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**The Role of PL-480 in Jamaican Food and Agricultural Policy**

**Policy Paper 3a**

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# The Role of PL-480 in Jamaican Food and Agricultural Policy

## 1. Introduction

This paper reports on the role and impact of PL-480 food aid shipments in Jamaican food and agricultural policy. Production, consumption, foreign exchange, and fiscal impacts of this food aid are identified and highlighted. The first section of this paper: contains a discussion of some of the important policy issues surrounding food aid to developing countries; identifies the data utilized to undertake the analysis; and sets out the analytical framework to determine the influences of PL-480 shipments. In the second section of this paper we describe the workings of the PL-480 program in Jamaica and present trends in shipments and total imports. The analysis of production and consumption impacts is undertaken in sections 3 and 4, respectively. Conclusions and policy recommendations are set out in section 5.

### 1a. Policy Issues

The role of food aid in making a positive contribution to the development process of a country has been widely debated in the literature (for a review of such literature see von Braun and Huddleston, Deaton, Maxwell and Singer) with two distinct views emerging. One view is that food aid provides a positive impetus to development: 1) by increasing food supplies to meet increases in employment without putting pressure on food prices and hence wages; 2) when foreign exchange is scarce, food aid can be used to maintain consumption levels without immediate expenditure of foreign exchange; 3) providing fiscal resources to the government

4) governments use resources earned through the domestic sale of food aid for capital development and enhanced resource allocation of domestic food production.

The alternative view, and somewhat pervasive, is that food aid is a disincentive to production. Food aid shipments, by increasing local supplies, decrease prices and reduce local production. However, recent evidence suggests that this may not be so. von Braun and Huddleston provide evidence that for a set of countries which received some of the highest levels of food aid, recorded high levels of real growth of agricultural output. In most cases, evidence attesting to the positive or negative consequences of food aid is less clear and varies by the specific country under analysis. Thus, the administration of food aid denotes whether positive benefits are acquired or negative consequences encountered.

#### **1b. Data for Analysis**

The data used for the analysis is time series data from the Jamaican Commodity Trading Company (JCTC), the Ministry of Agriculture (MOA), and cross sectional data from the 1984 Household Expenditure Survey (HES) of STATIN. These data are available in the background papers cited in the bibliography of this paper and are only summarized in this paper.

#### **1c. Analytical Approach**

The analytical approach taken in this study is that proposed by von Braun and Huddleston. There are four areas that food aid can influence: production, consumption, foreign exchange, and fiscal resources. However, the way in which food aid influences

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these four areas depends on whether food aid imports are additional to commercial imports (actually increases the level of imports) or food aid imports substitutes for commercial imports (the overall level of imports is the same as if all imports were commercially imported).

In the case where food aid imports are substituting for commercial imports the following is expected: 1) the disincentive effect to domestic food production is nil. This is because the overall level of food supplied by imports is unchanged and food aid commodities at the retail level cannot be distinguished from the same commodity from other supplies; 2) similarly the food consumption impacts are also nil since demand is not effected nor supply; 3) the impact on foreign exchange is positive since foreign exchange is saved in the short run (the mechanics of this feature of food aid will be described below). This is because food aid can be provided through direct grants or through soft loans that eventually must be repaid and; 4) fiscal resources are obtained through the difference between what the government receives from private millers and traders and what it pays to acquire food aid.

In the case where food aid is additional to commercial imports and sales are conducted on an open retail market the following is expected: 1) the additionality of food aid would depress farm prices since the total supply of the commodity has increased; 2) food consumption of the food aid commodities would increase since prices are now lower; 3) foreign exchange savings would generally not occur since the level of commercial imports is not reduced by the level of food aid; and 4) the

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government would still earn fiscal resources through its procurement and sale of food aid commodities.

Hence, whether PL-480 shipments in Jamaica are additional to or merely substitutes for commercial imports is a key to understanding the role of such shipments. This is determined in the next section.

## 2. PL-480 in Jamaica

The existence of PL-480 shipments can be traced back to 1975, (the earliest recorded level of such shipments). PL-480 commodities consist of corn, wheat, rice, and soybean oil and are provided under agreements reached by the Jamaican and U.S. governments. The quantum level of PL-480 imports, the terms under which such imports will be supplied, and payments are negotiated each fiscal year. The actual procurement and domestic sale of PL-480 shipments is handled by the JCTC.

Examination of the terms over the period FY1982-FY1988 reveals the following: 1) all deliveries of the commodities sold under the agreement must be made within the fiscal year of the contract; 2) percentages are specified as to the amount of PL-480 shipments that must be shipped on U.S. flag vessels and are currently 75 percent. Jamaica is responsible for the payment of ocean cargo charges, but the U.S. will bear the difference in the cost of meeting this requirement (i.e., if it is cheaper to ship on non U.S. carriers); 3) Jamaica is limited by value to the level of shipments it can obtain. Initial limits on both value and quantity are set, but if prices rise then the maximum quantity bought is reduced (conversely, if prices fall then more

of the commodity can be purchased). These limits are set out in Table 1; 4) Payment terms, made in U.S. dollars are: 25 (15 over the period FY1982-FY1986) installment payments of equal amount not due until 6 years after the date of last delivery of commodities in each calendar year. The initial interest rate is 2 percent which is applicable from the date interest begins (usually the date of last delivery in the calendar year) until the due date of the first installment. Thereafter, the interest rate is 3 percent (3% and 4%, respectively over the period 1982-1986); 5) the agreement insures that food aid cannot completely replace commercial imports by specifying the least amount that Jamaica can import from commercial sources. These values, the marketing requirements, are outlined in Table 2 and are in addition to the level of food aid financed in Table 1 and; 6) the government of Jamaica is directed to undertake a variety of self-help measures such as: improvement of production, storage and distribution of agricultural commodities; identification of incentives and strategy for private sector investment (AGRO-21); removal of price controls on domestically produced products and direct subsidies on food imports; dairy industry development; livestock genetics; and continuing studies on the impacts of the food stamp program and incentives faced by domestic agricultural producers.

Beginning in FY1987, local currency purchases of wheat up to \$US 7 million were allowed. That is, Jamaica would spend Jamaican dollars on specified projects and activities and the U.S. would provide an equivalent amount of wheat purchased with

Table 1  
 Maximum Value and Quantities of PL-480  
 Commodities Imported by Jamaica FY 1982-1987

<u>Fiscal Year</u>	<u>Wheat</u>		<u>Corn</u>		<u>Rice</u>		<u>Soybean Oil</u>	
	<u>Quantity*</u>	<u>Value**</u>	<u>Quantity*</u>	<u>Value**</u>	<u>Quantity*</u>	<u>Value**</u>	<u>Quantity*</u>	<u>Value**</u>
1982	27,000	1.6	60,000	6.7	14,000	4.7	1,100	.6
1983	40,000	7.1	45,000	5.0	18,000	5.7	3,000	1.5
1984	46,000	8.0	31,000	4.7	14,000	5.0	2,000	1.6
1985	100,000	16.0	75,000	10.5	20,300	6.0	3,300	2.5
1986	83,000	14.0	73,000	8.0	22,000	6.0	2,000	2.0
1987	53,000***	6.6	88,000	8.5	32,000	5.5	----	----

<u>Fiscal Year</u>	<u>Total Value**</u>
1982	16.6
1983	11.3
1984	19.3
1985	35.0
1986	30.0
1987	27.6

\* Metric tons

\*\* Millions of U.S. \$

\*\*\* In addition to this, 56,000 M.T. with maximum value of 7 million U.S. \$ in local currency

Table 2  
Usual Marketing Requirements for PL-480  
Commodities in Jamaica

<u>Fiscal Year</u>	<u>Wheat</u> <u>(M.T.)</u>	<u>Corn</u> <u>(M.T.)</u>	<u>Edible Oil</u> <u>(M.T.)</u>	<u>Rice</u> <u>(M.T.)</u>
1982	139,000	112,000	15,000*	39,000
1983	109,000	82,300	12,000	30,000
1984	113,000	33,900	12,400**	31,600
1985	68,000	58,500	7,425***	18,350
1986	65,600	37,500	7,425***	17,000
1987	120,400	none	---	---

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\* At least 12,000 M.T. from U.S.

\*\* At least 10,640 M.T. from U.S.

\*\*\* At least 6,700 M.T. from U.S.

U.S. dollars. Jamaica would still be responsible for the ocean freight charges. The local currency payments would have to be incurred 120 days after the U.S. disbursement. Ninety five percent of such funds in FY1987 would have to be in the forms of loans to intermediary financial institutions to foster the development of private enterprise institutions and improve and expand production of food and other related goods. Five percent would be for technical assistance in the agricultural sector.

## 2a. Trends in Shipments

Trends in and data on the limits on quantities and limits of PL-480 shipments, usual marketing requirements and levels of actual PL-480 shipments are given in Tables 1-3. The quantities in Table 1 are subject to the prices prevailing at the time of purchase, while the values are fixed. The average value of food aid given to Jamaica over the period FY1982-1987 is \$US 24.62 million dollars per annum and is equal to approximately 14 percent of the value of all food imports in 1986. Food aid has grown from 21.9% of all U.S. assistance in FY1981 to 42.0% in FY1988 (McLelland). The importance of this food aid is also demonstrated in the data presented in Table 3.

Two different regimes are noted, the periods FY1976-FY1980 and FY1981-FY1987. The data reveal that PL-480 shipments of rice, edible oils and wheat comprized a very small share of total imports over the period FY1976-FY1980. In the case of wheat, there is a jump in shipments in 1978/79 when the food shortage was escalating and foreign exchange was very scarce. PL-480 shipments of corn averaged 33.40% over the period FY1976-FY1980.



Table 3  
 PL-480 Imports and Total Imports of  
 Cereal and Edible Oil Commodities in Jamaica

Fiscal Year	Rice		Wheat		Corn		Soybean Oil	
	PL-480* Imports	Total* Imports	PL-480* Imports	Total Imports	PL-480 Imports	Total* Imports	PL-480* Imports	Total* Imports
1976	---	---	3	151	---	117.0	---	---
1977	---	---	6	138	1.3	159.0	---	---
1978	---	---	34	157	77.8	198.0	1.0	9.00
1979	---	---	2	173	87.9	157.0	0.0	5.00
1980	---	---	13	140	98.4	162.0	1.0	7.00
1981	2.2	44.3	23.43	167.2	25.0	151.7	3.85	8.30
1982	19.3	47.7	25.99	169.83	54.0	114.4	1.00	3.45
1983	16.3	47.2	42.06	174.92	39.1	173.8	2.66	5.96
1984	16.3	47.0	52.82	179.92	31.8	158.8	1.80	7.03
1985	32.7	56.1	89.55	194.95	101.2	140.5	6.15	12.07
1986	35.6	57.0	139.60	180.1	101.6	115.9	***	---
1987	32.0**	54.0	109.00**	204.0	88.0**	145.0	***	---

	Rice	Wheat	Corn	Soybean Oil
Percentage Shares:				
1976-1980	---	7.64%	33.40%	9.5%
1981-1987	43.69%	29.38%	42.80%	32.42%
Coefficient of Variation:				
1976-1980	---	1.15	.65	.87
1981-1987	.54	.65	.53	1.01
1976-1987	---	1.00	.65	1.12

\* '000 of metric tons  
 \*\* Stated in agreement, not actual  
 \*\*\* No PL-480 shipments

A different scenario emerges over the period FY1981-FY1987. PL-480 shipments for all four commodities averages 29.38% of wheat imports; 32.42% of edible oil imports; 42.80% of corn imports; and 43.69% of rice imports. Further, wheat, rice and corn imports show an increasing trend in both absolute and relative magnitude since 1980. Moreover, for these commodities we conclude that food aid imports have been substitutes for commercial imports since the overall quantity levels of imports experienced low or no growth over the period 1976-1986, while the composition of total imports (commercial vs. aid) changed dramatically.

#### **Supply of Food Aid**

An important issue associated with food aid is that of variability of supply of such aid. Recent evidence from a large sample of countries suggests that food aid is an unstable and risky source of supply as measured by the coefficient of variation (the standard deviation divided by the mean of the variable) (von Braun and Huddleston). This is particularly relevant for Jamaica where food aid imports were less important in the 1970's than the 1980's. Moreover, given the known peculiarities of U.S. foreign policy and aid decisions the level of supply to Jamaica could change for any future period. The coefficient of variations for each commodity was calculated over the periods FY1976-FY1987, FY1976-FY1980 and FY1981-FY1987 and is reported in Table 3. Over the period FY1981-FY1987, rice, wheat and corn have small coefficients of variation (.54, .53 and .65, respectively) indicating that instability in food aid supplied has not been a serious issue, while edible oil has a coefficient

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of variation of 1.01 indicating the variability of food aid supply of this commodity. In fact, edible oil is not currently being shipped to Jamaica under the PL-480 program.

Reliance on food aid of the magnitudes seen in Table 3 raises two potential problems for Jamaican policymakers. First, the true opportunity cost of cereal imports is not realized and hence policies are made (decisions to import other items, resource costs of agricultural investments) that may not be consistent with the true scarcity cost of foreign exchange since food aid may appear to be costless. Second, an increasing reliance on food aid adds to the general level of indebtedness of Jamaica, a country already heavily in external debt. Food consumption levels are being maintained, but the cost is hard currency owed sometime in the future which requires a strong export sector. In Policy Paper 2a, it was shown that the non-traditional export sector was providing an extremely small share of total export earnings and it is a stylized fact that the traditional export sectors of Jamaica are stagnant or declining. If this situation does not turn itself around, Jamaica may be faced with having to reschedule these loans in the 1990's and may also be faced with the prospect of a decrease in food aid imports. This would require Jamaica to rely more on commercial imports.

These potential problems are those that food aid is suppose to help over come--enable the country to achieve a level of development and production, by relaxing the foreign exchange constraint and providing fiscal resources, so that food aid is

not necessary and a country can afford to pay for its own imports (even imported food items) and/or produce commodities consistent with that countries preferences and true opportunity costs.

### 2c. Food Aid vs. Direct Aid

To conclude this section, we raise the question of whether the amount of food aid (in terms of soft loans) could not have had a higher rate of return if given to Jamaica directly for capital development and agricultural projects, instead of tying such aid to food shipments (and allowing Jamaica to pay for its own cereal imports). It is difficult to assess this, given the poor history of such projects in Jamaica, as outlined in Policy Paper 2a. Also, agricultural credit in Jamaica has had an equally poor history in that past schemes providing development credit, similar to those proposed, have resulted in a high rate of loan defaults and a weakening of institutions involved in making such credits (Bourne and Graham). This is not to suggest that such projects should not be undertaken, but careful design and monitoring need to be an integral part. However, one project that may have had a high payoff is a modernization of the sugar industry given the marketing arrangements with the EEC and financing of the development and modernization of coffee, cocoa and bananas. One area that has had a payoff from these tied funds is the developments in the dairy industry, where changes in milk pricing policy and marketing have led to increases in local milk production.

### 3. PL-480 and Domestic Production

In the previous section we concluded that food aid imports were substitutes for commercial imports and not additional imports. The analytical approach described in section 1, would lead one to then conclude that food aid imports would have no disincentive effect on domestic production. In policy paper 2a, the stylized facts of cereal and oil production in Jamaica were noted, namely, Jamaica grows no wheat, less than 4 percent of corn and rice disappearance is local production and edible oil production is less than 10 percent of total disappearance. This is because the comparative advantage of Jamaica is not in producing these food items (regardless of the level of food aid imports, but as long as they are not additional).

These points are emphasized by examining the influence of prices both locally and in the world market. In Tables 4 and 5, the world price, the price that could be paid under PL-480, assuming the quantities and values in Table 1 were upheld, the JCTC selling price, and the Jamaican farm price are set out over the period 1982-1987. The principle findings are as follows.

#### 3a. Rice

The JCTC selling price to local distributors is approximately two times the world price and 83 percent above the PL-480 price. The JCTC, for all PL-480 commodities, must incur the transportation costs of shipping the product to Jamaica and it has its own handling and administration costs, but the margins indicate that the selling price exceeds the import price plus costs. This has resulted in actually protecting rice producers since farmgate prices, until 1987, were close to JCTC selling

Table 4  
World Prices, PL-480 Prices, JCTC Selling Prices  
and Farm Prices of Cereal and Edible Oil Commodities  
(US \$/M.T.)

Year	Rice*				Wheat**			
	World Price	Max PL-480 Price	JCTC Price	Farm Price	World Price	Max PL-480 Price	JCTC Price	Farm Price
1982	280	336	669	---	159	171	280	---
1983	273	317	485	---	154	178	203	---
1984	240	357	380	272	147	174	208	---
1985	225	295	492	560	130	160	181	---
1986	221	272	492	472	109	169	116	---
1987	---	171	192	604	---	125	116	---

  

Year	Corn***				Soybean Oil****				
	World Price	PL-480 Price	JCTC Price #2	JCTC Price #3	Farm Price	World Price	PL-480 Price	JCTC Price	Farm*****
1982	115	111	116	135	542	454	545	977	1663
1983	145	111	85	134	---	675	500	709	1207
1984	117	151	124	200	---	650	800	1093	1100
1985	99	140	126	167	---	397	758	760	1140
1986	74	110	88	130	304	333	1000	760	1140
1987	---	97	88	130	368	---	---	---	---

\* Thailand, white, FOB

\*\* Gulf, FOB, #2 HW 13%

\*\*\* Gulf #3 Yellow

\*\*\*\* Decatur

\*\*\*\*\* Price of coconuts in terms of coconut oil equivalence

Table 5  
Selected Price Ratios of Cereal and Edible Oil  
Commodities in Jamaica

Year	Rice			Wheat		
	JCTC/WP	JCTC/PL-480	FP/WP	JCTC/WP	JCTC/PL-480	FP/WP
1982	2.39	2.00	----	1.76	1.64	----
1983	1.74	1.53	---	1.32	1.14	----
1984	1.58	1.06	1.13	1.41	1.20	----
1985	2.18	1.67	2.48	1.39	1.13	----
1986	2.22	1.81	2.13	1.06	.69	----
1987	----	2.39	3.53	----	.94	----
Average	2.022	1.83	2.32	1.39	1.12	----

Year	Corn				Soybean Oil			
	JCTC#3/WP	JCTC#2/WP	JCTC#3/PL-480	FP/WP	JCTC/WP	JCTC/PL-480	FP/WP*	FP/WP**
1982	1.61	1.01	1.67	4.71	2.15	1.79	---	3.66
1983	.92	.59	1.21		1.05	1.42	---	1.79
1984	1.71	1.06	1.32		1.68	1.37	.96	1.69
1985	1.67	1.27	1.18		1.91	1.00	1.92	2.87
1986	1.74	1.19	1.17	4.10	2.28	.76	3.04	3.42
1987	----	----	1.34	3.79	---	----	----	----
Average	1.53	1.02	1.315	4.40	1.81	1.27	1.97	2.69

\* Coconuts to Coconut Oil

\*\* Coconuts to Soybean Oil

prices. The price data for rice indicate that Jamaica has no comparative advantage in rice, unless yields can be improved to bring down farmgate prices to near world levels. PL-480 shipments of rice have then saved foreign exchange in the short run (until the loans have to be repaid) and contributed to the government budget by provision of resources through the sale of rice. In most years, Jamaica was able to exceed the maximum quantity levels specified indicating that the PL-480 price was generally not paid.

### 3b. Corn

The pricing policy for corn represents an interesting contrast to rice. Jamaica imports two types of corn, #2 corn for direct human consumption (cornmeal) and #3 corn for use in animal feed. The JCTC price for #2 corn is a subsidized price since their price is approximately equal to the world price and the costs of importation must be subtracted from the JCTC price to get an accurate measure of comparison. Conversely, #3 corn is sold by JCTC at a price 53 percent, on average, above the world price, but only 31 percent above the initial PL-480 price. Again, corn imports have generally exceeded the maximum quantity levels specified suggesting that corn has been procured at a price less than the initial PL-480 price. Further, #3 corn imports have averaged 76 percent of the all corn imports over the period FY1982-FY1987. Thus, livestock farmers have been penalized by this pricing policy and a disincentive effect for these farmers has occurred since animal feed, of which the corn content is approximately 50-60 percent of the total feed mix, has

been priced higher than world market conditions would imply. It is also interesting to note that the share of corn in animal feed has been declined from 60 percent in FY1982 to 47 percent in FY1987. This is part due to the availability of corn and the price paid for such corn. As in the case of rice, Jamaica does not have a comparative advantage in corn since farm prices have been 4 times higher than world prices and 3 to 4 times higher than even JCTC selling prices.

### **3c. Wheat**

Wheat prices set by the JCTC have averaged 39 percent above world prices and 12 percent above the initial PL-480 price. The quantity of wheat imported has generally exceeded the maximum quantity, which again indicates that most purchases occur at prices less than the initial negotiated price. Wheat does not appear to be heavily subsidized by the JCTC pricing policy once marketing costs are taken into consideration. It is difficult to discuss the comparative advantage of wheat, since it is not technically feasible to grow wheat in Jamaica. The usual marketing requirements for wheat have been removed for FY1988, but Jamaica is limited to the amount imported by the maximum value limits. The most important contribution of wheat food aid has been the saving of foreign exchange and contribution to the Jamaican government revenues.

### **3d. Edible Oil**

Edible oil imported by the JCTC under the PL-480 program is sold at prices, on average, 81 percent above world prices for soybean oil, but, on average, approximately equal to the initial

PL-480 price once marketing costs are accounted for. This initial price appears to influence the sale of these imports since less than the maximum quantity is usually purchased. As was noted above, soybean oil is currently not being imported into Jamaica under the PL-480 program, but is imported commercially.

The assessment of the comparative advantage of coconut production for coconut oil is undertaken by examining farm prices for coconuts in terms of coconut oil. Coconut oil, using locally grown coconuts, is priced at levels 2 to 3 times that of imported coconut oil and soybean oil. Hence, Jamaica does not have a comparative advantage in producing coconut oil. This is consistent with a recent report on edible oils, prepared for AGRO 21. Further, one of the self-help measures tied to PL-480 sales is to determine why locally produced edible oils exceed world prices by the levels reported here.

### 3e. PL-480 impacts on domestic food crop production

The impact of cereal and edible oil imports under the PL-480 have no negative consequences on either the same crops grown locally or crops that can substitute for cereal and edible oil imports (such as yams, sweet potatoes, green bananas, and coconut oil). This is because prices currently paid by consumers, and ultimately fed back to producers, are already at or exceed world prices. Thus, the relative prices faced by producers, as given in these markets, are higher than would be realized if JCTC were to reduce the prices of commodities it sells to wholesalers and millers. Under the current pricing schemes, the patterns of production observed for root crops, and green bananas (though

currently less true for coconut oil) are patterns observed under a policy where prices for these crops are subsidized (producers protected) and not penalized. In the case of livestock, though, producers are being penalized by the corn pricing policy.

A pricing policy that would bring grain prices more closely in line with world prices would then have some negative consequences for domestic root crop production. However, these "negative" consequences are the result of realigning resource allocation in agriculture to reflect more closely the true opportunity cost of producing these crops.

#### **4. PL-480 Shipments and Consumption**

The analytical model in section 1 predicts that there would be no impact on food consumption when food aid imports are substitutes for commercial imports. However, given the pricing policies of JCTC, it is clear that consumers of rice, edible oils, beef, pork, and poultry are financing the government budget and agricultural development in Jamaica. Consumers of cornmeal are being subsidized by this pricing policy.

The primary consumers of these products are those in Kingston and those with higher incomes (Policy Paper 2a). The rural and poor consumers rely more on domestically produced substitutes of these crops to meet food needs (Policy Paper 2a). From the viewpoint of nutrition, Kingston and upper income families record higher levels of calories, iron, calcium, and vitamin A than those in rural and low income households (Background Paper on Household Consumption Survey Analysis). This is expected given the consumption patterns of Jamaican households. This is in contrast

with a widely held view that food aid imports tend to and should increase the consumption and nutritional levels of the poor.

A reduction in the prices of commodities sold by JCTC would have the effect of increasing the consumption for meat and cereal products and improving the nutritional levels of rural and low income households.

A reduction in JCTC prices would also have ramifications for the government's budget since fiscal resources would be less. On the one hand financing development of agriculture through the local sale of food aid frees up government resources to be used elsewhere, but skews the opportunity cost of all government resources, since in the absence of such sales agriculture would be financed from general revenues. Further, such policy implicitly taxes those consumers to support development of agricultural products (i.e., root crops) which they do not widely desire.

## 5. Conclusions and Implications

PL-480 shipments of cereal and edible oil commodities to Jamaica, while a large proportion of imports of these commodities, do not appear to have caused disincentives for producers of domestic food crop products. An indirect disincentive is faced by livestock producers who must pay higher prices for animal feed than is indicated by world market prices. Consumers of rice, edible oil and meat also pay higher than world market prices for these products. Hence, producers of rice, edible oils and root crops find themselves subsidized by this policy.

The positive benefits of PL-480 shipments accrue to Jamaica in terms of the saving of foreign exchange in the short run (since the loans must be repaid) and the contribution of fiscal resources to aid in the modernization of agriculture and providing general budgetary support. These benefits should continue given that Jamaica has not experienced instability in food aid supply. However, since supplies must be renegotiated each fiscal year, an element of risk is present since a cutoff in aid (though perhaps in likelihood is quite low) is always possible.

Policymakers need to be aware that alternatives to food aid, such as foreign exchange earnings of the traditional and non-traditional export sectors need to be enhanced, so that food aid becomes less important. A continued reliance on food aid imports sends misleading signals to the government, since the opportunity cost of obtaining food aid imports is not just the cost of shipping and distributing.

The pricing policies of the JCTC need to be reviewed and perhaps modified. Reductions in the prices of imported staples sold by JCTC would reduce retail prices of these products, without adversely influencing domestic production (since prices are already above world prices). This would have the positive benefit of increasing real wages and fostering employment since low income workers spend a large portion of their budget on food items.

Finally, the Government of Jamaica, given that Jamaica does not have a comparative advantage in cereals and oils, should attempt to enter into long term trade agreements with the U.S. whereby Jamaica would trade such items as sugar, rum, ethanol, etc. for cereals and oils. This would ensure that cereal and edible oil supplies are stable and provide secure markets for Jamaican exports.

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