AGRICULTURAL PRICE POLICY—REGIONAL AND CYCLICAL VARIATIONS

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Price policy is one of the crucial policies for economic development. The objectives of such a policy in respect of agricultural commodities are:

(1) to ensure a reasonable relationship between prices of agricultural commodities and manufactured articles so that the terms of trade do not turn sharply against one or the other. As Dr. B. K. Madan has pointed out: "The sectoral relationships of prices have an important bearing on production and have to be borne in view in considering the general framework of price policy;"¹

(2) to maintain an appropriate relationship between prices of competing crops so as to fulfil the production targets fixed under the Plan;

(3) to reduce the margin between the producers’ price and the consumers’ price;

(4) to avoid sharp fluctuations in prices brought about by changes in supply and demand; and

(5) to bring about greater integration of prices between the various regions in the country.

For the purpose of this paper, only the last two problems of prices are examined. Differentials in prices over regions in India of certain selected agricultural commodities and their position with regard to market integration and price changes over periods of time are studied with an idea to indicate focal points for the operation of government policy.

For this study, wholesale prices of five important agricultural commodities at selected market centres are analysed, i.e., rice, wheat, sugar (gur), groundnut and cotton (kapas). Price data for the period 1952 to 1957 are considered and were obtained from Agricultural Prices in India—1957, a publication of the Ministry of Food and Agriculture, Government of India. The study has been confined to this period, since price data were readily available for the various centres for these years. For some rice and gur centres and a wheat market, prices for 1958 to 1960 are also available. The 1958-60 figures for rice were worked out from the Weekly Bulletins on Agricultural Prices issued² by the


². Monthly figures given in Dr. Parthasarathy’s article "Prices of Rice at Selected Market Centres in the Southern Zone," Artha Viljana, June, 1961 were made use of.
Ministry of Food and Agriculture. The figures for gur and wheat for the years 1958-60 were calculated from monthly price information of selected agricultural commodities given in the *Agricultural Situation in India*.

The wholesale prices so collected served as primary figures for this study. To ascertain the extent of regional integration in prices for the various commodities, an index of integration was prepared. This was done by working out the mean of wholesale prices of a commodity, say rice, ruling at the various centres for a particular year and thereafter calculating the percentage relationship between the wholesale prices at the different market centres and the mean. For example,

\[
\text{the wholesale price of rice at Kakinada in } 1952 \times 100
\]

Mean of prices at all the rice centres for that year

gives the index of integration for Kakinada centre in 1952. In the same way, indices were computed for other years and for other commodities also.

For the study of year-to-year fluctuations in prices, the prices ruling in 1952 were taken as the base and indices of wholesale prices for other years were calculated accordingly for each centre.

II

REGIONAL VARIATION

The necessity for regional price integration stems from the fact that with the “progressive integration of the national economy and the objective of doing away with unnecessary regulation requires that, as a long-term aim, we must move towards a uniformity of producers’ prices and that the differences in these prices from region to region should not be higher than warranted by reasonable calculation of transport and other costs.”

Rice

Twenty-four centres were selected for the study of rice, *i.e.*, two market centres each in 12 States. For our analysis, centres are taken to be closely integrated if their indices of integration fall in the range 90 and 110 (*i.e.*, those prices close to the mean price of all centres). One or two market centres which were on the border line were also counted as integrated.

Scrutinizing the indices of integration for rice, we observe that in 1952, the States form themselves into three well-defined areas of high, medium and low prices. The States of Assam, Bihar, Uttar Pradesh form one high-price block. Madhya Pradesh, Orissa, Bombay and Andhra make up the contiguous area of low price, while Mysore, Madras and Kerala down south constitute the medium price region. Price differentials were very marked between low and high-price centres in this year. For example, Assam and U.P. prices were nearly double the prices at Orissa and three times that of Jagdalpur in Madhya Pradesh. The

low price at Jagdalpur was due to its being a primary market centre with no railway connections—broad or narrow gauge. Though they were secondary markets and were situated on the broad gauge railway route, the Orissa centres quoted low prices. The chief reason was the low cost of production of rice in this region. The cost of production in Orissa was Rs. 5.8 per maund compared to Rs. 8.0 for West Bengal, Rs. 11.2 for Madras and Rs. 12.7 for Andhra.

Because of low prices at Madhya Pradesh and Orissa, there were movements of rice from the latter State to Bihar and to Uttar Pradesh from the former as economic theory would indicate. It was as a result of these movements, that the Union Government prohibited exports of rice and paddy from Orissa, Bihar and Madhya Pradesh in 1957.

Table I shows that there has been a marked trend towards greater price integration between 1953 and 1957, the integration between the centres in 1957 being most favourable. In 1957, Assam centres showed comparatively higher prices, while prices were comparatively lower at Jagdalpur and Orissa centres. Rice prices for 1958 to 1960 are readily available only for 7 out of the 24 centres considered (2 each in Madras, Andhra and Kerala and 1 in Mysore). These markets were studied with reference to market integration for the whole period 1952 to 1960. Our analysis revealed that between 1952 and 1956, out of the 7 centres, 5 were integrated (except in 1954 when only 3 centres were so). Shimoga (Mysore), a primary market centre, consistently showed a low price during 1953 and 1956. But, from 1957 to 1960, prices at all 7 centres were closely integrated.

### TABLE I — RICE MARKET INTEGRATION

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It has to be borne in mind that price disparity does not reflect only the supply position; the demand side is equally important. Therefore, comparing per capita incomes of the various States with the price of rice prevailing at the various regions in 1952, it is seen that there is some relationship between the two. Per capita incomes were higher at U.P. and Assam where rice prices ruled high while regions of low incomes such as Orissa, Andhra, Madras, Kerala and Madhya Pradesh reported comparatively lower prices.


7. Region-wise per capita incomes are given by Dr. K. N. Raj in his paper "Some Features of Economic Growth of the Last Decade in India" (Unpublished), p.43.
Wheat

Ten market centres, one each in the States of Andhra Pradesh, Bihar, Bombay, U.P., Madras, Orissa, Punjab, Rajasthan, M.P. and Delhi were selected for the study of wheat prices. Excluding the wheat importing States of Andhra Pradesh and Madras where prices were high, prices in 1952 and 1953 in Punjab, Rajasthan and Delhi were low and integrated among themselves while in U.P., Madhya Pradesh, Bombay, Bihar and Orissa prices were high and also integrated. Considering all the market centres together we find that in 1955 and 1956, except for Madras and Hyderabad (Andhra) there was a perfect integration among the other centres. In 1957 high prices at Madras, Andhra Pradesh, Bombay and Bihar were responsible for the markets being less integrated.

**TABLE II -- WHEAT MARKET INTEGRATION**

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The prices at Madras and Andhra which have been consistently high, need some attention by the Government.

Cotton

Eight centres were selected for the study of cotton prices. They were Adoni in Andhra Pradesh, Nanded and Jalna in Bombay, Coimbatore and Tiruppur in Madras, Raichur in Mysore, Amritsar and Bhatinda in Punjab.

**TABLE III -- COTTON MARKET INTEGRATION**

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<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Total</td>
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<td>8</td>
<td>8</td>
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<td>7*</td>
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* Price at one Centre not available.

In 1952, prices at the various centres were less integrated. In the following year, consequent on the raising of the floor prices of basic varieties of cotton, centres which revealed low prices in the previous year, e.g., Bhatinda, Jalna tended towards integration this year. As a matter of fact, 7 out of the 8 centres were closely related in 1953. In 1954, Coimbatore (Madras) and Adoni (Andhra Pradesh) were not integrated with other centres because of high prices prevailing
in these markets. Centres, however, were better integrated in 1955, 1956 and 1957. Prices at Coimbatore (Madras) ruled high throughout the period and in 1957 the price approximated to the ceiling prices of Rs. 41. This was because it was a secondary market—well organized and with adequate banking facilities.

Gur

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<tbody>
<tr>
<td>Number of Centres with Indices between 90 and 110 (i.e., Centres Integrated)</td>
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<td>9</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Number of Centres Outside the Range</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Total</td>
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Table IV shows how gur centres fared with regard to market integration. We find that in 1954 there was almost a perfect market integration in the Indian gur economy. But in 1955 and 1956 due to low prices in two or three centres, price integration was less pronounced than in 1954. In 1957, however, better integration was achieved. For 1958 to 1960, prices at Madras, Bombay, Hapur (U.P.) are available. In 1958 it is seen that the three centres were not integrated, price differentials being very significant among them. In 1959 and 1960, Madras and Hapur were somewhat integrated but Bombay prices were very high. Throughout the period under review Bombay prices were highest; in fact in 1960, it was actually Rs. 10 (per munda) more than the Madras centre and Rs. 13 more than Hapur. This was as a result of a general speculative rise in prices following the imposition of control on sugar prices, speculation being rather high at Bombay. This was halted by Government action in the futures market. Nevertheless, Bombay prices though halted should be brought down in line with the other market centres.

Groundnut

In the case of groundnut, 3 centres were studied, viz., Hyderabad in Andhra, Coimbatore in Madras and Nagpur in Bombay. The wholesale prices of unshelled groundnut variety were taken into account.

Prices ruled high at Hyderabad and low at Coimbatore in 1952 and 1953 but in the following years they tended towards integration. In 1954, 1956 and 1957, there was a close integration of prices between the 3 centres.

From the above analysis we conclude that there is a favourable trend towards regional price integration in the case of all the five selected agricultural commodities. Among these, cotton offers a very good example of sustained market integration while price integration in the case of rice among so many centres covering practically the whole of India is an accomplishment and needs a special emphasis. Government policy in fixing floor and ceiling prices for cotton and the zone plans for rice were largely responsible for bringing about a better integration of prices between the respective centres.
III

PRICE TRENDS

"The avoidance of sharp fluctuations in agricultural prices is a pre-requisite not only for the stability of the general level of prices but also for the attainment of our planned production targets. However, "the stresses and strains of a developing economy are likely to be reflected in sharp and recurrent turns in prices, unless regulated in time."  

Broadly, the period studied, i.e., 1952 to 1960 could be divided into two, firstly, 1952 to 1955 representing a period of falling prices and secondly, 1955 onwards representing a steady upward trend. The main factors contributing to the downward trend in prices "was the increased pressure of supplies resulting not only from bumper crops but also of a larger volume of imports and dis-hoarding of accumulated stocks, consequent on the elimination of controls over a wide sector." On the other hand, the stimulus for the general rise in agricultural prices after 1955 came from the steadily increasing tempo of investment from year to year, superimposed upon some decline in agricultural output from the record levels of production in 1953-54 and 1954-55.

Rice

For the purposes of this paper, prices at the centres are said to fluctuate if, between 1952 (or 1953 as the case may be) to 1955 prices declined by 20 per cent and more and also rose by 20 per cent and more between 1955 and 1957. Price trends between 1958 and 1960 will also be examined in respect of some centres (rice, wheat and sugar) for which data are readily available.

In the case of rice, fluctuation in prices (as defined above) was a striking feature in most of the States. Both the centres at U.P., Bihar, Assam, Mysore, Kerala, Andhra and Bombay were subjected to this pendular movement in prices. The centres in the States of West Bengal, Orissa and Madhya Pradesh—where prices were comparatively lower—and one centre each at Madras and Punjab were relatively stable between 1952 and 1955 but after 1955, they followed the general upward trend.

As fluctuation in prices was a characteristic feature in most of the States the next step was to see in which centres the fall in prices was very steep; also, in respect of sharp rises after 1955. It is observed that prices declined very steeply at both centres in Mysore, U.P., Andhra, Kerala and at Kumbakonam in Madras and Ranchi in Bihar, prices falling by more than 40 per cent in these centres. Kozhikode in Kerala and the two Andhra centres showed a fall of more than half the 1952 or 1953 price, Kozhikode registering the steepest decline of 64.4 per cent. The fall in prices should have seriously affected the farmers in these regions. Therefore, attention should be directed towards the market centres at the above mentioned States.

With regard to rise in prices after 1955, only the Madhya Pradesh centres registered sharp increases. It was seen that these were low price centres and the rise was conducive to market integration. Between 1957 and 1960, price rises have been small at Madras, Kerala, Andhra and Mysore centres for which price data are available. The launching of the ‘Package Plan’ in 1960 was a great step towards increasing internal supplies, especially when it is recognized that price stability through measures such as imports is dearly bought at the expense of balance of payments stability.

Wheat

Out of the 10 wheat centres studied (one centre in each State), 7 centres representing the States of Bihar, U.P., Rajasthan, Andhra Pradesh, Madras, Bombay and Delhi revealed fluctuation in prices. While the rise between 1955 and 1957 was more or less uniform in all the centres, the fall in prices between 1952 and 1955 was steeper at Patna (Bihar) and Kotah (Rajasthan). Prices were prevented from falling further by a policy of price support at Rs. 10 per maund announced early in July 1954. Sagar in Madhya Pradesh and Cuttack in Orissa were relatively stable during 1955 and 1957 and prices at Abohar (Punjab) had been stable throughout the entire six-year period.

It is therefore suggested that the centres susceptible to fluctuations in prices should be the objects of government policy, a closer attention, however, being paid to Patna in Bihar and Kotah (Rajasthan).

Cotton

1952 was a year of low prices for cotton except at the Madras centre. With a view to compensating producers for the rise in production costs, the Government permitted increases in the basic prices of raw cotton by Rs. 50 per candy or Rs. 2.75 per maund. Approximately, to this extent, prices at all the centres (except Madras) registered a rise in 1953. Prices remained firm the next year, but they fell at all centres between 1954 and 1955—sharply in the case of Jalna (Bombay), Adoni (Andhra) and Tiruppur (Madras). This was followed by a rise in 1956 and 1957. Fluctuations in prices were, however, noticeable in Adoni, Jalna, and Tiruppur. In the case of Coimbatore (Madras) the behaviour was one of regular year-to-year oscillations. Government’s stabilization operations, therefore, should be focussed on these markets.

The latest trends in cotton prices, in general, indicate that there was a fall in prices in 1958-59 and a rise in 1959-60. The latter was brought about by a steep fall in output due to damage caused to the crop by unfavourable weather conditions. The measures taken during the year to curb price rise included “(1) lightening of the regulatory measures relating to futures trading, (2) strengthening of the quality and distribution controls, and (3) larger imports.”

Gur

The general trend of gur prices presents a marked oscillation in prices between 1952 and 1955 and the striking phenomenon of this movement is that after a rise in prices in 1953 and 1954, the price declined in 1955 in almost equal

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proportions. The rise in gur prices during 1953 and 1954 was as a result of the withdrawal of control\textsuperscript{12} over gur prices and their upward revision. After 1955, there was a damping down in oscillations till 1957-58\textsuperscript{13} when there was an advance in its price mainly due to a 100 per cent increase in the excise duty on sugar in May 1957 and an additional levy of excise in lieu of sales tax in December 1957. (Gur prices largely moved in sympathy with sugar.)

Between 1952 and 1954 (1953 in some cases), the rise in prices was very steep at 7 centres, viz., Anakapalle (82.4 per cent), Ambala (72.6 per cent) and Amritsar (70.2 per cent) in Punjab, Hapur (57.5 per cent) and Kanpur (56.1 per cent) in U.P. and Cuttack (49.5 per cent) in Orissa and the fall between 1954 (or 1953) and 1955 was also equally pronounced in all of them. During the rising phase between 1955 and 1957 only 5 centres, viz., Ambala, Anakapalle, Bombay, Ahmednagar and Madras registered large increases in prices, price rises at Anakapalle and Bombay being foremost. Taking the entire 6-year period into consideration, fluctuation in prices occurred at Anakapalle, Ambala and Ahmednagar, the fluctuations at Anakapalle being most violent during the three phases. But, between 1952 and 1955 there were fluctuations in 9 centres (the Bolpur centre in West Bengal, and Bombay and Madras centres excepted) but the oscillations were more severe in 6 of them, viz., Anakapalle, Ambala, Amritsar, Hapur, Kanpur and Cuttack.

Groundnut

The trend in groundnut prices were more or less on the pattern of a rise in prices between 1952 and 1953 followed by a steady decline till 1955 (except for Nagpur whose price rose slightly between 1954 and 1955) after which there is a revival. The trend gave evidence of price oscillation especially in the case of Hyderabad and Coimbatore.

In 1958, groundnut prices soared following the announcement on June 3, 1958 of an export quota after a lapse of 2\frac{1}{2} years. Action was, therefore, taken by the Forward Markets Commission to restrain its rise in price. This action was continued in 1959 and 1960.

PRICE POLICY

Having now acquired an insight into the problems of spatial price differentials and price fluctuations in respect of 5 principal agricultural commodities, the following guide-lines to farm price policy are indicated.

Market Integration

In the case of rice, only in 2 States, i.e., Assam and Bihar, have the Government to operate to bring about complete price integration in the country. For wheat, the high prices at the wheat-importing States of Andhra and Madras need to be checked. Cotton prices were well integrated except for high prices at Coimbatore. With regard to gur prices, Bombay market quoted the highest prices throughout the entire six-year period and though its price rise was halted

\textsuperscript{12} Sugar and Gur Control Order 1950, issued on October 6, 1950.
\textsuperscript{13} Price data (gur) for 1958 to 1960 are available for Bombay, Madras, and Hapur (U.P.) centres.
in 1958-59 by Government action in the futures market, yet it is necessary to bring the price down so as to make it compare favourably with the other centres. Prices at the groundnut centres were integrated.

Avoidance of Price Fluctuations

Among the agricultural commodities studied, gur prices fluctuated very violently. This commodity needs to be carefully watched by the authorities and stabilization measures should be concentrated in districts, viz., Andhra (Anakapalle), Punjab (Ambala and Amritsar), Uttar Pradesh (Hapur and Kanpur), and Orissa (Cuttack). In the case of rice and wheat, prices at many of the centres revealed marked fluctuations and the Government in pursuing a general price stability programme should focus their attention on the rice markets at Uttar Pradesh, Mysore, Andhra, Kerala, Kumbakonam in Madras and Ranchi in Bihar and the wheat centres at Patna (Bihar) and Kotah (Rajasthan) where price oscillations have been wider than in the centres in other States. Further, Adoni (Andhra), Jalna (Bombay) and Tiruppur (Madras) were cotton centres and Hyderabad and Coimbatore were groundnut markets which revealed marked fluctuations in prices.

A PRICE POLICY FOR AGRICULTURAL DEVELOPMENT IN INDIA

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Utkal University
Cuttack

It is commonly known that in a competitive economy, price mechanism generally performs two functions, namely, the allocation of resources to different uses and the determination of the incomes of different factors of production. The price policy of a Government is a conscious approach to prices with certain definite objectives. If the free working of the price mechanism achieves the desired objectives, the necessity for manipulation of prices does not arise. But if the free price mechanism does not serve the desired objectives, the Government has to influence and regulate prices for desired ends. In a fully planned society perhaps there is less need for price manipulation but under an indirect and inductive Plan like ours, direction and control of prices often becomes necessary. A price policy for agriculture in India should aim at maximization of the production of agricultural commodities in general, achievement of the targets of production in different individual commodities and apportionment of a fair share of the national income to the agricultural producers. Accomplishment of the task is not easy. Various conflicting interests and factors come into operation and vitiate the formulation and execution of a definite policy.

It has to be recognized that in the Indian context expansion of agricultural production in general through price incentives is extremely limited. In all countries, agricultural output as a whole is insensitive to price changes in the short period. In India there is very little scope for an increase in the total acreage.