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Principles and Procedures of Determination of Administered Prices of Foodgrains in India

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Paper prepared for IFPRI workshop on Food and Agricultural Price Policy

Belmont Estate
Elkridge, Maryland
April 29 - May 2, 1984

PRINCIPLES AND PROCEDURES OF DETERMINATION OF ADMINISTERED PRICES OF FOODGRAINS IN INDIA

by J.S. Sarma*

Historical: Agricultural price policies and allied instruments were evolved in India in the context of shortages and excess demand during the Second World War years.[1/] Procurement and distribution of major foodgrains were introduced and statutory maximum prices were fixed, though they were not strictly enforced. Assurances were given for state purchases of foodgrains at fixed prices in the event of precipitous fall in prices. In pursuance of this policy, minimum prices were announced for wheat, jowar, rice and maize in 1954-55 when prices started falling sharply.[2/] However, the foundation for a sound agricultural price policy and a systematic determination of producer's prices of major foodgrains, and maximum wholesale and retail prices was laid following the recommendations of the Foodgrains Prices Committee (1964) known also as the Jha Committee.[3/] There is a view that the agricultural price policy in India was more oriented towards consumers' interests at least until the mid-seventies.

Types of administered prices: In considering the issues of price determination, mainly three types of administered prices could be distinguished, namely support, procurement and issue prices. Support price is the predetermined fixed price which is generally announced at

*The author is grateful to Dr. R. Ahmed, Dr. Chandra Ranade, Mr. Ram Saran and Mr. H.L. Chawla for their helpful comments on an earlier draft of the paper.

the sowing time and at which the government agrees to buy all the grain offered for sale. These prices are in the nature of a long-term guarantee to the farmer that in the event of excessive production leading to a glut in the market, prices of his produce are not allowed to fall. Farmers' decisions regarding the areas to be sown under crops depend, however, upon the actual prices realized for the previous crop and their expectations for the coming season. Procurement price is generally fixed and announced at the start of the marketing season.[4/] It represents the price at which the state agencies procure the grain from the producers directly or in the market. These prices are generally higher than the support prices but lower than the free market prices in normal years.[5/] Issue prices are fixed by the government for releasing grain stocks from the "central pool" and are usually concessional or subsidized prices. The issue prices are invariably much higher than the procurement prices. The subsidy element arises from the fact that the total pooled expenditure including storage costs, interest, transport and handling charges in public distribution are not fully recovered through sales at issue prices. These prices are designed to serve a social purpose, namely providing food to the vulnerable sections of the population at a rate cheaper than that prevailing in the market.

In addition to the above mentioned administered prices, when the minimum prices are determined statutorily, they are designated as statutory minimum prices as in the case of jute and sugarcane. Maximum control prices have sometimes been fixed for foodgrains to prevent profiteering.[6/]

Objective of agricultural price policy: The basic objective of the agricultural price policy in India is to evolve a balanced and integrated price structure in the perspective of the overall needs of the economy, protecting, in particular, the interests of the producer on the one hand and those of the consumer on the other. The policy is designed to facilitate the attainment of growth and equity objectives of economic development plans.

Agricultural Prices Commission: For achieving the objectives of price policy, the government of India is advised by the Agricultural Prices Commission (APC) set up in 1965 on the recommendation of the Jha Committee referred to earlier. The terms of reference then given to the Commission specifically indicate that it may, while recommending the price policy and the relative price structure, keep in view the following:

"(i) The need to provide incentive to the producer for adopting improved technology and for maximizing production.

(ii) The need to ensure rational utilization of land and other production resources.

(iii) The likely effect of the price policy on the rest of the economy, particularly on the cost of living, level of wages, industrial cost structure, etc." 7/

Under these terms of reference, the Commission is required to suggest such non-price measures as would facilitate the achievement of the above mentioned objectives. These initial terms of reference were amended in March 1980 requiring the Commission to take into account the changes in the terms of trade between the agricultural and non-agricultural sectors while recommending procurement/support prices. 8/

The Commission is headed by a distinguished professional economist and is comprised of three other members, two of whom are economists and the third with practical experience of farming. It is assisted by a small complement of technical staff, and is advised by a panel of farmers.

Criteria adopted for price determination: In making its recommendations on an appropriate price level for a commodity, the APC is guided by, among others, the following: prices fixed in the previous year, trends in market prices, demand and supply situation, the latest available estimates of cost of production and changes in the prices of inputs since the completion of the cost studies, the likely effect on cost of living and the general price level.[9/] Of these factors, the most important is the cost of production; for unless the prices fixed cover costs, there will be no incentive to increase production. But the main problem here is the concept of cost to be adopted and the items to be covered in the total cost. The APC takes into account the total cost (designated as Cost C) which covers all items of expenses of cultivation as also imputed value of inputs such as rental value of owned land, and interest on fixed capital. Various other issues such as principles of evaluation and allocation (in the case of joint costs) to be adopted in determining the costs also need to be resolved. Questions are often raised whether the managerial cost and costs of transportation to the market are to be included in the costs of production or not: a Special Expert Committee on Cost of Production Estimates (Sen Committee) suggested the inclusion of both items in the cost structure and this suggestion has been accepted.[10/] With respect to the question whether the average or marginal cost is to be taken into account in price fixation, the APC preferred the former on the grounds that the latter was more unstable. The Sen Committee also considered whether risks arising out of asset losses or yield variability should be included as an item of cost and recommended against their inclusion except in the case of premiums where such risks were covered by crop insurance. Also, at the time the APC recommends the support or procurement prices, cost data for the current year are not available and hence the APC takes into account the underlying trends in costs measured by the changes in input prices which are computed through a system of index numbers of input prices.

The parity approach is adopted in developed countries such as USA and Japan in price determination.[11/] In the applicability of this approach in India, several concepts of parity need to be taken into consideration; these are: (i) inter-commodity price parity, (ii) inter-sectoral price parity, (iii) input-output price parity, and (iv) parity between prices received and prices paid by farmers. Rational utilization of land and other production resources is one of the specific terms of reference given to the APC. For ensuring this, inter-crop price parities are kept in view. The intersectoral price parity arises when the prices of cash crops such as sugar, cotton and jute are determined. Then the relationship between the prices of raw material and the manufactured goods is taken into consideration. The input and output price parities are also invariably considered in price determination inasmuch as the former are reflected in the changes in the overall cost of production of the crop. There is a view that any automatic linkage between the prices received by the farmer and the prices paid by him will only feed the vicious circle of cost-price inflation.[12/] The amended terms of reference to the APC, as mentioned earlier, require it to consider the terms of trade also while fixing the prices. "An effective approach for correcting the distortions resulting from terms of trade becoming adverse to the agricultural sector would seem to be in adopting all such measures which result in increases in productivity, although some improvements in terms of trade could be effected by adjusting the output prices."[13/] If this view is accepted, the concept of terms of trade cannot be applied mechanically.[14/] In fact, even with regard to all the other factors so far discussed, the APC does not follow any mechanical approach in determining the prices, although it keeps in mind all of them.

Apart from variations over time, agricultural commodity prices show large spatial, varietal and quality differences. The spatial differences often reflect not only the transport costs but also the imperfections in the market. The problem of quality differences is sought to be resolved by fixing the price in respect of a well specified fair average quality. With respect to varietal differences also, prices are determined for standard varieties and those for others are indicated in terms of price differentials based on past relationships. Often varietal differentials are more important for cash crops than for foodgrains. Generally an all-India price is fixed. In addition, the states sometimes offer premiums or bonuses over and above the suggested price to suit the special needs or circumstances in the state, though this is not consistent with the policy adopted by the government of India.

Procedure for consideration of APC's recommendations: The APC generally submits its recommendations in the form of reports which contain the rationale behind the suggestions. The prices recommended by the Commission are referred by the Central Department of Agriculture and Cooperation to the state governments and are ordinarily discussed with them at special conferences arranged for the purpose. The views of other Central Departments/Ministries such as Food, Commerce, Industry, Finance, and Economic Affairs and the Planning Commission are also taken into account while formulating the final policy which is then considered by the Cabinet Committee on Economic Affairs before decisions are taken and announced.

Instruments for implementation of price policy: The government relies on procurement, public distribution, and buffer stocks as the main instruments for the implementation of price policy. Each of these instruments is discussed below briefly.

Procurement: In the early fifties, domestic procurement formed a little less than fifty percent of the total public distribution of foodgrains in the country. Subsequently, except in good crop years, major reliance was placed on imports for meeting the domestic requirements. During 1961-63, domestic procurement was around one-eighth of the public distribution. Further up to 1964, the procurement was confined to surplus states. The operations were extended to deficit states as well during the drought years and thereafter. Moreover, the objective of procurement till the mid-sixties was not to even out the supplies between good and bad years; rather it attempted to redistribute the limited supplies from producers to consumers within a crop year, especially when the production was short. With the success achieved in increasing the output of foodgrains, particularly wheat, since 1967-68, after the adoption of the new technology based on high yielding varieties of seeds, the situation began to change and the proportion of procurement in the total public distribution improved; and by 1978, imports were altogether stopped and the entire requirements were met from domestic procurement and stocks.

There are four main systems of procurement, namely monopoly procurement, graded levy on producers, levy on millers and traders, and pre-emptive/open market purchases.[15/] The choice of a particular system depends upon the structure of production, the infrastructure development including the marketing system, the nature of the food situation and above all, the administrative set up and experience of the state government. The system adopted also varies over time. For example, in the case of wheat and coarse grains, procurement is done through pre-emptive/open market purchases (except in Maharashtra for jowar) which is facilitated by the existence of regulated markets for these commodities.[16/] For paddy which is traded in the milled form, a levy on millers and traders is operationally more convenient. Although when the food situation was more acute, monopoly procurement and graded levy were imposed in many of the rice producing states, particularly those that were in deficit, currently only the Kerala State has a graded levy on producers of paddy. Annex I gives the systems of procurement of foodgrains prevailing in the different states in 1981-82. The procurement of cereals is done mostly by the field staffs of the Food Corporation of India, State Civil Supplies Corporations or Departments, cooperative marketing agencies, etc.

Procurement from domestic production may have to be done at prices which are slightly below the prevailing market prices;[17/] the balance of the marketable surplus in such cases is sold in the open market at prices which are higher than what they would have been, had there been no procurement. It is therefore "a fair assumption that the weighted average price received by the producer from the sale of the levy and the non-levy portions of marketable surplus may not be less than the price he would have received in the absence of the levy."[18/]

Public distribution: The public distribution system is an essential component of government's food management policy. The system functions through a network of ration shops and fair price shops. When the food deficits were large, statutory rationing was resorted to, to cordon off areas of high purchasing power like the big cities so that they did not exercise their enormous pull by drawing supplies from the rural areas. The system also catered to the needs of working classes in the industrial areas and big cities. After the improvement in the food situation, statutory rationing has been withdrawn, except in Greater Calcutta-Asansol industrial belt. Most of the country is covered by Fair Price Shops which number about 300 thousand, at present, more than three-fourths of which are located in or around the rural areas. Under the informal rationing or fair price shops system, a certain minimum requirement of foodgrains of the vulnerable sections of the population is met at reasonable prices. The people are free to purchase the rest of their requirements in the open market. Nearly 660 million of the population of India had access to fair price shops or ration shops at the end of 1981.[19/] The total quantity of foodgrains distributed under the public distribution system in 1982 was of the order of 14.8 million tons or an average of 1.2 million tons per month. This included sales to Roller Flour Mills, and the quantities distributed under the Food for Work Program since modified as National Rural Employment Program. The direct sale of wheat to Roller Flour Mills for conversion to flour prevents the bulk purchases by these mills from the open market causing a bullish effect on the market.

Other measures: To facilitate the procurement of foodgrains and prevent undue rise in prices, restrictions were imposed on the movement of grains from one zone to another. Most often, each state formed a zone. In some cases a group of adjoining states was formed into a zone. In others a few contiguous surplus districts formed a zone. The zones were different for rice, wheat and coarse grains. With the easing of the food situation, most of the zonal restrictions were withdrawn by 1978-79. Among the other measures taken to subserve the food policy implementation is regulation of private trade and of Bank advances against foodgrains stocks and ban on forward trading in grains.

Issue prices: The issue prices at which foodgrain stocks are issued to fair price shops for distribution are lower than the economic cost of the grains, the difference between the two being treated as subsidy. Whenever procurement prices are raised, a question arises whether and if so to what extent the increase is to be passed on to the consumers. Increase in the issue price affects the levels of living of the people engaged in the other sectors of the economy, and where wages are linked to cost of living, the wages also will have to be raised. If the issue prices are not raised, the implicit food subsidy to be borne by the public exchequer goes up. The total budgetary burden of the food grain operations in India has risen to a staggering Rs 7 billion (700 million US$) a year.[20]

Buffer Stock Policy: Since fluctuations in agricultural production tend to cause instability in supplies and consequently in prices, adequate buffer stocks are maintained, built out of internally procured grain supplemented by imports in years of shortfall in production. A conceptual distinction needs to be drawn between buffer stocks and operational stocks, although a physical distinction between the two is neither necessary nor feasible. As there are two main crop seasons in the country, (and in some parts three crops even) market arrivals, government procurement, offtake from public distribution system and level of government stocks vary from month to month.

There are several arguments against building up large buffer stocks: first, large finances are locked up in stocks; second, large investments are needed for storage construction; third, operating costs are high and finally there are chances of deterioration of stocks unless there is adequate turnover. A technical group set up by the government of India recommmended a size of 12 million tons of buffer stocks over and above the pipeline stocks needed for running the public distribution system, which may vary from 3.5 to 3.8 million tons on April 1 and 8.2 to 8.8 million tons on July 1.[21/] However, the Sixth Five-Year Plan envisages building up of buffer stock of 15 million tons of foodgrains to minimize the impact of weather fluctuations on their availability and prices.[22/]

Food Corporation of India (FCI): The principal institutional agency through which food procurement and distribution policies are implemented is the FCI, a public sector undertaking which was set up in 1965. It handles all purchases, storage and distribution operations on behalf of the central government and some of the state governments too. Import trade and exports of cereals (when given as loans or grants to countries in need) are also handled by the FCI. In addition, some states have Food and Civil Supplies Corporations or cooperative marketing agencies which make the purchases and sales on their behalf.

Price policy for commodities other than foodgrains: Besides foodgrains, the APC also advises the government on the price policy in respect of cotton, jute, sugarcane, tobacco, potatoes, onions, groundnuts, rapeseed and mustard, soybean, and sunflower seed. These prices are often in the nature of minimum support prices. The principles adopted for price determination in the case of these crops are similar. Additional considerations include relationship between the prices of raw materials and manufactured products, price behavior in international markets, etc. Also, the agencies for procurement of these commodities were not as effective as in respect of foodgrains. The Cotton Corporation of India and the Jute Corporation of India were established to ensure fair prices to the producers of these crops; the proportion of the crop handled by them was initially small, though in recent years, this proportion has increased. In the case of potatoes and onions also, government intervention has helped to bring a considerable degree of stability in prices at harvest time for the last two years.

In the case of sugarcane, statutory minimum prices are fixed. Actual prices payable by factories to farmers are higher. For sugar, dual pricing arrangements are in vogue. Under these arrangements, a certain proportion of the output is procured by public agencies or agencies designated by the government at prices linked to statutory minimum prices, while the remaining supplies are disposed of by the factories at market prices. The supplies procured by government are distributed at fixed prices through approved public distribution channels.

Lessons from the Indian Experience: It is difficult to summarize in a paragraph the lessons from the Indian experience of the formulation and implementation of agricultural price policy. Incentive prices in the form of minimum support prices are an essential prerequisite to the success of agricultural production programs, based on the adoption of high yielding varieties technology. At the same time, undue reliance cannot be placed on high prices alone for increasing the production of foodgrains, especially in a situation where there are shortages across the board. For effective implementation of price support policies, adequate institutional arrangements for the purchase of quantities offered for sale at that price are necessary. At the same time, the foodgrain consumption needs of the vulnerable sections of the population would have to be met through appropriate public distribution systems, supplies from which may have to be sold at prices which are less than the economic cost, implying subsidization. Procurement and public distribution are closely inter-related and are in fact two sides of the same coin. A public distribution system can be effectively maintained through domestic procurement of grain at reasonable prices. Quantities procured through price support operations find an outlet through the public distribution system. To even out the supplies between good and bad years and ensure price stability buffer stock policies form an essential ingredient of prudent food management. No doubt large buffer stocks are expensive to operate, but these costs are to be weighed against the gains to society in terms of mitigation of the hardships caused by supply and price instabilities. Imports do not provide the complete answer in bad crop years particularly in countries with foreign exchange constraints. In India, two organizations, namely the Agricultural Prices Commission, which has an advisory role in the formulation of price policy, and the Food Corporation of India, which is responsible for coordinated implemention of procurement, distribution and buffer stock policies, play very prominent roles in the management of food policy.

FOOTNOTES

[1]India, National Commission on Agriculture, Interim Report on Agricultural Price Policy, New Delhi, 1975.

[2]Chopra, R.N., Evolution of Food Policy in India, Macmillan India Ltd., New Delhi, 1981.

[3]India, Department of Agriculture, Report of the Jha Committee on Foodgrain Prices for 1964-65, New Delhi, 1964.

[4]By this time it would be possible to estimate the size of the crop and also take into account any increases in input prices taking place after the sowing time. However, on persistent demand in Parliament and from farmers' organizations, the procurement prices for 1983-84 were announced in the early part of the growing season.

[5]In a good crop year, in surplus states, free-market prices would have been lower but for government purchases; after the surplus is mopped up, the market prices tend to rule higher than procurement prices.

[6]Maximum control prices are not being fixed for cereals in the last few years. When the prices rise exorbitantly high in any area, it is a signal to the government of the scarcity conditions which need to be met by rushing larger supplies through the public distribution system to that area.

[7]Government of India Resolution dated January 8, 1965, reproduced as Appendix to the "Report of the Agricultural Prices Commission on Price Policy for Kharif Cereals for 1965-66," India, Department of Agriculture, New Delhi, 1965.

[8]India, Ministry of Agriculture, Department of Agriculture and Cooperation, Annual Report 1979-80, New Delhi, 1980. Under the amended terms reference the commodities to be covered by the Commission include paddy/rice, wheat, jowar, bajra, maize, ragi, barley, gram, tur, moong, urad, sugarcane, groundnuts, soybean, sunflower seed, rapeseed and mustard, cotton, jute and tobacco.

[9]The cost data are being collected under the Comprehensive Scheme for studying the cost of cultivation of crops, operated by the Directorate of Economics and Statistics. The scheme is working in sixteen states where mostly the agricultural universities plan and conduct field investigations on a continuous basis. The cost components which are taken into account include human labor, bullock labor, machine labor, all material inputs like manures, fertilizers, seeds, insecticides, pesticides, irrigation, diesel and power, as also fixed costs including interest on capital and rental value of land. The cost of human labor covers the imputed value of the family labor also--(India, Ministry of Agriculture, Department of Agriculture and Cooperation, Annual Report, 1981-82, New Delhi, 1982).

[10] India, Ministry of Agriculture, Department of Agriculture and Cooperation, "Report of the Special Expert Committee on Cost of Production Estimates," New Delhi, 1980.

[11] The price support level in this approach as adopted in USA is related to a historical average price received for the commodity and the index of price paid by the farmers, so that the purchasing power of the commodity remained more or less constant.

[12] India, National Commission on Agriculture, "Interim Report on Agricultural Price Policy, New Delhi, 1975.

[13] Kahlon, A.S. and Tyagi, D.S. Agricultural Price Policy in India, New Delhi, 1983.

[14] However the APC takes into account the changes in the index of prices of commodities which are sold by the agricultural producers and those paid by them both in relation to agricultural inputs and also the main items of consumer goods in their consumption basket.

[15] Ram Saran, Recent Changes in Food Policy, "Agricultural Situation in India," Vol. XXVII, 5, August 1971, New Delhi.

[16] Pre-emptive purchases of wheat were done in a situation when the procurement tended to be extremely low consequent on two or three successive years of low production. The general approach is that most of the procurement, particularly of wheat, is voluntary.

17
A system of public distribution has to be operated to supply reasonable quantities of foodgrains at reasonable prices, particularly to vulnerable sections of the population. So procurement from domestic production has also to be done at reasonable prices which may have to be lower than the ruling market prices in a number of years.

18
India, NCA, Interim Report on Agricultural Price Policy, New Delhi, 1975.

19
The distinction between statutory rationing and informal rationing is that in the statutorily rationed areas, the open market is legally barred from purchasing and the government undertakes the responsibility for supplying specific rationed quantities to consumers. On the other hand, in the informally rationed areas, the open market can legitimately function. (India, Department of Food, Report of the Foodgrain's Policy Committee, 1966, New Delhi, 1966).

20
Raj Krishna and Ajay Chibber, Policy Modelling of a Dual Grain Market: The Case of Wheat in India, IFPRI, Washington, D.C., 1983.

21
India, Department of Food, Report of the Technical Group on Buffer Stock of Foodgrains, New Delhi, 1976.

22
India, Planning Commission, Sixth Five Year Plan, 1980-85, New Delhi, 1981.

Annex I

Systems of Procurement of Foodgrains 1981-82

Rice/Paddy (In rice producing States during Kharif Season, 1981-82)

ANDHRA PRADESH
(i) Levy on rice millers/dealers at 50%.
(ii) 50% levy on movement of paddy outside the State.

ASSAM
Levy on millers/dealers - 50%.

BIHAR
(i) Rice millers - 50% or 2,500 quintals of rice in lumpsum.
(ii) Wholesalers - 35% or 1,000 quintals of rice in lumpsum.

GUJARAT
Levy on millers/dealers - 50%.

HARYANA
Levy on millers/dealers at the following rates:
(i) Common and fine variety - 90%.
(ii) Superfine variety - 75%.

KARNATAKA
(i) Levy on millers/dealers - 50%.
(ii) 70% levy on movement of paddy outside the State.

KERALA
Graded levy on producers of paddy.

MADHYA PRADESH
(i) Levy on millers/dealers - 60%
(ii) 60% levy on movement of paddy outside the State.

PUNJAB
Levy on millers/dealers as under:
(i) Common variety - 90%.
(ii) Fine and superfine variety - 75%.

RAJASTHAN
Levy on millers/dealers - 50%.

TAMIL NADU
Levy on wholesalers of rice - 50%.

UTTAR PRADESH
Levy on millers/dealers - 60%.
40% in certain districts.

WEST BENGAL
Levy on rice millers/wholesalers - 60%.
(Levy on rice millers reduced to 40% w.e.f. 1-4-1982).

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