

COAHUILA

POPULATION AND GEOGRAPHICAL CONTEXT

Geography

Coahuila represents 7.75% of Mexico's territory, and it could be said that the northern part of the state is surrounded by Texas, since it shares its northern border with this part of the United States and some of its western and eastern borders touch Texas. As for Mexican states, Coahuila shares its eastern and part of its southern border with Nuevo León; it shares other parts of its southern border with Zacatecas and Durango; and Chihuahua shares Coahuila's western border.

The state of Coahuila (Figure 1) is comprised of 38 municipalities, which have been grouped into six regions: border, desert, carbon-bearing, central, lakes, and southeast. The municipalities of Saltillo-Ramos Arizpe, Torreón, and Monclava stand out for their economic and demographic importance. However, the municipalities of Acuña and Piedras Negras are known for their dynamics and their relationships with the cities found on the other side of the U.S.-Mexican border. For this reason, each of these border municipalities is described in each section.

Climate

Coahuila's climate could be considered an adverse factor for some activities, since it is dry in 39.3% of the state and very dry in 46.3%, but moderate and semi-dry in 14.3% of the state. As a result, 3% of the state's surface is used for agriculture, 7.2% is used for grazing, and 1.5% is forest. The rest of the state's land is comprised of scrubland or chaparral.

Demographics

According to the Twelfth General Population and Housing Census of 2000 (el XII Censo General de Población y Vivienda del 2000), the total population of Coahuila is more than 2,225,808, of which 49.3% are males and 50.6% are females.

Of the total population, 33.62% are under the age of 15; 44.5% are between 15 and 39 years of age, 17.3% are between 40 and 64 years of age, and 4.4% are over age 65 (Figure 2). Consequently, the population pyramid begins to change shape, reducing the importance of the low percentage of minors in the group and increasing the importance of middle age and elderly groups.

The municipalities with the greatest number of residents in 2000 were Saltillo with 527,979; Torreón with 508,076; Monclava with 189,738; Piedras Negras with 116,148; San Pedro with 91,421; Matamoros with 88,235; and Acuña with 81,602.

The population is predominantly urban (84.3%), which could explain some of the parameters that have been used to measure the standard of living in the state.

This can pose a challenge for raising the standard of living since 10% of the state's population is considered dispersed and rural (towns with less than 2,500 residents). (Table 1)

Ciudad Acuña is found in the municipality of Acuña and has high decade population growth rates that reached 7.34% in 2000. Some 97.7% of this population is urban. This growth can be explained by migration, as suggested by the behavior observed in the population pyramid, which indicates an explosion in the 20-25-year-old age group. There are at least two strong waves of migration that can be identified, one in 1960 and the other in the 1990s, which was coupled with the growth of industry. (Table 2)

Piedras Negras has a lower decade population growth rate, which is at 2.32%. The municipality had its greatest population growth during the 1980s, when its population grew at a rate of 2.32%. Consequently, the population pyramid shows growth that can be explained by factors other than migration, indicating instead a natural population growth. (Table 3)

Population and its Impact

Although the population growth rate in Coahuila is less than the rest of the northern border states in Mexico (from 1990 to 1995 it grew 2.04% annually, compared to 3.01% in all the other northern Mexican border states and 2.44% for Mexico as a country), the disparity in growth rates among municipalities in the Coahuila requires the design of special policies in some cases. In the case of the municipality of Acuña, its growth rate was 8.97%, one of the most elevated of the period. This growth can be attributed to the accelerated growth spurred by the existence of maquiladora plants, which take advantage of the proximity to the United States. However, maquiladoras have become less vital in the region, which could lead to problems of unemployment in the mid-term.

On the other hand, there are municipalities with negative population growth rates, such as Guerrero, which had an average annual growth rate of -1.68%; Juárez, which had a rate of -0.96%; Morelos, which had a rate of -0.96%; and Progreso, with a rate of -2.12%. Despite their proximity to the U.S.-Mexican border, these municipalities are not as attractive as Piedras Negras and Acuña.

The population distribution will generate some challenges in the education sector, since there will soon be pressure on middle schools and advanced institutions of learning, as well as a decrease in demand for elementary schooling. In the medium term, this pressure on the educational system will shift to a demand for jobs.

The population growth was sustained due to industrial growth, which permitted the transport of food from other states and regions since the climate and land in Coahuila are inadequate for the development of a balanced agricultural industry. However, the state contributes to some important crops and products. The state

produces potatoes and apples. It also ranks second nationally in caprine livestock, as well as in the production of milk, both from cows (ranked third nationally in Mexico) and goats (ranked first in Mexico).

However, population growth is not seen as a serious problem in and of itself, since the population is not highly concentrated. In fact, the state has three locales of development: the lake region, the industrial corridor Saltillo-Ramos Arizpe, and the border region in Acuña and Piedras Negras. The greatest cause for concern is the lack of natural resources, such as water, but it is not entirely bound to population growth.

ECONOMY

Coahuila's production activities are among the most important in Mexico, with an estimated annual production of \$150 billion Mexican pesos. The state economy has regional specialties: the Lakes region specializes in textiles and fisheries; the southwest, with headquarters in Saltillo, specializes in the automotive industry and related supply chains, metallurgy, textiles, and chemicals; the northern region is dominated by maquiladoras; and the central region is home to one of the most important iron and steel companies in Mexico. As a result, there are economic activities that stand out in each region, such as, for example, the harvesting of catkin in the desert; coal-mining in the coal-bearing region, and tourism based on hunting trips in the north (Escobedo et al 2002).

The greatest part of the productive force in the state is concentrated in the municipality of Saltillo, which employs 144,687 people or 27% of the state's labor force. Torreón follows with a rate of 25.3%. Monclova has 54,711 employed people and Ciudad Acuña has 42,337.

The industrial sector has a special importance in the state since it contributes the greatest amount of production to the state's economy and has made the biggest impression on the economy's current dynamics. The prevailing industrial sectors in Coahuila are the metal-mechanics, which took off from the mining industry and Coahuila's geography. This sector has permitted Coahuila to take advantage of the momentum created by the process of globalization that converted the state into an axis of industrial policy in Mexico beginning in the 1990s.

In particular, the state's industries worth mentioning include automotive, iron and steel, and clay construction products. These industries are primarily destined for export. The production centers are distributed equally throughout Coahuila, without one center where production is concentrated. (Table 4) However, production is mostly concentrated on products for export, both in terms of industries and companies, which are generally large and capital-intensive.

In the border region, certain branches of commerce and services also stand out, due to the ties between border cities with neighboring cities on the U.S. side of the border. In particular, there are at least two Coahuilen communities with

strong links to the United States: Ciudad Acuña, whose counterpart is Del Rio, and Piedras Negras, which is linked to Eagle Pass.

The dynamic shown by the Coahuilan economy has allowed residents of the state to enjoy a greater quality of life by Mexican standards. According to a study by the Mexican Statistics and Geography Institute (INEGI in Spanish), Coahuila ranks sixth out of seven states in standard of living. It is fitting to measure that in the highest seventh tier, there is only one state: the Federal District, or Mexico City.

The highest standards of living are found in a Y-shaped region starting with the Municipality of Saltillo and ending in Acuña on one of its sides and in Torreón on the other side. However, this corridor is crossed by municipalities with less development (indicated in group 1), as shown in Figure 3, which is most evident more toward the north and in Torreón. It appears that the standard of living has been raised at the cost of the others. One possible explanation could be that population is concentrated in the municipalities with the highest standards of living.

More than 90% of the state's population is concentrated in municipalities that have the three highest standard of living rankings, while the municipalities with the three lowest standards of living comprise less than 5% of the population. This highlights one of the challenges to the state of raising the standards of living for this segment of the population, since the 5% is dispersed throughout the 10 municipalities.

When considering the 36 indicators that are used to determine the standard of living, the greatest differences between the highest and lowest levels are observed in the following parameters: percent of the population aged 15 to 19 that attends school, average year of education, number of homes with dirt floors, homes with sewage services, rural communities, urban communities, communities with secondary school education, homes that use wood or coal for cooking purposes, and homes without private baths. These parameters clearly show there is a need to increase spending on infrastructure, but due to the rural nature and dispersion of these households, it could be costly to increase their living standards.

There is also a decreased level of unemployment. In 1995, there was an unemployment rate of 6.2%, while in 2000 it was only 2.2%. As in the rest of the Mexico, unemployment affects women and young adults most profoundly. In the 20-24-year-old age group, the unemployment rate was 4.1%, while the unemployment rate for the group aged 45 or older was 1.1%. (Table 5)

The economic problems that Mexico has faced have had an impact on job creation. In 2001, there was a reduction in the number of people insured by IMSS (Mexico's health insurance and social security agency), however, a rebound

started in early 2002 and it reached levels higher than those found in January 2001, though an economic decline was observed at the beginning of the year, which could be temporary.

However, the economic decline could be due to a period of economic streamlining by the companies. This is clear when observing the maquiladora industry, where there has been a reduction in the number of plants since the past year, despite an increase in the value added in current exports. However, a departure from using labor-intensive processes can be expected of the maquiladoras, due to the competition created by international markets (Escobedo et al 2002). (Table 6)

AGRICULTURE

Given Coahuila's climate, most of the farming and livestock activities found are ones that require little water. Desert crops are the only product that can be harvested on a large part of the state's land. Even so, other activities are being attempted. An important part of the crops are destined to feed livestock. Other agricultural products that stand out are fodder and hay. Livestock production is important to the state because of its significant role in milk production from both cows and goats (Escobedo et al 2002). Coahuila is also the seventh-largest producer of eggs in Mexico. Of the 291,105 hectares that are cultivated, about half are sown perennially; these lands can be found in the desert and the forest in the southern part of the state. Of those that are harvested in cycles, only 13,000 hectares are assigned to two irrigation districts that serve 1,429 users. These districts are found in Coahuila's lake region and in an irrigation district in Palestina, which is located in Acuña. However, the surface area of the region harvested with irrigation reaches a total of 149,631 hectares. These irrigation districts are described later in this chapter (Comisión Nacional del Agua 1999).

Ejido (communal land) Situation

The prevailing conditions in the state's ejidos resemble those of peasants with scarce resources, according to the available information. In Coahuila there are 1,995 *ejidos*, but less than a third are mapped; that is, the majority of the *ejidos* in Coahuila encounter problems with determining land ownership rights, which creates the uncertainty among *ejido* residents.

Of the 552,427 total hectares assigned to the *ejidos*, 443,531 are parceled for the use of each *ejido* resident. In particular, 95,942 hectares are designated for communal use, while 12,953 hectares are zoned for homes. It has been noted that of the lands allocated for common use, only 0.1% have access to irrigation or moisture. That is, if the land is used extensively by farmers with few resources, the crops are low quality. Thus, 34% of the communal lands are farmed only seasonally. Given these conditions, *ejido* residents generally prefer to use the land for scrubland or pasture, since 52% of communal lands are scrublands or pastures in arid lands. This explains the importance that goats play to the region, since they require little water to subsist (INEGI 1999).

WATER

Water Bodies and Currents

Despite the arid conditions found in the state, a number of currents cross through the territory, fed primarily by groundwater, which by geological accident erupt to the surface. Similarly, other natural bodies of water are fed by groundwater, such as the Four Swamps Valley (Valle de Cuatrociénegas, in Spanish) and the zone designated the Five Springs (Cinco Manantiales, in Spanish), which mainly spans the municipalities of Zaragoza, Morelos, and Allende, although these do not extend far. Other natural water bodies, which are found in the Mapimí Bolsón zone, are intermittent because they only flow during extraordinarily rainy periods when their tributaries overflow; among them are the El Guaje, El Rey, Viesca, and Mayrán lakes.

On the other hand, artificial water bodies correspond to the reservoirs that come from the dams that were constructed to take advantage of water from some main rivers. The principal dams are La Amistad and Venustiano Carranza or “Don Martín” as it is known.

Related Institutions

The Ministry of Health (Secretaría de Salud or SS)

The SS is a federal agency responsible for establishing and enforcing laws and requirements for drinking water for human consumption. Many communities rely on the Rio Grande as a source of drinking water to satisfy vital needs. As a result, water is treated to the established norms.

The National Water Commission (Comisión Nacional de Agua or CNA)

CNA is the agency responsible for planning, construction, and management of water projects, including dams and sewage infrastructure. CNA is also charged with providing water for economic and social development in Mexico. CNA monitors water quality in rivers and lakes throughout Mexico, including the tributaries of the Rio Grande.

Comisión Internacional de Límites y Aguas (CILA)

Established originally in 1889 to define the international boundary between the United States and Mexico, CILA has been monitoring water quality in the Rio Grande since the 1930s, bringing valuable information to the riverside states.

Coahuila State Commission for Water Quality and Treatment (Comisión Estatal de Aguas y Saneamiento de Coahuila, or CEASC)

This state government organization is assigned a sufficient operating budget to issue technical and operating regulations for provision of services, supply, and service staff for potable water, sewage, and treatment in municipalities of Coahuila.

Irrigation Districts

The irrigation district of Palestina in Acuña has a total surface area of 13,000 hectares and serves 1,429 users. The Lakes Region's irrigation district is shared with Durango and has a reach of 116,600 hectares in the larger of the districts, with a user base of 37,962. This irrigation district has a total useful water storage capacity of 2,778 million cubic meters, however, during the months of March 2001 and 2002, the stored water volume did not exceed 22%; in fact, it was observed that the stored volume tended to diminish. Another problem that this irrigation district faces is its location in a region with overexploited aquifers (Figure 5). Neither of the two districts have problems of serious salinity (Table 7).

Drinking Water and Sewer Systems

Of the total state population in February 2000, according to CNA, 97% had access to potable water and 83% were connected to sewage services. There is a flow of 1,000 liters per second of potable water that comes from the three water purification plants.

This coverage is facilitated by the concentration of the cities' populations. The primary sources of drinking water originate in a deep well, which is fairly notorious since there have been 233 water sources found in the well versus the six from the springs. There are 432,039 residential taps, as well as 21,567 commercial and 498 industrial intakes.

As of December 2001, there were 15 municipal wastewater treatment plants installed in Coahuila, of which only six were operational and treated 1,364 liters per second. In the case of some municipalities, the construction of new treatment plants has been delayed due to financing problems, which result in part from the lack of awareness among users of the need to get the plants in service and the lack of consciousness regarding payment obligations.

In the case of the municipalities of Acuña and Piedras Negras, the primary source of supply is still the well; in the case of Acuña 34,000 cubic meters are extracted daily, while in Piedras Negras 88,000 cubic meters are extracted daily. Thus, there is more intensive use in Piedras Negras than Acuña, considering the sizes of the two cities is relatively equal. Acuña has 16,790 residential taps, 987 commercial intakes, and 84 industrial intakes. Some 32% are connected to meters and 51% have service coverage. In the case of Piedras Negras, there are 24,238 residential taps, 1,293 commercial intakes, and 84 industrial intakes. Some 46% have meter connections and the population served is 60%. The problem that is posed by the lack of meters is the limited charge for water by municipal drinking water systems in the state. A number of solutions have been attempted. In the case of Saltillo, there was a paramunicipal company created to incorporate business efficiency through a joint venture with a Spanish company, Aguas de Barcelona, which has a 49% stake in the venture and has succeeded in improving meter coverage in Saltillo. However, other problems have been created, such as overcharging certain users.

NATURAL RESOURCES

Coahuila possesses great biological diversity, including species such as the black bear, mule deer, white-tailed deer, puma, mountain lion, wild turkey, collared peccary, birds, and small mammals. Coahuila has a dominant role in the management, conservation, and sustainable exploitation of wildlife. Similarly, it has an important role in the recovery of species that are threatened and in danger of extinction. It is also involved in the reintroduction of older species, such as the bighorn sheep, elk, and the pronghorn.

A total of 1,659 users are registered for activities related to management, use, and scientific study of wildlife. They are distributed in the following manner: 1,630 hunters, 12 service providers, four scientific collectors, five taxidermists and tanners, two museums, and eight management technicians from the Management Unit for the Conservation of Wildlife (las Unidades de Manejo para la Conservación de la Vida Silvestre¹ or UMA) and Sustainable Management Area Project (Proyecto en un área de manejo sustentable² or PAMS).

Coahuila is the third largest state in Mexico and is the 28th largest producer of wood products. Its forest production is from products derived from the harvesting of vegetable species or parts of them (waxes, fibers, condiments, and medicinal plants) from arid and semi-arid zones of forest production that are not conducive to wood production (47% of the state). On the other hand, the scarce forest regions that have trees suitable for wood production are only 2.7% of the Coahuila's surface area, and production is restricted.

The zones that the state is conserving (843.74 square kilometers), are lands designated as protected natural areas or sites that are more than 3,600 meters above sea level and covered in vegetation. Agricultural zones, livestock, and urban areas without forest vegetation and with a slope of less than 18% are designated non-forest areas. Non-forest uses of these areas are currently unstabilized.

The zones of high wood production (PMA in Spanish) are mostly found in the subprovince of Serranía del Burro. The zones of restricted wood production (PMR in Spanish) are found in the subprovince of Sierras y Llanuras Coahuilenses. The non-wood production areas (PNM in Spanish) are found in the subprovinces of Llanuras de Coahuila y Nuevo León and the Sierras y Llanuras Coahuilenses. The latter consists of zones with high and medium levels of degradation, which are considered restoration areas since their actual use conflicts with their natural potential. They have been in the process of progressive degradation due to factors such as erosion, fires, plagues and diseases, among others.

Areas without forest vegetation (NF in Spanish) are distributed in an important manner throughout the state territory and occupy only 13%. The zone with the

greatest rate of territorial occupation corresponds to land designated as areas of non-wood production, home to vegetation typical of arid zones and apt for exploitation of non-wood resources. These are found in the plains that cover a great part of the state, descending paths, and mountain ranges.

The subprovince Sierras y Llanuras Coahuilenses contains most of the state's forests, with a total of 122,809 hectares or 27.65%. The greatest extension of forests with moderate and cold climate is located here. The largest extension of jungles is found in the subprovince of Llanuras de Coahuila y Nuevo León, with a surface area of 2,550 hectares.

SEMARNAT uses the Territory's Ecological Code (Ordenamiento Ecológico del Territorio) to regulate or control land use and productive activities. The aim of the code is to protect the environment while also preserving and exploiting natural resources in a sustainable way. Coahuila shares a regional ecological code with other northern border states. As well, there are:

- Local ecological codes: Cuatrociénegas and La presa de la amistad
- Codes for two federal natural protected areas: Maderas del Carmén, Mapimí
- Codes for three state protected areas: Los novillos—on the border with the United States—and the Sabinas river

In each case, the authorities have specific objectives and policies.

Coahuila is characterized by its exploitable mineral resources, as is shown by its abundant riches in carbon, of which it has considerable reserves. Carbon makes up all of the national production of coking coal for the metallurgic, iron, and steel industries. It also produces a type of coal known as "Black Flame" because it is used to produce energy in coal-fired electric plants. The state also has important deposits of lead and iron, and on a smaller scale, copper, zinc, and gold. There are also some deposits of manganese, strontium, and antimony. As for non-metallic minerals, barium oxide and fluoride are the primary minerals used; others include dolomite, phosphorus, sodium nitrates and magnesium, as well as materials for the construction industry such as limestone, sand, and clay.

Petróleos Mexicanos (or Pemex, Mexico's state-run oil and gas monopoly) conducted exploratory studies and drilling works that resulted in the discovery of large deposits of gas contained in intensely fractured Mesozoic rocks. These deposits are located in the paleogeographic province known as "Golfo de Sabinas." The productive oil fields in Coahuila include Amuleto, Buena Suerte, and Monclova, whose annual production is important.

SOLID AND HAZARDOUS WASTES

Solid Waste

In Acuña and Piedra Negras, a total of 211 tons of solid waste are collected daily, coming primarily from residences, which contribute 150 tons of solid waste per day. Industrial sources are the second greatest source of solid waste and

contribute 40 tons per day. In the case of Acuña, nearly half (48 tons) the waste is organic; celluloses make up 17 tons, plastics 11.5 tons, and glass 6.28 tons.

The final destination of some of this waste is clandestine trash sites, which in the case of Piedras Negras number about 50. They are privately-managed and function similar to a sanitary landfill. In the case of Acuña, there is no information about the existence of sanitary landfills, rather disposal of waste takes place in open air. In the case of the maquiladora industry, the law requires that solid waste should be returned to its place of origin. As a result, 735 tons of solid waste were returned. This figure could be higher, considering that the national Ecology Institute (Instituto Nacional de Ecología or INE) reported 754 tons generated.

Hazardous Waste

In the state of Coahuila, the main types of hazardous waste generated are solid, making up 34% of the total. Next is sludge from water treatment plants, at 14%. Others include: heavy metal slag at 13%, used oil and lubricants at 9%, and sludge from galvanized plastics at 9%. There is an installed, authorized capacity for the recycling of hazardous waste at 196,265 tons per year, of which 171,445 are for recycled energy.

To manage industrial hazardous waste, 17 companies have been authorized; 10 of them deal with transport and collection, six are recyclers, and one handles treatment and is in the range of most northern Mexico border states. The exception is Nuevo León, which, due to the size of its industry, has 102 firms dealing with hazardous waste.

Production of infectious biological wastes in Coahuila totaled 296.775 tons in 2001. There has been a decreasing trend in the generation of these wastes since 1998. Of them, 82.41% are not anatomical, 10.78% are pathological, and 5.7% are sharp needles. According to SEMARNAT, this type of waste is processed in an adequate manner, since there is rigorous control in hospitals and the public and private sectors. Two companies are authorized to manage hazardous, biological-infectious wastes, with a capacity of 6.1 tons per trip. There are three companies that handle treatment of the wastes, with a total capacity of 1,637 kilograms per hour. A majority of the hospitals in the health sector have appropriate equipment to treat hazardous wastes, which is apparent by the limited capacity found only in some private health centers.

In Torreón, the emissions from the company Peñoles has caused 12,000 children to have high blood-lead levels. Currently, there are advances in methods implemented by the Federal Prosecutor for Protection of the Environment (Procuraduría Federal para la Protección al Ambiente or PROFEPA); the company Caleras de la Laguna has affected the state with dust from the neighboring hills, without having information about the measures set in place by PROFEPA. The overexploitation of the aquifer has contributed to the presence of

arsenic salts in the wells, which is a critical situation for which increased coordination with CNA is being sought to find ways to reuse the water. The Cemex plant also generates dioxins and furans through its destruction of hazardous waste. PROFEPA's strategy has been to increase inspections and vigilance in the region. In Saltillo y Ramos Arizpe, tires are used as fuel, which elevates the presence of contaminating gases. To reduce the problem and not disrupt economic activity, oil substitutes are being sought for heating. There is also contamination by the foundry companies and chemical pharmaceuticals, for which there is increased inspection and vigilance.

HEALTH

The principal new cases of illness in Coahuila come from acute respiratory disease, with 960,167 cases reported in 2000. Next are internal infections at 178,784 reported cases, and urinary tract infections at 110,708 reported cases. The remainder of the cases do not reach the levels of the preceding three. In particular, the case of respiratory illness is explained by the changes in climate throughout the year. The primary causes of mortality are heart disease, malignant tumors, diabetes, accidents, and liver disease (Table 8).

The principal cause of infant mortality originates in the perinatal period and 439 deaths per every 100,000 registered children are attributed to that cause. This explains about half of the cases of infant deaths. Other causes are congenital malformation, which occurs at a rate of 186 cases per 100,000, and infectious intestinal illness, which occurs at a rate of 39 per 100,000. Accidents are the principal cause of death in pre-school aged children, with a rate of 10 deaths for every 100,000 residents, which explains a quarter of the cases; for the school ages, accidents continue to be the primary cause of death, at a rate of 5.2. At the age of reproduction, tumors are the principal threat, at a rate of 43 deaths per 10,000, diabetes at a rate of 40 per 10,000, heart disease at a rate of 39 per 10,000, and accidents at a rate of 35 per 10,000.

TRIBAL NATIONS

In spite of the existence of tribal groups such as the Apaches and the Coahuiltecas, currently, the only surviving tribal group in the state of Coahuila is the Kikapúe, which belongs to the Hokana linguistic family. This language family also contains tribal languages from the states of Baja California, the central coast of Sonora, and the coasts located to the north of Sinaloa and Nayarit.

Location

Kikapúe were displaced from the Great Lakes region in Wisconsin and Michigan in the United States and shifted to the Coahuilan territory. For these Mexican tribes, whether to stay on American territory or live on Mexican territory was a dilemma. Some were willing to be American Indians and others preferred to relocate to Mexico and make the Coahuilan desert their home. This is the origin of the Mexican Kikapúes. They currently live in the place known as El Nacimiento de los Kikapúes, located in the municipality of Melchor Múzquiz, Coahuila.

According to the Twelfth General Population and Housing Census of 2000 (XII Censo General de Población y Vivienda 2000), an estimated 138 people age 5 or older spoke the Kikapúe language.

Economic Activities

Hunting is the principal activity of the Kikapúe men; through hunting they find food and leather. Hunting is ritualistic in nature and is done in a group setting throughout the year, especially from January to April—the months of religious celebrations for the new year, baptisms, praise and worship masses directed at Kitzihaiata—and as the condition of being a Kikapú.

Agriculture is a secondary activity, since they have been excellent hunters for many years. In El Nacimiento, there are small individual parcels of farmland that cultivate wheat, oats, barley, beans, and squash. The Kikapúes have an *ejido* property that totals 7,022 hectares, of which nearly 6,500 are used as pastures and about 500 are irrigated.

Elements of their Worldview

Tribal members believe that all Kikapúes should comply with what God has sent them. Kitzihaiata chose the Kikapúes to populate the earth, for which the Kikapúes should obey Kitzihaiata's commands and be prepared to face the final moment of the world, which will permit them to go hunt deer permanently with God. To be a good Kikapú means always complying with the rituals of hunting, purification, new year, sacred fires, baptism through orations, sacrifices, and fasting. Ritual celebrations are always accompanied with venison meat. The culminating point in the orations comes when the deer's tongue is eaten, returning whoever eats it to Kitzihaiata. The deer represents the center of Kikapú life. Each sacrificed deer is reborn. For this reason, they believe, they will never cease to exist and there is no danger of extinction (Embriz 1993).

Table 9 shows the characteristics of the tribal nation population.

Figure 1. Map of Coahuila

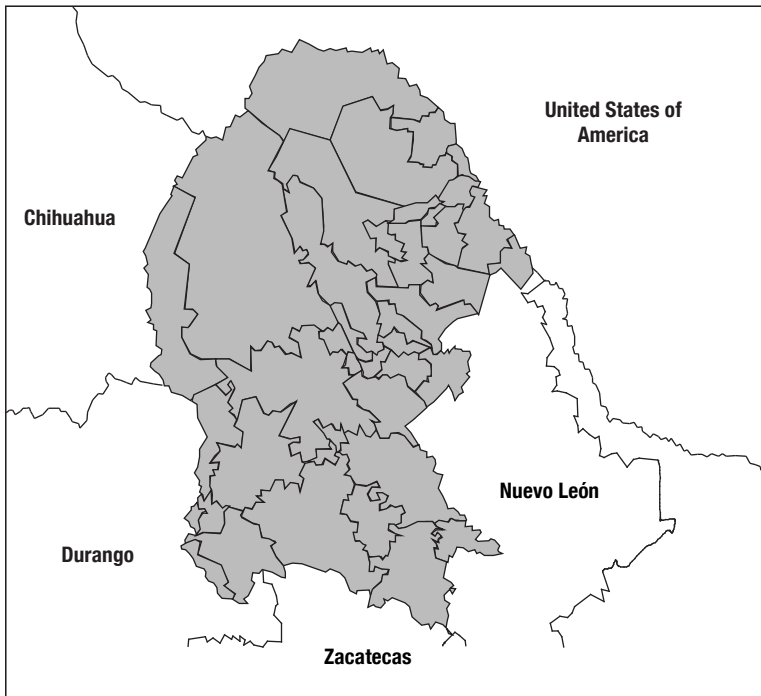


Figure 2. Population Distribution by Age Group

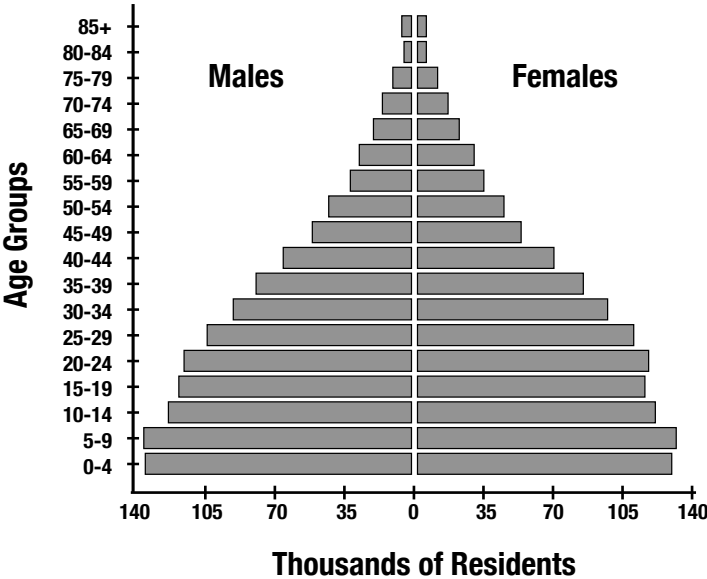


Figure 3. Levels of Well-Being in Coahuila

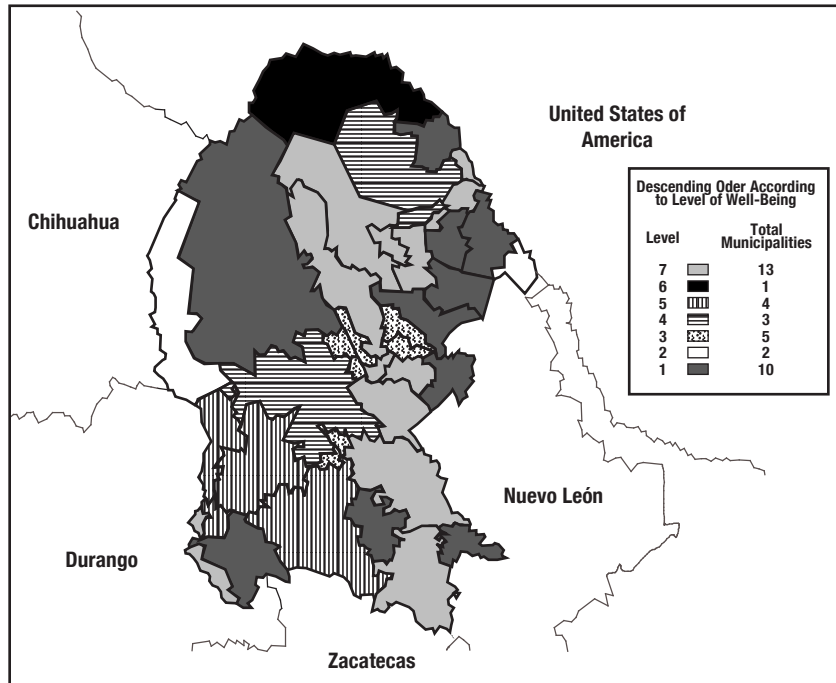
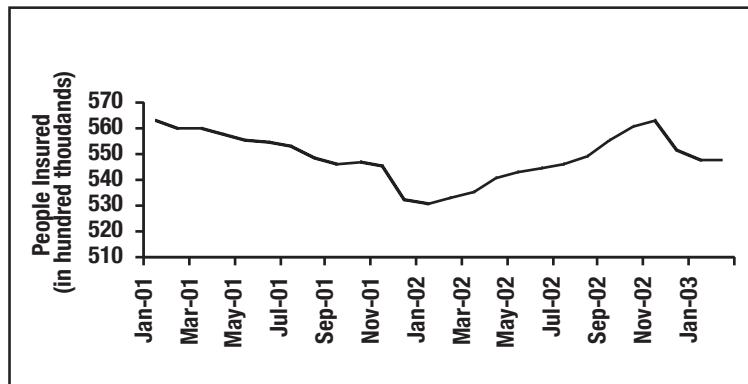


Figure 4. TOTAL INSURED BY THE MEXICAN SOCIAL SECURITY INSTITUTE (IMSS IN SPANISH)



SOURCE: IMSS, Instituto Mexicano del Seguro Social. At <http://coah.inegi.gob.mx/coyuntura/espanol/aseimss.html>

Figure 5. Overexploited Aquifers in Coahuila

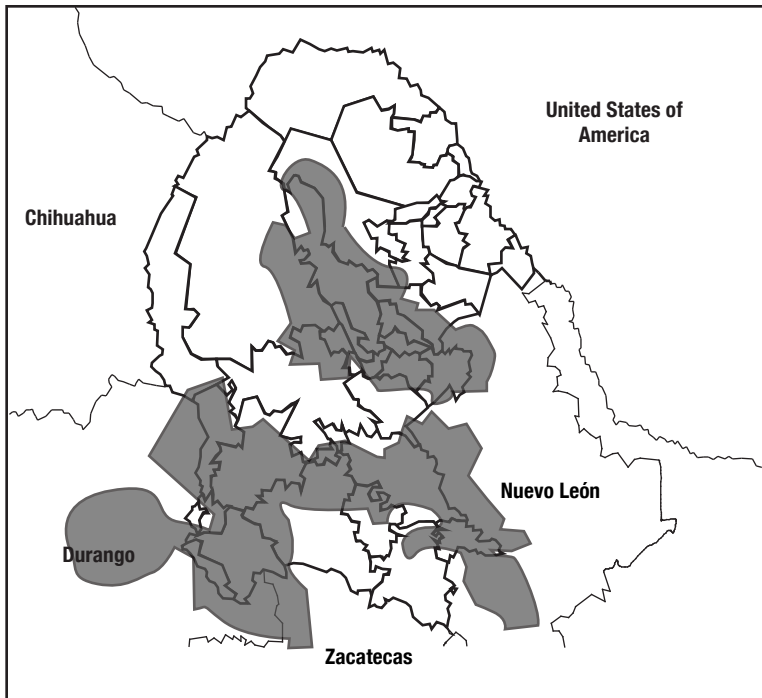


Table 1. Population Characteristics According to Place of Residence

Concept	National	State
Number of Municipalities	2,429	38
Number of Sites	201,138	4,910
Sites according to size (%):		
Less than 2,500 inhabitants	98.6	99.1
From 2,500 to 14,999 inhabitants	1.2	0.5
More than 15,000 inhabitants	0.2	0.4
Population according to residence (%):		
Urban (15,000 inhabitants and more)	59.9	82.9
Concentrated Rural (from 2,500 to 14,999 inhabitants)	13.6	5.3
Dispersal rural (less than 2,500 inhabitants)	26.5	11.8
Population Growth Rate, 1990-1995	2.3	1.7
Population speaking indigenous languages (%) (over age 5)	6.8	0.1

Table 2. Growth Rater per Census in Acuña

Year	Percentage
1960	5.12
1970	3.99
1980	2.50
1990	3.06
1995	6.88
2000	7.34

Source: INEGI

Table 3. Growth Rater per Census in Piedras Negras, 160-2000

Year	Percentage
1960	4.33
1970	-0.37
1980	5.38
1990	2.08
1995	3.06
2000	2.32

Source: INEGI

Table 4. Gross Domestic Product by Industrial Sector and Product Classes (preliminary)

Industrial Sector (IS) and Product Classification	National	State
	Thousands of Mexican pesos at 1993 prices	
Total	1,474,725,467	45,975,854
IS 1. Agricultural and Livestock, Forestry, and Fisheries	81,128,943	1,836,670
IS 2. Mining (including extraction of crude oil and natural gas)	19,133,818	1,313,283
IS 3. Manufacturing Industry	316,999,846	16,140,679
Class I. Food, beverages, and tobacco	75,336,558	2,074,022
Class II. Textiles, clothing, and leather	26,315,439	865,924
Class III. Wood and its products	8,345,448	55,499
Class IV. Paper, printers, and publishers	14,050,321	184,450
Class V. Chemicals, petroleum derivatives, rubber, and plastics	45,831,366	1,151,963
Class VI. Non-metallic minerals, except for petroleum derivatives	20,683,524	2,374,321
Class VII. Basic metal industries	15,219,523	3,120,485
Class VIII. Metal products, machinery, and equipment	101,826,731	6,230,121
Class IX. Other Manufacturing Industries	9,390,936	83,894
IS 4. Construction	63,381,852	952,255
IS 5. Electricity, gas, and water	23,950,033	1,259,888
IS 6. Trade, restaurants, and hotels	322,264,674	9,120,915
IS 7. Transportation, warehousing, and communications	166,295,394	4,903,294
IS 8. Financial, insurance, real estate, and rental services	228,952,194	4,929,091
IS 9. Municipal, social, and personal services	294,500,744	6,205,916
Minus: charges for banking service fees	-41,882,031	-686,138

Source: INEGI

Table 5. Open Unemployment Rate in Coahuila

Year	General	Men	Women	20-24	25-34	35-44	45 and older
1995	6.2	6.1	6.4	9.7	5.4	3.7	3.6
1996	5.4	5.2	5.8	8.7	4.9	3.1	3.1
1997	3.7	3.4	4.2	6.4	3.2	1.9	2.0
1998	3.1	2.9	3.6	5.7	2.8	1.7	1.4
1999	2.5	2.4	2.7	4.4	2.4	1.3	1.1
2000	2.2	2.1	2.1	4.1	1.9	1.1	1.1

Source: INEGI

Table 6. Principal Characteristics of the Maquiladora Export Industry

Period	Establishments Active	Inported Inputs (thousands of real pesos)	Value-added exports in real terms (corresponds to maquiladora service charges, calculated at 1994)
2002			
January	261	1,992,728	281,734
February	261	2,284,647	281,311
March	262	2,682,604	320,535
April	258	2,740,493	331,562
May	258	2,864,815	361,030
June	258	2,662,655	347,005
July	257	2,740,244	359,363
August	257	2,716,181	359,130
September	256	2,850,575	351,050
October	254	3,160,434	368,822
November	254	2,882,260	343,211
December	254	2,558,200	381,460
2003			
January	255	2,557,804	354,925

Source: INEGI

Table 7. Surface Area with Salinity Problems in the Irrigation Districts Most Affected (Hectares)

State	District	Surface Area Affected
Baja California	Rio Colorado	139,900
Sonora	Rio Mayo	33,100
Sinaloa	Rio Fuente	75,500
Chihuahua	Cuidad Juárez	14,400
Durango	Región Lagunera	24,800
Tamaulipas	Bajo Río Bravo	47,700
Michoacán	Lázaro Cárdenas	16,300
Hidalgo	Alfajayucan	4,300
Guanajuato	Alto Río Lerma	4,900
Oaxaca	Tehuantepec	16,000

Source: Ortiz 1993

Table 8. Principal Causes of General Mortality, 2000

Cause	National		State	
	Number	Rate	Number	Rate
Total	443,950	452.4	9,706	412.8
Heart disease	69,278	70.6	1,823	77.5
Malignant tumors	53,662	54.7	1,396	59.4
Diabetes mellitus	45,632	46.5	1,324	56.3
Accidents	35,690	36.4	718	30.5
Cerebrovascular illnesses	25,836	26.3	639	27.2
Liver disease	27,040	27.6	403	17.1
Chronic obstructive pulmonary disease	11,319	11.5	282	12.0
Certain conditions created by the perimatal period	19,268	19.6	262	11.1
Renal failure	7,807	8	155	6.6
Aggression (homicide)	12,249	12.5	154	6.6
Symptomatic signs, abnormal clinical findings, and other clinical and laboratory findings not classified in another part	9,474	9.7	158	6.7
Other causes	16,695	129.1	2,392	101.7

Note: Rate per 100,000 residents, estimated based on population projections

Source: INEGI; SSA

Table 9. Characteristics of the Tribal Nation Population

Number of Locations	1
Total Population	115
Males	59
Females	56
Population of 5-year-olds	2
Population of 5-year-olds that attends school	1
Population of 5-year-olds that does not attend school	1
Population age 6-14 years	23
Population age 6-14 years that can read and write	4
Population age 6-14 years that cannot read and write	19
Population age 6-14 years and older that attends school	4
Population age 6-14 years and older that does not attend school	19
Population age 15 and older	76
Population age 15 years and older that is literate	15
Population age 15 years and older that is illiterate	61
Population age 15 years and older being taught	66
Population age 15 years and older with incomplete primary education	1
Population age 15 years and older with complete primary education	2
Population age 15 years and older with postprimary education	7
Population age 5 years and older speaking native language	90
Population age 5 years and older speaking native language, no Spanish	18
Population age 5 years and older speaking native language and Spanish	73
Population age 12 years and older	86
Economically active population	4
Economically inactive population	82
Total residences inhabited	29
own homes inhabited	28
Occupants in particular homes not owned	111
Average occupants per home	3.83