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DECLINE OF AGRICULTURE IN PUERTO RICO:  
AGRICULTURE IN A SMALL ECONOMY INDUSTRIALIZING  
WITH THE HELP OF FOREIGN CAPITAL

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Introduction

According to a recent United States Census Bureau report the agricultural sector in Puerto Rico has continued to decline - farm acreage, number of farms, and value of the agricultural product are all in decline (1).

The decline of Puerto Rican agriculture is a recent phenomenon. At the time of the U.S. occupation of the island in 1898, only 21 per cent of the total area was under cultivation (2), while in 1967 about 56 per cent of the area was cultivable (3). (According to the Federal Soil Conservation Service of the United States about 40 per cent of the area of the Island is favourable for cultivation, and the rest could be dedicated to pastures and forests.) (4). However, between 1964 and 1969 farm acreage shrank from 1.6m. acres to 1.3m. acres. In this period the number of farms declined from 44,859 to 32,687, and the value of all farm products sold from \$209.8m. to \$172.9m. The decline in farm income was mainly due to the decline in crop income from \$141m. to \$84m. There was, however, an increase in the income generated by the livestock, poultry and related products from \$68m. in 1964 to \$88m. in 1969 (1).

History

The rise and fall of Puerto Rican agriculture has a checkered history. After 1898, the large United States sugar corporations gave an impetus to the sugar cane production both through acquisition of the existing cultivable land and by reclaiming more land for cultivation. Coffee, which was prominent in the island's export trade before the American rule, was rapidly replaced by sugar (5). Sugar enjoyed protection of the U.S. tariff.<sup>1</sup> The coffee industry declined because of competition from imports in the absence of comparable tariff; and the traditional tobacco industry, producing cigars, could not face the new vogue of cigarette smoking.

*By 1930 sugar was responsible for some 78 per cent of all capital invested in manufacturing; its exports constituted some 65 per cent of all products exported; and in capital invested the industry accounted for five times the amount invested in the coffee and tobacco industries combined. (5)*

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<sup>1</sup>"Then the tariff wall was thrown around the island. Sugar became the chief beneficiary and cane spread over the valleys and up the hillsides like wild-fire. The Spanish economy had somewhat haphazardly predicated on small land-holdings. The American economy ... was based on the million-dollar mill and the tight control of the surrounding countryside." (5)

An emphasis on monoculture led to acquisition of land "hitherto devoted to subsistence food growing result(ing) in a steady decline in the production of crops that could be used for local trade or immediate domestic consumption " (5). Rice and corn, which were being grown adequately before 1898, were grown less and less. In 1950-51, still 32,934,700 pounds of corn and 2,866,400 pounds of rice were being grown for a population of about 2,210,703 (6); while in 1970-71 almost all the cereals were being imported for a population of about 2,777,000.

During World War I, the island for a while could produce a lot more for home consumption without affecting its exports of coffee, tobacco and sugar cane products. But that was made possible by a deliberate government policy. After the war no such policy was maintained and, for that matter, social benefits of local food production were sacrificed to private profit possibilities in the monoculture of sugar cane.

The citrus fruit industry flourished after 1915 for some time. But it was badly hit by competition from Florida and California. The hurricane of 1932 further threatened its existence.

#### The 500-Acre Law

The Congress of the U.S. passed the 500-Acre Law in 1900, according to which no corporation could own more than 500 acres of land. This was incorporated in the first Organic Act of Puerto Rico in the same year. In the second Organic Act of 1917, the 500-Acre Law was reenacted. However, the implementation of the Law had to wait for nearly forty years when the Superior Court granted the right to the Puerto Rican government to enforce the agrarian law. For forty years, after 1900, the vested interests tried in one way or the other to avoid the law or to have it repealed. In the meantime 51 sugar corporations had come to control 249,000 acres of the best land of Puerto Rico. One of these corporations held more than 50,000 acres. U.S. capital dominated the sugar industry and gradually concentrated ownership. In 1909

... there were 48 mills of less than \$5,000 capital investment (each) and only three of more than \$500,000 (each); by 1919 there were none in the lower category and 32 in the higher (most of those being over \$1m). Investment in individually owned sugar mills moved from \$1.3 to \$3.3m between the two dates while that of corporate mills moved from \$13.1 to \$45.9m." (7)

The government of Puerto Rico started out in 1941 to eradicate the corporate *latifundio*. But of 33 corporations owing more than 500 acres, only 7 were made into public enterprises,<sup>1</sup> and 5 others were persuaded to sell part or all of their land to the *colonos*.<sup>1</sup> By the end of the 1940's further attempts to implement the 500-Acre Law were abandoned.

Sugar monoculture continued as before for exportation of sugar. In 1949 out of 768,886 *cuerdas*<sup>2</sup> of crops planted on the island 366,441 *cuerdas* were devoted to the production of sugar cane, 176,386 *cuerdas* to coffee, 44,241 *cuerdas* to bananas, 39,497 *cuerdas* to corn, 26,834 *cuerdas* to tobacco, 23,818 *cuerdas* to sweet potatoes, and the rest to miscellaneous crops such as plantains,

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<sup>1</sup>The *colonos* grew sugar cane and the sugar mills processed it. The *colonos* got a share of the sugar, leaving the mill owners with the other share plus the revenues from rum and molasses.

<sup>2</sup>A *cuerda* is equal to 0.9712 acre.

tannias, coconuts, yams, rice, pineapples, cotton, etc. (6). In the meantime a blow was dealt the Puerto Rican industry by mechanized beet and sugar cane production in the U.S. and Hawaii, and by competition from low cost production in Cuba. The relatively small tobacco and coffee industries were not able to stand the competition of cigarettes against Puerto Rican cigars, and of South American coffee against Puerto Rican coffee.

According to the First Economic Report to the Governor of Puerto Rico, in 1950, sugar cane land then consisted of 380,000 cuerdas. Food crop acreage, which increased from 230,000 to 300,000 cuerdas due to import restrictions during World War II, had declined to the original 230,000 cuerdas. There was also a decrease in the pasture land by about 30,000 cuerdas, but better breeding of animals made up for it.

In 1953, it was observed by Nathan Koenig (6) that 80 per cent of wood products consumed in Puerto Rico were imported, while a lack of forests resulted in erosion of land and sedimentation of streams and reservoirs needed for hydroelectric power.

### Present Situation

Personal consumption expenditure on food has gone up from \$106m. in 1940 to \$901m. in 1971. However, farm value of agricultural commodities in total gross terms has gone up from \$84m. in 1940 to only \$279m. in 1971. The major increase has been contributed by livestock products.<sup>1</sup>

Crop-land has declined from 745,000 cuerdas in 1962 to 565,000 cuerdas in 1970. However, in the same period, pasture and range land has increased from 794,000 cuerdas to 840,000 cuerdas; forest and woodland from 300,000 cuerdas to 321,000 cuerdas; and buildings and other unproductive land from 97,370 cuerdas to 106,000 cuerdas.<sup>2</sup>

In 1940 both forest and woodland, and buildings, roads and other unproductive land constituted 213,689 cuerdas, while in 1970 they totalled up to 427,000 cuerdas (6).

With a base of 1950-51, index of the physical volume of agricultural production changed from 116.5 in 1951-52 to 105.1 in 1968-69. Index of principal crops, such as sugar cane, tobacco and coffee changed from 122.5 in 1951-52 to 60.2 in 1968-69. Index of other crops such as fruits, starchy vegetables, garden vegetables, pulses and cereals went down from 107.2 in 1951-52 to 95.6 in 1968-69. Index of livestock products, on the whole, changed from 105.2 in 1951-52 to 223.9 in 1968-69. While index of race horses and fighting cocks, together, shot up from 109.0 in 1951-52 to 416.1 in 1966-67 (10)

Total number of agricultural labourers (of 14 years or older) has declined from 201,000 in 1952-53 to 75,000 in 1970-71 (10). The decline in agriculture

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<sup>1</sup> Informe del Gobernador, 1971

<sup>2</sup> Anuario de Estadísticas Agrícolas de Puerto Rico, 1962-63, 1968-69 and 1970-71, Land Utilization Tables.

has scared the young and productive-age people away from the land; 80 per cent of the island's farm owners are over 45 years of age, 13.5 per cent are between the ages of 34 and 44, and only 0.8 per cent are between the ages of 25 and 34.

There are many small farms on the island. Their productivity is low. Between 1967 and 1969, 77.3 per cent of the farms earned \$1,200 a year or less on the average, and 4.2 per cent of the farms, which occupied 625,568 acres or just about half of all the land, earned \$20,000 or more on the average. The large farms accounted for 79.9 per cent of the Island's total farm income (1).

The total sales of all the fertilizers have declined from 260,227 tons in 1951-52 to 133,660 tons in 1970-71. The sales of unmixed fertilizers went down in the same period from 41,771 tons to 10,854 tons, and that of mixed fertilizers went down from 218,456 tons to 122,806 tons. By crops there was a noticeable decline in the use of mixed fertilizers in cases of sugar and tobacco. The coffee, vegetable and pineapple crops maintained their use of the fertilizers over time. The pastures increased their use of the fertilizers (10).

In 1950-51, the value of imported foodstuffs, fodders, and feeds from the U.S. was about \$109m. while in 1970-71 it was \$497m. From other countries the imports of these commodities were about \$16m. in 1950-51, and \$112m. in 1970-71 (6 & 10). Below we give the comparative values of some of the imports for 1950-51 and 1970-71 in current prices.

<u>Imports</u>	<u>1950-51</u>	<u>1970-71</u>
	(Million dollars)	
Meats and meat products	16	148
Milk and milk products and eggs	17	69
Fish and fish products	6	65
Cereals and cereal products	36	69
Fruits, vegetables and preparations	20	64
Sugar and related products	2	8
Forage	8	15
Beverage materials and spices	4	11
Beverages	6	43

The agricultural imports of the island have increased many times because the exporters to the island, especially from the U.S., have taken advantage of the rising population, rising incomes, and rising prices on the island. The local agriculture for one reason or the other has not been able to rise to the occasion.<sup>1</sup>

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<sup>1</sup> One of the main reasons for this seems to be that the U.S. producers of agricultural products dump their surplus produce on the island market and sell it at less than their full cost of production.

## Reasons for Decline in Agriculture

We would like to argue that decline in agriculture, as highlighted by the above-mentioned data, is mainly due to the dependence of the island on foreign enterprise, and to land speculation. It does not seem, as argued by some, to be due to a deliberate neglect of agriculture, soil conservation, irrigation facilities, mechanization, marketing facilities, etc. For that matter, it is not due either to the lack of enterprise and ingenuity on the part of Puerto Rican agriculturists, or to the demand for relatively high wages by the agricultural labourers. These are just symptoms of the malady caused by over-dependence.

### Dependence

According to Koenig, both agriculture and industry:

*... have their focus primarily on the export market and virtually overlook the real possibilities of the local market. ... In general, there exists a heavy reliance on imports ... which otherwise could be produced economically in Puerto Rico. Obviously this imposes a heavy drain on the economy and deprives the people of employment opportunities. A dollar earned from exports and spent for imports disappears almost completely from the island when it is paid out. On the other hand, a dollar earned from local production and spent for local consumption or use remains on the island, and has a healthy cumulative effect on the economy as it circulates from one hand to another. Thus, if the economic base is to be effectively broadened and strengthened, it is essential that far more attention be given to increasing production for local needs to the full extent that is economically feasible while at the same time maximizing economic production for export. This applies equally to industry and agriculture in Puerto Rico. And if followed through, it would supply the balance that is needed between both. (6)*

The problem in the case of Puerto Rico is that not much attention can be given to increasing production for local consumption. The nature of the situation, at the same time, is that not much needs to be done about maximizing production for export. The island has been dependent on foreign enterprise and "typical manufacturing industries working chiefly for the domestic market do not appear to attract foreign capital" (11). The foreign enterprises produce generally for exports. This has been very evident for the plantations on the island. In the case of the foreign enterprise in manufacturing it is no less true. Whatever costs, fixed or variable (excepting labour and some other minor costs), are incurred by the foreign enterprise, are incurred on imported equipment and raw materials. The increase in income since the start of the industrialization programme has been due to the employment of part of local labour in the foreign enterprise, and to the cumulative effect of construction of roads, urbanization, condominiums, and office and factory buildings with the help of some local supplies and local labour. Many well paid managerial and technical jobs in the foreign enterprise go to the foreigners who may save a big part of their incomes. The minimum wages of local labour, who may spend a large part of their incomes, are kept as low as possible. To a large extent the incomes created by foreign enterprise in Puerto Rico are spent on their products or on imported goods, especially when local agriculture and business are not strong enough to meet competition from foreign enterprise and imported goods. All this does not help in widening the internal market of the island (11). Nor does it generate a healthy cumulative effect when industrial development

of the island relies almost exclusively on imported raw materials and continental U.S. market (2).

It has been argued that a small island like Puerto Rico, with limited resources, has to depend on imports. But the dependence of the island on imports of foodstuffs, fodder, and feeds can be reduced to a great extent. (Although it may not be economical to produce automobiles, and capital goods, the production of certain electrical appliances and intermediate goods, which are being imported at present, could also be done with due economies of scale.)

At present, in 1970-71, the import of meat and meat products is about \$148m. (which is almost the same as the import value of automobiles). It should be possible to meet a lot of this demand locally by improving upland pastures, which have few alternative uses, for the cattle industry; by raising hogs on feeds of heavier weights; and by scientific production of poultry. Milk and milk products and eggs, whose imports are worth \$69m. can be produced when there are enough cattle and poultry. Fish and fish products which are imported to the tune of \$65m, should be possible to have locally, provided a fishing industry is developed with active help from the government. Fruits, vegetables, cereals and beverages, which amount to \$180m. of imports can also be produced to a great extent locally<sup>1</sup> and cheaply.

The U.S. exporters of rice, for example, produce rice in Louisiana at \$125 for 100 hundred-weight per acre in one crop. They sell this 100 hundred-weight for \$600 at the farm. The shipping costs from the farm in Louisiana to Puerto Rico is extra. It has been found after due experimentation that the production of rice in the river-valleys of the island is feasible. This production, even at a cost of \$350 for 100 hundred-weight would leave a margin of \$250 for unforeseen costs and profits. The consumers would also benefit as they would not have to pay for shipping charges from Louisiana to Puerto Rico (12).

Not only is there enough plain coastal land for growing of the rice requirements of the island, but also enough for growing of the vegetable requirements. Rice growing is not so labour-intensive as vegetable growing. Growing of both rice and vegetables might take away some land from sugar production. But this should result in a better situation both from economic and social viewpoints. Sugar cane production is a declining industry anyhow. Growing of rice and vegetables would not only provide jobs to the Puerto Ricans, it would also provide a cheaper and surer source of basic necessities to them.

To achieve a certain degree of freedom from imports a balanced development of the economy is needed. It does not mean that the island has to become self-sufficient. But it does mean that the present situation of over-dependency on imports can be corrected through an active economic policy of pairing industrial development with agricultural development.

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<sup>1</sup> Certain products of the island, such as pineapple, instead of being processed right on the island, are sent to the U.S. where they are processed and then exported back to the island. It is heartening to learn, however, that recently the island government has decided to experiment with rice production.

## Land Speculation

Land speculation may also be traced to the economic dependence of the island. It is true that land is scarce in Puerto Rico. But it has been made still more scarce by the *pampered* foreign investors. First, a lot of land was appropriated by the planters. Before 1940, almost all the flat, rich, coastal land was bought over by the American sugar companies and devoted to a monoculture of sugar cane. Lately these companies, it seems, have found it more profitable to go into real estate and land speculation because the sugar industry is in decline and their lands are in demand for urban expansion.

Sprawling urban expansion, which is very much unplanned, seems to be connected with the rising but unequal incomes engendered by tax exemptions and low minimum wages. Land prices have been shooting up at the rate of 20 to 30 per cent per year since the start of *Operation Bootstrap*.<sup>1</sup> The land-owners who anticipate future urbanization just because an industrial manufacturing plant has been established nearby do not improve their lands for cultivation. Besides, "*for every acre of land that is urbanized, four additional acres are withdrawn from farming because of development expectations*". According to the already mentioned U.S. Census Bureau report, about 300,000 acres of land were taken out of farm production between 1964 and 1969 for land speculation.

At present there are hundreds of land development companies trying to build one-storey, two-storey, and multi-storey houses and buildings. Real estate trusts of the U.S.A. are trying to buy the insular land for investment purposes. These include big speculators. Professionals buy land for token farming in order to show losses which can be written off against their professional incomes for tax purposes. At the same time the value of the land goes up each year, giving the professional a good return on his original investment.

Property taxes on the island favour land speculation. In 1961, according to a government estimate, the assessed value of land in San Juan was about 23 per cent of the market value. This induces developers and speculators to purchase farmland and hold it in anticipation of rising prices.

The Planning Board has been approving housing projects on agricultural land. Over and above this it has approved sewer facilities in excess of the immediate needs. This results in a pressure for further urbanization and land speculation.

Over the past decades, especially since the start of a programme of industrialization based on tax exemption and other concessions, the value of land has increased. But the value of urban and semi-urban land has increased more than that of agricultural land. Therefore, the developers and builders have to leapfrog and develop and build in the countryside. Because the agricultural value of land is lower than its market value, agriculture is being sacrificed.

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<sup>1</sup> The mainland banks "*continue to show strong interest in Puerto Rico, bringing in new money for industrial projects or for condo-resort projects.*" James McDonough, "Land: Our Next Explosive Crisis," *San Juan Star*, April 15, 1973. This section has taken a lot from a series of six articles by McDonough in the *San Juan Star* issues of April 15 to April 21, 1973.



Mostly urbanizations and roads are being built on land which is flat and thus suitable for mechanization for agriculture.<sup>1</sup> This type of land is very scarce in an otherwise hilly Puerto Rico.

### Epilogue

The present Popular Democratic Party government of the island is contemplating the following measures in order to increase the cost of holding idle land and reduce the profit from land sales:

- (a) a new tax on vacant and under-utilized land in both urban and rural areas - this should encourage utilization of the land and thus reduce land speculation;
- (b) a reassessment of property values which would increase the property tax and thus induce the landowners to use their tracts of land most productively;
- (c) a special tax levied against land whose value increases because of a government improvement such as a road - this would make the landowners pay a part of the improvement expenditure; and
- (d) a stronger capital-gains tax law, which would permit the government to appropriate a share of the profits realized from land sales.

It is also being considered that the farm land of the island should be frozen so that the urban expansion does not eat up the agricultural lands. The best farm land in the lowland areas would be made an exclusive agricultural zone. Less productive land would be classified in less rigid zones. Altogether 1.5m. acres would be put into the various agricultural zones. This should help in boosting net income from agriculture to \$380m. by the year 1975.

The government seems to be of the view that taxation, together with zoning, should end speculation and protect agricultural land. Back in 1962, it was thought by the then Popular Democratic Party government that neither taxation nor zoning was enough. So it established a land administration agency. The aim of this agency was to buy and hold land and then later sell it at lower than market prices for either public or private development. For one reason or the other, the agency did not fulfill its promise. However, it was used by the conservative administration of the New Progressive Party during 1968-72 to purchase a number of losing sugar mills. The agency lost \$5m. from operating these mills.<sup>2</sup>

It is to be hoped that a reassessment of property values will be made. The last scientific reassessment was done during 1949 and 1952. The one done in 1958 was less than a thorough job. The Planning Board studies of 1961 and 1968 reported that low assessment led to speculation. But the government did not pay much attention to these reports. Whenever a re-zoning by the Planning Board increases the land values the Treasury does not do a corresponding reassessment.

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<sup>1</sup> Large petro-chemical complexes in Peñuelas, Guayama and Yabucoa have also been built on the fertile alluvial land which had a great potential for mechanization.

<sup>2</sup> Another \$100m. was appropriated to be spent over five years to offer aid to the expiring sugar industry. *Sugar y Azúcar*, May 1970.

The 500-Acre Law, as mentioned before, was not implemented wholeheartedly. One possible reason could have been the impotence of the government vis-à-vis the vested interests in the sugar industry. Since the 1940's a number of cases against the landowners, who own more than 500 acres, have been abandoned. At present, with the decline of the sugar industry, the *latifundistas* seem to be indulging in land speculation.

It has been suggested that Puerto Rico could reduce its farm land from 1.3m. to 700,000 acres and still produce more than it does at present. Modern agricultural technology can increase farm income from \$170m. a year to \$442m. a year, by 1983, on reduced acreage. The estimated cost to the government for this programme is \$320m. over a period of 10 years. This is less than that spent on sugar cane alone during 1968-72. Through intensive training in modern skills of farmers and farm hands, through land improvement, the creation of service centers, and government marketing programmes, the sugar cane and coffee acreage can be reduced and production increased; pastureland and land for plantains can be increased to boost the production of milk, beef and plantains sharply; and vegetables, rice and timber production can be augmented (13).

More production on less land through the application of modern technology is feasible. But the question is: *Is it possible for a dependent economy like that of Puerto Rico to do this?* The development of Puerto Rican agriculture might hurt the exporters of \$497m. worth of agricultural commodities from the U.S.A. Already U.S. labour is angry about low wages on the island which attract U.S. industry and deprive U.S. labour of jobs. A reduction in export of agricultural commodities to the island would be resisted by the U.S. agricultural interests vehemently.

Another proposal is to make the island economy a completely industrialized economy with the help of American, European and Japanese capital. The agricultural requirements then could be imported from abroad (14). Whether this would solve the problems of the island is a moot question. Already the highly technified, capital-intensive industries have made the distribution of income and wealth highly skewed without solving the unemployment problem.

*About 70 per cent of the island's families have annual income below the minimum deemed necessary by the Commonwealth government to maintain an adequate standard of living in Puerto Rico (15).*

Recently an import and distribution corporation has been created to protect locally produced foods against outside dumping. Dumping makes imports relatively cheaper, and thus it is easy for them to ruin the island's agriculture. The corporation, by subsidizing the local farmer, would make him face the foreign competitor (16). This is an indirect approach as compared with the control of dumping, or prices at which dumped goods can be sold on the island. But this may be a short step toward reviving agriculture.

## References

1. U.S. Department of Agriculture, Bureau of the Census. *1969 Census of Agriculture, Puerto Rico*: Pt.52, Dec. 1972, pp. VII-X.
2. Lewis, G.K. *Puerto Rico, Freedom and Power in the Caribbean*. New York: 1963, p.55.
3. Roces, M.V. *Puerto Rico y su Reforma Agraria*. Río Piedras, Puerto Rico: 1968, p.165
4. *Anuario de Estadísticas Agrícolas de Puerto Rico, 1970-71*, E.L.A. Depto. de Agricultura, Oficina de Estadísticas Agrícolas, p.VIII.
5. Marin, L.M. "The Sad Case of Puerto Rico," *The American Mercury*, 16 (62), Feb. 1929, p.139.
6. Koenig, N. *A Comprehensive Agricultural Programme for Puerto Rico*. Washington D.C., U.S.A.: 1953, pp.5 & 182.
7. Beckford, G.L.F. *Persistent Poverty*. New York: Oxford Univ. Press, 1972, pp.112-113.
8. Edel, M. "Land Reform in Puerto Rico, 1941-59," *Caribbean Studies*, II (4), Jan. 1963, pp.43-50.
9. *Anuario de Estadísticas Agrícolas de Puerto Rico, 1962-63, 1968-69, and 1970-71*. (Land Utilization Tables.)
10. *Anuario de Estadísticas de Puerto Rico, 1968-69 and 1970-71*.
11. League of Nations. *Industrialization and Foreign Trade, 1945*, p.66, quoted in P.A. Baran, *Political Economy of Growth*, New York: 1968.
12. Stella, T. "Expert Say Island Can Fill Rice Needs," *San Juan Star*, March 6, 1973.
13. \_\_\_\_\_. "New Agriculture Proposal for Puerto Rico," *The Sunday San Juan Star*, April 15, 1973.
14. Bliss, P. "Japan Said Threat to Puerto Rice Economy," *The Sunday San Juan Star*, April 15, 1973.
15. Ramos, F. "Study Shows the Poor Getting Poorer," *The Sunday San Juan Star*, May 28, 1972.
16. \_\_\_\_\_. "Import Firm Hopes to Cut Rising Prices," *San Juan Star*, April 23, 1973.

Appendix Table 1. Land Utilization; Puerto Rico

(Area in Cuerdas) *			
	1962	1968	1970
<i>Total Agricultural Land</i>	1,936,370	1,838,000	1,832,000
Cropland	745,000	620,000	565,000
Pasture & Range (not cultivated)	794,000	820,000 340,000	840,000 340,000
Forest & Woodland	300,000	323,000	321,000
Buildings, Roads & Other Unproductive Land	97,370	75,000	106,000

\* A cuerda equals 0.9712 acre.

Source: Informe del Gobernador, 1971.

Appendix Table 2. Summary of Puerto Rico's Agriculture

	1969	1964	% Change
<i>Number of Farms</i>	32,687	44,859	-27.1
Cuerdas in Farms	1,334,800	1,641,042	-18.7
Cuerdas of Harvested Cropland	362,642	585,444	-38.1
Value of All Farm Products Sold	\$172,944,896	\$209,824,778	-17.6
Crops	\$ 84,404,901	\$141,121,162	-40.2
Livestock, Poultry & their Products	\$ 88,547,545	\$ 68,703,616	+28.9
<i>Farm Production Expenses:</i>			
Feeds for Livestock & Poultry	\$ 31,558,736	\$ 22,266,645	+41.7
Commercial Fertilizer	\$ 12,353,975	\$ 13,317,152	- 7.2
Farm Labour	\$ 50,320,083	\$ 61,226,552	-17.8

Source: (1)