AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Vol XLI
No. 4

ISSN 0019-5014

CONFERENCE
NUMBER

PART II
OCTOBER-
DECEMBER
1986

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

Ind. Jn. of Agri. Econ.
Vol. 41, No. 4, Oct.-Dec. 1986

(b) Subsidies and Taxation

REDUCING THE BURDEN OF FOOD SUBSIDY—AN ALTERNATIVE PROPOSAL

Shyamal Roy*

The objectives of Government of India's food policy are three-fold: (*a*) to ensure that the producers get reasonable prices and continue to have adequate incentives for increasing production; (*b*) to ensure that consumer prices are stabilised and, in particular, the interests of low income consumers are safeguarded; and (*c*) to build adequate buffer stocks of foodgrains with a view to ensuring both the objectives mentioned above. In order to provide the producers with sufficient incentive to increase production, the government, before each sowing season, announces minimum support prices and it is the government's policy to purchase all the quantities of grains of fair average quality offered to it for sale at those prices. The minimum support price is fixed after taking into account the costs of production plus normal profits.

In order to protect the interests of the consumers, the government, in addition to procuring grain through the price support operations mentioned above, resorts to levy purchases of part of the marketable surplus with traders/millers and producers at the procurement prices (set somewhere between the minimum support price and the open market price). The grain, thus procured, is used for distribution to the vulnerable sections of the population through a network of ration/fair price shops and/or for building up of buffer stocks.

The costs of subsidised food distribution, as can be seen, are, in some part, met by the producers/traders/millers since they have to forgo a fraction of their marketable surplus at less than the market price but, in most part, by the government, to the extent it has to maintain the issue price (the price at which it sells through the ration/fair price shops) within a reasonable margin even in the face of rising procurement/transport/import/storage costs.

Throughout India's Five Year Plans the cost of food subsidy to the government has been on the rise. For the Sixth Plan period (1980-85), on the average, it amounted to Rs. 800 crores (at 1984-85 prices) or, roughly 5 per cent of the total revenue receipts of the government. In absolute terms, this figure is likely to go up substantially during the Seventh Plan period, though as a proportion of total revenue receipts, it is projected to come down slightly.

* Co-ordinator, Centre for Agriculture and Rural Development, Indian Institute of Management, Bangalore-76.

True, the recent spurt in food subsidy (from Rs. 710 crores in 1982-83 to Rs. 1,650 crores in 1985-86 Revised Estimate) can be partly explained by the increased cost of buffer stocks consequent to bumper harvests in several years in a row and a rise in supplementary demands resulting from severe drought conditions prevailing in selected pockets of the country, but these do not explain all. For example, in 1985-86, the carrying costs of excess food stocks and total supplementary demands did not add up to more than Rs. 850 crores, still leaving a large gap of Rs. 800 crores.[1]

In what follows, the author argues that the Public Distribution System (PDS) for food in India, both conceptually and operationally, is too wide to be justified. Substantial reductions in food subsidy can be achieved, without compromising with its objectives by making the PDS more target oriented.

THE PROPOSAL

For analytical convenience the consumer groups are divided into three categories: (*a*) urban, (*b*) rural-general and (*c*) rural poor. Each is discussed separately.

Urban

The criticism commonly levelled against PDS in the urban areas relates to the practice of distributing grain at a uniform price to all sections of the urban population. Such a practice is considered, rightly so, to be not only costly but also unnecessary. The suggestion, therefore, is that the government should cater only to the needy after a careful identification and estimation of low income population. The operational feasibility of implementing this suggestion has, however, not been given any serious trial.

There are several imponderables to reckon with. For example, in India where there have hardly been any direct programmes for removal of poverty and inequality in the urban areas, where the country has all along talked about the extent of poverty and seldom succeeded in identifying the really poor, where record keeping is primitive, where information on incomes of persons other than salaried people is loaded with inaccuracies, where income-tax evasion is practised on a massive scale, how does one go about identifying and estimating the number of low income people? In a similar situation, thus, it is not surprising, that Sri Lanka, which has covered the entire population under the PDS, finds it more convenient, when the budgetary strain becomes unbearable, to cut down on the ration rather than on the beneficiaries.

An alternative way of addressing the above criticism, thus, has to be found. What is suggested here is in the form of a proposal and is based on the following facts: (*a*) The price elasticity of demand for foodgrains of the poor (in most cases close to one or even greater) is higher than that of the not

1. Government of India: Long Term Fiscal Policy, Ministry of Finance, New Delhi, reprinted by Centre for Monitoring Indian Economy, Bombay, December, 1985, p. 18.

so poor.[2] Hence government policy must aim towards safeguarding the interests of the poor against fluctuations in prices/supplies. The PDS has an important role to play in providing the means of access to this section of the population to satisfy their minimum nutritional needs. (*b*) Nutrition, expressed in calories, whether obtained from wheat, rice or coarse grains, is the same. It is estimated at 3500 calories per kilogram of grain,[3] And (*c*) the poor people in the urban areas (consisting of bottom 30 per cent of urban population) meet more than one-fifth of their total cereal demand from coarse grains (Table I, col. 5). In respect of other cereals, *i.e.*, rice and

TABLE I. QUANTITY AND VALUE OF CEREAL CONSUMED BY URBAN POPULATION, 1973-74

Income group	Per capita cereal consumption (kg./month)	Proportion (per cent) accounted for by			Implicit price paid (1973-74 Rs./kg.)			
		Rice	Wheat	Coarse grains	Rice	Wheat	Coarse grains	All cereals
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Bottom 30 per cent	10·56	45	34	21	1·78	1·40	1·27	1·55
Others	11·88	48	42	10	2·09	1·50	1·38	1·77

Source: Government of India: The National Sample Survey: Tables With Notes on Consumer Expenditure, Twenty-Eighth Round, October 1973 to June 1974, No. 240, National Sample Survey Organisation, Cabinet Secretariat, Department of Statistics, Ministry of Planning, New Delhi, 1978.

Note:—Data for the particular income groups have been derived from the concentration curves fitted to the NSS data by the author.

wheat (cols. 6 and 7), as is apparent from the price differentials, the poor consume inferior qualities of grain. And considering the fact that in the 'others' category, already a large number of middle income people are consuming coarse varieties of rice and wheat, the grains that the poor are consuming must be of the coarsest variety.

As against the above background, the PDS as it operates in the urban areas does not include coarse grains and the rice and wheat that are distributed through the ration/fair price shops, barring exceptionally bad years, are mostly of fine and superfine varieties which, even at controlled prices, are perhaps more expensive than what the poor are used to consuming. The PDS, thus, goes against the declared public policy of ensuring cheap grain to the poor; as it is, the PDS caters to the relatively better off sections of the urban population.[4]

2. John W. Mellor, "Food Price Policy and Income Distribution in Low Income Countries", *Economic Development and Cultural Change*, Vol. XXVII, No. 1, October 1978, pp. 1-26.

3. Food and Agriculture Organization of the United Nations: Tapes on Consumption of Foodgrains, 1975, Rome, 1976 (unpublished).

4. This argument can be extended to sugar also. While the poor mostly consume khandsari and gur, the PDS distributes only sugar which is consumed mostly by the not so poor.

Needless to say, if the PDS is confined only to the distribution of coarse grains and coarsest varieties of wheat and rice, automatically a large section of the urban population will drop out, only those who are needy will avail of the PDS, the size of PDS will be drastically cut, thereby reducing the extent of food subsidy and yet, such a step will not militate against the government policy of distribution of grain to the poor at affordable prices. An indirect confirmation of the above thesis can be obtained from the low off-take of PDS in some States in the current year. The low off-take is not so much due to mismanagement as to the poor quality of grain supplied through the PDS which the not so poor people do not need. But, instead of drawing lessons from this experience, the government is proposing to spend additional money to find ways of improving the off-take.

Rural-General

Rural areas not only have a larger concentration of unemployed and under-employed who suffer severely from rising prices but rural income is also highly correlated with production. While this is true, the PDS is heavily biased in favour of urban population. Except in the States of Kerala, Gujarat and Tamil Nadu where rural areas are well served by the PDS, in other States the PDS is not accessible to all the villages. There is, therefore, some pressure to extend PDS to all areas of rural India.

Is this necessary? The National Sample Survey (NSS) data bring out an interesting feature in this regard. The prices paid for cereals both by those below poverty line and 'others' in the rural areas are lower than in the urban areas.[5] The urban-rural price ratios are shown in Table II. And it should

TABLE II. URBAN-RURAL PRICE RATIOS FOR CEREALS, 1973-74

Income group	Urban-rural price ratios			
	Rice	Wheat	Coarse grains	All cereals
Poor[a]	1·06	1·02	1·09	1·08
Others	1·11	1·05	1·11	1·11

Source: Compiled by the author from Government of India: The National Sample Survey: Tables With Notes on Consumer Expenditure, Twenty-Eighth Round, *op. cit.*

a. Bottom 30 per cent of urban and bottom 40 per cent of rural population.

be noted that this relationship holds even when subsidised distribution of grain in the urban areas is taken into consideration.

Aside from the fact that the cost of living in the rural areas is lower than in the urban areas, a significant factor accounting for the above-mentioned phenomenon is that many persons in the rural areas are able to meet their

5. In the interest of space the table has not been reproduced here, but this relationship holds, by and large, even when comparison is made for the same expenditure groups in the NSS data.

foodgrain needs in full or, in part, from their own produce which, assessed at ex-farm prices, costs them less.

Given the above, there does not appear to be a case for opening up fresh distribution outlets in remote villages which lack infrastructural support and where such outlets will not be economically viable. The existing outlets may continue but the commodity composition of PDS should change on the lines suggested for urban areas so that only the needy avail of such facilities.

Rural Poor

A different set of measures is, however, needed for the rural poor (bottom 40 per cent of the rural population). This is for three reasons: (*a*) Per capita cereal consumption per month of the rural poor, as per NSS data,[6] is only 12.60 kg. as compared to 17.30 kg. for 'others'—a difference of 37 per cent (in the urban areas this difference is only 12 per cent). This suggests that the per capita consumption, in absolute terms, of this class has to be pushed up. (*b*) The rural poor live in remote areas which lack infrastructural support; they, thus, neither have their own farm produce nor do they have access to subsidised grain through the PDS. And (*c*) as a corroboration of what is stated above, the urban-rural price ratios are unfavourable to the poor when compared to 'others' (Table II).

The most effective way of bringing about an increase in the food intake of the rural poor is through food for work programmes currently being attempted under National Rural Employment Programme, Rural Landless Employment Guarantee Programme, etc. Without proper infrastructural development in areas where the poor live, the distribution of grain through the PDS will not only be prohibitively expensive but will eventually turn out to be a never ending unproductive venture.

The critical variable here is to ensure a smooth supply of grain, as an integral part of developmental activity, to the backward areas of rural India where the poor live. Once again, the government has done the mistake of distributing only wheat and rice through such developmental schemes; as a result, supplies have become erratic and, at times, costly. On the other hand, the fact is that the bottom 40 per cent of rural population meets almost 40 per cent of its cereal requirements from coarse grains and the balance, from the coarsest varieties of wheat and rice.[7] If the government sticks to coarse grains and coarsest varieties of wheat and rice, it will be able to ensure a smooth supply without compromising with the food habits of the rural poor.

Questions may, of course, be raised about the desirability of using the present consumption pattern of the poor (primarily consisting of coarse grains and coarsest varieties of wheat and rice), which are perhaps choices made under poverty conditions, as a basis for designing welfare programmes of the

6. Government of India: The National Sample Survey: Tables With Notes on Consumer Expenditure, Twenty-Eighth Round, *op. cit.*

7. Government of India: The National Sample Survey: Tables With Notes on Consumer Expenditure, Twenty-Eighth Round, *op. cit.*

type proposed in this paper. However, a welfare programme is essentially to meet the 'needs' of the people and not the 'demand'. The latter makes sense only if it is backed by purchasing power. A gradual shift in favour of superior grains should take place only by giving more purchasing power in the hands of the poor people and not through 'charity'. And this can be achieved best by making subsidised distribution of food an essential part of a developmental programme.

POLICY IMPLICATIONS

The main thrust of the arguments put forth in the preceding section is that the size of the PDS in India can be drastically cut and the amount of food subsidy considerably reduced if PDS caters only to the poor, as it should, by concentrating on commodities like coarse grains and coarsest varieties of wheat and rice. We discuss the policy implications of undertaking such a step.

The impact of substituting 'coarse grains' for other types in the public distribution system can be analysed as follows: As the share of 'coarse grains' goes up, many people will drop out of the PDS, only the needy will remain and the government will operate on a much smaller scale. In the open market supplies of wheat and rice will go up to the extent 'coarse grains' are being substituted for better wheat and rice varieties in the controlled market. Since people who were earlier purchasing this grain from the controlled market (whose demand is more price elastic than of those who have all along been buying in the open market) will also enter the open market, the demand curve facing wheat and rice may become somewhat flatter than before. Prices may fall and get closer to the theoretical price that would prevail in the absence of a dual market.

Government intervention in the wheat and rice market in the above situation should be confined to only support operations at the minimum support price. In fact, in a separate study the author hopes to be able to show that the present practice of continuously increasing procurement prices of wheat and rice despite an yield-augmenting (cost-reducing) technology, has not only discouraged acreage substitution in favour of crops like edible oilseeds, but has made wheat and rice highly non-competitive in the world market.

A second question is: If 'coarse grains' are to be distributed through the PDS and under the food for work programme, will there be adequate supplies ? This is an important question particularly in view of the fact that the long-term trend in the production of coarse grains has been showing a decline in India. However, the sluggish growth is not due to constraints on the supply side but due to those on the demand side. The income elasticity of demand for such grains is positive only at the lowest income ranges. Everytime the production has increased prices have crashed leading to a cutback in production in the following period.[8] Thus, the only way an increase in coarse

8. Shyamal Roy: The Problems of Coarse Grains in India and Their Policy Implications, Research Report No. 97, Indian Institute of Management, Bangalore, July 1983.

grains production (and, thereby, an increase in the incomes of the farmers in dryland agriculture) can be sustained is by creating additional demand for the product. In the long run, of course, demand has to originate from non-human consumption, but till such time such demand picks up in a developing country like India, generation of additional demand through subsidised distribution to the poor through the PDS, food for work programme and accumulation of stocks will go a long way towards ensuring demand and thereby maintaining the tempo of production (income) increase in dryland agriculture.

Finally, what should be the size and composition of buffer stocks under the proposed scheme? The government should build up stocks of superior grains, *i.e.*, wheat and rice only as a part of its support operations and use those strictly for exports. For stabilising domestic supplies and prices to the poor, the government should stock sufficient quantities of coarse grains and coarsest varieties of wheat and rice. In any case, a total size of 14 to 15 million metric tons of buffer stock would be adequate to offset any individual year's production shortfall. A national grain reserve adequate to meet worst-case contingencies such as the two successive crop failures of 1965-66 and 1966-67 (foodgrain production in these two years combined was about 29 million metric tons below trend) would not only be prohibitively expensive but also quite unnecessary in view of the rare possibility of such an eventuality.[9]

In sum, the PDS, as conceptualised and operationalised presently, is not only costing the government a huge amount by way of direct subsidy but is also coming in the way of realisation of certain broader sectoral development objectives of increasing the incomes of dryland farmers, production of edible oilseeds, keeping the buffer stock to manageable levels, exports, etc. Hopefully, the proposed scheme, once put to more rigorous test, will get over many of the above problems.

9. Shyamal Roy : Government Management of Foodgrain Supplies: A Critical Appraisal, Research Report No. 84, Indian Institute of Management, Bangalore, June 1982.