A MARXIAN APPROACH TO SPATIAL DEVELOPMENT: THE CUBAN ALTERNATIVE TO TOWN AND COUNTRY PLANNING

by

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INTRODUCTION

Planners can promote ordered growth and development through acquaintance with various planning approaches. Use of a particular theory without reference to others undermines the reliability and validity of those alternatives which may have the potential for more accurate predictions. One little recognized approach in the United States is that of the Cuban Marxist, its apparent success warrants consideration as a viable alternative. Throughout Europe, Asia, Africa and Latin America, Marxism is a broadly accepted social science and while it is not the only framework for analysis, it is the focus for this report.

Since the revolution of 1959, Cuba's political, social, and economic organization has developed its own brand of Marxism. The national planning approach involves a single framework from which city and rural planning and development can transpire. Within the Cuban socialist context, spatial development is defined as the integration of town and countryside, and the harmonization of productive and residential units.

Since 1959, Cuban town and country planning has vivified John Friedmann's notions of innovative and allocative planning. Innovative planning involves institutional change to meet ongoing demands and needs. It "is fundamentally concerned with translating general value propositions into new institutional arrangements."

As early as 1953 Castro's forces stressed two major concerns: promoting rural living standards and uplifting social justice. Actualization of these ideals insinuated a restructuring and reorientation of capitalist Cuba's redistributed mechanisms.

Action orientation, another aspect of innovative planning, is an intentional mobilization and use of resources to produce a given effect. Actions can be either individual or group organized. They are interrelated with institutional change, flexibility is stressed, strict adherance to pre-established guidelines is not. Action orientation acquaints planners with the side effects stemming from original objectives: Suitable objects are then formulated to ameliorate them.

Friedmann writes that action orientation is:

Continuous search for the relevant objectives of action . . . In successful instances of innovative planning, two related strategies will be employed. The first is primarily concerned with matters of institutional development. . . The second is more concerned with achieving the evolving purposes of the institution.²

This has characterized Cuba's development since 1959.

Allocative planning is "the distribution of limited resources among a number of competing users." It is exemplified by comprehensiveness, system-wide balances, quantitative analysis and functional rationality.

Comprehensiveness stresses various interdependencies:⁴

- all explicity stated objectives;
- major alternative uses for the resources available;
 and
- projected external conditions that may modify the setting of intermediate targets.

System-wide balances emphasizes optimal choice, which requires

a balance among a system's components and which permits the calculation of results achieved under incremental change.

Quantitative analysis allows "for a study of the system under quasi-experimental conditions and is capable of leading, through a process of trial-and-error, to logically consistent solutions." 5

Functional rationality is geared to point out inconsistencies among goals. As an ingredient of allocative planning, it attempts to make all decisions functionally rational.

As indicated by each of its elements, allocative planning attempts to promote centralized activities which are balanced, coordinated and implemented in the public interest. Conversely, innovative planning emphasizes a competitive form of planning which tends to be rather independent of central allocative mechanisms.

The Cuban approach reveals that allocative and innovative planning can be intertwined within the same structural framework. The conditions in 1959 were such that, had either form been emphasized, Cuba may not have progressed as rapidly as it did. The revolutionary government needed an expansion of the governmental structure in order to stimulate economic development and the socialist transformation. As the restructuring of the productive and distributive forces and the emphasis on geographic decentralization indicated, innovative planning promoted better allocative procedures than those found in capitalist Cuba. The predominance of innovative planning and the comprehensiveness of allocative planning have provided the framework for long range social and economic development, especially since 1971.

Within the context of comprehensiveness of the last fourteen years, Cuba has periodically readjusted its policies as results of trials-and-errors. These modifications have not involved complete revampment of existing programs and governmental organizations. Change has occurred incrementally within rational long range quidelines.

Since planning was quite nill until 1967, the profession has learned in piecemeal fashion what the process entails in developing the Cuban model. Had each alteration of the system been comprehensive rather than a synoptic rational approach, the whole planning system would have been thrown into disequilibrium and become quite unstable. Within a revolutionary context, this may have made the legitimization of the government more difficult.

NOTES

l John Friedmann, <u>Retracking America: A Theory of Transactive Planning</u> (New York: Anchor Press, 1973), p. 61.

- 2 <u>Ibid.</u>, p. 64.
- 3 <u>Ibid.</u>, p. 52.
- 4 <u>Ibid</u>., p. 59.
- 5 <u>Ibid.</u>, p. 55.

CHAPTER I

AGRICULTURE - PRE-REVOLUTIONARY DEVELOPMENT

The Institutional Framework

"The institutional pattern of modern Cuban agriculture was largely shaped during the great expansion of the sugar industry at the beginning of the present century." Until the revolution in 1959, rural areas were characterized by the concentration of land in the hands of the owners of a few large cane plantations and cattle ranches, by the prevalence of non-owners among farm operators, and by the high proportion of the labor force who were wage-earners.

Table 1 illustrates the degree of concentration of landholdings in the mid-forties. The contrast is quite striking. Less than eight percent of all holdings accounted for slightly over seventy percent of the farmland, one-half of one percent controlling more than one-third of the total farm acreage. At the other extreme was the minifundia (small plantation) complex—more than eighty percent of the holdings comprised less than one-fifth of the agricultural land, over one-third of the farms being smaller than two hectares and more than seventy percent of them less than twenty-five.

TABLE 1.--Cuban Farms by Size Groups, 1945

Size Groups	Far	Farms	Area	
(Hectares)	(Number)	(Number) (Per cent)	(Thousand hectares)	(Per cent)
0.4- 24.9	111278	9.69	1021.9	11.2
25.0- 99.9	35911	22.5	1608.0	17.71
100.0-499.9	10433	6.5	2193.6	24.1
500.0-999.9	1442	0.0	992.5	10.9
1000 and over	894	0.5	3261.1	36.1
Totals	159958	100.0	1.7706	100.0

a. One hectare equals 2.471 acres.

Source: Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 75, table 6: Cuban Agricultural Census, 1946.

TABLE 2.--Land and Sugar Mills Controlled by 28 Largest Sugar Companies (May, 1959)

Firms that controlled.	M	Mh.	77 P 2 -	1 3 - 1 - 1 - 1 - 1		Percentage of	0
(In thousands of hectares)	Number of Firms	Sugar Mills	Owned	Firms Sugar Mills Owned Rented Controlled	Controlled	Farmland	Area
13.42 to 67.1	17	35	391.9	147.6	539.5	5.35	4.7
67.1 to 134.2	.c	15	332.8	146.3	579.1	4.75	4.2
More than 134.2	9	36	712.6	323.4	1036.0	10.30	9.0
Totals	28	98	1437.3 617.3	617.3	2054.6	20.40	17.9

Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 77, table 8: Mills and area controlled by firms: INRA, Un Ano de Liberacion Agraria. Land in farms: Proyecto de Plan Quinquenal para el Desarrollo de la Agricultura Cubana en 1961-65. Source:

TABLE 3--Number of Holdings and Area by Types of Farm Operators in Cuba, 1945.

Type of Operator	Fa	Farms	Total Area	ırea	Average Area
	(Number)	(Per cent)	(Thousands of Hectares)	(Per cent)	(Hectares)
Owners	48,792	30.5	2958.7	32.4	9.09
Administrators	9,342	5.8	2320.4	25.6	248.4
Renters	46,048	28.8	2713.9	30.6	58.9
Sub-renters	6,987	4.4	215.2	2.4	30.8
Share-croppers	33,064	20.7	552.1	6.1	16.7
Squatters	13,718	8.6	244.6	2.7	8.71
Other	2,007	1.2	72.1	0.8	35.9
Totals	159,958	100.0	9077.0	100.0	56.7

Source: Dudley Seers, ed., Cuba: The Economic and Social Revoluation (New York: Anchor Press, 1973): p. 79, table 10: Cuban Agricultural Census, 1946.

These overall measures of concentration largely reflected the situation that prevailed in the sugar and cattle industries, the two principal branches of Cuban agriculture.

The rise of the <u>latifundas</u> (sugar plantations) had been both a cause and result of the accelerated growth of sugar production from about 1890 to 1925. The progressive concentration of the sugar industry and land ownership was the result of new technological conditions. After railway networks connecting the cane fields to the mills were built on a significant scale at the end of the last century, it became technically possible for the mills to serve considerably larger areas. Moreover, it became profitable for the sugar companies to own the surrounding land in order to assure an adequate supply of cane for their mills, now larger and more efficient.

After 1900, the massive inflow of American investments and the rising profits of Cuban and Spanish-owned sugar mills² removed the capital limitations which had existed in the previous century. During this period the sugar companies bought vast tracts from independent cane growers³ and by 1912 they controlled more than one-tenth of all Cuban land. American interests invested heavily in expansion and modernization, and these developments led to further reductions in the number of centrales (central plantations) and to new acquisitions of land from the peasants. By 1925 only 184 sugar mills were in operation but they controlled 17.7 percent of the total land area in Cuba.⁴ A similar pattern existed in the thirties, a decade during which the mills owned a fifth and controlled more than a

quarter of all land on the island.

The information in table 2 illustrates that by May, 1959, the twenty-eight largest sugarcane producers owned over 1,400,000 hectares and rented 617,000 hectares, controlling over twenty percent of the land in farms and almost one-fifth of the Cuban territory.⁵

The degree of concentration was also significant in the cattle industry. The forty largest firms in the country owned almost one-tenth the land in farms. 6

During the 1950s the rapid development of rice cultivation introduced a new type of large-scale farming. By 1958, roughly five percent of all rice producers had control of about seventy-five percent of the area under rice and produced an even larger share of total output. As with the sugar estates and cattle ranches, the large rice farms were, in general, highly specialized, one-crop units.

The vital role played by managers who did not own farms they cultivated is apparent from table 3. In 1946 only 30.5 percent of all holdings and 32.4 percent of the land in farms were directly managed by their owners. Both the number of holdings controlled by different types of renters and their area exceeded the corresponding figures for owners. Additionally, one-fifth of the agricultural production units were farmed under sharecropping arrangements.

Economic Patterns

Monoculture and serious underutilization of land and labor were the major economic features of pre-revolutionary Cuban agriculture. Cuba was a prime example of the one-crop, export-oriented

economy. For instance, one-fourth of national income came from the sugar industry during the fifties.⁸ The agricultural sector of the sugar industry employed 400,000 wage workers and contributed forty percent of farm income.⁹ More than one-half of all cultivated land was under cane.¹⁰

Over-specialized farming was not restricted to the sugar estates, but typified the majority of the agricultural production units. As table 4 indicates, the main source of income for every group of farms never provided less than sixty percent of all earnings and considerably more on farms specializing in sugarcane, livestock, tobacco, and coffee.

Table 5 shows how land was used in Cuba during the mid-forties. Pastures covered by far the greatest part of the farmland. In general, the pattern of land use was molded by institutional and economic factors. Because of the sharp concentration of land ownership, the allocation of land to alternative uses at the national level was bound to reflect the decisions of the sugar mills and the cattle ranchers of the eastern provinces. Allocation was also partly determined by natural causes, such as the instability of the international demand for sugar, and by artificial ones, such as the vast array of institutions which, being related to sugar, tended to perpetuate monoculture. Finally, the divergence of private and social costs caused by unemployment placed sever limitations on incentives to diversify agricultural production and thus influenced indirectly the pattern of land use.

TABLE 4--Composition of Farm Income, and Farms Classified According to Principal Source of Income in Cuba, 1945.

			FARMS	
Source of income	Per cent share in total farm income	Per cent of income from principal crop	Number (in thousands)	Per cent of all farms
Sugar cane	41.6	9.98	29.1	18.2
Livestock	20.9	82.2	28.8	18.0
Tobacco	10.2	75.9	22.8	14.2
Cereals and beans	9.4	63.8	26.8	16.8
Root crops	6.7	2.09	15.7	8.6
Coffee	2.7	75.6	9.3	5.8
Tree fruit	2.0	70.6	4.8	3.0
Garden truck	6.0	62.1	1.2	6.0
Other crops	5.0	73.9	11.4	7.1
Forest products	9.0	79.3	6.0	9.0
			9.1 ^a	5.7
Totals	100.0	1	159.9	100.0

a. No income reported.

Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 81, table 12: Cuban Agricultural Census, 1946. Source:

TABLE 5--Cuban Land in Farms by Uses, 1945

Uses	Area (In thousands of hectares)	Proportion of land in farms (Per cent)
Cultivated	1970.4	21.7
Pastures	3897.2	42.9
Moods	1265.7	18.9
Marabu ^a	268.1	3.0
Other uses ^b	1650.4	18.2
Idle ^C	25.2	0.3
Total land in farms	9077.0	100.0

a. Area covered by Dychrostachys nutans, Banth, a leguminous, thicket-like growth which is one of the worst agricultural pests in Cuba.
b. Includes roads, buildings, and unproductive land.
c. Land that was not exploited in 1945 and was idle at the time the census was taken in 1946.

Source: Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 84, table 15: Cuban Agricultural Census, 1946.

Since land was the cheapest and most abundant factor of production, economic rationality recommended that some land be kept uncultivated in a sector catering to a market characterized by large periodic fluctuations. Table 6 illustrates that the area under cane expanded during favorable periods and contracted when the world market situation deteriorated. The figures also indicate that the amount of land kept in reserve was in excess of what was justified by the instability of the demand for sugar.

The need to maintain large amounts of semi-idle land was further reduced because the sugar mills used another method to adjust output to changes in the market. A comparison of the figures in the first two columns of table 6 reveals that during 1953 to 1958 a significant gap developed between the area planted with cane and that actually harvested. During a downswing in demand, the gap widened, as the harvested area declined more rapidly than the area planted; it narrowed when market prospects improved, since the companies could absorb the partly unexpected demand increases through cutting a higher proportion of the available cane.

For the <u>centrales</u>, this system was extremely flexible and almost costless. For the national economy, however, it represented a costly under-utilization of the best farmland of the country. The data also indicates that in pre-revolutionary Cuba it was the level of demand and not the limitations imposed by productive capacity that determined the actual volume of sugar production. They also prove that in Cuba there was neither a land or labor shortage to require

TABLE 6--Area Under Cane and Area Harvested in Cuba, 1952-59.

Year	Area Under Cane (In thousands of hectares)	Area Harvested (In thousands of hectares)	Area Harvested as Per cent of area Under Cane
1952	1425.0	1405.8	98.6
1953	1604.9	1009.2	62.9
1954	1541.7	957.4	62.1
1955	1444.3	834.7	57.8
1956	1346.4	0.966	73.9
1957	1376.9	1264.8	91.8
1958	1304.1	1047.1	80.3

Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 85, table 16: Anuario Azucarero, 1959. Source:

that agricultural diversification could only be bought at the price of a reduction in sugar output.

On the other hand, diversification would have required more capital in the form of higher inputs of seeds, fertilizers, tractors, and other agricultural equipment, as well as investments in the training of agronomists, technicians, and laborers. To the extent that investments used semi-idle but fertile land and unemployed workers, they would have yielded high rates of net social return. By expanding both output and employment and by making them steadier over the years, investments in diversification also would have increased the average productivity of some of the social overhead capital, which was large enough to meet the seasonal peak requirements of the sugar harvest but remained underutilized during the rest of the year. 13

Diversification could have made another strategic contribution to the development of the economy. By replacing food imports and by increasing exports of agricultural products, it would have saved foreign exchange—one of the essential conditions for increasing imports of capital equipment. Lapital imports in turn would have facilitated industrial growth and improvements in agricultural technology.

The social and economic advantages of agricultural diversification were considerable. They had been recognized as early as 1927. This prolonged failure to diversify suggests that the factors at work were imbedded in the economic institutions of Cuban agriculture.

The Socio-Economic Situation of the Agricultural Population

The existence of relatively large differences between living conditions in urban and rural areas is a common characteristic of underdeveloped economies. Although well-paid during the cane harvest, the rural worker earned little during <u>tiempo muerto</u> (dead season), when employment opportunities fell sharply.

The population and housing census, on which table 7 is based, provides a comparison between the relative and absolute living standards of the countryside and cities. Three-quarters of the rural dwellings were <u>bohios</u> (huts), and two-thirds had earthen floors. Over ninety percent had neither tub or shower, and less than eight percent of all dwellings had any form of water closet.

A survey taken in 1958 resembled the results of the census of 1953. ¹⁶ In addition, the survey included information on income levels, expenditure levels, food intake, educational and health standards, and other subjects. All of these confirmed the squalid living conditions which about forty percent of the country's population had to face.

The average annual income of a family of six was estimated to be \$590.75, giving a per-capita figure of \$91.95. 17 More than two-thirds of expenditures went to food. 18 For only eleven percent of the families did the usual diet include milk; for only four percent meat, for only two percent eggs, and for only one percent fish. 19

Health standards were no better. More than one-third of those interviewed had intestinal parasites; thirty-one percent of them had

TABLE 7.--Housing Conditions in Cuba, 1953 (In percentages)

-	Urban	Rural	Cuba
Buildings Masonry Wood Palm or wood thatch Other	51.8	2.7	33.5
	34.6	16.4	27.7
	9.7	75.4	34.3
	3.9	5.5	4.5
Floors Tile Cement Wood Earth Other	53.3	2.6	34.4
	26.9	18.2	23.6
	6.6	7.5	6.9
	9.3	66.2	30.6
	3.9	5.5	4.5
Conditions Good Fair Poor	53.8 37.6 8.6	25.7 48.4 25.9	43.4 91.6 15.0
When built Before 1920 1920 to 1945 After 1945	36.1 35.8 28.1	8.1 46.6 45.3	25.7 39.8 39.5
Lights Electric Acetylene Kerosene Other	87.0	9.1	58.2
	.3	1.9	.9
	12.3	87.6	40.1
	.4	1.4	.8
Water Inside piping Cistern Outside piping River, well, or spring	54.6	2.3	35.2
	5.2	4.6	5.0
	22.0	8.1	16.8
	18.2	85.0	43.0
Toliets Water closet, inside Water closet, outside Privy None	42.8	3.1	28.0
	18.9	4.8	13.7
	33.3	38.0	35.1
	5.0	54.1	23.2

TABLE 7--Housing Conditions in Cuba, 1953 (continued).

	Urban	Rural	Cuba
Baths Tub or shower	64.9	9.5	44.4
None	35.1	90.5	55.6
Refrigeration			
Mechanica1	26.5	2.4	17.5
Ice	11.0	1.1	7.3
None	62.5	96.5	75.2

Based on 1,256,594 living units (793,446 urban, 463,148 rural).

Source: Dudley Seers, ed., <u>Cuba: The Economic and Social Revolution</u> (New York: Anchor Press, 1973): p. 96, table 18: Censos de Poblacion, Viviendas y Electoral, 1953.

suffered or were suffering from paludism and fourteen percent from tuberculosis; thirteen percent had had typhus. ²⁰ Almost nine percent of the peasants had to pay for medical care out of their earnings. ²¹

Economically, low income levels represented an important obstacle to the expansion of industrial output; lack of education wasted potential talent; poor housing and health reduced labor productivity. Still more negative were the social effects of the adverse conditions in the rural areas. The scarcity and irregularity of employment and the inadequacy of educational facilities meant that the peasants' lot was essentially determined for forces outside his control. On the average, he had little chance of improving his situation.

In sum, during the decade before the revolution, the Cuban economy was highly vulnerable to uncontrollable changes in the international demand for sugar. Moreover, food imports were high, notwithstanding the fact that many foodstuffs could have been produced on the island itself, land was underutilized, and farm labor was unemployed. The lack of rapid economic progress was accompanied by basic absence of change in institutions.

As a result of the slow growth of agricultural output, of the persistent predominance of sugar monoculture with its highly seasonal demand for labor, and of the uneven distribution of land ownership, the economic, social, and cultural conditions of the peasantry were low by absolute standards and in sharp contrast to the more favorable circumstances of the urban population.

NOTES

- 1 Dudley Seers, ed., <u>Cuba: The Economic and Social Revolution</u> (Connecticut: Greenwood Press, 1975), p. 74.
 - 2 Ibid., p. 75.
 - 3 Ibid.
 - 4 Ibid., p. 76
- 5 Guillermo Geisse and Jorge Hardoy, eds., <u>Latin America</u> <u>Urban Research</u> (United States: Sage Publications, 1972), p. 21.
 - 6 Ibid., p. 22.
- 7 Seers, ed., <u>Cuba: The Economic and Social Revoluttion</u>, p. 76.
- 8 Maruja Acosta and Jorge Hardoy, <u>Urban Reform in Revolutionary Cuba</u> (Antilles Research Program, Yale University, 1973), p. 20.
 - 9 Ibid., p. 22.
 - 10 Ibid.
- 11 Seers, ed., <u>Cuba: The Economic and Social Revolution</u>, p. 83.
 - 12 Ibid., p. 87.
 - 13 Ibid., p. 89.
 - 14 Acosta and Hardoy, Urban Reform in Revolutionary Cuba, p. 13.
 - 15 <u>Ibid</u>., p. 17.
 - 16 Seers, ed., Cuba: The Economic and Social Revolution, p. 95.
 - 17 <u>Ibid.</u>, p. 97.
 - 18 Ibid.
 - 19 <u>Ibid</u>.

- 20 <u>Ibid</u>.
- 21 <u>Ibid</u>., p. 98.

CHAPTER II

PRE-REVOLUTIONARY URBANIZATION

Like most Latin American countries, Cuba demonstrated a high degree of urban population concentration prior to 1959. During the first twenty-five years of the twentieth century, the expansion of an economy dominated by foreign interests brought two new influences on the Cuban urbanization process: development of the latifundo and an increase in migratory workers. In its most advanced state, the plantation system created a form of rural social organization which of necessity limited any relative surplus of population, giving rise to a rural-urban migratory flow whose peaks coincided with the months of sugar harvest inactivity. Other events influenced the rural-urban migration: the displacement of small farmers from the land, the substitution of immigrants for Cuban rural workers, the introduction of improved, labor-saving technologies in the modern centrales, and the disappearance of diversified agriculture, with a consequent reduction in employment opportunities, acted together to produce an internal migratory movement toward the cities. 2 As table 1 indicates, the rates of urban growth, sustained by immigration and internal migration, exceeded those of the total population from 1907 to 1958. By 1931 the cumulative effect of the immigration of the previous years, of rural demographic pressure, of a decrease in the death rate, and of the world crisis that affected the sugar industry had definitively

TABLE 1--Annual Growth Rates of Total and Urban Population, 1827-1958.

	Total (%)	ürbar (%)
 1827-1841	3.0	
1841-1861	1.9	
1861-1877	0.5	
1877-1887	0.8	
1887-1889	-0.9	3 ■.■9
1889-1907	3.3	3.0
1907-1919	2.9	3.5
1919-1931	2.6	5.0
1931-1943	1.6	2.0
1943-1953	2.1	3.0
1953-1958	2.2	3.0

Source: Maruja Acosta and Jorge Hardoy, Urban Reform in Revolutionary Cuba (Antilles Research Program, Yale University, 1973), p. 74, table 1: Nicolas Sanchez Albornoz and Jose Luis Moreno, La Poblacion en America Latina (Buenos Aires, Paidos, 1969), for 1827 to 1887; official census figures for 1887 to 1953; and JUCEPLAN, Compendio Estadistico de Cuba, estimates for 1953 to 1958.

tipped the rural-urban balance of the population in favor of the urban sector. 3

Several policies: adopted between 1902 and 1930 set the stage for an open immigration that, directly and indirectly, contributed to the greater urbanization of Cuba. Initially there was an interest in attracting foreigners who would colonize Cuban territory. Beginning in 1920, and coinciding with the crisis in the sugar industry that lasted the decade, immigration received a new boost when all types of workers were permitted legal entry. As these immigrants tended to settle in the sugar-producing areas and in the proximity of the big cities. Table 2 shows that Havana province absorbed 29.62 percent of the increase from immigration between 1907 and 1931, followed by Oriente (23.60 percent), Camaguey (21.42 percent), and Santa Clara (19.68 percent).

The data on table 3 indicates urban population concentration in Havana, the capital city, expressed both by absolute numbers in comparison to the total population and by percentage of national demographic growth absorbed. From 1931 to 1953, the capital gradually increased its absorption of absolute demographic growth and of the growth of the urban population. During the first three intercensual periods listed in table 3, Havana absorbed a percentage of the absolute growth of the total population and of the urban population that exceeded its proportional share of the total population of the country.

The distribution of the urban agglomeration in Cuba was determined by the configuration of a transportation network that

TABLE 2--Distribution of Foreign-Born Inhabitants By Province, 1907-1943.

				1907-1931	31	1931-1943	43
Province	1907	1919	1931	Increase	% Total	1943	% Total
Pinar del Rio	23,481	28,258	34,688	11,207	1.93	4,312	2.14
Havana	108,011	163,214	280,438	172,427	29.62	71,190	35.36
Matanzas	25,816	49,371	47,624	21,808	3.75	9,827	4.87
Las Villas	59,307	126,806	173,844	114,537	19.68	32,254	16.09
Camaguey	10,340	56,917	135,025	124,685	21.42	39,712	19.75
Oriente	41,397	108,384	178,776	137,379	23.60	43,882	21.79
Cuba	268,352	535,950	850,413	582,043	100.00	201,177	100.00

Source: Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 77, table 4: Official census figures.

TABLE 3--Population of Havana in Relation to National Demographic Growth, 1919-1969.

ex	9		3	9	9	6
Ind	8/6 (9)	!	1.23	1.76	1.26	0.99
the pop. periods	(8)		20.4	34.4	26.1	20.6
	5/3	Ĩ	29.4	49.1	38.3	30.7
	(6)	15.0	16.5	19.5	20.7	20.7
	Havana (5)	;	219,102	281,847	275,250	527,034
Absolute growth of the pop. in intercensual periods	Tota! (4)	1	1,073,340	816,239	1,050,446	2,531,306
Absol in	Urban (3)	1	744,079	572,456	717,138	1,692,861
	Havana (2)	432,721	653,823	935,670	1,210,920	1,737,954
	lota! pop. (1)	2,889,004	3,962,344	4,778,583	5,829,029	8,360,335 1,737,954
	Year	1919	1931	1943	1953	1969

Dudley Seers, ed., Cuba: The Economic and Social Revolution (New York: Anchor Press, 1973): p. 78, table 5: Official census figures for 1919 to 1953; JUCEPLAN estimate for 1969 (especially prepared for one of the authors by the Instituto de Planificacion Fisica in August 1970). In 1943 and 1953 Greater Havana was formed by the municipios of Havana, Guanabacoa, Marianao, Regla, Santa Maria del Rosario, and Santiago de las Vega. Source:

essentially served the needs of the export economy. During the colonial period the principal cities were ports. In 1899 there were only three interior cities (10,000 or more inhabitants) connected to the coast by railroads. In 1931 the number had risen to twelve, and in 1953 to twenty-eight. The interior cities with more than 10,000 inhabitants contained seven percent of the total population in 1931, and twelve percent in 1953. Taken together they did not surpass the population of the capital. The expansion of the sugar industry and the development of overland transport furthered the growth of service centers away from the coast, to the extent that by 1943 six of the thirteen most populous cities were in the interior. 9

There can be little question that the needs of the sugar industry—to transport cane to the <u>centrales</u> and sugar to the ports—dictated priorities for the transportation network that developed during the earlier part of this century. The Revolutionary Government had to confront serious problems in the development of transport. Of fundamental importance was the insufficient number of roads that penetrated to cultivable fields. 10

In sum the most salient demographic and environmental aspects of Cuban urbanization prior to the revolution were:

- an abnormally large capital which in 1959 contained a fifth
 of the total population and whose growth absorbed twentysix percent of the absolute growth of the total population.
- 2) another urban center, Santiago de Cuba, second in order of importance with a growth rate higher than that of either

the nation or the capital--located in the province of Oriente, rich in a variety of natural resources and the most populous, one of the most rural and yet most extensively populated.

- a more or less uniform distribution of the urban population in the remaining provinces.
- 4) a great dispersion of urban population in small cities-especially in those of less than five thousand inhabitants, that represented 9.4 percent of the total population in 1953.
- 5) the predominance of isolated peasant housing in rural areas and the almost total non-existence of rural communities.
- 6) a road and transportation network that linked the most important urban centers to each other but did not have sufficient branches to the smaller cities and agricultural regions.

These disparities between urban and rural living standards posed difficult problems for the Revolutionary Government. They created numerous obstacles for the development of efficient administration of basic services both to the rural and urban sectors.

NOTES

1 Maruja Acosta and Jorge Hardoy, <u>Urban Reform in Revolutionary</u> Cuba (Antilles Research Program, Yale University, 1973), p. 2.

- 2 <u>Ibid.</u>, p. 3.
- 3 Ibid.
- 4 Ibid.
- 5 <u>Ibid.</u>, p. 6.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid.
- 9 Ibid.
- 10 <u>Ibid.</u>, p. 7.

CHAPTER III

AGRICULTURE - POST-REVOLUTIONARY DEVELOPMENT

Agriculture has been central to the Cuban revolution. The first Agrarian Reform Law was the first major act of the new revolutionary government on coming to power. It expropriated the <u>latifunda</u> from the major landowners without compensation, distributed part of them to landless peasants and set an upper limit to the amount of land which could remain in private property. The Second Agrarian Reform Law further restricted maximum holdings and guaranteed the security of the peasants landholding in perpetuity. 2

Limited in natural resources, Cuba was dependent on agricultural development for economic progress. Peasant small-holdings, however, are as inefficient a form of agriculture as rich absentee landlords. Economic progress of the country and social-progress of the peasantry was dependent on persuading the latter to revolutionize their ways on farming and of life. There has been much effort put into the transformation which is still far from complete. Much of the cultivable land still privately owned is split into individual smallholdings. Since the Cuban revolution depends on the support of the peasantry, attempts to force collectivisation would undermine the legitimacy of the government rather than increase productivity.

A major aim of the Cuban revolution is to provide in the countryside the amenities necessary for the peasantry. This requires

a voluntary change in their life-style which produces a difficult paradox for the Cuban authorities. The older peasants may have seen their fathers and grandfathers forced off their smallholdings by the latifundists. Indeed many of them will have suffered this fate themselves and be slow to come round to giving up the one surety that they feel they have against future starvation. The young, however, often adapt readily to new ways and are unwilling to give up films, television and other modern advancements for the life of their fathers in a thatched hut without electricity, running water or transportation. Although Cuba cannot afford a drift from the land, their policy of education will encourage it, unless they can persuade the peasantry to transform rapidly.

The voluntary policy has had economic advantages in other ways. It has meant that all changes are "totally dependent on the small farmer's understanding of the advantages of modern methods in agriculture and that modern methods will advance society and hence benefit himself and his family." With this approach the imposition of an overall bureaucratic plan for collectivisation is quite impossible. Proposals for collectivisation must be seen by the peasants as means to improve agricultural production. 5

There has been two forms of collectivisation, peasant cooperatives and state farms, known in Cuba as state plans. State plans developed first. The <u>latifundists</u> used their lands in two ways, as large sugar plantations worked by migrant seasonal labor and as extensive cattle ranges patrolled by a few persons. Thus when these

lands were expropriated, large tracts to which there were no natural claimants fell into the hands of the state.

Sugar was the most obvious candidate for state plans. In 1976, only nineteen percent of the sugar delivered to the mills came from the private peasant sector. The problem of the revolutionary government has been to transform the mode of production. For a time the harvesting of sugar cane had to depend on brigades of volunteer labor, which proved to be rather inefficient. Mechanization of sugar production has become a major target of the government to the point that the work force is being reduced to relatively few full-time professionals who are expert not only as cane-cutters, but in all the jobs in the cultivation of cane. 8

Plantations in hilly land connected to distant mills by an old rail system have been scrapped and replaced with plantations of new varieties in flat lowland situations close to the mills and suitable for mechanical harvesting. The removal of the sugarcane to the plains freed the upland areas for other uses, allowing the move away from sugar monoculture with its economic and possible epidemic disease disadvantages. A considerable area of previously uncultivated land was cleared, to the extent that despite all the various building projects undertaken by the revolution, the total agricultural land has remained so far constant at about 6,600,000 hectares.

The other major area for the use of some of this land in state farms was in milk production. Prior to the revolution Cuba was a net importer of foodstuffs. A modern dairy industry was desperately

needed, involving the construction of plants for cooling and pasteurizing milk and for cheese, yogurt and butter production, and a service to control disease in the herds as well as the milk itself. 12 Only a state farm system could produce the transformation fast enough.

There are other problems to the creation of a dairy industry than the production of better cattle and the means of processing the milk. In Cuba the most important is the dry season. Because of the massive deforestation of Cuba, and other Caribbean Islands, for timber since the Nineteenth Century, the boundary between the continuous rainfall tropical climate and the seasonal subtropical has moved from the middle of Florida to south of Jamaica. 13 Cuba now has a winter season which may last from November to April, and the natural grasses which have evolved are more noted for their ability to survive this drought than for their nutritional value. 14 The land of the dairy plan, therefore, is being transformed through irrigation and the sowing of new varieties of grasses. 15 The irrigation is mostly on a small scale. The geography of Cuba leads to short runs of rivers to the north or south so that provision of water for large areas from a single major dam is seldom possible. 16 The construction of such projects consumes time and scarce engineering skills. As a result, small mountain streams are impounded by mini-dams using mostly local materials and producing reservoirs often no larger than a few hectares in extent. 17

The change in scenery as a result of these developments is striking. The contrast between the open ranch of sugar plantations

and the individual peasant plots dotted along the stream valley is gone. Above everything, in place of the thatched huts of the peasants, is the new hilltop village. 18 It is positioned so as not to waste valuable agricultural land and consists of a water tower, perhaps a dozen four story blocks each of about twenty flats equipped with refrigerator, washing machine and so forth, and a village center with a few shops, a health center, an elementary school, usually a bar selling beer, soft drinks, coffee, and ice cream, and often a small cinema. 19 These villages provide the basic level of new social organization in the countryside. The ethos behind this transformation is to combine the agricultural workers into a unit of a size where the drudgery of peasant life can be removed by the economic provision of electricity, water, transportation, education, health, welfare and the means to live a community life. 20 On the slopes below the village are the communal vegetable fields providing for the needs of the villagers and usually for some surplus for sale in a manner analogous to the peasant cooperatives. 21

Similar primary units of social organization associated with a particular agricultural production are being evolved for other rural industries, whether state or cooperatively owned. 22 The secondary level of rural organization is equally functional, composed of the secondary school, usually a high school in the countryside, the local hospital, and in the case of a dairy plan the veterinary center, and the artificial insemination laboratory. 23

The centralization that the Cubans have applied to cattle breeding and other aspects of agricultural development may possibly

lead to bureaucracy and inflexibility. The counterbalance to such tendencies lies in a willingness to throw responsibility back on the people, as much in the small scale of dairy farms as in the large scale of <u>Poder Popular</u> (People's Power).

In contrast to the organization of the sugar and animal industries into state farms for reasons of economics and logistics, many other crops are for equivalent reasons best left in the direct control of the peasants, although all surplus produce is sold to the state. The peasants produce more than half of the fruit and vegetables and practically all the tobacco and coffee. These are crops where traditional knowledge and care is more conducive for agricultural development than state organization. The coordination of production and the interchange of information with state agencies is carried out by ANAP, the small farmers' organization. In the agricultural sector therefore, agricultural development is realized through ideological and practical endeavors.

State encouragement to the formation of cooperatives comes in the form of direct investment and credit to the societies; the degree of state aid is determined by the needs of the people not the potential return on investment. Direct aid mainly takes the form of provision of the infrastructure, roads, electricity and water, including dam construction. Toans are made to acquire machinery, materials for irrigation, new seeds and fertilizers and the materials for the construction of new housing. 28

State aid to the peasantry is concentrated on the new cooperatives rather than on the still uncollectivized section. In part this is to encourage collectivization, although much encouragement seems to come from the community development officers whose job it is to explain the plan to the peasants. The practicability of aid to the collectives is quite important. For instance, little is achieved by state construction workers demonstrating new building techniques if there is no peasant organization to continue the work.

Principles of self-help, self-sufficiency and voluntary labor spread agricultural production much wider than the classes traditionally associated with it, and are indeed some of the tools used to weld Cuba into a unitary society undivided even into the classes of peasant, worker and intellectural. One case may exemplify this.

The agricultural work of the high schools in the countryside, provides for many of their own food requirements from smallholdings immediately adjacent to them. The fruit yields from secondary schools are also important contributions to Cuban exports.

Overall, the agricultural and social transformation of rural Cuba is illustrated by sheer practicality.

NOTES

- 1 Carmelo Mesa-Lago, <u>Cuba in the 1970s</u> (Albuquerque: University of New Mexico, 1978), p. 13.
 - 2 Ibid., p. 15.
- 3 Carlos Franqui, <u>Diary of the Cuba Revolution</u> (New York: The Viking Press, 1980), p. 33.
- 4 Dudley Seers, ed., <u>Cuba: The Economic and Social</u> Revolution (Connecticut: Greenwood Press, 1975), p. 107.
 - 5 Ibid., p. 108.
- 6 John Griffiths and Peter Griffiths, eds., <u>Cuba: The Second Decade</u> (London: Writes and Readers Publishing Cooperative, 1979), p. 86.
 - 7 Ibid.
 - 8 Ibid.
 - 9 Ibid., p. 87.
 - 10 Ibid.
 - 11 Ibid.
 - 12 Ibid.
 - 13 Ibid., p. 88.
- 14 Seers, ed., <u>Cuba: The Economic and Social Revolution</u>, p. 113.
 - 15 Ibid., p. 116.
- 16 David Barkin and Nita R. Manitzas, <u>Cuba: Camino Abierto</u> (Mexico: Siglo Veintiuno Editors, 1975), p. 97.
 - 17 Griffiths and Griffiths, ed., Cuba: The Second Decade, p. 88.
 - 18 <u>Ibid</u>.

- 19 Ibid., p. 89.
- 20 Ibid.
- 21 <u>Ibid.</u>
- 22 Fred Ward, <u>Inside Cuba Today</u> (New York: Crown Publishers, Inc., 1978), p. 153.
 - 23 <u>Ibid.</u>, p. 154.
 - 24 <u>Ibid.</u>, p. 163.
 - 25 Ibid., p. 164.
- 26 Griffiths and Griffiths, eds., <u>Cuba: The Second Decade</u>, p. 97.
 - 27 Ibid., p. 98.
 - 28 Ibid., p. 99.

CHAPTER IV

URBAN AND RURAL PLANNING

Early Revolutionary Reform

The revolutionary campaign of the 1950s had land reform as a major campaigning issue, and indication that the peasant base of the struggle was as crucial as the proletarian base. Within the first two months of the new revolutionary government, Urban Reform legislation ordained large cuts in housing rents, ranging from fifty percent in rents below \$100 per month to thirty percent for rents over \$200. Under-occupied and abandoned dwellings were identified and reallocated; private speculative building was rapidly eliminated; tenants were enabled to become owners of their dwellings by making payments over a five to ten year period. The conception of ownership was transformed in that owners were not able to bequeath their houses, and only in special cases did their offspring have priority in the reallocation of property. By 1972, seventy-five percent of households owned their houses and ten percent more were in the process of buying them. 3

Havana grew rapidly after 1959, but has expanded subsequently at a rate slower than the national population. Most of the urban growth has been in cities of over 20,000 and in very small settlements in the countryside.⁴ The proportion of the population regarded

as urban grew from fifty percent in 1953 to sixty percent in 1970. ⁵

The number of people living in dispersed dwellings or in settlements of less than two-hundred dwellings fell in the same period by thirteen percent of its 1953 magnitude. ⁶

Current Policy and Practice

The location of activities and the links between them are central to Cuban economic planning. This is partly a political momentum caused by the increased expectations following the substantial peasant involvement in the revolutionary struggle; partly it flows from the severe spatial inequalities (between regions and between neighborhoods) before 1959; partly it reflects the importance and growth of agriculture, mining and, more recently, tourism in the economy. 8

The other important provision of the early legislation was the establishment of the <u>Junta Central de Planificacion</u> (JUCEPLAN), the central agency for planning and guiding the economy. <u>JUCEPLAN</u> had, from the first, powers and responsibilities over land use and the location of activities, and came under the general direction of the Council of Ministers. It has responsibilities for the preparation, coordination and monitoring of plans and for related research and statistics. ⁹ Up to 1975, plans were made on an annual basis, but from 1976 they have been on a five year cycle.

Even before the government reorganization of 1976, there had been a dialogue between (a) the Council of Ministers, articulating national objectives in relation to the process of discussions taking place in the mass organizations and Party organs, and (b) the producing sectors responsible for state enterprises and representatives of the non-state farmers. ¹⁰ This dialogue takes place against a global model of the economy maintained by <u>JUCEPLAN</u>, comprising forecasts for both the industrial and agricultural sectors with special attention to exports and to the import content of production and final consumption. ¹¹

Since 1976 the planning system has been changing in accordance with the new constitution and the institutionalization of social and national life around the elected assemblies. From the point of view of spatial planning, the importance of these changes lies in the decentralization of control and the new politics of decision making.

As the management of locality-serving activities passes to the municipalities and of region-serving activities to the provincial assemblies, conditions are created where local populations can bring their own needs and priorities to bear directly on planning decision. While it is clear that major resource allocations, price and wage determination, work norms and product standards will remain central responsibilities, various questions arise. For instance, will the national standard size for new villages be rigid? Or will assemblies and their staffs be able to vary it to fit their own settlement patterns, terrain and transportation networks?

Spatial Development

The Construction Sector's Institute of Physical Planning (IPF), is responsible specifically for the articulation of national economic

and social development in space. 12

The IPF national office coordinates and sets norms and standards for lower level offices; it brings together resource bids for JUCEPLAN; it gives methodological advice to its branches; it gathers and processes planning data; and in a few cases it designs and executes major projects. ¹³ Perhaps most important of all, it prepares and maintains the National Physical Plan. The preparation of the plan involves the technical staff of IPF working with the staffs of the agricultural and other key ministries.

Provincial and local IPF offices prepare regional and local plans and special projects. At least up to 1976, these plans have not been the subject of much public discussion. He are regarded as "one dimension of the realization of national objectives—the creation of a socialist, and ultimately of a communist society. . "15 The extent to which spatial planning issues will themselves become the subject of political discussion in the elected assemblies is not yet clear. In 1976, however, it became clear that mass organizations had become involved in local discussions, and action during the implementation of plans. 16

Within this planning framework the priorities in development to date have gone to construction work on irrigation and farm building, ports, transportation, education, health and industry, with housing taking only a subsidiary position. ¹⁷ Construction as a whole has been competing with non-capital spending in industry and social services. ¹⁸

The National Physical Plan embodies analysis of soil and hydrology, climate, established uses, proximity to ports and industry, to consumers and to workers. ¹⁹ Alongside the Land Use Plan is a perspective plan for settlement which envisages the whole population being in concentrated settlements by the mid-1980s.

The main device for implementing these national plans is the Territorial Plan covering a few hundred square kilometers with functionally defined boundaries. 20

The main implementing agency is <u>DESA</u>, the construction division which deals with farm buildings, roads, water and settlements. <u>DESA</u> appoints a community development officer for each plan whose job it is to contact all the households affected and explain the plans to them, and the option each household has of joining in (and having housing and job priority), of remaining on their present holding, or a close substitute. The proportion of families wishing to join the plans is apparently high and can exceed the available places; but there are still non-joiners and their plots are very obvious in the landscape: small plots with mixed crops and thatched <u>bohios</u> (huts) in the middle of large state farms. ²¹

The impetus to rural settlement transformation appears to be threefold: 22

- a. from the needs of the new agriculture and the need to avoid long journeys to work on the farm;
- b. from current estimated thresholds for provision of services in each settlement--food and clothes shop, cafe, day

- nursery, primary school, small clinic, social center, book shop, Party office, and sometimes a cinema;
- c. from the need for a physical and social framework for the development of political life. (Each settlement elects its own small council as well as having the normal branches of mass organizations. Living together in a village and managing some of the collective facilities is clearly a contribution to the political self-education of the rural people).

Greenbelts

Primarily due to a lack of food supplies and inadequate transportation facilities which meant that food had to be transported long distances to reach metropolitan areas, the greenbelt program was established. The problem had originated in pre-revolutionary days. With the emphasis on income redistribution, the demand for food increased significantly under the Revolutionary Government. Consequently new means for the supply of many food products had to be found.

The cultivation of idle land with the basic Cuban staples of rice and certain vegetables, and agricultural diversification were the first responses by the Revolutionary Government. ²³ Investments were made in the fishing and poultry industries; other foods were imported. ²⁴ Other problems persisted; programs were started on the provincial and regional levels to alleviate them. Substantial areas were set aside around each of the major urban centers where various types of agricultural and livestock production would take place. These

state farms cultivated these lands with modern irrigation systems and machinery. The products chosen to be grown in each of the areas were picked according to ecological suitability, local needs and national guidelines. The greenbelt program avoided long hauls of perishable goods, provided a basic supply of vital foods to the local population, and promoted social transformation by allowing the people to volunteer for cultivation and harvesting.

Planning efforts also made the greenbelts into recreational areas. For example, Lenin Park in Havana, mades use of the irrigation facilities and provides many activities, among them a zoo and various games. ²⁵

Housing

Prior to 1959, housing conditions for the majority of Cubans was appalling. Except in the larger towns and cities, sanitation was almost non-existent. As indicated by table 1, the rural sector faired the worst. Three-fourths of all rural housing in 1953 were constructed with either palm-leaf or wooden-planks. Two-thirds had earth flooring with a vast majority having quated sources of water supply. Over ninety percent of rural dwellers had no bathroom facilities. However, it should be remembered that Havana alone had a great share of the population. Consequently, the statistics indicate overall adverse urban conditions as well.

In order to confront the housing problem, a new approach was adopted in the early 70's. Through mid-1960, there had been an extreme shortage of building materials; in 1971, this had been reversed. 26

The problem was now one of insufficient labor in the construction industry. In 1971, the first steps were taken in utilizing mass participation in constructing new homes. The formation of the first microbrigada (microbrigade) occurred in Havana. The concept was quite simple in nature: workers in a unit of production for instance, a factory, could on their own or in cooperation with other centers, request to form a microbrigade to build needed housing at their work center. Microbrigades stress the local aspect of decision making. They illustrate the collectivist attitude of people solving problems of national magnitude on a local level.

Microbrigades exemplify a pattern of urban expansion in which housing is coordinated closely with employment centers to ensure that schooling, medical facilities, and transportation are also available as part of a national program of human settlements.²⁹

A microbrigade usually consists of thirty laborers excused from their jobs in order to build housing units. ³⁰ Production levels are maintained at the work center through extra work on the evenings and weekends by those not in the brigade. Newly constructed housing is allocated at general meetings based on certain criteria: immediate housing need, general merit of those applying, assessed work performance, and political activity. ³¹

The microbrigades have offered the possibility of meeting the housing shortage without taking human labor from other essential sectors vital to the economy. By 1973, there were over 1,000 brigades throughout the country. During 1972 and 1973, they accounted for almost sixty-five percent of all houses built in Cuba. 33

The concept was employed in conjunction with the development of new towns. 335 such places had been built by 1975. 34 Over a third of the new settlements were linked to sugar production and another twenty-five percent to cattle farms. The majority of the locations were located in the provinces of Oriente, Las Villas, and Camaguey. 35 Changes in agricultural production necessitated linked changes in construction. The movement of laborers for sugar harvesting for instance, required the construction of numerous hostels to house them. Countryside schools also required massive construction in order to house the students. This lessened overcrowding in urban areas as well.

Since there are still labor shortages, the microbrigades must continue to construct most of the new housing. The majority of these developments are occurring outside the city limits where little construction had occurred before. Although much has transpired to improve the housing condition since 1959, a lot still remains to be done. Urban housing problems still are quite noticeable. This is most evident in Havana where badly maintained buildings, broken sidewalks, and other signs of deterioration are evident. This is due to shortages of paint, cement, and construction materials in general. Overcrowding is lessened with the growing numbers of people being away at boarding schools, colleges and the army. Another major problem in rural and urban areas is transportation. The demand exceeds the available supply. 37

TABLE 1--Condition of Housing, 1953.

Categories	Urban	Rural	Total
	housing	housing	housing
Construction Finished wood Palm-leaf or wood-planks Brick	34.6	16.4	27.7
	9.7	75.4	34.3
	51.8	2.7	33.5
Flooring Tile Cement Wood Earth Other	53.3	2.6	34.4
	26.9	18.2	23.6
	6.6	7.5	6.9
	9.3	66.2	30.6
	3.9	5.5	4.5
Condition Good Acceptable Poor	53.8 37.6 8.6	25.7 48.4 25.9	43.4 91.6 15.0
Date of construction Before 1920 1920-1945 After 1945	36.1 35.8 28.1	8.1 46.6 45.3	25.7 39.8 39.5
Lighting Electric Acetylene Kerosene Other	87.0	9.1	58.2
	0.3	1.9	0.9
	12.3	87.6	40.1
	0.4	1.4	0.8
Water supply Inside piping Cistern Outside piping River/running water	54.6 5.2 22.0 18.2	2.3 4.6 8.1 85.0	35.2 5.0 16.8 43.0
Bathroom facilities Inside toliet Outside toliet Privy No privy Bathtub or shower No bathtub or shower	42.8	3.1	28.0
	18.9	4.8	13.7
	33.3	38.0	35.5
	5.0	54.1	23.2
	64.9	9.5	44.4
	35.1	90.5	55.6

TABLE 1--Condition of Housing, 1953 (continued)

Categories	Urban	Rural	Total
	Housing	Housing	Housing
Refrigeration Mechanical Ice None	26.5	2.4	17.5
	11.0	1.1	7.3
	62.5	96.5	75.2

Source: Maruja Acosta and Jorge Hardoy, Urban Reform in Revolutionary Cuba (Antilles Research Program, Yale University, 1973), 86-87, table 10: Census of 1953.

NOTES

1 John Griffiths and Peter Griffiths, eds., <u>Cuba: The Second Decade</u> (London: Writers and Readers Publishing Cooperative, 1979), p. 111.

- 2 Ibid.
- 3 Ibid.
- 4 Ibid., p. 112.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid., p. 113.
- 9 Maruja Acosta and Jorge Hardoy, <u>Urban Reform in Revolutionary</u> Cuba (Antilles Research Program, Yale University, 1973), p. 24.
- 10 Carlos Franqui, Diary of the Cuba Revolution (New York: The Viking Press, 1980), p. $\overline{131}$.
 - 11 <u>Ibid.</u>, p. 133.
- 12 Griffiths and Griffiths, eds., <u>Cuba: The Second Decade</u>, p. 114.
 - 13 Ibid.
 - 14 Ibid.
 - 15 Ibid., p. 115.
 - 16 Ibid.
 - 17 Franqui, Diary of the Cuba Revolution, p. 153.
 - 18 Ibid., p. 154.
 - 19 Ibid.

- 20 Ibid.
- 21 Griffiths and Griffiths, eds., <u>Cuba: The Second Decade</u>, p. 116.
 - 22 Ibid.
- 23 William K. Tabb and Larry Sawers, eds., Marxism and the Metropolis (New York: Oxford University Press, Inc., 1978), p. 328.
 - 24 Ibid.
- 25 Griffiths and Griffiths, eds., <u>Cuba:</u> The Second Decade, p. 118.
 - 26 Acosta and Hardoy, Urban Reform in Revolutionary Cuba, p. 46.
 - 27 Ibid., p. 47.
 - 28 Ibid., p. 48.
 - 29. Tabb and Sawers, eds., Marxism and the Metropolis, p. 327.
 - 30 Ibid., p. 328.
 - 31 Ibid.
 - 32 Ibid.
 - 33 Ibid.
 - 34 <u>Ibid.</u>, p. 323.
 - 35 Acosta and Hardoy, Urban Reform in Revolutionary Cuba, p. 33.
- 36 Fred Ward, <u>Inside Cuba</u> (New York: Crown Publishers, Inc., 1978), p. 14.
 - 37 Ibid.

CHAPTER V

CONCLUDING REMARKS

The Cuban planning process can be divided into four stages. Planning in the first stage, which lasted from 1959 to 1967, was basically nill. This was a highly frustrating period for planners since most resources went to favorite projects handpicked by the ruling elites.

This lack of objective assessment is clearly illustrated in the 1961 decision to demolish vast amounts of sugarcane. Based on a technically valid proposition—that there was considerable scope for gains in productivity in the cultivation of cane—the decision overlooked the conditions required to achieve higher average yields: more intensive use of fertilizers and irrigation, more frequent replanting, a better selection of seeds, and, in general, a widespread improvement of technical standards. In 1961, Cuba could not fulfill these conditions—well—trained managers and skilled technicians were scarce, the distribution and transportation systems were in difficulty, and the cane cooperatives were disorganized. In light of this, any objective analysis would have seriously questioned the feasibility of accomplishing the change in sugar production without a drastic fall in sugar output. ²

The production failures that resulted in the second half of 1961 and the beginning of 1962 led to a critical evaluation of the planning process. The foundations for the second period, in which planning was accepted as being necessary, were laid. Many institutional changes had already been laid in 1959 with the Agricultural and Urban Reform Laws. Innovative planning which was influencing the government's structural reorganization and the allocation of resources, was having an impact on the country's socio-economic and political aspects. This was evidenced in the redistribution of land, rent reform, the establishment of Granjas del Pueblo (state farms), agricultural cooperatives, cane cooperatives, and advancements in formal education.

Planning gained emphasis in the mid-60s and from 1967 to 1970, it was becoming part of the overall governmental process. It was during this stage that foreign planners, primarily Czechoslovakian, were imported to aid in building the Cuban model. The foreign models that were applied, however, were not conducive to Cuba's situation and as a result many of the planning techniques failed. Nevertheless, objective assessment of issues and problems was becoming institutionalized in the planning process.

Diversification of crops and industry became of primary importance although sugar exportation remained the chief commodity for export. Much experimentaion transpired in the agricultural sector; developments occurred in the dairy and cattle industries.

Due to the influence of foreign planning techniques, this planning period as well as the first, was characterized by trial-and-error procedures in the planning process. Various reasons accounted

for this; Czechoslovakia's geography, climate and culture differed from Cuba's.

During the period, 1971 to 1976, the development of Cuban planning continued at the national level. Diversification of crops and industry under centralized guidance continued. The interference from the elites, which had occurred during the first two stages, especially the first, became quite minimal.

Much progress was made in the urbanization of rural Cuba through industrialization. Mechanization, irrigation and other industrial developments continued and raised agricultural productivity and output. Especially important was the construction industry which had a tremendous impact in the building of dams, hydro-electric power generation, roads, bridges, silos, and numerous specialist sheds needed by modern dairy practices.

With such increases in output, basic industries grew as well, especially those that produced intermediate products and raw materials. The cement and steel industries have been vital in this regard. After 1971, cement production doubled to reach two-million tons by 1975. Also by 1975, steel production had increased tenfold to 305,000 tons since 1959. Increased investments in nickel strengthened Cuba's position in the world market. 5

Between 1976 and the present, Cuban planning has become well established. The decentralization of the process through local participation has expanded innovative planning. Participation is comprised of indirect participation, through the election of representatives to the various commissions of mass organizations, and direct control,

especially of the local productive process.

As a result of decentralization, resource allocation has been altered as well. Local units can determine their consumer needs under national guidelines.

The current planning phase in Cuba is highly different from previous stages in that it has become professionalized. Inspite of viable planning endeavors, within a national framework, the uncertain outcome of various issues and concerns present certain dilemmas to the planning profession.

One major concern is that Cuba is highly dependent on energy imports—approximately eighty percent. The major sources of energy—crude oil and coal, are imported almost entirely from the Soviet Union. This has to some extent insulated Cuba from the oil price increases since 1973. As a result, the country has shown positive growth rates over a period depicted by recession, crisis, and general decline in living standards throughout the world. Cuban planners have revised their targets downward primarily because of the decline in the purchasing power of exports. 8

Inspite of government policies, the modernization of rural areas generally have not attracted migration from urban areas—one-third of the population prefer to live in cities, 9 an occurance which is antithetical to the overall government strategy of integrating towns and countryside.

The mobility of the population complicates the dilemma; this is primarily a result of serving in the armed forces and the travel

opportunities that are afforded. A person who is born and raised in a rural setting may find that a large city has many characteristics which differ from those found in the countryside; the excitement, convenience or different lifestyle may be more to their liking.

The vast majority of students attending countryside schools return to the cities upon completion of their studies. ¹⁰ Assuming the continuance of these and the other trends mentioned, future actions of the government relative to population distribution are not yet evident.

The comprehensiveness of current planning efforts have evolved steadily since the mid-60s. Inspite of vast improvements in distribution and productive mechanisms, various questions pertaining to Cuba's future arise. For instance, rural and urbanization policies have raised the populations' expectations concerning their overall welfare. The consequences of failure to meet rising expectations due to deteriorating relations with the Soviet Union, or of the government's inability and limitations, is not yet evident. This dilemma can become especially crucial if Cuba continues its involvement in international affairs, since vital resources, such as technicians and doctors, are not directly involved in the country's domestic planning process.

NOTES

- l Dudley Seers, ed., <u>Cuba: The Economic and Social</u> Revolution (Connecticut: Greenwood Press, 1975), p. 142.
 - 2 <u>Ibid.</u>, p. 147.
- 3 John Griffiths and Peter Griffiths, eds., <u>Cuba: The Second Decade</u> (London: Writers and Readers Publishing Cooperative, 1979), p. 63.
 - 4 Ibid.
 - 5 Ibid.
 - 6 Ibid., p. 5.
 - 7 Ibid.
 - 8 Ibid., p. 67.
- 9 Phillip Althoff, interview held at Kansas State University, Manhattan, Kansas, April 1981.
 - 10 Ibid.

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A MARXIAN APPROACH TO SPATIAL DEVELOPMENT: THE CUBAN ALTERNATIVE TO TOWN AND COUNTRY PLANNING

bу

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B.A., Lehman College, 1975

AN ABSTRACT OF A MASTER'S REPORT

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MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

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A MARXIAN APPROACH TO SPATIAL DEVELOPMENT: THE CUBAN ALTERNATIVE TO TOWN AND COUNTRY PLANNING

ABSTRACT

Planners can promote ordered growth and development through acquaintance with various planning approaches. For this research endeavor, the Cuban Marxian approach was chosen. Its apparent success warrants consideration as a viable alternative.

Throughout Europe, Asia, Africa, and Latin America, Marxism is a major and broadly accepted methodology. As a social science, Marxist ideology is filled with too much insight to disallow it from consideration in methodological endeavors. However, other theories deserve consideration. The thesis of this Master's Report is that there should be no substitute for pursuing various methodological approaches to questions and problems.

This research will illustrate how Cuba's planners have attempted to integrate both economic factors and desirable social objectives.