



Cooperative Consortium Agroatirro: Combining Social and Economic Goals

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Abstract

The case is in-depth and complex and is suited for use with advanced MBA and EMBA students, as well as practitioners. The case describes AgroAtirro a Costa Rican sugar cane mill that faces financial problems (operating losses over the last two years) resulting from factors such as low productivity in sugar cane production, mainly due to funding problems and lack of technical assistance among its members. It has been structured to show enough information to illustrate the decision-making process at agribusiness firms in highly-difficult crisis situations, where business and social factors play a major role.

Key words. AgroArtirro, Sugar cane mill, financial crisis, agribusiness, decision-making process, social factors.

Cooperative Consortium Agroatirro: Combining Social and Economic Goals

At the beginning of November 2009, the General Manager of the Consorcio Cooperativo Agroatirro,^{1/} Ramiro Solano, after six years of work and feeling helpless, resigned from his position because of the cooperative's unfavorable economic situation during his time as General Manager (Exhibits 1 and 2).

Mr. Solano was aware that dissolving the Consorcio Cooperativo Agroatirro would not only impair the million dollar investment made by its principal partner, INFOCOOP,^{2/} but it would also affect more than 11,500 people who directly or indirectly benefitted from sugarcane production in the area. This area included the Turrialba and Jimenez counties in the province of Cartago and part of Siquirres in the province of Limon in Costa Rica, Central America.

Origins Of The Consortium

The Consorcio Cooperativo Agroatirro was founded in June 2003 to use, produce, conserve and industrialize sugarcane and its derivatives under a cooperative business model inspired by the success of the Coopevictoria R.L. mill (Grecia, Alajuela)^{3/}. With this initiative they hoped to create development and well-being in the abovementioned counties in Cartago; years later they added the Siquirres area of the Atlantic province of Limon.

Due to the relevance and impact of the Atirro mill on employment, the Government of Costa Rica (Abel Pacheco's administration, 2002-2006) declared the project of national interest and sought support from the Ministries and institutions like INFOCOOP. In the end, INFOCOOP was entrusted with leadership to develop the project and make the "Atirro Mill" a cooperative. This leadership was given to INFOCOOP based on the institution's governing Law No. 6756, which stated the purpose of the institution was:

"To contribute to, promote, finance, market and support all levels of cooperatives, providing them with the conditions and elements necessary to have greater and more effective participation of the country's population, in developing socio-economic activities that simultaneously contribute to: creating better living conditions for low-income inhabitants, truly promoting Costa Ricans and strengthening the country's democratic culture."

INFOCOOP's position and strategic interest in this project was reflected by its economic support, which is summarized in the following table:

Table No 1. CURRENT LOANS WITH INFOCOOP IN COSTA RICAN COLONES (*)

NAME	AMOUNT LOANED	CURRENT BALANCE	INTEREST	TERM/YEARS
AGROATIRRO R.L. 1266	2,653,538,147.72	2,653,538,147.72	2	24
AGROATIRRO R.L. 1266	620,000,000.00	612,400,000.00	2	25
AGROATIRRO R.L. 1266	265,200,000.00	226,440,704.00	2	10
AGROATIRRO R.L. 1266	131,600,000.00	114,232,000.00	2	6
AGROATIRRO R.L. 1266	93,911,111.11	76,206,716.05	2	4
AGROATIRRO R.L. 1266	150,960,000.00	127,047,538.90	2	10
AGROATIRRO R.L. 1266	246,840,000.00	246,840,000.00	2	10
AGROATIRRO R.L. 1266 (**)	250,000,000.00	250,000,000.00	10	1
TOTAL	4,412,049,258.83	4,306,705,106.67		

Source: INFOCOOP; FINANCE DEPARTMENT

(*)Exchange rate: 490 colones per US dollar

()** REVOLVING LINE OF CREDIT: A revolving line of credit for 5 years. Each year the loan is paid and another ¢250 million are disbursed. Repayment from sugarcane liquidations that LAICA has to pay AGROATIRRO, R.L. AGROATIRRO issued a notice to LAICA authorizing payments should be made to INFOCOOP based on a payment schedule provided by INFOCOOP. If AGROATIRRO, R.L. does not pay on the scheduled dates each year (November), the line of credit is cancelled.

That same year, IDA ^{4/} finalized the purchase of property for Central Azucarera de Turrialba (CATSA), paying two million dollars. CATSA used the money to pay its debts with several institutions, thereby avoiding the closing of the Atirro Mill.

The initial intention of IDA was to transfer the 392 purchased hectares (12 farms) to small sugarcane producers in Turrialba and Jimenez, who formed part of Coopecañita R.L. However, in the end IDA decided to lease the parcels, which still continued when this case was written.

Another important institution in the cooperative's operations was CATIE,^{5/} an independent producer that supplied the mill with 10% of its total tons of sugarcane processed in the last harvests.^{6/} This support from CATIE was provided thanks to the Ministry of Agriculture and Livestock in Costa Rica, which, as a member of CATIE's Board, recommended helping the Consorcio Cooperativo Agroatirro project.

Business Background

The Atirro Mill was first owned by an affluent family in the area that had severe administrative and financial problems, forcing the sale. The family sold the mill to the private company CATSA (Central Azucarera de Turrialba SA). Despite CATSA's best efforts, it was not able to prevent the mill from almost going under at the beginning of the century, due to debt and a trend of lower production.

As the consortium's^{7/} manager reflected about the situation, CATSA inherited a complicated financial and productive situation. In his words:

"I think most of the problem was a shift in attention away from their main activities, hoping that growing macadamia nuts in the area would be a good alternative for greater profits in the agro-industrial business. The former owners of the Atirro Mill had invested a lot and mortgaged large properties because of their belief in this new activity."

He continued:

"They also invested a lot in a hotel (referring to the Mill's original owners), that wasn't as profitable as they had hoped. All of that together was a waste of money, since they didn't really have that much. You can compare it to a company like the Juan Viñas Mill 6/, where decisions were more conservative and they bet on the traditional way to do business rather than making structural changes. There's a huge difference in terms of styles and administration, which can be easily seen when they are compared. One was successful, and the other, a failure. From that perspective, the sugar business, quite a decent industry, couldn't handle such a diversion of resources."

In 2003 CATSA opted for a Preventive Agreement with its creditors, motivating two potential buyers: the Juan Viñas farm^{8/} and Coopeagrí R.L.^{9/} These large companies represented two very different styles of business management. The first was a private and traditional family business. The other was a cooperative. Both were successful in sugarcane processing, among other activities.

The cooperative initially took the lead in negotiations; however, the negotiations fell through, obligating INFOCOOP to create Coopeatirro R.L. in order to acquire the mill. At the same time, INFOCOOP helped found the cooperative consortium with participation from Coopeagrí R.L. in order to form a more solid structure.

In 2003 Coopeagrí R.L. and Coopeatirro R.L. became the founding members of the consortium, with INFOCOOP providing capital support for an eventual future affiliation.

The property bought by IDA had been leased to a small group of farmers who had previously worked at the Atirro Mill. This group formed part of Coopecañita R.L., which soon joined the consortium. The new capital distribution then became: Coopeagrí R.L. 50%, Coopeatirro R.L. 39.5% and Coopecañita R.L. 10.5%.

The group’s assets included an industrial factory with a milling capacity of 95 tons of sugarcane per hour. Depending on the weather and operations each year^{7/}, the mill could be operating between 125 and 135 business days a year, assuming 80% milling capacity, for a total of 220,000 metric tons of sugarcane per harvest.

The company had a two-story building for offices, a steelyard balance, gas station, mechanics shop, three houses for workers and an open area with a 1,675 square meter cement base for an organic composting project that processed the cachaza byproduct,^{10/} ashes and coffee cuttings.

The Atirro Mill was the larger of the two in the Turrialba and Jimenez area, with a milling capacity of 210,000 metric tons per harvest. The other mill, the Juan Viñas farm, had a milling capacity of 140,000 metric tons per harvest. The table below presents the mills’ processing of sugarcane in metric tons during the last five harvests:

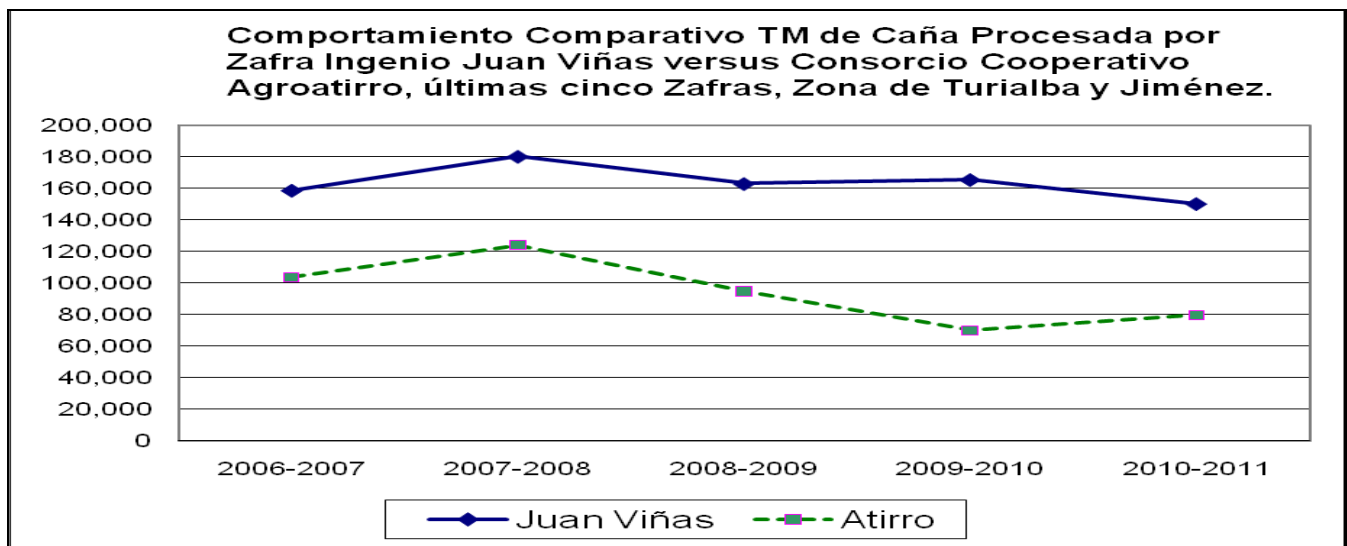


Figure1. Metrics tones of Processed sugarcane. Comparative behavior Agroatirro vrs Juan Viñas Mill. Source: Liga de la Caña Costa Rica

Administrative Situation

For the consortium's Administrative Board, Mr. Solano's resignation as General Manager left them in a complicated situation since he resigned just before the 2009-2010 harvest and just after the resignation of several other managers with many years of experience. First, the Industrial Manager responsible for the mill, and then the Agricultural Manager, or field coordinator (related to sugarcane products), had resigned. This had left a vacuum in authority for operational decision-making at the company, creating "chaos," according to several reliable sources.

This uncertain operational environment was coupled with the withdrawal of one of the main founding members of the consortium: Coopeagrí R.L., in March 2010.

The withdrawal of Coopeagrí R.L. was quite significant since it was used as a leading example for cooperatives in the country because of its business success and size. In addition, Coopeagrí R.L. had been one of the founding cooperatives of the consortium, playing a leading and enthusiastic role in its formation, years ago.

What happened with Coopeagrí R.L.? Why this radical change only five years after this business project had started?

At precisely that time Coopeagrí R.L.'s Board had a change of management. The new President, Amado Castro Fernandez, and the new Board members thought that given the consortium's economic results and production indicators, the best option was to withdraw and concentrate the cooperative's efforts and management internally.

This decision generated fierce debate, friction and distancing among managers of INFOCOOP and Coopeagrí R.L. - issues which continue today. INFOCOOP sanctioned Coopeagrí R.L. for not complying with the sixth cooperative principle on support among cooperatives, and Coopeagrí R.L. defended its purely business interest.

This crisis had the potential to culminate in the closing of one of Costa Rica's most important mills.

Table 2. Average Production Per Mill Per Harvest. 2007-2008-2009-2010-2011 Harvests

Mill	Milled Tons of Sugarcane	Total
1 Taboga	730,824	19.69
2 CATSA	650,072	17.52
3 El Viejo	642,214	17.30
4 El Palmar	359,649	9.69
5 El General	249,849	6.73
6 Quebrada Azul	215,776	5.81
7 Victoria	194,278	5.23
8 Juan Viñas	163,627	4.41

Table 2. Continuation

Mill	Milled Tons of Sugarcane	Total
9 Cutris	156,997	4.23
10 Atirro	94,412	2.54
11 Costa Rica	64,479	1.74
12 Providencia	64,281	1.73
13 Santa Fe	50,903	1.37
14 Porvenir	48,108	1.30
15 San Ramón	25,990	0.70
Grand Total	3,711,460	

Source: Liga de la Caña Costa Rica

Due to this crisis situation and because the mill had been left without a clear manager or leader to organize workers in an emergency operating plan, Alexander Cervantes Mora was named internally as Manager. He had a degree in Business Administration from Costa Rica's prestigious Instituto Tecnológico. He, along with several workers, took the initiative to organize an improvement committee, which they named Action Vision (AV). Its purpose was: to save the company from closure, and "armed" with a deep sense of identity and loyalty to the organization, to "jumpstart" a work plan resulting from several emergency meetings with all workers. This work plan would be used to guide operations during the 2009-2010 harvest, while a new manager was hired.

Months later, Rogelio Moreno, co-founder of Action Vision, and current Mill Manager, recognized that:

"The departure of the managers caused initial confusion, since they had the most experience, but a conflict of interest among them and a lack of trust from the producers facilitated Action Vision, who took responsibility to lead the company forward. Another challenge that AV faced in March 2010 was that they had to finish repairs to the mill so that they could start harvesting. This was an obvious priority to continue business. Given the circumstances, just thinking about not operating during the harvest or delaying harvest, would have been the "straw that broke the camel's back" for the company."

The basic tasks of Action Vision included planning for the harvest and harvesting, while beginning to recover the consortium's image in the community of producers. In order to rebuild its image, AV had to visit each producer in his or her community, share ideas and see how they could collaborate together. It was hard work, but quite fruitful, as summarized by comments received by Moreno from the sugarcane producers:

"You are quite brave because you are standing up and facing everything that has happened' and that was how we began to rebuild trust and support the mill's producers. You have to remember that at one point their payments for sugar had been delayed for more than seven months, and they hadn't received a good explanation about what was happening. You can imagine the damage that caused."

In April 2010 Carlos Alberto Cruz Chan was hired as General Manager. He had a degree in Agronomy and a Masters in Business Administration. He completely supported the Action Vision's initiative, inviting them to continue as his consultative advisors.

Sugarcane Production in Costa Rica^{11/}

Costa Rica's main sugarcane production areas are listed in Tables No. 2 and 3. As seen, Turrialba represented 6.95% of sugarcane production in the country, with a crop cycle of one to 24 months. The two mills - Juan Viñas and Consorcio Cooperativo Agroatirro - were the only sugarcane mills in the area (Turrialba and Jiménez).

In terms of metric tons of sugarcane production, Turrialba contributed 10% of the 4 million metric tons nationally, equaling 8.8% of the country's sugar.

“Each one of these regions has very different and particular characteristics and production conditions, which make production potential, expected agro-industrial yields and costs of production vary significantly.”

Table 3. Mill Production in Costa Rica in the Last Five Harvests, in Metric Tons of Processed Sugarcane and Kilograms of Sugar per Metric Ton of Processed Sugarcane

Mill	2006-2007 Harvest		2007-2008 Harvest		2008-2009 Harvest		2009-2010 Harvest		2011-2012 Harvest	
	Milled sugarcane, tons	Yield, Kgrs. M.F/T.C	Milled sugarcane, tons	Yield, Kgrs. M.F/T.C	Milled sugarcane, tons	Yield, Kgrs. M.F/T.C	Milled sugarcane, tons	Yield, Kgrs. M.F/T.C	Milled sugarcane, tons	Yield, Kgrs. M.F/T.C
1 Atirro	103,680	109.47	123,896	110.18	94,649	109.58	70,166	104.61	79,668	112.19
2 Juan Viñas	158,799	108.41	180,303	109.79	163,073	106.09	165,607	106.75	150,353	125.30
Subtotal Area A	262,478	108.83	304,200	109.95	257,722	107.37	235,772	106.12	230,021	120.76
3 Argentina	0		0		0		0		0	
4 Costa Rica	67,615	107.60	61,758	113.16	60,740	105.04	68,588	95.98	63,695	108.62
5 Porvenir	56,045	110.34	46,954	119.43	45,015	115.04	47,637	105.27	44,889	107.32
6 Providencia	65,249	113.35	61,728	117.19	61,226	113.89	68,658	98.54	64,545	107.87
7 San Ramón	38,778	101.78	29,603	102.52	13,013	99.12	22,566	87.00	0	0.00
8 Victoria	219,803	114.80	194,726	118.11	185,955	113.10	195,601	109.24	175,308	120.47
Subtotal Area B	447,489	111.81	394,769	116.18	365,950	111.64	403,049	103.45	348,436	114.28
9 Cutris	141,337	97.48	134,504	110.31	162,041	96.40	166,857	92.85	180,248	102.60
10 Quebrada Azul	286,518	78.89	174,411	105.91	202,815	86.58	224,015	68.35	191,119	95.43
11 Santa Fé	66,461	85.68	55,693	98.11	30,555	83.55	0	0	0	0
Subtotal Area C	494,316	85.12	364,608	106.34	395,411	90.37	390,872	78.81	371,367	98.91
12 El Palmar	491,913	94.92	402,112	97.56	319,631	97.19	338,682	98.46	245,905	93.16
Subtotal Area D	491,913	94.92	402,112	97.56	319,631	97.19	338,682	98.46	245,905	93.16
13 CATSA	740,612	102.04	612,889	98.16	589,572	101.44	737,616	100.30	569,672	103.75
14 El Viejo	670,642	97.06	584,519	102.62	643,048	102.22	723,012	100.28	589,850	103.69
15 Taboga	746,269	99.26	678,958	102.03	710,171	104.74	849,914	100.02	668,809	110.12
Subtotal Area E	2,157,523	99.53	1,876,367	100.95	1,942,791	102.91	2,310,542	100.19	1,828,331	106.06
16 El General	299,078	118.12	219,324	120.67	210,777	126.12	239,965	115.94	280,101	119.76
Subtotal Area F	299,078	118.12	219,324	120.67	210,777	126.12	239,965	115.94	280,101	119.76
Grand Total	4,152,799	100.52	3,561,379	104.79	3,492,281	103.61	3,918,882	99.56	3,304,161	107.35

Source: Liga de la Caña Costa Rica

Sugarcane planting and processing had created its own culture in Costa Rican society, according to Chaves^{13/} due to the fact that: “it has played an extensive and important role throughout history, since its introduction to the national territory in the 16th century, presumably from Nicaragua, sugarcane accompanied processes of colonization and development in rural areas of the country. There are many ways in which sugarcane and its derivatives have had an impact on Costa Rican life.”

Saccharum officinarum is the scientific name of sugarcane, which is processed in a very specialized way that requires much technical knowledge to convert it from a raw material to sugar. Sugarcane is a grass whose pulp has large quantities of sucrose. With processing, it became sugar for human consumption. Sugarcane was typically grown in tropical and subtropical areas, which presented optimal environments.

As with any agricultural crop, obtaining high yields of a quality product required the use of technological best practices. Sugarcane was the raw material used to produce sugar, syrups and alcohol.

Chaves ^{12/} described the sugarcane production process in the field as follows: “the first task is to prepare the soil for planting. You have to make furrows to outline the plantation. Before that, you have to level the ground to best take advantage of the land’s capacity. Agricultural technology has evolved greatly, and leveling is done using a laser system that makes very precise cuts.”

“After the land is leveled, the process continues to prepare the soil, making irrigation and drainage ditches and furrows. These tasks are done prior to planting. Once this stage is done, you continue by selecting the seed, planting and irrigating until germination. These activities are done while applying fertilizers and using systems to control pests and weeds.”

“Once the sugarcane is mature, between 12 and 14 months later, it is harvested, in what is known as a *zafra* in Spanish. Seven groups of workers start cutting the crop by hand. Workers must still be hired since harvest is a strictly manual process. Once the sugarcane is cut, the process is quite mechanized, and it is taken to the mill using a modern and efficient transportation system to begin the sugar-making process.”

During the last five harvests between 2003 and 2011, 15 mills in the country processed between 3.5 and 4 million metric tons of sugarcane in a harvested area of approximately 45,000 hectares. Of this total acreage, 50.48% belonged to the 15 mills; the remaining percentage was owned by independent producers.

The country’s average yield of sugar per metric ton of sugarcane was 104.44 kg, with an approximate production of 7.5 million 50-kg bags per harvest.

One of the most notable pests in sugarcane production was the sugarcane borer, by its common name, or *Diatraea* spp, by its scientific name, which led DIECA to do research about it to provide farmers with best practices and agricultural controls to avoid propagation among Costa Rica’s crops.

According to data provided by the consortium’s management, their average yield in 2010 was 49.73 metric tons/ha. DIECA reported that the expected yield in the area was 64 metric tons, which represented 28.7% more than the current amount. In terms of sugar yielded per metric ton of sugarcane, Agroatirro produced an average of 107 Kg/ metric ton of sugarcane. (Exhibit 3.)

The following Table No. 4 and Graph No. 2 show sugar milling at the two mills in the Turrialba and Jimenez area compared with Costa Rica’s largest two mills.

Table 4. Mills in the Turrialba Area versus the Two Largest Mills in Costa Rica. Metric ton of processed sugarcane per harvest, last five harvests

Geographic Area	Mill	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Guanacaste	Taboga	746,269	678,958	710,171	849,914	668,809
Guanacaste	CATSA	740,612	612,889	589,572	737,616	569,672
Turrialba	Juan Viñas	158,799	180,303	163,073	165,607	150,353
Turrialba	Atirro	103,680	123,896	94,649	70,166	79,668

Source: Liga de la Caña Costa Rica

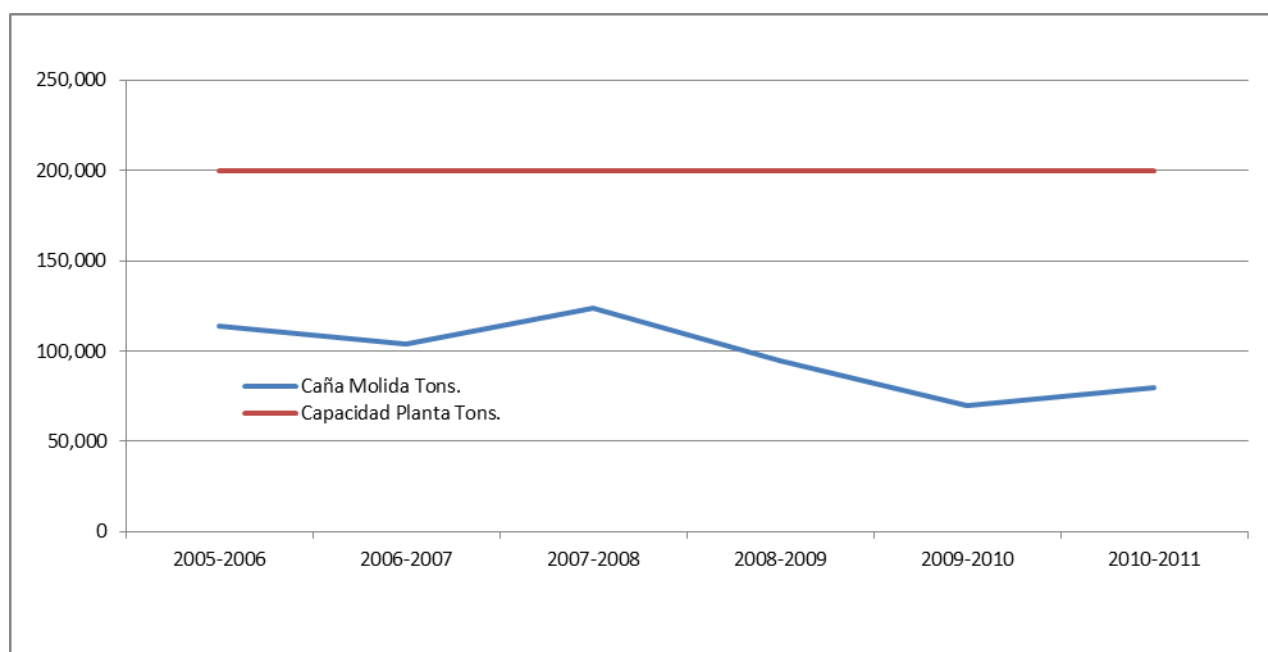


Figure 2. Sugarcane Milling in Metric Ton per Hectare, Cooperativo Agroatirro 2005-2011

This situation resulted from the cooperative members' productivity problems on their plantations. Because many of the farmers were small farmers with low incomes, who could not invest much in optimal technological packages (farming, equipment, agricultural inputs, irrigation, labor, technical assistance, etc.) to produce sugarcane, they employed low levels of technology and lacked agricultural best practices. This situation implied that the supply of sugarcane to the mill was insufficient, causing stoppage with negative consequences.

Mr. Rogelio Moreno, the current Mill Manager, commented:

“The effects of stopping processing are, first of all, that we lose continuity and control. We begin to see losses due to microbiological and chemical investments in processing materials, in addition, since we have to start cleaning, we lose the lining of the tanks because we have to leave them empty. We keep using equipment, but since we can't continue to produce electricity, we

have to use ICE's, which increases the bill. When we want to start up again, we have to use firewood (approximately 50 m³), which increases labor costs because we have to have people to repair and take care of the equipment and feed the boilers with firewood. In my opinion, the supply problem is due to a lack of field workers and because sometimes producers start to give their plantations more time to mature or grow because they only have new plantations, but that creates a gap in the supply of sugarcane scheduled to arrive at the mill."

In Rogelio's opinion:

"This year the issue of the roads wasn't a big deal because the summer lasted into the harvest, which meant they weren't really a factor. In rainy season the situation is much different and becomes an important factor. The issue with transportation is the fees, which I think are very high and provide a disincentive for small producers. For example, the Juan Viñas farm has other activities, like coffee production, so they have their own fleet of trucks, which makes it cheaper and more efficient. The issue of transportation isn't a fundamental problem for us, I mean it's not as if sugarcane doesn't arrive because we lack transportation. The capacity, or possibility, to mill 200,000 metric tons is real, if we had the sugarcane, even though Juan Viñas mills much more than we do because 80% of its sugarcane is its own (they mill 160,000 metric tons, or 1,400 metric tons per day), so they can organize the harvest better. In contrast, only 34% of our sugarcane is our own, and we average 1,000 metric tons per day. What I mean is, our industrial facilities are larger than Juan Viñas'."

Description of Processing

1. Once the raw material arrives at the mill, it is processed in the following way:
 - a. A sample of the sugarcane is taken to analyze its sugar content.
 - b. The sugarcane is weighed on a steelyard balance to determine its weight.
 - c. After the weight and sugar levels are recorded, the farmer is then paid.
 - d. Once the sugarcane is weighed, it is unloaded onto the mill patio using rotating cranes.
2. The sugarcane is taken to the mill section, where the juice is extracted. The juice is chemically cleaned and transformed into crystals. These crystals become sugar in centrifuges. The sugar is then dried and packed in 50-kg bags, ready for mass or industrial consumption.
3. The main inputs are:
 - a. Sugarcane
 - b. Chemical products
 - c. Firewood and fuels
 - d. Bags

4. The main products and byproducts and their uses are:
 - a. White sugar for mass or industrial consumption
 - b. Raw sugar (brown) for export
 - c. Molasses for livestock or concentrate
5. Waste
 - a. Bagasse
 - b. Cachaza foam
 - c. Ash

Costa Rica's Sugar Market

The Liga Agrícola Industrial de la Caña de Azúcar (LAICA) controlled, regulated and commercialized all sugar and mill derivatives for the Costa Rican market.

LAICA operated with a national sugarcane quota that they prorated and distributed among mills. The quota was based on a reference amount that each mill had produced during the previous period and also responded to the average production of each mill during the last five harvests.

Each year, LAICA used estimates of national and global consumption to assign a percentage of growth to the quota. For all national sugar production, LAICA assigned 61% to the local market and the remaining 49% for export. The quota in sugar bags of 96% of production was divided into 50% from the mill and the remaining amount had to come from independent producers.

The products that LAICA commercialized were: sugar, syrups and other byproducts and alcohol. Alcohol was used for liquor production, the pharmaceutical industry and as a fuel, when convenient for national industry.

In terms of using alcohol as fuel,^{13, 14/} due to low petroleum prices and high sugar prices globally, this activity was not very profitable. This was a problem because the activity depended on market prices, which were quite volatile. The idea to use alcohol as a fuel because of its combustion properties began in the 70s and 80s when petroleum prices were high and sugar prices were low in the global market.

The market price structure, both for the mill and the producer, was established by LAICA, using a model proposed in Article 92 of Law No. 7818, the Organic Agricultural and Sugarcane Industry Act. The producer's price equaled 62.5% more than what he or she delivered within the production quota assigned to the mill. This established price percentage was given to the producer for processing the raw material using a purchasing system based on quality. Bagasse^{15/} and cachaza production were excluded from this transaction. The difference in price went to the mill.

Table 5 Sale Price per Bag of Sugar and Kilogram of Syrup

Harvest	White sugar bag value in quota ¢	Value per kilogram for the producer	Value per kilogram of syrups ¢	Value per kilogram of syrup for the producer ¢
2000-2001	6,119.00	73.43	19.31	12.07
2001-2002	6,835.00	82.02	23.87	14.92
2002-2003	7,300.00	87.60	24.77	15.48
2003-2004	7,885.00	94.62	24.43	15.27
2004-2005	8,750.00	105.00	29.31	18.32
2005-2006	10,291.46	123.50	44.47	27.79
2006-2007	11,239.84	134.88	49.70	31.06
2007-2008	10,945.97	131.35	36.81	23.01
2008-2009	12,008.39	144.10	66.23	41.39
2009-2010	13,438.17	161.26	64.60	40.38

Source: Liga de la Caña Costa Rica TC 490 colones per US dollar.

Country Profile: Costa Rica^{16/}

Costa Rica is a country located in Central America with 51,100 square kilometers of territory and a population of approximately 4,502,392 in 2009.

The country's economic policies for commercial opening, beginning in the 80s, made it possible to overcome the global economic crisis of the day sparked by high petroleum prices, which had increased prices of raw materials and accelerated inflation and devaluation, unemployment and poverty and the fiscal deficit.

By opening its markets and allowing governmental policies to play a greater role in the market, Costa Rica entered a period of sustained economic growth that extended through the present. However, these policies also brought major social inequalities as a consequence of unequal income distribution, deficient and limited access to social services and productive resources and insufficient opportunities for quality jobs.

In terms of employment, though the country did not face the same situation as other countries in the region in 2003, it did have problems with open unemployment and visible and invisible underemployment.

While the country's unemployment rate in 1990 was 4.6%, in 2009 it had reached 7.8%, the highest it had been during the last two decades. Visible underemployment increased from 3.4% in 1990-1994 to 4.9% in 2009, while the rate of invisible underemployment remained steady. The result of these three unemployment rates was that the country went from an underutilization of its labor force of 10.4% in 1990-1994 to 15.6% in 2009.

Because of this social situation, INFOCOOP, acting on Article 157 of the Cooperative Association Act, made efforts to support the formation of these networks to consolidate Costa Rica's social economy. The start-up of Agroatirro R.L. was a social challenge, on the one hand, and a business challenge, on the other. More than 400 people adopted the cooperative model as an option to resolve the area's social and economic problems.

Producer Profile For Sugarcane Producers Belonging To Consorcio Agroindustrial Agroatirro

The member cooperatives included Coopeatirro R.L. (361 members, small producer), Coopecañita R.L. (22 members, sharecroppers), Coopehumo R.L. (35 members, small producers) and Coopezucareros R.L. (43 members, medium producers). In addition, many independent producers, who were not affiliated with the consortium, delivered their production to the mill helping it meet its quota assigned by LAICA.

For the most part, consortium members came from low-income families with little to no business experience. Most had little knowledge about the industrial and competitive production of sugarcane.

Cooperative Company

Law No. 6756 on Cooperative Associations defined cooperatives in Chapter 1, Article 2, as:

“Voluntary associations of people, not capital, with full legal status, indefinite duration and limited responsibility, in which individuals organize themselves democratically in order to satisfy their needs and promote their economic and social improvement as a way to overcome their individual situation, and in which the purpose of work and production from distribution and consumption, is service, not profit.”

This definition implied several values and principles that characterized and distinguished cooperatives from other types of associations. These values made cooperatives “one of the most effective ways to promote the economic, social, cultural and democratic development of the inhabitants of a country.”

These principles included: freedom to join and withdraw voluntarily, a right to voice and one vote per person, limited interest payments for contributions made to the capital stock, distribution of dividends (profit generated by the cooperative belonged to members), education, cooperation among cooperatives and “racial, religious and political neutrality.”

Decision-making in the cooperative was more complicated than in a private company due to the logic of a cooperative in which several people with equal authority participated in decisions; these decision-makers sometimes agreed and other times, did not. In addition, in many cooperatives, members lacked formal business education, which could negatively impact the quality and opportunity for business decisions.

This last issue was later addressed through the professionalization of management positions and a strong training campaign for the sector.^{17/}

The Consortium’s Problem

In order to meet its business obligations, Mr. Cruz was convinced that the consortium had to align its strategy with an appropriate organizational and functional structure and improve its productive infrastructure so that the mill was well prepared for the start of future harvests and operations, in general. These changes would lead to greater efficiency in the production and processing of sugarcane and sugar.

Just eight months after becoming General Manager, Carlos Alberto had written his first annual report for 2010 to present at the next General Assembly of Consorcio Cooperativo Agroatirro. He was sure that despite negative annual sales in sugar since the consortium’s founding, there was a potential way forward for the organization.

For Carlos Alberto it was clear that “straightening out the business side” was not easy, but that was “the heart of the matter” for its management. After five years of operations, the mill’s industrial side was the part that most impacted^{18/} the organization’s financial problems.

Despite large investments from INFOCOOP and other federal agencies, they had not been able to provide enough support to convert the consortium’s industrial structure while offering working capital and technical assistance to its members – two things that were vital to sugarcane

production, which was an industry dominated by the private sector and high-technology companies with financial solvency.

If you were General Manager of Consorcio Cooperativo Agroatirro, what would you list as the organization's main problems? And, in priority order, what would do to solve them in order to achieve sustained growth and profitability?

List these problems in priority order and convert them into a management agenda, using the following:

Analyze the strengths, weaknesses, threats and opportunities of the situation facing Consorcio Cooperativo Agroatirro.

Using your own judgment, list the organization's strategic resources that make up its core competencies that you would use for the business solutions.

For each problem establish an objective for the solution(s). These objectives should be clear, concrete and concise.

For each objective establish a strategy(ies) that would allow them to be met and list management indicators that could be used to monitor the results once the established strategies are implemented.

Using financial planning tools, make economic projections that help you quantify commitments in the previously established management agenda.

References

- 1/ The consortium includes Coopeatirro R.L. (mill), Coopecañita R.L., Coopehumo R.L., Coopezucareros R.L. and INFOCOOP. Initially, Coopeagrí R.L. also participated.
- 2/ INFOCOOP, the institution leading Costa Rica's cooperative movement.
- 3/ Mr. Martin Robles Executive Director of INFOCOOP, personal interview.
- 4/ IDA Instituto de Desarrollo Agrario de Costa Rica. Costa Rica's Agricultural Development Institute.
- 5/ CATIE. Centro Agronómico Tropical de Investigación y Enseñanza, Turrialba. Tropical Agricultural Research and Higher Education Center.
- 6/ Comment made by Mr. Oscar Sanabria Garro. Commercial Director at CATIE.
- 7/ Agronomist and Masters in Business Administration, Mr. Carlos Alberto Cruz Chan.
- 8/ Prominent mil owned by an affluent and traditional family in the area of Turrialba.
- 9/ Coopeagrí R.L. prominent and exemplary member of the consortium in the southern part of Costa Rica.
- 10/ Cachaza –foam that forms on the sugarcane juice when it is first cooked.
- 11/ Mr. Marco Chávez, Director of DIECA, Liga de la Caña, Costa Rica.
- 12/ 78 Conference, Chaves, DIECA, Liga de la Caña, Costa Rica
- 13/ Mr. Eladio Bolaños, Economist at DIECA.
- 14/ United Nations Economic Commission for Latin America and the Caribbean (ECLAC) lc/mex/l.746, September 5, 2006, original: Spanish, economic analysis on bioethanol prices for gasoline mixes.
- 15/ Bagasse, fibrous waste from the sugarcane stem that remains after milling.
- 16/ INEC. Instituto Nacional de Estadística y Censo, www.inec.go.cr/Web/Home/. National Statistics and Census Institute.
- 17/ Cenecoop, Centro de Estudios y Capacitación Cooperativa. Center for Cooperative Studies and Training.
- 18/ Opinions of people in the Consorcio Cooperativo and CATIE.

EXHIBIT 1.

CONSORCIO AGROATIRRO, R. L.

General Balance Sheet

Through September 30, 2010 and 2009.

(In colones, exchange rate is 490 colones per US dollar)

	2010	2009
Current Assets		
Cash and cash equivalents	¢8,749,301.66	¢252,913,621.89
Stock investments	¢98,000,000.00	¢0.00
Sugar receivable	¢23,024,933.73	¢58,171,483.39
Accounts receivable, net	¢14,055,397.26	¢29,323,292.00
Subscriptions receivable	¢72,323,292.00	¢72,323,292.00
Supply inventory	¢29,370,712.11	¢30,265,069.68
Prepaid expenses	¢444,594,399.15	¢182,613,758.77
Total Current Assets	¢690,118,035.91	¢625,610,517.73
Noncurrent Assets		
Property, machinery and equipment, net	¢5,870,410,861.94	¢5,802,978,770.95
Biological assets, net	¢738,841,573.54	¢796,496,866.09
Total Noncurrent Assets	¢6,609,252,435.48	¢6,599,475,637.04
Other Assets		
Sugar receivable from LAICA	¢104,081,410.03	¢104,081,410.03
Intangible	¢378,155,467.50	¢378,155,467.50
Pending INFOCOOP funds	¢0.00	¢202,919,084.04
Rights and patents	¢18,727,438.51	¢18,727,438.50
Total Other Assets	¢500,964,316.04	¢703,883,400.07
Total Assets	¢7,800,334,787.43	¢7,928,969,554.84

EXHIBIT 1. Cont.**CONSORCIO AGROATIRRO, R. L.**

General Balance Sheet

Through September 30, 2010 and 2009.

(In colones, exchange rate is 490 colones per US dollar)

	2010	2009
Current Liabilities		
Accounts payable to suppliers and others	¢113,112,083.00	¢283,420,848.48
Withholdings payable	¢13,941,355.22	¢18,492,541.63
Accumulated interest payable	¢3,140,656.20	¢67,971,524.97
Accumulated expenses payable	¢26,560,979.24	¢42,334,800.71
Total Current Liabilities	¢156,755,073.66	¢412,219,715.79
Noncurrent Liabilities		
Obligations payable to LP	¢4,027,855,918.55	¢3,673,430,144.12
Provisions for legal benefits	¢1,028,492.69	¢1,271,150.44
Total Noncurrent Liabilities	¢4,028,884,411.24	¢3,674,701,294.56
Total Liabilities	¢4,185,639,484.90	¢4,086,921,010.35
Equity		
Cooperative Capital Stock		
Affiliated cooperatives		
COOPEATIRRO RL	¢1,616,200,904.30	¢2,009,794,604.82
COOPEAGRI RL	¢0.00	¢1,823,159,715.31
COOPECAÑITA RL	¢27,785,537.72	¢93,566,179.12
COOPEAZUCAREROS RL	¢830,393.38	¢4,001,346.79
Subscription COOPECAÑITA RL	¢72,232,292.00	¢80,000,000.00
Associative participation INFOCOOP	¢163,182,818.72	¢163,182,818.72
Surplus in purchasing assets	¢343,789,039.49	¢343,789,039.49
Surplus for revaluing assets	¢1,390,583,316.91	
Reserves by law		
Legal reserves	¢0.00	¢5,604,411.45
Reserves for capital strengthening	¢0.00	¢50,439,703.15
Accumulated Profit (Loss)	¢0.00	-¢731,109,121.94
Total Cooperative Capital Stock	¢3,614,604,302.52	¢3,842,428,696.91
Total Equity + Liabilities	¢7,800,243,787.42	¢7,929,349,707.26

EXHIBIT 2.
CONSORCIO AGRIATIRRO, R. L.
Profit and Loss Statement
For the period ending September 30, 2010 and 2009.
(In colones, exchange rate is 490 colones per US dollar)

	2010	2009
Sales		
Sugar	¢1,863,315,234.75	¢2,402,607,958.31
Syrups	¢134,296,570.75	¢188,170,913.78
Total Sales	¢1,997,611,805.50	¢2,590,778,872.09
Direct Expenses		
Expenses for Production and Sales Costs	¢1,900,206,398.59	¢2,844,829,997.03
Expenses for Amortization of Biological Assets	¢58,282,292.55	¢88,723,877.68
Expenses for Depreciation	¢96,032,972.40	¢103,341,100.53
Total Direct Expenses	¢2,054,521,663.54	¢3,036,894,975.24
Gross Profit in Sales	-¢56,909,858.04	-¢446,116,103.15
Operating Expenses		
Administrative and General Expenses	¢130,050,320.73	¢146,737,874.09
Operating Profit	-¢186,960,178.77	-¢592,853,977.24
Interest Earned and Other Income	¢167,172,281.14	¢38,601,972.46
Expenses for Interest Various	¢16,562,957.56	¢163,832,500.62
Profit After Interest	-¢36,350,855.19	-¢718,084,505.40
Producer Subsidy	0	0
Expenses for Promotion and Scheduling	¢10,052,645.49	¢13,024,616.54
Profit (Loss) with Reserves by Law	-¢46,403,500.68	-¢731,109,121.94

EXHIBIT 3.

LAICA in numbers

- An average of 12,000 producers.
- 15 mills.
- An average of 400,000 metric tons per harvest.
- 14.4% of Agricultural GDP.
- 1.1% of Costa Rica's total GDP.
- 13.4% of traditional exports.
- 1.5% of total Costa Rican exports.
- 23,000 people with direct employment.
- 100,000 people with indirect employment.
- 9.3% of employment generated by agricultural sector.
- 1.3% of employment generated by the entire economy.
- 48,000 hectares or 10.6% of Costa Rica's total planted area.
- Income generated and received by LAICA is distributed 63% among producers and 37.5% among mills each fiscal year.
- The industrial productivity, or the amount of sucrose extracted from sugarcane, since the 70s has improved by 15.2%.
- Costa Rica's sugar is sold 50% in the commercial sector and 50% in the industrial sector.