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**GROWTH WITH EQUITY: SOME REFLECTIONS ON THE
ROLE OF AGRICULTURAL PRICE POLICY**

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The disillusionment in the developing countries with the ability of their growth process to make a perceptible impact on large scale inequality, the widespread poverty and unemployment has led to a re-thinking on the approach to be followed to meet the economic development objectives. Great emphasis is now being placed on policies and programmes that help in achieving growth with equity. In India the anxiety of the Government in this regard is reflected in the clause added to Article 38 of the Constitution through an amendment in 1970 which reads: "The State shall, in particular, strive to minimise the inequalities in income, and endeavour to eliminate inequalities in status, facilities and opportunities not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations." However, notwithstanding this anxiety and considerable emphasis on offering equal opportunity to every citizen, the achievements in terms of various indicators of equity and social justice have so far been rather limited.¹ Thus, an analysis of policies, strategies and programmes having a bearing on emerging income distribution and growth for drawing lessons for the future is called for.

While some scholars believe that for achieving the objective of equity with growth what matters is to redistribute assets, power and access to income-earning opportunities, some others think that the solution lies in developing appropriate technologies. There is yet another group of economists rightly classified as 'price mechanists' who argue that low production, low productivity, inequality and unemployment can be eliminated by setting the correct prices which serve both as signals and as incentives.² However, a large section of economists believe that price policies at best can have only a marginal effect on equity. This paper is focussed on the role of agricultural price policy in achieving growth with equity.

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1. Achievements in regard to growth and equity have been summarised by Manmohan Singh (1986) as "While our country has made significant all round social and economic progress since independence, our achievements in terms of various indicators of social justice have been less striking."

2. According to Stewart and Streeten (1976), "One may distinguish very broadly between three schools of thought each advocating a different strategy to eradicate poverty and reduce inequality. They may be called for want of better names the Price Mechanists, the Radicals and the Technologists."

In India, agricultural price policy is being used as an adjunct to development policy for stimulating growth since the mid-sixties.³ It would be worthwhile to discuss what role, *a priori*, price policy can be expected to play in bringing about more equity along with growth and to what extent price policy has actually helped in achieving the objective of growth with equity. Finally, what modifications need to be made in the price policy or in its implementation for achieving the objective of growth with equity in the coming years need to be discussed. In Part I of the paper an attempt has been made to briefly discuss the role the price policy can play in accelerating the growth and in bringing about equity. In Part II some evidences on the pace and pattern of growth and on equity along with a discussion of those aspects of price policy that appear to have helped or hindered this process are presented. In Part III of the paper a few suggestions for making price policy more effective in accelerating growth with equity are offered.

I

ROLE OF PRICE POLICY IN ACCELERATING GROWTH
AND IN PROMOTING EQUITY

Let us first discuss *a priori* the role price policy can be expected to play in accelerating growth and in promoting equity. Agricultural prices have two important functions: (a) to allocate resources and (b) to distribute incomes. As allocator of resources, prices give signals to both the producers and the consumers regarding the levels of production and consumption respectively. Farm prices while determining the income of farmers simultaneously affect the cost of living of those engaged in other sectors.

As regards the role of agricultural prices in accelerating agricultural output, it is well-known that the growth of agricultural output can come about through (a) increase in area under crops, (b) increase in the productivity of individual crops and (c) changes in the cropping pattern from low value to high value crops. Since prices play a crucial role in determining the allocation of resources and also in capital formation, price policy can affect all the three factors through which increased agricultural production can be brought about.⁴

Agricultural prices can also affect the levels of output in other sectors due to forward and backward linkages. For example, the growth of agro-processing industries to a great extent depends on the growth of raw material output. Further, the agricultural sector plays a crucial role in earning and saving foreign exchange, agricultural prices can induce or discourage the exports of the non-agricultural sector. Agricultural prices in fact can through profitability affect the pace of investment and, therefore, the levels of output of other sectors also.

3. Although price policy formed an integral part of the development policy since the beginning, a systematic approach seems to have emerged after the setting up of the Agricultural Prices Commission in 1965.

4. For a detailed discussion, see Tyagi (1984).

Income distribution between sectors as well as within different sectors to some extent may also get affected by changes in agricultural prices. Increased or sustained higher price support levels for food can change the distribution of national income in favour of agriculture. It may, however, simultaneously affect the poor adversely through the likely consequential rise in food prices because poor people spend more of their income on food than those who are better off. In such a situation higher food prices are indeed likely to be strongly regressive in their impact on the pattern of real income in the country. Further, agricultural prices through their impact on the pace and pattern of output in other sectors as well as on the cost of living of those engaged in these sectors can affect the income distribution in these sectors. Within the agricultural sector prices can affect income distribution through their impact on agricultural output, agricultural employment (higher price may stimulate employment both through supply response in production and through increased demand associated with producer incomes) and on cost of living. These apart, agricultural price policy if accompanied by a simultaneous increase in operating efficiency of the marketing system may result in improving the bargaining power of the small holders. However, if the agricultural sector is characterised by large disparities in asset holding including land, price policy may further accentuate the disparities in the income distribution within agriculture. Another related issue is that of regional disparities within the agricultural sector. Price policy may stimulate production in only well endowed areas and thus generate or accentuate disparities between different regions.

A full scale discussion and analysis of the impact of agricultural price policy on equity in the economy as a whole would be difficult within the scope of the present paper. In fact, to identify adequately the complexity of the inter-dependence of agriculture and the economy as a whole and the effects on them of a change in agricultural prices requires analysis by means of a series of simulations of a fully specified macro model of the economy. However, an important proposition on which some exposition would still seem desirable is that higher food prices if sustained would adversely affect the urban poor as a large proportion of their income gets spent on food. The two other aspects taken up for analysis and discussion in this paper are (a) impact on income distribution within agriculture and (b) impact on regional disparities.

II

IMPACT OF PRICE POLICY ON PACE AND PATTERN OF GROWTH AND ON EQUITY

The proposition stated above that higher food prices would adversely affect the urban poor as a large proportion of their income gets spent on food, needs to be critically examined. What is missed in this proposition is that higher prices of food articles may result in inducing larger investments in the food producing sector and as a consequence either the production function might shift upwards or the farms might move on the same produc-

tion function to a point of higher efficiency. In either case the result would be to lower the unit cost because of rise in productivity. This gain in productivity can then be shared between the producers and the consumers. The possibilities of such shifts in the food production process are often provided by technological innovations like irrigation, fertilisers and high-yielding varieties of seeds.⁵

Evolution of high-yielding varieties (HYVs) of wheat provided such an opportunity in the mid-sixties. For realising the full potential of these varieties, large investments were necessary in tubewells, pumpsets, etc. The policy options then probably were (i) sustain wheat prices at remunerative levels so that the farmers are encouraged to adopt/invest in yield-raising practices/infrastructures or (ii) allow wheat prices to decline so that the benefits of higher productivity and production are passed on to the net buyers of foodgrains instantaneously. By following approach (i) net buyers could benefit after a few years when as a consequence of increased productivity the unit cost of production had declined and lowering of wheat prices was unlikely to give a set-back to the tempo of increasing yield and production. The advantage in this approach was that its benefits could be more lasting. In the second case however gains would have been short-lived as higher growth could not be sustained without giving remunerative price to the producers.

An analysis of cost of production of wheat and of prices fixed indicate that in the early seventies, the margin allowed in the prices fixed over the operational cost was as high as 110 per cent. As the foodgrains availability position improved, the margin was reduced to 74 per cent by 1978-79 and further to 61 per cent by 1983-84 (Tables I and II). The larger margin allowed in the early phase induced the farmers to adopt better technology and to invest in a big way in yield-raising infrastructural development programmes.⁶ As a result, the productivity increased and the unit cost (at constant prices) declined.⁷ Thus, because of a large increase in productivity, the farmers' overall returns did not suffer even when the margins were lowered and the process of rising yield and investment continued.

As a consequence, whereas in 1970 as much as 12.9 per cent of the per capita income was required to buy a quintal of wheat, in 1980 only 7 per cent of the per capita income was sufficient to purchase the same quantity. Further, during 1984 this percentage works out to no more than 6.4. Thus,

5. How technological innovations can help in increasing both economic and physical access to food, see Bhalla and Tyagi (1985).

6. It is estimated that between 1970-71 and 1983-84 as much as 15 million hectares of additional irrigation potential have been created through the investments made by the farmers in irrigation works like tubewells.

7. For example, on the basis of their analysis, Kahlon and Tyagi (1983) concluded: "The impact of new technology on cost of production at constant price becomes more clear from the data available for Madhya Pradesh where yield per hectare showed an increase of 50 per cent during the period under consideration.... Thus the technology had helped in bringing the operational cost down." The CACP also in its report on price policy for wheat for 1982-83 season observed: "if the triennium averages are taken for the period ending 1972-73 to 1980-81, the operational cost per quintal of wheat production at 1971-72 constant prices shows a decline of 7.7 per cent" (CACP, 1984).

Table I. Return Allowed in Prices of Wheat over
 Estimated Cost of Production in Punjab

Crop year	Cost A ₂ plus family labour (Rs. per qtl.)	Price recommended by CACP (Rs. per qtl.)	Return
			Col. (3) — col. (2) Col. (2) × 100
(1)	(2)	(3)	(4)
1970-71	35.14	74.00	110.59
1971-72	37.86	72.00	90.17
1972-73	42.51	76.00	78.78
1973-74	48.04	95.00	97.75
1978-79	66.01	115.00	74.22
1983-84	92.56	155.00	67.46

Notes:- 1. Cost A₂ + includes all expenses in cash and kind incurred in the production by the owner cultivator and rent paid for leased-in land (if any).

2. Figures in col. (4) denote the percentage return on the recommended procurement price over cost per quintal (A₂ + family labour).

 Table II. Procurement Price and Cost of Production of
 High-Yielding Wheat, Punjab, 1967-68-1977-78

Production year	Average cost ^a	Procurement price in marketing year	Proportion by which the procurement price exceeds the average cost (per cent)
(1)	(2)	(3)	(4)
	(Rs./quintal)		
1967-68	50.02	76.00	51.94
1968-69	67.45	76.00	12.68
1969-70	62.69	76.00	21.23
1970-71	60.96	76.00	24.51
1971-72	59.71	76.00	27.28
1972-73	67.10	81.00	20.72
1973-74	74.34	105.00 ^b	41.24
1974-75	87.76	113.00 ^b	28.76
1975-76	99.45	113.00	13.62
1976-77	101.39	110.00	8.49
1977-78	108.45	112.50	3.74

Source: Sidhu (1979).

Notes:- The production year runs from July to June and the marketing year from April to March. Thus, the output of crop year 1967-68 would be marketed in the marketing year 1968-69.

a. These figures include family supplied inputs valued at market prices.

b. This figure includes the imputed value of special fertiliser subsidy (Rs. 8 per quintal of wheat).

the rise in the prices of wheat as well as of rice—two important staple foodgrains had been at a rate much lower than the growth in the per capita income (see graph). Thus, even if the income distribution within the non-agricultural sector had remained unchanged at current prices, a slow rise in the prices of foodgrains should have resulted in higher consumption and real income for the poor than in the early seventies.

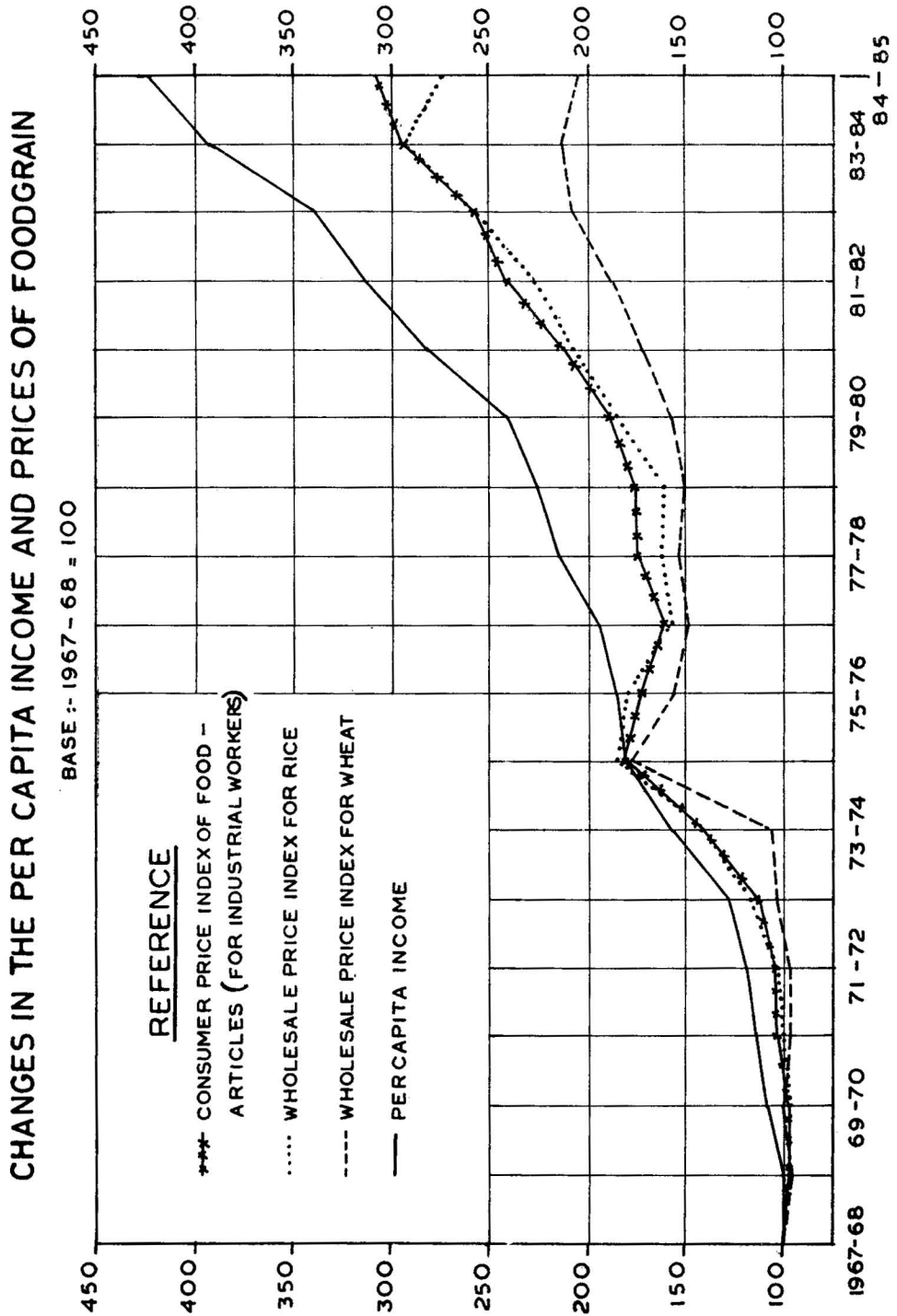
It needs to be appreciated that increase in productivity of those agricultural commodities which have a predominant share in wage goods, even when brought about through offering incentive prices to the producers initially, can have favourable effect on real wage rates. While reliable data on distribution of income are not readily available, the National Sample Survey (NSS) data on consumer spending do indicate some decline in inequality. The Gini coefficient for urban areas was estimated at 0.33 for 1967-68 and also for 1970-71, but at 0.30 for 1973-74 and also for 1983-84. Further, the share of bottom 30 per cent in consumer spending is also reported to have gone up albeit marginally (Manmohan Singh, 1986).

In this context, I would also like to quote from a study carried out by Quizon and Binswanger (1984):⁸ “During the early Green Revolution period (for the three-year period centering on 1965-66 to the three-year period centering on 1970-71), real per capita income of the rural population of India rose by about eight per cent. However, these gains were rapidly eroded. The sobering point is that in 1980-81 real rural per capita income appears to have been only about 2 per cent higher than that in 1960-61. The early productivity gains of the Green Revolution were retained by the agricultural sector because Indian policy makers used these gains to reduce imports of foods. Food prices therefore continued to rise slightly. But when near self-sufficiency was reached, all the extra output had to be absorbed domestically, and terms of trade moved substantially against agriculture. *The benefit of the productivity gains were thereby transferred to consumers, a classic case of the well known mechanisms of the agricultural treadmill.*”

It is evident from the above that the short-term and long-term impact of price policy could be quite different and much depends on the way price policy gets modified in response to changes in the demand and supply. Price policy could provide a helping hand in raising foodgrains output and with a time lag could be modified to allow for sharing of gains from the rise in productivity.

In this context, however, it needs to be emphasised that a policy of encouraging crops in the case of which better technology becomes available may have an adverse impact on growers of those crops for which better technology has not been developed. Further, if the growers of these crops are concentrated in a few regions, inter-regional disparities may even widen. We

8. However, Subbarao (1985) concludes that an upward pressure on food prices—both free market and administered—would worsen the real income position of farm labour, marginal and small farmers and urban workers and urban marginals.



shall discuss this issue a little later, taking the case of wheat and rice vis-a-vis coarse cereals.

Distribution within the Agricultural Sector

The agricultural sector can be conceived as consisting of (a) farmers with marketed surplus to sell, (b) farmers growing crops for self-consumption only, and (c) landless labourers and others depending on farmers for employment. Changes in the prices affect only those who enter the market either as sellers or buyers. An increase in the price instantaneously improves the position of those in category (a), but may have an adverse impact on those in category (c) if the increase in their wages and employment fails to counter-balance the adverse impact of rise in their consumer price index. Within the group (a) also the rise in producer prices or their stabilisation at remunerative levels will benefit the larger producers most because the increase in their sales is likely to be much greater than the additional cost of their food purchases. The small, semi-subsistence farmers will gain or lose depending on the relative size of the higher value of their sales as compared with the additional cost of their food purchases.

It ought to be appreciated that producer price support as such can in no way be adjusted to reduce the income inequality which it necessarily generates; its benefits are positively related to the marketed surplus. The proper instrument for reducing the inter-farm inequality of marketed surplus rooted in the inequality of land holding and ownership or access to other means of production, is the redistribution of these assets.

Some scholars have tried to analyse the impact of prices on income distribution in the agricultural sector. Based on the results of an empirical simulation model of the impact of food price policy in a computable general equilibrium framework, Subbarao (1986) concludes: "The above analysis suggests that price support programmes are, in the short run, highly regressive on the distribution of real income, creating sharp losses in purchasing power for the rural and urban poor. Even in the longer run allowing for supply response, these classes lose while the rich farmers gain substantially in nominal and real incomes. While agricultural output can be modestly stimulated through price incentives, the social cost of this approach to output growth appears to be excessively high in the prevalent context of massive poverty."

In contrast, some other scholars have on the basis of their study arrived at an opposite conclusion. Recognising that the distributional outcomes from general equilibrium models depend crucially on labour market assumption,⁹ Quizon and Binswanger (1984) model the real rural wage by equating supply and demand for labour. The results of their model on simulated income distribution in India for the period 1960-61 to 1980-81 are pre-

9. It is well-known that the distributional outcomes from general equilibrium models depend crucially on labour market assumption. For example, see Taylor (1982) and Tyagi (1986).

sented in Table III. The table shows what would have happened to the real income of a person in a particular quartile because of changes in agricultural production and technology, agricultural output and input prices, non-agricultural incomes and prices and population.

They conclude: "The trends in output and factor prices, and in agricultural and non-agricultural income, suggest that real aggregate per capita income among rural people grew by only about 8 per cent during the early Green Revolution, after which it declined and stagnated. Despite a drastic shift in the distribution of rural income from wages to profits, the rural income distribution was remarkably stable over the period as a whole. The rural poor did not suffer excessively from the adverse wage trends because agricultural employment increased somewhat and because the poor participated to a small extent in the growth of farm profits. About 11 per cent of their income was derived from such profits. They also had substantial gains in non-agricultural incomes, and as consumers, they benefited from the decline in agricultural prices during the last five years of the 20-year period."

Not only do the results based on simulation models differ but those based on the data collected through surveys also provide conflicting evidence. However, in this context Ahluwalia's (1986) conclusion based on a rigorous analysis are worth noting: (i) There is fairly strong evidence of an inverse relationship between agricultural income per head and the incidence of rural poverty, especially if account is taken of lagged effects. (ii) There is no evidence that this relationship has weakened since the green revolution. It needs to be emphasised that sustained growth in the per head agricultural income on which the above conclusions are based was the result of higher growth of agricultural output in which price policy had played an important role. Thus, price policy can help in stimulating agricultural growth which, if sustained, would result in increased income not only of the large producers but also of small farmers and agricultural labourers and thereby helping many of them to cross the poverty line. It is this role of price policy which does not necessarily result in more equity but does result in improving the conditions of small farmers and agricultural labourers that need to be appreciated.

Marketing Efficiency and the Small Farmer

In contrast to the impact of level of prices the benefits of which are positively related to the size of marketed surplus, there are other aspects of price policy which may tend to help the small farmers more. For example, price policy implementation in most cases results in increasing the operational efficiency of the marketing system. Since in an inefficiently operating market it is mostly the small farmers who suffer the most, implementation of price policy may result in better equity. It is also well-known that due to lack of holding capacity, it is the small farmer who sells his produce immediately after the harvest whereas a large producer may wait in the expectation of a higher price later in the season.¹⁰ In this case also if implementation

10. For example, Dantwala (1976) states: "There is substantial evidence indicating that the big farmers obtain much higher prices than the small farmers for their produce either because of their better bargaining power or capacity to withhold stocks in a situation of rising prices."

Table III. Simulated Income Distribution in India, 1960-61 to 1980-81

(Base 1970-71 = 100)

Endogenous variables		1960-61	1965-66	1973-74	1975-76	1980-81
	(1)	(2)	(3)	(4)	(5)	(6)
Real national per capita income (actual) (m)		91.96	95.00	95.10	95.36	105.87
Real per capita income by quartile	R ₁	100.92	98.96	95.87	97.41	106.97
	R ₂	96.90	95.82	94.61	94.83	99.89
	R ₃	93.75	93.51	93.78	93.29	96.32
	R ₄	88.47	88.59	92.35	90.71	88.76
Aggregate rural	U ₁	92.88	92.43	93.56	92.94	94.94
	U ₂	91.90	100.38	98.04	100.69	136.00
	U ₃	90.86	102.76	99.33	102.57	141.85
	U ₄	90.18	102.74	99.65	102.52	139.26
Aggregate urban		87.61	102.26	99.76	102.21	133.45
		89.35	102.28	99.44	102.16	156.65

Source: Quizon and Binswanger (1984).

Table IV. Comparative Rates of Growth and Cost of Production (A₂ + Family Labour) of Paddy

Particulars	Punjab	Uttar Pradesh	Andhra Pradesh	Bihar	Assam	Madhya Pradesh	Orissa
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Compound rate of growth of production of paddy from 1967-68 to 1983-84 (per cent per annum)	16.90	4.12	4.13	(-) 0.42	1.74	0.94	(-) 0.52
Cost of production of paddy (A ₂ + family labour) (Rs. per quintal)							
1981-82	72.27	75.23	70.67	53.71	72.17	64.14	76.40
1982-83	71.92	82.34	81.81	78.83	58.93	75.01	94.74
1983-84	85.37	81.12	94.35	72.05	71.94	60.58	72.18
Average of triennium ending 1983-84	76.52	79.56	82.28	68.20	67.68	66.56	81.11

Note:-- Cost A₂ is all actual expenses in cash and kind incurred in production by owner plus rent paid for leased-in land.

Source: Directorate of Economics and Statistics, Department of Agriculture and Co-operation, Government of India, New Delhi.

of price policy results in narrowing the intra-seasonal variation in prices, it is the small farmer who benefits the most. Such a development in turn would result in a more equitable income distribution.

To illustrate how improvements in the operational efficiency of the marketing system may have helped in bringing about a more equitable distribution, I shall discuss the case of VFC tobacco and jute.¹¹ In 1977 when the Government first asked the Agricultural Prices Commission (APC) [now the Commission for Agricultural Costs and Prices (CACAP)] to recommend minimum support price for VFC tobacco, monopsonistic conditions prevailed in the VFC tobacco market. The Commission had summarised the problems faced by tobacco growers as follows: "A major problem assailing the tobacco farmer is the inadequate market infrastructure. The age-old practice of the farmer bringing tobacco in *kutchha* grades to the buyers' platforms by and large continues at the primary level. In what seems practically to be a buyers' market dominated by a few buyers in a monopsonistic position, the tobacco farmer is subject to several disadvantages like unauthorised deductions, heavy market charges and deferred payments,"¹² Recognising that for implementing price policy the system of marketing of VFC tobacco has to be changed, several measures were initiated. In 1985, all the VFC tobacco crop is reported to have been purchased through the auction system. Further, the entire crop in Karnataka and about 65 per cent of the total auctioned quantity in Andhra Pradesh are estimated to have been marketed in terms of straight farm grades. The establishment of auction platforms and introduction of plant position grades in Karnataka and in northern light soils of Andhra Pradesh and of farm grades in the rest of Andhra Pradesh has helped in ensuring VFC tobacco growers a fair price for their produce. No doubt, large as well as small farmers have been benefited from the improvements in the marketing of VFC tobacco but it is the small farmer who had benefited the most.

In the case of jute in the absence of regulated markets in the jute growing States, non-existence of a scientific system of grading and prevalence of growers' selling to peripatetic dealers at their door steps, the farmers particularly the small farmers used to get much lower price for their produce. With the establishment of Jute Corporation of India (JCI) to undertake price support operations and its making purchase in hats and in weekly markets through mobile purchase units, at least those small producers who were able to sell to JCI were in a position to get the minimum support price. As a consequence, the disparity between the prices received by the large pro-

11. According to the Agricultural Census 1976-77, in 1976-77 nearly 45 per cent of the area under jute was on holdings of less than two hectares and 44 per cent of the area under tobacco in Andhra Pradesh was on holdings of less than five hectares. Thus, a large number of tobacco and jute growers are small and marginal farmers.

12. VFC tobacco then used to be brought by the producers to the buyers' platforms in the form of so-called *kutchha* grades. Price was to be settled by negotiation between the buyer and the seller.

ducers and the small producers should have narrowed down substantially. Further, the introduction of scientific system of grading¹³ in the marketing of jute would have significantly increased the bargaining capacity of the small producers.

As regards intra-seasonal variations in prices, these have gone down perceptibly in the case of wheat¹⁴ and rice and consequently the gap between prices realised by the small and large farmers have narrowed down. However, in many commodities these variations continue to be large and the possibilities of large producers realising higher prices than the small farmers cannot be ruled out. In this regard it needs to be emphasised that as a consequence of narrowing price differential between the post-harvest and lean season, the market arrivals of wheat and paddy are getting more and more concentrated during the immediate post-harvest period.¹⁵ This creates problems of storage, transportation and also of maintaining quality. Thus, the method of reducing intra-seasonal variations in prices to levels below the economic cost of storage though it results in reducing the gap between the prices received by the large and small producers, creates problems of storage and transportation. The solution to the problems faced by the small farmers as a result of low stock holding capacity would seem to lie in developing a market infrastructure where the small producers could pledge their produce and get advances against it, and may take decision later on in the season regarding the final sale of the produce.

Inter-Regional Disparities

Due to differences in resource endowments of land, water, etc., there exist wide inter-regional disparities. There are differences in soil composition and its texture, amount of rainfall received, levels of infrastructural development which differ for historical and demographic, economic and social factors. The rates of growth of agricultural output recorded in different States display large variations and consequently income disparities between regions have also widened.¹⁶ It is the north-western States of Punjab, Haryana and Uttar Pradesh which have recorded fairly high rates of growth

13. It is well-known that trading on the basis of accepted quality standards makes pricing more precise and equitable and it is difficult to be achieved without having scientific system of grading. With the introduction of ISI grades the price of jute got linked to its quality.

14. In the case of wheat the wholesale price index in 1984-85 season showed an increase of only 5.4 per cent between May 1984 and February 1985.

15. For example, in Punjab whereas in the early sixties nearly 50 per cent of wheat used to arrive in the markets during April-June, this proportion increased to 70 per cent by the early seventies and further to 93 per cent in the early eighties. The concentration has become so intense that during the 1984 marketing season as much as 72 per cent of the total marketed surplus arrived in the market in a five-week period.

16. According to Subbarao (1985), the benefits from a combination of incentive policies comprising price support, input subsidies (fertiliser subsidy in particular) and subsidised credit have accrued disproportionately to prosperous regions and affluent farmers.

ranging between 3.1 and 3.9 per cent per annum during 1969-70 to 1983-84. Interestingly, the two dry States of Gujarat and Maharashtra have also registered a high growth rate in this period. On the other hand, whereas Andhra Pradesh and Karnataka have experienced a moderate rate of growth, the performance of other southern States, *i.e.*, Tamil Nadu and Kerala has been rather disappointing. Again, in the eastern region, while in Orissa and Assam agricultural production has recorded a moderate growth, in the States of Bihar and West Bengal output has grown at a paltry rate of less than one per cent per annum.

In certain quarters price policy is being held responsible for the emergence of these disparities.¹⁷ It is being argued that since cost of production in the slow growth regions is higher, a policy of fixing prices at a uniform level throughout the country fails to cover the cost of production in the slow growth regions and consequently, the farmers are unable to invest in yield-raising infrastructural development programmes. In this context, it needs to be mentioned that though the cost of production across regions shows wide variations, the range of such variations is not very large. The available data on cost of production for a major crop, *viz.*, paddy in years of comparable weather indicate that the costs are generally lower in the States where growth is slow than those in the States with high growth rates (Table IV). For example, in 1983-84 whereas the cost of production of paddy (cost A₂ + labour) varied only between Rs.60.58 and Rs.72.18 per quintal in the States where the growth of paddy was reported to have been low, it varied between Rs.81.12 and Rs.94.35 per quintal in the States where paddy had recorded a significant growth. Further, the prices in general have tended to rule at a much higher level than the minimum support price in most of the States where agricultural growth has been tardy. Thus, it needs to be appreciated that it is not the prevalence of unfavourable price climate (generally looked as the difference between cost of production and prices received by the farmer) but the existence of structural bottlenecks which are primarily responsible for the slow productivity in these States. The problem of low productivity and low growth in these areas is unlikely to be solved by the introduction of regionally differentiated prices — the solution lies in removing the structural bottlenecks through significant investment in irrigation and other infrastructures.

This is not to say that operation of price policy cannot have any effect on the regional disparities. There are many ways in which the operation of price policy may contribute towards emergence of regional disparities although their impact in most cases at worst would be only marginal. Let us take the case of wheat. The wheat revolution in India was led by the technological breakthrough and sustenance of profitability of its cultivation through the fixation of procurement prices. As the technology spread to new areas the productivity gains were lower. However in

17. See, for example, Subbarao (1985).

the new areas, the cost of necessary infrastructural developments was much larger than in the areas where the technology first spread. For example, in the State of Uttar Pradesh, the installation cost of tubewell in a district like Meerut (in western U.P.) is much lower than say in Jaloan (in Bundelkhand) and by the time the farmers of this district wanted to invest in tubewells, the real cost has further gone up due to a slow rise in the prices of wheat as compared to a rise in the cost of tubewell installation.¹⁸ In such circumstances regional disparities may widen. However, it needs to be appreciated that the solution to such problems lies not in tampering with the prices but in subsidising infrastructural development programmes in the lagging regions.

Another factor that can contribute towards the development of regional disparities is the implementation of price policy. In the slow growth areas, the magnitude of marketed surplus being low, the public sector agencies may on their part find it uneconomical to operate sufficient number of purchase centres in these areas and thus the farmers may fail to realise the full benefits of price support programmes. By extending the market support operations of public sector agencies in areas where the surpluses are to emerge and prices are likely to fall below support, such problems can be effectively tackled.

Apart from the above, if price policy is not implemented properly in respect of crops mainly grown in a few States, regional disparities may widen. For example, until a few years back proper arrangements did not exist for implementing price policy in the case of coarse cereals. In the absence of a public sector agency responsible for price support on the one hand and the Government's commitment to subsidise the State Governments on the losses incurred in the procurement and distribution of coarse cereals only to the extent of 50 per cent on the other, the coarse grains were sold at prices lower than that fixed by the Government in many markets. On the other hand, the case of full compensation of losses on coarse grains distribution was even stronger than that for wheat and rice as coarse cereals are generally produced in rainfed areas and consumed by relatively poor sections of the population.

In this context, it may also be mentioned that as a part of price policy, distribution of foodgrains through the public distribution system (PDS) can be effectively used to narrow down the differences in the per capita availability of foodgrains in different States. An analysis of distribution of foodgrains through the PDS indicate that, by and large, it has helped in reducing the differences in the per capita availability. No doubt, such a system helps in narrowing the differences in the per capita real incomes in different

18. During the period 1970-71 to 1978-79 whereas the procurement price of wheat was raised by 48 per cent, the price of electrical motors rose by 78 per cent and that of cement by 97 per cent.

States, but it could also be argued that a larger distribution through the PDS in States where per capita production is low results in lowering the market price and this adversely affects the growth of foodgrains production in these States. However, the analysis of price behaviour in most States indicates that prices in the deficit States have generally ruled at levels much higher than that in the surplus areas and well above the cost of production in these States. Thus, whereas there are many aspects of price policy which can contribute towards the emergence of regional disparities, their impact at worst would be only marginal. Further, as in the case of effects on income distribution within agriculture, the impact of price policy could be quite diverse in the short and long run on the emergence of regional disparities. However, in price policy implementation crops grown in the less endowed regions must be given the same priority as is given to crops grown in better endowed regions. Since slow growth in lagging regions is the result of structural bottlenecks requiring large investments, price policy is not an appropriate instrument for accelerating their growth.

III

SUGGESTIONS FOR MAKING PRICE POLICY MORE EFFECTIVE IN ACCELERATING GROWTH WITH EQUITY

We have seen above that (a) direct and second-round effects of price changes could be quite different, (b) it is by no means certain that all farmers will benefit equally through any adjustment in prices, (c) price policy if implemented only in respect of crops predominantly grown by regions better endowed will result in inducing regional disparities, (d) even a policy that in the short-run seems to have a more egalitarian effect may generate inter-regional disparities in the long run, and (e) price policy implementation if it is accompanied by an increase in the operational efficiency of the market may have a more beneficial impact on the small farmers than on the large farmers. Producer price support as such can in no way be adjusted to reduce income inequality which it necessarily generates because of wide inequality in land distribution and thus price policy should not be regarded as an important instrument for bringing about equity.

In view of the above, price policy implementation needs to be accompanied by structural and other non-price measures to directly tackle the question of equity. As regards price policy, its implementation should be so designed and administered that it ensures participation and realisation of full benefits by the small farmers. Price support should cover, as far as possible, those crops predominantly grown by the small farmers, thereby meeting income distribution objective. Producer price incentive when given for accelerating investment by the farmers in yield-raising infrastructures should be accompanied by food subsidies to reach both rural and urban poor to counteract the adverse effects of price increase. Later on, productivity gains arising out of technological development need to be allowed to be shared between the producers and consumers gradually.

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