PART II

ENVIRONMENT
I N T H I S C H A P T E R I c o m p a r e t h e h i s t o r i c a l p r o c e s s o f l a n d s c a p e t r a n s f o r m a -

tion in the west of the state of Santa Catarina, Brazil, and in the province

of Misiones, Argentina. These are regions that both harbor sections of the

Atlantic Forest biome, which presents varied vegetation cover of temperate
deciduous forest and mixed ombrophyllus forest and experienced a nearly iden-
tical colonization process by German Brazilians. Between the 1910s and the
1960s, this colonization process based on private colonies occurred at the same
time at the two sides of the border. I focus on a colony in the far west of Santa
Catarina, at the border with Argentina, and on two colonies in Misiones, near
the border with Paraguay. The comparison of the chosen colonies brings to light
transboundary similarities and differences regarding the desired type of set-
tler as projected by these different colonization projects and the environmental
changes caused by them.

To have a better understanding of the areas where the settlement of European
immigrants and their descendants occurred—that is, inside the forests—it is
necessary to first offer a brief description of the two types of forest formations
present in the region: the mixed ombrophyllus forest and the temperate decid-
uous forest. Both are part of the Atlantic Forest biome, the Mata Atlântica,
which stretches for over three thousand kilometers along Brazil’s Atlantic Sea-
board from the northern state of Rio Grande do Norte to the southern state of
FIGURE 3.1 Original forest cover and locations at the Argentine Brazilian border, ca. 1950s. Map by Frederico Freitas.
Rio Grande do Sul. The biome reaches inland into Eastern Paraguay and the province of Misiones in northeastern Argentina, and it also advances narrowly along the coast into Uruguay. The Atlantic Forest has an extremely diverse and unique mix of vegetation and forest types.

The mixed ombrophyllus forest (MOF), also known as Araucaria forest or Brazilian pine forest, originally occupied around 250,000 square kilometers distributed through the states of Paraná, Santa Catarina, and Rio Grande do Sul; some smaller areas in the south of São Paulo and in the Mantiqueira Mountains; a few other isolated spots in Minas Gerais; and areas in the province of Misiones, Argentina. The MOF is characterized by a rich floristic mixture made up of the Australasian (*Drymis, Araucaria*) and Afro-Asian (*Podocarpus*) genera with a landscape strongly marked by the predominance of the Brazilian pine (*Araucaria angustifolia*) in the upper stratum. There were also other species, such as the imbuia (*Ocotea porosa*), the canela lageana (*Ocotea pulchella*), the yerba mate (*Ilex paraguariensis*), the butia palm (*Butia eriospatha*), and the bracatinga (*Mimosa scabrella*), among several others.

The temperate deciduous forest (TDF) was known by the settlers as *mata branca* (white woods) in order to distinguish it from the *mata preta* (black woods, i.e., the MOF), where Brazilian pines were found. The TDF comprises the forests of the middle and upper portions of the Uruguay Valley, most of the south mountain range of Serra Geral, and scattered areas of the Jacuí, Ijuí, and Ibirú River basins, reaching an area of approximately forty-seven thousand square kilometers. The upper Uruguay forest (UUF), as it was called by Rambo, is an extension of the thriving forest of the Paraná River and advances into the Argentine province of Misiones. The UUF is separated from the forests of the Iguazu River Valley by pine wood formations, the latter stretching from the Fartura and Capanema Mountains into Misiones.

The Misionera forest (Selva Misionera), also called Paranaense forest, currently covers an area of twelve thousand square kilometers in the province of Misiones. The forest is divided in two zones: the mixed forests, also known as *selva misionera, zona de monte* (hilly zone), or *bosques* (woods); and the fields, also known as *zona de campo* (fields zone). Mixed forest groves are an extension of the Brazilian and Paraguayan forests and like them present high floristic diversity with over two hundred tree species in three strata.

It is worth mentioning that although not the focus of this chapter, indigenous peoples were also present in the area before colonization. The two forests had harbored indigenous peoples for centuries, providing them with native
Brazilian pine fruits, game, and domesticated species such as maize, beans, and cassava. As the process of colonization advanced alongside the Uruguay River, it generated a series of significant conflicts. Both the state government and private companies considered it good business to sell vacant land to European immigrants, but they failed to take into account the indigenous peoples and the peasants who lived on these lands.

In addition to indigenous peoples, this area also harbored a social group called *caboclo*, formed by the contact between Indians and European settlers, especially the Portuguese. Recent scholars have dedicated their studies to recover the history of these peasants who were largely forgotten in the earlier literature on colonization.

The history of the two regions under study has many aspects in common starting with the fact that the borders between Brazil and Argentina were a motive of dispute between the two countries. The international competition for the land in the west of Santa Catarina and Paraná involved a long dispute between Argentina and Brazil, which came to be known as the “Question of Palmas” or “Question of Misiones.” On September 7, 1889, after years of negotiation, the two countries signed a treaty in Buenos Aires accepting the arbitration of U.S. president Grover Cleveland to settle the dispute. On February 5, 1895, Cleveland announced his decision, establishing “the boundary line by the Pepery (also called Pepery-guaçu) and Santo Antonio Rivers, i.e., the rivers that Brazil had proved in documents.” This agreement granted Brazil a territory of 30,621 square kilometers. Part of the same border area in Brazil was also a matter of dispute between the states of Paraná and Santa Catarina. After several legal arguments, an agreement was achieved between the two states, and the disputed area was bifurcated, forming the western sections of Paraná and Santa Catarina. The signing of these two agreements, an international and a national one, created the conditions for a rapid colonization process.

**THE ROLE OF THE COLONIZING COMPANIES**

For the most part, the colonization process in this border area of Brazil was handed to private colonizing companies. Many companies had received land grants from the federal government as compensation for building highways or railroads, and they sold the public land to third parties or directly to settlers. The largest company to operate in southern Brazil was the Brazil Development
and Colonization Company, which in many cases ended up selling part of their land to other companies, such as the Volksverein für die Deutschen Katholiken in Rio Grande do Sul (People’s Association for the German Catholics in Rio Grande do Sul).9

Of the companies responsible for establishing colonies of German Brazilians, I will examine two in this chapter. The first, in Misiones, Argentina, is the Compañía Colonizadora Alto Paraná (Upper Paraná Colonization Company), later named Compañía Eldorado, Colonización y Explotación de Bosques Limitada (Eldorado Company, Colonization and Forestry Ltd.). The second is the aforementioned Volksverein für die Deutschen Katholiken in Rio Grande do Sul, which also operated in western Santa Catarina in Brazil.

These colonies had as their primary mentors the Jesuit priest Max von Lassberg and the civil engineer Carlos Culmey,10 who had worked together in the early 1900s to create the colonies of Serro Azul (now Cerro Largo) and Santo Cristo in Rio Grande do Sul.11 Max von Lassberg was a German national who served as a priest in Rio Grande do Sul and was one of the founders of the colony of Porto Novo.12 Carlos Culmey was an associate director of projects in Misiones who, after retirement had returned to his native Germany. In 1926 he accepted an invitation from the Companhia Territorial Sul Brasil (Territorial Company South Brazil) to oversee the colonization of the company’s lands in the west of Santa Catarina.13 At that time, these two leading characters were considered patres colonorum, that is, “parents of the settlers” or “founding heroes” for the new colonies.14

The colonizing model adopted for the frontier areas in both countries was the same method used in Rio Grande do Sul, from where most settlers originally migrated. The so-called old colonies in Rio Grande do Sul were first established in 1824 with the foundation of the colony of São Leopoldo followed by colonies in São Sebastião do Caí, Montenegro, Lajeado, Estrela, Taquara, and Santa Cruz, all of which were settled by German immigrants. When their German descendants opted to migrate to the west of Santa Catarina in Brazil and to the province of Misiones in Argentina, they tried to recreate their cultural practices in the new location. The colonizing companies supported this. The most efficient way to bring settlers to the new colonization projects involved recruiting prospective settlers from the old colonies of Rio Grande do Sul. To attract settlers, the colonization companies used newspaper ads and reports, annual almanacs, posters pasted at strategic points, flyers, books, and, especially, colonization agents.15
The two most demanding companies in terms of the ethnic composition and religious beliefs of their settlers were the Volksverein für die Deutschen Katholiken in Rio Grande do Sul, which obviously only allowed the settlement of German Catholics in their lands, and the Sul Brasil (Territorial Company South Brazil), whose colonies were separated by distinct ethnic and religious beliefs. The same model that had been implemented in previous years in Rio Grande do Sul was forwarded by Culmey and von Lassberg in Misiones, Argentina. This type of division by ethnic composition and religious beliefs contributed to the creation and maintenance of specific sociocultural practices characteristic of these groups. It helped define an ethnic culture that generated solidarity within the group and that isolated them from internal and external tensions.\textsuperscript{16}

The main technique used by colonization agents involved the persuasion of a particular family member, which then triggered a family migration stream. Through interviews carried out with these people, it was observed that once they got to know the place, they ended up bringing other family members. Given the land fragmentation and high property prices prevailing in Rio Grande do Sul, families with many children were the preferred targets of the colonizing companies. In the west of Santa Catarina and in Misiones, it was possible for settlers to purchase several pieces of affordable land, allowing family members to live in adjacent plots. It was important that members of the same family stay together, since in colonies and small towns extended families constituted the social and economic unit and thus produced goods for household consumption and for the market. Some settlers were originally single and would later return to their region of origin to bring a girlfriend or fiancée whom they had left behind. Generally, marriage between settlers would observe the same boundaries based on ethnic composition and religious beliefs that were enforced by the companies.

A large number of children was the norm among German Brazilian families, for they meant more hands to work in the fields. Women with many children inevitably faced a double burden of “house and field work.” This fact of life was confirmed by an interviewee who had lived in Itapiranga since 1927: “I got married, and I would spend the whole day in the field, I cleaned the house in the meantime at noon. We would never think about resting, and every other year I had a child. I have ten children.”\textsuperscript{17}

A similar situation was found in the colony of Puerto Rico, Misiones. According to historian Maria Cecilia Gallero, settlers considered children to be assets. Regardless of age, children contributed to farm working. Gallero writes
that one of her interviewees, another mother of ten children, explained that “even the smaller ones have their obligations: taking care of the small animals, feeding the pigs cassava, and also helping to hoe.”

**AGRICULTURAL BACKGROUND: “PREDATOR CULTIVATION”**

Studies on agricultural systems are scarce in Brazil. Leo Waibel, a German geographer, was a pioneer in this regard, and he described the cropping systems of German farmers in Brazil in the late 1940s. According to him, three agricultural systems, or stages, were practiced in frontier areas of southern Brazil. He called the “primitive land rotation system” the initial phase of agriculture practiced in forest areas. They practiced *coivara*—the indigenous slash-and-burn technique—to grow subsistence crops, combining that with the raising of pigs. Mercantile exchanges were few, and transactions were done with a single local merchant. In the second stage, when most forest land had been cleared and wagon roads had been built, trade was more active, and production increased and specialized. They also practiced an “improved land rotation system.” However, soil fertilization did not occur, which led to soil exhaustion after only a few years. The exhausted land—or the land about to be exhausted—was left fallow to naturally recover its fertility. The third stage, the “crop rotation system combined with livestock,” was barely used because of limitations imposed by the small size of rural plots. According to Waibel, the few people who reached this stage “became prosperous settlers.”

Colonies linked to German immigration in Rio Grande do Sul had since the 1900s the help of the Bauernverein zur Beförderung der Einheimischen Produktion (Association of Rio Grande do Sul Farmers for the Promotion of Local Production). The Bauernverein held meetings where settlers discussed issues relevant to the daily routine of a family farm: soil cultivation, organic fertilizing, reforestation, forest burning, rational livestock, and the establishment of small manufactures, all aiming at the self-sustenance of the region.

However, this association did not last. In 1912, the Catholics left the association and founded the Volksverein in the Catholic Congress in the city of Venancio Aires, Rio Grande do Sul. It is remarkable that despite all the information available about improving farming techniques, information that circulated both in the Bauernverein and during Catholic Congresses (which were annual
meetings with great participation of the community), settlers continued to follow a model of cultivation that in most of the cases proved to be unsustainable.

The agricultural cultivation practiced by the German immigrants in Rio Grande do Sul ended up being used in the new colonies with some adjustment based on experience over the years. What follows is a quick description of the main crops and methods used. This section is intended to describe—and not to justify—the predatory cultivation methods adopted in colonies old and new.

The main products grown since the early days of colonization were common beans, maize, cassava, sugarcane, squash, potato, wheat, and rye. Although beans brought higher profit, maize was more popular among the German colonies and was considered the “queen of useful plants,” because every part of the plant is useful. A major income source for German settlers was tobacco cultivation, also practiced in Germany. Rare were the farms on which tobacco was not cultivated. Since 1865 the colony of Santa Cruz do Sul was considered the largest producer of tobacco leaf, and most of the settlers who migrated to Misiones and Itapiranga were from this region. Similar to Rio Grande do Sul in the nineteenth century, tobacco cultivation accompanied migrants in the transition to the new colonies because it was a known crop that could yield quick profit.

According to the analysis of historian André C. Werle, the Catholic Congress held in Brazil widely discussed the relationship of immigrants with the environment and the way of conducting agriculture. Werle explains that “burnings, reforestation, crop rotation, crop pests control, green manure, erosion, careful water cleaning, and other issues involving the formation of farmer organizations and the structuring of small farms were recurrent topics.” Werle further observes that to describe the harmful farming methods, discussants used the German term raubbau—“predatory cultivation.”

In a lecture at the Catholic Congress of 1905 (held in Harmonia, Rio Grande do Sul), the Jesuit priest Max von Lassberg warned that “colonies do not exhaust themselves, they are exhausted” mainly “because outdated methods are used.” Werle lists the working methods considered outdated and problematic: “the burnings (which occurred after each harvest to clear the land and eliminate weeds); the indiscriminate deforestation, mainly from the hillsides; the lack of fertilizing; and the absence of crop rotation.” In order to combat this predatory cultivation, the adoption of several new working methods and cultivation techniques was suggested. The first Congresses recurrently focused on three essential points: tree planting, fertilizing, and crop rotation. Unfortunately,
this “predatory cultivation,” with minor changes, continued to be practiced in the new colonies of western Santa Catarina and Misiones.

TARGET LANDS

Itapiranga is located in western Santa Catarina, Brazil, while the colonies of Puerto Rico and Montecarlo are situated in the region of the upper Paraná valley, in Misiones, Argentina. The mesoregion west of Santa Catarina is an area of 27,303.5 square kilometers with the following boundaries: to the west, the Republic of Argentina; to the south, the State of Rio Grande do Sul, Brazil; to the north, the State of Paraná, Brazil; and to the east, the mesoregions north of Santa Catarina and Serrana. The economic development of western Santa Catarina was directly related to agriculture and livestock. This region was characterized in the past by the predominance of small family units of diversified agricultural production. Migration of German Brazilians occurred in the whole region but with higher concentration in the far west, as in the case of Itapiranga.

The colony of Porto Novo (later called Itapiranga) covered an area of 583.98 square kilometers and was located between the Macuco and Pepery-Guaçú Rivers. To the south, it bordered the Uruguay River (Rio Grande do Sul); to the east, Porto Feliz (later Mondai); and to the west, the Pepery-Guaçú River, which also marks the border with Argentina. Currently, its original area comprises the municipalities of Itapiranga, Tunápolis, and São João do Oeste. It presented an undulating landscape with few areas of flat land. Agriculture in such a landscape demanded much manual work, especially in the early years of the colonization project, because of the lack of equipment. The region presents a subtropical climate with rainfall in all seasons of the year, floods, and prolonged droughts. The soil is of great fertility, but it exhausts after a few harvests, requiring chemical and/or organic fertilizing.

In 1932, Carl Middeldorf wrote a brochure describing Itapiranga (see fig. 3.2) as a beautiful and prosperous colony. The purpose of the brochure, written in German, was to attract German settlers and their descendants. Middeldorf compared the new colony to Europe, writing that “the colony of the Uruguay River appears to the visitor’s eyes as a true picture of Wonderland. . . . With great scenic charm, this colonial kingdom extends from the banks of the Uruguay River to the small rivers [penetrating] into the forest. All of them flow into the Uruguay River, which, similar to the Rhine River [in Europe], dominates
and protects this flourishing land. Old memories of rural landscapes of the regions of the Rhine and Moselle arise when observing the river, the land, and the forest.”

The planning of the colony of Porto Novo (Itapiranga) took a decade (1916–1926) to be completed, almost the same time as the colonies of Misiones. However, its execution took longer. Colonization began in 1926 with the arrival of the first German Brazilians, but by 1935, the priest responsible for the register book of the Itapiranga parish still described the existence of “large areas to be conquered [with] extensive virgin forests on fertile lands. There were few lands the settlers’ mighty arms have cleared or have begun to clear.”

The province of Misiones is located in the northeast of Argentina. To the west it borders Paraguay, separated by the Paraná River; to the east, north, and south it borders Brazil, separated by the Iguaçu, Santo Antonio, Pepery-Guaçu, and Uruguay Rivers as well as twenty kilometers of land boundaries. Its area is approximately 30,719 square kilometers, representing only 1.1 percent of the Argentine territory. Misiones can be divided in several natural regions, and the region discussed here is located in the upper Paraná valley. This valley presents moderate rolling hills that gradually rise from Santa Ana to Puerto Iguazú and a subtropical climate. German Brazilians had scattered throughout the province of Misiones, but the highest concentration occurred in the colony of
Puerto Rico. Currently, Puerto Rico belongs to the Department of Libertador General San Martín, and its original area was divided into three municipalities because of the emancipation of Capioví and Ruiz de Montoya. The original area of Puerto Rico is located at the banks of the Paraná River and borders the municipality of Capioví to the south, the municipality of Garuhape to the north and east, and Paraguay to the west.

The Misiones colonization project was carried out by the colonizing company created by Carlos Culmey and partners with the trade name of Compañía Colonizadora Alto Paraná (Upper Paraná Colonization Company), founded on May 2, 1919. The first colony founded by the company was Puerto Rico in late 1919, which only received Catholic settlers. In 1920 another one, Montecarlo, was founded for Lutheran settlers.

In the period 1919–1924, under the direction of Carlos Culmey, about 12 percent of the plots of Puerto Rico were traded. According to Gallero, this percentage may be considered high, since in a few years the central plots of the main routes were occupied. However, this was a problem for investors because many settlers failed to pay off the plots within the allotted time. In 1924, after several changes (such as the retirement of Carlos Culmey) the colonizing company responsible for the colonization process changed its name to Compañía Eldorado, Colonización y Explotación de Bosques Limitada (Eldorado Company, Colonization and Forestry Ltd.).

According to data published by Compañía Colonizadora Alto Paraná, 160 families had already been established in the colonies of Puerto Rico and Montecarlo in 1922. The Crónica de la Comunidad Católica de Puerto Rico indicates that at the end of February 1922, eighty-seven families were living in the colony with a larger number of single people and a total of approximately five hundred inhabitants. The same source brings light to a model of frontier exploration adopted by many German Brazilian families: “first, they would send their older unmarried children to open a clearing in the forest and prepare the first shelter for the family upon arrival.”

**SETTLEMENT OF COLONIES**

Land was divided into small plots not very different from the plots of the former colonies in Rio Grande do Sul. According to the colonizing companies, twenty-five hectares was enough for a family to settle and thrive. Thus, small communities were established and often called _lines_ or _picadas_ (in German,
The socioeconomic structure implemented in the colonies, which were set up in small communities with a church and a school, helped in the community integration. The different communities were distributed in such a way that all of them had access to water (river or stream) and a road. Within the communities, most of the settlers ended up erecting their facilities (house, pigsties, stables) close to rivers to have easy access to water. This occupation of riverbanks contributed to the destruction of riparian vegetation, increasing the erosion and the silting of rivers.\(^{35}\)

Developing the plots followed various steps, the first of which was to fell a section of the forest. This task was the most difficult for settlers who lacked external help, experience, and proper tools.\(^ {36}\) Once the vegetation was removed, “it was allowed to dry for four to six weeks and then burned in several places on the first clear day.”\(^ {37}\) Logs, roots, and stumps were included in the burning. After that, settlers would remove the weeds and use the land for crops. After harvesting, they would clear the land by hoeing or plowing and burning. In this way, they continued the predatory model of cultivation of their parents and grandparents. Settlers usually managed to clear and plant one or two hectares in the first year. If hardwood trees had not yet been removed or reserved by the colonizing company, plot owners were allowed to exploit them. The land was largely exhausted within a few years. Settlers did not practice crop rotation, they did not attempt to prevent erosion, and only from time to time would they use manure or straw.\(^ {38}\)

Concerns regarding forest preservation were not part of the planning of colonial leaders. In a report published in 1940 in the *Skt Paulusblatt* magazine, a prevailing opinion at the time is expressed:

> There, where 1,412 courageous pioneers agreed to fight against the virgin forest, the forest will be defeated soon. There, where some time ago the terrain was dominated by giant trees, which lifted their branches to the sky, today, either maize spreads out in the fields, or tobacco spreads its broad leaves, or the farmer burns his new garden.\(^ {39}\)

### DEFORESTATION

Clearing the forest was part of the colonization process, and along with the settlers, sawmills were soon installed. They tended to belong to people or groups
that had worked in the logging industry in Rio Grande do Sul. Timber export to Argentina was already a business in Rio Grande do Sul and even in parts of the west of Santa Catarina. Logging was an objective from the outset as colonization companies expected part of their profits to come from the exploitation of forest resources. Thus, they set up sawmills, opened roads in locations of interest to them, and organized the transportation of timber.

Logging in the far west, which is characteristic of small logging companies, began in the 1930s; it increased in the following decades and rapidly intensified in the 1960s. From the 1960s on there was the technification of the sector with the introduction of the band saw mill powered by electricity. The logging sector continued to grow until the end of the 1980s, which was the period of highest deforestation. Logging, which was practiced with simple axes and handsaws, was one of the few industries in the region, and settlers felled the forest to clear land for agriculture. They provided timber and received, in turn, lumber from colonization companies to build their homes or other agricultural facilities. Because of the low technical conditions of extraction at the beginning of colonization (transportation and the processing of logs), yields were low, and much forest resource was wasted. In addition, after the felling, the remaining forest resources were burned or left on the ground to deteriorate.

Sawing was carried out using what the loggers called a woodpecker saw, and it was powered by waterwheel or steam tank (also known as a traction engine). Loggers only exploited trees 40 centimeters or more in diameter with straight and healthy trunks and high value logging species.

Transportation initially relied on animal traction, but beginning in the 1940s transportation to places with passable roads began in trucks (see fig. 3.3). In the photograph in figure 3.3, rural farms appear in full expansion, with parts of the temperate deciduous forest in the background.

The diaries of Maria Rohde show aspects of daily life in the Itapiranga colony during the years from 1920 to 1940 that helps us to understand the logging extraction process and transportation to the main consumer market in Argentina:

Currently, the colony carries out its own timber trade. Since the region is already colonized and cultivated to its last frontier, it is possible to see the monstrous wealth of these forests’ woods. Many settlers today, after building their houses, facilities and sheds with wood taken from their land, can also sell “beautiful logs” and get extra money from it.
The situation was no different in Misiones, where logging was the main economic activity from the beginning of the twentieth century up to the 1960s. Timber exploitation was made possible by the existence of large extensions of primary forests, abundant labor, and transportation through the Paraná River mainly through the banks inside the territory. In Misiones, the process of deforestation increased in the 1940s, and in addition to animal traction to transport timber, the truck was introduced thus allowing faster transportation to the Paraná River, where the transportation to Argentina occurred. The arrival of timber industries and sawmills increased the pressure on the forest. Similar to the west of Santa Catarina, the sawmills in the province of Misiones were small and low tech despite the large number of these companies there.

**SMALL FARMERS**

In general, the settlers in the first two decades of colonization worked practically with family subsistence farming, producing primarily for home consumption and marketing the few surpluses. The main crops were maize, cassava, and
common beans. Puerto Rico and Montecarlo cultivated the same crops in addition to yerba mate. In his book *Pioneer Settlement in Northeast Argentina*, Eidt highlights the importance of cassava, and in his view, it was “the easiest food crop to plant and had the dual advantage of producing its tubers even in poor soil and of not rotting if left undisturbed in the ground.”

For Jungblut, the traditional agriculture practiced by the settlers can be characterized in general terms. According to the author, lands were naturally fertile, which initially generated good harvests. The settlers worked with tools that required great physical effort—such as a hoe, sickle, horse-drawn plow, manual machine for cereal crops, wagon—and they usually had an oxen yoke and a horse. Swine production was also part of the daily life of family farming. Lard was produced on the farm, and farmers reared lard pigs of the *speckschwein* breed. In the case of Itapiranga, for many years, the binomial tobacco and lard was the backbone of the economy in the region. According to Franzen, there was a surge in swine production in the late 1940s—with the emergence of industrial slaughterhouses in São Paulo, which bought pigs for slaughter—to supply consumer growth. To serve the consumer market, there was also the need to improve the genetic stock of pigs. The expansion of the regional pig husbandry in the 1960s was responsible for the creation of the industrial slaughterhouse Sociedade Anônima Frigorífico de Itapiranga (SAFRITA). Most shareholders were merchants from Itapiranga.

The first cash crop planted in Itapiranga and Montecarlo was tobacco, which provided income within one year. Kentucky, Maryland, and Criollo Misionero were some of the principal stands planted. In the 1960s, there were approximately 10,000 hectares of small plots cultivated, and at that time Misiones produced nearly one-fourth of the Argentine tobacco crop. For certain observers, tobacco presented numerous advantages such as being very good to plant in newly deforested land. Moreover, it could be planted with hand tools and held the promise of high yields in only a few years’ time.

Tobacco cultivation in Itapiranga, Puerto Rico, and Montecarlo was supported by tobacco industries. According to Jungblut, Volksverein made an agreement with the tobacco companies from Rio Grande do Sul that provided a technician to instruct the farmers. This technician began his activities in late 1929, hoping that there would be good harvests in 1930–1931. He visited almost all of the 360 existing farms. With the result obtained from the first harvest in 1931, tobacco became the second largest income source for the settlers. Greenhouse tobacco was slowly phased out after the 1950s as the easier to manage
burley tobacco grew in popularity. In the 1970s and 1980s, Itapiranga saw the modernization of tobacco production through the introduction of other crop varieties and of fertilizers, pesticides, and tobacco sheds.\textsuperscript{30}

In relation to Misiones, Gallero discusses the cultivation and purchase of tobacco in the period between 1930 and 1946 in the colony of Puerto Rico highlighting the role of tobacco producers and the Johann Company, the colony’s largest company of tobacco classification, purchase, and storage (\textit{acopiadores} in Spanish). Working together with farmers was indispensable for commercial development, as this was the first step to link production with processing and consumption centers. According to Gallero, in 1943 there were thirty-two traders and one tobacco factory in Misiones. As Misiones reached the highest number of tobacco farmers with a total of 9,569 producers, it represented almost 62\% of the national farmers, according to the Department of Economics and Control.\textsuperscript{51}

The involvement of settlers in the yerba mate industry is a topic rarely addressed in Brazilian historiography. In a 2013 doctoral dissertation, Gerhardt deconstructs the idea that the extraction of yerba mate was not part of the daily life of the colonies. The author points out that in some forest areas there was plenty of yerba mate, as in Santa Cruz do Sul, and since the decade of 1880, it was listed as one of the main products exported by the colony.\textsuperscript{52} From that region German Brazilians migrated to the new colonies in Santa Catarina and Misiones.

Yerba mate appeared in Volksverein advertisements. Yet there are no studies or data showing the importance or even the existence of large amounts of yerba mate trees in Itapiranga. However, other sources indicate that the extraction of yerba mate in western areas was an important source of income.\textsuperscript{53}

Unlike in Itapiranga, yerba mate was one of the main products in the colonies of Misiones. According to Gerhardt, advertising material for Compañía Eldorado, written in German, presented yerba mate as a crop that produced results from the third year after planting and gave increasing yields in subsequent years. Settlers were nonetheless subject to market prices controlled by businessmen in the yerba mate sector.\textsuperscript{54}

When analyzing the data on the production of yerba mate in Puerto Rico and Montecarlo, Gallero found a substantial difference in the numbers of yerba mate plants found on the two colonies. While Puerto Rico had 4,396 plants, Montecarlo had a total of 28,876 plants. The author explains that this is related to the agrarian landscape, making it clear that German Brazilian settlers did
not practice yerba monoculture, and if they did, it was only on a small scale. One of the explanations for this, again according to Gallero, is the culture of these immigrants. Since in Brazil mate was harvested from natural yerba mate groves, settlers did not have expertise in this type of cultivation. Another negative aspect is that the economic return of yerba mate would take longer than that of other cultures—around five years for the first harvest.\textsuperscript{55}

**AGRIBUSINESS IN WESTERN SANTA CATARINA, BRAZIL, AND THE REFORESTATION INDUSTRY IN MISIONES, ARGENTINA**

The continuation of predatory cultivation methods in the two regions generated similar problems, but settlers in diverse places adopted different solutions. New alternatives were sought to cope with soil exhaustion and the reduction of forests. With the impoverishment of the population, many opted to migrate to the cities, especially larger centers, where they were employed in the secondary and tertiary sectors. Others migrated to other regions, opening up new agricultural fronts in central and northern Brazil as well as Paraguay, continuing the environment exploitation model with no worries regarding preservation. However, statistics show that most of the settlers ended up adopting new agricultural models and remained on their small farms with various crops. Still others joined the swine and chicken agribusiness, as in western Santa Catarina, or they opted for reforestation with exotic trees for the pulp industry, as in Misiones.

According to Rambo, capitalist penetration in the countryside began in the 1960s with the first agribusiness industry in the region of western Santa Catarina: SAFRITA. This was intensified in the 1970s with the subordination of agricultural work through production contracts.\textsuperscript{56}

The change from traditional farming to market agriculture, in the case of Ita-piranga’s adoption of an agro-industrial model, also brought sweeping changes to the region’s environment. With vertical integration, in which the farmer was forced to follow the technological package developed by the agribusiness companies, pesticides and chemical fertilizers became ubiquitous.

Reforestation in Misiones, according to Mastrangelo, was already happening in the late 1940s, including the cultivation of *Araucaria angustifolia* (Brazilian pine) in Eldorado by Celulosa Argentina S.A. and Porto Libertad. Following reforestation for commercial purposes, small and medium owners used the
cultivation of Brazilian pine to serve as a forest curtain for tung crops and as “an alternative to the failure of intensification of yerba mate plantations.”

The project to produce pulp in Misiones began in 1949 through studies carried out by engineers from Celulosa Argentina S.A. A factory was then established in Puerto Piray in 1956. Moreover, according to Mastrangelo, there was a progressive increase in reforestation with resinous pine. The change to this type of monoculture tree occurred in 1960, when it reached almost five times more than the first area planted with this species—from 219 hectares in 1959 to 911.6 hectares in 1950. Furthermore, in 1967 almost all reforestation areas were carried out with *Pinus* species.

### FINAL CONSIDERATIONS

The two regions addressed in this chapter received German Brazilian immigrants in the same historical period. This process has caused drastic changes in the occupied landscape. Yet both western Santa Catarina and the Misiones Province received other ethnic groups as well from throughout Latin America and Asia. This broader influx also contributed to the rural and urban change of the original landscape. The current scenario is characterized by multifaceted landscapes where the continuous forests that existed at the beginning of colonization are now highly fragmented. Only a few small stretches of the original forest still remain.

Misiones now contains a mix of native forests as well as four main types of land use: modern agriculture, forest plantations, mixed use (i.e., subsistence agriculture), and pastures. Agriculture relies mainly on perennial crops such as yerba mate and tung, and Misiones is the largest producer of yerba mate in Argentina. Forest plantations are mainly grown with *Pinus* and *Eucalyptus*. Between 1973 and 2006, “the area of forest plantations increased from 1 to 11% of the province, replacing native forests, agriculture and pasture, partly due to government subsidies.” Mixed use (i.e., subsistence agriculture) continues to be seen on small familiar units that grow tobacco and maize. These small farmers are subject to economic insecurity “because they do not have easy access to the market, credit, or other economic incentives, as have large producers, which uses their land for intensive agriculture or plantations.”

Today, western Santa Catarina’s resulting anthropic landscape can be classified as follows: small fragments of forest; large areas of soybean monoculture;
Pinus and Eucalyptus plantations; agro-industries, notably pig and poultry husbandry; and small farmers relying on various modes of economic survival. The major remnants of forests are concentrated in three areas of permanent preservation: Parque Nacional das Araucarias (National Park of the Araucarias), Estação Ecológica da Mata Preta (Black Forest Ecological Station), and Parque Estadual Fritz Plaumann (Fritz Plaumann State Park).

The pursuit of economic success in the region has defined the territorial and environmental setting of western Santa Catarina. The imposed continuous changes were incremented by the dynamism and concentration of the agribusiness sector. The agro-industrial integration model adopted in western Santa Catarina was responsible for most of the growing socioeconomic and environmental problems. Among its negative consequences were regional economic concentration, exclusion of small family pig farmers, pollution of water by pig manure, and the regional and rural exodus, especially of young people. The predominance of monocultures such as soybeans, in addition to maize and beans, with little regard to the recovery of the soil and the lack of legally binding relocation policies of pig manure have all contributed to pervasive soil exhaustion.

The migration process has continued into new agricultural frontiers, taking with it the long-standing model of predatory production. With new technologies, however, forests are affected at an increasing rate, and agro-industry as a whole concentrates primarily on commodity monocultures and livestock.

Currently, the Atlantic Forest biome of southeastern Brazil and northeastern Argentina is one of the most threatened and diverse ecosystems in the world. As seen throughout this chapter, the endangered condition of this forest is to a large degree the result of the early colonization model adopted in the states of Rio Grande do Sul, Santa Catarina, and Paraná, in Brazil, and in the province of Misiones.

NOTES

5. The term is used in the same way that Paulo Pinheiro Machado used it in his work on the caboclo involvement in the Contestado War (1912–1916) in southern Brazil. Although “there is no ethnic connotation in this word, often the caboclo was brown skin, often black. But the main feature of this word is that it distinguishes a social and cultural condition, i.e., poor peasants with no ownership documents, shifting cultivators, and/or landless workers in cattle ranches. Later, with the first waves of immigrants from Germany and Poland from the second decade of the nineteenth century, these immigrants turned to a caboclo way of life, acquiring many habits and customs of that population, such as farming methods.” See Paulo P. Machado, Lideranças do Contestado: A formação e a atuação das chefias caboclas—1912–1916 (Campinas: Editora da UNICAMP, 2004), 48.


10. Tutz Culmey Hewig and Ilga K. Knorr, A filha do pioneiro (São Carlos: Prefeitura Municipal de São Carlos, 1987).


13. The area colonized by the company comprised the region that today belongs to the municipalities of Palmitos and Cunha Porã (Protestant Germans Brazilians), São Carlos and Saudades (Catholic German Brazilians and Germans Russians), and Caibi (Italian Brazilians).


21. Ibid., 131–32.


24. Ibid., 165–66.


33. Ibid., 124.

34. Ibid., 121.


41. Ibid., 156.


44. Gallero, *Con la patria*, 172.


55. Gallero, *Con la patria*, 164.


59. Ibid., 24.


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