

Mr. Rosas - An Entrepreneur in Mexico

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by

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Mr. Rosas - An Entrepreneur in Mexico

Don Raúl Rosas, a native of the state of Veracruz in Mexico, attended the Universidad Metropolitana in Mexico City to pursue a career in Food Engineering. After graduation with a B.S. in 1982, he realized he was unfamiliar with many aspects of the food industry, most notably, new product development, a subject that held his interest. As a result, Mr. Rosas decided to begin his career working for others, though he had an entrepreneurial spirit and wanted eventually to work on his own.

After graduation, Mr. Rosas started his career working for SWAM corporation, where he worked for just over two years. He was successful in his job, launching new products in 1983 and 1984, so much so that he was hired as a consultant in the meat industry in different states in Mexico.

After working in the poultry business for two years, his entrepreneurial desire became strong enough to cause him to forge out on his own. While working in the poultry industry, he noticed that hens that were no longer productive in the production of eggs would be given away as waste. He realized he could get the commodity virtually for free, picking up the birds from farmers, and further process the birds into ham and sausage. Mr. Rosas ran this business for ten years, making a profit largely due to the low input costs.

However, Don Raúl Rosas was not satisfied with one success. He started a second business with a friend importing turkey breast in bulk from the United States and selling it in smaller amounts. Although the venture made a profit, it took longer than anticipated and Mr. Rosas lost his friend over the venture. This caused Mr. Rosas to feel like a failure in this venture. He remained in the sausage and ham industry, but eventually, the entrepreneurial spirit returned.

For his next challenge, Don Raúl Rosas stated, “Since I’ve been in the sausage and ham business for 23 years why not look for something different? Something not so traditional, something that doesn’t have so much competition.” After scanning the environment for ideas, he moved to Tenancingo, State of Mexico, where he started to introduce a new product, turkey jerky, an idea that was not accepted in many places. During the beginning of this vision, he used part of his house and expanded little by little. He created a brand name “Pavo Light” and a cartoon turkey as a logo (Figure 1).

Figure 1. Pavo Light Logo



Turkey Supply, Consumption, and Market Size- World wide production of meat in the period of 1990-2005, increased at an annual average growth rate of 2.45%, from around 180.0 to 265.2 million tons. Beef, pork, and chicken were the three principal components of this production (Table 1). World-wide volume of production of turkey meat was 3.7 million metric tons in 1990, increasing to nearly 5.2 million metric tons by 2005. The principal producer of turkey was the United States (47%), followed by France (12%), Germany (7%), Italy (5%), the United Kingdom (4%), and Brazil (4%). Production of turkey in Mexico was 27,242 tons, ranking Mexico 18th in turkey production in the world.

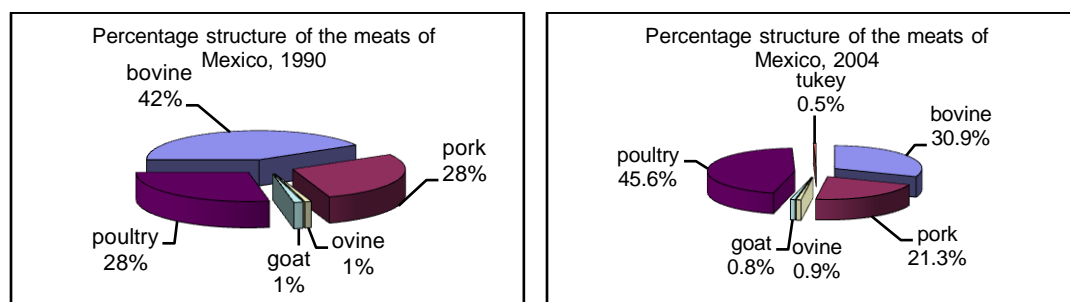
Table 1. World production of meat, 1990 – 2005.

	1990	1995	2000	2005
Total Worldwide production of meat (mt)	179,958,374	206,754,900	235,120,727	265,236,128
Total production of meat (beef, pork, and chicken) (mt)	158,332,043	180,639,711	205,771,563	232,595,740
Total production of pork (mt)	69,872,701	80,091,475	90,095,587	102,523,344
Total production of chicken (mt)	35,266,957	46,561,171	58,958,620	69,891,802
Total production of beef (mt)	53,182,385	53,967,065	56,717,356	60,177,594
Total production of turkey meat (mt)	3,703,991	4,568,169	5,120,550	5,188,633

Source: Prepared by authors using statistics from FAO. FAOSTAT, <http://faostat.fao.org/>.

At the beginning of the 1990's, the total production of meat in Mexico was 2.7 million tons (Figure 2), with the majority of meat being beef (42%), followed by poultry (28%) and pork (28%). By 2004, the volume of production increased to 5.0 million tons (Figure 2), with beef's share decreasing to 30.9%, poultry increasing to 45.6%, and pork falling slightly to 21.3%.

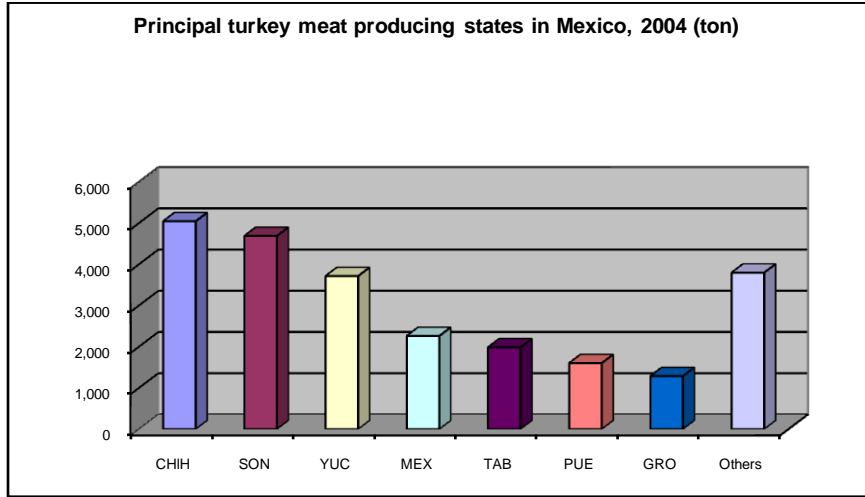
Figure 2. Structure of the meat industry in Mexico, 1990 and 2004.



Source: Prepared by authors with information from SAGARPA, the Mexican Department of Agriculture. SIAP. <http://www.siap.sagarpa.gob.mx/>

Turkey, though increasing, represented only 0.5% of total meat production on Mexico. Production was spread throughout the country (Figure 3). The state of Mexico, where the *Pavo Light* firm was located, was among the main producers in the country.

Figure 3. Production of Turkey in Mexico, 2004, by region



Source: Prepared by authors with information from SAGARPA, the Mexican Department of Agriculture.
<http://www.siap.sagarpa.gob.mx/>

Growth in the turkey industry was fueled by consumer demand for meats perceived to have a better benefit-cost health relationship (Tables 2 and 3). Per-capita consumption of turkey meat in Mexico grew 14% in 10 years (Figure 4). Those in the turkey industry, including Mr. Rosas, believed the promotion of these benefits could cause turkey consumption in Mexico to continue to increase. Imports mainly from the United States and from Chile (64% and 36% respectively in 2004) have covered the insufficient domestic supply of turkey in Mexico.

Figure 4- Per capita consumption of turkey meat in Mexico

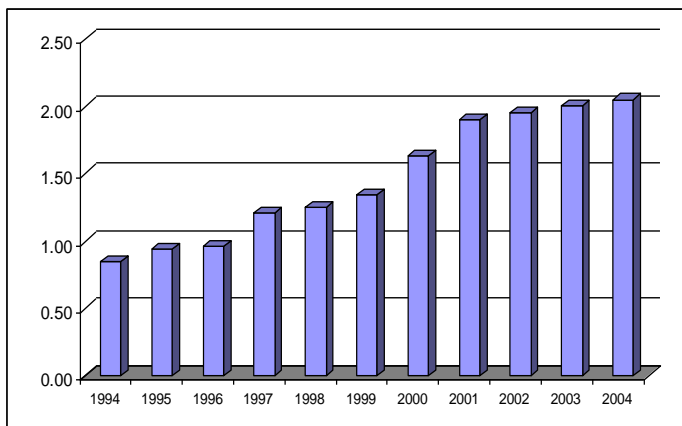


Table 3- Nutritional comparisons of different types of meats

Type of Meat	Water %	Protein %	Fat %	Minerals %
Bovine				
- lean	66.0	18.8	13.7	1.0
- semi grease	60.0	17.5	21.7	0.9
Pork				
- lean	50.0	14.1	35.0	0.8
- semi grease	42.0	11.9	45.0	0.6
Chicken	72.7	20.6	5.6	1.1
Turkey	58.4	20.1	17.5	1.0
Rabbit	69.6	20.8	7.6	1.1

Source: Lacteos y Carnicos Mexicanos, Volume 18, Number 2, April/May 2003.

Table 4 – Local Prices of Turkey and Other Meats by Products

Product	Turkey	Bovine	Chicken	Pork
Natural jerky	36	58	42	45
Seasoned jerky	36		46	47
Ground meat	28	45	38	39
Hamburger meat	24	35	33	NA
Sausage	24	36	39	40

Turkey prices are Pavo Light's prices as of 2005. Other prices are estimates by the firm.

Pavo Light

In 1996 and 1997, when Mr. Rosas first created a name for the turkey jerky company (Pavo Light) and the cartoon turkey logo (both of which still exist today), he offered the jerky to different stores, many of whom kicked him out telling him he was crazy. However, one store chain, Tiendas Garcés, an important store in the State of Mexico, decided to pick up the product. To everyone, including Mr. Rosas' surprise, there was a large demand for the product, reaching 200 kilos per week. As word of the product spread, other companies began to want to carry the product. Commercial Mexicana started carrying Pavo Light jerky, and soon expanded this product to stores outside the state of Mexico, specifically in Cuernavaca, Morelos; the State of Guerrero and in the metropolitan area of Mexico City. In Mexico City, many stores sold Pavo Light by 1998, creating a demand of 600 kilos per week. In 1999, Commercial Mexicana decided to place the product on special, and sales spiked to 800 kilos per week.

Soon Mr. Rios had 58 stores to stock in Mexico City plus the stores of Toluca, Guerrero and Cuernavaca, leading to greater coordination in his distribution. To handle the volume, he resorted to contracting personnel and renting trucks to meet demand of stocking the stores. Over time, he tried to acquire the trucks as he could afford them. As demand continued to grow and the number of stores he was servicing increased (to 110 stores by 2000), he continued to struggle with distribution and labor issues. Lack of labor, trucks, and the increased need for staff to deal with distribution was putting a tremendous strain on the business. At the same time, however, changes to the structure of distribution in Mexico were occurring, leading to centralization of distribution. Products headed to the stores in other states were now turned over directly from Mr. Rosas to the branch of Vallejo del Distrito Federal, relieving some of the difficulties he was having distributing his own product.

Over time, Mr. Rosas managed to consolidate as direct supplier of two important auto service stores, *Comercial Mexicana (la comercial)* and *Super Compras*. By 2005, almost 90% of Pavo Light sales were to *Comercial Mexicana*. *La Comercial* was one of the largest retail companies in Mexico associated through a joint venture with *Costco Wholesale Corporation*, and competing with WalMart, Gigante, and Soriana at the national level. *La Comercial* had several retail formats focused on different income levels, as well as a chain of family-style restaurants under the name *Restaurantes California*. Stores of *La Comercial* were concentrated in the Mexico City metropolitan area and in the central Mexico's region, including Guadalajara, or the Central Region.

As distribution issues were relieved, Mr. Rosas and his daughters turned their attention to increasing the demand for Pavo Light, attending food expositions, fairs, and promotional events. The company won awards for its success, including a second place award as a successful project at the 9th Annual Meeting of Successful Experiences Exchange in the State of Mexico.

With continued success, Don Raúl Rosas continued to innovate and create new products. In 2002, the two main products were turkey jerky and chicken marinade (production of 2 tons per week of the two products). Up to this point, he was purchasing mainly turkey breast to produce the smoke-dried turkey jerky, but the suppliers started to pressure him to purchase legs and thighs also. Though *Pavo Light* acquired its inputs from several mid-size suppliers such as Pavos Parson, Aves Ideal, and Industria Avicola, Mr. Rosas felt he needed to respond to their pressure. Feeling he must begin to purchase these products to keep his supply of turkey breast, Don Raúl Rosas added products like turkey sausage (using only leg and thigh meat), turkey burgers, and ground turkey meat (including breast, thigh, and leg). The products were an immediate success and were adopted by the store chains already selling his other products. Though the new products were all successful, the production of these products was driven by inputs, and Mr. Rosas lacked a systematic way of analyzing and positioning to take advantage of consumer tastes and preferences.

With expansion brought growing pains and by mid-2005 Mr. Rosas had to decide whether to take on more risk and try to grow more, or to maintain Pavo Light as is. Again, his entrepreneurial spirit made it hard for him to be happy maintaining, so he investigated how to expand. With help from those in his department of administration and finance, he developed a proposal for a new plant. This investment would increase the asset base of the firm by 6 million MP to 8.6 million MP. When completed, the proposal would be submitted to The Fund of Risk shared for the Promotion of Agribusinesses (FOMAGRO), a Mexican governmental agency that may fund 40% of the cost of the project. According to preliminary talks with FOMAGRO representatives, this looked promising. The new plant would allow Pavo Light to double the current level of production and would increase the quality of products.

The current production plant operated close to 88% of its 550 tons capacity on 200 square meters in the State of Mexico, Mexico. With the expected growth in sales for 2007, the current plant would be insufficient. Furthermore, the plant was considered obsolete with increasing maintenance costs and with the potential to cause quality problems in the near future. The proposal called for a new plant that would be a Federal Inspection Model (TIF –*Tipo Inspeccion Federal*) plant. TIF plants are state of the art plants introduced in the swine industry to allow

continued exports to the U.S. after an outbreak of foot-and-mouth disease in Mexico. The high quality standards of TIF plants facilitate certifications by importing countries like the United States¹. The proposed plant would have a greater capacity than the first (970 tons).

A local consultant firm had conducted a market research project related to the potential of this project. Results on that study confirmed the growing demand of the Pavo Light products. The study cost 80,000 MP and had already been paid. The results of this study are shown in Table 5.

Table 5- Initial Projected Sales by Products and Years (in tons)

Product	2005 (Year 0)	2006	2007	2008	2009
Natural jerky	26.0	26.0	26.0	31.2	31.2
Seasoned jerky	130.0	182.0	208.0	234.0	260.0
Sausage	93.6	104.0	130.0	140.4	156.0
Ground meat	182.0	197.6	208.0	234.0	234.0
Hamburger	52.0	78.0	88.4	104.0	130.0
Total	483.6	587.6	660.4	743.6	811.2

Projections by the firm

As Mr. Rios inspected the ‘initial’ projections in Table 5, he noticed the aggressive 22% projected growth for 2005. He thought that it may be safer to evaluate the project using a more conservative projection, perhaps using the historical annual growth rate of turkey production in Mexico. It was considered unrealistic to project long-term sales after 2009. By then, the plant would need major investments to keep it competitive. As a conservative approach to evaluate the project, it was considered that along with the book value of land and building, 2 million MP would be recovered as salvage value for the project. Mr. Rios was also skeptical about this arbitrary value.

Based on the sales forecasts, this plant would be operating at 80% of capacity by 2010 (without considering possible new products). Required investments for the TIF plant are detailed in Table 6. Net operating working capital investment, defined as the investment in inventory plus investment in accounts receivable minus spontaneous financing by suppliers, was estimated to be 15% of sales per year. In total, 90% of this amount was expected to be recovered at the “end” of the project in 2009 (10% lost in obsolete inventories and accounts receivables recognized at the end of the project).

Table 6. Initial Investment Estimates for TIF plant (in Mexican Pesos)

Fixed Assets:	
Land (800 square meters)	320,000
Buildings, construction	984,500
Cooling equipment	299,950
Machinery and equipment other	1,917,450
Shipping and installation of machinery and equipment	213,050
Total Fixed Asset Investment	3,734,950

¹ Economic Research Service / USDA. Mexico’s Pork Industry Structure Shifting to Large Operations in the 1990’s. A Special Article. Agricultural Outlook September 1999.

Net operating working capital investment: 2,130,000

Other Costs:

Market research 80,000

Estimates by the firm

Under current Mexican rules for tax purposes in general only linear depreciation is allowed. New assets could be depreciated following an accelerated-type depreciation only for specific industries and given certain requirements. For the evaluation of this project, machinery and equipment is depreciated in four years and the building in ten years. For project evaluation purposes, it was estimated that the building and the land could be sold at book values by the end of 2009. Tax income rate was estimated to be 40%.

The TIF plant would allow the firm to grow from a regional to a national level and probably to start exporting to the United States. Some talks had been started with American grocery stores. Fifteen permanent full time employees work in the current plant. With the new plant the number of employees in the plant will grow to fifty nine. The disproportionate increase will be due to increased quality control standards required in a TIF type plant. It was estimated that this will increase variable costs in the first year of operation (2006) by 10% per product compared to current actual costs, as given in Table 7. Fixed costs excluding depreciation and amortization are estimated to be 350,000 MP in 2006, increasing with inflation the following years. Inflation in Mexico had been stable around 5% in the last years, dropping from 50% in 1995 during the so-called Mexican Peso Crisis.

Table 7. Variable Cost by Products (MP/Kg)

Product	Variable costs
Natural jerky	25.3
Seasoned jerky	29.7
Sausage	16.2
Ground meat	22.9
Hamburger meat	19.9

Prepared using internal documents of the firm. Actual figures have been disguised for confidentiality purposes.

The plan was for FOMAGRO to finance 56% of the total investment. As it is FOMAGRO's mission was to support agribusinesses in Mexico, this portion of the funds would be interest-free. Another 3% of the investment, to acquire part of the cooling equipment, will come from "Alliance with You", a temporary governmental agency supporting small companies in Mexico. This resource will come as a direct support rather than as a loan. The remaining 41% of the total investment will come from Mr. Rosas' own resources.²

² Estimating the cost of equity is one of the most problematic issues when making capital budgeting decisions, especially for small private firms, and when no comparable firms data are readily available. In developed countries, the use of market information such as Treasury securities and comparable firms' betas serve as a guide when implementing the Capital Asset Pricing Model (CAPM) to estimate the cost of equity. In Mexico, given the high instability in the tiny Mexican Stock Exchange, it was not very precise to use market data for this estimation. As a gross guidance, however, one could take the yields of a risk-free rate security, and the yield of a diversified market

Don Raul Rosas was an entrepreneur. He had not made it where he was today without taking risks. However, this would be his biggest risk yet. He believed in the success of Pavo Light, and believed the old plant would outdated soon, but was not willing to risk such an investment without a thorough analysis.

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portfolio to have the extreme yields of a safe vs. a risky investment. 28 days CETES (the "risk-free rate" security issued by the Mexican government) yielded 18.3% per year on average for the 1995-2005 period. Furthermore, CETES had been relatively stable with a 10% average during the past five years (2000-2005). The expected yield on a risky investment, a market portfolio in the Mexican Stock Exchange as of 2005 was around 25%. Given the lack of quality information to determine the cost of capital, and its importance in determining whether a project should or should not be accepted, it was desirable to perform a sensitivity or "what if" analysis, not only on the cost of capital, but also on the relevant variables of the TIF plant project.