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Vol XVIII  
No. 3

ISSN 0019-5014

JULY-  
SEPTEMBER  
1963

# INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF  
AGRICULTURAL ECONOMICS,  
BOMBAY

## AGRICULTURAL PRICE POLICY AND CO-OPERATIVE MARKETING IN JAPAN

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### I

Agricultural prices and marketing in Japan have in a large measure been subject to the government intervention and the activities of farmers' co-operatives. Immediately after World War II government price policies were primarily directed towards protecting the consumer in order to curb the then prevailing severe inflation. As the food situation relaxed, however, they have gradually become producer-oriented. At present, they cover nearly all the main products including rice, wheat, barley, sweet and Irish potatoes, sugar beet, soybeans, rapeseeds, tobacco, cocoons and silk, pork and dairy products, which altogether account for approximately three-quarters of the total agricultural output. Of course, the type, method and extent of government intervention varies from commodity to commodity, reflecting the respective importance both in the agricultural industry and in the economy as a whole, and the features peculiar to each commodity.

TABLE I—COMMODITY COMPOSITION OF TOTAL OUTPUT AND TOTAL SALES OF AGRICULTURAL PRODUCTS, 1955 AND 1961

Commodity	(in per cent)			
	Total Agricultural Output		Total Sales	
	1955	1961	1955	1961
Rice .. .. .	53.7	44.9	44.3	38.2
Wheat and Barley .. .. .	8.4	6.6	6.3	6.5
Other Cereals .. .. .	0.7	0.5	0.4	0.4
Pulses .. .. .	3.3	2.6	3.3	2.6
Potatoes .. .. .	5.0	4.2	5.2	4.3
Vegetables .. .. .	6.1	9.4	9.0	11.3
Fruits .. .. .	3.7	6.4	5.0	7.8
Industrial Crops .. .. .	5.6	4.8	9.0	7.0
Cocoons .. .. .	2.9	3.1	4.2	3.9
Livestock and Livestock Products .. .. .	9.8	17.0	12.4	17.4
Total* .. .. .	100.0	100.0	100.0	100.0

Source : Ministry of Agriculture and Forestry.

\* Including rice straw.

In the meantime, practically all the farmers throughout the country have been organized into multi-purpose co-operative societies which now number approximately 11,500.<sup>1</sup> Each town or village has at least one society of this type with an average membership of about 550 and average fixed assets of U.S. \$ 50,000. These co-operatives at the town or village level have formed in each of their different fields of activities prefectural federations, which in turn have their respective apex organizations at the national level. There is little doubt that farmers' co-operatives have fulfilled important functions in the marketing of the farm produce and thus in the implementation of government price policies especially in the case of cereals.

We shall discuss below the close connection between the producer price policy and the co-operative marketing in respect of rice, since this is by far the most important commodity in the people's diet as well as for the farm income.<sup>2</sup>

## II

Obviously, the prices and marketing of rice in the pre-war days were subject largely to influences of landlordism. Peasants who had been emancipated from feudal ties as a result of the Meiji Restoration (1868), were soon involved in monetized economy partly because of industrial development and partly because they were forced to pay land tax in cash instead of in kind. In the course of time much of their land passed into the hands of a relatively small number of landlords. By the turn of the century landlordism had been established firmly throughout the country-side. The tenant had to pay high rent in kind amounting often to as much as half his harvest. More than one-third of the total quantity of rice traded in the market was sold by landlords and the remainder by cultivators. Whereas landlords used to obtain better prices by selling later in the season the bulk of the rice they received as rent, most cultivators, always in dire need of cash, were constrained to sell their crop at low prices immediately after harvest. Quite a few of them, moreover, had to sell their standing crop before maturing or to deliver their crop in repayment of their debt to landlords or rice-cum-fertilizer merchants, a fact which implied even lower prices. Speculative activities of merchants frequently added to fluctuations in rice prices on the market.

With growing urban population, rice prices, while showing wide seasonal variations, tended to rise and soared towards the end of World War I, when the so-called 'rice riots' occurred in various places of the country, causing serious social unrest. Consequently the government not only embarked upon the encouragement of increased rice production both at home and in colonial territories, but also enacted a Rice Law in 1921. The Law, as amended later, was designed to stabilize market prices of rice within a certain range by means of buffer stock operations, *i.e.*, by buying supplies when the market price fell below the prescribed minimum and selling them when the price rose above the maximum.

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1. Apart from these multi-purpose co-operative societies, there exist more than 16,000 single-purpose co-operative societies specializing chiefly in the marketing of cocoons, fruits, dairy products, industrial crops, etc.

2. For instance, about 20 per cent of the food expenses in the average urban family is spent on rice; while more than half the total cultivated area is planted to rice, which accounts for 48 per cent of the total value of agricultural output or 44 per cent of the total value of agricultural products sold off the farm.

TABLE II—SEASONAL DISTRIBUTION OF RICE SALES BY LANDLORDS AND CULTIVATORS  
 AVERAGE 1927-1931\*

	Sales by Landlords	Sales by Cultivators	Total
	million <i>koku</i> †	million <i>koku</i> †	million <i>koku</i> †
Annual total .. .. .	12.3 (37.0%)	20.9 (63.0%)	33.2 (100.0%)
	100.0%	100.0%	100.0%
November .. .. .	5.7	15.9	12.1
December .. .. .	12.6	22.9	19.0
January .. .. .	11.8	13.7	13.0
February .. .. .	8.6	8.0	8.2
March .. .. .	8.0	6.0	6.7
April .. .. .	8.1	5.0	6.1
May .. .. .	8.1	4.5	5.8
June .. .. .	7.2	4.1	5.2
July .. .. .	7.7	3.9	5.3
August .. .. .	8.9	4.4	6.0
September .. .. .	7.2	5.0	5.8
October .. .. .	6.2	6.7	6.5

Source : Ministry of Agriculture and Forestry.

\* Crop years.

† One *koku* equals 150 kgs. of brown rice.

After an Industrial Co-operative Law was passed in 1900, farmers' co-operatives (then called 'industrial co-operatives') developed quite rapidly. Their marketing activities in respect of rice were greatly encouraged by various government measures, *e.g.*, for assisting them in the construction of warehouses under the Agricultural Warehousing Act of 1917 and for giving them priority in buying operations made under the above-mentioned buffer stock scheme. The co-operative marketing of rice was further strengthened by the formation in 1931 of the National Federation for Co-operative Marketing. Even in 1934, however, farmers' co-operatives handled not more than 28 per cent of the total quantity of rice moving into the trade. The buffer stock scheme apparently benefited not so much cultivators as landlords and merchants who could command larger quantities. Furthermore, its effects were often largely offset by an increasing inflow of rice from the colonial territories. Thus it can be safely said that under the domination of landlords and merchants, the pre-war price policy and co-operative marketing had rather limited effect on rice cultivators.

During World War II the production, marketing and distribution of rice, together with most other crops, were placed under the strict government control. War-time Agricultural Associations (which incorporated both farmers' co-operatives and farmers' associations)<sup>3</sup> acting as government agents had the monopoly of purchases of rice from producers, merchants being eliminated. To give an inducement to increased production, moreover, a step was taken to buy at higher prices from cultivators than from landlords which eventually weakened the position of landlords.

### III

After the war the notorious landlordism was abolished completely as a result of the Land Reform which was implemented during 1947 to 1950. As much as 80 per cent of the total tenanted land was redistributed to the former tenants. Tenanted land now represents only 10 per cent of the total area of cultivated land as against 46 per cent before the Reform. Whereas in the pre-Reform days almost half the farmers were tenants (defined here as those who rented more than half of their land), tenants accounted in 1950 for only 12 per cent of the total number of farmers. The corresponding percentage fell further to 6 per cent in 1960. Thus the overwhelming majority of cultivators have become owner-operators and acquired higher social status. In addition, the traditional high rent in kind has been replaced by extremely low cash rent with greatly ensured security of tenure. All these have unmistakably given farmers an impetus to and ways and means for increased capital investments, and greater output, and also made them more responsive to changes in prices.

With the enactment of the Agricultural Co-operative Associations Law of 1947, new co-operative associations of the farmer, by the farmer and for the farmer were formed immediately throughout the country and superseded the Agricultural Associations. It is true that at the outset, new co-operatives based on a democratic principle which consisted mostly of owner farmers were, as it were, given from the above, since both the guidance by the government and the controlled economy then ruling were largely responsible for their rapid formation. However, they have in due course become an important organization through which farmers protect their own interests and have a voice in decisions made by the government or the parliament on agricultural policies especially in regard to prices and marketing.

### IV

During the earlier post-war years the price and marketing policy for rice was characterized by compulsory delivery quotas and relatively low official prices in order to combat food shortages and counteract mounting inflation. With increased domestic supplies of rice, however, it has apparently become one of the important means whereby to support farm incomes. Although there have since been some changes and modifications, the marketing and distribution of rice still remain under the government control and its prices at all stages continue to be fixed officially. Any producer is required to sell his rice crop exclusively

3. Under the Farmers' Associations Law of 1899 farmers' associations were organized in each town or village with the object of providing advisory services for improvement of farming.

to the government<sup>4</sup> (Food Control Special Account) ; imports of rice are likewise monopolized by the government. Except for sales to brewers and other processors, rice is rationed by the government to consumers through licensed wholesalers and retailers.

Actual buying from the producer is done by contract made in advance with him on the basis of his sales offer. He may sell his rice either directly or through the designated collecting agents to the government. Of those agents numbering some 14,000, the majority (or 80 per cent) consists of farmers' co-operatives. These collect by far the greater bulk (approximately 93 per cent) of the rice purchased by the government, the remainder being handled almost wholly by the designated rice merchants.<sup>5</sup> Usually, the producer carries his packed brown rice to the co-operative's warehouse,<sup>6</sup> where he receives a price certificate after his produce has been weighed and graded by the government inspector. There are five regular grades and one sub-grade, depending on weight, shape and quality of grain, content of moisture and alien grains or articles, etc. According to that certificate he then receives money through the co-operative.

Warehousing is another important activity of the farmers' co-operatives, which owned warehouses with a total capacity of more than 4.4 million tons in 1960. A large part of the rice purchased by the government is stored in such warehouses. Both commissions for assembly and fees for storage paid by the government have been important sources of revenue on the part of farmers' co-operatives. It is estimated that in 1960 they constituted in aggregate approximately 32 per cent of the co-operatives' gross income from economic activities excluding credit and advisory services. Moreover, there is no doubt that the government control of rice has likewise strengthened co-operative credit activities, for much of the farmers' receipts from rice sales remain as deposits with the co-operatives. At the same time, low-cost loans extended by co-operatives have constituted one of the main sources of farmers' borrowings.

The prices of rice to producers (and also to consumers) have been determined by the government after consultation with the Rice Price Deliberation Council which is composed of representatives of producers and consumers and of independent members. The producer price was formerly fixed on the basis of parity formula, which underwent frequent modifications and involved certain additions in the direction of raising the price level (see Table III). Since the 1960 crop, use has been made of the production cost and income compensation formula, which is designed to enable rice-selling farmers, with average efficiency, to cover their cost of production as well as to obtain for their own and family labour remuneration comparable with urban wages. In practice, it is based on the average cost of production in the last three years which has been derived from the survey covering about 5,000 rice-selling farmers and modified in such a way to reflect the subsequent changes in prices and to value remuneration for family labour according to the average hourly wage in the manufacturing industry allowing for differentials in consumer prices between urban and rural areas. Added to

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4. Although there is a small amount of black market sales.

5. The quantity of rice sold by the producer directly to the government is negligible.

6. The paddy harvested is generally sun-dried, and machine-threshed and husked by individual growers or small groups of them to become brown rice, which is then packed by them for delivery. Rice is traded in the form of brown rice from the grower to the wholesale stage.

the basic price to producers thus calculated are allowances for package cost, for higher milling percentage, quality differentials, etc.

TABLE III—PRODUCER PRICES OF RICE : 1950-1962

Crop Year	Method of Price-Fixing	Basic Price	Average Price paid to Producers*
(Yen per 150 Kgs. of brown rice)			
1950	Pre-war-base parity formula (Price parity) .. .. .	6,047	6,351
1951	Pre-war-base parity formula (Price parity) .. .. .	7,050	7,440
1952	Post-war-base parity formula (income parity) .. .. .	7,500	8,635
1953	Post-war-base parity formula (income parity) .. .. .	7,905	10,682
1954	Post-war-base parity formula (income parity) .. .. .	9,120	10,008
1955	Provisional parity formula .. .. .	9,755	10,259
1956	Modified parity formula .. .. .	9,470	9,964
1957	1954-56 base parity formula .. .. .	9,745	10,261
1958	1954-56 base parity formula .. .. .	9,700	10,256
1959	Combination of parity formula and production cost and income compensation formula .. .. .	9,715	10,389
1960	Production cost and income compensation formula .. .. .	9,755	10,420
1961	Production cost and income compensation formula .. .. .	10,322.5	11,022.5
1962	Production cost and income compensation formula .. .. .	11,405	12,177

\* Including various bonuses, differentials and additional payments.

There is little doubt that farmers' co-operatives and other organizations have had a strong voice in the determination of the method of price-fixing and the level of prices. In fact, the adoption of the present price-fixing formula was largely attributable to their pressure.

## V

As discussed above, the producer price policy for rice has provided farmers with a sense of security and an incentive to increase yields<sup>7</sup>; and in its implementation, farmers' co-operatives and their federations have played an important role particularly in regard to collection, storage and price-fixing.<sup>8</sup> It should not

7. For example, the yield of brown rice per hectare increased from 2,980 kgs. during 1934-38 (average) to 4,010 kgs. in 1960.

8. Although the system of government intervention differs from that of rice, almost all the saleable supplies of wheat and barley have in fact been purchased by the government at fixed prices. In this case, too, farmers' co-operatives have played an important part particularly in the assembly and storage.



be overlooked, moreover, that the very abolition of landlordism and the resultant establishment of a large body of owner-farmers after the war has permitted the price policy to function in favour of the producer.

In greatly changed circumstances resulting from the high rate of economic growth in recent years, however, government price policies for rice are now confronted with a number of problems. The Agricultural Basic Law of 1961 has laid down the basic lines of agricultural policies to be taken in the years to come with the ultimate objective of fostering as many economically viable farms as possible and thus of narrowing the existing gap in per capita incomes between agriculture and other sectors. One of the policies required to this end is the selective expansion of agricultural production,<sup>9</sup> *i.e.*, the shift of emphasis in production from cereals to protective foods such as dairy products, meat, fruits and vegetables which are in growing demand. It seems that the high level of producers' prices of rice relative to other farm products is liable to discourage the desired selective expansion of production. In addition, the benefits of price policies have largely gone to a relatively small number of larger farmers. For instance, 8 per cent of the rice-selling farmers<sup>10</sup> cultivate more than 1.5 hectare of paddy fields each and sell about one-third of the total quantity of rice purchased by the government, while 35 per cent of the rice-selling farmers cultivate less than 0.5 hectare of paddy fields each and sell only 9 per cent of the total quantity. There is also a wide regional difference in the distribution of benefits of rice price policies. Moreover, if the present price-fixing formula was to be maintained, rice prices would go up automatically in parallel with a rise in urban wages, which would not only further affect the relative prices but lead inevitably either to a rise in the consumer price of rice or to an increased deficit to the treasury.<sup>11</sup>

Farmers' co-operatives, on the other hand, are also facing several problems. They have so far become accustomed to easy business by depending too much upon the handling of rice, wheat and barley as government agents; while their share is relatively small in the marketing of livestock products, fruits and vegetables the demand for and the production of which have been growing quite rapidly (see Table IV). Therefore, they now need to strengthen the marketing activities in respect of these products, and to become much more business-conscious. Moreover, the present size of the co-operatives has in most cases become too small for the needs of the times, and the employees at their offices have tended to leave because of the low level of salaries. Thus there is an urgent need to merge

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9. Another important line of policy is improvement of agricultural structure, *i.e.*, enlargement of the size of holdings, modernization of farming, etc.

10. Nearly 90 per cent of all the farmers in the country grow rice, and about 60 per cent of all the farmers sell rice.

11. The price for rationed rice has been fixed as a rule regardless of the price to producers with a view to stabilizing consumers' family budgets. In fact, it has been lower than the real cost incurred by the government. The difference for the 1961 crop amounted to 1,193 Yen per 150 Kgs. of brown rice, which together with the similar deficiencies in respect of wheat and barley has formed a deficit to the Food Control Special Account to be made up by transfer from the general budget. The sum of such transfer (in respect of these and some other crops) increased year after year and totalled approximately 59 billion Yen in 1961 (of which 50 billion Yen related to rice). In December 1962, increased deficits of that sort necessitated a 12 per cent increase in the consumer price of rice, which had been maintained at the same level for the preceding five years.

many small co-operatives into larger units in order to reduce costs and raise efficiency.

TABLE IV—PERCENTAGES OF SALES BY FARMERS CHANNELLED THROUGH CO-OPERATIVE ASSOCIATIONS IN 1961

Commodity	Percentage
Rice*	93
Barley	85
Naked Barley	82
Wheat	75
Sweet Potatoes	46
Irish Potatoes	54
Soybeans	50
Rapeseeds	54
Radish	15
Onion	42
Tangerines	51
„	15
Apples	25
„	14
Cocoons	56
„	34
Milk	36
„	36
Eggs	35

Source : Rice : Food Agency ; Others : Ministry of Agriculture and Forestry, Survey of Utilization of Co-operatives.

\* Percentage of sales to the government.

A Indicates multi-purpose co-operatives.

B Indicates specialized co-operatives.