

University of Minnesota Morris Digital Well

University of Minnesota Morris Digital Well

Anthropology Publications

Faculty and Staff Scholarship

1996

Culture, Ideology, and Community: The Dynamics of Accommodation and Resistance to Restructuring of the Mexican Sugar Sector

Donna Chollett

University of Minnesota - Morris, cholledl@morris.umn.edu

Follow this and additional works at: <https://digitalcommons.morris.umn.edu/anthropology>



Part of the [Agricultural and Resource Economics Commons](#), [Labor Economics Commons](#), [Latin American Studies Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Chollett, Donna, "Culture, Ideology, and Community: The Dynamics of Accommodation and Resistance to Restructuring of the Mexican Sugar Sector" (1996). *Anthropology Publications*. 5.
<https://digitalcommons.morris.umn.edu/anthropology/5>

This Article is brought to you for free and open access by the Faculty and Staff Scholarship at University of Minnesota Morris Digital Well. It has been accepted for inclusion in Anthropology Publications by an authorized administrator of University of Minnesota Morris Digital Well. For more information, please contact skulann@morris.umn.edu.

Culture, Ideology, and Community: The Dynamics of Accommodation
and Resistance to Restructuring of the Mexican Sugar Sector

Donna L. Chollett

Assistant Professor, Anthropology

Division of Social Sciences

109 Camden Building

University of Minnesota-Morris

Morris, MN 56267

1996 Culture, Ideology, and Community: The Dynamics of Accommodation and Resistance to Transformations
in the Mexican Sugar Sector. *Culture and Agriculture*, Peter Singelmann, Ed. 18(3):98-109.

Culture, Ideology, and Community: The Dynamics of Accommodation
and Resistance to Restructuring of the Mexican Sugar Sector

Donna L. Chollett

ABSTRACT

Neoliberalism has provoked profound and diverse consequences for rural Mexico, escalating the agricultural crisis for producers and workers in various sectors. Against this context, recent improvements in the sugar sector raise interesting questions about its relative economic success under the neoliberal paradigm. This article contrasts two cane zones--one that experienced economic recovery and another affected by abandonment of the sugar mill--to argue that in the interstices of modernizing neoliberalism, cane growers and mill workers who were subjected to politics of exclusion struggle to ensure the survival of their culture, community, and economic livelihood. [key words: neoliberalism, economic restructuring, sugarcane growers, sugar mills]

ABSTRACT

Neoliberalism has provoked profound and diverse consequences for rural Mexico, escalating the agricultural crisis for producers and workers in various sectors. Against this context, recent improvements in the sugar sector raise interesting questions about its relative economic success under the neoliberal paradigm. This article contrasts two cane zones--one that experienced economic recovery and another affected by abandonment of the sugar mill--to argue that in the interstices of modernizing neoliberalism, cane growers and mill workers who were subjected to politics of exclusion struggle to ensure the survival of their culture, community, and economic livelihood. [key words: neoliberalism, economic restructuring, sugarcane growers, sugar mills]

Author's Statement

Donna L. Chollett is Assistant professor of Anthropology at the University of Minnesota-Morris. She has conducted research on agrarian issues in Mexico since 1984. Her doctoral research on sugarcane growers and reprivatization of the sugar industry, *State Divestment, Reprivatization, and Peasants: Dialectical Transformations Within the Mexican Sugar Sector*, Michigan State University (1994), was funded by grants from the National Science Foundation, the Fulbright Program, and the Inter-American Foundation. Her continuing research interests include further changes associated with NAFTA and economic restructuring, the impact of ejido reform, and campesino strategies of resistance and accommodation.

Culture, Ideology, and Community: The Dynamics of Accommodation
and Resistance to Restructuring of the Mexican Sugar Sector

Structural transformations induced by neoliberal economic policies are reshaping the Mexican countryside and augmenting social and economic polarization. This fact is particularly striking in the sugar sector where neoliberalism provokes profound and diverse consequences for Mexican sugarcane growers and mill workers. With the privatization of sugar mills from 1988 to 1992, this sector experienced the worst economic crisis in its history, a crisis that affected both new private mill owners and cane producers. Declining productivity, market disruption, bankrupt mills, and astronomically large debts owed by producers in the early years following privatization appeared to match crisis conditions associated with austerity measures in other sectors of the rural economy. In recent years, however, many cañeros (cane growers) have recovered their losses, sugar mills are again profitably operating, and Mexico has regained its export capacity in sugar. This economic recovery--at a time when other sectors of the rural economy continue to suffer the impact of economic restructuring--raises important questions about the apparent success of the sugar sector under neoliberalism. In part, this achievement was accomplished by preferential economic support to more productive sugar mills and to cane growers with greater productive potential, while selectively eliminating others through the "politics of exclusion" (Gledhill 1995:23), or what may be considered a strategy of "economic triage" (Gates 1993:59) by private mill owners. In this paper I address the divergent experiences of cañeros and mill workers who continue to maintain their contractual relationship with sugar mills and those who, through economic triage, were excluded from what may be properly considered "la cultura cañera."

I argue that the implementation of neoliberal economic reform entails profound economic consequences, but just as important, involves a consequential impact on culture, ideology, and community. Cultural traditions, ideological orientations, and the nature of community life were dynamically constituted during several centuries of struggle and conflict over the production of sugar cane. Cultural ideologies held by diverse groups of cane growers, as well as by mill owners, were themselves subject to transformation as the sector passed from private to state control, later to be privatized under the neoliberal paradigm. After a brief overview of historical events that

contributed to the current context, I contrast two case studies from western Mexico, one community in which the majority of cañeros recovered from the economic crisis which threatened to close the regional sugar mill in the early 1990s, and another community that struggled to survive after the bankruptcy and closure of its sugar mill. These two cases illustrate the multiplex effects of privatization and the complexity of forms that cañeros' and workers' strategies of accommodation and resistance take for the preservation of a cultural tradition and way of life.

The culture of cane production, constituted during the colonial era, emerged from a symbiotic relationship between sugar haciendas and rural communities. The violent upheaval of the Mexican revolution culminated in a structural change in relations between the hacienda, that had depended on the work force of rural communities and campesinos, who depended on the hacienda for their livelihood. The revolution redefined the ideologies of both mill owners and campesinos, as agrarian reform severed the unity of field and factory previously maintained by sugar mills. Subsequently, economic and political hegemony within the sector shifted; yet whether characterized by economic liberalism under private control, or paternalism and populism under state control, relations with cañeros--who held rights to the land and provided the raw material to the industry, and mill owners, who controlled economic resources and decision making--remained contentious.

Mill owners, culturally defined as antagonists, exploited cane growers; and cañeros, in turn, were categorized by mill owners as dependent, lazy, illiterate, productively inefficient, and wasteful of economic resources. Elements of these ideological orientations persist, even as neoliberalism transforms relations among social actors. Illustrative of these notions is the sugar industry representative who criticized cane growers for lack of a work ethic: "They are lazy people. Cañeros want to receive money without working." Even union leaders may show lack of support for their constituency through adoption of this neoliberal rhetoric: "The union needs to change the mentality of the producer. Cañeros need to be more responsible, more like capitalists. Cañeros need discipline because they resist change and much ignorance still persists. The union must put into the head of each cañero that they respect the work requirements (union leader, Michoacán)."

Cañeros, on the other hand, relate their labor as cane producers to cultural identities and to their contradictory relationship with the mill owners. They talk frequently about the extensive knowledge acquired to

produce sugar cane for the industry, the contingent responsibilities of being a cañero, and the sacrifices they make:

The cultivation of cane has been a culture here in Mexico. It is the most social of crops because in reality, that is where the society is--cane production maintains many families. It is a culture; it has endured 300 years. The cañero works, produces, and passes the land on to his sons [sic]. The rest of the family works in the planting, cultivation, and harvest--they have a hand in the raw material. What gives life to many people and villages in cane zones is precisely the cane. But to be a cañero is to suffer. We have relied on our own family in our struggle. Our strikes have been repressed, but this is our patrimony, our form of living. To be a cañero is a culture." (cane grower, Michoacán).

These words reveal cultural knowledge regarding the tradition of cane production, its significance for families and communities, and its insertion in Mexico's history. Below I outline the salient factors that gave shape to conflictive relations between cañeros, sugar mills, and the state, and how these relations were transformed over time.

HACIENDAS TO AGRARIAN CERTIFICATES

Sugar mills, first established in Mexico in the 16th century, rapidly became the hub of the colonial economy. Soon the hacienda emerged as the institution that structured access to land, labor, and capital, thus historically constituting contradictory relations among social actors: the state, mill owners, and campesinos (rural producers) (Crespo et al. 1988, 1990; Landázuri and Vázquez 1988; von Wobeser 1988). Although there are regional differences, numerous campesino communities resisted hacienda encroachment on their lands and the displacement of subsistence crops by sugar cane. Since the early colonial period campesinos have been active agents in defending their culture and community (von Wobeser 1988). Nonetheless, the state supported the accumulation of wealth and land by hacendados (hacienda owners), which guaranteed the social reproduction of the hacienda (Landázuri and Vázquez 1988, Melville 1979). Indeed, the hacienda survived in some regions until the 1930s, and many cañeros recall a time when they or their parents worked as debt peons for local hacendados. While hacendados promoted the modernization of capitalist mills in the late 19th and early 20th centuries, they simultaneously fomented the development of an antagonistic peasantry that would join forces with other social

groups in the Mexican revolution to overthrow the landed oligarchy. The campesino component of the revolution, led by Emiliano Zapata, the martyred culture hero of the Mexican revolution, emerged in a region with a long cultural tradition of cane production.

After the revolution, the 1917 Constitution provided, through Article 27, for the redistribution of former hacienda lands to campesinos. Most hacendados were able to retain a small portion of land but over time, particularly in the 1930s, the government allocated the majority of former hacienda lands to campesinos. The creation of ejidos severed cane lands from haciendas. In the process, it created a major structural change which displaced the traditional landed oligarchy and disrupted the former unity of land and sugar mill that had allowed hacendados dual control of field and factory. Nonetheless, the state, mill owners, and cane growers continue to be linked in conflictive and accommodative relations over land, labor, and capital. From the 1930s to the 1950s, cane growers with scarce resources were tied to private mill owners through contractual relationships under a system of oligopoly capitalism (Purcell 1981). Over time, increased state intervention in the sector and a freeze on the price of sugar caused owners to decapitalize the industry and the government gradually took control of insolvent mills (Crespo et al. 1988, 1990; del Villar 1976). State-owned mills, notorious for productive inefficiency and mismanagement, were operated under the ideological pretext of a state-campesino alliance (Paré 1987). Cañeros thus accommodated themselves to 20 years of state paternalism beginning in the early 1970s, wherein the sugar sector and the price of cane was subsidized.

The economic crisis of the early 1980s brought to a dramatic end extensive state involvement in the economy. Under the neoliberal policies of Miguel de la Madrid (1982-88) and Carlos Salinas de Gortari (1988-94), parastatal enterprises were privatized, supported by an ideology of free markets, private investment, modernization, productive efficiency, and the replacement of paternalistic relations with competitive individualism. Within the sugar sector, these policies involved the sale of sugar mills to private investors, many of whom sought quick profits through speculation, and others who sought access to cheap raw material for processed foods and beverages. Privatization resulted in the consolidation of 49 sugar mills into 12 groups, administered by private investors. Owners of soft drink franchises were strongly represented in these groups: Consorcio AGA (Mexican soft drinks), Consorcio Azucarero Escorpión and Grupo Azucarero México (Pespsi),

Grupo Beta San Miguel and Promotora Industrial Azucarera (Coca-Cola). While families with a long tradition of sugar production operate some sugar mills, "neoazucareros" (new sugar industrialists) entered recently, in order to turn quick profits with mills purchased at depressed prices.

Eleven mills remain unincorporated into groups and the government still holds one of several mills that were returned to the state after privatization. Three mills--El Higo, Mahuixtlán, and Melchor Ocampo--that were owned by the Confederación Nacional Campesina (CNC), the national campesino union with which the cane growers' union (UNPCA, Unión Nacional de Productores de Caña de Azúcar) is associated, were declared bankrupt and resold to Grupo Zucarmex. Grupo Escorpión purchased one of the two producers' cooperatives, Emiliano Zapata, and the other, El Mante, was sold to the long-time sugar industrialist and owner of Grupo Sáenz. These sales brought to an end the involvement of cane growers as associates in the ownership of mills. Four mills, according to neoliberal standards, were deemed inefficient and closed.

Sugar mills were sold in packages of both "good" and "bad" factories. Grupo Beta, purchaser of the Quesería (Colima) mill, discussed below, owns mills that rank in the top ten and among the lowest ten in factory efficiency. Among the last to be privatized were the five mills in Michoacán. The Santa Clara and San Sebastián (Michoacán) mills were sold in 1992 to Grupo Porres; these rank second and third in the nation for factory efficiency; Porres' factory at Huixtlán (Chiapas) ranks 51, of 61 total mills. The Lázaro Cárdenas (Michoacán) mill was sold to Grupo Azucarero Mexicano. Grupo Santos purchased the facilities at Pedernales and Puruarán (Michoacán), one of the two case studies presented here. At the time of purchase Grupo Santos was associated with Gamesa (a huge Mexican cookie and food processing conglomerate); the latter was subsequently bought by Pepsi. Two other mills owned by Grupo Santos rank fifth and sixth for factory efficiency; a fifth mill is among the ten least productive. Originally the Confederación Nacional de Productores Rurales (CNPR, formerly CNPP) was to enter a joint venture with 49% ownership in the four mills, but for lack of financing and because private ownership was the objective of restructuring, the cane growers' union was ultimately pressured into ceding 100% ownership to Grupo Santos. At the end of the first harvest season, the owner closed the Puruarán mill, claiming that it was unprofitable.

Following the transfer of sugar mills to private control, government subsidies were slashed, market opening

and excessive imports periodically flooded the sugar market, access to credit for cane production became more restricted, and modifications to Article 27 of the Constitution raised new questions about the relationship of cañeros to sugar mills and the Mexican state. These modifications ended a state-campesino alliance that had traditionally guaranteed land rights to rural producers. Competition in this new neoliberal economic space, as indicated by Singelmann, has forced cañeros to confront the withdrawal of customary political patronage and economic guarantees (1995:6). As explained by a cane union leader in Michoacán, "The private industrialists came and the politics changed. Our relationship is difficult; we can't accommodate very well and they don't accept the politics of the cañero, either." The relationship between cañeros and privatized mills may increasingly be affected by changes in land use in future years, since modifications to Article 27 allow the rental and sale of ejido parcels (agrarian reform land). In 1996, the Los Mochis (Sinaloa) mill was renting 80% of the cane lands from former cañeros; while this case is unique, the practice of renting land by sugar mills is on the increase. Industrialists show little concern for displaced cañeros. One of the national representatives of the Cámara Nacional de las Industrias Azucarera y Alcoholera (the national chamber of mill industrialists), when asked what had happened to ex-cañeros at Los Mochis, replied, "Many migrated out, but they are enjoying the money and drinking liquor with the rent they received for the land." In numerous cases, mills are taking over the land of unproductive cañeros who are unable to repay debts; theoretically the land is to be returned when the debt is paid and the land is once again productive. It remains to be seen whether outright land purchases and transfer of land to sugar mills will become more prevalent. Today, most ejidatarios (former recipients of agrarian reform land) hold agrarian certificates which open the door for the first time to the legal right to sell former ejido land as private property. The potential alienation of land from the cane grower was a particularly perilous situation in 1992, when 14 sugar mills were on the verge of bankruptcy and cane growers, who once profited from the sale of cane to sugar mills, found themselves deeply in debt at the end of the harvest. Many abandoned sugarcane production. To some analysts, the crisis created by loss of productivity, debt, and changes in land tenure following privatization of the industry epitomized the failure of neoliberal policies. By 1993, however, a quite different scenario had emerged. New investments had seemingly rejuvenated the industry and former cane growers were returning to cane production and investing their own resources and labor to improve yields and

profits.

What, then, does the changing structure of the sugar sector signify for cane growers and mill workers? After the initial shocks that rocked the sugar sector in the early 1990s, by 1996 there was a trend toward stabilization and profitability for both mill owners and cañeros, on the one hand, and a less-observed polarization that was excluding traditional cane growers, on the other. Maintaining an ideology of neoliberal modernization, industrialists and government officials alike are quick to point out the impressive achievements of the last few years. These include: greater surface harvested, more cane processed, more sugar produced, more sugar per hectare, more sucrose in the cane, higher factory yield, and less consumption of petroleum (see Table 1). Many cañeros also recognize improvements in production and profits, as former cane growers return and new producers enter production.

[Table 1 here]

These data appear to lend credence to the ideology of neoliberalism, that is, privatization improves efficiency. Essential to the neoliberal agenda is the selective integration of more productive cañeros into the newly privatized sector and simultaneously, massive layoffs of excess mill workers, and exclusion of cañeros who demonstrate less productive potential. In the sugar sector, exclusion may apply to individual cañeros who are refused credit for continued production, and to entire communities, where mills are deemed inefficient and closed. The selective process takes multiple forms and is differentially expressed in distinct cane-producing regions of Mexico. Below I turn to two cases that illustrate the multiplex forms of accommodation and resistance that cañeros and mill workers deploy in responding to economic transformation.

SURMOUNTING THE CRISIS THROUGH ACCOMMODATION

The Quesería mill in the western state of Colima was sold in 1989 to Grupo Beta San Miguel, which markets sugar to Coca-Cola, Nestle, and several Mexican food processors. Though about to close its doors in 1990, recent investments to improve the factory and more exacting work demands have increased productivity of field and factory (see Table 2). A portion of this increase is attributed to the recent closing of the Purísima (Jalisco) mill; its 600 cane growers deliver 60,000 tons of cane to Quesería. Innovative use of containers for cane harvest, first developed at Motzorongo (Veracruz) in 1994 to support harvested cane above the ground, has all but eliminated

large rocks and other debris that previously entered the mill, damaged machinery, and resulted in stoppages. With new, higher-yielding varieties of cane, improved organization of the harvest schedule, and more rapid processing of cane, the mill and cane producers have seen profits for the past two years. The mean profit for growers in 1996 was \$4000 new pesos (approximately \$533 US) per hectare. Debts owed by cane growers at Quesería totaled \$1,200,000 new pesos (about \$160,000 U.S.), in contrast to the historically highest debt of \$5,317,940,890 old pesos (about \$1,772,647 U.S.) in 1991.

[Table 2 here]

To analyze these processes from the perspectives of cane producers and mill officials, it is necessary to consider the multiple forms of conflict, struggle, encounter, and the divergent ideologies and discourses that undergird the ongoing negotiation in the processes of accommodation and exclusion that characterize relations between officials and producers (de Vries and Zendejas 1995). Mill officials, strongly influenced by neoliberal ideology, have developed cultural understandings of their relationship with cane growers.

The manager at Quesería, for example, attributed changes in the region to factors much broader than a mere shift in mill ownership. Since they no longer receive subsidies, cane growers, he explained, are now "socios" (partners, or associates) of the owners. Before, he claimed, cañeros abused the system by depending on government for everything. They received more money in loans than needed or could be repaid and were often indebted to the mill. Now the mill provides only partial credit for production and growers must pay a portion of expense out of pocket. The policy, in accord with FINA (Financiera Nacional Azucarera, S.A.), sets differential amounts of credit according to the producer's yield, which encourages greater investment in higher-yielding fields. The manager stated: "We changed the mentality of the cane grower--now he is like a businessman." In part, the mill manager attributed the positive change in cañeros' attitude to a cane grower capacitation program to develop human resources, established by Grupo Beta. This program of formal courses, presented by psychologists, was designed to "sensitize" cañeros, to instill optimism, to develop cooperative thought, and self-esteem. This was particularly important during the crisis, when many cañeros were abandoning cane production; the mill manager appeared at these meetings to convince cane growers not to lose faith.

For those who do not comport themselves as competitive "businessmen," and for those who have debts, the

Quesería mill denies credit and appropriates the land until the debt is paid. The mill currently rents 200 hectares from ejidatarios for cane production, paying the landowner \$700-\$800 pesos per hectare. While Grupo Beta claims not to be interested in purchasing privatized ejido lands, the manager views the sale of parcels as an advantage: "He who buys land, works it." Those who have not assimilated the neoliberal ideology continue to be perceived as backward, lazy, and inefficient. The mill manager admits that adjustments to neoliberal policies were difficult. Although producers initially received few earnings, he explains, "Neoliberalism is like the Bible; the Bible says that 'he who does not work does not eat.'" The Bible is thus used to justify the fallout from neoliberal modernization--those who are subject to policies of exclusion.

Cane production in the state of Colima evolved over the years into a culturally embedded production strategy. Transformations in the sugar industry since privatization led cañeros to redefine their strategies, struggles, and cultural ideologies, at times in response to, and at other times as proactive tactics to cope with the implementation of neoliberal policies. In the mid-1980s, due to the many benefits they identified with sugar cane as a production strategy, cañeros were overwhelmingly positive about their relationship with the state and its patronage. By the early 1990s, in stark contrast to previous years, privatization of the industry had produced an ideological reorientation of cañero culture. Many cañeros expressed their opposition to the government, the new mill owners, and the declining economic position of cane growers by abandonment of cane production--which reached a peak in 1990-91. With over half of the cañeros in debt to the sugar mill, they had lost their relatively prestigious economic position. In the words of one cañero, the contradiction between the idealized past and present was expressed: "I remember when I was a boy and they said 'God and Cane;' that's what they said. I was a boy and I thought, 'What does this mean?' Well, in that time, yes, they profited. And now, everyone is left with pure debt."

If the contrast between the pre- and post-privatization periods (until 1989, and 1989-94) is remarkable, the changes from the early 1990s, when the crisis was at its zenith, and the current situation is equally striking. Cañeros have reformulated ideologies concerning cane production in part due to increasing profits and in part because the crisis in the rural economy discouraged alternative production strategies. Cane is currently the principle crop from which a profit can be derived. To cut costs, the mill dismissed half its workers (their numbers

declined from 566 in 1991 to 291 in 1996), causing an increase in out-migration; yet cañeros were returning once more, increasing their numbers from 1373 in 1991 to 1556 in 1996. Thus, policies of exclusion and inclusion differentially affected factory workers and cane producers.

But economic triage was also practiced against cañeros, creating differences in perception of whether they are truly "socios" with the sugar mill. Some cañeros, for example, perceive themselves to be "socios," since they depend on the mill for processing cane, yet the mill must depend on them for raw material. The cultural definition of cañeros--as providers of the essential raw material--is notably prevalent among producers; cañeros readily realize that their traditional knowledge, their labor, and their cooperation are crucial ingredients in this major agroindustry that benefits the entire nation. Others, however, culturally define their relationship with the mill as one of exploitation, rather than "socios." A more critical cañero reflected on the mill manager's statement--that neoliberalism is like the Bible (he who does not work, does not eat)--and replied, "The Bible also says, 'take what you need for the day,' not accumulate!" Ambivalence is more characteristic of others, who see themselves as "socios," yet say that mill officials view them as inferiors ("microbes," as put by one cañero).

A major factor in restructuring the relationship between cañeros and mill officials is the change, essential for cane production, in credit distribution. Credit now depends on cane yields and producers are expected to pay a portion of their own costs. Yet despite credit restrictions, land that in 1990 was abandoned for cattle raising or subsistence maize production was being reconverted to cane by 1996. A constant complaint in 1990, because of the cost, was the demand by the mill to replant cane fields with new varieties. Though the majority resisted doing so, by 1996 many cañeros had replanted or planned to do so with the new, higher-yielding varieties. Today there is talk of the improved quality of new varieties. The planting of new cane represents a significant change, since it requires that a substantial cost be borne without credit from the mill. In contrast to mill officials, who believe in making cañeros individually responsible for investing in their production, a number of cañeros complain that those who lack resources for cane cultivation suffer decreasing yields, fall into debt, and will be denied further credit. A prevalent fear exists: in restricting credit and repossessing cane fields for which debts are not paid, ultimately, those with more resources will accumulate land, and those with fewer will lose access. One cañera put it, "Many of these parcels of land are going to be taken away. Once improvements are made, the same

government [that gave them] is going to take them from us." Nonetheless, while some complain about not receiving sufficient credit for production, many cañeros acquiesce with new mill policies, acknowledging that with less credit, fewer are in debt; even they have accommodated to the charge of mill officials--cañeros wasted the money that they formerly received from the mill. One cañero explained that it was "hard" the first year, but now they are saving money by force.

In 1992, the Mexican Constitution was revised, allowing for the regularization and titling of ejido parcels; ejido members may now vote to privatize their parcels. As well, the sugar mill began to require ejidatarios to present the new land title (Certificado Parcelario) before receiving credit for cane production. Though most ejidatarios retain their land, others have converted parcels to private property (Dominio Pleno) and sold them. The majority of ejidatarios, including cañeros, express positive attitudes toward the modifications to Article 27. Since ejidatarios received their titles in 1993, an often heard comment is, "Now the land is mine; I can do with it what I want." Yet when asked about the long-range consequences, the responses were overwhelmingly negative. A cañero who agreed with privatization explained, "People are now free to sell their parcels, but the land could end up in the hands of the wealthy. Before there were haciendas and large landowners; it could return to the same situation." Dissident voices, however, criticize the privatization of ejido parcels. The few that opposed it--a stronger tendency among those with a longer family tradition of cane culture--felt pressure to comply with the majority decision to privatize. One cañera, whose father took part in the violent struggle for ejido land that ended in the assassination of several campesinos from her community, related:

They screwed us. We had to agree with the majority. Later, they are going to chase us from the ejido; they are going to crush us. The government is going to be left with the ejido. My father left the land to me to help me, not for me to sell. My parents fought for the land, they suffered, and I want to pass it to my sons. In the revolution, the people, without eating--man! how they suffered. How easily the people sell the land now. I don't want to sell. I was a widow with four sons and I was enduring the hunger, but it would have pained me to sell it.

Along with their concern over the alienation of ejido lands, cañeros of the zone preoccupy themselves with the environmental deterioration associated with cane production. Cultural definitions of environmental problems

held by mill officials and cañeros are also contradictory. Many growers see cane production as unsustainable (e.g., annual burning of cane fields, deforestation, drying of soils, destruction of animal habitats, and air pollution). The mill manager, however, rationalized these well-known criticisms: "Sugar mills," he claimed, "are ecological, because the cane plant produces oxygen all year long. This is not recognized by environmentalists." This view is not shared by cañeros of the zone, for whom this benign perception excludes the realities of health hazards posed by excessive use of agrochemicals. The sugar mill now uses a plane to spray fields and combat cane plagues, but fails to warn cañeros and workers laboring in the fields. On these occasions workers observe that small animals die and humans suffer severe skin rashes. According to villagers, the cancer incidence has increased dramatically in recent years. Thus the environmental ideology neglects the health of cañeros, otherwise considered "socios" of the mill.

Just as neoliberalism forces cañeros to culturally redefine their relationship to land and economic resources, it also presents a challenge to their identity as autonomous actors. Illustrative of this is the extension of mill control over cañeros, from credit and production decisions, into the arena of self-identity. Grupo Beta established capacitation courses to increase optimism and ensure stability among cane producers. Two textbooks (Aguilar 1995a; 1995b) published by Grupo Beta San Miguel, "Optimism Predominates" and "Self-Esteem Predominates," were used in these classes. The texts, written at an elementary level, included various quizzes and exercises; one question asked, "Do cañeros feel like socios?" followed by, "Do you know how we are socios?" The text then explains that all CNC members are "socios" in UNAGRA, the new credit union that operates through the mill. The partnership, thus defined, is narrowly economic. A very self-confident and active cañera who serves on the board of the cane growers' union and who had attended the course, received high scores for self-esteem. Others, she explained, who received low scores, were mortified by their performance. While the objective was to make cañeros feel optimistic and instill a sense of responsibility (for example, not taking unnecessary credit that would lead them into debt), the result was offensive and patronizing. Cultural interaction between mill officials and cañeros is still tinged with ethnocentric attitudes; it is the cañeros who must assimilate to the culture of neoliberalism.

The increasing economic profitability of sugar cane production in Colima has not eliminated strategically

opposed interests or reservations about the long-range impact of changes in land tenure and access to credit. In general, however, both mill personnel and cañeros demonstrate heightened satisfaction with recent developments, despite environmental problems. Cañeros in Colima have accommodated to the neoliberal policies of the sugar industry and with the exception of inefficient producers who were excluded from sugar production, a substantial majority are again earning profits. Yet in other regions, neoliberal policies have spelled economic doom to entire communities and led mill workers and cañeros to resist policies of economic triage, a case to which I turn below.

RESISTING ECONOMIC TRIAGE AND THE STRUGGLE FOR COMMUNITY SURVIVAL

"It is very delicate." "That is a political issue." These are the responses by industry officials in Mexico City and mill and union personnel in Michoacán when asked about the Puruarán sugar mill. After informing me that "The community lives from the sugar mill," an official of the Cámara Nacional de las Industrias Azucareras, who was willing to talk about Puruarán, explained that the closure of the Puruarán sugar mill "really had no effect on the community."

Puruarán, with a population of 15,000, has a cultural tradition of cane production going back almost 300 years. Spaniards founded the Hacienda of Puruarán for the production of sugar cane in 1715. Over the years, the culture of cane production, along with its knowledge, traditions, and social relations, passed from generation to generation. Community members, most of their lives, labored in the mill or the field, as did their parents before them. Hacienda Puruarán, owned by Aurelio and Gerardo Bastarrachea since 1883, was sold to Joaquin Oseguera during the final years of the revolution. Oseguera maintained the hacienda until 1923 when it was subsequently acquired by José Gómez Arreola, and later, by an American, Tomás B. Boyd. Campesinos recall that Boyd allowed cattle to destroy their maize and bean crops because he wanted land planted in cane. For 18 years, from 1926 to 1944, before being granted ejidos, campesinos struggled for the redistribution of hacienda lands. When President Gustavo Díaz Ordaz suspended credit to the mill in 1966, it was temporarily abandoned. The governor at that time, Agustín Arriaga Rivera, reopened the mill by declaring it for the benefit of workers, cañeros, and the community (Caso 1987). Mill workers and cañeros consider the mill the patrimony of the nation, yet, this community has struggled against the consequences of a neoliberal policy of exclusion for the past four years. The mill was finally closed on May 31, 1992.

The privatization of Mexican sugar mills epitomizes the neoliberal economic model, since most mills were transferred from the state to various corporate groups, headed by wealthy and politically powerful industrialists. Puruarán, under state control for 21 years, was privatized in 1992 and was then sold to a northern industrialist and senator from the state of Nuevo Leon. The sale of Ingenio Puruarán falls under the rubric of neoliberalism in yet another way: the senator received thanks--in the form of the purchase of four sugar mills--in return for his support leading to modification of Article 27 of the Mexican Constitution. He not only supported the modifications but played a role in designing the formula to title and transfer ejido parcels into private property. While privatization of ejido land is voluntary, possession of land collateral subjects ejidatarios indebted to capitalist enterprises or banks to potential confiscation of their land.

The sale proposal stipulated that Empresas Gamesa, the corporate group that was to purchase the mill, would acquire 51% ownership, leaving CNPP cane producers with 49% ownership. Four mills were included in the purchase--Alianza Popular (San Luis Potosí), Bella Vista (Jalisco), Pedernales (Michoacán), and Puruarán. But national CNPR leaders signed an agreement with the purchaser giving him full ownership of the four mills. Mill workers and cane growers were incensed. They considered it a fraudulent action that hurt the entire nation. Clauses VIII, XVI, XIX, and XX of the sale contract, in particular, commit the purchaser to preserve the industry and improve the industrial unit, so that it continues to be productive and generate employment. In this sense, former mill workers and growers view the sale as unconstitutional--since these are important obligations that the purchaser should uphold for the good of the nation.

Those whose livelihoods were affected by the sale found it incomprehensible that Salinas de Gortari sold all the sugar mills in the country without taking into consideration the damage that it would create for families in cane-growing regions. According to some residents of Puruarán, *salinismo* (the neoliberal politics of President Carlos Salinas Gortari) brought uncertainty to the majority of Mexicans, sacking the nation, and "not benefitting the poor, but making them poorer." The May 14, 1992 visit of Salinas de Gortari to the city of Tacámbaro presents a peculiar irony for mill workers and growers. The visit culminated in a development plan that was to create employment and help the economies of 11 municipalities; a few weeks later (May 31), the new owner closed Ingenio Puruarán, under the pretext that it was unprofitable.

In fact, the Puruarán mill, like other state-managed enterprises, operated in the red. Community members explain that the mill is capable of generating profits, and that research demonstrates the potential utility of the mill. Former mill workers and cañeros moreover, share a belief that the profits were directed to personal uses or election campaigns. Mill owners, they assert, together with politicians, made a "great business" of changing numbers from black to red. The Comisariado Ejidal of Puruarán claimed that, "It is certain that the mill was in the red, but this is what they [the mill owners] did, because there was much plundering of money, both in the field and in the factory. They did their dirty work, hurting the workers, and all this made the sugar mill unprofitable."

The rationale for subjecting thousands of residents of the region to unemployment can be measured against data that reveal the place of Ingenio Puruarán among other mills. In 1992, the year the mill closed, the average yield in tons of cane per hectare at Puruarán was 91.63, in contrast to the national average of 74.34; only 14 mills surpassed Puruarán's yields, and 48 had lower averages. While the factory yield (the amount of sugar produced per ton of cane) at Puruarán was 9.70, the national average was 9.28; only 18 mills surpassed Puruarán and 44 achieved lower factory yields. Also in 1992, extraction of sucrose during the processing of cane at Puruarán was 13.01%, while the national average was 12.36%. Puruarán was ranked twelfth in the nation. Ex-workers criticize the owner for not carrying out the necessary procedures to determine the mill's potential profitability; however, he intends to dismantle the mill in order to utilize its parts in the nearby Pedernales mill, purchased as part of the four mill package.

The 1992 closing of the Puruarán mill condemned inhabitants of the Turicato region to impoverishment. The mill, the economic hub of the region, benefitted 2,260 cane growers, 800 cane cutters, 56 truck drivers, 160 drivers of animal-pulled vehicles, 28 tractor operators, 300 factory workers, 60 temporary mill workers, 35 unionized employees, and 75 office personnel. A total of 3,774 persons were sustained by direct employment in the mill. The economic ramifications, however, extend beyond Turicato to the adjacent municipio of Tacámbaro and parts of Ario de Rosales and Uruapan. The economic activity and spillover effects directly and indirectly benefitted 36,050 inhabitants of the region, in addition to employment created throughout the state and nation related to the distribution, consumption, and use of materials produced, including sugar and syrup. While advocates of neoliberal policies view this mill as a white elephant, the social costs of this economic triage remain

largely unaccounted for, except by those who bear the burden of unemployment.

Though many cane growers elected to transport their cane to the Pedernales mill, 11 km. from Puruarán, about 900 cañeros quit cane production and abandoned 939 hectares for other uses--maize and pasture. One thousand nine hundred cañeros (4800, including those from Pedernales) delivered their cane to the Pedernales mill. In contrast to the economic decline at Puruarán, the Pedernales mill experienced a record harvest in 1996 (see Table 3).

[Table 3 here]

The majority of mill workers at Puruarán were also cane growers. Because the average cane field in the area is only one hectare, the loss of employment was critical. According to the Federal Work Law, workers are to be indemnified according to the number of years worked; but some employees who had worked their entire lives at the mill, complained that released workers received only half what was due. Out-migration increased but most migrants failed to find employment and returned after one or two months. Some told me, "We see the desperation of the people. The working class is ending because there is no work." As one ex-worker explained, "If the mill is going to stay closed, well, in the end, this is going to be a ghost town." Cultural discourse evokes contradictory notions regarding former mill workers and producers. A FINA official in Mexico City stated simply, "It is necessary to make adjustments" to unemployment created by mill closings. But discord with the interests of cane growers is not uniform, even within the union organization, as asserted by a national UNPCA representative: "UNPCA should defend this culture with its nails and its teeth." Though the national union struggled to prevent the closure of mills, they could not support the Puruarán mill. The takeover of the factory (discussed below) violated constitutional rights and the union did not want to appear as the purveyor of these actions. Twenty mills were at risk of being closed and by supporting the Puruarán takeover, "We were going to violate 20 mills," explained the representative.

Clearly, the closing of the Puruarán mill affected the entire community. It created a series of grave social problems. Thousands of unemployed workers and their families faced the difficulty of living in hunger. Average income was \$20 pesos per family per day before the closure of the mill; now, many are without income. While deaths attributed to malnutrition increased, the health clinic was dismantled--few had health insurance (previously

available through the mill). School dropouts and delinquency are more common. According to local workers, businesses and services were affected by a lack of cash flow: 40% have closed since the closure of the mill. One former worker from the mill informed me, "There are people that are crying because they don't even have enough to pay for the electricity. The closure of the mill left a town dying because there is no work."

Puruarán, then, was one of several communities in the nation that was relegated by the neoliberal paradigm to the politics of exclusion. It was in the interstices of such transformative processes that people began to draw upon their cultural traditions and confirm their unity as they engaged in new strategies of confrontation and negotiation. On December 7, 1992, some 60 mill workers, cane growers, and townspeople--including women--decided to illegally occupy and operate the sugar mill. As they returned the mill to operation, gunmen fired on three workers. They were detained by police, but released one hour later and their weapons returned. Those involved in the takeover, lacking the services of technicians, engineers, and chemists, repaired machinery and processed \$700,000 new pesos (about \$93,333 U.S.) worth of sugar. Enough sugar was produced to make partial payments to cane growers. Workers, in response to the mill owner's statement that they were "illiterate," and indicating the 50 kg. bags of sugar stacked to the ceiling of the warehouse, remarked, "We ignorant workers made all this."

The mill owner immediately contacted the state governor, who ordered in the police. Those in the mill were arrested, jailed, and severely beaten. Others were taken from their homes at night. Of those arrested and beaten, an elderly man with heart problems had to be hospitalized; and another individual died. Following the arrests, twenty police were ordered to guard the mill. They cut electric cables and removed machinery to prevent the functioning of the mill. Although the police took 40 tons of sugar, the remaining sugar, now four years old, remains stacked in the warehouse collecting dust. The workers themselves cannot sell this sugar, since its production involved the illegal takeover of the mill, the private property of the owner.

This crisis has increased unity among community members. The community, including former workers, cañeros, and townspeople, is now united into a formal organization, the Committee For the Reopening of Ingenio Puruarán. In their support, other groups have petitioned for government intervention to prevent economic destabilization of the region. A number of professionals argue that they had the opportunity to study and to

become teachers, and dentists, thanks to wages parents earned in the mill. The organization negotiates at local, state, and federal levels to resolve the social repercussions of the mill's closing. Three times the Committee for the Reopening of Ingenio Puruarán has visited the offices of the president in Mexico City, though the offices of the federal government, the Hacienda, Financiera Nacional, and the Cámara de Diputados have given no response. They request that the sale contract be reviewed, in light of the fact that it has not been respected. As one person explained, "In each one of the petitions we requested solutions given our constitutional right to petition and the response of the government is to ignore us."

The government has made an effort, however, to support micro-businesses to generate employment in the community. Money was loaned for 15 small businesses, but all have failed due to lack of cash flow. The government offered to install trapiches, or small-scale, labor-intensive mills for the production of piloncillo (an unrefined form of sugar), but these already existed in the region and most had been abandoned. One social program provided cows, but they were too old to be of value. A carpenter shop to make furniture could not function because with high unemployment in the region, there was a lack of demand. Even a bakery could not survive the stressed economy of the community.

When cañeros and mill workers held a meeting in February 1994 to discuss their political options, one hundred soldiers entered Puruarán and dozens of police guarded the mill. Consequently, several years of negotiating with various federal and state agencies proved fruitless. On June 30, 1996, workers, "tired of listening to lies and failing to receive a concrete solution," again took over the Puruarán mill. Again the police invaded the mill, but the workers peacefully forced them to leave. After two days, they agreed to turn the mill over to state authorities. A decision was reached, with the approval of the governor, that a permanent guard of 30 ex-mill workers could maintain vigilance within the confines of the sugar mill to prevent further sacking of the installations.

Two years later, in May of 1996, another effort was made to negotiate a solution. The mill owner, cañeros, and ex-mill workers, attended a joint meeting at which workers proposed three alternatives to the owner: 1) to reopen the mill and operate it himself; 2) to sell the mill to cane growers, or 3) to rent the mill to them. Cañeros presented results of formal studies which demonstrated that while profits may be minimal, the benefits of

sustaining the community were assured by keeping the mill open (Hernández 1996:10). However, the mill owner rejected all three alternatives on purely economic grounds. Sugar mills were sold in packets of both "good" and "bad" mills. Many of the mills were antiquated, thus there is an incentive to invest in the more profitable mills, while leaving the less productive mills to benign neglect or to close them. The industrialist who purchased this group of mills is interested primarily in sugar to supply Empresas Gamesa. Less concerned with the social repercussions, after visiting with Puruarán residents for three days, he concluded that the standard of living in the community had improved. Locals, in contrast, maintain that it has worsened considerably.

Despite these events, workers are currently attempting to repair the mill without pay, to maintain their source of employment. The mill owner, however, threatened in July, 1996 that if the organization continues to insist on reopening the factory, he would leave the cane of the region, as well as that of the Pedernales mill, unprocessed. These are not empty threats, for the leaders of the organization have been harassed, parts of the factory have already been dismantled, and many have been refused credit for cane production. Recently, he warned that if the situation at Puruarán is not resolved, he will close down the Pedernales mill. While the mill owner remains insensitive to the needs of the community, the community refuses to disappear. According to one cañero, "We campesinos have experience, we know what we are facing, and we are willing to demonstrate that we are capable of succeeding in this project, which is very significant for Michoacán." People of Puruarán argue that generations of cane culture cannot be destroyed by the capriciousness of one person.

Certain that the mill is a viable, potentially profitable factory (several studies demonstrate that the Puruarán mill has the capacity to compete in quality and capacity of production with other mills of the country), the community searches for funds to acquire the installation; however, its legal status prevents them from acquiring the necessary financing. The committee continues to fight for the expropriation of the mill for the public benefit. As one member of the committee explained, "We need work in order to escape from the poverty in which we find ourselves. We don't ask for handouts or subsidies, we simply want to work. Definitively, yes, we feel the need to produce; we feel the need to survive." Workers and cane growers in Puruarán share a common precept, "If we are going to die slowly of hunger, we prefer to die with dignity, from a bullet, but struggling." Ex-workers guarding the mill stated that they are willing to die in order to preserve their source of livelihood. Puruarán is considered a

failure in the neoliberal grade book, but local residents argue for a different agenda than the acquisition of huge profits--resolution of the social problem and survival of the people of the region.

CONCLUSION

Neoliberalism and its consequent economic restructuring are often viewed in economic terms with little attention to the social and cultural dimensions of transformative change processes. Gledhill's reference to the "new free-market enterprise culture" (1995:2) implies that the strategies, ideologies, and discourse of neoliberalism should be analyzed as culture content. Both in policy and through discourse, a complex of cultural constructs defines the underlying premises of this culture. First and foremost, paternalism must be eliminated by withdrawing subsidies and support to inefficient producers and workers, who become defined as "over-employed," "backward," "lazy," and "ignorant." In its place, new forms of management and organization are geared to rationalizing production in terms of efficiency, long-term profitability, and support of producers who are willing to assimilate and become "capitalists" and "businessmen." This ideological base, then, manifests itself in a differentiation among various types of producers and workers, while it concentrates wealth in the hands of a few industrialists.

In the sugar sector, impressive gains were made in productivity, thus fulfilling neoliberal objectives; but in the interstices of this dynamic transformation the social basis and cultural traditions of cane growers and mill workers are being undermined. Two cases are considered here to illustrate the diverse ways that communities have been affected by the imposition of neoliberalism in the Mexican countryside. In both cases, cañero culture was historically constituted, drawing on traditions and ideologies formulated and reformulated in a revolutionary past through experiences of struggle and resistance against haciendas and sugar mills. In one region, cañeros chose to accommodate to the neoliberal paradigm, but their economic success has been at the expense of less productive cañeros and liquidated mill workers. In the second case, a policy of exclusion affected not just individuals, but an entire community. While some cañeros were able to resume their relations with the nearby Pedernales mill, many of these same producers were also mill workers who lost their source of livelihood. As a form of resistance to the mill closing, community members collectively drew on their cultural heritage, ideology, and forms of organization to demand the reopening of their source of employment.

Based on the diverse experiences of cane growers and mill workers, I argue that the social and cultural costs of economic triage should be carefully contemplated. Privatization of sugar mills resulted in the erosion of social guarantees since "the longstanding responsibility of mill management...to address the needs of both the cane growers and the community surrounding the mill has not been assumed by the new group of mill owners" (Singelmann and Otero 1995:14). Unseen behind the facade of neoliberal culture are the human costs-- unemployment, decreased health status, increased malnutrition, declining educational attainment, undermining of community enterprises, and escalating crime rates. As entire communities are forgotten and the social costs of modernizing the Mexican countryside discounted, local residents are uniting on the basis of their shared cultural identities, appropriating new strategies of resistance, and refusing to disappear.

The cultural construction of cane and sugar production by mill workers and cane growers is expressed in manifold ways, by passing a heritage of knowledge and practice from generation to generation, through material resistance in the form of the takeover of the mill, and in an ideology that counterposes itself to the contradictions of modernizing neoliberalism. A wall outside of the mill provides a media for expressing this ideology in artwork and graffiti: "Zapata lives;" "An end to repression of campesinos;" next to a caricature of Salinas, "Puruarán, ¿Didn't you like my government? I am liberalism and the political parties are my accomplices;" and over a picture of the mill owner and the state governor someone wrote, "Corrupt traitors of the working people." This wall symbolizes the reality of a people under siege, perhaps best expressed by the Comisariado Ejidal, "Puruarán is not a television show. It is a reality that should be seen, but above all to live and be able to understand that the government attends to us, [and] if it does not do it in time, we will all lament the consequences" (Hernández 1996:10).

REFERENCES CITED

Aguilar Kubli, Eduardo

1995a Domino el Autoestima. Mexico: BSM (Beta San Miguel).

1995b Domina el Optimismo. Mexico: BSM (Beta San Miguel).

Caso González, Leticia

1987 Orígen y Evolución de los Ingenios Azucareros y Zonas de Abastecimiento. Mexico, D.F.: Fideicomiso Para Obras Sociales y Campesinos Cañeros de Escasos Recursos.

Crespo, Horacio, Sergio Reyes Retana, Enrique Vega Villanueva, Arnulfo Embriz, Carlos Zolla, Carlos González Herrera, Alejandro Pinet, and Beatriz Scharrer

1990 Historia del azúcar en México, Vol. 2. México, D.F.: Fondo de Cultura Económica, S.A. de C.V.

1988 Historia del azúcar en México, Vol. 1. México, D.F.: Fondo de Cultura Económica, S.A. de C.V.

de Vries, Pieter and Sergio Zendejas

1995 Toward an Interpretive Framework for the Study of Rural Transformations. In *Rural Transformations Seen From Below: Regional and Local Perspectives from Western Mexico*. Sergio Zendejas and Pieter de Vries, eds. Transformation of Rural Mexico Series, No. 8, Pp. 1-7. San Diego: Center for U.S.-Mexican Studies.

Gates, Marilyn

1993 *In Default: Peasants, the Debt Crisis and the Agricultural Challenge in Mexico*. Boulder, CO: Westview Press.

Gledhill, John

1995 *Neoliberalism, Transnationalization and Rural Poverty: A Case Study of Michoacán, Mexico*. Boulder: Westview Press.

Hernández Calderón, Gabriel

1996 Vale más Santos de Hoyos que un pueblo con hambre, *Porqué de Michoacán* III(120):10.

Landázuri Vázquez Benítez and Verónica Vázquez Mantecón

1988 *Azúcar y Estado (1750-1880)*. México, D.F.: Fondo de Cultura Económica, S.A. de C.V.

Melville, Roberto

1979 *Crecimiento y rebelión: El desarrollo económico de las haciendas azucareras en Morelos (1880-1910)*. México, D.F.: Editorial Nueva Imagen.

Ortega Pizarro, Fernando.

1990 El porvenir de la industria mexicana, ser devorada por trasnacionales, dice Alberto Santos, *Proceso* 728:10-15.

Paré, Luisa, ed.

1987 *El estado, los cañeros y la industria azucarera 1940-1980*. México, D.F.: Instituto de Investigaciones Sociales, Universidad Autónoma de México.

Poole, Claire

1991 Land and Life! Forbes, April 29, Pp. 45-46.

Purcell, Susan Kaufman

1981 Business-Government Relations in Mexico: The Case of the Sugar Industry. Comparative Politics 13(2):211-233.

Singelmann, Peter

1995 Introduction. In Mexican Sugarcane Growers: Economic Restructuring and Political Options. Peter Singelmann, ed. Pp. 1-6. San Diego: Center for U.S.-Mexican Studies.

Singelmann, Peter and Gerardo Otero

1995 Campesinos, Sugar, and the Mexican State: From Social Guarantees to Neoliberalism. In Mexican Sugarcane Growers: Economic Restructuring and Political Options. Peter Singelmann, ed. Pp. 7-21. San Diego: Center for U.S.-Mexican Studies.

von Woebeser, Gisela

1988 La hacienda azucarera en la época colonial. México, D.F.: Secretaría de Educación Pública and Universidad Autónoma de México.

Table 1. Changes in Production at the National Level, 1988-89 to 1995-96.

	<u>1988-89</u>	<u>1995-96</u>	<u>% Change</u>
Hectares harvested	510,596	570,598	11.75
Tons of cane	34,893,129	40,185,213	15.17
Yield/hectare (tons)	68.34	70.43	3.06
Tons sugar	3,173,680	4,377,554	37.93
Kg. Sugar/hectare	6,216	7,672	33.78
% Sucrose in cane	11.65	13.46	23.42
Factory Yield (%)	9.10	10.89	19.67
Lost Time (%)	26.79	26.86	.26
Consumption of petroleum (lts.)	23.73	16.87	-28.91

(source: Cámara Nacional de las Industrias Alcohólica y Azucarera)

Table 2. Changes in Production at the Quesería Mill, 1988-89 to 1995-96.

<u>Year</u>	<u>Tons Cane</u>	Surface <u>Harvested</u>	Field Yield <u>Tons/ha.</u>	Tons <u>Sugar</u>	Factory <u>Yield</u>
1989	367,532	9,029.00	40.71	31,012	8.438
1990	409,202	8,153.95	50.18	33,244	8.124
1991	484,377	7,088.00	68.34	38,362	7.920
1992	463,794	7,087.00	65.44	40,341	8.698
1993	618,353	7,136.25	86.65	59,180	9.571
1994	402,313	5,870.07	68.54	36,042	8.960
1995	504,075	6,126.55	82.28	52,399	10.395
1996	636,160	7,957.28	79.95	66,286	10.420

(source: Ingenio Quesería, S.A. de C.V.)

Table 3. Changes in Production at Pedernales and Puruarán, 1989-90 to 1995-96.

<u>Year</u>	<u>Tons Cane</u>	<u>Surface Harvested</u>	<u>Field Yield Tons/ha.</u>	<u>Tons Sugar</u>	<u>Factory Yield</u>
<u>1990</u>					
Puruarán	144,940	1,729	83.85	13,244	9.14
Pedernales	261,176	2,594	100.70	25,621	9.81
<u>1991</u>					
Puruarán	158,498	2,062	76.88	15,400	9.72
Pedernales	256,463	2,566	99.95	26,955	10.51
<u>1992</u>					
Puruarán	123,329	1,600	91.63	14,218	9.70
Pedernales	191,540	2,196	87.52	19,708	10.26
<u>1993</u>					
Pedernales	299,874	3,254	92.17	30,035	10.02
<u>1994</u>					
Pedernales	261,758	3,498	74.83	28,010	10.70
<u>1995</u>					
Pedernales	345,000	4,132	83.49	37,950	11.00
<u>1996</u>					
Pedernales	382,111	4,196	91.06	43,607	11.41

(source: Cámara Nacional de las Industrias Alcohólica y Azucarera)

LIST OF TABLES

- Table 1. Changes in Production at the National Level, 1988-89 to 1995-96.
Table 2. Changes in Production at the Quesería Mill, 1988-89 to 1995-96.
Table 3. Changes in Production at Pedernales and Puruarán, 1989-90 to 1995-96.