

Conflicts for control of Mapuche-Pehuenche land and natural resources in the Biobío highlands, Chile

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Abstract

This paper analyzes the impact that the Chilean government's land-ownership policies have had on the Mapuche-Pehuenche communities, especially with respect to the control of their territory and natural resources. The results show a tendency towards non-protection of their rights to control their territories with an increasing loss of autonomy and control over land. State intervention, together with large private investment projects, has generated socio-economic and territorial impacts in the indigenous areas, such as the migration of young persons, socio-cultural changes, and conflicts over access and use of ecological zones. The territorial re-ordering of the original Mapuche space, combined with its increasing appropriation by private actors and the Chilean government, has produced a subordinated integration of the indigenous communities with respect to national society.

Keywords: *indigenous communities in Chile, indigenous policies, Mapuche-Pehuenche territories.*

Resumen

Este artículo analiza los impactos que las políticas territoriales de los gobiernos de Chile tuvieron sobre las comunidades Mapuche-Pehuenche, especialmente respecto del control de su territorio y recursos naturales. Los resultados muestran una tendencia histórica hacia la desprotección de sus derechos a controlar su territorio y una pérdida de su autonomía y control sobre sus tierras. La intervención del Estado, junto con los proyectos de inversión privada, ha generado impactos socioeconómicos y territoriales en las áreas indígenas, tales como la migración de personas jóvenes, cambios socio-culturales y conflictos por el acceso y uso de zonas ecológicas. El reordenamiento territorial de los espacios originales de los Mapuche-Pehuenche, junto con su apropiación creciente por actores privados y del Estado chileno, ha producido una integración subordinada de las comunidades indígenas con respecto a sociedad nacional.

Palabras claves: *comunidades indígenas en Chile, políticas indígenas, territorios Mapuche-Pehuenche*

Introduction

The Mapuche¹ comprise the largest native population in Chile representing close to 93% of the million inhabitants who could be considered as natives. Together with the remainder, the Aymara (5%) who live in the Puna de Atacama highlands and the Rapa Nui (2%), who settled on Easter Island, the indigenous population accounts for 7% of

the total Chilean population. Forty-four percent of the Mapuche live in Santiago, the Chilean capital of six million inhabitants, and only 250,000 in rural communities distributed principally in two central-southern Chilean regions: Araucanía and Biobío, located 500 km south of Santiago (Pérez 2000:63; INE 1997:9-27; Gissi 2004:1-12). The Mapuche have suffered an intensive, permanent migration process from their Andean highland home to the cities, as a direct consequence of their pervasive precarious economic situation.

The Mapuche's poverty contrasts with the recent socio-economic progress of Chile, which is often considered a model for emerging economies (Pérez 2000:76-77). Its economic development has been essentially based on the production and export of natural resources and raw materials. Minerals (mainly copper) in the north, vineyards and fruits in the central region, and lumber and fish in the south, have been the basis of higher rates of economic growth in the global economy since the middle of the 1970s. Many of the critical export-oriented resources and several indigenous groups are located in the Andes, which comprises Chile's eastern border for more than 4,500 km.

In central and southern Chile, an important section of the Andes has been the Mapuche's habitat for more than a hundred years since the nineteenth century. Yet, their territory has been persistently and permanently reduced by the intervention of the Chilean state, as a political response to pressures of dominant economic sectors and social groups. The colonization and sharing of the Mapuche's land, was planned, organized and executed almost two centuries ago by the Chilean government, and is one of the main reasons explaining the permanent clashes between the State and the native people for control and ownership of land and resources, a conflict that has reached one of its most critical moments in recent years. The current conflict is over the timber plantations controlled by national and foreign companies in hundreds of thousands of hectares claimed by the Mapuche as their traditional land and, more recently, by the construction of hydroelectric dams along the river Biobío, whose upper section has been traditionally inhabited by the Mapuche.

Historically, the Mapuche sub-groups lived in an extensive area located between the Itata River to the north (36°S) and the Toltén River to the South (39°S), but several local communities, which correspond to Mapuche-derived branches, were even more dispersed. For example, the Huilliches, a population dedicated to fishing, occupies the southern section, principally on the Great Chiloe Island (42° S); the Lafkenches who live along the coastal lands, and the Pehuenches² and the Puelches, two Andean mountainous communities that live on the Chilean and Argentinian slopes, respectively (Figure 1).

Until the mid-nineteenth century, Chile was divided in two separate sections because the center-south of the country had been under Mapuche military control since the sixteenth century. Indeed, the Spanish government, and later the Chilean Army, could not easily defeat the Mapuche troops, given their extraordinary ability to fight over mountains and in the forests (Bengoa 1985:140-142).

During more than three hundred years from the sixteenth century, the Mapuche organized the land under their control with a common property system (*Lof mapu* / *Lof che*³), where each community occupied a specific place under the governance of one *lonko* (cacique) or community head. According to Bengoa (1999: 45-55), the Mapuche effectively occupied the total area under their control, strategically avoiding the existence of empty spaces. However, the imagination of the urban Chilean society, and the development of a land-demanding agrarian society created the illusion that most of this land was empty. The accepted slogan based on the fantasy at that time, and the one that propelled southward colonization was "A southern Chile without people, and a lot of land without owners" (Bengoa 1999:40-41).

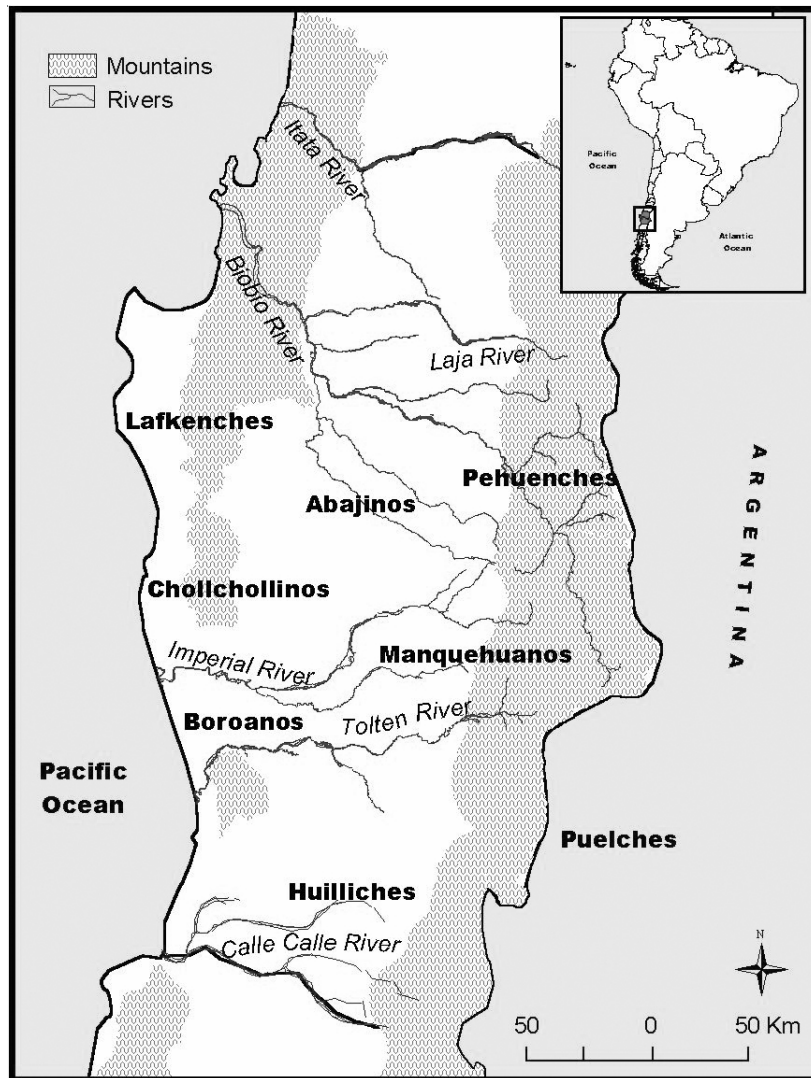


Figure 1. Mapuche sub-groups historical territories
(Sources: the authors and Bengoa, 1985)

From the second half of the nineteenth century, the Chilean government began to militarily occupy Mapuche land for three reasons: the necessary geographical unification of the country; the incorporation of Mapuche land into the wheat-producing export-oriented system; and to protect national and foreign (German, Swiss, Italian) colonizers who began to expand southwards. Culturally, the Chilean government attempted to impose what they believed was a battle between civilization and *savages*, or the necessity to solve the dilemma between progress versus underdevelopment (Mariman 2000:3-5; Bengoa 1985:178-185).

The Chilean government saw the natives as an obstacle to economic development. To politically justify the military occupation and the distribution of Mapuche land to colonizers and land speculators, the Chilean government accepted the idea that these lands “were not effectively occupied”, “that they were empty lands” and finally, “that this land was rescued from the savages”(Neculman & Werlinger 1994: 15-18).

Once the government controlled the land, the apparent definitive settlement of the Mapuche occurred between 1860 and 1920 when small plots of land, awarded by the Chilean state to the Mapuche, as a “gift” under the legal figure called “*merced de tierra*”, or land grants (Figure 2). A total of 500,000 ha. were shared among 3,078 properties (Bengoa 1985: 355). In practice, the intervention of the Chilean government acting from the perspective of a homogeneous geopolitical viewpoint related to the national territory meant the appropriation, division and fragmentation of the lands the Mapuche had held for generations. As a result, the Mapuche lost their territorial contiguity and political autonomy.

Furthermore, the government’s territorial organization of the Mapuche landholdings only considered the small agricultural plots that surrounded Mapuche houses, but did not include other relevant components that were fundamental for their survival on the mountain slopes and in the valleys, such as water and forests. Since Mapuche territorial organization and their holistic concept of a common resource system were either unknown or at best misunderstood by the government, they were reduced and fragmented. The new property rights did not respect the traditional highland-lowland interactions. After controlling ten million ha, Mapuche land was reduced to only 500,000 ha. in 1929, concentrated in two Chilean regions: Araucanía and Biobío (Mariman, 1990:1-14). As a consequence, the average landholding of some 80,000 people was a mere 6.1 ha.

In 1927, the Chilean government dictated a series of laws and decrees permitting the subdivision of the Mapuche communities’ land to replace the common communal ownership system with market-oriented private property, aiming to facilitate the transaction of individual plots from the native people to farmers. Large landholdings (*latifundios*) were gradually being established through the amalgamation of enormous pieces of land, which were taken by force or “purchased,” many times illegally from the Mapuche. The new landowners expelled the native population, increasing the fragmentation process, and atomizing their territory into very small plots. Relevant clashes repeatedly occurred over the control of critical resources between large farmers and indigenous people (Calbucura 1993:3-6).

In the following decades of the twentieth century, and especially since 1960, a new reduction in Mapuche land, this time of State-provided land, occurred again. One hundred fifty thousand ha. of Mapuche land practically disappeared for *unknown* reasons (Tordera 1982:135-146). The recovery of this land constitutes the principal contemporary conflict between the Mapuche, the Chilean State and several private companies and landowners.⁴

Reduction and fragmentation of the land previously held by the Mapuche have provided sufficient reasons to maintain the conflict between the Mapuche and Chilean society alive and unresolved since the beginning of the twentieth century. They are also some of the principal factors that explain the Mapuche’s current very poor living conditions. In 1960 it was estimated that each Mapuche family needed to own at least 50 ha. of land to ensure their subsistence. However at that time, a family only owned on average 9.2 ha. Other studies indicate that the Mapuche currently own between 5 and 20 ha. of what are essentially badlands, and that their harvests are, generally, much lower than the amount required to cover a family’s needs in food and agricultural inputs (Haughney and Marimán. 1993: 3).

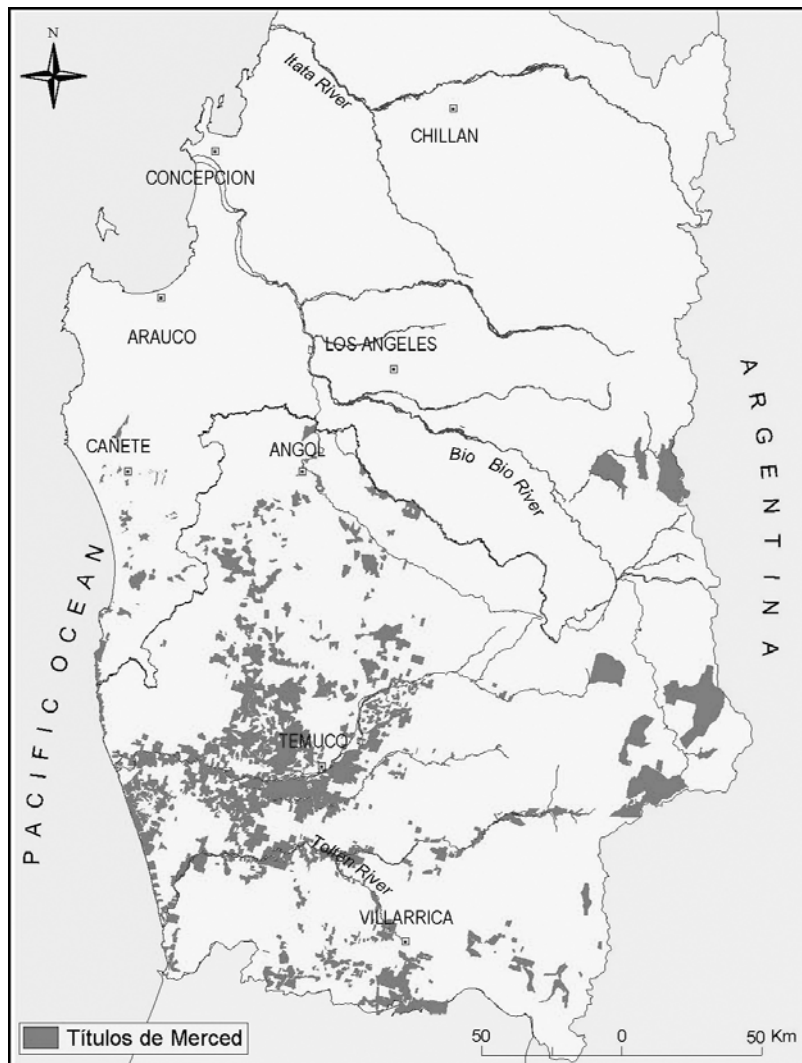


Figure 2. Land titles awarded to Mapuche, 1860-1920. (Source: developed by the authors)

The agrarian reform that took place in Chile between 1960 and 1973 generated great expectations among the Mapuche, since they saw this process as the opportunity to recover their ancestral lands, mainly because the target of the agrarian reform was the division of the largest landholdings concentrated in the Bío Bío and La Araucanía regions. However, their expectations were again frustrated by the government that preferred, for reasons of political convenience, to share the land among the peasants (*campesinos*) instead of recovering prior Mapuche territories.

In the two Mapuche regions, 584 large landholdings, covering 710,816 ha. were expropriated and distributed among Chilean peasants who had previously worked as *inquilinos*.⁵ In the Bío Bío region, 88,950 ha. were expropriated from large farmers of

which 53,326 (60%) were passed to non-Mapuche campesinos; only 35,623 ha. were given to Mapuche (EULA 2001a:3-4). The situation was even less fair in the Araucanía region, where close to 200,600 ha. were transferred to non-Mapuche peasants and only 9% (19,328 ha.) were passed to Mapuche (EULA 2002:4-5). The agrarian reform program certainly did not favor Mapuche claims. The main goal of the reform was to strengthen the rural farming society, without any particular consideration of ethnicity (Molina 2000:188).

A large amount of land remained under the direct control of the state until 1973 when, during Pinochet's dictatorship, a new law favoring forest development in southern Chilean regions was passed. At the same time, the military government initiated an agrarian counter-reform by which large landholdings were given back to big farmers.

Mapuche-Pehuenche land in the upper Biobío river basin

The governmental policies applied to Mapuche lands studied empirically by us is a sub-group of the Mapuche: the Pehuenche group. The Pehuenche live on both the western and eastern slopes of the Andes, in the Santa Bárbara and Lonquimay communes in Chile and Neuquén province in Argentina. In Chile, the Pehuenche population includes some 4,639 individuals who belong to eleven indigenous communities in the upper section of Queuco and Biobío rivers (Table 1).

Community Name	Estimated number of families	Number of People	Land area (Ha)	Density (Hab/ha)
TrapaTrapa	160	900	14,204.42	15.8
MallaMalla	65	400	4,361.71	10.9
Cauñicu	106	700	9,380.9	13.4
Pitril Andrés Gallina	80	400	2,384.73	15.5
Callaqui	80	500	1,424.42	2.92
El Avellano	15	59	164.19	2.78
Quepuca Ralco	90	400	11,501.61	29.3
Ralco Lepoy	125	800	18,522.47	23.2
Guayalí	100	500	18,969.33	40.9
Los Guindos ^(a)	36	180	n/c	n/c
Total	817	4,639	86,530.3	18.7

Table 1. Pehuenche communities in the Biobío highlands

^{a)} This community does not own land and the families live in a private lot.

Sources: *Estudio Legal de la Propiedad Sector Alto Biobío*. Corporación Nacional de Desarrollo Indígena, Sede Cañete (2000). Instituto Nacional de Estadística (I.N.E). XVI Censo de Población y V de Vivienda 1992.

Currently, the Pehuenche occupy some 86,530 ha., which represents 6.3% of the total Biobío watershed (Figure 3). In 1997, the Planning Ministry declared 227,107 ha. of Pehuenche lands to be the "Biobío Indigenous Development Area" (Biobío IDA), a space where public services in general, and the National Corporation for Indigenous Development in particular, should focus their actions to promote harmonious development in favor of local people and their communities, following the ideas of the Indigenous Law passed in 1993.

Most of the Pehuenche currently live in extremely poor conditions, practicing a subsistence economy based on the complementary use of the Andean ecological zones,

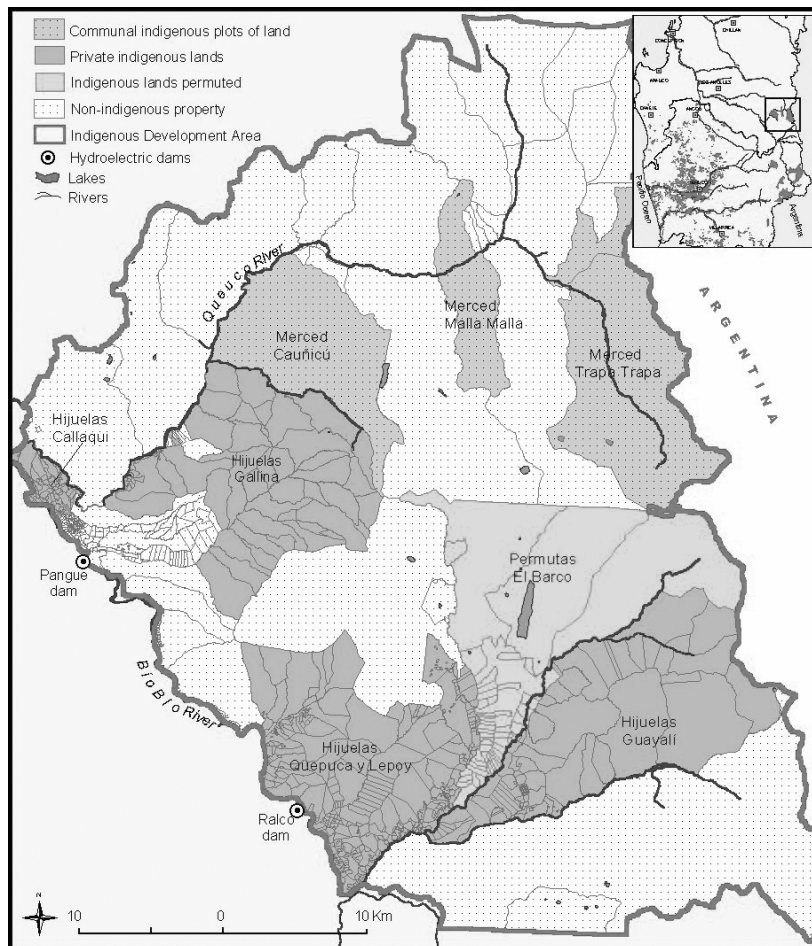


Figure 3. Actual situation of Pehuenche lands in the Biobío highlands legally declared an Indigenous Development Area (Source: Azócar et al., 2003)

which are known as '*veranada*' (summer grasslands)⁶ and '*invernadas*' (winter grasslands).⁷ For the Pehuenche, a large part of the territory is for common use, and its use is based in the annual cycle of activities and the availability of natural resources, assuming territorial continuity (free movement of people and resources) between these ecological environments (Molina & Correa 1996: 32; Molina 1998:43-62).

Pehuenche agricultural lands are generally located on river terraces. However, even for subsistence, these small landholdings have low yields and productivity, and are not enough to maintain the population. Available research concludes that physical and socio-economic constraints as well as the depopulation of the zone severely limit Pehuenche survival.⁸

Subsistence agriculture includes cereals (wheat and barley), potato and bean cultivation, vegetable gardens in open air and under greenhouses, and pastures (clover and alfalfa). Generally speaking, the production system is very primitive; production is low –

much lower than regional and national standards, and uses self-produced seeds and animal manure.⁹ High rates of water-induced erosion and soil compaction, poor shallow soils, climatic extremes, and steep slopes are factors that limit a household economy based exclusively on primary activities. They are forced to diversify their activities to support their life in the mountains. For example in 1992-1993, 40% of the Pehuenche community of Callaqui work outside of the community in paid jobs, 43% are involved in unpaid household activities, and 16% take care of the livestock (Azócar 1993:118-122).

The Pehuenche husbandry system is extensive with significant seasonal animal movements. It obtains very low yields in terms of animal weight, especially during droughts. They travel with their cows, sheep, goats and horses between the winter and summer pastures. Goats are the most important food resource for Pehuenches given their better adaptation to local climate and slope conditions.

Between April and November, the livestock is maintained in the winter grasslands near Pehuenche homes, grazing pastures or consuming forage stored during the summer season. However, overgrazing due to the plots' small size has severely affected the lowlands' carrying capacity, and consequently the Pehuenche have been forced to maintain their animals at higher elevations, even during the winter. As a result, overgrazing has been transferred from the lower to the higher zone, which is now producing new clashes between communities as well as with the non-Mapuche who also own animals (Carrasco & Figueroa 2003: 20-40). Livestock is the most important economic activity for Pehuenches since it provides the only source of direct income. Animals are sold in the communities or in the nearer urban settlements, although they have very precarious sanitary conditions (EULA 2001b:8-9).

To maintain their livestock, the Pehuenches need large landholdings as well as easy transit between highlands and lowlands. The flooding of riverbeds and lower river terraces due to the construction of hydroelectric dams has meant the disappearance of winter grasslands and consequently, the interruption of the seasonal livestock circuits. International companies are trying to compensate the flooding of Pehuenche lowlands, offering land and support to settle the Pehuenches communities exclusively in the highlands. This means a dramatic change in their way of life, and one that is complicated by their cultural practices based on highland-lowland interactions as well as on a spatial vision that values the complementarity of mountain ecological belts as fundamental for their subsistence.

Another important economic activity for the Pehuenche is forestry. However, overexploitation of native forests by both indigenous people and colonizers has severely damaged the ecosystems as well as the natural resource base. The necessary enhancement of grasslands and croplands, burnings and harvesting has forced a permanent and continuous retreat of natural forests. Additionally, between 1940 and 1970, the large private company Ralco S.A. while harvesting wood-chips for cellulose industries, generated very severe deforestation (Azócar 1993:48-49; Aguayo 1998:36-37). Timber extraction to be used as fuel, charcoal and construction materials for fences has affected both highland and lowland native forests. However, despite the above-mentioned devastation, the Biobío native forest still possesses a large use potential.

The gathering of the *piñón* or *nguillio* (the *Araucaria Araucana* fruit) is one of the most traditional activities practiced by Pehuenches. Native forests, composed of araucaria, roble (*Nothofagus obliqua*), coihue (*Nothofagus dombeyi*), and raulí (*Nothofagus alpina*) constitute a fundamental food source in their diets and a source for materials such as medicinal plants, fungi, fruits and stems, which they commonly use, and particularly when they celebrate religious ceremonies, such as *nguillatun*.¹⁰

In the winter, the piñón gathering grounds, located between 900 and 1,400 m., are covered in snow up to two or more meters. The Araucaria forests located principally in the highlands are formed by long-living, slowly regenerating trees with low seed dispersion that form pure forests in some sectors, and are associated with lenga (*Nothofagus pumilio*) and ñirres (*Nothofagus antartica*) in other sectors.

The Araucaria forests, and especially the piñón, have been a continuously important source of resources for the Pehuenche communities. Several studies have identified the importance of this resource for the Pehuenche, identifying the distinct uses of the piñón, collection methods, symbolic representations, and the use of its wood.¹¹

The fragmentation of Pehuenche territory: origins of a conflict?

The territory occupied by the Pehuenche since the arrival of the Spanish until the nineteenth century included the foothills of the Andes between the 34° and 40° south (Figure 4).

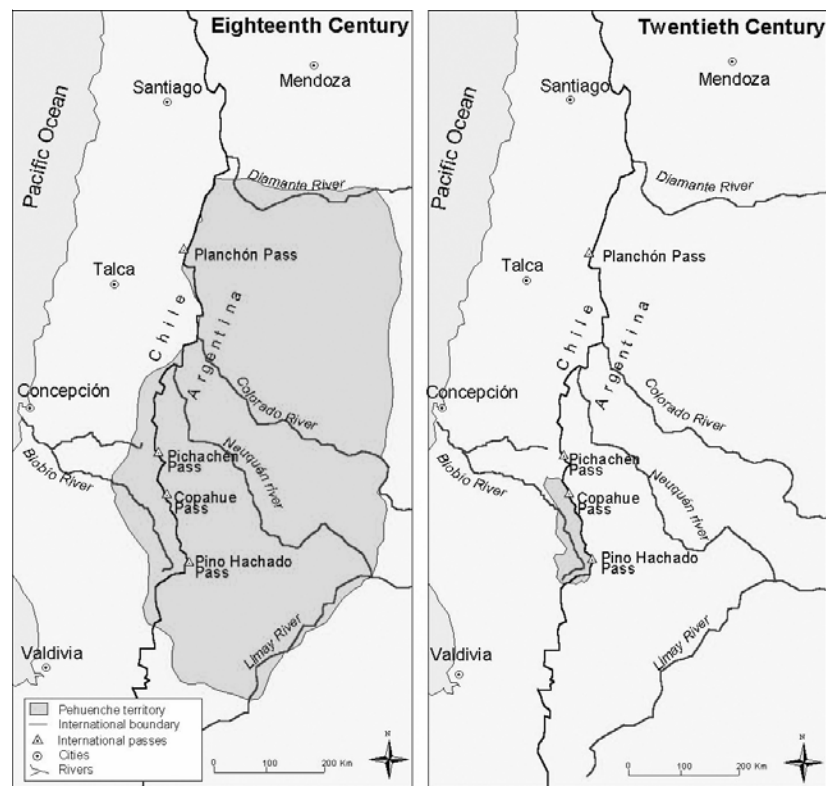


Figure 4. Pehuenche territory in the 18th and 20th centuries (Source: Azócar et al., 2003)

All historiographic and archeological sources demonstrate that the Pehuenche were present in the Biobío highlands since times immemorial.¹² The nomadism that the Pehuenche practiced in earlier centuries did not imply the abandonment of their lands, but rather that they practiced dominion over territories that they seasonally needed to occupy in order to survive. In the mountain valleys, they exercised possessive acts as described by

Diego de Rosales (1877): "Each one had his own piece of the mountain that was signaled and inherited from his ancestors and whose pines of the district were for his piñón harvest for food for the year" (author's translation¹³). The same practices were witnessed at a later date in other chronicles such as those by De La Cruz and Poeppig (1960:347-400).

In the mid-nineteenth century, the Chilean state applied a virtually uniform policy to end the special situation of the Pehuenche lands. The new Civil Code, based principally on the Napoleonic model, recognized only individual forms of land occupation and the communities theoretically possessed the right to register their lands as private property (Plant & Hvalkof, 2002:15). In practice, the special laws, whose objective was to avoid abuses of indigenous lands that had been promulgated in the mid-nineteenth century, did not achieve their objective because they were not applied or they were interpreted capriciously. Molina and Correa argue that

"...the loss of Pehuenche land is produced in a context of conflict and persecution, which facilitated land speculator action... who through the purchase of actions and rights from the indigenous people, took control of large land extensions, whose boundaries were redacted as wished or corresponded to the jurisdiction of determined chiefs. The property obtained from the indigenous peoples through deceitful transactions is legalized in notaries, and the property titles are registered in the Real Estate Conservatory" (Molina & Correa 1996:25, author's translation).

The large, private properties in the Biobío highlands were shaped after 1870 by the cession of indigenous rights to private parties. Tenant farmers and administrators, who were mere delegates of the owners, confirmed the ownership of the large properties, becoming in practice the colonizers of the mountain valleys while imitating the Pehuenche way of life. "Through the practice of summer and winter grazing lands, the grazing economy, piñón recollection, small gardens, the territorial occupation of private lands was consolidated, creating a frontier with the Pehuenche who were denied access to their traditional locations of economic use due to non-indigenous occupation" (Molina & Correa 1996: 30)

Another procedure used by private parties to divest the Pehuenche of their lands consisted in the occupation of the mountain valleys by third parties, who took animals to the summer grazing lands. They then took control of the sector and established commercial and friendly relations with the Pehuenche, taking advantages of the diverse subsistence means provided by the area, such as the habitual animal traffic from the other side of the Andes, using the passes controlled by the Pehuenche. Within this environment, there was also Argentinian military persecution that combined well with the speculators' pretensions since the Pehuenche often had to flee or were forcefully relocated in the central valley of Chile (Bengoa 1985:199-200; Molina & Correa 1996:21-27). However, when they returned to their ancient lands they found others had taken control of them. Additionally, those who remained in the Biobío highlands were tricked into granting dominion of thousands of hectares to private parties (EULA 2001b:20). The majority of the purchases only took place on paper, in the titles. Another mechanism of property acquisition was the seizure of indigenous lands by the government due to the Pehuenche non-payment of property taxes.

Around the end of the nineteenth and beginning of the twentieth century, thousands of hectares of traditional lands were now in the hands of natural or legal individuals from outside the Pehuenche communities. At that point, the drama of total removal

from one's own land began because the Chilean legal system, via its "land registry" policy, no longer recognized Pehuenche property or their historical occupation (Azócar et al 2002:185). In this context, the situation of the Pehuenche became more and more precarious, a situation that obliged the authorities to take a more protectionist and eventually more integrationist approach with the indigenous communities.

In 1890, the Pehuenche formally declared to the Chilean state to have ancestral dominion of their lands and solicited tranquil use of their lands in an area that includes practically all of the Biobío IDA, with a surface of approximately 232,355 ha. (Figure 3; EULA 2001b:20-22 and 85).

In this way, from 1900 the Chilean government recognized only part of the lands that had been ancestrally occupied by the Pehuenche, and "loaned" the land to the communities in the form of specific, differentiated agrarian entities whose sale, rent, mortgaging, division or prescription was prohibited. In this way, and despite the enormous administrative difficulties and the tenacious private opposition, the Indigenous Settling Commission resettled the Pehuenche communities of the Queuco river valley in 1919 and 1920 with their respective titles. However, these titles did not satisfy the territorial demands of the Pehuenche since the summer grasslands and Araucaria forests remained outside their dominion (EULA 2001b:20-22).

The transformation of community titles into private property or the liquidation of communal lands

The transformation of community titles into private property was promoted by the Chilean state through a legislative sequence that took over 52 years, with the most relevant events for the Pehuenche communities being agrarian reform (1960-1973) and the actions of the military government from 1973, which implemented neoliberal economic policies that marked a clear involution in the recognition of the autochthonous rights (Boccaro 1999:425-461). The agrarian reform (Law N° 17.729), differing from virtually all previous legislation on indigenous lands, sought to put an end to the division of the communities and to promote land recovery through the restitution of lands usurped and expropriated. Beginning in 1960, the Pehuenche pressured for the recovery of their ancestral lands, and in the agrarian reform legislation the Chilean state granted 20,000 ha. to Pehuenche communities in the Queuco and Biobío valleys, partially satisfying their ancient demands. An important part of the land expropriated in the Biobío Valley, close to 12,000 ha., were declared state-owned property and transferred for their administration to the National Forestry Corporation (CONAF).

With the military government in 1973, the indigenous rights recognition process was halted and the community division process was accelerated with the application of Decree Law N° 2.568, which established mechanisms that permitted community division at the request of only one of its members. According to the authorities at the time, this law appeared as the best way to end the small farm (*minifundio*) problem, and to facilitate at the same time economic and social development of the communities. For some authors, the new legislation and the state policy developed during the military regime were directed exclusively towards family units without considering either their ethnic character or the communitarian social logic (Kellner 1993:142-178; Bengoa 1990:238-239).

In the Biobío highlands, the result of these policies was the division of communal lands that had been expropriated in the 1960s during the agrarian reform, and their transformation into small plots of individual property, originating a process of increasing atomization and fragmentation of Pehuenche territory as well as internal processes of socio-cultural and socio-economic differentiation. In these lands, currently, eleven

Pehuenche communities are distributed with an average of 18.6 ha. per person (Table 2).

Property Type	Land Area		Properties	
	No. ha	Percentage (%)	No. of Properties	Percentage (%)
State-owned property (Ralco Forest Reserve)	16,482	7.3	19	1.5
Private Property (non-indigenous)	83,072	36.6	558	45.4
Communal Indigenous Lands	27,947.3	12.3	3	0.4
Private indigenous property	41,451	18.3	493	40.1
Indigenous lands exchanged to ENDESA-España	17,132	7.5	125	10.2
Land in ownership conflict	41,002.3	18	13	1
Other State-owned property	21	-	18	1.4
Total	227,107.6	100	1,229	100

Table 2. Actual Situation of Land Ownership in the Biobío highlands

(*)The indicated values correspond to the areas indicated in the each property title.
Source: EULA, 2001b. Informe Ejecutivo Estudio Legal de la Propiedad Sector Alto Biobío.

In the 1990s, ENDESA-España S.A.,¹⁴ obeying Chilean Indigenous Law, Law N° 19.253, permuted Pehuenche private property in the Biobío valley for lands of equal value situated in the same area and in areas located farther away.¹⁵ Actually, only three Pehuenche communities in the Queuco valley have retained their titles, maintaining communal property of their lands.

Towards an interpretation of the territorial conflicts

In 1920, non-indigenous private property was established in the Biobío highlands, constraining the Pehuenche to the scarce land that they occupy today. In this way, one of the greatest state interventions was consummated, endorsed by a judicial order that consecrated a system of land tenancy based in the legality of property titles in the Land Registry Conservatories, and that did not recognize the historical rights of the Pehuenche to use and enjoy their ancient territories. The Pehuenche lost their lands and were transformed into poor peasants, exercising less and less control over their territory and natural resources. Through the Chilean judicial system, a legal fragmentation of land components has been produced; in other words, the components of the territory, land,

water, river shores, sub-soil, and forests, are estranged and separated into distinct tenancy systems and/or by concessions to private parties, producing a contraposition to the indigenous concept of territory that includes and links all these resources (Toledo Llancaqueo 1996:2-3).

Over the centuries, the Pehuenche were forced to retreat towards marginal, poorer and isolated lands located in the higher reaches of the Andes, occupying places that were of little interest to Chilean society. The lack of economic interest is demonstrated in the declaration of such locations as national parks or natural conservation areas. However, increased economic development—in a global export-oriented economy with private natural resources based on free market neoliberal premises—has meant in practice, a re-assessment of these highlands since they contain water sources that are increasingly needed to sustain lowland mining, agriculture, forestry, and cities, or for the native forests that are required by the wood-chip industries. Finally, and the principal demand for the Pehuenche lands, is the construction of hydroelectric dams in the Upper Biobío Valley.

Chilean energy demand has doubled in the last few years as a direct consequence of its successful economic development. Chile doubled its GDP between 1983 and 1998, and a higher, continuous economic growth is expected to continue in the near future. Energy is increasingly required to support this economic progress, and Chile depends exclusively on hydroelectricity to support this demand. As a result, the government plans to build a series of six dams on the Biobío. One of the consequences of water legislation, has been the concentration of water rights in a few hands. For example, now foreign enterprises such as the Spanish electric company ENDESA, now control 80% of the water rights of the Biobío River.

The Pehuenche suffer under this new paradox. They may own the land but they do not own the water rights, whilst the Spanish hydroelectric company owns the water, but not the land that will be flooded by the series of dams to be built along the riverbed, where the native people live. Another argument is necessary to correctly interpret the current pressure on the Pehuenche lands. Since 1981 Chile has applied neoliberal policies (deregulation and privatization) to all natural resources, and consequently has implemented a pioneering and original system, creating a free market system for water rights. Any individual or firm can apply to the government for water rights for consumption uses, and if they are available they could be perpetually obtained free of charge. If they are not available—because the totality of the water rights of the watershed are already owned by private parties—they can be purchased from the current owners paying the market price. For the development of a free market of water rights, a legal separation of water resources from the landholdings where they are located was required. Large mining, electricity and sanitary international companies have purchased water rights that they now own perpetually, and they can use them when and however they wish.

Mining development of the area operates under the same logic. In the Biobío highlands, mineral rights to silica, gold, silver, copper, molybdenum, zinc, lead, and iron as well as other unidentified concessions have been granted. These are exploration concessions that include an area of approximately 13,701 ha., equivalent to 6% of the Biobío IDA, located in the Biobío and Queuco river basins and in the Pehuenche communal lands of the communities of Trapa-Trapa and Malla-Malla. In the future, the exploitation of these resources could constitute potential conflicts between the communities and the owners of these concessions.

Our research in the Biobío highlands shows that: of the 81,775.52 ha of summer grasslands in the Biobío IDA, 36,626.13 ha. are actually in indigenous hands, 22,921.7 ha. in private hands, and 18,556 ha. in private hands but contested by the Pehuenche as ancestral territories. In the case of the winter lands, the situation is more complex since

these lands are only 16,658.2 ha. or 7.3% of the Biobío IDA. Of this total, 9,793 ha. are Pehuenche lands, 4,013.5 ha. in private hands, and 2,851.8 ha. are in ownership conflict. In the case of the *Araucaria* forests or piñón gathering areas, these cover an area of 18,607 ha, of which 9,346.4 are located in indigenous lands, 4,557 ha. on private property, 3,599.5 in state-owned property, and 1,104.2 ha. are in conflict (EULA 2001b:40-45).

Conclusion

The territorial conflicts in the Biobío highlands are of historic origin and are directly related to the constitution of private property in the mid-nineteenth century, the military occupation of the eastern and western slopes of the Andes, the drastic reduction of the spaces occupied by the Mapuche and the colonization processes that have affected the area. The Mapuche's traditional practices were altered, especially their free movement between the Argentinean pampas and the Chilean mountain valleys, their commercial activities of selling salt, ponchos and other products, cattle raising and their utilization of grazing areas for wild fruit collection, forcing the communities to share their natural resources with non-indigenous residents in reduced areas.

State intervention in Pehuenche territory, especially in the creation of reservations at the beginning of the twentieth century, the division of communal lands in the 1980s, and the development of large private investment projects in the 1990s have generated serious socio-economic and territorial impacts in the Pehuenche-occupied areas. One of the most important tendencies that affect Pehuenche communities and population is their temporary or permanent emigration from their lands toward the principal urban centers of the region, especially of the youth toward Santa Bárbara, Los Angeles and Concepción. This is not a recent phenomenon and for many decades, high emigration has been accelerated by the lack of land in the communities and regional economic change (Bengoa 1996:9-28).

In most of the Pehuenche communities, a continuous exit and return of population may be observed. The territorial spaces of stagnation consist only of the inactive work force: the elderly and children. Those who migrate, usually temporarily, are part of the active population and work in forest plantations, agriculture, and urban services (Azócar et al. 2002:186-187). The Pehuenche communities have been progressively transformed into areas of cultural refuge from the modernization processes of Chilean society, producing a cultural breach between rural Pehuenche society and the regional society (Bengoa 1996: 9-28).

A new type of community has emerged, a residential community that is characterized as the place where indigenous people live to work daily or during certain periods of the year outside of the communities. The agricultural production data demonstrate that residence is combined with basic subsistence agriculture, which permits no more than the satisfaction of basic nutritional needs.

In this context, the lack of land in the communities (both winter and summer lands), the necessity of economic, productive and social development improvements (access to agricultural credits, training, irrigation financing, rural housing, machinery and infrastructure) together with the recognition and development of cultural diversity (language, memory and religious beliefs) and of territorial autonomy (construction of the Mapuche nation) are the principal demands of the Pehuenche communities of the Biobío highlands.

Strengthening of Pehuenche culture begins undoubtedly with the recognition of the complexity and diversity of their demands, especially their territorial demands since land constitutes for the Pehuenche the sustenance of life and the pillar of their cosmol-

ogy. Together with the indigenous world, it is necessary to adopt an endogenous development model that is compatible with Chile's more global development and at the same time respecting the cultural diversity of ethnic minorities. A holistic development strategy is needed that stresses identity and culture, including the economic development of communities with alternatives to subsistence agricultural activities and increasing control and self-determination of their territories.

A second element is the need to establish of a permanent dialogue and synergistic collaboration between state institutions, industries in the area, and the indigenous communities, that would integrate the distinct necessities and demands in a set of projects for the area. To achieve this, mutual distrust needs to be overcome and the recognition, respect and protection of cultural specificity and the opening of new dialogues and meeting points need to be initiated.

Another element of vital importance is environmental protection and rational natural resource use. As indicated above, the resources of the area are fragile due to the physical and climatic conditions and a traditional use of these resources forms part of the special indigenous cosmology of unity between the distinct components of the land and the continuity of the ecological spaces being occupied. For Chilean society, immersed in modernity, this relation is not always understood and is expressed in the fragmentation and specialization of the natural spaces and their subordinated integration into the market, and even the impairment of the ecological connectivity of the territory. For the Pehuenche, the connectivity between the distinct components of the territory is part of their culture and obeys the historical integration that this people have developed with its natural environment. In this sense, some authors have noted that indigenous groups have developed successful strategies of ecological natural resource administration when they live in harmony with their socio-cultural premises (Grey 1991; Bernhardson 1986:311-318).

In this manner, it is not surprising that Mapuche demands are related fundamentally to access and possession of winter and summer grasslands, piñón-gathering areas, and forests, since these resources provide the basis for the material and spiritual reproduction of their culture. Similarly, the interruption of the territorial continuity limits development opportunities and is a source of permanent conflict. The comprehension of the ecological-cultural relations is a fundamental aspect that must be considered for the socio-environmental sustainability of any development proposal that could be implemented in the Biobío highlands.

Finally, understanding Pehuenche territorial demands also suggests the need to incorporate cultural continuity of ethnic minorities or peoples in the current development model. Their cultural specificities and their particular relations with land and territory, it is suggested, do not imply a threat, but rather a confirmation that post-modernization and globalization includes a recognition of uniqueness, of the unrepeatable, that many see in biological diversity and that should also be seen in cultural diversity.

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Notes

¹ In the local language (*Mapudungun*) Mapuche signifies “people of the land”.

² “People of the pehuén”—the fruit of the *Araucaria Araucana*—the native forest species of the Andes.

³ Approximately, *Lof mapu* is land community, and *lof che* is social community.

⁴ In reality, at that time not only the land disappears, but 169 communities as well.

⁵ The “*inquilinaje*” comprised the system of servitude of Chilean properties until 1960. The “*inquilino*” was an agricultural worker who lived on the property and benefited somewhat from the property, though he did not own it.

⁶ The “*veranadas*” are areas used in summertime for grazing by their cows, horses, goats, and sheep. Between May and September, they are covered in snow. In October, the melting begins to open these areas, permitting the development and growth of new grass. The pasture of the Biobío highlands are dominated by vegetal formations located at more than 600 m., such as thorny, Andean bushes, open Andean forests with conifers, pre-Andean lauriform leaves, and open *araucaria* forests. These grasses present seasonal performance marked by low winter temperatures and water restrictions in the summer, with a spring-summer production that reaches 2.4 ton/ha of dry matter. Servicio Agrícola y Ganadero de Chile (SAG 1986: 94-110).

⁷ The “*invernadas*” are sheltered lands which provide refuge for the animals during the winter and where the families are established a large part of the year. They are located at less than 1,000 m.a.s.l. In these locations, the families survive on subsistence agriculture, principally cereals, oat, wheat, and small gardens. Additionally, in these spaces, the families plant alfalfa for their cattle. In the last few years, lumber plantations of *Eucalyptus* sp., have been introduced to conserve soils and wood use. There is scarce land and a strong pressure for their use. Servicio Agrícola y Ganadero de Chile (SAG 1986: 94-110).

⁸ This situation has been indicated by diverse authors: Azócar G. 1993:174-185; ENDESA, 1997; Aguayo, M., 1998:85-90; Carrasco, S. & Figueroa, S., 2003: 55.

⁹ The average wheat production in some Pehuenche communities in the 1995-1996 agricultural season was 12 qq/ha, a value that is significantly lower than the national average for this same period, which was 35 qq/ha. ENDESA op. cit., 1997.

¹⁰ In 1992 in the community of Callaqui, an average Pehuenche family recollected 74 kg of piñóns, of which 87% were for family consumption (Azócar 1993: 101).

¹¹ See, for example: Angli, J. 1918:1-84; Hilger, M. 1957; Nielsen, U. 1963: 77 p.; Valenzuela, R.. 1984: 65-68; Quarto, A. 1990:21-25; Aldunate, C. & Villagran, C. 1992: 3-15; Agesen, D. 1998: 146-160.

¹² See, for example: Carvallo Goyeneche, V. 1879 Vol IX:335-339; De la Cruz, L. 1910: 10-12; Latcham, R. 1929 (67): 164-166; Casamiquela, R. 1965: 146; Villalobos, S. 1989: 269; Villalobos, S. 1995: 117-154.

¹³ Diego De Rosales, 1877 (Vol. I): 196-201.

¹⁴ Empresa Nacional de Electricidad S. A., Chilean branch of ENDESA Spain.

¹⁵ Pehuenche land was permuted to permit the construction of the Ralco Hydroelectric Dam, one of six energy projects planned by ENDESA-España S. A. in the Biobío river basin. Since indigenous land cannot be sold, it must be permuted for land of equal value according to Law N° 19.253.

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