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THE IMPACT OF THE TOURIST INDUSTRIES ON THE AGRICULTURAL SECTORS: THE COMPETITION FOR RESOURCES AND THE MARKET FOR FOOD PROVIDED BY TOURISM

The Case of Jamaica

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Introduction

In analysing the impact of the tourist industry upon the agricultural sector in Jamaica, this paper focuses upon the flow of resources to both sectors during the period 1965 to 1972 as well as the growth and structure of the market for agricultural products within the tourist industry during the period. The significance of these issues in a discussion of agricultural development in the Caribbean region arises from the fact that in any listing of the prevailing reasons for moderate progress in agricultural development in the region, the adequacy of supply of basic inputs to the sector: labour, capital and land, as well as the size and structure of the market for agricultural products assume critical importance. On the resources side, the question arises as to whether or not the development of the tourist industry has aided or inhibited the flow of resources to the agricultural sector or the retention of inputs within the sector. On the market side, it is a question of whether or not the size and composition of supply of agricultural output has been such as to permit the sector to satisfy the requirements of the tourist industry for food products.

The size and composition of the tourist sector, the relatively long period of involvement in tourism and the significance of the agricultural sector of the Jamaican economy, make the Jamaican experience an important lesson for the rest of the Commonwealth Caribbean countries.

Growth of the Tourist Industry

Tourist traffic (stop-over visitors) increased from 84,764 in 1962 to 407,806 in 1972. At the same time, tourist accommodation increased from 3,735 rooms in 1962 to 9,065 rooms in 1972. It means, therefore, that within the 10-year period 1962 to 1972, tourist traffic increased by 381 per cent while tourist accommodation increased by 143 per cent. The growth in tourism and the economic implications of this expansion is further indicated by the level of tourist expenditure in Jamaica and the level of employment within the industry. Tourist expenditure stood at EC\$263.2m. in 1973 compared with EC\$59.5m. in 1962. This represents an increase of J\$89.6m. or 342 per cent during the period. Employment in the hotel sector in 1973 is estimated at 9,000 compared with 4,350 in 1962 an increase of 106.9 per cent.

The tourist industry in Jamaica has therefore grown significantly since 1962. There is no doubt that its growth has had a significant impact

on the Jamaican economy. The important question arises as to the extent to which this growth in tourism has had serious and substantial implications for the agricultural sector.

Growth in Agricultural Production

During the period 1962 to 1971 when, as has been underscored above, the tourist industry expanded dramatically, the agricultural sector grew at a very moderate rate. In fact, from 1966 to 1970, net agricultural output measured at constant prices, declined. Net agricultural output increased at an annual average rate of 3.2 per cent throughout the period. The absolute increase in the sectors net output increased by approximately J\$33m. during the nine-year period notwithstanding an increase of 10.1 per cent in root crop production.

The agricultural labour force declined from 229,719 in 1960 to 214,700 in 1972. This decline itself should not be regarded as evidence of the contraction of activity within the sector. But when examined in conjunction with the fact that the average age of the labour force engaged in agriculture is now over 50 years and agricultural productivity has decreased significantly, the implications of the movement of labour from the agricultural sector will be seen. Moreover, the movement of labour out of agriculture has given rise to a substantial shortage of agricultural labour - a shortage which has come to be regarded as one of the factors contributory to the slow growth in agricultural production. The main influences on labour migration from agriculture has been identified by the Government's Green Paper on agricultural development in Jamaica. (See Johnson and Strachan, p. 4.) In addition, the slow growth of agricultural output was accompanied also by large acreages of unused land and an absolute decline in land in farms, the acreage of land in farms decreasing from 1.823m. in 1958 to 1.489m. in 1968. At the same time, the acreage of farmlands described as unused or underutilized stood at 279,480 acres in 1968 compared with 354,991 acres in 1958.

Several reasons have been advanced for this increase in the acreage of idle agricultural lands:

- (a) a shortage of capital funds, which shortage arises in part from the fact that a large percentage of the capital funds available for agriculture is used for the purchase of land;
- (b) the absence of laws to effectively control the fragmentation of agricultural lands;
- (c) the hesitance of farmers to engage in the long term development of land held by them on account of the fact that laws for the protection of the rights of tenant farmers are inadequate; and
- (d) inadequacy in the supply, and where it exists, inefficient use of irrigation water.

Summing up, the tourist industry has developed into a large sector within the Jamaican economy, whose significance can be gauged on the basis of its foreign exchange contribution and the size of its labour force. During the period of most significant growth by the tourist sector, the agricultural sector declined in both relative and absolute terms. This decline is gauged by the size and growth of net output in real terms, the level of employment within the sector and the quantum of land utilized for agricultural production. These trends in the development of the two sectors during the last ten years are, however, not sufficient to support a conclusion that the expansionary effects of the tourist industry on the agricultural sector was zero or that the stagnation of the agricultural sector was in anyway due to the rapid expansion of the tourist industry. In what follows, the relationships between these two sectors are closely probed with a view to finding more precise answers to the questions thrown by this paper.

Competition for Resources

Land

The decline in the total acreage under agriculture between 1958 and 1968 must, on the face of it, be interpreted to mean that agricultural lands were transferred to other uses during the period - housing development, manufacturing and commercial activities as well as the development of tourism. Since 1958 the total acreage under usage by the hotel sector has increased appreciably. This is indicated by the growth in visitor accommodation during the 1962-1972 period. The data do not permit a statement of the quantum of land under use by the hotel sector which is appropriate for agricultural development. Nevertheless, the question of the extent to which the tourist sector competes with the agricultural sector for land resources can be treated. The large quantum of high quality farmlands which has remained unused during the last 16 years supports the view that even if all the lands under use by the hotel sector were good agricultural lands, the tourist industry could not be said to be in any meaningful competition with the agricultural sector for land. Moreover, the indications are that most of the lands under usage by the hotel sector are not suitable for agricultural production. They are in the main, lands situated within urban centres or on the seafront.

The point should be made, however, that there are cases in which estates with good agricultural potential were purchased for resort development. These estates are still under agricultural production, but have not been developed to the full extent of their potential. To the extent that this practice is widespread, it can be said that agricultural development has been inhibited by the operations or existence of the tourist industry. It should be pointed out, however, that this situation does not exist to any significant extent. A conclusion that the purchase and holding of land for the future expansion of tourist activities has deprived the agricultural sector of a significant quantum of high quality land cannot therefore be supported.

It could be strongly argued that if there were efficiency in the use of total available farmlands, the quantum of this resource would have been adequate to sustain a level of supply of agricultural products which is adequate to meet total demand. It is recognized that notwithstanding the large quantum of underutilized or idle land, there is a large number of farmers whose greatest problem today is the shortage of good agricultural lands. This situation highlights the basic defects in the land distribution system in the country. It is a situation which can be remedied only on the basis of a meaningful land reform programme.

Labour

In examining the extent to which tourism competes with agriculture for labour, reference is made to factors enumerated by the Government's Green Paper as having a bearing on the migration of labour from the agricultural sector. Among these factors is the very high reserve price of agricultural labour - a price which is strongly influenced by the relatively high wage rates in most non-agricultural activities, in particular, bauxite and tourism.

The data indicate that during a period of rapid overall expansion in the tourist industry - 1962 to 1972, there was a fairly significant migration of labour from parishes in which agriculture is the main activity to those parishes with large scale tourism. Since workers could have moved from one parish to another in search of employment outside of the tourist industry, the data in Table 1 which seek to demonstrate the pull of tourism on labour in the rural sector are much too lumpy and have not established a very clear case. As crude indicators, however, they do assist the analysis.

With the parishes of Clarendon and St. Catherine as exceptions, St. James which has the largest tourist sector in the island, had the most significant inward movement of population during the 1960-1970 period, from parishes in which agriculture is the main activity. Table 1 demonstrates that the movement of population from the parishes of Hanover, Westmoreland, St. Elizabeth and Trelawny into St. James during the period, was quite significant.

Although the movement of population into the other parishes listed in the Table was less significant, the pattern in which parishes was substantial activity in sugar lost population to parishes with a high level of activity in tourism, is clearly established. It seems reasonable to conclude that people who moved from rural areas into the tourist centres did so with the reasonable expectation of obtaining jobs within the hotels or within the activities catering to the tourist industry. The fact is that there are several jobs within the hotel sector which demand skills which can be acquired during a relatively short period of training. This fact makes the tourist sector a fairly substantial user of labour which migrates from the agricultural sector.

It is estimated that of the 4,000 people employed in the hotel sector in the Montego Bay Area, approximately 3,000 are people who might very well have migrated from the agricultural sector. They are employed as maids, waiters, gardeners, bellhops, etc. A substantial number of those engaged in activities which are ancillary to the tourist industry would have fallen into these skill categories. It should be noted that a substantial number of those workers who migrated to the tourist centres have not been successful in finding jobs. They are therefore a part of the unemployed labour force within the tourist centres.

It is concluded on the basis of the foregoing analysis that the tourist industry has deprived the agricultural sector of a fairly substantial part of its labour force. This occurred, not simply because the tourist industry provided additional jobs for agricultural workers, but because it accellerated the rural/urban migration of labour especially in those sections of the island where there are substantial tourist activities.

Place of Birth	Place of Residence (1960-1970)				
	Portland	St. Mary	St. Ann	St. James	
St. Thomas	954	366	116	116	
Portland	-	970	218	162	
St. Mary	1,170		1,224	293	
St. Ann	297	1,326		501	
Trelawny	108	241	549	1,071	
St. James	156	217	307	_	
Hanover	115	148	171	2,811	
Westmoreland	183	235	252	3,450	
St. Elizabeth	276	334	293	1,570	
Manchester	197	256	423	408	
Clarendon	311	493	671	323	
St. Catherine	467	1,545	708	282	
TOTAL	4,234	6,131	4,932	10,987	

Table 1. Migration into Portland, St. Mary, St. Ann, St. James; 1960-1970

Source: Department of Statistics, Jamaica. Population Census 1970.

Capital

The shortage of capital funds was noted above as one of the important factors accounting for the existence of large acreages of unused land in Jamaica. In addition, such capital funds as flowed into the sector was not efficiently utilized. A substantial quantum of those funds received by farmers or allocated to agriculture was used in the procurement of ownership of land. Agriculture thus remained *capital starved* throughout the period under review.

The annual value of fixed capital formation in agriculture is used as the indicator of the quantum of capital funds which flowed into the sector during the period 1962 to 1971. The value of fixed capital formation increased from EC\$23.4m. in 1962 to EC\$28.6m. in 1971. This represents an increase of EC\$5.2m. in annual allocation during the nine-year period or an annual average increase of 2.5 per cent. Fixed capital formation in agriculture as a percentage of total fixed capital formation in the economy increased from 10.5 per cent to 12.9 per cent during the period 1962-1964 and then declined to 4.4 per cent by 1971. This decline in the relative share of capital formation in agriculture to total capital formation in the economy is attributable to the significant growth in capital formation in the mining and tourism sectors especially during the period 1967-1971 compared with a much slower rate of growth of agricultural investment. It is conceded that there has been some understatement of the level of investment in agriculture. The measurement of investment by farmers, especially small farmers, poses serious difficulties. It is reasonable to conclude on the basis of available data, however, that agricultural investment increased insignificantly and that in fact there was a relative decline in agricultural investment during the period.

The question arises as to whether the growth in investment in tourism inhibited the flow of investment into the agricultural sector Investment in tourism during the period 1969 to 1972 was of the order of EC\$272.7m. and EC\$295.4m. for the full period - 1965 to 1972. The significant growth in investment within the sector during the 1969-1972 period was substantially influenced by the provisions of the Hotel Incentives Law which was promulgated in 1968.¹

The private sector in Jamaica and the Government of Jamaica mainly through dept guarantees have participated in this investment. It should be noted, however, that the major portion of total investment within the sector especially during the 1969-1972 period was financed from overseas sources.

The total investment in agriculture during the 1969 to 1972 period is estimated at \$50m. or only 42 per cent of the level of investment of \$120m. in tourism. The wide differential between the level and rate of investment within the two sectors should be used as an indicator of the relative attractiveness of tourism as an area of investment.

The flow of the bulk of capital funds between sectors in an economy which is substantially private enterprise is largely influenced by relative rates of return. The rates of return on the other hand are influenced in some sectors within the Jamaican economy by among other factors, fiscal incentives. Fiscal incentives have had a substantial influence on the growth of investment in the manufacturing sector and as has been shown above, they were singularly important in the growth of investment in the tourist industry during the 1969-1972 period. In so far as fiscal incentives were provided within the agricultural sector, they were not as attractive as those provided for tourism. It can be concluded then that during the period under review, rates of return on capital invested in tourism were much higher than those which existed in agriculture. The fact is that the prices of agricultural products, for much of the 1965-1972 period were depressed by structural defects within local and overseas markets. This condition gave rise to such heavy losses and low rates of return in several agricultural activities as to make fiscal incentives completely irrelevant. Indeed, the rates of return on investment in agriculture might have been so low that in

¹Under the Hotel (Incentives) Act of 1968, the owners, tenants and operators of approved hotel enterprises or approved hotel extensions are granted relief from income tax, tonnage tax and customs duty for 10 years (15 years for approved convention-type hotels as well as hotels located in special development areas).

so far as the investor was presented with the options to invest in tourism, invest in agriculture or not invest at all, he would have chosen the first or the third option. All the available evidence suggests that this was in fact the extent of the relative attractiveness of the agricultural sector from an investment point of view, during the period 1969-1972 when investment in tourism rose dramatically. Given a limitation of capital funds and nationality on the part of investors, the relative unattractiveness of the agricultural sector from an investment point of view placed the tourist sector at a distinct advantage in the overall competition for capital funds.

It could be argued, however, that what is most relevant to our analysis is not the level of total investment in the two sectors but the level of public sector investment. The relevance of the level of government investment derives from the fact that in so far as government identifies the development of agriculture as a top priority this ought to be reflected in the allocation of funds to the sector. Moreover, the basic restraint on the flow of government investment funds to the sector is not the rate of return on capital employed by government's financial resources. To the extent that there are allocations to the tourist sector, government's ability to make allocations to sectors earmarked for priority treatment is limited.

Direct government capital allocation to tourism increased from approximately EC\$2.3m. in 1962 to approximately EC\$14.7m. in 1972, while its allocation to agriculture increased from EC\$5.7m. in 1962/63 to EC\$54.5m. in 1972/73. Thus, there was no substantial compensation to the agricultural sector for its poor showing in the competition for private capital through allocations of public sector investment funds as is shown by the level and rate of growth of capital allocations by government, to the two sectors.

The Market for Agricultural Produce Provided by Tourism

Food represents an important input in tourism. It is estimated that in Jamaica, 34 per cent of total tourist expenditure related to food and beverages. A very important determinant of the net foreign exchange benefits from tourism is the quantum of the total expenditure on food and beverages which goes towards locally produced foods and beverages. The achievement of an appropriate rate of growth of domestic agricultural production and the pursuit of a market strategy which permits local producers to utilize fully all opportunities within the local economy for the sale of farm products are therefore crucial elements of the strategy aimed at maximizing the benefits to the domestic economy from the development of tourism.

Table 3 shows that the value of food and beverages consumed by the industry increased by \$15.8m. during the seven-year period. This represents an annual average rate of increase of \$2.2m. or 19 per cent. Net agricultural output increased at an annual average rate of 6 per cent during this same period. The consumption of beverages by the tourist industry increased at as rapid a rate as that relating to food consumption.

A major defect in the foregoing analysis is the fact that no allowance has been made for price changes during the period under review. We are convinced, however, that the estimates provided do represent a



Table 2. Expenditure on Food and Beverages by Hotels, Clubs and Restaurants, 1965-1972

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Year	Beverages	Food	Total
1965	2.7	9.1	11.8
1966	3.3	11.2	14.5
1967	3.4	13.4	16.8
1968	4.3	14.6	18.9
1969	4.5	15.3	19.8
1970	4.6	15.7	20.3
1971	5.4	18.3	23.7
1972	6.3	21.3	27.6
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Source: Central Planning Unit. Tourism Expenditure Project - A Preliminary Report, 1970.

Note: Estimates of the food requirements of the tourist industry are based upon data relating to local production and imports for the period 1965-1972.

meaningful set of indicators of the level and growth of food and beverages consumption by the tourist industry during the period under review.

Imports accounted for a high percentage of total expenditure throughout the period. As is shown in Table 3, the import content of total food demand ranged from 63.8 per cent in 1971 to 79.3 per cent in 1969. The relative significance of imports in total food demand increased during the 1968 to 1970 period. This trend is partially explained by the fact that domestic food production declined during this period under the impact of drought and other adverse production conditions. Domestic food production increased significantly during the 1970-72 period. This was accompanied by a fairly substantial decline in the import content of total demand.

A reasonable conclusion based on the data in Table 3 is that the dependence of the tourist industry on imported food and beverages increased substantially during the 1965-1972 period - a period during which the industry's food demand more than doubled. This trend, it will be argued below, is one of the most important indicators of the failure of domestic agriculture in Jamaica during the last seven years. The extent of the failure of domestic agriculture to capitalize on the growth of the tourist industry is indicated, not only by the growth and level of demand for food and beverages by the industry, but quite importantly, by the composition of the tourist industry's food requirements and the policy of the hotel sector regarding the sources of supply of the sector's requirements of food and beverages.

		:	(EC\$m.)
Year	Estimated Imports	Total Expenditure	Import Content
1965	8.2	11.8	0.700
1966	10.12	14.5	0.695
1967	11.92	16.8	0.710
1968	13.95	18.9	0.738
1969	15.7	19.8	0.793
1970	15.06	20.3	0.742
1971	15.1	23.7	0.638
1972	18.3	27.6	0.662
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Table 3. Import Content of Expenditure on Food and Beverages

On the basis of the data in Table 4, conclusions can be drawn on the question of whether or not the high import content of expenditure on food and drink is an indicator of the import substitution possibilities offered or presented by the tourist industry. In so far as the food import structure of the tourist industry is dominated by competitive imports, the import substitution opportunities provided by the industry are substantial. Competitive imports relate to products which, at a given point in time, are being produced within the economy. This group of products embraces also, those items the local production possibility of which has been established.

The data reveal that the major item of food imports by the tourist industry are: meats (frozen, fresh and smoked), fish (smoked, fresh and frozen), crustanceans and molluscs, canned vegetables, poultry meat, cheeses, and oils and vegetable shortening. The item "meat" is by far the largest single item in the import structure. In 1972 it accounted for approximately 48 per cent of total food imports. Of some significance is the fact that in 1972 the total imports of meat and meat products was \$16m.

The data outlined in Table 4 emphasize the fact that the growth in the tourist industry was one of the most important factors in the significant growth of meat imports.

The extent to which the local agricultural sector succeeds in taking full advantage of the large market for meat and meat products within the tourist industry will depend not only upon the expansion of the livestock industry but also on the provision of facilities for producing high quality fabricated cuts required by the tourist industry. Very active consideration is currently being given to the whole question of reorganising and developing the meat packaging industry. The justification for such a programme lies not only in the existing levels of demand for meat within the tourist industry, but upon the substantial growth in this demand which is envisaged over the next five years.

	EC\$m.
Items	1972
Meats and Meat Preparations	6,384,400
Fish (smoked, fresh, frozen)	1,382,400
Fish (canned)	475,200
Crustaceans and Molluscs (shell fish	
including snails)	356,500
Vegetables (frozen, fresh, etc.)	1,241,552
Fruit (canned - including pie fillings)	712,800
Cheeses	461,400
Butter and Other Dairy Products	•
(except cheese)	367,200
Soups (canned or powdered)	453,600
Cereals	86,400
Rice	367,200
Oils and Vegetable Shortening	291,748
Cake Mixes	21,600
Bakery Products (bread, rolls,	,
pastry, biscuits)	86,400
Sauces	124,600
Dressings and Toppings (including	221,000
chocolate preparations)	190,400
Pickles	72,800
Cherries/Olives	100,400
Spices	48,200
Vinegar	21,600
Syrups	86,400
Jams, Jellies, Preserves (portions) etc.	
Edible Nuts	64,800
Food Preparations (almond paste,	04,000
fondant icing, aspic jelly, etc.)	86,400
Food Colouring	-
Dried Fruits	64,800
Flavouring Extracts	-
Tomato Paste Puree	21,600
Other Food Products	2,000,000
	2,000,000
TOTAL	\$15,300,000

Table 4. Food Items Imported by the Tourist Industry

ECSm

The level of demand by the industry for imported vegetables (canned, frozen and fresh) should be noted, in view of its significance to the small farming sector since, unlike beef, most of the vegetables produced in Jamaica are grown by small farmers. In 1972, the level of imports of vegetables by the tourist industry was approximately \$1.2m. Available data do not permit a meaningful comparison with the value of imports of these products for 1963. We maintain, however, that there was an appreciable increase in the value of these imports during the period under review. A close examination of the list of fresh vegetables imported by the industry reveals that most of these are being produced or can be produced locally. The main items within this category are: peas and beans, potatoes, onions, garlic, carrots, sweet corn, lettuce, asparagus, cabbage, mushrooms, cellery, cauliflower, brussels sprouts, broccoli, spinach, pickles and soups.

Imports of cheeses and butter and other dairy products by the industry remained at a fairly high level throughout the period. It is suggested, however, that the level of imports in this category of products should not be regarded as indicative of import substitution possibilities. The fact is that butter and cheese should be regarded, at this time, as among the most important of our non-competitive food imports. Much hope should not be held out for significant substitution in respect of these products in the immediate future in view of the fact that domestic production would require a level of expansion of the local dairy industry as would make available, large surpluses of fresh milk at relatively low prices, which is not envisaged in the immediate future.

It is concluded therefore, that most of the items in the food import structure of the tourist industry and *Competitive Imports*. The high import content of expenditure on food by the tourist industry is therefore an indicator of the opportunities which exist for food import substitution.

The significance of competitive imports within the food import structure of the tourist industry should be considered in relation to the policies relating to food imports in order to get the full measure of the extent to which opportunities for the development of substantial linkages between agriculture and the tourist industry were not utilized during the period under review.

Since 1964 all fresh fruits and vegetables have been subject to either high import duties or quantitative restrictions. A very wide range of processed foods were also placed under quantitative restrictions. The objective was to establish a high degree of protection to local producers selling within the domestic market as part of the policy to accelerate the rate of production of both fresh fruits and vegetables and processed foods. Imports of these items were allowed only where it could be established by applicants for import licences that local supply was not immediately available or could not be made available within the short run. The import regime relating to the tourist industry, in situations of shortages was somewhat less rigid. Once it was established that the particular type of product required by the hotels were not immediately available, licences were granted for the importation of such product.

In view of the substantial growth in visitor traffic which is expected to take place during the period 1974 to 1977, under the impact of substantial market development and promotion programmes, the market provided for agricultural products by the tourist industry should be looked at not simply in terms of the growth and structure of this market during the seven-year period 1965 to 1972, but should be examined in relation to the size of the tourist industry at the end of this fouryear period. The growth in food demand by the tourist industry during this four-year period will be influenced very largely by the growth in the number of stop-over visitors to the island and the pattern of tourist expenditure during the period. Tourist expenditure pattern could so change that there is a substantial increase in the demand for food by the industry even without there being any significant increase in the number of stop-over visitors to the island.

On the basis of total visitor accommodation at the end of 1973 and the projected growth in accommodation during the 1974-77 period, it is estimated that visitor traffic could increase at an annual average rate of approximately 20 per cent during the period. At this rate of increase a level of visitor traffic of 768,000 would have been attained in 1977. The consequent value of food demand could be approximately EC\$47m. This would mean an annual average increase in food demand of approximately \$5.0m. or 17.5 per cent. If domestic production failed to respond to the increased demand for food by the tourist industry during this four-year period, the expansion of the industry would then be accompanied by a significant increase in food imports.

The size and projected expansion of the tourist industry over the next four years has important implications for the agricultural sector as well as the food processing industry. The expansion of the food processing industry is substantially dependent upon the extent to which locally produced raw materials are available.

The implications of the expansion of the tourist industry for the livestock industry are indeed very great. It will be seen from the data in Table 5 that approximately 42 per cent of total food imports is accounted for by meat and meat products. If the import content of the tourist industry's food demand as well as the structure of food imports by the industry remains unchanged throughout the period, this would mean a level of food imports of approximately EC\$30m. of which meat and meat products would be EC\$13m.

Conclusion

- (a) A significant growth in the tourist industry occurred during a period in which the agricultural sector declined in both relative and absolute terms.
- (b) The failure of the agricultural sector to expand under the stimulus provided by the expansion of the tourist industry and the overall growth in demand for food and other products within the local economy, cannot be explained in terms of the fact that the development of the tourist industry deprived agriculture of critical resources (land, and capital) to any significant extent.
- (c) The development of the tourist industry in Jamaica has not been a major influence on the availability of cultivable lands in the agricultural sector since most hotels and other facilities have been built on lands which can be described as basically marginal.
- (d) The development of the tourist industry with its provision of jobs requiring a relatively low level of skills and its relatively high levels of income, was an important factor in the migration of population from key agricultural areas to the urban centres. It has also been an important factor in the high

incidence of the withholding of labour services in the rural sector.

(e)

In the competition between agriculture and tourism for capital funds especially during the period 1969-1972, agriculture was placed at a distant disadvantage on account of lcw rates of return in a number of the major activities within the sector consequent on low market prices, low productivity, etc. The attractiveness of the tourist industry from an investment point of view was significantly enhanced by the promulgation of the Hotel Incentives Act of 1968. In so far as fiscal incentives were provided for agriculture, the effects of such incentives on the rate of growth of investment within the sector was completely nullified by the trends in the prices of major farm products during the period under review. The tourist industry became an important claimant on public sector investment funds during the period, a fact which placed it in strong competition with agriculture for capital funds supplied by government.

(f) The tourist industry provided a substantial market for agricultural products during the period. The growth and structure of this market was such that provided a strong link was established between the two sectors, the tourist industry could have served as one of the most important stimulators of growth in agricultural production during the period under review. The significance of imports in the food demand structure of the tourist industry is demonstrative of the fact that the link between agriculture and tourism was not effectively forged during the period. The scope for the development of such linkages is indicated by the fact that the major portion of the food items imported by the tourist industry are defined as competitive imports, i.e., products which can be produced or are being produced within the domestic econony.

- (g) The import regime relating to food is such as to provide a high level of protection to local farmers within the domestic market. The failure of agricultural production to increase to a level which is high enough to permit the sector to meet fully the demand of the tourist industry is attributable to basic defects in the production structure.
- (h) The projected growth of the tourist industry during the next four years suggests that the market for agricultural products within the tourist industry will grow at a faster rate during the next four years than obtained during the last seven or ten years.
- (i) The items for which the most significant increase in demand is likely to take place during the next four year period are meat and meat products and vegetables. Meat is the major output of medium and large farms in Jamaica while vegetables are a major output of small farms.
- (j) To the extent that the expansion of agricultural production is not adequate to meet the growth in the demand for food during the next four years, to that extent will the import demand for food by the tourist industry increase during the period. Trends

in the import coefficient relating to food demand by the tourust industry will therefore be substantially influenced by the agricultural development policies pursued during the next few years.

Reference

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