

Sugar and globalization. The changes in the Tucumán's agroindustrial sugar complex (NW of Argentina) during the nineties.

Pablo Paolasso

**Instituto de Estudios Geográficos - Universidad Nacional de Tucumán-CONICET
pablopa@filo.unt.edu.ar**

1. Introduction

The province of Tucumán is the main producer of sugar cane in the Argentina; there find almost 70% of the surface sowed with sugar cane of the country and produce the 57% of the sugar¹, supplying with the production of the provinces of Salta and Jujuy basically to the national market.

The agroindustrial complex that has been developed around the processing of the sugar cane had its origins in the last third of the XIX century and from that time it has been characterized by the separation of the production tasks and those of industrialization where the characteristic note has been the presence of an important number of small independent producers, a different structure to that of the other sugar provinces—mainly Salta and Jujuy—in those that the sugar mills also concentrated the production of the sugar cane.

From the emergence of the sugar complex in Tucumán, they have been able to distinguish four important agents at least: sugar cane producers (*cañeros*), industrials, workers and State². The articulation of these elements defined a sugar process in which the crisis has been the natural state and the speculation its excluding objective³.

The development of the sugar complex was bound on one hand to the different agreements among *cañeros* and industrials (to those that already in the second half of the XX century the workers would be added) and for another to the different policies applied from the State to regulate the activity, before a production that grew quicker than the consumption capacity.

This linking type among the different actors would be broken with the application, starting from 1991, of neoliberal policies that were based in three principles: total deregulation of the economy and of the labor process; privatization of public companies and liberalization of the trade⁴. The clear objective of these policies was to improve the links of the Argentina with the global economy, emphasizing the role of the macroeconomic policies and minimizing that of the sectoral ones⁵ in the mark of a hegemonic discourse that sustained that a “free market and without obstacles it would allow a bigger production and consequently wealth, reducing the government's action.”⁶

¹ Giarraca, Norma and Susana Aparicio (1997). “La acción social en los procesos económicos. El caso de la actividad cañera en Tucumán.” In Cantón, Darío y Jorge R. Jorrot (comp.) **La investigación social hoy. A cuarenta años de la recreación del Instituto de Sociología (UBA)**. Instituto de Investigaciones Gino Germani. Universidad de Buenos Aires. Buenos Aires. p. 308.

² Bolsi Alfredo y Roberto Pucci (1997). “Evolución y problemas de las agroindustria del azúcar.” En Bolsi, Alfredo (Dir.). **Problemas agrarios del Noroeste argentino**. UNT - Junta de Andalucía. Tucumán. p. 114.

³ Ibid. p. 115.

⁴ Giarraca, Norma (coord.); Carla Gras; Karina Bidaseca and Daniela Mariotti (2000). **Tucumanos y tucumanas. Zafra, trabajo, migraciones e identidad**. La Colmena. Buenos Aires. p. 11; Ghezán, Graciela; Mónica Mateos and Julio Elverdín (2001). **Impacto de las políticas de ajuste estructural en el sector agropecuario y agroindustrial: el caso de la Argentina**. CEPAL. Serie Desarrollo Productivo. N° 90. Santiago de Chile. p. 9.

⁵ Ghezán et. al. (2001). Op. Cit. p. 7.

⁶ Giarraca et al. (2000). Op. Cit. p. 11.

The evidences show that the execution of this type of policies, characterized mainly by the abrupt disappearance of the State as intervener agent, they had an important impact on those «regional economies»⁷, all them in one way or another characterized by an important state regulation.

In such sense it would be necessary to determine how this type of policies affected to the Tucuman agroindustrial sugar complex and of what way the different agents were articulated in this complex after the deregulation.

2. Objectives, sources of data and methodology

The central objective of this work is to describe and to explain which have been the changes that have taken place in the Tucuman agroindustrial sugar complex in the nineties by the light of the process of deregulation. Of there, they come off two secondary objectives: analyze of that way has been linked the different economic agents inside this complex and to investigate about what strategies developed the same ones from face to the new productive logic. For the analysis of the sugar cane producers we have been used the data coming from the works carried out by the Group of Rural Studies (GER) of the University of Buenos Aires in the years 1988 and 1996 starting from which we have been carried out a stratification of the sugar cane exploitations take account their size. Three main categories have settled down with this way: small producers or small *cañeros* (less than 20 hectares); medium producers (21 to 100 hectares) and big producers (more than 100 hectares), among those that it can be distinguished a megaproducers sector whose exploitations overcome the 12.000 hectares. This classification has been used to compare among the different strata such aspects as: number of exploitations, harvest type, agrochemicals use, commercialization forms, etc. The study of the workers on the other hand, is based on the surveys carried out by the GER in 1999, of which only have been extracted generals references vinculated to the number of work positions, types of labor bonds and occupation type, while the analysis of the paper of the industry and of the State has been carried out according to the proposal of Rofman (1999).

3. Results

3.1 Deregulation and globalization during the ninety. Linking strategies and articulation among industrials, cañeros and workers in the tucuman's sugar complex and the role of the State.

Unite to a progressive labor flexibilization, the deregulation supposed in the sugar scope the elimination of the Dirección Nacional del Azúcar that regulated the production quotas, the deliveries quotas of sugar to the market, the price of the sugar cane, etc.; the repeal of the national sugar law and the liberation of the cultivation, the harvest and the industrialization of the sugar cane⁸. This fact supposed that the Tucuman sugar complex should adapt to the general macroeconomic features, without to interest which were the asymmetries among the different actors at the interior of the same.

Although already among by the middle of the decade of 1960 and final of that of 1980 important changes in the Tucuman sugar complex took place consistent not only in a decrease of the number of factories, but also of the number of producers and workers, at the same time of the establishment of a limit-for law- to the surface under cultivation that could not overcome the 250.000 hectares, the changes that would happen with the deregulation of the activity starting from 1991 would suppose much quicker and deeper transformations.

With the deregulation was left configuring a new scenario in which the different actors looked for new forms of being articulated to the novel game rules. The members of the complex tried to develop strategies laying to improve their relative position inside the same. Very soon, already with

⁷ In the Argentina they are denominated «regional economies» to all those economies out of the pampa region, among which the sugar one is included.

⁸ Rofman, Alejandro (1999). **Las economías regionales a fines del siglo XX. Los circuitos del petróleo, del carbón y del azúcar**. Ariel. Buenos Aires. p. 163 and Giarraca and Aparicio (1997). Op. Cit. p. 311

the first harvests later to the deregulation, it was patent the important paper that had carried out the State in the previous stage to the liberation of the activity. In the face of the absence of regulations the industrials and the big *cañeros* demonstrated to be the most powerful agents inside the system. The strategies for them developed they placed both the small and medium producers as to the workers in a subordinate position. These sectors developed different strategies that allowed them to continue subsisting inside the complex, however still when there was an important decrease in their number.

Those strategies, framed in a market where the prices of the sugar were quite depressed, they consisted basically, in an important increase of the use of fertilizers and agrochemicals⁹; a spectacular increase of the mechanization of the harvest (Table 1), that which was translated in a decrease of the number of small producers and in changes in the labor environment¹⁰ that didn't only imply a descent of the number of work positions, but also qualitative changes in agreement with the mechanization¹¹.

The data show that between 1988 and 1996, the number of sugar cane producers decreased more than 35%. That general cipher should be tinged keeping in mind the sizes of the sugar cane exploitations; in fact the only stratum that diminished its number was that of the denominated small cañeros, with properties whose extension was not superior to 20 hectares -where the manpower of family type prevailed with low use of technology- that however continue representing more than 60% of the total, while the remaining strata grew in significant form, mainly the big producers group with exploitations bigger than 600 hectares (Table 2) that includes to the denominated megacañeros (megaproducers), possessors of properties of more than 12.000 hectares, formerly nonexistent in the Tucuman sugar cane world¹².

Table 1
Forms of harvest of the sugar cane
1988 and 1996

Form of harvest	1988	1996
Manual	81,8	43,0
Manual cut and mechanical load	8,3	20,2
Mechanical cut and load	9,9	16,2
Integral	0,1	20,5

Source: Giarraca (2000). Op. Cit. p. 299.

Equally took place an important decrease of the number of workers that passed of 30.000, between permanent and transitory, at the beginning of the ninety at 15.000 at the end of the decade¹³. This decrease was accompanied by important qualitative changes in the labor world (recruiting modalities, qualification level, profile of the positions, organization forms and administration of the

⁹ It was calculated that toward the year 2001, 18% of the surface with sugar cane harvested used glifosato and fluazifop p-butil like chemical maturer, that which induced an important improvement in the yields. The use of such fertilizers had also been generalized as the nitrogen, potassium, sulfur and diverse types of phosphates. Equally new sugar cane varieties were used adapted to the different soils of the province. Cfr. Estación Experimental Agroindustrial "Obispo Colombres" (2002). **Informe anual año 2001**. EEAO. San Miguel de Tucumán. *passim*.

¹⁰ The traditional labor market linked with the sugar cane not only included the rural workers, but also to those factory workers. Inside these two categories they were distinguished those workers in turn with stable bonds (permanent) and those with unstable bonds (temporary). In this work we will refer exclusively to the first category.

¹¹ Cfr. Giarraca et al. (2000). Op. Cit. p. 14.

¹² Cfr. Giarraca et al (1997). Op. Cit. p. 316.

¹³ Cfr. Giarraca et al. (2000). Op. Cit. p. 15.

work, etc.)¹⁴. This way, at the same time of a widespread descent of the traditional positions of works associated with the manual harvest, new types of tasks linked with the mechanization appeared (harvest foremen, machinists, prompters, etc.), and in turn new modalities of manpower recruiting arose, where the terciarization of the harvest, together to an important precarization of the labor bonds has been the characteristic note. Although the sugar cane producers still constitutes the main manpower contracting parties (it is calculated that in 1999 45,3% of the manpower for the harvest was hired directly by the cañeros), the contractors, managers in charge of providing workers' gangs in charge of the harvest of the sugar cane, provide 41% of the manpower, that which has supposed a definitive rupture of the traditional labor bonds. With it, an important part of the sugar cane producers, mainly the biggest, they have been able to breakaway of the labor bonds with the harvesters, transferring the responsibility to the contractor who becomes the direct responsible of the workers¹⁵.

Table 2
Number of sugar cane producers according to the size of exploitations
1988 and 1996

1988 and 1996					
Surface with sugar cane (hectares)	Total of producers				Variation (%)
	1988		1996		
	Absolute	%	Absolute	%	
0-20	10.059	87,5	4.512	61,1	-55,1
21-100	1.031	9,0	2.050	27,8	49,7
101-600	384	3,3	612	8,3	59,4
600 and more	22	0,2	206	2,8	836,4
Total	11.946	100	7.380	100	-35,8

Source: Giarraca, Norma and Aparicio, Susana (1995). Op. Cit. p. 179 and Giarraca, Norma (2000). Op. Cit. p. 295.

The situation of the industrial sector at the end of the decade of 1980 was quite precarious: of the 15 existent factories in the province (over a total number of 25 in the country), 7 were in ceasing of payments or in bankruptcy and most had not improved their technical conditions during years. With the deregulation many of the sugar mill changed owners, in a context in that the factories of more size and the big sugar cane producers still began a concentration process in the middle of development¹⁶; many factories applied more technology and improved in great measure their production, some inclusive passed to constitute links of the productive chains of highly dependent multinational companies of the sugar for the elaboration of their products or linked to the agricultural sector (Arcor, Pepsi Cola, Minetti); but some other ones continued already maintaining the precarious situations present during the eighties, where each new harvest was the prolegomena of conflicting negotiations

¹⁴ Ibidem. P. 14.

¹⁵ The contractors and the cañeros on the whole hired 86,2% of the manpower in 1999. 13,8 remaining% corresponded to the cooperatives. Íbidem, passim.

¹⁶ The Azucarera Terán, a company of the Grupo Colombres, was in being able to of 5 sugar mills; equally a North American multinational company, Seaboard, possessed three factories in the province and one in the neighbor Salta. Most of the factories acquired by these companies was about to break or in creditors' convocation. At the moment it is frequent to read in the locals newspapers announcements entailed with the sale of some sugar mill. Cfr. Rofman (1999). Op. Cit. p. 189 and newspaper **El Periódico**, March 16 2001. p. 11.

that end in precarious leases of the plants¹⁷. This last characteristic spreads however to disappear as different economic groups take possession of the factories.

As we saw, the State after the deregulation practically disappeared as intervener actor in the sugar complex when stopping to carry out mediator's role among industrials, sugar cane producers and workers; however, it continued maintaining certain intermeddling role protecting the national sugar production before the much more powerful Brazilian sugar complex. Equally, with the disappearance of the national State, the provincial government offered certain support to the activity, which consisted to postpone the payment of the taxes and in the grant of credits to the committed companies.

The strategies developed by the different actors to be articulated to the sugar complex have been very different; in this way the small producers, for example, dedicate their lands almost exclusively to the cultivation of the cane, diversifying their production with the cropping of grains and vegetables. The harvest of the cane prevails in manual form that sells with cash in an important proportion. On the other hand, these producers have looked for to supplement their more and more scanty revenues mainly with the work outside of their exploitations, a fact for anything novel, but that acquired vigor with the deregulation.

The medium producers although they dedicate an important proportion from their lands to the cultivation of the sugar cane, they diversify their production with grains and vegetables, while a relatively important proportion of the same ones distributes its working hours in other managerial activities as the trade. The type of predominant harvest is the semimechanic, but with an important presence of the integral harvest. When being a sector with certain capitalization level, the sugar cane sale is carried out mainly by means of the multure system¹⁸ but also with cash.

The big producers on the other hand are those that present a bigger diversification degree, looking for to minimize the risks that implies to be devoted to an only cultivation; at the same time of the cultivation of grains, vegetables and the livestock breeding, they also carry out other managerial works linked to the transport and the trade. In these units there is a notorious prevalence of the semi-mechanic harvest that include more than 75% of the surface, while the rest corresponds to the integral harvest. The sale of the production is carried out mainly under the multure system.

Table 3
Evolution of the main indicators of the cane and sugar production in Tucuman
1991 and 2000

	1991	2000	Variation (%)
Sowed area (has.)	188.600	183.400	-2,7
Sugar produced (tons)	748.000	904.000	20,9
Yields (tons/has.)	3,97	4,94	24,4

Sources: EEAOC (2002). Op. Cit. P. 67; Centro Azucarero Argentino (www.centroazucarero.com.ar); Giarraca et al. (1995). Op. Cit. p. 310.

Independently of the size of the exploitations, many producers articulate their production with the sugar mills which provide from materials and inputs to the sugar cane producers through their

¹⁷ Rofman (1999). Op. Cit. p.189.

¹⁸ The multure system was established in the decade of '80. By means of the same, the sugar cane producers deliver the raw material to the sugar mills, who receive the 47% of sugar and the totality of the molasses, while the 53% remaining keep in power of the producers. Cfr. Paolasso, Pablo (2000). **El complejo cañero en un contexto de crisis (1966-2000)**. Unpublished.

technical departments and they fix precise dates of delivery of the raw material, not only rationalizing this way the operation of the factories, but also the cultivation of the sugar cane¹⁹.

The sector of workers on the other hand has appealed to labor strategies as mechanism of survival, migrating after the harvest to different points of the country (Buenos Aires, Mendoza and Río Negro mainly), carrying out circuits that maintain them far from its place of permanent residence most of the year. In this sense, the migration also help to supplement the characteristic seasonality of the agricultural work²⁰.

Beyond the adverse social implications that were developed with posteriority to the application of the neoliberal model, the result of the rearrangement that took place in the Tucuman sugar complex redounded in a decrease of the sowed area that it was accompanied by a spectacular increment of the production of sugar and the yields for hectare that were increased of 4 tons along the decade to almost 5 (Table 3). If they are placed in the national context, these changes are more than significant, since in the remaining provinces that elaborating sugar, both the production of sugar, as the yields and the surface under cultivation stayed relatively stable.

4. Conclusions

With the deregulation and the development of policies intended to the flexibilization of the labor market has been come producing a clear restructuring of the sugar complex. changing the traditional linkings among the different economic agents; it has diminished the number of exploitations significantly, exclusively the segment of small producers, increasing the concentration of the production and the industrialization of the cane in an every time smaller number of economic agents that spread to verticalizate their operations. The results of this restructuring show that the production of the Tucuman sugar complex has improved in sustantive form, but with social costs of great magnitude. The agents have developed in this way different strategies, some to improve their position inside the group, others maybe to subsist and to be not expelled, negotiating 'subsistences and permanencies'²¹ and activating their capacities to be inserted in the activity in spite of the structural tendencies²².

The actors more harmed inside the group, besides the small sugar cane producers they have been the rural workers whose number has shrunk considerably due mainly to a progressive tecnification of the harvest. It has impelled it that characteristic practices of the labor markets linked to the industry and the services, became also present in the agrarian landscape, mainly an accentuation of the precarization of the labor bonds and a modification of the content of the tasks, that which has stimulated processes of qualitative flexibilization.

On the other hand the property and the handling of the sugar mills has changed of owners, passing of a traditional structure controlled by 8 or 9 families to a multiplicity of situations that have put the activity under critical conditions. However, the entrance of companies linked to practical global of rationalization –novels by the way–, both in the industrial sector as in that of the farmers, it induced the diffusion of such practices to the rest of the actors. In such sense the fact can be understood that a production still characterized by the presence of a numerous sector of small producers with prevalence from the work family present similar organizational forms to the reining ones in different parts of the world, where the concentration of production units and the fragmentation of the work market are the characteristic notes.

¹⁹ Cfr. Giarraca (2000). Op. Cit. Passim.

²⁰ Cfr. Giarraca et al. (2000). Op. Cit. Passim.

²¹ Giarraca et al. (2000). Op. Cit. Pp. 12-13.

²² Giarraca, Norma (2000). "Transformaciones en la estructura social agraria cañera de Tucumán y las estrategias de los actores sociales." In **Población & Sociedad** N° 6&7. Fundación Yocavil. San Miguel de Tucumán. pp. 288-289.