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SOME ASPECTS OF THE ECONOMICS OF THE FOOD PROCESSING INDUSTRY IN JAMAICA

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The objective of this brief paper is to examine the role of the food processing industry in a developing economy. Using Jamaica as an example, we note that the food processing sector covers four areas of activity:

- (a) cereal foods (bakery products, cassava products, patties, pies, etc.)
- (b) meat and dairy products (meat slaughtering, poultry and other meat processing, condensed and evaporated milk, ice cream, etc.)
- (c) canning and preserving of fruits and vegetables (citrus, other fruits, and vegetables)
- (d) other food groups such as edible oils and fats, sugar, confectionery, cashew nuts, peanuts, etc.

The sugar industry is excluded from consideration.

The data in Table 1 show that between 1959 and 1968 the food processing sector accounted for roughly 21 per cent of the contribution of the processing industry to Gross Domestic Product, while the food processing industry itself was responsible for 15 per cent of G.D.P.

A study of the food processing industry conducted in Jamaica in 1967 showed that of the four groups listed, the meat and dairy products group was the largest contributor to the sectoral gross output, accounting for 33 per cent of total output compared with 30 per cent for cereal food products and 11.5 per cent for canning and preserving.

The expansion of the poultry industry and the development of the pig industry have accounted for the dominance of the meat and dairy products group.

The performance of the cereal food products group reflects the contribution of the wheat flour mill and cornmeal factory to the Jamaican economy. The relatively low performance of the canning and preserving group is associated with short supplies of locally produced raw materials, and the absence of proper organisation within the industry. However, the situation is changing.

The relative performance of the four groups has very significant implications for employment, income distribution, foreign exchange and linkages with the rest of the economy.

The major portion of income generated by the processing of meat and dairy products accrues to capital, whereas labour benefits most from canning and preserving. The relative importance of the four groups can also be assessed on the basis of the ratio of income contribution (wages, profits, rents, interest and indirect taxes) to gross output as this indicates the extent to which processing adds income or value to the basic raw materials used. The study previously referred to shows that of the four groups, meat and dairy products which had the distinction of being the largest producer of gross output in the sector also had the dubious distinction of generating the lowest level of income in relation to gross output. Canning and preserving and the miscellaneous foods which account for the lowest contributions to gross output achieved the highest ratios of income

generation in relation to gross output.

On the basis of our experience it is evident that one strategy for developing countries could focus on achieving the greatest benefit from pursuing the expansion of the canning and preserving sub-sector of the processing industry both in terms of the creation of development opportunities as well as the flow of income created through linkages with ancillary industries. In the context of the Caribbean economies the creation of employment and the generating of farm income are particularly important.

The Commonwealth Caribbean economies have been placing a great deal of reliance on import substitution as a strategy for economic development. Taking into consideration the relative lack of basic raw materials apart from the bauxite and petro-chemicals, the agro-based industries offer the best prospects for the successful implementation of the programme of import substitution. Examination of the structure of the processing industries clearly shows that the canning and preserving of fruits and vegetables offer the best prospects for a programme of development through import substitution.

The cereal food industry is based on the importation of wheat which cannot be produced locally and maize whose local production is less than 10 per cent of requirements and whose comparative economic advantage has not been fully determined. Hence, the linkage effects will be minimal. As far as the meat and dairy products group is concerned it must be recognised that there is a tremendous potential for development. However, feed accounts for a high percentage of the cost of raw material and at present the bulk of concentrate feeds, inclusive of ingredients for local mixing, is imported. Unless and until the Region produces not only the animals for processing but also a significantly higher percentage of animal feeds, the bulk of the meat and meat products group will be lost. This is even more relevant where the production of poultry and pig meat is concerned.

In recent years a great deal of attention has been focussed on the canning and preserving sub-sector. This can be attributed to the following considerations:-

- a) the opportunities it creates for the production of a wide range of import substitutes (canned fruits, nectars, etc.)
- b) the linkage effects with the small farming sector and consequently the overall employment effect of this activity
- c) the scope presented for expansion of industrial activity into the rural areas
- d) the potential for export promotion and foreign exchange earnings from a wide range of exotic tropical food products
- e) food processing activity increases the shelf life of highly perishable commodities and stimulates out-of-season consumption
- f) because of the high degree of dependence on natural weather conditions, the production of food crop and vegetables is punctuated by alternating periods of glut and shortages. Processing provides a market for surpluses.

In general terms so far as the local production of raw materials is concerned, it should be stressed that one of the most serious obstacles to the development of food processing industry is the tendency to depend on surpluses rather than make firm contractual arrangements for production specifically for processing, preferably on a large-scale basis so that the economies of scale can be achieved, thereby reducing unit costs of production.

Table 1

Jamaica: Contribution of the Food Processing Sector to the
Manufacturing Sector. 1959-1968

Year	G.D.P. of Manufacturing Sector	G.D.P. of Food Processing Sector	Percentage Contribution of Food Processing Sector
 (\$J'000)*.....		(per cent)
1959	59,046	13,982	23.67
1960	58,734	13,296	22.63
1961	62,506	13,588	21.73
1962	63,446	14,194	22.36
1963	70,916	14,796	20.86
1964	79,084	15,746	19.81
1965	83,046	16,220	19.53
1966	89,144	18,448	20.70
1967	92,298	19,008	20.49
1968	96,544	18,784	19.45

* Constant Prices 1960

Source: Dept. of Statistics, Jamaica, National Income and Product 1968, April 1970.