

Chapter 1

Foundations for Growth

IN THE LATE 1850s German naturalist Hermann Burmeister visited the province of Tucumán and observed, “Of all the cities in the interior, there is no doubt that San Miguel de Tucumán is the most elegant and friendliest, not only because of its location but also because of its infrastructure and population . . . a result of the vast industries that exist in the area.”¹ Burmeister was not alone in his remarks. During the late 1860s and 1870s, other visitors highlighted the province’s economic dynamism and the city’s affluence, in particular when compared to its neighbors in the Argentine northwest. Tucumán’s prosperity rested on a diversified economy characterized by a rich agropastoral sector and a large manufacturing sector. The province’s population made for a strong local demand that was complemented by active trade with domestic and foreign markets. In those days the sugar industry did not occupy a significant place in the provincial economy; it contributed only 10 percent of Tucumán’s total production revenues. High transportation costs not only limited the scope of Tucumán’s sugar market but also made the adoption of modern technology almost impossible as it was too expensive to transport machinery from Buenos Aires to Tucumán.

The Early Years

In 1545 the discovery of silver in Upper Peru unleashed profound transformations in the economies of the region. The area became the most important mining

complex in South America and quickly surpassed other silver-producing regions of the Spanish Empire, such as Zacatecas and Guanajuato. Silver production declined during the seventeenth century but revived in the following century and experienced an impressive expansion.² Upper Peru became South America's fastest-growing region and Potosí, the silver-mining capital of the world. Thousands of people migrated to work in the mines or to take advantage of the opportunities offered by the new economic bonanza, transforming the area into a major population center that contained at times more than one hundred thousand individuals.³

Remote and at a high altitude, the city of Potosí and surrounding mining areas relied for the survival of their population on goods produced in neighboring regions.⁴ Hundreds of pack mules arrived regularly with foodstuffs, textiles, leather goods, furniture, and luxury goods, as well as tools, mercury, and other mining supplies. For decades, silver became the fuel that sustained the economies of the modern territories of Jujuy, Salta, Tucumán, Santiago del Estero, Catamarca, Cuyo, and Chile. In direct response to Potosí's expanding demand, a line of settlements sprouted southward to supply provisions and equipment to the mining areas. San Miguel de Tucumán was one of them. The town was founded in 1565 by Diego Villarroel, following orders from the viceroy of Lima.⁵ Bounded by the Río Pueblo Viejo to the north, the Río Seco to the south, the Río Salí to the east, and the foot of the Cerro Aconquija to the west, the site chosen was more protected from Calchaquí invasions than earlier settlements such as Nieva, Cañete, and San Clemente while at the same time closer to the commercial route to Upper Peru. The city became part of the Gobernación del Tucumán (under the political jurisdiction of Lima), which encompassed the modern Argentine provinces of Córdoba, Jujuy, Salta, Tucumán, Santiago del Estero, Catamarca, and La Rioja. The founding of the town of San Miguel de Tucumán represented a major turning point, as it signaled the beginning of a more stable occupation of the region. During the late sixteenth century, people migrated and settled in Tucumán and transformed it into the most populated area in the territory that is now Argentina.⁶

The town of San Miguel did not experience significant changes until the first half of the seventeenth century. During this period, its population faced many difficulties, such as poor living conditions, lack of resources, and periodic flooding. Furthermore, native hostility rendered the commercial route through the valleys extremely dangerous. Attacks by Calchaquí groups reached a peak between 1630 and 1660 and contributed to the final relocation of the

Spanish trade route thirty kilometers to the west of its original location, leaving San Miguel isolated and in financial distress. In 1685 the city's *vecinos* (inhabitants with full citizenship rights) managed to convince the authorities in Lima to move San Miguel sixty kilometers northeast of its original site to an area known as La Toma. Located on higher ground, the new site offered protection from floods and indigenous threats as well as a more direct access to Potosí through El Camino del Perú. The city's proximity to trading routes meant new opportunities for the town's impoverished population and inaugurated a new phase in the economic history of San Miguel.⁷

During the eighteenth century, the Upper Peruvian market provided an important stimulus to San Miguel's economic development. Potosí and its adjacent mining areas depended on mules to transport mercury, silver, and provisions through the mountain passes. Mules bred in Córdoba, on their way to Salta's annual fair, passed through San Miguel. Between 1750 and the early nineteenth century, Salta, the "largest assemblage of mules in the entire world," received tens of thousands of animals annually.⁸ San Miguel's fertile lands offered pastures for breeding both mules and oxen used on the carts that transported goods throughout the region. The city's inhabitants became specialized in the manufacture of those carts, which were made entirely of wood and leather. The cart industry provided an important source of provincial revenue for a large sector of the population, who were not only involved in building the carts but also in operating the convoys. Other goods, such as wool textiles, raw cotton, hides, furniture, and agricultural products, were significant sources of income for the city's inhabitants. Potosí was San Miguel's largest consumer market, although Tucumano products reached other areas as well. Maize, wheat, textiles, and furniture were traded in Cuyo and Chile, while hides and tallow reached Buenos Aires, where they were exchanged for smuggled goods that found their way into Spanish territory through the Río de la Plata.⁹ Since contraband drastically reduced Spain's revenues from the colonies, the authorities attempted to reduce its negative effects with the establishment of the Aduana Seca (lit., dry customs house) in Córdoba.¹⁰

Limited success in controlling contraband in the region led the authorities in Spain to institute a number of reforms that altered the internal equilibrium of the Spanish Empire in South America and directly affected the fate of San Miguel. In 1776 the Spanish crown created the viceroyalty of the Río de la Plata, which enabled the port of Buenos Aires to become a lawful

mediator between Potosí silver areas and Spain. The new administrative jurisdiction included Buenos Aires, Cuyo, Paraguay, Tucumán, and Upper Peru. During the second half of the eighteenth century, San Miguel's merchants maintained an active trade with the two ends of the viceroyalty as they increased their trade, especially in hides and shoe soles, with Buenos Aires but still maintained an active commerce of mules, saddles, and foodstuffs with Upper Peru.¹¹ Salvador de Alberdi's 1805 report indicates that while Tucumán's contacts with Potosí remained very important for the economic health of San Miguel, the local market was becoming more dependent on a wide array of European goods that arrived through the port of Buenos Aires. San Miguel's population provided an important market not only for local products but also for luxury imports, thus giving an additional stimulus to the region's economy.¹² In 1805, according to Alberdi's estimates, two thirds of Tucumán's imports came from Castile, while the area's exports reached more varied markets, such as Buenos Aires, Chile, and Upper Peru.¹³

The May Revolution, in 1810, brought an end to the colonial order and launched decades of civil strife that disrupted the region's economy profoundly. Spanish control over Upper Peru severed San Miguel's trading ties with Potosí, seriously affecting Tucumano merchants and encouraging their economic reorientation toward Buenos Aires and the Argentine littoral.¹⁴ The declaration of independence from Spain failed to bring peace among the Argentine provinces. In the four decades following independence, the country became involved in factional struggles and civil war, and Tucumán oscillated between periods of political anarchy and stability. The situation changed for the province during the 1850s and 1860s. A relatively peaceful political climate enabled Tucumán's authorities to devote their energy to introduce important foundations for growth. Since order and stability were perceived as essential to economic modernization, the provincial government moved toward the consolidation of a strong provincial state by committing to the creation of new institutional settings that would not only legitimize their authority but also facilitate economic growth.¹⁵ The legislature approved a new provincial statute in 1852 and a constitution in 1856. The new charter, in accordance with the 1853 national constitution, established the division of powers, guaranteed internal order, protected private property, and organized public sources of revenue. It also provided for the future sanction of a new judicial code, an electoral law, the creation of municipalities, and a public mandatory education law.

During the 1850s, Tucumán's authorities paid special attention to tax and labor legislation. Four decades of political turmoil had left public finances in disarray. In order to increase revenues, the government reformed the provincial tax structure through measures that attempted to simplify collection and prevent evasion.¹⁶ The two taxes specifically targeted during this period were the *patentes* and the *contribución directa*.¹⁷ *Patentes* dated back to the early 1820s, although their origin can be traced to colonial times. This tax consisted of a levy on the profits obtained from any economic activity, including commerce, industry, the professions, and agriculture. During the 1850s, the tax was changed several times. Originally, the levy was a fixed percentage applied equally to all activities. Over time, to increase control over taxpayers and to better reflect the changes undergone by the provincial economy, the fixed percentage was replaced by a specific rate for each activity.

The *contribución directa* was created in 1855 by the national government to replace the colonial tithes.¹⁸ The new tax consisted of fixed rates on the values of real estate as well as on total amounts involved in capital transactions. During the 1860s the levy underwent successive modifications that simplified and improved its collection and reflected the increasing activity of the real estate market. According to provincial records, in 1876 *patentes* provided 24 percent of the total provincial income, while the *contribución directa* accounted for 31 percent.

Besides revisions to the tax system, during the early 1860s the government instituted a number of reforms to modernize mechanisms of tax collection. To prevent abuses and improve collection, the government appointed commissions to assess real estate values and make estimates on taxable amounts. To achieve the cooperation of taxpayers, commission members were selected from among the propertied class.¹⁹ To guarantee a fair tax system, taxpayers could appeal the commissions' appraisals before a special jury before the tax was due. Nevertheless, these mechanisms failed to generate the anticipated outcomes, as real estate values were not updated annually to account for infrastructural improvements, commissioners were unable to verify the accuracy of tax declarations, and assessments failed to keep pace with the swift expansion of the cultivated area.²⁰ In any case, what these measures clearly reveal is authorities' commitment to increase their control over public revenues, inaugurating a trend that intensified during the decades of expansion of the sugar industry.

New labor legislation also occupied a significant place in the provincial authorities' agenda. Since colonial times, labor shortages had constituted a

constant source of concern among Tucumán's landowners. The most acute problem, according to contemporary witnesses, was workers' tendency to run away. In an attempt to thwart a problem that not only disrupted the work routine and labor discipline but also inflicted important material losses on the propertied class, the authorities passed several pieces of legislation throughout the nineteenth century. As early as 1810, a decree authorized the use of physical punishment for those workers who escaped from their jobs. In 1823, Tucumán's *cabildo* (municipal council) penalized vagrancy and required workers to produce job certificates or other proof of employment in order to avoid incarceration or military draft. The decree also authorized the police to place vagrants in available jobs in the area, thus giving the police a new role that was to become institutionalized in the second half of the nineteenth century. Despite the government's efforts, regulations failed, as difficulties to apply the letter of the law and lack of control in the countryside rendered coercive measures largely ineffective.

In 1856 the provincial authorities made another attempt to solve the labor problem when Tucumán's legislature passed the Police Code, section 6 of which was entirely devoted to labor-related issues. Borrowing from prior legislation, that section gave the police administrative and judicial authority in labor matters.²¹ Section 6 provided for the police to persecute vagrants as well as to find them an occupation. It established basic procedures for registration and penalized those registered with more than one employer. The code required workers to carry at all times a *papeleta* with their employer's name, the job's address, and the duration of the contract.²² These job certificates were to be renewed every year. Section 6 also stated the rights and duties of both employers and employees, but it made no pretense that they were equal before the law. Workers were required to be obedient, faithful, and respectful. Employers, defined as domestic magistrates, were allowed to moderately punish workers and to detain them for twenty-four hours. After that period, the law stipulated that workers be turned over to the police, thus subjecting them to a double system of control in which both the public and private sectors reinforced each other. The code also instituted a penal principle called *hurto de servicios* (service theft), which enabled the police to consider flight a punishable offense.²³ The statute regulated workers' rights such as daily rations, wages, health care, and length of workday. Their obligations—obedience, fidelity, and respect—were established in vague terms, enabling practices that exceeded a standard working relationship. Despite

the government's attempts, the 1856 regulation failed to create a stable pool of workers. During his 1869 visit to survey mining resources in Tucumán, British engineer Maj. Ignacio Rickart observed that labor in the province was scarce: "It would seem a most desirable arrangement to introduce here a number of coolies."²⁴ In any case, section 6 of the Police Code represented a major step toward the consolidation of coercive labor mechanisms in the province since it increased both authorities' and employers' control over workers and tightened procedures to impose labor discipline.

Institutional changes provided important foundations for growth but other factors proved to be equally important. Stressing Tucumán's rapid progress during the late 1860s, Rickart identified two additional elements that contributed to the province's prosperity, a population that "manifestly increases in number and advances in civilization" and "land [that] is comparatively cheap, and may be purchased in freehold."²⁵ Since colonial times, Tucumán had enjoyed a large population concentrated in a relatively small area. In 1869, according to the first national census, the province counted 108,953 inhabitants and was the second most populated in the northwest region.²⁶ Even more important, Tucumán's density of 1.75 people per square kilometer was the highest among its counterparts in the northwest and throughout the country second only to Buenos Aires.²⁷ When describing Tucumán's human and physical resources, contemporary observers praised the spirit of enterprise and economic drive of its large population but also marveled at the "pasture of the densest, richest, and most lofty kind" that justified the titles Garden of the Confederation and Italy of Argentine provinces.²⁸ Tucumán's fertile and well-watered plains were exceedingly well suited for a variety of crops.²⁹ Wheat, maize, rice, sugarcane, tobacco, alfalfa, barley, flax, legumes, vegetables, and citrus and other fruit trees were among the most common plants cultivated in large but also medium and small plots throughout the province.

As was the case in other regions in Argentina, a relatively small group of landowners concentrated large tracts of land. The group had been acquiring land since colonial times and became the main beneficiaries during the redistribution of holdings expropriated from the Jesuits after the order's expulsion in 1767.³⁰ Over time, their holdings increased in size as a result of marriage, purchase, or usurpation. However, at the same time, Tucumán also displayed a significant number of medium and small holdings. The group's numbers increased gradually throughout the 1700s, and the tendency accelerated during

the following century, when the land market expanded, thus enabling a larger sector of the population to gain access to landownership.³¹ Therefore, during the mid-nineteenth century, the province witnessed the consolidation of a group of medium and small holdings coexisting with large properties. In the 1870s contemporaries remarked Tucumán's complete absence of public lands as well as its population's widespread access to landownership.³²

The peculiar nature of Tucumán's land tenure system is corroborated by additional evidence. In 1869 the first national census listed a total of 19,932 people engaged in primary activities in Tucumán.³³ The census reported 10,785 *labradores* (farmworkers), 6,527 *jornaleros* (day laborers) and *peones* (farmhands), 1,584 *estancieros* (ranchers), and 833 *agricultores* (farmers). Even though census figures do not provide information on property status, occupational descriptions can be used as an indication of land ownership or lack of it. While *jornalero* and *peón* were terms used for rural wage workers, *estanciero*, *agricultor*, and *labrador* implied direct access to land through tenancy or proprietary status.³⁴ In 1875, Juan Terán's survey for the National Department of Agriculture confirmed the existence of widespread access to land. According to the report, the province had a large number of



Figure 1.1. Rural area, 1870s. Rural families lived in small huts with very few possessions besides land and farm animals. (Courtesy of Photographic Department, Archivo General de la Nación, Buenos Aires.)

family-operated units, worked by their owners and no bigger than a couple of hectares, devoted to the production of cereals for self-consumption and of various tropical crops such as tobacco and sugarcane.³⁵ The group revealed a degree of prosperity not found in other areas of the Argentine northwest, as some of these units also possessed cattle and agricultural tools and its members were described as not only relatively successful and hardworking but also fiercely independent.³⁶

Before the Sugar Boom

In 1853 a commission appointed by the provincial authorities estimated the total value of the goods produced in Tucumán at 1,754,250 pesos.³⁷ The primary and secondary sectors' participation in Tucumán's output amounted to 1,033,000 pesos and 721,250 pesos, respectively, while exports totaled 908,250 pesos. The province imported a total of 500,000 pesos in goods from other provinces and neighboring countries. The commission's report revealed a balanced and diversified economy that produced a variety of agropastoral goods and manufactures that were consumed locally as well as traded on domestic and foreign markets.

During the 1850s and 1860s, following on a trend manifested since colonial times, Tucumano farmers were still devoting most of their lands to the production of different crops and livestock. Until the early 1880s grains enjoyed a paramount position in Tucumán's agricultural sector, accounting for almost 80 percent of the province's cultivated area.³⁸ Maize was the most popular crop among cultivators. A traditional staple in the local diet, it did not require intensive care and was cultivated throughout the province on small and medium farms that used family labor. Since maize was consumed locally, its production expanded in response to increases in population growth. In those years, farmers also devoted their lands to other grains. For example, although not as popular as maize, wheat production grew three times between 1853 and 1880.³⁹ In this case, increases reflected the expansion of Tucumán's flour industry and its growing trade with foreign and domestic markets rather than changes in local demand. Between 1857 and 1877 the number of flour mills in the province—powered by steam, water, or animals—increased from eleven to sixty-nine.⁴⁰ Tucumán's lands produced other crops, such as rice, barley, and alfalfa for local consumption or to be traded with neighboring provinces. Citrus trees, in particular orange groves,

surrounded the city of San Miguel as well. Locals consumed the sweet oranges and used the bitter variety for marmalades that were sold by women in small stands in the local markets.

Tucumán's farmers also produced tobacco and sugarcane. Tobacco was cultivated mostly in the southern parts of the province, on family-operated plots.⁴¹ The crop enjoyed popularity among farmers, as it required only a modest initial investment and offered quick returns. In the early 1850s, according to Belgian military geographer Alfred Marbais, the capital needed to put into production a two-hectare tobacco plantation was 4,200 pesos. That cost included land, workers, utensils, animals, taxes, and packaging materials and was reduced to one half in subsequent years. Such a plantation would yield 5,000 pesos a year.⁴² Tobacco is a very delicate plant; sowing seedbeds, transplanting, pruning, and leaf-by-leaf harvesting entail total dedication and a level of expertise and dexterity not always present among cultivators. Visitors to the province pointed out that Tucumán's tobacco could compete with Brazil's only if planters devoted more time to improve its quality. They criticized producers' preference for tobacco's strength over scent and taste and their carelessness when tending the plants. Tobacco's share of the province's cultivated land remained stable during the 1870s but never exceeded 5 percent of the total cultivated area.

Another popular cash crop was sugarcane. According to contemporary witnesses, a sugarcane planter could recover the original investment made in land, machinery, and tools after one year, and sugarcane did not require the intensive care of tobacco plantations.⁴³ Tucumano farmers were inclined to devote part of their land to the cultivation of sugarcane because there was a captive local market, as taxes on imported sugar and high transportation costs made imported sugar too expensive. The province's trading networks with neighboring regions acted as an additional incentive to local producers, who relied on primitive technology to produce small quantities of low-quality sugar. In any case, during the 1850s the expansion of the potential market for sugar required investment in machinery that in those days was beyond the financial reach of most local entrepreneurs—this explains why during this period sugar production did not occupy a significant place in the provincial economy. According to the 1853 commission's report, sugar and rum contributed less than 10 percent of the total value of provincial output. Still, the potential importance of the crop in Tucumán's economy did not escape the attention of contemporary witnesses who predicted that, with strong

government support and reduction in transportation costs, sugar production could take the lead in the province.

A significant pastoral sector complemented Tucumán's agriculture. Animal husbandry was a widespread activity, in particular in the northern parts of the province, although it never achieved the same scale as in Argentina's littoral areas. In the case of Tucumán, most cattle ranching took place on medium and small units that bred livestock for self-consumption and for the local market. According to Minister of Government Arsenio Granillo, few units owned more than five thousand head of cattle.⁴⁴ Gradually, cattle raising declined in importance, as noted by Paul Groussac, who in the early 1880s observed that agriculture's dramatic expansion had affected pastoral activities in the province in profound ways.⁴⁵ Throughout the nineteenth century animal husbandry maintained its preeminence only in some departments, such as Trancas and Graneros. Beasts of burden, in particular oxen and mules, constituted an important economic activity in those departments. Oxen carried the carts that transported Tucumano goods throughout the northwest while mules remained an important commodity in the Bolivian market. Besides being used for transportation and food, cattle provided the raw material for Tucumán's leather products, one of the many goods produced by Tucumán's diversified manufacturing sector.

The 1853 commission's report indicates the existence of a diversified and bustling manufacturing sector that contributed about 40 percent of the total value of provincial output. Textiles, shoe soles, leather products, soaps and candles, and carts and furniture were the most important manufactures in the province. Specializing in riding gear and footwear, Tucumano leather goods were traded in the littoral, Chile, and Bolivia. The tanning industry had occupied a prominent place in Tucumán's economy since the Jesuits brought it to the province during the eighteenth century. After the order's expulsion, French immigrants took over the business and invested in animals and equipment. Most of these new factories were located in the western districts of the capital city. Tanning became the most remunerative activity in the province, until sugar took the lead in the late nineteenth century. The 1875 financial crisis affected an industry already battling the effects of a scarcity of bark from the *cebil* tree, which was rich in tannin, necessary to cure the hides. The result was a reduction in the number of tanneries operating in the province.⁴⁶ Despite these difficulties, in 1882 provincial tanneries produced almost fifty thousand pieces used in saddlery (*talabartería*).⁴⁷

Tucumán specialized not only in the production of leather goods but also in textiles. The province's needlework, knitted cloth, embroidery, tapestries, ponchos, and saddle blankets enjoyed a fine reputation throughout Argentina and received the praise of visitors such as Burmeister, who observed that textile manufacturing provided an at-home working alternative for women in both urban and rural areas. It is not possible to determine whether these women made a living from the goods they produced, supplemented their household income, or just did it as part of their domestic chores. But the German traveler offered an indication of the importance of textile production for the household economy: "Production of beautiful saddle blankets and woolen fabrics sustained many Tucumano middle-class families."⁴⁸ In any case, by midcentury Tucumán's textiles enjoyed a vast number of markets and contributed 18 percent of the output value of the provincial manufacturing sector.

Timber and furniture making occupied a significant place in Tucumán's economy during the second half of the nineteenth century as well. In 1875, Juan Terán reported that twenty-three sawmills in the province were using



Figure 1.2. Tucumano carts. Tucumán's artisans specialized in the construction of strong carts that transported goods to both local and foreign markets. Later in the century, these carts were used to carry sugarcane from the fields to the ingenio. (Courtesy of Photographic Department, Archivo General de la Nación, Buenos Aires.)

steam or hydraulic power.⁴⁹ Besides furniture and wood utensils, Tucumán still specialized in the manufacturing of carts that not only provided transportation but also were exported, representing another important source of provincial income.⁵⁰ Tucumán's diversified manufacturing sector as well as the excellence of its workmanship became apparent at the 1871 national exhibit in Córdoba, where the province earned gold medals for its sugar, leather, and embroidery. Silk products, indigo, sugar, and wooden products received silver medals. Finally, ponchos and rum collected bronze medals.⁵¹

Tucumano goods were consumed locally as well as traded in domestic and foreign markets. Since colonial times, a dense population concentrated in a small territory created an important local market. In 1778, Tucumán's twenty thousand inhabitants consumed more than half of the goods produced in the area.⁵² This situation continued during the mid-1850s. The 1853 commission's report estimated that Tucumán's eighty thousand inhabitants consumed over 60 percent of the agropastoral products and almost 30 percent of the manufactures produced in the province. Besides the local market, the report revealed the importance of Tucumán's trading networks as exports to neighboring provinces, Chile and Bolivia contributed more than half of the total value of provincial output. Notwithstanding the restrictions posed by long distances, poorly maintained and unsafe roads, and high transportation costs, cartloads of leather goods, textiles, and other manufactures arrived to Bolivia, Chile, and Buenos Aires.⁵³

The destination of Tucumano goods, in particular manufactures, indicates not only the survival of colonial trading networks but also the increasing importance of the national market, as 82 percent of the export values in 1853 came from trade with other provinces.⁵⁴ The report does not offer specific information on the final destination for Tucumán's goods, but additional evidence suggests that a large part of provincial manufactures were dispatched to Cuyo as well as to the port city of Rosario, a trend that intensified during the late 1870s, with the arrival of the railroad in the province.⁵⁵ Within the primary sector, maize and tobacco were the only crops exported. However, while most maize remained in Argentina, likely in neighboring provinces, Tucumán's tobacco was consumed more widely, as it was exported to Bolivia and Chile.⁵⁶ As for the pastoral sector, cattle on the hoof were exported to neighboring provinces, while mules and oxen were traded mostly in Bolivia. Since Tucumán could not provide for all its population's needs, the province's hides, textiles, and tobacco paid for

a large number of imports, such as fine linens, iron roller mills, fine wine, beer, medicines, and barrels.⁵⁷

Tucumán's diversified economy and widespread markets provided provincial entrepreneurs with opportunities to invest in a wide range of activities including agriculture, animal husbandry, manufacturing, and commerce. Such was the case of Esteban Gutiérrez, whose estate inventory after his death, in 1862, indicates that he was involved in a number of different activities, as it included barrels for sugar, rum, and honey, plantations with fruit trees, a small warehouse to store tobacco, livestock for consumption and beasts of burden, sugarcane-processing machinery, carts for transportation, agricultural tools, firewood, water rights, and real estate.⁵⁸ As Gutiérrez's case illustrates, the opportunities offered by the provincial economy created an environment that rewarded investment flexibility. Provincial entrepreneurs diversified their estates in an attempt to minimize risks and actively pursued the consolidation of mercantile relationships with the littoral areas while maintaining old colonial trading routes.

Personal connections and informal credit mechanisms assisted Tucumanos in fulfilling their increasing capital needs.⁵⁹ The Nougues family epitomizes this business strategy. In 1817, Juan Nougues arrived in Tucumán from France. In 1826 he purchased part of the former Jesuits' estates with capital he had accumulated from the tanning business. The French entrepreneur devoted those lands to cultivating some of the sugarcane that Obispo José Eusebio Colombres had distributed in 1821 as well as to cereals such as maize, wheat, rice, and barley. He installed a flour mill to grind his grains. Nougues also raised livestock and installed a modern sawmill to process the wood obtained from neighboring forests he owned. During the 1830s the family business continued to grow. By 1840 they owned four *estancias*, one of them, San Pablo, almost completely devoted to the production of sugar. The *ingenio* (sugar mill) administered after 1865 by Juan Luis Nougues, became during the 1880s one of the most important in the province.⁶⁰

During the 1860s, British travelers M. G. and E. T. Mulhall visited Tucumán and, after surveying the province's political institutions, economic structure, and people's industriousness, finally concluded that the "whole town presents an aspect of progress and prosperity not found in other regions."⁶¹ However, Tucumán's prosperity was more apparent in the Capital Department than in the rest of the province. According to the first national census, in 1869 the capital was home to 33 percent of the province's population who

had declared an occupation. Half the department's working population was employed in the secondary sector, 30 percent in the service sector, and 20 percent in the primary sector.⁶² The occupational pattern of Capital Department reveals a diversified and dynamic economy during the 1850s and 1860s. Secondary activities predominated, in particular leather and textile manufacturing, with high employment among the adult population. Timber was still an important activity, as judged by the number of workers engaged in furniture and cart making. Within the primary sector, peons and day workers constituted a clear majority, although the evidence indicates the existence of a significant group of landholders.

A sample of census manuscript schedules corresponding to Capital Department provides additional insight into the department's occupational structure.⁶³ Of the 7,644 residents surveyed, 4,556 (59.6 percent) were over fourteen years old. There was remarkable labor participation among the working-age group since 3,769 (82.7 percent) declared an occupation.⁶⁴ The schedules indicate a clear division between the sexes in various occupations.⁶⁵ Tucumán's well-diversified economy allowed women to be engaged in a vast number of activities. The sample indicates that rates of female employment were high, since 73.3 percent of women over fourteen declared an occupation, predominantly in manufacturing and service activities.⁶⁶ Tucumán's female artisans contributed significantly to the province's livelihood and the goods they produced were traded regionally and internationally.⁶⁷ Women constituted 64 percent of the population engaged in the manufacturing sector and enjoyed a clear majority in the areas of textiles, clothing, and cigar making, representing more than 95 percent of the workers employed in those activities.⁶⁸ Within the service sector, female laborers accounted for 53 percent and revealed a clear preeminence in domestic activities, in particular household servants, laundresses, cooks, and ironers. Males predominated in the primary sector (94 percent) and their participation in the secondary sector was limited to the tanning and furniture industries, where they represented almost 100 percent of the workers. Finally, men made up almost 100 percent of the workers in the liberal professions, mostly lawyers, and 83 percent of those engaged in commercial activities.

Capital Department enjoyed not only diversified and high employment rates but also a steady population growth. Between 1869 and 1874, the department increased its share of the total provincial population from 36 to 44 percent.⁶⁹ A large number of employment opportunities transformed

San Miguel into an important urban center in the Argentine northwest and attracted individuals from neighboring provinces. The significant number of migrants living in Tucumán during this period attests to the economic dynamism of the city. In 1869, 9 percent of Tucumán's population came from other provinces, the largest percentage in the Argentine northwest. Almost half the migrants chose San Miguel as their final destination and accounted for 12 percent of the population of Capital Department.⁷⁰ Searching for jobs, hundreds of people traveled to Tucumán, in particular Santiagueños and Catamarqueños, who represented almost 80 percent of the nonlocals residing in the province.⁷¹ Census returns uncover important disparities among migrant workers in terms of their labor choices and literacy levels, clearly indicating that the province's prosperity and diversified economy offered opportunities for a broad range of individuals. In the sample, 19.6 percent of the population over fourteen was not from Tucumán. There was high employment among this group; 84 percent declared an occupation. Almost 38 percent found employment in the agropastoral sector (mostly as peons), 29 percent in the manufacturing sector, and 33 percent in the service sector. While Catamarqueños and Santiagueños had high illiteracy rates and predominated in the primary sector, Cordobeses and Salteños were engaged in commerce and service activities and were, as a group, more literate than people coming from other provinces. Therefore, as early as the 1860s, Tucumán's economic prosperity attracted migrants from neighboring provinces, anticipating a trend that would acquire new intensity during the last decades of the century as a result of sugar expansion. In contrast, only a few foreigners chose Tucumán as their final destination. According to official figures, in 1869 fewer than four hundred foreigners resided in the province and most of them lived in Capital Department. Of the seventy-three foreign individuals in the sample, sixty-five reported an occupation, mostly in the primary and secondary sectors.

Tucumán's economic dynamism did not escape the attention of contemporary visitors, in particular those visiting the city of San Miguel. Writing in 1880, Vicente Quesada recalled an "affluence . . . apparent in the clothes of peasants, bourgeois, and the working class" and contrasted it with Salta, where everything had the "color and decay of old things."⁷² During this period, as was the case for most of Argentina's "secondary cities," San Miguel became Tucumán's "oasis of modernity," as it concentrated the province's political and administrative functions and became its intellectual and

cultural center.⁷³ As the most important trading center in the province, the city was also the main site for commercial houses and businesses. With a population of over seventeen thousand, San Miguel was the largest urban center in the Argentine northwest. During this period, the city underwent important infrastructural improvements, such as better pavement; kerosene street lighting; construction of public schools, a public hospital and a new cemetery; and remodeled public buildings.⁷⁴ Private construction accelerated as well. According to a witness, a “construction fever” invaded the provincial elite, whose houses were demolished and rebuilt under the direction of European architects.⁷⁵ These new buildings were made with brick and lime mortar and had two stories and terrace roofs, not unlike those seen in Buenos Aires. They housed the most powerful families in the province and future sugar barons, such as Juan Manuel Méndez, Wenceslao Posse, and Juan Crisóstomo Méndez.⁷⁶

However, infrastructure and housing improvements benefited mostly downtown San Miguel. In 1865 the poorer sectors of society lived in “miserably dirty mud-and-straw hovels” in most of the suburbs, with their narrow, dirty, poorly paved streets and unreliable lighting.⁷⁷ The suburbs also lacked security; the city’s night watchmen patrolled only a few blocks in the downtown area. Regularly, vast areas in the suburbs experienced “dreadful floods” that caused material and human losses.⁷⁸ Arsenio Granillo recalled that the 1863 flood had almost reached San Miguel’s downtown and that such floods had previously occurred in the province.⁷⁹ Furthermore, most tanneries and primitive sugar factories were located in the city’s outskirts, especially in the northern and western neighborhoods, adding to the already bad living conditions in the more populous sectors. These problems only intensified with the constant arrival of workers in search of jobs.

Tucumán’s bustling and diversified economy was more remarkable when weighed against that of its neighbors. In 1866 the British-owned Ferrocarril Central Argentino (Central Argentine Railway) commissioned engineer Pompeyo Moneta to survey the area between Córdoba and Jujuy “to find the best, shortest, and least expensive route for a line between Buenos Aires and Salta.”⁸⁰ The report included information on soil fertility, commercial traffic, natural features, and productive activities in the area. Moneta’s estimates of production and population for Tucumán, Salta, and Catamarca placed Tucumán’s per capita output above the other two provinces.⁸¹ Moneta indicated that the area offered potentially high profits for the construction of a



Figure 1.3. Downtown San Miguel. During the 1870s the municipal authorities increased investments in infrastructure to improve San Miguel's downtown areas. (Photo by Angel Paganell, courtesy of private collection of Roberto Ferrari.)

railroad line but advised against it because of the obstacles that the region's topography could pose to construction.⁸² The potential benefits of a railroad line in the area did not escape the attention of other contemporary observers. For example, in 1870, Ignacio Rickart predicted that the province would "indeed be a rich and important territory" once the railroad arrived.⁸³ In the absence of private investors' interest, it was the national authorities who undertook the task of building the line.⁸⁴

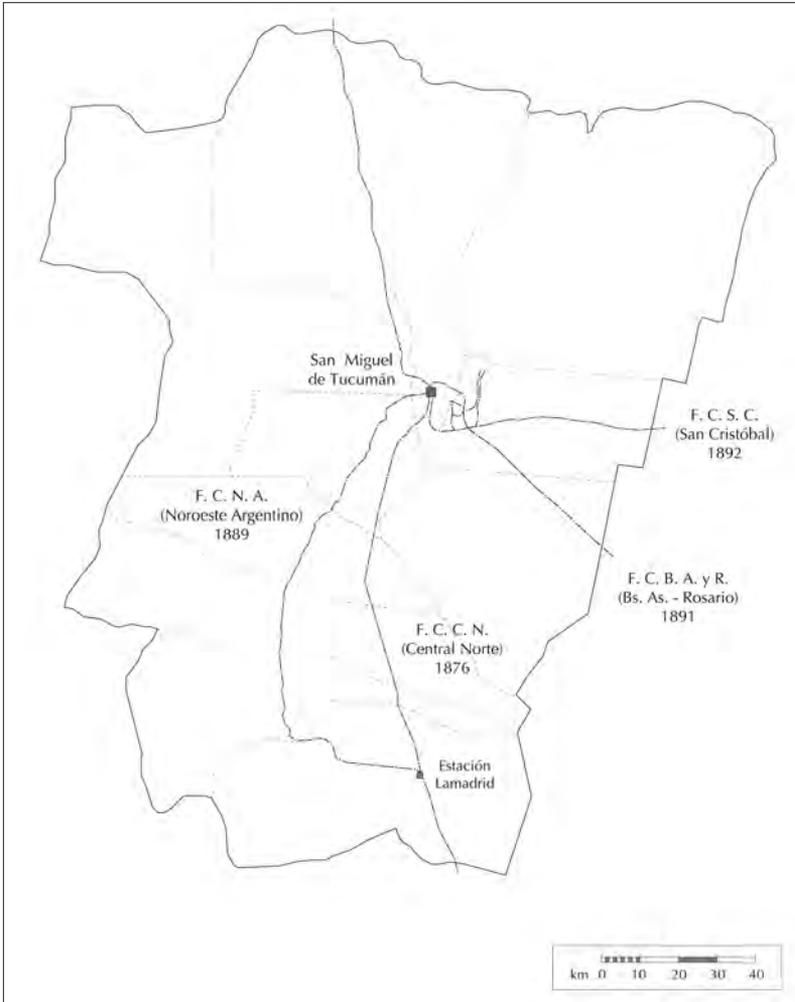
Railroads and Tariffs

Improved communications between Buenos Aires and the Argentine northwest had been a priority in the national government's agenda since the early 1850s. In 1863, President Bartolomé Mitre (1862–68) summarized the two main objectives behind the railroad programs elaborated by the Argentine government during the second half of the nineteenth century: "[Railroads] will bring wealth where there is poverty and order where there is anarchy."⁸⁵ Economic considerations guided the concessions granted for the

construction of the Central Argentino and Ferrocarril del Sud lines.⁸⁶ Political priorities guided the national government's interest in railroad construction to Cuyo and the Argentine northwest. The railroad's layout identified critical components of the national political coalitions of the time. Tucumán's location made the province an important military stronghold and the ideal region to establish a stable center of support for the authorities in Buenos Aires.⁸⁷ However, besides political priorities, the project indicated the government's awareness of Tucumán's economic importance in the northwest. Tucumán's diversified productive structure, strong merchant community, and well-organized trading networks offered an additional incentive for the modernization of the transportation system. Furthermore, originally planned to continue to Salta and Bolivia, the project clearly revealed an attempt to maintain or revive colonial trading networks while reinforcing the area's existing links with the emerging economic littoral axis.

The Ferrocarril Central Norte was inaugurated in 1876 and extended from Tucumán to Córdoba. The line penetrated Tucumán from its southeast side, at Estación La Madrid. Following a south-north direction, the railroad passed along the departments of Graneros, Río Chico, Chicligasta, Monteros, Famaillá, and Capital. The line monopolized Tucumán's railroad traffic for more than a decade and provided a fast, safe, and cost-effective route for passengers and cargo traveling between Tucumán and the littoral. However, with only six stations within provincial boundaries, the line failed to provide door-to-door service to the existing ingenios. Ox and mule carts remained the main means to transport machinery and sugar to and from the railroad stations.⁸⁸

The obstacles posed by the absence of a more comprehensive railroad network within the province, and in particular one that provided service to the western region, became quickly apparent to the provincial authorities. These problems were overcome in 1888 with the Ferrocarril Noroeste Argentino, a line extending from La Madrid station, point of entry of the Central Norte, to San Miguel de Tucumán. Tracks crossed the province's main sugar areas and attended to the specific necessities of the ingenios, albeit those located in the western areas of the province. The Central Norte connected Tucumán to Córdoba. From that point the Central Argentino provided transportation to Rosario, thus facilitating communications between the Argentine northwest and the littoral. The line operated on narrow-gauge tracks that required the expensive and inconvenient unloading



Map 1.1. Railroad lines in Tucumán, 1895

and loading of cargo to the broad-gauge Central Argentino.⁸⁹ In an attempt to surmount this obstacle, the Ferrocarril Buenos Aires y Rosario opened for service in 1891 and offered an important advantage over the Central Norte, as it established a direct route from San Miguel to Buenos Aires using the broad gauge. The line also served the needs of those ingenios located in the eastern areas of the province. A fourth line, the French-owned

Ferrocarril San Cristóbal, started operations in 1892. Its tracks penetrated the province from the department of Cruz Alta and ran parallel to the Buenos Aires y Rosario.⁹⁰ In 1892 a newspaper reported that “an express line departing from Abraham Medina’s ingenio consisting of thirty carts carrying three thousand bags of sugar reached Buenos Aires in twenty four hours, the fastest trip done by Argentine railroads to this time.”⁹¹ By then, four different railroad companies in Tucumán, totaling almost 650 kilometers of track, provided transportation between the province and the rest of the country.⁹²

Railroads constituted an essential component in the impressive growth experienced by Tucumán’s sugar industry and its subsequent path to leadership in the provincial economy.⁹³ Tucumán’s location required modern transportation to haul the machinery and ship the sugar. Railroads consolidated Tucumán’s economic reorientation toward the littoral, thus facilitating the arrival of technology and, more important, increasing the potential market for its sugar. By creating a railroad network that met the specific needs of local producers, they expanded the area under sugarcane cultivation and consolidated the crop’s preeminence in the province. The national government assumed the initial risk and paved the way for private companies to invest in the region. Railroad investment accelerated sugar expansion. In turn, the industry’s promising future was the reason behind the railroad revolution of the 1880s. Lines built between 1888 and 1892 perceived the economic potential of Tucumán’s sugar industry and responded to the opportunities offered by an industry that revealed an increasingly dominant role in the economy. Of the thirty-five ingenios operating in Tucumán in 1895, more than half were founded after 1876 and none was farther than thirty kilometers from one, two, or even three lines.⁹⁴ As in other sugar economies in Latin America, railroads accelerated an already existing process and later sustained it by providing for its specific needs.⁹⁵

Safer and cheaper transportation encouraged and enabled industrialists to adopt modern technology, thus increasing sugar production. By 1895, Argentina had achieved self-sufficiency in sugar and Tucumán contributed 80 percent of the sugar consumed in the country. However, the industry required additional government involvement to protect domestic sugars from cheap imported ones. As Miguel Nougués observed in the late nineteenth century, “If Argentina stops protecting its sugars the country will be divided in two. Buenos Aires, Santa Fe, Entre Ríos, Corrientes, and parts of Córdoba will

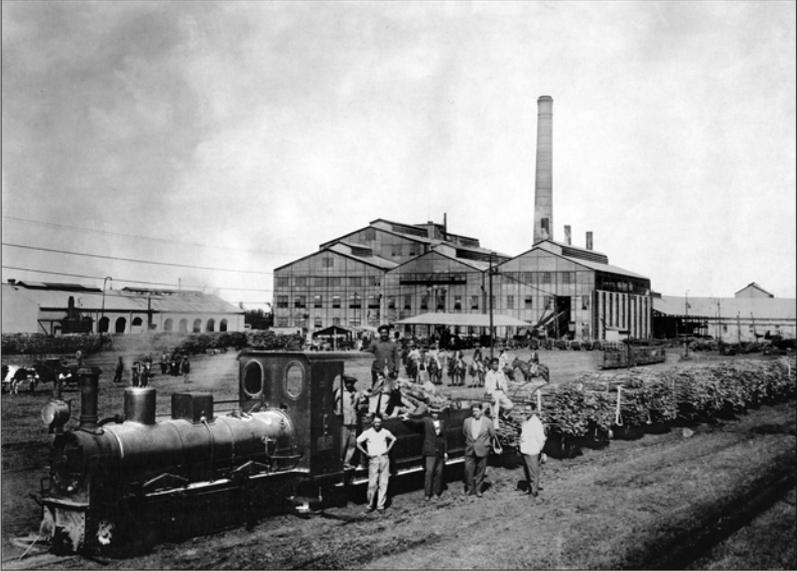


Figure 1.4. Sugarcane transport to an ingenio. Railroads enabled sugar producers to obtain sugarcane from remote plantations. (Courtesy of Photographic Department, Archivo General de la Nación, Buenos Aires.)

have no problems sustaining their economies with agricultural and pastoral products, but Tucumán will be ruined and its neighbors Catamarca, La Rioja, Santiago del Estero and Jujuy, whose populations benefit from Tucumán's prosperity, will fall into the utmost misery.⁹⁶ The authorities responded with high tariffs and a bounty system that guaranteed the preeminence of Tucumán's sugar on the national market.

The use of tariffs was not new in Argentina. Since independence, Argentina's authorities had relied on the collection of customs duties as a main source of revenue and a mechanism to balance public finances. Therefore, when the European crisis of 1873 interrupted the flow of capital from abroad, leading to a fall in public income and affecting the government's ability to service the foreign debt, it came as no surprise that the legislature passed a new customs law that increased duties on a large number of imported articles, including sugars. This in turn encouraged increases in local production.⁹⁷ During the 1880s the national government adopted a more vigorous stance to assist the sugar industry through several revisions to tariff schedules that increased the effective rate of protection for domestic sugars.⁹⁸ Besides

tariffs, domestic sugars experienced implicit protection as a result of currency depreciation.⁹⁹ In addition, since sugar duties did not reflect the fall in world prices, the effective rate of protection was even higher.¹⁰⁰

Tariffs protected Tucumán's sugar industry and guaranteed local producers full control over an expanding domestic market, thus creating an environment conducive to the industry's expansion.¹⁰¹ However, they failed to offer a safeguard against unsold stocks and their depressive effects on prices, a situation that producers faced in 1896 as two consecutive large crops left 139,000 tons of unsold sugar on the market. A year later, the national government offered additional protection in the form of bounties that were expected to eliminate the depressing pressure of excess stocks on domestic prices.¹⁰² While initially government action provided invaluable assistance for the expansion of an infant industry, bounties aimed at rescuing an already mature industry facing a crisis of overproduction. Sugar tariffs were not modified, although the government introduced a new classification system for refined and unrefined sugars more consistent with international standards but that still protected the interests of Argentine sugar producers.¹⁰³

Bounties compensated for low prices and high shipping costs, but the conditions of the international sugar market limited their potential positive effects. Sugar producers faced the difficult task of finding outlets for their sugar in an already saturated and extremely protected international market.¹⁰⁴ The situation worsened during the early 1900s as new international conditions rendered bounties futile.¹⁰⁵ The Brussels Treaty changed the conditions of the sugar international market and forced the Argentine government to implement new policies. In 1904 the national congress eliminated bounties and production taxes on sugar but maintained duties on imported sugar.¹⁰⁶ Consumer demands to reduce protection to the industry intensified after 1904. In 1912 the national congress approved the Saavedra Lamas Law. The new legislation did not eliminate sugar duties but established a gradual descending scale. Starting in 1913 the duty on both types of sugar would decrease annually until it reached seven cents for one kilogram of refined and five cents for one kilogram of unrefined sugar by 1921. The law established penalties on imports of bountied sugar and authorized the national government to intervene in the domestic market by reducing import duties to control domestic prices.¹⁰⁷ Therefore, as late as 1912, although in a much more cautious way, the national government was still responding to the interests of sugar industrialists, showing its commitment to protect the sugar industry.

Not surprisingly, the new legislation was received with skepticism by those defending orthodox free-trade policies but with much optimism among sugar interests, as the daily newspaper *El Orden* observed when examining the bill, “the Saavedra Lamas Law eliminates the uncertainty surrounding Tucumán’s economic future to guarantee a new potential, a foundation for its development.”¹⁰⁸ Clearly, protective policies became indispensable for guaranteeing the industry’s expansion. High tariffs enabled Tucumán’s sugar expansion, as they eliminated foreign competition in the domestic market, while export bounties had the potential of making Argentine sugar prices more competitive in foreign markets.¹⁰⁹

DURING THE 1850s and 1860s, Tucumán emerged as the most prosperous province in the Argentine northwest. Its fertile soils and a large population with widespread access to land contributed to the development of a diversified economy that rested on a large range of agropastoral and manufacturing products. The province’s population made for a strong local market that was complemented by active trade with domestic and foreign markets. Local merchants shipped cartloads of maize, tobacco, cattle, hides, textiles, and furniture to neighboring provinces, as well as to Cuyo, Rosario, Buenos Aires, Bolivia, and Chile. Even though decades of civil war could not completely break colonial networks, trade patterns during the 1850s and 1860s indicated the consolidation of the shift toward the Atlantic and the increasing importance of the littoral markets for Tucumán’s commodities. Tucumano entrepreneurs took advantage of the situation and diversified their investment portfolios, devoting capital to different economic activities, including sugar production. In those days, the expansion of the sugar industry faced serious obstacles, as high transportation costs limited the area under cultivation and prevented technological modernization while imported sugars supplied the needs of consumers in the littoral areas. In the last quarter of the nineteenth century, the national and provincial governments came to the industry’s assistance with investments in railroads and protectionist policies such as tariffs and bounties. Initially a politically motivated decision, the railroad revolution became one of the most important transformative forces of Tucumán’s economy. By facilitating communication with the littoral areas, the tracks opened new markets for Tucumán’s sugar and enabled technological modernization. Similarly, tariffs and bounties encouraged sugar production by protecting domestic sugar from the volatility of the international

CHAPTER 1

market and enabling local producers to maintain a captive domestic market despite high production costs. Direct government intervention provided a degree of predictability and stability that encouraged further investments in the industry. As a result, the sugar industry expanded dramatically.