil and its suitability to the growth of bananas. The more inferior the soil, the better it is to the growth of bananas. For example, at Dasnoor village, more than hundred orchards are thriving where, formerly, even grass would not grow properly.

3. Controlled economy makes cash transactions inevitable. This encourages banana cultivation, bulk of which is intended for the market.

4. It enjoys a free market. It is not subjected to any levy and such other restrictions on sale.

5. The financing of other Kharif crops can be most conveniently done through growth of bananas. Due to disappearance of money-lender and lack of corresponding expansion of co-operative credit, a cultivator cannot secure adequate credit. The growth of bananas provides him finances exactly at a time when his resources become depleted. Sale of bananas begins from June. The orchards ripen by instalments and the consequent periodic sales keep on supplying finances to a grower throughout the year.

(6) Its yields are regular. It is not liable to fluctuations to which many other crops are subjected.

(7) It is peculiarly immune from crop pests and diseases.

The supply of bananas for sale is spread mainly over eight months from June to January. Out of the total quantity produced, hardly 1% is consumed locally. The remaining 99% is chiefly sold at Delhi market which is at a distance of 600 miles. Before the partition of our country, three-fourths of the total produce used to be sold in the Punjab. Now Delhi is the largest market for bananas where more than half the produce from Raver Taluka is sold. About 30 waggons of bananas are sold daily at Delhi. The other half of the crop is sold in several markets in U. P., C. P., Bombay Presidency, Central India, Rajputana etc.

Inasmuch as half the produce is sold in Delhi and the other half is distributed throughout the country, it is natural that the producer has his eye on the Delhi market. There is the additional advantage of direct transportation without the inconvenience and delay of transhipment experienced in other markets. Besides, Delhi market is more attractive than even the Bombay market in spite of the fact that Bombay is at a distance of less than 300 miles from Raver Taluka and affords the same transportation facilities. This is so because the prices at Bombay are arrived at secretly and not by open bidding as is the case at Delhi. Even though the grower sends his produce to several agents at Bombay in order to get the highest price, the agents arrange among them-selves to pay at the lowest rate. Secondly, at Bombay, the agent is the virtual owner of the produce and therefore is interested in seeing that the producer gets the lowest price as that would increase the agent's income. Thirdly, the Fruit Merchants' Association at Bombay prohibits independent sale in the main market and outsiders are not accepted as members. Fourthly, Hundekaris have monopoly of unloading waggons and they do not hesitate to exploit the consigner to their own advantage e.g. they try to enlarge their margin by employing less number of coolies entailing delay and consequent loss to the grower. On the whole, from the point of view of the grower, Bombay is the worst of all the fruit markets in India. On the other hand, Delhi is considered to be the best because price in that market rises from Rs. 2,000/- to Rs. 5,000/- due to open bidding and waggons are sold even without unloading. Thereby, the share of the grower increases since he escapes from payment to several other middlemen of the Delhi market.

Due to distance of 600 miles between the producing centre viz. Raver Taluka and the best and the most important market viz. Delhi, railway transport naturally dominates over price spreads of bananas. One acre of land grows 2,000 plants; allowance for barren ones may be made upto 400/- Thus, there are 1600 bunches per acre to be transported. With regard to waggons, there is space for loading from 1300 to 2000 bunches according to the size of the waggon. The average load per waggon may be taken as 1,600 bunches. Thus the number of waggons required would be equivalent to the number of acres under bananas. Accordingly, 4630 waggons were ab-

solutely necessary for marketing bananas from 4630 acres. But during the season of 1947-48, only 2338 waggons were supplied and so the shortage of waggons amounted to 2392. In other words, the railways did not offer facilities to transport more than half the produce. Consequently, it became impossible to dispose of profitably about half the produce, considerable part of which simply perished locally. For example, at Kochur, out of 3 lakhs bunches, 1½ lakhs had to rot in orchards. Hundreds of growers, therefore, actually uprooted orchards of 5 or 6 months' growth. In case of such vast quantity of bananas, price does not emerge at all, not to speak of its spread.

Such extreme shortage of waggons and excessive demand for them have created a new class of middlemen who are locally called by three different names i.e. "Turnwala" or "Umbrellawala" or "Jahagirdar". Some of them are considered very dangerous who misappropriate the lion's share of the price without rendering any useful service except illegitimate sale of their turn and thereby exploit the growers excessively. Their number is about 30 out of total 86 "Turnwalas".

As they seriously affect the spread of prices, their emergence and importance may be briefly described as under:—

1. A "Full turn" means assignment of one waggon throughout the year and the assignee can have one waggon per week at a given station. Default to load one waggon cuts off two subsequent waggons.

2. A "Control turn" means assignment of limited number of waggons ranging from 5 to 15 for one year. Default to load one waggon cuts off all subsequent waggons. Announcement of the "Control turn" is made by the Marketing Department in September where as the peak of prices is reached in June. This delay causes loss to the grower. Waggons available under "Full" and "Control" turns are attached to parcel trains and so reach their destination earlier.

3. Waggons are also available under the category "Sections". But these are attached to goods trains. Hence inordinate delay is involved and the consignor is not entitled to claim damages.

4. Bananas can be exported in bags. But their number is controlled. For sending one lakh and twentyfive thousand bananas by waggon rate to Delhi, the railway freight is Rs. 570. But for the transport of the same quantity, the railway parcel freight according to maunds amounts to Rs. 2,400. Besides, this mode of transport is subject to two limitations.

(a) The number of bags to be despatched from a particular station is controlled e.g. a consigner cannot send more than 50 maunds at a time.

(b) Due to corruption, one individual books bananas under bogus names and thus takes undue advantage of this control system. However,

the quantity of bananas sent in bags throughout the season was equivalent to 288 waggons.

In the spread of prices, the existing mis-management of the turn system is the first mal-absorbent of prices and hence requires some elucidation. The great disparity between the number of waggons required and the number of waggons actually supplied creates desperate scramble for obtaining "Full turn" since it alone grants better advantages.

The distribution of "Full' and "Control" turns is done by the Marketing Department. The basic bottle-neck created by the railways is aggravated by mal-distribution of turns by the Marketing Department. To begin with, working is dilatory. The season of marketing starts in June. The Marketing Department holds meeting for redistribution of turns in August and new turns are announced in Spetember. The delay in marketing resulting from the delay in securing "Control turn" and new "Full turn" entails loss to the growers e.g. while prices in June are about Rs. 6,000/- per waggon, in September, when the "Control turn" enables the producer to market his goods, the price comes down to Rs. 4,000/- per waggon. The old "Turnwalas" naturally get the benefit of this delay and they are always interested in getting redistribution of the turn postponed e.g. this year the meeting was called in June but it is reported that the old turnwalas got it postponed to a later date.

The "Full Turnwalas" may be classified under three sections:—

1. Those who grow bananas on large scale and use turn for transport of their own produce to outside market. They make proper use of their turns.

2. Those who purchase bananas in the interior largely on credit and sell waggons at the station.

3. Those who neither purchase in the interior nor send goods outside but sell them at the station. Their number is about 30 out of total 86. They are called Jahagirdars or Umbrellawalas, because they shift the cost of primary marketing on the growers and the cost of secondary marketing on the merchant who sends bananas outside. Thus, they pocket about Rs. 1,600/- per waggon only by an illegitimate use of their turn. That is why they are called Jahagirdars created by the Railways. The only capital they usually have is their umbrella. They themselves boast that their umbrella earns them Rs. 1,600/- per turn. So, they are also known as Umbrellawalas. Some times, they sell the turn for Rs. 1,000/-. About 80% of the waggons are sold at Nimbhora and Sawada stations which together account for 77 turns out of total 86.

The administration of the turn system is vitiated by the following causes:—

1. *Communalism:* In the recent past, both the Registrar of the Co-operative Societies and the Marketing Officer were Muslims. It is reported that these officers showed partiality in assigning turns to muslims even though many of them were neither growers nor genuine purchasers from the interoir and they did not send goods outside. Many of them were not even residents in Raver Taluka. One was from C.P. Some of them scaled down the rates at the end of the season by threatening to go to Pakistan and failed to pay lakhs of rupees to the growers.

2. *Fraudulence:* Evidence of purchase is often concocted and the officers concerned indulgently accept it. Business continues to be conducted in the names of some turnwalas who, in fact, are no more alive.

3. *Lack of correspondence between need and service:* A village, e.g. Dasnoor, needs to transport 3½ crores of bananas whereas provision of turn is only for 36 lakhs of bananas even though several growers of that place made futile attempts to obtain more turns.

4. *The "Stand-Offish" attitude of the Marketing Officers:* They fail to act as guardians of the growers. Otherwise, swindling might have vanished long ago.

5. *Red Tape and Routine:* When the grower complains against the 'Umbrellawala', the onus of proof is thrown on the complainant in the presence of the Umbrellawala. So it is impossible for the former to prove swindling due to fear of consequent victimisation. Growers are advised to form Sangh for getting turns. But positive guidance is not given for organising the Sangh. The President of the Sangh is not prevented from usurping the turns of the Sangh for personal aggrandizement.

The vitiated administration of the turn system strengthens the Umbrellawala or Jahagirdar or the third type of Turnwala who reigns supreme over the growers of the Taluka. As an unscrupulous parasite, he goes on exploiting the growers.

The second mal-absorbent of price is railway corruption which swallows considerable portion of the price. The shortage of waggons starts the ball rolling. The growers try to secure what are called section waggons which involve longer delay to reach destination. They ought to reach Delhi after four days but they reach after nine days. If the turn waggon is sold for Rs. 4,000/- at Delhi the section waggon may be sold there only for Rs. 400/-. Since the alternative is either to sell at any price or to allow bananas to perish, the growers try to get section waggons inspite of the disadvantages. The extra payment usually demanded by railway officials for providing a section waggon is Rs. 100/- each. The technique of passing waggons is mysterious. A waggon declared fit and allotted in the morning becomes unfit during the course of the day while remaining in the yard. After

a short travel of 6 miles a loaded waggon becomes 'sick.' If the persons concerned are bribed, the 'defect' is quickly set right. Otherwise, it may lie 'sick' for 3 days. In order to prevent a glut at Delhi, merchants fraudulently get half-a-dozen waggons detached at Itarsi and some at Jhansi. In order to maintain their deadly grip on the local market, some Turnwalas in collusion with railway servants, get sections declared 'sick' or prevent the grant of sections to growers. It is estimated that during the last season, about 100 sections load waggons perished.

The black-market rate of one 227 C.A. ventilated waggon is Rs. 300/-. One fifth of the total waggons i.e. 447 were secured as 227 C.A. Thus illegal gratification amounting to Rs. 1,334,000/- had to be paid for obtaining 227 C.A. waggons. Due to its ventilation, this waggon is sold as standing on Delhi station at Rs. 5,000/- to Rs. 6,000/-. Goods escape payment of terminal taxes and such other charges attendant upon sale at Delhi. The time element is extremely important.

A waggon reaching at 9 a.m. at Delhi may be sold for Rs. 4,200/- and another arriving at 10 a.m. at the same station may be sold for Rs. 3,200/- Lapse of one hour causes a difference of Rs. 1,000/-. To avoid delays, greasing of hands of various railway employees is inevitable; otherwise the bananas are bound to perish during the course of transit. The procedure for establishing claims for damages is maddening. Growers have spent thousands of rupees on establishment of such claims but none has succeeded so far. So, the only means of avoiding damages is to resort to such greasing. Variations in the size of waggon inflict serious loss. The waggon must be loaded within six hours after its arrival, unless illegal gratification is given to the Railway employees concerned. The bananas are, therefore, brought to the railway station in advance. If the size of the wagon is smaller, the quantity in excess rottens or perishes. If it is larger, the waggon is taken to be as one half or three-fourths by the buyers at Delhi and the corresponding loss while selling at the station has to be unnecesarily sustained. Empty space within the waggon leads to tossing of bananas and causes further loss.

The third mal-absorbent of a considerable share of the price is road transport. The verdict of the Royal Commission on Indian Agriculture that the true income of the cultivator is largely dependent on the efficiency of communications is literally applicable to transport of bananas from an orchard to the railway station. The peak of marketing season coincides with heavy rains. The black cotton soil of the Taluka becomes sticky morass, impassable to wheeled vehicles for at least two months. So, during this period, bunches are carried 2 miles on heads at the rate of one rupee per bunch. About $\frac{1}{4}$th of the total quantity of bananas has to be transported in this way.

For the rest of the period during this season, the bullock cart hire ranges from Rs. 8/- to Rs. 15/-. One waggon requires a load of 50 to 60 carts. So, one waggon requires minimum cartage of Rs. 400/-. If there are ups and downs like those between Nimbol and Raver, cartage amounts to Rs. 800/- for a distance of 6 miles, whereas for 600 miles between Raver and Delhi, the railway freight amounts to Rs. 570/-. The transport cost exceeds the intrinsic value of bananas due to road conditions. At Tandalwadi, bananas were purchased at Rs. 60/- per 100 bunches, but due to the head-load system, the transport cost amounted to Rs. 100/- for one hundred bunches. Even the crossing of a small brook raises the costs of transport considerably e.g. at Waghoda, the rate for taking bananas across a small brook less than one furlong wide was As. 4/- per bunch.

There are remarkable variations in prices in accordance with the distance from the railway station and conditions of fair weather, roads etc. Thus if the price at Dasnoor which is less than two miles from Nimbhora railway station is Rs. 250/- per 100 bunches, at Waghoda, 4 miles away from the railway station, the price is Rs. 200/-. On the same day at Kochur 6 miles away, it is Rs. 150/- and, at Kumbarkheda, 7 miles away, it is not even Rs. 100/-.

The fourth mal-absorbent of price is incidental expenses incurred by the series of sellers on tea and tobacco. Such expenses range from Rs. 25/- to Rs. 35/- per waggon.

The fifth absorbent is locally called Pattiwala. He is the merchant who purchases bananas from the interior and transports them to the railway station. He usually purchases on credit. The understanding is that the purchaser would cut off bunches as they approach ripening and pay for that instalment of bananas at the rate then prevailing in the market. Such instalment is locally called Chalan. Every contract of sale is oral and no advance whatsoever is paid. At the time of cutting, an instalment of only a part of its price is paid. The balance is deliberately allowed to accumulate. At the end of the season, payment for the entire orchard is made at scaled down rate or payment is not made at all.

A 'Pattiwala' is a person who loads one quarter of waggon and sells it to turnwala at the rate of Rs. 500/- or Rs. 600/- per patti. Patti may also be sold by the grower. (Turnwala sells waggon at the station for Rs. 4,000/-) The Pattiwala deducts the cost of transport from orchard to railway station and charges at least, Rs. 50/- per Patti as his commission and, if honest, hands over the balance to the grower. At some villages, 5 more bunches are taken per hundred bunches. This additional levy is called "Pasturi".

The sixth absorbent is the enterprising merchant who purchases waggons at the railway station and undertakes to bear probable loss or damage due to railway delays. He has an extraordinary knowledge of distant mar-

kets including those in Pakistan. He has also enough cash reserve to make payment on spot for a waggon and incurs all subsequent expenses. He is contended if he can have Rs. 600/- to Rs. 700/- as a margin of profit per waggon.

The seventh absorbent is railway freight which amounts to Rs. 570/- per waggon from Raver Taluka to Delhi.

Other absorbents per waggon are Rs. 25/- as wages of labourers who cut bunches in the orchard, Rs. 20/- as charges of the coolies who load waggons at the local station, Rs. 50/- as charges paid to the coolies who unload waggons at Delhi, Rs. 200/- as carting charges from Delhi station to the fruit market, Rs. 250/- commission charged by the Delhi agent, Rs. 75/- as terminal tax, Rs. 10/- as postal expenses, Rs. 25/- as expenses of a person who follows the waggon upto Delhi.

At Delhi, bananas are sold at one rupee or As. 12/- per dozen but after making allowances for inferior quality or rotton bananas which are sold at As. 6/- per dozen, the average rate for entire waggon may be taken at As. 9/- per dozen. At that rate, the value of one waggon is about Rs. 7,437/- since an average waggon contains 1,600 bunches and one bunch contains 100 bananas.

The following statement gives the costs incurred at the several stages of marketing of bananas grown in Raver Taluka and transported to Delhi during 1947-48:—

S. No.	Description of Item.	Payments made.	Percentage.
1.	Price paid to the grower.	Rs. 1,600/-	21.51%
2.	Plucking charges.	,, 25/-	.33%
3.	Cartage from orchard to local Rly. station.	,, 400/-	5.37%
4.	Incidental expenses on tea and tobacco.	,, 25/-	.33%
5.	Unauthorised railway charges.	,, 150/-	1.98%
6.	Coolie charges for loading at local station.	,, 20/-	.26%
7.	Pattiwala	,, 200/-	2.68%
8.	Turnwala.	,, 1,600/-	21.51%
9.	Merchant who sends waggon to Delhi.	,, 600/-	8.04%

S. No.	Description of Item.	Payments made.	Percentage.
10.	Railway freight	Rs. 570/-	7.66%
11.	Coolie charges at Delhi.	,, 50/-	.67%
12.	Cartage from Delhi station to Delhi fruit market.	,, 200/-	2.68%
13.	Commission to the agent at Delhi.	,, 250/-	3.3%
14.	Terminal tax.	,, 75/-	.99%
15.	Postage.	,, 10/-	.33%
16.	Personal expenses of attendant on waggon.	,, 25/-	.33%
17.	Retailer's margin.	,, 1,637/-	22.01%