PRICES AND INCOME OF FARMERS
SOME IMPLICATIONS OF PRICE POLICY.

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The purpose of this paper is to show how farm management data can be used for finding out the effect of changing level and the structure of the prices on farmer's income. It is not necessary that farmer's incomes change in the same proportion as the price-rise. Because whenever there is a rise in the level of prices of agricultural commodities, the structure of prices also changes. The price of some commodities rises faster than the others. Specially the price of inputs may change with the different speeds. Out of the main inputs which the farmers put on his farm, it has been generally observed that the wage rates of unskilled and skilled labour changes more slowly than general price rise. During last several years the prices of oil cakes, which are used for feeding bullocks, have increased faster than general price rise. Further there are certain costs like the land revenue, irrigation charges, cost of fertilizers that have remained almost constant. In the face of these differential increases it is not possible to ascertain without a detailed investigation, whether the income of farmers of particular region is rising faster or slower than the rise of the prices of his outputs. As has been shown by the author elsewhere the price rise may not only affect cultivators of different soil climate complexes differentially but also may affect farmers of different size holdings in different manner.* In that study it was shown that the price rise in 1956-57 over that of 1955-56 benefitted the bigger cultivators much more proportionately than the smaller ones.

Relationship between Prices and Income of farmers

Below the average effect of price on the incomes of the cultivators of three areas of the farm management studies have been investigated, on the assumption that their input output has remained the same, as it was in the year 1954-55, 1955-56 and 1956-57. Their farm business income in the year 1962-63 to 1963-64 has been calculated. The areas

* Artha Vijnana, April 1962
for which this work is done are those covered by farm management studies of Punjab, Bombay and Madhya Pradesh. This should be considered only illustrative as source of wages as well as of wholesale prices on which the reliance has been made are far from satisfactory. I remember that when these farm management studies were about to be finalised there was a scheme mooted by Directorate of Economics and Statistics of continuing collection of price and wage data in these areas, so that more meaningful and useful studies can be done about them. I, however, do not know whether the scheme was taken up at all, though I have not found any results published so far. In absence of any such reliable information, we have used wage series as available in Agricultural Situation in India, and price series of the Economic Adviser’s Wholesale Price Index. Needless to say that this makes any conclusions only illustrative.

The results of these three calculations are given in the attached tables. It will be seen that in 1964 prices of the output in Punjab rose by 50 per cent while the income rose by as much as 65 per cent. Similarly in Bombay rise in prices of output was 43 per cent while the income was calculated to have increased by 48 per cent. In Madhya Pradesh, however, the increases in the two were almost equal. However the tendency of greater rate of increase in income than that of prices has not been borne out in the year 1962 and 1963. In Bombay the prices rose in 1962 by 11 per cent, and the increase in income was found to be almost equal (10 per cent). But in 1963 while the prices were 9 per cent higher, the income was the same. In Punjab and Madhya Pradesh also the rise in income has been a bit lower than in prices in these years.

One point may be noted. To find out the relationship between the rise or fall in prices with rise or fall of income the detailed study of the basic structure of farm business is necessary. Such relationship can not be found out by simple regression techniques as these relationships are not simple but are dependent on a residual and related to price change in a complicated way. Secondly, without the detailed study, it is not possible to say whether the income of a particular group will increase at higher, lower or at the same rate as the prices of their output.
Implications for Price Policy

This has important implications about the consumption demand of the farmer. The consumption demand of a cultivator, as of anybody else, is dependant on his total income. Lots of family budget studies have conclusively proved that the consumption of a farmer neither depends on his subsistance requirements or such things "customary consumption of his family". They are directly dependant on his income. Now if a rise in prices leads to proportionate rise in his income, his consumption of self produced goods like foodgrain will not be affected. If on the contrary the rise in prices leads to proportionately greater rise in his income the consumption of his family will increase and vice-versa. Further, if we assume that there are no speculative activities by the cultivator, the marketable surplus will change with the rise in price. If income increases at a lesser rate than price increase, the marketable surplus will increase with the price rise and if income increases at a higher rate than the rate of the rise of prices this marketable surplus will decrease with price rise. Apriori any definite statement about this can not be made. For instance we can not say that higher the price the larger will be the stocks that will be marketed in the short run.

The function of agricultural price fixation is primarily an equitable distribution of agricultural products in general and foodgrains in particular. Theoretically it is possible to acquire whole of the agricultural product in the country, and distribute it according to some pre-conceived norms among the whole of populace. But such a big operation has not been possible administratively even in totalitarian countries. On the other hand, it is well recognised that in a developing economy like that of our country with a scarcity of foodgrains we can not leave everything to the market forces. Our price structure should be such as to facilitate the administrative work as much as possible. For instance, in agriculture we may aim that the price should be fixed at a level which will bring to the market amount of grain determined in accordance with distribution requirement in the rest of the population. Administrative measures may be used to acquire this particular amount of grain to forstall any speculative activity of the farmer. If we fix prices at a level at which, ordinarily the
required amount of marketable surplus will not be coming, then by
procurement we shall have to cut into the resources which the
cultivator will keep ordinarily for his consumption. This policy may
be very difficult to operate and may lead to hardships to the cultivators.
We have seen above that with the help of farm management data,
and reliable market information about wages etc. we can get the
estimate of the income and its distribution for every group of farmers
for any given structure of prices. Once that is known family budget
studies would give us the likely consumption of the cultivators. It will
be thus seen that for every given structure of prices the desired cons-
umption of cultivators can be calculated and thus the marketable
surplus can also be calculated as a residual. The rational price system
should be based on the study of these relationships.

When determining different types of price like support prices
for agriculture, maximum price for a season, and/or a purchasing
price for the Government purchasing agency, the results of above
calculations have to be borne in mind. The whole operation should
not be left to just trial and error. Firstly, the method of trial and
error converges slowly leaving lot of wastage and wrong decisions and
secondly, the method of trial and error can not continuously take
account of changing dynamic economic conditions of a developing
economy. In such an economy there are lots of purposeful economic
decisions regarding the trend in development, affecting purchasing
powers of the various sections of community. By having an analy-
tical view, these considerations can be brought to bear in determining
support, maximum or purchase prices of various agricultural commo-
dities.

In conclusion I plead for a wide-spread study in different
regions of agricultural income and prices to help us in the supreme
task of steering the economy through its difficult growing decade.
### Price and Income Indices for Agriculturists

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