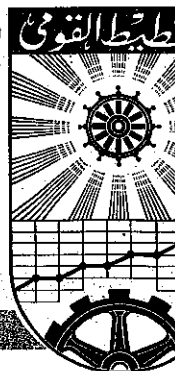


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Agricultural Prices
"Bases of Setting and Control"

By

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"Opinions Expressed and Positions Taken by
Authors are Entirely their Own and do not Nesessarily
Reflect the Views of the Institute of National Plan-
ing".

"The main points and ideas in this thesis
depends upon the authors Ph.D. Dissertation about:
The Organization of Agricultural Market and Control
Agricultural Prices in Developing Countries, With
Special References To A.R.E. (Egypt) - The Central
School of Planning and Statistics - WARSAW - 1972".

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PREFACE

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Agriculture, in most developing countries is still the dominant sector of the economy. Till the industrial sector takes the lead, agriculture will continue to play a predominant part in the growth of the economy and will be the major contributor to the increase of national income.

In developing countries, agriculture contributes to economic growth. It has been the main source of labour force for other economic sectors. Supply of food and industrial raw materials, is also one of the most important tasks of agriculture in developing countries. If food supply fails to expand in pace with the growth of demand, the result is likely to be a substantial rise in food prices. To support the establishment of agriculturally - based industries, it is necessary to expand raw materials production.

In developing countries, particularly during the early stages of economic growth, agriculture shoulders the major part of the financial burden of economic development - in domestic or foreign currencies - since it is the major producing and exporting sector.

Until and unless industrial development has reached that stage at which these countries would be in a position to export manufactured goods their foreign exchange position will be dependent mostly on the volume a

value of the exports of agricultural commodities. As such priority has to be given to agricultural production as a source of foreign exchange earnings and also as means to counteract inflationary pressures in the economy.

The historical experience of the economically developed countries indicated that industrial expansion was preceded by the development of agriculture. It is logical to stress that, it is rather difficult to achieve industrial development without agricultural development. The growth of industries in turn have a beneficial effect on the agricultural development. In fact there is a close inter relationship of the agricultural and industrial development. Industrialization requires modernization of agriculture, and adversely, modernization of agriculture requires industrialization.

This close interdependence of the agricultural and industrial sector of the economy has led to the suggestion that there should be a balance in the development of both these sectors in order to ensure stable overall economic growth. If increase in agricultural production takes place without corresponding expansion of the non-agricultural sector, the demand for agricultural products will fall short of supply, and this would lead to depression in agricultural prices and fall in incomes.

On the other hand during the process of economic growth an increase in both income and employment take place. This, leads to an increase in the demand for agricultural products. The success of developing countries in avoiding inflation and accelerating economic growth can be largely attributed to their success in solving the problem of increasing agricultural output.

The basic prerequisite for a rapid industrialization of a developing country is a revolutionary upsurge in agricultural production.⁽¹⁾

The lack of sufficient food marketed surplus in the developing countries is a drage on their efforts towards industrialization, because it makes it more difficult to shift workers away from agriculture and provides them with sufficient quantity of food products. Also, the lack of marketing facilities are obstacles for mobilizing the agricultural marketed surplus to consumer centres, and industries.

To increase agricultural output, to mobilize the agricultural surplus, and to ensure farmers fair prices and stable incomes, it is necessary to organize agricultural market and control agricultural prices.

Low agricultural prices may discourage farmers to increase their production and on the other hand a rise in food prices gives rise to political discontent which may hinder development.

(1) Kalecki, M. - "Unemployment In Underdeveloped Countries" - in "Short Papers on Economic Growth" - Teaching Materials Vol. 1 - SGPIIS - Warsaw 1964 - p. 89.

The purpose of this paper is to examine and analyse the bases of setting and control agricultural prices under planning system.

I . Base of Setting Agricultural Prices =====

This part will discuss and analyse the bases on which the agricultural prices should be set or established in order to fulfil the tasks of agricultural price policy.

This establishment must be taken of the interests of the producer and the consumer, within agriculture and in relation to other sectors of the economy. To a large extent, the relative importance given to these and other criteria will depend on the objectives that a country sets itself.

In many countries - India for example - some or all of these criterias are taken into account when establishing the level of agricultural prices.

These bases can be set as follow:

1.1 Cost of production formula

From the theory of price and allocation of resources, we know that the price must cover the cost of production, or to look it in other way round, the cost of production must be lower than the price.

The price fixed as the floor price should at least cover the average cost of package⁽¹⁾ cultivation in a normal crop year, or over a period

(1) Cultivation with improved inputs and practices, will be referred to as "package cultivation" - Johnston, F.B., and Southworth, H. "Agricultural Development and Economic Growth" Cornil University Press - 1967, p. 518.

of 3 to 5 years including good and bad crop years, estimated on the basis of input prices likely to prevail.

Since there are at least two important concepts of the cost of cultivation in a dual agriculture in which a substantial part of the input comes from the peasant household, it is necessary to choose the one that ought to form the basis of the "floor price". There is, first, the complete average cost of cultivation, including the value of the services of family labour, computed with the market rent and wage-rate in the neighborhood. And there is second, the so-called "paid-out" average cost of cultivation, which excludes the imputed value of the services of family labour.

Therefore, for many analytical purposes "paid-out" cost is the relevant cost. But for fixing the "floor price" it is complete average cost or the best available approximation to it - would induce the commercial farmers, who are actually paying for the services of labour, to seek more profits through increasing their output; and it would give other farmers a cash income over and above their "paid-out" cost, which would improve their capital position, and enable them to invest the innovate more than before.

On the other hand, when the value of the services of family labour inputs calculated with the rent and wage per unit of hired labour in neighbourhood and included in the guaranteed price, we assure to the peasant

what may be called the input return parity. The actual inputs of family labour on the family farm are given the same remuneration that they could earn if and when they could be hired out.

This is the only concept of equity of peasant rewards the developing countries may be able to work with. Equity in the sense of an equivalence of earnings on the farm and earnings for equivalent work in urban employment, which the developed countries have recently tried to realize, is more than the developing countries can afford at the present stage of their development. In developing countries if the farmers were rewarded for their labour at wages equal to that of workers, agricultural prices would be very high. Many economists have been of the opinion that wage rates in the modern sector have to rise substantially above farm incomes⁽¹⁾. This, in their opinion, brings modern sector as much labour as it wants.

Another issue relevant for the determination of the "floor price" arises from the fact that the variability of cost as between different farms is very high. Whose cost should in this situation, be the basis of the "floor price" should it be the minimum cost in a representative sample or should it be the sample average cost? Ideally it should be the sample minimum. But in a shortage situation the minimum price has to be above the minimum cost to induce even some of the relatively inefficient farmers to increase output. It will be the minimum cost which covers the actual average costs of farmers producing a major part of the output. It is, of course,

(1) Lewis, W.A. - "Development Planning" - The Essentials of Economic Policy, New York, 1966, p. 77.

necessary that reliable and representative data about the cost of cultivation of individual commodities be collected for the purpose of price fixation. The price should only be based upon the cost of cultivation under "package" condition. Where, therefore, data about the cost of "package" cultivation are not available, the cost of traditional cultivation can be used as the basis of price fixation, reduced by a "package" discount which can be estimated from realistic experimental data. It follows, any price that covers the cost of traditional cultivation will automatically cover the cost of "package" cultivation.

As regards the geographical variation of prices, it is desirable to fix the same "Floors" in markets which are of the same order in the hierarchy of markets throughout the country, but to provide differentials as between markets at different levels of the hierarchy. That is to mean, that there will be reasonable differentials between village "floors", town "floors" and district "floors".

Since there are many grades of farm products, it is necessary to determine whether a "floor price" is to be defined for every grade or for only a few selected grades.

In Egypt in setting agricultural prices, the government price policy has been mainly concerned with accomplishing certain income distribution rather than affecting production, based on cost criterion. The idea of cost

plus pricing is at work in Egyptian agriculture. Where costs are average costs including depreciations, and the profit plus is understood as "normal" or "fair" profits in some sense.⁽¹⁾

According to the cost criterion the appropriate income for one feddan is determined by adding two to three the rent rate to the estimated cost of production. Or by the cost of production - without rent - plus a definite percentage rate from cost of production. By dividing total income calculated from the above estimations by the output of one feddan, we get the price per unit of the product.⁽²⁾

The departments of agriculture in the governorates derive average costs for each crop they produce by means of questionnaires. From these average the Ministry of Agriculture derives general average of costs for these crops for the country as a whole. The items of costs can be divided to: a) preparing the land. b) seeds and cultivation; c) irrigation; d) fertilizers; e) harvesting; f) transportation; g) rent; h) others.

Table (1) shows prices, average costs and net revenue of every unit of production of main crops in Egypt (1956-1966). It shows that prices are generally high enough to cover costs of production and allow for certain margins. Costs increased more rapidly than prices through the period

(1) Hansen, B. and Marzouk, G.A. - "Development and Economic Policy in U.A.R." - North Holland Publishing Company - Amsterdam 1965, p. 287.

(2) Bshir A.M. - "Agricultural Price Policy in Egypt" - "L'Egypt Contemporaine" No. 332, Cairo, Oct. 1967, p. 916 (in arabic)

Prices, Average Costs and Net Revenue of Every Unit of Production of Main Crops in Egypt
(1956 - 1966)

	Rice			Wheat			Barley			Maize		
	Price	Cost	Net revenue	Price	Cost	Net revenue	Price	Cost	Net revenue	Price	Cost	Net revenue
1956	17.00	11.48	5.52	3.95	4.10	-0.15	2.73	2.28	0.45			
1957	16.96	11.28	5.68	4.28	4.30	-0.02	2.24	2.27	-0.03			
1958	16.96	13.00	3.96	4.28	4.27	0.01	2.75	2.23	0.52			
1959	17.00	12.35	4.65	4.35	4.27	0.08	2.91	2.22	0.59			
1960	17.00	12.30	4.70	4.29	4.14	0.15	2.57	2.15	0.42			
1961	17.00	13.26	3.74	4.25	4.15	0.10	2.45	2.06	0.40			
1962	17.00	11.76	5.24	4.37	3.94	0.43	2.58	2.29	0.29	3.21	2.12	1.09
1963	17.00	12.63	4.37	4.37	4.01	0.30	3.15	2.19	0.96	3.86	2.12	1.74
1964	18.09	15.64	2.54	4.40	4.00	0.40	3.61	2.28	1.33	3.91	2.51	1.40
1965	20.09	18.81	1.28	4.53	5.03	-0.50	3.09	3.19	-0.10	3.78	2.70	1.08
1966	25.89	21.78	4.11	4.92	5.17	-0.25	3.52	3.26	0.26	4.56	2.96	1.60
the secular trend.	0.55	0.81	-0.26	0.06	0.06	0.00	0.09	0.06	0.030	0.26	0.23	0.03

Source: Computed from: Ministry of Agriculture-Bulletin of Agricultural Economics-several issues - (in arabic).