

<http://faculty.mdc.edu/tpedraza/MMF-Ten%20Million%20Ton%20Harvest.htm>

The Ten Million Ton Sugar Harvest (*La Zafra de los Diez Millones*)^{*}

Manuel R. Moreno Friginals and Teresita Pedraza Moreno

1. In 1970, the Cuban government attempted to culminate an economic plan, conceived late in 1963 that aspired to break all historic sugar production records by producing a ten million-ton sugar harvest. The 1964-1970 pro-sugar economic strategy indicated a reversal of the original economic program stated by the leadership upon the triumph of the Revolution in 1959. In reality, the turn-about responded to the failure of the imports-substitution strategy adopted between 1960 and 1963. During that period, sugar production had been neglected as agricultural diversification became the goal and most resources were channeled to achieve the accelerated industrialization of the country.

2. In 1959, the triumphant revolutionary leaders lacked a coherent development strategy. The Revolution was grounded on ethical pronouncements in favor of administrative honesty and against sugar dependency, latifundia, monoculture and existing United States-Cuban relations. This explains why the first major revolutionary legislation was the Agrarian Reform Law of May 1959, which created the Institute of Agrarian Reform (INRA), for its implementation. A radical process of agricultural transformation, aimed to eliminate latifundia particularly among sugarcane North American interests, was initiated by INRA.

3. These and other revolutionary measures, such as the nationalization of two North American oil refineries, promoted conflicts between the Cuban and United States governments, finally leading to the cancellation, by the United States Government, of the sugar trade agreement between the two nations. Cuba, through established trade agreements, annually exported to the United States the greatest part of its sugar harvest at preferential prices above those of the world market. A quota system allocated Cuba close to sixty percent of all North American sugar imports. This system also applied to other sugar exporting countries among which the remainder of the North American sugar imports quota was divided. In July 1960, the United States formally ended the sugar trade agreement with Cuba. The delivery of the 700,000 tons pending from the 1960 quota was canceled, together with an additional 165,000 tons of the supplementary quota. The Cuban three million-ton annual sugar quota was later redistributed among other sugar exporting countries.

4. The straining of diplomatic relations between Cuba and the United States was parallel to the re-approachment in Cuba-Soviet relations initiated with the visit of the Soviet First Deputy Premier Anastas I. Mikoyan on February 4, 1960. The first sugar trade agreement between Cuba

and the Soviet Union was signed a few days later. In addition to this trade agreement, the Soviet Union, other Socialist Block countries and the People's Republic of China extended credits, sold factories, and provided technical assistance necessary for the rapid industrialization of the Island. Notwithstanding, the development strategy was ill conceived and by 1963 its failure had to be acknowledged. It was obvious that the industrialization program and the neglect of Cuba's main cash crop led to a trade deficit and to the progressive indebtedness of the country. Under these circumstances, the leadership decided to turn Cuba once again into a sugar exporting giant; increasing its productivity to reach a ten million-ton sugar harvest by 1970. In 1964 Cuba and the USSR signed a new trade agreement. The Soviets made a commitment to purchase 2.1 million tons from the 1965 harvest at the preferential price of 6.11 cents a pound and to increase annually the Cuban sugar quota for the next five years. Sugar was expected to provide sufficient foreign exchange earnings to improve the balance of payment, permitting the importation of necessary machinery and equipment.

5. The 1964-1970 sugar plan was grounded on Cuba's historic record as the world's major sugar producing country for more than a century. Unfortunately, by 1964 the structure and infrastructure of the Cuban sugar industry had been seriously damaged by measures adopted from 1959 to 1963. Thousands of hectares of planted sugar cane had been dismantled. The required process of repairing and cleaning sugarmills after each harvest had been neglected since 1959. Sugarcane railroads had been equally neglected. Quantitative and qualitative methods of control had been discarded; allowing the instruments used in determining product quality and production levels to deteriorate. The sugar-wage differential (*diferencial azucarero*), that provided additional compensation over regular wages to sugarmill employees, was eliminated when the United States-Cuba sugar quota was canceled. It was not reinstated when Cuba signed a similar trade agreement with the USSR, as the revolutionary leaders substituted material incentives for moral incentives in their quest of creating the "new man". The anti-sugar development strategy led to a sharp reduction in the number of qualified personnel in the sugar industry. Professional administrators had been substituted with loyal and politically trustworthy personnel. Expert cane cutters had been pressured into retirement, transferred to non-sugar agricultural activities, or incorporated into the army and militia. The number of cane cutters had been reduced from 300,000 in 1959 to 75,000 by 1964. These policies and their subsequent results worked to the detriment of labor relations in the cane fields (planting, harvesting, and transporting of sugarcane to the mills) causing a drop in industrial sugar production during 1962 and 1963.

6. To achieve a ten million-ton harvest required, as a minimum, a twenty-five percent increase over the industrial capacity installed in 1959. Although the last sugarmill was built in 1927, the majority of the 161 mills in existence in 1959 had been carefully maintained and periodically modernized until the advent of the Revolution. The industrial sector throughout the

former Republican Period had achieved sugar industrial yields as high as 13.20 per weight of cut cane in 1950 and 1955, with an average industrial yield of 12.00.

7. The agricultural sector of the Cuban sugar industry, however, had stagnated throughout the Republican Period. It had the second lowest yields per hectare of any sugar producing country. The ten million-ton target demanded the addition of approximately 600,000 hectares over the existing amount of 998,293 in 1964, as long as modern agricultural techniques were implemented. These included: expansion of the amount of cultivated land under irrigation; substitution of the sugarcane type traditionally used in Cuba (POJ 2878) for other sugarcane varieties with higher yields; and, an increase in the application of fertilizers and insecticides. In the absence of these improvements, the cultivated land would have to be increased by 900,000 hectares. This would represent an expansion of 30 percent over the area cultivated in 1952, when Cuba produced its greatest harvest of 7,298,023 million tons. Such an increase would provide the necessary cane for the ten million-ton harvest, leaving the required surplus for the following year. In addition, it was necessary to achieve the partial mechanization of the harvest (planting, cutting and lifting), raise the number of experienced cane cutters to 500,000 and develop an excellent network of transportation from the cane fields to the mills. These three final requirements would facilitate the completion of the harvest within the period in which optimum sugarcane yields are obtained: from January to April.

8. In July 1969, Castro decided that a "small harvest" would begin as part of the celebrations and preparations for the upcoming 1970 effort. Castro also announced that those traditional celebrations, such as Christmas and New Year's, were to be postponed until July, in order to avoid interrupting the harvest. The main objective of the "small harvest", which in some provinces lasted until the end of September, was to test the performance of the mills in which the installed capacity had been expanded and modernized. This exercise was conducted by cutting and milling sugar cane from the 1969 harvest. The sugar tonnage obtained was added to the total production figures for the 1970 harvest. The ten million-ton harvest was officially inaugurated on December of 1969, although mass mobilization of the labor force was initiated since November.

9. The original plan to expand the industrial capacity by building three new mills had been abandoned. Instead, investments were made to increase the milling capacity of several mills. The difficulties in achieving this second strategy proved to be greater than expected. Making changes at different points in the production flow altered the synchronized operations of the mills. The substitution of North American and/or Western European machinery for equipment from the Soviet Block created spatial constraints in the areas where the workers operated. The plant space in a surgamill is closed and limited, thus the substitution of any machine for another of equal or greater productive capacity, but larger in size, negatively affected the floor plan.

10. In the agricultural sector, land under cultivation never surpassed 1,500,000 hectares, while the amount of irrigated cane fields only reached 140,000 hectares. Fertilizers and insecticides were also insufficient. Although other sugarcane varieties were planted, the bulk of the harvest was milled from the traditional Javanese POJ 2878. Mechanization of the harvest was sharply limited due to the absence of sufficient cane-cutting combines capable of working under Cuban conditions. While the Soviet imports proved unreliable and had to be discarded, the Henderson and Libertadora combines developed in Cuba were few and not designed to remove neither the leaves nor the end of the sugar cane.

11. In addition, the absence of qualified personnel in the administration and technical sectors of the mills and in the fields, was often compensated by appointed personnel from the Revolutionary Armed Forces (Fuerzas Armadas Revolucionarias, or FAR), staunch revolutionaries, yet mostly ignorant regarding sugar production. Out of the estimated 350,000 individual who worked as cane cutters in the 1970 harvest, 100,000 were members of the FAR. Professional cane cutters numbered 50,000. The rest was comprised of voluntary workers from all sectors of the economy and society, including students, athletes, professionals, housewives and Cuban cabinet members. The shortage in the number of experienced cane cutters created irreparable damage to the harvest. The inadequate cutting performed by hundreds of thousands of workers, taken to the cane fields as volunteer laborers, produced several negative consequences. Sugarcane must be cut at ground level, inasmuch as the bottom of the stalk contains the highest concentration of saccharose. Cutting the stalk at ground level is also necessary to protect from contamination the plant from which the cane for the next harvest will be grown. Another negative result of improper cutting is the inadequate removal of leaves and of the end of the stalk (cogollo). Improper cutting caused the accumulation of non-sugar residues during milling. A random study conducted in several sugarmills showed that leaves, top end of the stalk, and other impurities, comprised 24 percent of the cut cane's weight. In some sugarmills the percentage was higher. Hundreds of cane collection centers had to be established to eliminate the debris before transferring the cut cane to the mills. Inexperienced sugar cane cutters created another related and fundamental problem in the productive flow of the 1970 harvest. They tended to disperse throughout the cane fields, cutting cane at different points and leaving accumulated piles of cut cane in places that were not scheduled for immediate pick up. Cut sugar must be transferred from the fields to the sugarmills and processed within 24 hours. After that period, the levels of saccharose start to drop in a geometrical progression. Low morale among the volunteers, who were forced to separate from their families, sometimes for weeks, and to work in activities for which they were unprepared and ill equipped, translated into high rates of absenteeism, carelessness and low productivity.

12. Transportation problems from cane fields to the mills presented one of the bottlenecks in the production process. The only significant achievement during the harvest was the adoption of the Australian system of utilizing mechanized lifters, provided by the Soviet Union. Cane-lifters permitted the transfer of the cut cane directly from the ground onto trucks, oxcarts or railroad. The shortage of these lifters was aggravated by the lack of organization of the cutters in the cane fields.

13. A policy adopted during 1964, under the name of *discreción azucarera* also contributed to the failure of the 1964-1970 strategy. The harvest had been in the hands of the private sector for over one hundred years. Sugarmill owners had exact information of the capabilities and daily output of each production center and surrounding cane fields. The nationalization of the sugar industry placed all its productive activities under the control of the MINAZ (*Ministerio de la Industria Azucarera*). A centralized economic system requires a network of communication and free flow of information between state planners and each production center, which the so-called *discreción azucarera* inhibited by making sugar production data a state secret. The official transmission of incomplete or false information, the deterioration and/or partial elimination of quality controls and the absence of accurate quantification methods promoted an administrative chaos. The leadership's pressure to produce the ten million-ton harvest, despite obvious limitations, forced many sugarmills to begin milling before the cane had reached adequate sugar yields and to continue milling through the period when sugar cane yields begin a fast decline. It also prompted the reporting of inflated production figures.

14. Workers were exhorted to participate in this gargantuan effort through a massive propaganda campaign. All means of communication were devoted to the dissemination of the official rallying cry: "The Ten Millions Go" (*Los Diez Millones Van*). A popular music group achieved almost immediate fame, echoing the government's slogan by identifying themselves as *Los Van Van*. The government controlled media, mass organizations, schools, and work centers were used to convince the population that the harvest represented another battle. The nation was encouraged to win this battle through discipline, sacrifice, and self-denial. Yet, the miscalculations, mismanagement, censorship, emphasis on moral incentives, massive mobilization of unskilled workers to the cane fields and lack of sober planning led to the failure of this inordinate effort. It is estimated that at the end of the 1970 harvest more than one million people had worked in the cutting, loading and transporting of the sugar cane. The concentration of all resources and energies into achieving a ten million-ton sugar harvest also had adverse effects in other production sectors of the economy, with the exception of rice, fish, and eggs. Economic dependence upon the Soviet Union increased. The cutting and milling of planted sugar cane that should have been reserved compromised the success of the 1971 harvest. In 1971 domestic consumption of sugar per capita was rationed to two pounds a month in order to meet export obligations.

15. Turning the harvest into the sole objective of every productive center, agency and mass organization, in the end, promoted the disorganization of the entire society. It also contributed to further consolidate the on-going militarization process. The total social and economic cost caused by the 1970 harvest may never be properly measured. Although the goal was not achieved (the 1970 harvest only reached 7,558,569 tons) the harvest occupied the lives of the Cuban people for an entire year and passed into history under the name of "The Ten Million Ton Sugar Harvest".

(2466 words)

Manuel Moreno Fraginals and Teresita Pedraza Moreno

See also: Agrarian Reform Law; Diferencial Azucarero; Discreción Azucarera; Los Van Van; Material Incentives vs. Moral Incentives; Militarization; New Man; Rationing; Sugar Combines; and United States-Cuban relations.

Further Reading

Burks, David D. "Cuba Today". *Current History* 1971 60(354)
108-111.

Mesa-Lago, Carmelo. "Economic Policies and Growth" in
Revolutionary Change in Cuba, Carmelo Mesa-Lago ed.
Pittsburgh: University of Pittsburgh Press, 1971, pp.
277-338.

Ritter, Archibald R. M. *The Economic Development of
Revolutionary Cuba: Strategy and Performance*. New York:
Praeger, 1974.

Roca, Sergio. *Cuban Economic Policy and Ideology: The Ten
Million Ton Sugar Harvest*. Beverly Hills: Sage
Publications, 1971.