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short time became familiar with this new way of management and on account of their own resourcefulness and practical understanding they contributed substantially to further development of cooperative operational methods. It, therefore, proved to be also right that one did not proceed according to an inflexible scheme, but that it was left to the own judgment of the individual members of a farming cooperative to find the best suitable way of farm management in accordance with the respective local conditions.

Although the period during which the farming cooperatives could be tested in practice was limited to two years, this period was sufficient to prove that this new way of management could yield excellent results provided there are certain prerequisites given. During these two years this new form of management also turned out to be absolutely suited for raising small-scale farms to a higher level. The prerequisites as mentioned above were the following: territorial conditions which are suited for establishment of a common crop rotation; prevalence of crop raising as the leading branch of agriculture; a region the structure of which is determined by small-scale farming, *i.e.*, the arable land of the individual farmsteads not exceeding 10 hectares; availability of large farming machinery and—last but not the least—an efficient and energetic manager of the cooperative.

PRICE CONTROL AND PRICE SPREAD IN THE MARKETING OF RICE IN WEST BENGAL

by

J. P. BHATTACHARJEE, Visva-Bharati.

I.

Living in an era of acute shortage of goods, we have become accustomed to fixing our eyes only on production. The need for increased production is so often and so vehemently being dinned into public ears that it has almost been sloganised. Rationing and price control have now, thanks to shortage and scarcity and an unfortunate interlude of unpardonably faulty decision by the Government, been taken for granted at least as the lesser of two evils. Naturally, therefore, the emphasis has been shifted from distribution to production. In fact it would not be wrong to say that in these days we seldom think about distribution, specially its costs, even though this is one of the most vital points in economic policy.

Distribution of goods among the consumers is a task mostly performed by the agencies and forces operating in the system of marketing. There are all the links of intermediaries in between the producers and the consumers, who serve to equate consumption with production and *vice versa*. The function of these intermediaries are firstly to bridge the physical distance between the producer and the consumer,

secondly to distribute the product uniformly over the period of consumption, *i.e.* to bridge the time gap between production and consumption, and thirdly, to assume the risks of danger or loss in these two processes. With the increasing diversification of production, the task of distribution is also becoming gradually specialised. Quality is becoming as important as quantity in the function of marketing. Besides, the responsibility for the creation of new demands has also become a part and parcel of this task. However, the efficiency and specialisation which distribution can attain depends to a great extent on the nature of the product and the state of economic development of the country concerned.

The last Great War has, temporarily at least, shunted the functions of distribution from the path of qualitative specialisation to that of quantitative efficiency in almost all countries of the world. The world-wide scarcity and shortage of goods caused by the War and the resulting economic dislocation has forced the consumer from the status of the director of the distributive system to that of its poor servant. The consumer is no longer the pivot of the system; he finds himself now on the circumference of the ring. Price control and rationing have taken away much of his freedom and he has now got to be satisfied with whatever quantity and quality he is offered. The function of the distributive system have therefore undergone a change.

Is this a change for the better or for the worse? So long as there is scarcity, the question does not obviously arise at least for the reason that there is no other sure and well-known alternative to the system of price and quantity control. But this should not be taken as an excuse for avoiding an assessment of this system. It must be remembered that the system of distribution in the modern world has got to be viewed and assessed from the cost aspect. The problem, can therefore, be stated in the form of two questions. First, what are the costs of distribution of commodities and services at present? Secondly, how do they compare with those before the war? The answers to these questions will enable us to estimate the efficiency of the type of rationing and price control prevailing in India as a method of distribution.

It is against this general background that we must look at the system and methods of marketing of agricultural produce in India. Paucity of data is a serious difficulty which has to be faced in such a study. In fact the problems of marketing and distribution have begun to be studied in India only recently. A significant contribution to the analysis and study of these problems has been made by the Agricultural Marketing Adviser to the Government of India and his department. The reports on the Marketing of different Agricultural produce in India prepared by this department and published in the series on Agricultural Marketing in India are the only sources of data in this field. Besides, it is difficult for persons outside the Government to have command over the tremendous human and financial resources which are necessary for conducting comprehensive marketing surveys. One has, therefore, perforce to rely on these Marketing Reports of the Government for the

basic and representative data and can only study the systems and conditions in a few markets. This is also the aim of this short paper.

II.

The last war gave a rude shock to the agricultural economy of Bengal, which is based on rice and jute. The fear of Japanese invasion, denial policy of the Government, stoppage of imports from Burma, the Great Midnapore Cyclone, are some of the very well-known factors which culminated in the catastrophic Bengal Famine of 1943. The normal channels of trade and distribution were paralysed and the middlemen squeezed out huge profits. The Famine Enquiry Commission estimated that there were about one and a half million deaths in Bengal as a result of the famine and that "the amount of unusual profits made on the buying and selling of rice during 1943 was Rs. 150 crores. Thus every death in the famine was balanced by roughly a thousand rupees of excess profit". * The distributive system thus failed (completely). The interests of the growers as well as the consumers ceased to play their natural role in distribution. The ground was prepared for price control and rationing. The system and methods of distribution were thus changed. The issue that has to be faced now after all these years is whether the interests of the producers as well as the consumers are being better served under the new arrangements.

The question of the growers' or the producers' share in the price paid by the consumers is one of what is technically called "Price Spread". A valuable study of this subject has been made by Mr. M. C. Munshi¹ who has compiled the relevant data from the different Marketing Reports of the Government of India and ably analysed them. It is no use now discussing those figures which relate to pre-war years. Nor is there any meaning in going into the difficulties and technicalities of measuring price spread. An attempt is, therefore, being made here to make some estimates of the price spread in the marketing of rice in West Bengal with reference to one particular market, viz., Bolpur and, on the basis of the figures obtained for this one commodity and one typical market, to study the dynamics of price spread from the theoretical as well as the practical points of view.

Bolpur is one of the most important rice centres in the province of West Bengal. Situated as it is in the heart of the rice growing areas of the district of Birbhum which is one of the very few surplus districts with regard to paddy in West Bengal, Bolpur plays a very important part in the distribution of rice from Birbhum to other parts of the country and in feeding the population of Calcutta and the surrounding industrial area. There are 21 rice mills in this locality and the importance of the rice trade of Bolpur can be appreciated from the fact that it is one of the eight representative markets selected by the Agricultural Marketing Adviser to the Government of India for the study of price spreads in rice in India and mentioned in the Report on the Marketing of Rice in India and Burma (1941). Further, of the total volume

* Report on Bengal of the Famine Enquiry Commission—1945, Vol. I, P. 83.

1. From the Farmer to the Consumer—a Study of Price Spreads, by M.C. Munshi, 1945.

of rice exports from the district of Birbhum, varying between 25 and 35 lakhs maunds per year, the share of Bolpur is about one-third. The importance of Bolpur as a rice market will be apparent from the following table which gives the volume of annual exports of rice from the Bolpur Railway Station for the years 1938 to 1940, 1944 and 1945; the road-borne exports are excluded from it.

TABLE 1.

Direction and volume of Rice exports from Bolpur by Rail.

Destination.	EXPORTS OF RICE IN									
	1938		1939		1940		1944		1945	
	Mds.	%	Mds.	%	Mds.	%	Mds.	%	Mds.	%
Calcutta	200214	18.4	131225	13.7	281956	33.6	{ 624106	72.5	563652	65.8
Calcutta Industrial Area	108043	9.9	161419	16.8			{ 188293	21.9	203557	25.3
Local (Birbhum)										
Rest of Bengal ..	125833	11.6	181141	12.4	138289	16.7	{ 4972	0.6	15227	1.9
							{ 43551	5.0	57703	7.0
Bihar	319774	29.4	329910	34.5	334770	40.1	..	..	..	..
C. P.	25196	2.3	24892	2.5	12961	1.5	..	..	..	..
U. P.	226162	20.9	142807	14.9	57292	6.9	..	..	..	..
Ind. States	52554	4.8	21877	2.3	6574	0.8	..	..	..	..
Other Prov.	29072	2.7	27479	2.9	3127	0.4	..	..	..	..
Total	1086849	100	957750	100	334969	100	860920	100	813139	100

(Figures for 1943 are not available).

It appears from the above table that the nature of the trade in rice at Bolpur has undergone important changes since the introduction of controls. It may be mentioned here that rice has been rationed in Calcutta from 31st January, 1944. Free trade in price in some of the urban areas of the province was banned even earlier. This has fundamentally changed the direction of trade in this commodity. Further, inter-provincial and inter-district movements of rice on private account have been

stopped and movements of foodgrains have been controlled by the Government on the basis of the estimated requirements of different geographical regions or zones into which India has been divided. All these developments are reflected in the figures given below. The table shows that whereas Bolpur used to send between 50 and 60 per cent of its total annual exports of rice outside Bengal up to the year 1940, it has ceased to export rice outside the province since the year 1944. Exports of Rice from Bolpur to places within Bengal excluding Greater Calcutta increased from 11.6 to 16.7 per cent between 1938 and 1940, but have gone down to 5.6 and 8.9 percent in 1944 and 1945 respectively. In other words, these exports have almost been halved. Calcutta and the surrounding Industrial Area, together comprising what is now called Greater Calcutta have increasingly absorbed the rice surplus of Bolpur, the exports in 1944 and 1945 amounting to 94.4 and 91.1 per cent of the totals against a mere 28.3 per cent in 1938. Whereas the total volume of exports of rice from Bolpur by rail amounted on an average to 9.60 lakh maunds per year between 1938 and 1940, the figure stood at 8.37 lakh maunds as the average for the years 1944 and 1945, even though the yield of paddy in the latter years was more or less near the normal. In other words, annual rice exports from Bolpur have been reduced by about 1.23 lakh maunds since the introduction of controls and procurement by the Government. The failure of the Government to procure the whole of the exportable surplus is thus apparent. In short, the Bolpur market is now playing the role of a feeder to Greater Calcutta. Consequently, the exportable surplus of rice produced in this region is being wholly moved on Government account to Calcutta where the consumer has to purchase it through Government owned or controlled shops. This altered spread between the producer and the consumer with regard to space is the main factor now influencing the price spread. In other words, the consumers' rupee now comes mainly from Calcutta and for the portion of rice locally sold, also from Bolpur.

III.

Nor has this been an isolated development. Ever since 1944, almost all the "surplus" districts of Bengal with regard to paddy have been exporting their surplus first to Calcutta, secondly to other urban areas within the province and finally to the deficit rural areas. Thus Bolpur may be taken as a typical and representative rice market for the study of price spread in rice produced in Bengal. Looked at from this side the figures that are being given below have a very wide applicability and significance.

Let us then try to estimate the price spread in the marketing of rice at Bolpur. The table below seeks to estimate the margin between the consumer's rupee and the producer's share in it during the last few years. It may be mentioned here that it has not been possible to estimate the spread at each step in the process of marketing and that figures are given for the total spread only. The spread has been calculated for local trade as well as for rail-borne trade and with reference to the most common variety of rice produced in this region, viz., *Sindurmukhi*.

TABLE 2

Price Spread in the Marketing of Rice at Bolpur.

Year.	Net price received by the Farmer for Paddy†	Retail price of Rice and by-products.			Producers' share of the—	
		at Bolpur. *	in Calcutta.†		local price.	Calcutta. price. ¹
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	%	%	
1938—39	3 4 3	4 3 6	4 8 6	77.4	72.1	
1939—40	2 14 0	4 6 3	4 10 9	65.5	61.5	
1940—41	3 2 0	4 15 3	5 8 9	63.0	56.3	
1941—42	4 2 6	6 3 2	6 12 3	65.7	71.4	
1942—43	18 5 0	23 0 0	18 13 4	79.6	97.2	
1943—44	12 2 0	21 8 0	30 8 0	56.4	39.8	
1944—45	9 2 6	16 0 0	17 4 0	58.8	(a) 68.4	
		(a) 12 4 0		(a) 74.7	(a) 53.9	
1945—46	9 0 0	13 5 0	16 12 0	67.6	(a) 53.7	
		(a) 12 0 0		(a) 75.0		
1946—47	9 0 0	13 7 3	16 6 2	66.9	(a) 54.9	
		(a) 12 0 0		(a) 75.0		
1947—48	9 11 3	15 4 0	17 12 0	63.6	(a) 54.6	
		(a) 13 8 0		(a) 71.9		
1948—49	10 6 6	15 12 0	18 4 0	66.0	(a) 57.4	
		(a) 13 8 0		(a) 77.1		

It may be mentioned here that the spread has been calculated with reference to one particular method of marketing, viz. the producers selling paddy to *Arhatiyas* or middlemen who sell it to the rice-mills and the mills in their turn selling rice through the handling agents to the wholesalers whence to the consumers through retailers. This was the usual practice before the war and through this channel approximately 70 per cent of the marketable surplus was traded. Since the introduction of controls, the process has undergone no changes except that in certain cases the mills procure directly from the producers. From the end of 1947, however, the Government procurement machinery has also participated in the procurement of paddy, but the volume of such procurement is small. Further, the production of hand-pounded rice has seriously suffered since the introduction of controls, so that a very high percentage of the rice marketed is mill-made. Besides, the difference in the price of hand-pounded and milled rice has now vanished and mill-made rice is now almost hundred per cent boiled rice.

With these facts in mind, an attempt may be made to explain and analyse the figures given in the above table. It is apparent from the table that the spread between the farmers' price and the consumers' price has been calculated in the

(For the purpose of this table, the conversion ratio has been taken as 1md. Rice : 123 lbs. of Paddy).

*Including the price of the by-products *i.e.* bran, husks and brokens.

† Gross price received by the farmer for 123 lbs. (1½ mds.) of paddy minus his carting and transport costs.

1. The Calcutta price has been taken from the figures given in the Indian Trade Journal (a) Controlled price.

case of local trade and consumption in as well as trade with Calcutta, which is about 100 miles to the south of Bolpur. As we are concerned here with the dynamics of price spread in the case of one commodity, viz., rice, there are only three variables directly involved. These are (a) the distance between the producer and the consumer and the number of intermediate links in the marketing chain, (b) fluctuations in the price of the commodity brought about by variations in the general level of prices as well as by crop conditions and yield, (c) the degree to which the Government has allowed the economic forces to play their part and the nature of Governmental interference in the marketing system. These three variable functions will have to be studied in the light of factors like organisation of markets, the general condition of the producer, facilities for transport and storage—in other words, factors which are analysed and emphasised in the usual studies on marketing from the static point of view, so common in our country.

Distance between the producer and the consumer.

It has already been pointed out that price control has resulted in the "regionalisation" of the trade in rice. This has to a great extent removed the difficulties in the measurement of price spread which should normally be expected to operate in favour of the producers. The direction of trade has been regulated so as to be always towards the major deficit areas in the neighbourhood. Consequently, the costs of transport (railway freight, etc.) are expected to become lower, resulting thereby in a larger share for the farmer as compared to prewar years. For it is a recognised principle of marketing that the shorter the distance over which the produce has to be hauled in order to reach the destination the larger the share of the producer in the consumers' rupee. The truth of this principle is also illustrated in the above table. The producers' share of the ultimate value has all through these years been higher in the case of local trade at Bolpur than in that of Calcutta trade. This difference varied from 4.0 to 6.7 per cent between 1938-39 and 1941-42, reached its maximum, 16.6, in 1943-44, falling to 4.9 per cent in 1944-45 and from 1945-46 gradually coming down from 13.9 to 12.0, 9.0 and 8.6 per cent in the succeeding years. If, however, estimates are made on the basis of the controlled price of rice at Bolpur, the difference would show much bigger figures, which will in that case be 14.6, 20.8, 21.3, 20.1, 17.3 and 19.7 per cent, respectively for each of the years 1943-44 to 1948-49. Without going into the justifiability or otherwise of taking controlled prices here, it may be said that the difference in the growers' share as between local and Calcutta trade has increased from an average of 5.1 per cent between 1938-39 and 1941-42 to 10.9 per cent. on the basis of the actual ruling prices between 1945-46 and 1948-49 and 19.6 per cent. on the basis of the controlled prices at Bolpur during the same period. The cost of distribution per unit of distance has, therefore, increased more than proportionately to the increase in prices, thus affecting the growers unfavourably.

The second point of interest and importance in this connection is a comparison between the figures of price spread over a long distance marketing in 1939 and the

above figures for intermediate and short hauls. The Report on the Marketing of Rice in India and Burma gives certain figures to illustrate the price spread in the case of long distance marketing of rice. Fortunately, Bolpur is one of the eight representative rice markets of India, which were taken up for study in this Report. The following figures refer to the marketing of *Dudhkalma* rice (boiled) from Bolpur to Delhi:

TABLE 3

*Price Spread in the Marketing of Rice from Bolpur to Delhi (1939) **

Items..	Share of the Ultimate Retail Value %	Items	Share of the Ultimate Retail Value %
Cultivator's Price	57.8	Expenses at Destination ..	3.1
Expenses upto Milling	9.5	Wholesaler's Margin	2.5
Profit Margin on Hulling	7.7	Retailer's Margin	3.7
Expenses F.O.R. including bagging cartage, market charges	13.2		

It appears from the above table that whereas the cultivator used to get 57.8 per cent of the consumer's rupee paid in Delhi in 1939, he is getting more or less the same (57.4 per cent.) in 1948-49 from the Calcutta consumers and was in fact getting much less in each of the years 1943-44 to 1947-48. The saving in transport costs is, therefore, being absorbed by the intermediaries who are gaining doubly from the reduction in railway freight to the extent of about one eighth and secondly from the fact that railway transport charges have not increased in proportion to the rise in the price of rice.

It may, therefore, be concluded that distance between the producer and the consumer is at best an uncertain factor affecting the dynamics of the growers' share in the price. Any saving or surplus on this head is likely to be absorbed by the middlemen, the wholesalers and the handling agents—who are usually responsible for such transport. Obviously the producers and the consumers both of whom are in a weak bargaining position are to the same extent deprived of likely benefits. Regionalisation of trade and the consequent shortening of the space spread between the producer and the consumer are not, therefore, likely to narrow down the price spread.

Fluctuations in Price Spread.

In the case of one particular commodity, the most important factor affecting the course of its price spread over a number of years is perhaps the movement of its price level. In the case of agricultural produce, the prices are affected as much by the volume of production (yield of crops) as by the general price level. Both these factors will be found to have played a dominant role during the period taken up for

*Vide Report on the Marketing of Rice in India and Burma, 1941, Pp. 401-2.

our study *viz.*, the years 1938-39 to 1948-49. Crop Failures and acute scarcity resulting in a terrible famine and unimaginable tragedies ruled over Bengal in the years 1942-43 and 1943-44. In 1942-43, crop conditions were particularly bad in the Bolpur region, where there was an acute and severe failure, prices reached undreamt of heights and famine conditions prevailed in this region from the early part of this year when conditions in Calcutta and other parts of the Province were *not* abnormal and price of rice was also *lower*. This explains the anomaly in the figures of price spread in 1942-43 when the cultivator's share of the ultimate value was 97.2 per cent in the case of trade with Calcutta, *i.e.*, 17.6 per cent greater than the figure for local trade. In short, the period from 1938-39 to 1943-49 is an abnormal one not only from the point of view of violent fluctuations in prices but also from the way in which normal channels of trade have been controlled and interfered with. Naturally, therefore, the fluctuations and movements have not in every year followed the normal course. But the general trend stands out sufficiently prominently for us to draw certain conclusions.

The cultivator's share of the consumer's rupee has suffered a gradual diminution during the period, 1938-39 to 1948-49. This is the most important feature of the course of price spread in the marketing of rice in West Bengal and applies as much to the local trade as to the trade with Calcutta. In the case of Calcutta trade the cultivators' share amounted to 72.1 per cent in 1938-39, went down to 39.8 per cent, the lowest figure, in 1943-44 and then staged a recovery from 53.9 per cent in 1944-45 to 57.4 per cent, in 1948-49 on the basis of the controlled prices. The figure of 97.2 per cent for 1942-43, it may be mentioned, is something apparently exceptional. In the case of local trade also the same tendency is noticeable if the actual market prices are taken, the controlled prices being rarely effective. The figures in this case are 77.4 per cent for 1938-39 and 66.0 per cent for 1948-49, against 65.7, 79.6, 56.4, 58.8, 67.6, 66.9 and 63.6 per cent for the years 1941-42 to 1947-48, respectively. On the basis of the controlled prices, however, the figures look much better, being 68.4, 74.7, 75.0, 75.0, 71.9 and 77.1 per cent respectively for the years 1943-44 to 1948-49. While, therefore, the controlled prices of rice fixed for the Bolpur region have served to maintain the price spread more or less near its pre-war (1938-39) level, the same cannot be said in respect of the controlled prices fixed in Calcutta. It may thus be concluded that the spread between the producer and the consumer has tended generally to increase during the years 1938-39 to 1948-49. This is particularly so with regard to the quantum of trade with Calcutta, the difference between the figures for the two years being in this case 14.7 per cent as compared to 11.4 per cent in the case of local trade. This is something unusual and goes to show that the cultivator has been impoverished, as compared with pre-war years, in relation to the increase in retail or consumers' prices.

It would be interesting in this connection to compare the course of price spread in the marketing of agricultural produce in India with that in the U.S.A. during this period. Table 4 gives the relevant figures.

TABLE 4
*Course of Farm Price Spread in the U.S.A **
Share in the Retail Price (in percentage) of

Commodity groups	The Farmer.		The Market§		Govt. Taxes (—) or payments (+) on marketing	
	1935-39 Av.	1944	1935-39 Av.	1944	1935-39 Av.	1944
Meat Products	52.6	74.1	47.4	25.9	-1.2	+6.3
Dairy Products	49.8	58.7	50.2	41.3	—	+3.0
Poultry and Eggs	66.3	69.1	33.7	30.9	—	—
Bakery and other Cereal Products.	20.7	30.1	79.3	69.9	-1.2	-0.1+3.0
Fruits and Vegetables	30.8	45.0	69.2	55.0	—	+0.9
Misc. Food Products	18.4	27.5	81.6	72.5	-0.9	-1.0+1.4
Average (all commodities) ..	40.3	53.0	59.7	47.0	-0.6	+2.7

§ Exclusive of Government marketing taxes or payments.

Thus the farmer's share of the consumer's dollar has increased in the case of bakery and other cereal products by 9.4 per cent and in the case of all agricultural produce by 12.7 per cent in 1944 over the average figures for 1935-39. In India, however, the tendency has been in the opposite direction, thanks to price control and rationing of the type adopted by the Government.

It appears, therefore, that the general fall in the producers' price of rice in India during the last 11 years is not part of a world wide trend. This decrease in the farmers' share cannot be called a general tendency of distribution costs such as was noticeable in the U.S.A. upto the year 1939 and explained by the Bureau of Agricultural Economics, U.S.A., as "the result of modern progress towards increasing specialization." * *The reasons for this state of affairs are, therefore, to be sought elsewhere such as the effect of price fluctuations, etc.

The theory of price spread is rather well-known and has been best stated in a publication of the League of Nations† in the following words, "The consumer's price does not tend to fall in the same proportion as the producer's price and conversely does not rise relatively as high as producer's price when better prices return." It is easy on the basis of this theory to explain the increase in the farmer's share of the consumer's dollar noticeable in the U.S.A. between 1938 and 1944. In India, however, the theory seems to fail to explain the reality. Is the theory then funda-

*Based on the Table, "Farm to Retail Price Spread and Marketing Charges" given in the Agricultural Statistics, 1945, (U.S.. Dept. of Agriculture).

* *The Agricultural Situation ; Bureau of Agricultural Economics, U.S. Dept. of Agriculture, April, 1941, Vol. 25, No. 4.

†Agricultural Crisis, Vol. II.—League of Nations.

mentally sound? Or has it to be modified to suit Indian conditions? For the purpose of drawing any conclusion it would be better to look at the figures more closely. For the sake of convenience the figures of farmer's share in the retail price as well as of the retail prices of rice and paddy are given together below.

TABLE 5
Price Trend and Price Spread in the Marketing of Rice in West Bengal

Year	Farmer's share in the Retail Price of Rice in—		Index (1938-39=100) of—		
	Bolpur %	Calcutta %	Farm Price of Paddy	Retail Price of Rice in—	
				Bolpur	Calcutta.
1938-39	77.4	72.1	100.0	100.0	100.0
1939-40	65.5	61.5	89.1	103.9	102.9
1940-41	63.0	56.3	96.9	118.0	123.2
1941-42	65.7	61.4	131.0	145.2	144.9
1942-43	79.6	97.2 (c)	552.0	550.0	413.5
1943-44	56.4	39.8	365.5	500.0	672.5
		68.4 (a)		281.3 (b)	376.8 (b)
1944-45	58.8 (74.7 a)	53.9 (a)	277.7 (b)	375.0, 281.3 (c)	376.8 (b)
1945-46	67.6	53.7 (a)	272.5 (b)	314.1	371.0 (b)
	75.0 (a)			281.3 (c)	
1946-47	66.9	54.9 (a)	272.5 (b)	317.6	382.6 (b)
	75.0 (a)			281.3 (b)	
1947-48	63.6	54.6 (a)	292.1 (b)	362.5	394.2 (b)
	71.9 (a)			318.3 (b)	
1948-49	66.0	57.4 (a)	314.4 (c)	375.0	405.8 (b)
	77.1 (a)			318.8 (b)	

(a) Estimated on the basis of "Controlled prices."

(b) "Controlled prices." (c) Figure obviously inflated and unreal.

It appears from the above table that (a) the period from 1938-39 to 1941-42 is one of gradually rising prices of rice, even though there was a short recession in 1939-40 and 1940-41, (b) 1942-43 and 1943-44 are years of violent rise in the price both of paddy and of rice and (c) the period from 1944-45 to 1948-49 may be characterised as the era of control, marked by a 'suppressed', and hence slow rise of prices. In the first period, there appears to be a time lag between the retail and the farm prices. This is evident from the fact that farm prices in 1939-40 and 1940-41 were below the 1938-39 level, although the retail prices in these two years recorded steady increases. Besides, the rates of fluctuations in the two sets of prices are uncorrelated. It also appears that under more or less normal conditions farm prices do not rise as much as retail prices. Hence the price spread does not narrow down and this fact is reflected in the decreasing shares of the farmer in retail prices during this period. During 1942-44 the impact of the Far East War and its consequences on the rice economy of India were severely felt. Further the year 1942-43 was characterised by an acute failure of crop and this fact, more than anything else, was responsible for the very high level of farm and retail prices (552.0 and 550.0) that ruled at Bolpur

during this year. Consequently the farmer's share of the retail value reached peak figures in 1942-43. Next year, however, the farm prices again went down because crop conditions turned out to be favourable. And this happened even inspite of the fact that famine conditions were prevailing throughout the Province and the retail price of rice even in Bolpur stood at a very high level after recording a slight decrease from the previous year's figure. Consequently, the farmer's share of the retail price went down to the lowest figures of the series during this year. The common assumption that the hectic rise in the price of rice in Bengal during 1943 considerably enriched the farmers thus proves to be false at least in the case of surplus districts like Birbhum. On the contrary, we may conclude that crop conditions and yield, more than anything else, determine the farm price and the price spread. This is bound to be so in a country like India where the farmers' knowledge of the market is inadequate and estimates of future prices are based on and strictly limited by the conditions and yield of crops which they can see with their eyes. Added to this, are the lack of staying power on the part of the cultivators and the consequences of the system of subsistence farming on small holdings, both these being of course interdependent in some measure. The third period is one of 'controlled' prices both of paddy as well as of rice. It may be called a period of controlled rise of prices. The 'controlled' prices seem to have settled down and some sort of stability reached in the farmer's share of the retail price, though at a low level. The usual theory of price spread seem to have operated only partially in these years. A more detailed treatment of the features of this period is attempted in the next section.

The conclusions arrived at in this section may now be conveniently summarised. Farm prices tend to lag behind retail prices at least during periods of normal or moderate rise. Secondly, there is a certain amount of inelasticity associated with farm prices of rice (on the upward movement side), inasmuch as the farm price of rice does not, under more or less normal conditions, rise as much as the retail price, resulting thereby in decreasing shares of the farmer in the consumer's price. Thirdly, crop conditions and yield, more than anything else, influence the movements of farm prices and the price spread, specially in the case of rice, even in times of violent rise in prices. This is due, on the one hand, to the ignorance on the part of the farmers about market conditions and on the other to the lack of staying power of the farmers in the matter of sale of their produce. Fourthly, the "market" in India is always in an immeasurably stronger position than the farmer in the matter of price fixation, at least in the case of rice. The implications of this will be evident from a study of the success or failure of the system of 'price control' in India, to which now we turn.

Interference by the Government in the Marketing system.

The history of the Government's interference in the marketing of rice in Bengal may be said to have begun after the middle of the year 1943-44. Earlier efforts by the Government, both Provincial and Central, were sketchy, half-hearted and unplanned or ill-conceived. It is only after the Bengal famine of 1943 that the

Government became alive to the need for interference in the marketing of rice. From then on the Government's policy has been to remove bottlenecks arising out of an actual shortage of rice in the market and to fix up 'ceilings' on the prices of rice and paddy. The action of the Government in this respect can be classified into three groups, (a) monopoly procurement of paddy by the Government in the beginning through agents and later on through Civil Supplies (Procurement) machinery (b) rationing of rice in cities and big towns, and (c) following a "Support Price" programme in semi-urban and rural areas whenever the price of rice shows a tendency to rise above the controlled rates. All these mean, at least theoretically, a thorough control over the system of distribution of paddy and rice. To what extent has the Government policy been successful and with what results?

It is easy to answer these questions if we refer to Table 5. First the index of farm price of paddy at Bolpur shows a gradual fall from 277.7 in 1944-45 to 272.5 in 1946-47 and then it rises to 292.1 and 314.4 in 1947-48 and 1948-49 respectively. It may, however, be said that the farm price of paddy has showed a good amount of steadiness during this period. This steadiness is of course a result of the system of control, for all these prices which are the actual market rates are also the controlled rates. The system of control has, therefore, operated very successfully in the case of farm price of paddy. This may be said to be due not so much to the efficiency of the Government and its procurement machinery as to the financial and speculative weakness of the farmers in regions like Birbhum where paddy is both the cash as well as the subsistence crop. Secondly, the system of rationing of rice has operated fairly successfully in cities like Calcutta. The controlled price has, therefore, been fairly well maintained. But the cost to the consumer has been rather high. The figures of price spread reveal that this high cost is mainly due to the increased margins and concessions to the intermediaries in the marketing chain. In other words, the cost of distribution has increased more than proportionately during the era of controls, the margin absorbed in this process being between 45 and 48 per cent of the retail value in Calcutta. As against this may be compared the margin of 20 per cent only allowed to trade in the case of distribution of textile goods in India. Thirdly, the price that the consumers have paid in rural and semi-urban areas of Bengal has all through this period been on a higher level than the controlled prices even inspite of the commitments of the Provincial Government to follow a Price Support programme. In reality the Government has not so far followed this policy. Even though there has been upward revisions of the controlled rates in 1947-48 and 1948-49, the actual prices are still higher than the ceiling prices fixed by the Government. The failure of the Government in the matter of procurement and price stabilisation is glaringly apparent. Price control has, therefore, been a failure in the non-rationed areas of Bengal, more so in the deficit districts. It may be added in this connection that it is difficult to make the Price Support policy or programme a success, specially in a country like India where markets are not regulated and warehouse, godown and other storage facilities are almost conspicuous by their absence. Lastly, it should be mentioned that the increased cost of distribution is due, at least in part, to an increase

in the number of persons engaged in the distributive channels since 1942-43. Speculative activity has increased in rice trade since this year and has offered a cheap source of investment to the idle blackmarket funds. It has been observed that between the Bolpur rice mills and the retailer in Calcutta, rice sometimes passes through the hands of five speculators each absorbing a portion of the margin.

In short, the Government's interference in the trade in rice has not turned out to be as thorough and successful as it has been intended to be. It has been successful in rationed areas only to the extent of maintaining controlled prices over the quantity allotted to the consumers who have however paid a rather high cost for this. In rural areas, price controls have been successful at the farmer's (procurement) end, but not at the opposite side, *viz.*, the consumer's end. The net result has been that the farmers have not been able to participate fully in the increased price paid by the consumers, even though the movements of farm and retail prices have shown a greater degree of correlation.

IV

We should, before finally concluding, mention at least in brief the measures which are essential for improving the nature of the price spread in rice and increasing the farmer's share in the retail value. It is obvious from the above sections that problems of price spread have to be tackled from a dynamic point of view. Naturally, therefore, there will be some measures which may be called immediate and short term in their objectives. These relate to the problems arising out of the system of control. But there are also other more fundamental measures, the adoption of which has been too long delayed in our country and as such requires immediate attention. What then are these remedies?

Short-term Measures.

It appears from the analysis attempted in the previous section that distribution of rice in West Bengal has become costlier under the system of Government controls than under the pre-war system of free marketing. Consequently there is dissatisfaction both among the producers and among the consumers. The failure of such a policy is at once apparent. Would it then be better, at least in the interests of consumers, to go back to the old system of distribution through the free and unfettered play of the market forces? Our recent and bitter experience of decontrol sounds a note of warning. In fact, it would be foolish, if not criminal, for the Government to give up the control of distribution of commodities like rice in as much as price control and rationing seem to be the only known method of combating scarcity and greed. What is necessary is to perfect the system and the method of control in such a way that the farmer's share in the consumer's rupee becomes the largest possible under the circumstances and at the same time the cost to the consumer does not become very high. The following are the most important measures which should be adopted by the Government for achieving these objects.

(a) The enforcement of the controls should be made very strict and rigorous specially in those marketing processes where the Government has to rely on the trade channels. The system of procurement, transport, etc., through "approved agents" should be discontinued and these things should be done directly by the Government with the help of its staff. For the successful running of such a huge monopoly trade by the Government the fundamental condition is that all forms of corruption, nepotism and jobbery should be ruthlessly stamped out from the Civil Supplies Department and blackmarketing in all forms wiped out. One indirect advantage of establishing a Government monopoly at least at a few stages in the marketing chain is that the Government will be able to exercise greater supervision over the whole process and subsidise the trade more smoothly, if or when that is found to be necessary.

(b) The farmer's share in the retail value of rice in 1948-49 is very low and should be raised to the 1938-39 level. The farm price of paddy in Birbhum district is now, (1948-49) on the basis of 1938-39 figures, about 60 per cent lower than the 'actual' retail price of rice in Bolpur and about 90 per cent. lower than the controlled retail price in Calcutta. On the basis of the average of 1938-39 and 1939-40 figures, this difference would become slightly smaller. Anyway, it appears that there is considerable scope for increasing the farm price of paddy. An increase of 25 per cent of the 1938-39 price can immediately be recommended as a conservative measure. This means an increase of at least Re. 0-9-6 in the present controlled price of paddy (Rs. 7-8-0 per md.). This will not, however, be sufficient to raise the farmer's share to its prewar level, at least so long as the control over the retail prices in Bolpur does not become effective and the controlled retail prices in Calcutta remain at their present levels. The need for giving the farmers a large share of the retail value can hardly be overemphasised in this connection, at least for the sake of giving the farmers a greater incentive to increased production. The course of price spread in the U.S.A. may well serve as an example to our Governments in this respect.

(c) How is this increase in the price of paddy to be effected? A proportionate increase in the retail price of rice would be the easiest course; but this would not solve the problem of price spread. Besides, the small peasants, the share croppers and the consumers in general, who together constitute the bulk of the population will be hard hit. Another way of doing this would be to subsidise the traders as has been done in the U.S.A. or the farmers as in the U.K. In the present state of inflation in the country, the former is ruled out, while the latter measure cannot obviously be recommended unless it is combined with serious attempts to bring down the retail prices which means in effect a reduction in the share of the market. In other words, the share of the farmer should be increased by adopting one of two measures, either subsidising the farmers and reducing the retail prices or "squeezing" the market and the distributive channels. In any case, what is needed is a decrease in the cost of distribution brought about firstly by reducing the number of middlemen in the

process and secondly by cutting down their shares. These two things are possible of achievement, only if encouraging co-operative organisation is encouraged in this business with all seriousness.

(d) From the point of view of the consumers, the policy and the programme of price support to which the Government is now committed, are useless and meaningless, in as much as they are seldom restarted to. Price support policy, to be effective, must be preceded by a reasonably successful procurement drive, a fair stock of food-grains and an alertness on the part of Government to enter the market at the proper time and place. All these imply a level of efficiency which the Civil Supplies Department of the Government has all along lacked. The success of this policy and programme will, therefore, depend on the efficiency and effectiveness which the Government will be able to show in this matter.

Long-term Measures.

The long-term measures are in fact no less urgent than the short-term ones and relate mainly to the removal of the limiting factors in our system of marketing not only of rice, but also of other agricultural produce. The following remedies are among the most important.

(a) The Government should study the market and the price spread regularly with the help of its Marketing and Statistical staff. In times of falling prices, the Government should come out with measures for subsidising the farmers and for fixing floor prices of the commodities. In times of rising prices, the Government should control prices and act promptly with a view to neutralising the effects of the time lag of farm prices. It should always be borne in mind by the Government that in a country like India where there is a chronic shortage of food, the farmer's share of the retail value should always be maintained on a high level, at least for the sake of increased production.

(b) Secondly, the overcrowding in the channels of trade should be removed. This seems all the more urgent in view of the fact that trade has offered a cheap and easy source of occupation to the innumerable refugees and a profitable source of investment to the blackmarketeers. The difficulties of capital investment in the country give a fillip to this process, which ultimately results in too much of speculative dealing in foodgrains. Such speculative activities should be banned by legislation and no increase in the number of intermediate 'links' (as opposed to the number of wholesalers or retailers) should be permitted. Unfortunately the system of controls operating in India does not seek to displace even the weakest link in the distributive chain.

(c) The immediate possibility in the direction of reducing the intermediate links is offered by co-operative organisations. Procurement and handling can both be tackled by one single organisation, as also the wholesale and the retail trade. The remuneration at each step and for each process should be statutorily fixed. Besides, there should be a Central Apex organisation of these co-operatives organised on the

lines of the "Credit Agricole," for the purpose of supervising and co-ordinating the activities of its member societies.

(d) The most urgent measure is perhaps statutory "regulation of the markets" which are to be controlled and supervised by a Committee in which the producers (small, middle and big farmers) will be fully represented. The business of assembling, weighing, standardisation, etc., can thus be checked and supervised and the farmers assured a fair price whenever he brings his produce to the market. These regulated markets will form a part of the co-operative marketing which has already been recommended. It is a recognised fact that malpractices in weighing, arbitrary market charges, etc., which go to reduce the farmer's share of the retail value can be stamped out only with the help of regulated markets. After all is said and done, it must be remembered that even the smallest increase in the farmer's share should not be taken too lightly, because it is indeed a difficult task.

The war and the consequent dislocation has given a rude shock to the old system of normal trading. The traditions, honesty and efficiency of the traders have now become a thing of the past. It is very doubtful whether these will come back again. Slowly but steadily we are moving away from the era of "laissez faire," in distribution to that of state control and management. If the state wants to recede from this field, as it is likely to do, some sort of responsible and efficient organisation must be entrusted with this business. Co-operation, fully developed and supported by the Government, seems to offer the only alternative. Regulated markets and the existing Government godowns will form the basis of this system of organised and responsible marketing. This suggestion will sound all the more reasonable in the perspective of a dangerously chronic position of rice and other food supplies in India in the years ahead.

WORLD POPULATION AND AGRICULTURAL OUTLOOK

by

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Since Malthus proclaimed that population tends to exceed food supply, world has been fearing overpopulation and this apprehensive state of mind has been aggravated in our times by the danger of declining world resources¹. It has given rise in many quarters to a demand for adoption of a world policy to stabilize.

1. Cf. "Modern man has perfected two devices, either of which could annihilate civilization. One is atomic war, the other is world soil-erosion. Of the two, soil-erosion is the more insidiously destructive. War disrupts or destroys the social environment, which is the matrix of civilization. Soil erosion destroys the natural environment, which is its foundation."

(*Food or Famine* by Ward Shepard).