

The Forest Stewardship Council in Chile

Continuities of Inequality through Market-Based Regulation of Extractivist Commodity Chains

ABSTRACT Climate change and forest fires are bringing global forest management back into the public eye. One of the most important players on a global level is the Forest Stewardship Council (FSC), which certifies forest products. This article argues that market-based regulatory mechanisms such as the FSC have systematic weaknesses and, using the example of the Chilean forest industry, shows that this is particularly true for the regulation of global extractivist commodity chains. It argues that private regulatory mechanisms such as FSC perpetuate global dependencies, ecological problems, and social inequalities. **KEYWORDS** Chile, Latin America, certification, forestry industry, socio-ecological conflicts

In recent years, the topics of climate change and environmental policy have shaped public debates. Emissions of greenhouse gases have been as much a topic as the loss of biodiversity and forest fires, from Chile and Brazil to California and Australia. Forests have always been of special importance for ecological balance as well as animal and human life (FAO 2022:9f.; Williams 2006). But while forests store around two billion tons of CO₂ every year and contribute to the daily subsistence of at least 3.5 billion people, millions of hectares continue to be cleared annually, a problem now considered the second-biggest contributor to climate change (FAO 2018, 2022:21f.). And while global biodiversity is in sharp decline, monocultural forest plantations, defined as monocultural cultivation of fast-growing tree species on large areas (Gerber 2011:165f.) and established exclusively for economic use, are expanding (FAO 2015:112, 155). Sawn timber, chipboard, furniture parts, construction timber, paper products, firewood, packaging, and pulp are traded around the world. Behind the commodity chains of these everyday products hide many square kilometers of forestry plantations, hectare-sized clear-cut areas, and huge pulp mills. In 2017, for example, 184 million tons of pulp was produced worldwide, and 64 million tons was traded on global markets (FAO 2019).

Forest products have been the focus of discussion with respect to sustainable production in particular since the 1992 UN Conference on Environment and Development—the so-called Rio Conference. A key outcome of this conference was the establishment of the Forest Stewardship Council (FSC). The initial aims of the FSC were to prevent further deforestation and to establish an ecologically sustainable global forestry that mainly benefits the small forest owners. European stakeholders were at the forefront

of these initiatives, which has to do with the fact that European countries, along with the United States, are important markets for global forest and wood products. The member states of the EU, for example, obtain most of their wood pulp imports from Latin America.¹ Today, FSC certification represents a relatively new and increasingly relevant regulatory mechanism for global commodity chains in this sector (FAO 2022:71). Meanwhile, the FSC sets international standards and is the most important certification system for sustainable forest products, along with the seal of the Programme for Endorsement of Forest Certification Schemes (PEFC), which was founded later (Wolff and Schweinle 2022:2). Today close to 160 million hectares of forest area has the FSC seal.²

In the course of changing land use and the conversion of natural forest into monocultural forest plantations, Chile has become one of the 10 countries worldwide with the largest share of land area used for forest plantations (Salas et al. 2016:564). The Chilean forestry sector is dominated by globally integrated, transnationally active companies, whose certification processes began in the late 2000s due to international pressure (Carrasco 2015; Klubock 2014; Millaman et al. 2016). This fundamentally changed production processes, documentation procedures, ethical, environmental, and social standards, and corporate discourses (Astorga and Burschel 2019:84, 87; Tricallotis, Kanowski, and Gunningham 2018). As I will show in this article, this happened through civil society campaigns that connected local ecological actors with buyers in the U.S. and European markets. I argue that, *first*, a complex regime of regulation has emerged in the forestry sector, in which a transnational civil society actor, the FSC, plays a decisive role; *second*, although certification is seen by many as a mechanism to reduce environmental damage, improve forest management, and strengthen local community participation (Cubbage et al. 2010; Heilmayr and Lambin 2016; Pattberg 2006; Tricallotis, Kanowski, and Gunningham 2018; Tritsch et al. 2020; Wollff and Schweinle 2022), it has systematic weaknesses that undermine its standards and initial objectives and systematically deprive local communities of participation; and *third*, the FSC reproduces ecological and social inequalities, environmental conflicts, and global dependencies.

My contribution thus focuses on market-based forms of regulation of global commodity chains, which have been gaining relevance for some time now against the background of the increasing role of transnational corporations (Bartley 2021; Bromley and Meyer 2017; Chandler and Mazlish 2005; Valiente-Riedl 2016). Many of these corporations generate revenues equivalent to the gross domestic product of entire countries.³ As debates on governance show, regulation of economic activities in neoliberal globalization has shifted from state to private actors such as NGOs (Bartley 2021; Mayntz 2006; Pattberg 2006; Schirm 2013:268f.). Against the background of this diagnosis, I discuss the increase in corporate power in the context of asymmetric global dependencies, looking at the regulation of the forest industry.

In recent decades, international forest policy has emerged as a particularly innovative field of extra-state governance (Auld et al. 2009; Bartley 2007; Pattberg 2005:356, 2006; Wolff and Schweinle 2022). Private certification schemes such as that of the FSC, as I will show, signify buyer-oriented and privatized transnational regulation that is primarily oriented toward the values and norms of the global North. As I will argue, the

case of the Chilean forestry sector illustrates that while the actions of global corporations can be effectively influenced and changed in the short term by civil society actors and campaigns, in the long run corporations manage to significantly expand their influence on these civil society actors. This highlights the risk of independent environmental governance actors such as the FSC turning into partners in corporate greenwashing. And this explains not only the disappointment civil society actors have felt with the FSC since recent years, but also the fundamental weaknesses of private and market-based regulation.

The Chilean forestry sector is a suitable case through which to study the FSC as a regulatory mechanism of global commodity chains because the country's economy is strongly dependent on this sector's exports (Klubock 2014); the state has shown insufficient willingness, ability, or power to regulate the environmental effects of its extensive plantations (Barton and Román 2012:873f.; CoatarPeter and Gareau 2022; Tecklin, Bauer, and Prieto 2011); and at the same time, the industry is highly contested and subject to intense pressure from indigenous communities and socio-ecological protests (Carrasco 2015; Schmalz et al. 2023). Thus the FSC can be analyzed as a transnational regulatory mechanism in the contested terrain between global dependencies, environmental governance, and local conflicts. Furthermore, the region in which the sector conducts its economic activities has always been affected by socio-ecological conflicts, for which the FSC purports to offer a conflict-resolution mechanism. With reference to the FSC, the forest industry tries to present itself as a green economy despite strong local conflicts over resource distribution.

To explore the ambiguities of transnational, market-based, and civil society regulation, with its democratic potentials and vulnerabilities, I first develop a theoretical framework for how such regulating actors can be conceptually classified. I then explain my methods and data, as my research is based on qualitative empirical research in Chile, 69 qualitative interviews, participant observation, and various kinds of fieldwork. In a third section, I discuss the Chilean forestry sector, with its most important globally operating companies and their regulation by FSC Chile. Fourth, I trace the changes in the forestry sector in the context of certification, and fifth, I address how forestry companies expanded their influence on the FSC and pushed critical actors out of its ranks. Finally, I briefly assess the implications of the FSC Chile case for the possibility of sustainable transformation of global commodity chains through seals.

EXTRACTIVIST COMMODITY CHAINS AND ENVIRONMENTAL REGULATION IN THE WORLD ECONOMY

Since the 1970s, the world-systems approach has argued that countries fulfill distinctive roles and pursue specialized production models within the global capitalist system, which is marked by the international division of labor (Wallerstein 1974, 2004:23–30). Economic differentiation and productive specialization play an essential role in the adoption of accumulation models, the development of social structures and dynamics of socio-ecological conflicts, and the shape of the political system at the national level

(CoatarPeter and Gareau 2022; Svampa 2019; Wallerstein 2004: 32–38). The political, economic, and social differences among countries become particularly evident in the comparison between industrialized core countries in the global North and export-oriented, extractivist, peripheral countries in the global South. In this sense Latin American economies are characterized by a relatively stable position in the world-system and the dominance of extractive industries such as mining, industrial agriculture, and forestry (Gudynas 2018; Klubock 2014; Veltmeyer and Petras 2014), oriented toward the export of “cheap nature” (Patel and Moore 2017:53ff.). This reflects a colonial continuity of Latin America’s integration into the world economy as a supplier of barely processed commodities, which is termed extractivism (Gudynas 2018; Machado 2010; Svampa 2019).

This term refers to the orientation of an economic sector or a country toward the export of marginally processed as well as highly nature-intensive products (Gudynas 2018). In this sense, Chile’s forestry industry can be viewed in the continuity of Latin American extractivism and the unequal exchange of the modern world-system (Pino and Carrasco 2019; Shandra et al. 2009). The huge plantations of pine and eucalyptus in south-central Chile are the starting point of a nature-intensive commodity chain which is part of the global pulp and paper industry. In this global division of labor, south-central Chile is integrated as a supplier of pulp for the industries in China, the U.S., and Western Europe.

At the same time, extractivism goes along with the great importance of business groups that economically focus on resource exploitation, dominate the domestic markets, have great political influence, and are closely linked to the political elite of Latin American countries (Fairfield 2010; Landherr and Graf 2017; Román and Barton 2017:244–48; Schneider 2013). However, extractivism not only increases socio-ecological inequalities but also leads to major social and environmental problems and a variety of local conflicts (Akchurin 2020; Martinez-Alier and Walter 2016; Svampa 2019). In these conflicts, very different modes of production and living are pitted against one another. On the one hand, large extractive companies want to profitably exploit raw materials and ecosystems, enforce private property rights, and expand scientifically supported methods of raw material extraction and integrate them into higher value creation and international markets. On the other hand are the local communities, whose relationship with nature is focused more on reciprocity and protecting local ecosystems than on resource exploitation, whose local knowledge is often not scientifically recognized, and whose communal ways of relating to nature do not fit into modern environmental governance (Bustos, Prieto, and Barton 2017; Román and Barton 2017). The result is that different territorialities confront each other (Román and Barton 2017:242f.; Svampa 2019:54–58) and intense socio-ecological conflicts emerge, which can be described as “environmentalism of the poor” (Martinez-Alier 2002). The increased conflicts and the growing international awareness of ecological pressure to act raise the question of how such nature-intensive economic activities can be regulated and controlled.

The question of environmental regulation and governance has been discussed prominently in world polity theory (Boli and Thomas 1997; Meyer et al. 1997a). This

approach argues that key features of environmental regulation within nation-states are derived from global regimes that disseminate global norms and regulatory mechanisms, with international organizations such as the UN playing a central role (CoatarPeter and Gareau 2022; Meyer et al. 1997b; Orihuela 2014). This institutionalist approach explains the high level of isomorphism in environmental regulation among states as a result of their embeddedness in the world polity (Gareau 2012). As parts of the world polity, not only nation states but also civil society actors can learn which actions are suitable and legitimate, which practices conflict with the world culture, and which regulations are enforceable (Boli and Thomas 1997). However, this approach is also subject to criticism. Authors note that the effects of the world polity in each country depend on its position in the global division of labor, its mode of integration into the world culture, and global and domestic power relations (CoatarPeter and Gareau 2022:3f.; Gareau 2012; Henderson and Shorette 2017; Mejia 2020). In many cases, actors profess certain environmental values and norms but neglect them in their actual behavior, which is called the *decoupling* of policy and practice (Bromley and Powell 2012).

The question of effective environmental regulation and governance arises especially on a global scale regarding extractivist commodity chains, and here in particular with regard to the forestry and timber industries, since forests are increasingly used for profit but also represent extremely sensitive ecosystems with a special role in these times of climate change and the search for CO₂ sinks (FAO 2022:9f.). In the 1990s, growing awareness of forest degradation and large-scale clearing of virgin forests revealed the previous governance of forestry activities as a failure. In view of this diagnosis, the initiative to create a new international certification system for forest products grew up within the framework of the UN's 1992 Conference on Environment and Development. In 1993, the FSC emerged as the first worldwide certification system for forestry products, which in the following years became the strictest and, next to the PEFC, the most important seal in this field (Nussbaum and Simula 2005:6–7; Wolff and Schweinle 2022:2).

In this sense, the FSC can be seen as a product of the world polity, but at the same time as a specific form of regulation which I will understand as a *transnational, private, and market-based regulatory mechanism*. This form of environmental governance can be distinguished from classical forms of regulation and state control. Classically, regulation was understood as state control within clearly defined hierarchies and a national framework (Mayntz 2006:18–20). Although nation-states remain central actors in today's multilevel system, relevant inter-, supra- and transnational organizations of different types are rapidly joining them (Bromley and Meyer 2017; Wissen and Brand 2011). Regulation thus becomes a form of governance in the multilevel system (Benz 2004). This also means that the *subject* of regulation is changing due to increasingly globalized production and marketing. Global commodity chains have placed new demands on policy, but also on research. Initially, commodity chains were considered either “producer-driven” or “buyer-driven,” but this distinction soon proved to be too broad (Gereffi 1994, 2001). Today, commodity chains are subject to very different types of governance, ranging from their own departments, intra-firm hierarchy, and control over

subcontractors to different types of dependencies of suppliers and trading partners on their lead companies, as well as pure market governance (Bair 2005; Fischer, Reiner, and Staritz 2010:13f.; Gereffi, Humphrey, and Sturgeon 2005:82–88).

The regulation of commodity chains, however, goes beyond corporate governance along the commodity chain, as the example of certification in Chilean forestry industry makes clear. Often, global commodity chains link extractivist activities in the countries of the global South, and thus significant environmental and social costs, with further processing in intermediate countries and, ultimately, the sales markets of the high-income global North and its consumption norms (Brand and Wissen 2021). And the expansion of these global extractivist commodity chains brings significant conflicts at their origins, as in the rural areas of Latin American countries (Ciccantell 2022; Martinez-Alier and Walter 2016; Svampa 2019:45–53). In combination with a growing international public, this increases regulatory pressures, giving even more importance to the establishment of seals and certification systems designed to exert buyer-driven pressure on producers in countries of the global South.

In the following, I will show that the FSC in Chile is not only a product of the diffusion of norms and practices of environmental governance as part of the world polity but also a result of civil society's struggle to regulate the Chilean forestry industry. I also show the strengths and the systematic weaknesses of transnational, private, and market-based regulatory mechanisms like the FSC. Regulation mechanisms are always characterized by "structural selectivity," through which privileged access is granted to some actors (Offe 1972:74–78), and I will show that, in the case of FSC, this structural selectivity favors big forestry companies. I thus contribute to the ongoing debate on environmental governance by showing that the decoupling of policy and practice in the implementation of environmental norms through private certification mechanisms is a result of power inequalities, social struggles, and structural constraints.

DATA AND METHODS

My contribution is based on empirical research and qualitative methods.⁴ For this case study of Chilean forestry I conducted 69 semi-structured interviews with experts from companies, associations, NGOs, and the state, as well as with affected local people. Qualitative data were gathered over five periods: February to July 2016, March to April 2017, March to April 2019, October to December 2019, and December 2021 to January 2022. The sample was constructed using a snowball technique for the expert interviews and open sampling (per grounded theory) with the communities (Corbin and Strauss 1990:8). Some individual experts were interviewed multiple times to assess changes over the multi-year study period as well as to conduct follow-up inquiries. The interviews were recorded, transcribed, and analyzed using qualitative content analysis (Mayring 2014).

A particular focus of this study was on members of FSC Chile (in 2016 and 2017) and on indigenous Mapuche communities in rural areas, mainly in Araucanía, a region with many forestry plantations and a high poverty rate (in 2019 to 2022). I visited four rural communities in Biobío and Araucanía, two of which had Mapuche majorities,

getting to know the daily lives of rural households and participating in local cultural and political events. In addition to this participant observation (Lüders 2004) in rural communities, I frequently visited forest plantations, sawmills, processing plants, and various affected communities close to forest plantations. I also attended the events and workshops of civil society actors involved in the conflicts between rural communities and the forestry industry in Araucanía. The research also used document analysis, especially of the annual reports of forestry companies and documents from state institutions such as the national forestry institute (Instituto Forestal, or INFOR), as well as reports and documents from the FSC, certification companies, and local actors.⁵

THE CHILEAN FORESTRY SECTOR

Since the second half of the twentieth century, Chile has created one of the most competitive forest industries globally (Clapp 1995; Klubock 2014). Chilean forestry is based on large-scale plantations of fast-growing, non-native pine and eucalyptus species in the central south of the country. The state was actively involved in the development of this sector from the beginning. The expansion of forest plantations of the pine species *Pinus radiata* and the establishment of state-owned pulp mills in the mid-1960s played a special role in promoting the industry (Clapp 1995; Graf 2019:10–11; Klubock 2014:120–24). During the dictatorship of Augusto Pinochet, however, state companies were privatized and a broad redistribution of the land to large private agricultural and forestry companies took place (Klubock 2014:241–44). Until a few years ago, reforestation was also financially supported with special state subsidies. Legal Decree 701 (of 1974) offered to subsidize 75 percent of the cost of establishing plantations, and large forestry companies received an estimated USD 875 million from such subsidies between 1974 and 2013 (Matamala 2015:204; Pastén, Nazal, and Fuders 2020:63). The Chilean constitution, which was enacted during the period of military dictatorship and is still in force today, stipulates the privatization of natural resources as well as the comprehensive protection of private property (Bustos 1987).

Today, 50 percent of the plantation area is in the regions of Biobío and Araucanía, which together account for less than 10 percent of the country's total area (INFOR 2022:28). Especially since the 1990s, the area of forest plantations in Araucanía has been greatly expanded (Figure 1). In this region, plantations occupy much of the agricultural land between the high Andean mountains to the east and the Pacific Ocean to the west. About 63 percent of regional exports come from the forestry sector, which thus shapes the region socially, economically, and ecologically.⁶ At the same time, Araucanía is in the geographic area of Wallmapu, the territory of the indigenous Mapuche, who still make up a third of the region's approximately one million inhabitants. The Chilean state granted the Mapuche people, whom it defeated militarily at the end of the nineteenth century, land rights—the so-called *títulos de merced* (titles of grace)—to areas in today's Araucanía Region (Figure 1). But because even these areas are now often covered with plantations, since the late 1990s there has been open and sometimes violent conflict between the Mapuche and the large forestry companies (Di Giminianni 2018; Kaltmeier 2004; Klubock 2014:34f.; Schmalz et al. 2023).

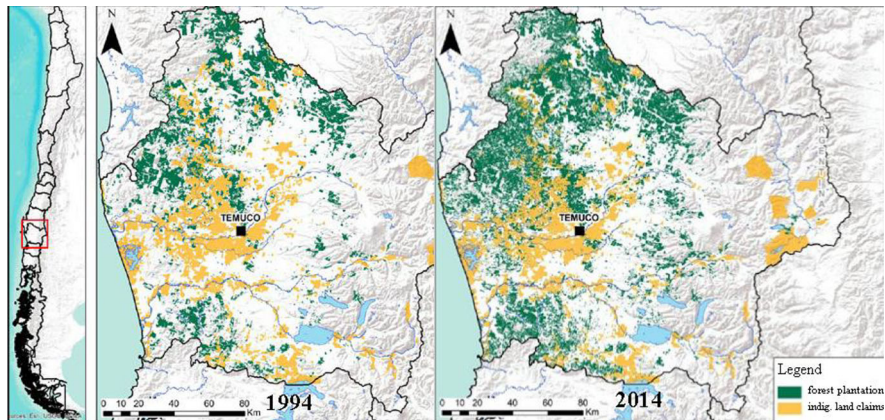


FIGURE 1. Increase in forest plantations in La Araucanía from 1994 to 2014.
Source: Adapted from Romero et al. (2017:41).

The plantation area in Araucanía grew significantly between 1994 and 2014 (Figure 1). Since the 1990s, the production of pulp has increased from 800,000 tons to over five million tons annually (INFOR 2022:148). Today, forestry is one of Chile's most important economic sectors (7), and it is dominated by two companies that focus on the production of pulp for export.⁷ Forestal Arauco and CMPC/Mininco are part of the national holdings of long-standing Chilean business families and closely linked to the Chilean elite (Klubock 2014:270f.). Together, they control nearly half of the total forest plantation area in Chile.⁸ The two companies, which also operate in other sectors, have great economic importance and political influence within Chile (Graf 2019). At the same time, their production is mainly oriented toward exports. Since 2011, forestry companies have exported goods worth more than USD 5 billion annually, consistently accounting for 6 to 8 percent of Chile's total exports.⁹ These exports usually end up on the domestic markets of European countries or the United States, increasingly with further processing in China (INFOR 2022:179; Jenkins 2019:212).¹⁰ To sum it up, since most of the products are hardly processed further and large-scale soil- and water-intensive monoculture has short harvesting cycles (between around 10 and 20 years) and is primarily done for export, the Chilean forestry industry forms a globally integrated extractivist commodity chain.

However, the land-intensive production model of the forestry industry has been able to expand to this extent only through the conversion of natural forest, agricultural land, and so-called erosion-threatened soils into forest plantations (Klubock 2014:257). As local residents, forest engineers, and scientific sources point out, this has led to a worsening shortage of land for smallholders and especially the Mapuche population (f9, r1; Garín, Albers, and Ortega Rocha 2011; Henríquez 2013; Klubock 2014:239f.; Pareja 2021).¹¹ A young Mapuche told me, "If we divide the 345 hectares of our community into individual family holdings, my father has one hectare. That means I am entitled to a quarter of a hectare. What does that leave for my children?" (r6). A forestry engineer explained that a peasant family needs at least 10 hectares for a good life and viable production, especially in hilly areas (f9).

The expansion of forest plantations in Chile not only contributes to the unequal distribution of land but also interferes with local ecological cycles. As a consequence, the rural population suffers from water shortages (Alvarez-Garreton et al. 2019; Millaman et al. 2016:128f.). The exotic tree species, eucalyptus and pines, grow extremely fast, and as reported by an employee of the Corporación Nacional Forestal, or CONAF (et), “in the growth phase [they are] true water pumps,” consuming up to 30 liters per day.¹² Members of the rural communities estimate even higher numbers—about 50 liters a day (r2)—and complain that this dries up local streams and wells (r3, r4, r8). Due to the resulting drying of the soils, the severe drought in forest plantation areas, and the high temperatures and lower levels of precipitation of recent years, the number of forest fires has increased steadily (Coper, Garreaud, and Rondanelli 2023). Therefore, rural residents near forest plantations fear fires and blame the large forestry companies for this threat (r5, r9). And besides reducing the availability of land and water, forest plantations also reduce the nutrient content of the soil and increase erosion and thus the probability of forest fires.

Collectively, these factors hinder local peasant activities, traditional cultivation methods, and ways of life that are of utmost importance to the Mapuche (Carrasco 2015; Klubock 2014:257ff.; Schmalz et al. 2023). A resident of a Mapuche community reported that “the eucalyptus . . . is drying up the big water sources where we have been getting . . . our water for generations. We did everything you do in agriculture, everything that the earth gives, be it corn, potatoes, vegetables . . . yes, and then all that was lost, it dried up” (r3).

As we can see, like extractivist commodity chains in general, their expansion has increased the use of “cheap nature.” At the same time they do not generate significant employment for local residents, so the communities close to forest plantations are more impoverished than others (Andersson et al. 2016; Pastén, Nazal, and Fuders 2020; Román Barton 2017). This means that although the capitalist sector continues to expand, that expansion does not benefit the local population. Instead, as we can see in Araucanía, it makes local, rural ways of production and life harder, or impossible. And this is why, at the lowest end of this extractivist commodity chain, the economic activity of the Chilean forestry sector generates significant discontent (Carrasco 2015; Romero et al. 2017; Schmalz et al. 2023).

Thus, as the literature on extractivism (Gudynas 2018; Machado 2010; Svampa 2019) emphasizes, the peripheral-extractivist regime of accumulation of the Chilean forestry industry is highly prone to socio-ecological conflict. As a result, the regions of the country with the strongest concentration of transnational forestry companies are also the poorest and most conflict-ridden (Aylwin, Yáñez, and Sánchez 2013:7f.). This is no coincidence, and the land- and water-intensive forest plantations have increasingly been perceived by the local people, and in particular by indigenous Mapuche, not as an opportunity to participate in global value creation but as a threat to local ways of production and life, as well as to traditional cultural practices (Carrasco 2015; Millaman et al. 2016:11f.; Schmalz et al. 2023).

Since the late 1990s, disputes have intensified between, on the one hand, Mapuche communities reclaiming their territory, and on the other hand the forest industry and

state actors, most notably the military police—as local residents, Mapuche, activists, and the scientific literature have all pointed out (a1, r1, r3, r7, a1; Pineda 2014; Romero et al. 2017; Schmalz 2023; Tricot 2009). Some Mapuche have responded to the expansion of forest plantations, state repression, and social deprivation with land occupations and by setting fire to forestry machinery and transport vehicles (Millaman et al. 2016:10f.; Romero et al. 2017:35f.). In recent years, even non-Mapuche have occupied land in forestry plantations, for example the Mundo Nuevo area in Curanilahue (r9).

In summary, it can be said that the rapid expansion of the forestry sector in both area and environmental impact, along with the meager economic opportunities for the local population, have led to socio-ecological conflict in south-central Chile (Pineda 2014; Romero et al. 2017; Schmalz et al. 2023). However, even after the collapse of the military dictatorship in 1990, the resistance of indigenous Mapuche, the rural population, and civil society actors such as domestic and foreign NGOs to the large-scale conversion of native forests into monocultural forest plantations has not been considered important by policymakers. The Native Forest Law (DL 20.283), which was intended to counteract these processes, was passed only in 2008.

As I will show in the following section, due to this initial lack of regulation and the highly precarious state enforcement of environmental laws afterward, the FSC was seen by many actors in Chilean civil society as a welcome alternative: a new way to put pressure on the forestry companies (Barton and Román 2012: 873f.). In fact, FSC Chile has been able to halt further deforestation (Aguayo et al. 2009; Heilmayr and Lambin 2016). However, as we will also see, the Chilean forestry companies have not escaped conflict through their certification by FSC Chile; rather, the local and territorial conflicts have become internationalized and thus now also take place within the FSC and with reference to the buyers in the global North.

THE REGULATION OF CHILEAN FORESTRY INDUSTRY BY THE FSC: FROM STATE REGULATION TO CERTIFICATION

Organizational Structure of the FSC in Chile

The Chilean state has been widely unable to effectively enforce its environmental regulations and prevent forestry companies from circumventing the law. In this sense, Chilean environmental regulation is characterized by the decoupling of policy and practice referred to by Bromley and Powell (2012). One example mentioned several times in the interviews refers to a Chilean law requiring an environmental impact study, in cooperation with the Ministry of the Environment, for any planned forestry plantation of 500 hectares or more. To sidestep this requirement, as explained by a management consultant working in the sector (e3), the companies divide their plantations into units of 499 hectares.

In the rural sector, the state institution of CONAF is responsible for controlling the forestry industry. However, as a staff member told me (e1), it has too few employees assigned to this task. Thus we see a concurrence between the strong promotion of extractivist industries and weak control by the Chilean state. Lax state laws and

insufficient monitoring thus allow an enormous range of labor and environmental conditions, depending on corporate culture, certification, and self-imposed standards. Commitments by companies and certifications are both gaining in importance in this context. The current importance of FSC Chile is partly a result of the regulatory gap that state institutions created in relation to corporate action in the forestry sector.¹³ Initially, at the beginning of the 2000s, the Chilean state (among others) developed its own seal in cooperation with the forestry industry, the Sistema Chileno de Certificación de Manejo Forestal Sustentable,¹⁴ which, like many other such programs founded at that time, was dominated from the outset by companies and forest owners (Auld et al. 2009:195).

However, since this program did not result in any real changes in the forestry sector, an initiative was soon formed to stop the deforestation and conversion of Chile's virgin forests into plantations and to implement a stricter program which was less dominated by the forestry companies. The hope now lay in the FSC, which was the result of an international process with significant participation from civil society. The aim was to use pressure from international actors to enforce global civil society regulations in Chile, a process that world polity theory describes as the dissemination of global norms (Coat-Peter and Gareau 2022; Meyer et al. 1997b).

In the early 1980s, the International Tropical Timber Organization was founded, and in 1992 the Rio Conference launched a global initiative for sustainable development. The lack of strict and binding agreements between nation-states and the failure of civil society pressure, including boycott campaigns, eventually led to the emergence of market-based mechanisms using certification and product labels (Auld et al. 2009:192f.). The FSC was founded in California in 1993 by European companies, U.S. foundations, the WWF, and a number of other NGOs (193).¹⁵ It emerged as a result of the Rio Conference with the aim not only of halting the clearing of rainforests but also of establishing a counterweight to large corporations in the forestry sector itself. As a forestry engineer who has been active in the FSC since its founding (f9) reports, the original ideas of the FSC were, first, to develop a seal with which customers could distinguish sustainable from unsustainable products (from tropical and subtropical countries), and second, to give small and medium-sized forest owners and operators a market advantage and thus promote local development. However, it was already clear in 1996 that forest plantations based on monoculture would be allowed and that small companies would be left behind. This is due, among other things, to the fact that certification processes require a great deal of time and money. In addition, the forest companies were part of the FSC from the start. One of the key organizers of the Rio Conference was Swiss entrepreneur Stephan Schmidheiny. The Schmidheiny family business owns Masisa, one of Chile's three major forestry companies. Schmidheiny was substantially involved in the foundation of the FSC and drove the establishment of the seal program, as reported by the forest engineer (f1). From the beginning, companies like Masisa sought to use the FSC to gain privileged access to markets in the global North that were sensitive to ecological issues.

The FSC is a membership organization that maintains its own structures at the national, regional, and international levels. All members and member organizations are invited to its international General Assembly, held every three years (Pattberg 2005:363).

At each level, the FSC is divided into three chambers—environmental, social, and economic—each of which has one vote.¹⁶ The central task of the international FSC is to define global standards, the further concrete formulation of which is then the responsibility of the national FSCs.

The FSC awards two types of certificates. For product certification, the management of plantations and forests is checked for compliance with the rules. If there are no deviations (or only minor ones), the product can bear the FSC seal. The other type is for processing companies, which may be certified with regard to FSC regulations on the trade and processing chain. The main issue here is the traceability of the product. Only recently has there been discussion of the extent to which social issues are also included here, noted a member of FSC Chile (e5). Certification ultimately results in three types of seals: FSC Pure, FSC Mix, and FSC Recycling.¹⁷

FSC Chile emerged in the late 1990s, but only slowly, as the country's dominant forestry companies initially rejected it. Not until 2010 was it officially recognized by FSC International as the Chilean representative body. Today it has about 90 members, of which about 54 are active, as an FSC Chile staff member explained (e6). The environmental chamber consists mainly of NGOs such as the WWF and the Chilean CODEFF, along with universities and independent consultants. The social chamber consists mainly of NGOs, representatives of indigenous peoples, and consultants. The economic chamber is formed by about 25 certified forestry companies. Each chamber has an equal vote. This is also intended to limit the superiority of the economic chamber. FSC Chile itself has only four employees.

FSC Chile as a Site of Social Conflict

The process of creation and implementation of FSC Chile illustrates what critical world polity theory (CoatarPeter and Gareau 2022; Gareau 2012; Henderson and Shorette 2017; Mejia 2020) emphasizes as the importance of the global division of labor and domestic power relations in the world-system. This is true in view of the power of large companies in Chilean regulatory processes but also of the central role of forest product customers in foreign markets in Europe and the United States in forcing Chilean forestry companies to comply with the certification. This is primarily because certification systems like the FSC can only rely on one relevant power resource: control over market access. The products bearing the label form a special market for customers who prefer sustainable forest products. However, to form such a market, customer awareness must first be created. As employees of key environmental NGO involved in the implementation of the FSC in Chile reported (e6, e10), this was the first step that had to be taken within the framework of FSC Chile, since none of the Chilean forestry companies except Masisa were willing to commit to be certified. The major customers for Chilean forest products in the target countries had to be persuaded to demand only FSC-certified products. This was done in the early 2000s as part of a major campaign aimed at raising awareness in the U.S. market of the conversion of virgin forests into plantations. The environmental activist (e10), who was involved in the campaign, told me:

Well, in Chile we didn't have any political power at all. We don't have it today, either. So we were looking for an international alliance with NGOs from the United States to exploit the power of the market. . . . In 2003, after two and a half years and thousands, thousands of letters . . . to all the customers in the U.S. who were buying Chilean wood, the companies said, "We're not going to buy any more Chilean wood that's not FSC-certified." That was the first break, the first culmination of the transformation of the Chilean forest industry, as a result of social pressure.

This development was also reported by members and staff of FSC Chile (e5, e6). The campaign of environmental NGOs, especially in the United States, had a strong influence on the decision of Chilean companies to recognize the FSC. As the environmentalist said, it was clear to civil society actors in Chile that they alone would by no means have enough influence and power to put pressure on the companies. So contacts U.S. and European civil society were pivotal. The most important process was the joint campaign with international NGOs, especially those in the United States. Using international markets and FSC as a leverage "gave us a power we had never had," the NGO staffer said (e10). This campaign was able to give the NGOs influence they had previously lacked over the Chilean companies, precisely because civil society actors forced the integration of the Chilean forestry sector into an international set of rules and global norms.

The quoted employee (e6) went on to report that until the international campaign, Chilean companies had never sat down at a table with the NGOs; they had no need to do so, because they felt "absolutely above any law." Instead, they had repeatedly pressured the NGOs, both legally and illegally. But in this new market pressure, Chilean civil society for the first time had a decisive power resource *vis-à-vis* the forestry companies. As a result of the international campaign of the NGOs, the large Chilean companies decided that they needed to produce FSC-certified forest goods, or they would lose international market share. But, as we have seen, they decided this only after a long, intense social struggle in which a previous international market was constrained and a new seal-regulated market was created.

CMPC/Mininco finally joined FSC Chile in 2007/2008, and Forestal Arauco in 2013/2014. The former company completed certification under the FSC in December 2012, and the latter in September 2013 (Millaman et al. 2016:5). The seal of the FSC is now the most important in the Chilean forestry sector. In only a few years, almost 70 percent of all plantation area in Chile was FSC-certified (WWF 2014), and in 2021 more than 2 million hectares of Chilean forests were managed under the certification of FSC (FSC 2021:8). All three major companies and most of the exporters in the forestry sector have now been certified by the FSC.

To obtain the seal, corporate activities must also comply with international standards. Convention 169 of the International Labor Organization, the UN Convention on Biological Diversity, and the FSC's own rules on respect for and recognition of the territories and natural resources of indigenous populations play a special role here (Millaman et al. 2016:18). All of this might suggest that social tensions and conflicts in southern Chile have eased in the aftermath of FSC certification. However, this

tendency cannot be observed at all (9f.), which can be interpreted as a first indication of weaknesses in the FSC certification mechanism.

In summary, the FSC is a civil society, transnational, and market-based regulatory mechanism, itself legally registered as an NGO, which owes its emergence and its assertiveness against forest companies in Chile to civil society campaigns and actors that embedded the regulation of the Chilean forestry sector into the world polity. It is a transnational and market-based actor because it gains its relevance by linking actors and markets of different countries, and it is a market-based mechanism because its relevance, power, and assertiveness result from the creation of a certain foreign market for forest products that are labeled sustainable. As a result, and as becomes evident in the case of the FSC in Chile, globally integrated forestry companies are redefining their codes of conduct as part of a new international institutional setting and new requirements on international sales markets. We now turn to both the strengths and the weaknesses of FSC Chile.

CHANGES IN PRACTICE: CONSEQUENCES OF EMBEDDING CHILEAN FORESTRY IN THE WORLD POLITY THROUGH THE FSC

An FSC Chile member (e5) reported, “The experience in Chile was really very interesting, because we made progress, and I tell you: great progress in terms of improving business practices, thanks to certification.” A former employee of Forestal Arauco (e8) also had a very positive assessment, speaking of the changes over 19 years:

Personally, I worked at Arauco until 2006 . . . and I got to know some of their forests and now, two, three years ago, I was in a forest of theirs again and, really, I was surprised by what they have done, all the water management, the quality of the trails they have constructed, so they have really improved the environmental protection remarkably. . . . What the companies are doing today is very good . . . but they are just huge—it is impossible for them not to have effects, not to affect the people—impossible.

According to a former CMPC/Mininco employee (e2), in all these processes the companies have begun to systematize their relationship with local communities, their value chain, their local management plan, and their environmental standards, among other things. The CONAF employee (e1) also pointed to certification as an important driver of change in corporate policy in Chile. According to a founding member and former president of FSC Chile (e5), the main reason for this is that “the companies are feeling that they can no longer do what they want, but that they can increasingly come under the spotlight of a critical public through the FSC.” A political activist from the capital of Araucanía (a1) stated that there have been changes, above all, in that companies now enter into selective contracts with individual local communities. Although companies are often still inconsistent in their dealings with local communities, they have strengthened their relationships with the communities and are now proactively pursuing good relations as part of their corporate social responsibility programs. For example, Forestal Arauco has

established its own foundation, *AcercaRedes*, dedicated to the rural social development of neighboring communities.

There are more skeptical voices. A member of an environmental organization (e7) told me that even though the forest companies have made some adjustments, they have only changed their economic practices within a certain framework, and only as a result of intensified pressure. He concluded: “There is now more military on the forestry companies’ lands, much more military . . . and much less acceptance than five years ago. The forestry model has very low social acceptance, despite certification.” A wide range of assessments can be identified. But most of my respondents agreed that since certification the relationship between forestry companies and the local population has intensified, but not necessarily improved in all cases.

The emergence of FSC Chile was initially the result of an acute need for action regarding the conversion of native forests into plantations by large companies. That process was stopped, but the conflict between forestry companies and local Mapuche communities intensified. This is due to (among other things) the socio-ecological problems in regions like *Araucanía*, which have been significantly exacerbated in recent years by permanent water shortages and an enormous number of forest fires (Astorga and Buschel 2019:15). Initially, the FSC succeeded in imposing a new framework for action and new forestry standards, and in better integrating the local population. However, it soon became clear that not even this strict certification system could bring about fundamental changes in the Chilean forestry sector (Astorga and Burschel 2019:84f.; Millaman 2016:20f.). This may seem surprising, as the international rules of the FSC provide strict guidelines regarding the sensitive cultural and socio-ecological relationships between forestry companies and local communities. Principle 3 states that companies must “identify and uphold Indigenous Peoples’ legal and customary rights of ownership, use and management of land, territories and resources affected by management activities.” Principle 4 says that forest management should contribute to “maintaining or enhancing the social and economic well-being of local communities.” Principle 6 long called for the preservation of biodiversity, water resources, and ecosystems, and the integrity of the forest, but has now been amended to call only for the preservation of “ecosystem services and environmental values of the Management Unit, and [to] avoid, repair or mitigate negative environmental impacts.” And Principle 10, added later, at first called for plantations to supplement natural forests only to provide for their relief, a sentence that was subsequently deleted (see Table A1 in the appendix). This raises two questions: how do we explain this decoupling of policy and practice, and why are Chilean forestry companies still certified, if they chronically disregard these standards? We might also ask why companies do not lose their membership in FSC Chile even in the event of serious legal violations. In 2015, for example, it came to light that CMPC had divided up the domestic market for toilet paper and other products with another company, through years of illegal price fixing. But an attempt to suspend the company’s membership in FSC Chile failed due to internal processes (e5, f9). This gives rise to the suspicion that the companies are largely able to assert their interests within FSC Chile and thus that the regulatory mechanism shows clear weaknesses.

STRUCTURAL SELECTIVITY AND CORPORATE POWER IN FSC CHILE

In Chile, the international world-system with its dependencies and structures, as well as the domestic balance of power, play essential roles in the decoupling of environmental regulation and the economic and social practices of forestry companies. Looking at power relations within regulatory mechanisms such as the FSC, we see a number of reasons why the influence of forest companies on FSC Chile far exceeds that of environmental and social civil society actors and that of rural communities. First, communication between FSC Chile and the major forest companies is tight. There is a close connection between the full-time employees on the two sides. Sometimes high-level employees from the forestry industry even move to the executive board of the FSC. This is why the forestry companies always know about changes and processes taking place in the FSC: according to an FSC employee (e6), a short phone call is enough. But these companies do not only maintain close informal contacts with FSC Chile. They can also talk to the director of FSC International to put pressure on FSC Chile (e3).

Besides the communication channels between the FSC and the various actors, there are those related to the certification companies. Access to these channels is even more unevenly distributed. For example, the management consultant quoted earlier (e3) reported that the contact details given on certification companies' websites often do not work even for him. And often their websites can only be viewed in English. All this means that not only the informal but even the formal communication channels for the various actors involved in the certification and evaluation processes are unevenly distributed.

Furthermore, the interests of the local population and Mapuche communities, as well as of those employed in forestry and of the environmental organizations, are drastically underrepresented in the meetings of FSC. In addition to the selective communication channels, this is because, unlike the paid employees of forest companies, most NGO members and civil society activists do not have the time or the resources to prepare for and participate in FSC meetings over long periods, as a Chilean NGO member (e10) explained. This leads to a fundamentally asymmetrical relationship between the centrally organized, highly qualified, and well-financed specialist teams of forestry companies on the one hand and decentralized, voluntary, and precariously financed initiatives on the other. Consequently, the dominance of the forestry companies within FSC Chile results not only from the formal processes but also from informal dependencies, as well as the overall social and financial inequalities of Chilean society.

This asymmetry also has implications for policymaking within the FSC. The interpretation of international norms and the drafting of specific national standards, for example, are negotiated between and within the three chambers of FSC Chile (environmental, social, and economic). Development of the national standards, which initially involved mainly Chilean NGOs and Masisa, began as early as 1999 and lasted until 2006, explained a forest engineer (f9). But they have been revised again and again, more recently with the participation of the large companies and their experts. And in this process the large companies have gained more and more influence within FSC Chile. An NGO staff member (e10) reported,

The idea is that you discuss the standards and everything with the three chambers, and the participation is extremely unequal, because currently the main participants are the companies. The companies have technical teams, specialists, they have paid people with travel money—with everything, you could say—and meanwhile civil society in Chile is getting weaker and weaker, because, for example, the NGOs used to be able to work with a lot of projects and resources—at that time we had a professional team to participate in these processes that also went a little bit beyond your project . . . and that doesn't exist anymore.

As we can see, the structural selectivity within the FSC with regard to access to decision-makers and influence on policymaking is reinforced by structural social background conditions. One of these is the already mentioned underfunding of Chilean civil society. According to an NGO staff member (e4), Chile's civil society is consistently struggling with scarce financial resources. This is especially true since Chile joined the OECD and is no longer considered a poor country by many donors. Thus it is hard for the NGOs, which are considered an important oppositional force to the forestry companies, to commission their own studies, pay for experts and the travel costs of activists to attend important international meetings like the General Assembly of the FSC, or to employ their own experts (e4). Even the funding of the campaign described earlier, which contacted buyers in the United States, was quite modest. For example, as a member of an important Chilean NGO reported (e7), those involved flew to the U.S. at their own expense to conduct negotiations there. In contrast, Chilean forestry companies employ many experts, maintain excellent contacts with the country's political elite, and are the only employer for local people in rural regions dominated by forestry, as well as for critical engineers in the forestry sector. A management consultant (e3) reported that even university studies of the forestry sector are sometimes directly funded by one of the forestry companies. This not only reduces the participation of social and ecological actors within FSC Chile, increasing their dependency on private funds, but also makes FSC Chile itself dependent on donations from forestry companies. A long-time member of FSC Chile reported that large companies in the forestry sector occasionally financed entire meetings of FSC Chile (e5). At the same time, and in addition to donations and contributions from its members, FSC Chile is co-financed by FSC International. However, these informal and loose dependencies of FSC Chile engineers, experts, or consultants working in the forestry sector, as well as civil society organizations, on the cooperation or financial support of forestry companies are only the broader framework in which other structurally selective processes favorable to corporate interests emerge. One of these is the certification process itself.

For a company to become certified, it must pay a private certification company. Their services are expensive, as reported by a consultant (e9) who is active in this field. For small and medium-sized companies, this is definitely a financial hurdle. It takes about a year for certification to be issued. After that, the company faces additional costs in the form of an annual review and a main review every five years. Critics have been complaining for some time that FSC certification is not economically viable for small forest owners (Forum Ökologie und Papier 2013:47). Thus the FSC seems to have developed, contrarily to its

original objective, into a mechanism that privileges larger companies. The relationship between the forestry companies and the certification companies is usually permanent, and this economic dependence of the certification company on the client means that it is impossible to speak of independent verification and audit. Rather, as consultants working in the field admit, there is an open conflict of interest here (e3, e9). Moreover, essentially only five companies in Chile offer this service—and more than half of the certified area is covered by just one of them (Venegas 2014:2).

Since the auditors who work for the certification companies often come from abroad and do not know the local cultures, conflicts, history, or language, they rely on strictly formalized processes and easily identifiable indicators. The usual informalization of the process, as reported by the consultant quoted earlier (e9), leads to the experts and translators becoming a distorting filter between the certification company and the local population—a filter which is controlled by the forestry company. In extreme cases, the responsible certifiers hand over all responsibility to local experts. And thus the influence of the forestry company and the arbitrariness of the standards and their relation to the local situation is magnified. Moreover, the brief time spent on these costly audits means that only a few stakeholders are really consulted, especially when it comes to stakeholders in the local population.

It is important to understand here that the FSC itself does not have its own monitoring bodies to check compliance with the standards. The only actor that conducts these audits is the certification company chosen by the forest company itself. Civil society can only try to initiate a separate procedure by calling out particularly drastic violations of FSC norms. Since the local population is usually not aware of either the responsible certification company or the available complaint procedures, the interests of the forestry companies and the local population are highly unmatched in the certification process. But even if complaints do reach the certification companies then there is little capacity or willingness to record and process these complaints. For example, Astorga and Burschel (2019:90) report hundreds of letters from forestry workers to companies that went unanswered. This significantly weakens the voice of the local population within the certification system as a whole.

While the dependency of FSC Chile and the certifiers on the forestry companies is relatively direct, it works more indirectly at the global level of the world economy. The funding of FSC International depends largely on the business turnover that companies make with certified products. For each product that bears the FSC seal, the FSC receives a system fee (Forum Ökologie und Papier 2013:47). In 2022, more than USD 50 million in such annual administration fees was collected (FSC 2023:51). The income from the accreditation body (Assurance Services International), donations, and membership fees is negligible in comparison.¹⁸ Therefore, the FSC has a great interest in a growing market volume of FSC-certified products. But, given its financing structure, the FSC is not only dependent on a large turnover of certified products. Its competition with PEFC also puts pressure on the FSC to certify as much product as possible (PEFC 2020). With this dependence on a high market share of certified products, the FSC has an interest in as many large forest companies as possible being certified and in hurdles to certification—overly strict standards and overly complicated procedures—being avoided.

In Chile this has led to a situation where discourse in the national FSC meetings is severely restricted. The important discussion of whether forestry that displaces the modes of living and production of local populations, transforms entire areas into large-scale monocultures, and endangers ecological cycles may be recognized as *sustainable* falls outside this framework. A key leader in FSC Chile (e9) told me, “Those who are in the FSC would all tell you, ‘the plantations are there, and they’re going to stay.’ The thing we can do is try to make sure they don’t get bigger.” Ultimately, this leads to the FSC reinforcing the international division of labor with regard to forest extractivism—that is, the dependent position of regions focused on unprocessed forest products and the associated social-ecological costs, instead of alleviating them. At the same time, the FSC’s transnational and market-based regulatory mechanism, which uses global sales markets as lever of power, is the only way to exert sufficient pressure on forestry companies that allows at least small changes inside the global division of labor. All in all, however, we have to conclude that the problems of market-based regulation like that of the FSC go far beyond the decoupling of global norms and local practices, significantly privilege the interests of large companies, and prove to be a very limited instrument for the necessary fundamental changes (necessary in view of the high level of conflict), since discourses, demands, and initiatives that fundamentally want to address the problem are structurally excluded.

SUSTAINABLE FORESTRY THROUGH CERTIFICATION? A CRITICAL BALANCE

As we have seen in the case of FSC Chile, transnational, market-based, and civil society mechanisms of certification can succeed in enforcing certain changes in the area of corporate governance. Recent studies have shown this in other contexts as well (Cubbage et al. 2010; Tricallotis, Kanowski, and Gunningham 2019; Tritsch et al. 2020; Wolff and Schweinle 2022). On the other hand, this case shows clear systematic weaknesses in this type of market-based regulation with respect to social improvements, environmental effects, democratization, and the effectiveness of controlling economic processes.

The reasons for the systematic weaknesses of this kind of private certification can be seen in several factors that favor the interests of the forestry industry with respect to FSC certification in Chile. First, the increasing problems of Chilean civil society and its weakness in the face of business interests, which is related to the power inequalities in Chilean society as a whole, have led to over-representation of business interests in FSC Chile. This is reinforced by the structural selectivity of the institution of FSC Chile itself. Second, not only has FSC Chile been captured by business interests over time, but the regulatory mechanism is also systematically flawed. This has to do with the certification process, in which the certification company is dependent on its client, the plantation company. Third, because of the international competition between seals, the FSC itself is interested in profitability and a high turnover of FSC-certified products and thus in the growth of the forest industry as a whole—growth not overly restricted by regulations. All these factors mean that the power of the FSC to change corporate behavior and processes is very limited, the extractivist economic integration of regions like Central-South Chile is strengthened, and social inequities and ecological problems continue.

In Chile, at the beginning, the power of the FSC over the forestry companies resulted mainly from appealing to the buyers of forest exports in the global North. This makes it clear that such seals, as market-based and buyer-centric regulatory mechanisms, can only function on the basis of economic considerations. Companies cannot be forced to get certified; this only happens when the market in the foreign countries makes it necessary, that is, when it is economically profitable to become certified and when the pressure from the sales markets in the target countries is great enough. Today, pressure on Chilean forestry companies through the FSC works only when the certification company threatens to withdraw the seal and thus restrict a company's market access. However, this happens only in very rare cases. Both local communities and NGOs lack the resources to build up sufficient public pressure from outside or within FSC Chile, even in cases of clear violation of standards by the companies.

As a result, the certification apparatus did not fundamentally change forestry in Chile but only reiterate its socially and ecologically unsustainable extractivist position in the world economy. In fact, since smaller forest operators can hardly afford certification, the arrangement favors very large companies. And given the structural selectivities and inequalities of influence on and within FSC Chile, the local population, as well as Chilean civil society, is systematically disadvantaged. FSC certification does not help reduce or resolve local conflicts. Instead, it has become a mechanism that promotes market opportunities and the sustainable *image* of large Chilean forestry companies on international sales markets—not sustainable forestry. In the long run, certification strengthens big business groups, and the major conflicts in the forestry sector persist, in particular those concerning the indigenous Mapuche and their right to manage their ancestral territory where the forestry industry operates.

The case of FSC Chile also shows that market-based regulation of extractivist commodity chains fosters dependencies between the global North and South. Regulatory mechanisms such as the FSC give civil society in countries of the global South an important lever of power to change the actions of large companies, but only by putting pressure on the decisions of buyers in the global North. In this way, buyers do not directly control productive activities, but the demands that apply in sales markets and a specific "world culture" (Meyer et al. 1997b) enforce certification. The globally hegemonic ethical norms prevalent in the target markets of Europe and the United States, with their demand for sustainable forest products, thus shape not only the extractivist commodity chain but also the survival conditions of local populations in peripheral areas, such as southern Chile.

This also places the FSC in the neocolonial continuity of global North–South dependencies. Within the framework of certification, the concrete productive activities of companies are changed to fit the interests, norms, and values of consumers in the global North. Customer satisfaction and the trust of large-scale buyers are the focus of certification. The local population, which is directly affected in peripheral areas, or indigenous rights are not the starting point for regulation. Their fundamental interests are still left out of the equation due to structural selectivities. As a result, although the replacement of virgin forests by plantations has slowed significantly, water scarcity, land scarcity, poverty, and threats from large-scale forest fires caused by monocultures persist. This applies equally to

the conflict with the indigenous Mapuche, in which the forestry companies today embody all the colonial continuities and inequalities in Southern Chile. The decoupling of policy and practice in environmental governance goes hand in hand with the decoupling of internationally recognized indigenous rights and the local reality of indigenous communities, which is rooted in long colonial traditions and the long-standing global division of labor (Coulthard 2014; Di Giminiani 2018; Kaltmeier 2004; Toledo 2005).

In some respects, Chile's highly unequal political system (Landherr and Graf 2017; Pizarro 2020) reinforces structural selectivities in FSC Chile. However, these framework conditions only multiply structural selectivities that are by no means only a Chilean problem but demonstrate the systematic weaknesses of market-based regulatory mechanisms. Just as in other transnational private forms of regulation, it turns out that their concrete implementation in a particular area is a question of power and, above all, of countervailing power to corporate power (Barton and Román 2012; Bartley 2021). The fact that the world-system structurally privileges the interests of big, globally oriented corporations (Wallerstein 2004:26f.) is subsequently also reflected in regulation mechanisms such as the FSC, especially in a neoliberal economic model such as that established in Chile (Schneider 2013:176ff.). Although cases can be found in which the FSC has at least slowed deforestation, doubts about the FSC as a guarantor of sustainable forestry affect even countries in the global North (Niedzialkowska and Shkaruba 2018). As criticism of the FSC in Chile increases, scientific studies are also increasingly supporting skepticism. For example, Millaman et al. (2016:20) conclude that the FSC is in a deep crisis.¹⁹ This has led, among other things, to the Association of Forest Engineers for the Native Forest withdrawing from FSC Chile (Agrupación de Ingenieros Forestales por el Bosque Nativo 2018).

Instead of continuing to rely on the FSC and private, market-driven regulation of the forestry industry, it might be far more efficient and successful on the one hand to strengthen local communities and their say in the use of ecosystems in their territories and, on the other hand, to combine direct forms of action and protests by the Mapuche and rural communities with international civil society support to increase the pressure on the Chilean state and society to continue to return land to the Mapuche communities through the National Corporation for Indigenous Development (CONADI) and to push back the forestry industry in terms of area. This might be better not only for the people of the Araucanía, by strengthening the rural economy, but also for the local ecology, as small-scale agricultural land uses go hand in hand with greater biodiversity, and the Mapuche cosmivision is based on the protection of local ecosystems (Carrasco 2015; Neira et al. 2012; Otero 2006:56f.). Land redistribution could therefore be a key not only to dealing with conflict in the Araucanía but also to combating the social and ecological problems there. Finally, power relations, state actors, and the strength of civil society and local community organizations are crucial for the implementation of sustainable forest management (Bartley 2021; Burns et al. 2016) and should be the subject and starting point of future studies on the governance of extractivist commodity chains. ■

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NOTES

1. While in 2000 imports from North America still dominated, pulp imports from Latin America are now by far the most important, with over five million tons in 2014 (Deutsches Institut für Wirtschaftsforschung 2016:13).

2. See “At a Glance” on the FSC’s “Facts & Figures” page (<https://connect.fsc.org/impact/facts-figures>, retrieved May 8, 2023).

3. For example, in 2022, Apple generated revenue of over USD 394 billion, and ExxonMobil, nearly USD 413 billion. For comparison, Chile’s GDP in 2021 was USD 317 billion (<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=CL>, retrieved April 25, 2023).

4. The fieldwork was carried out as part of the sociological project Sozial-ökologische Widersprüche kapitalistischer Landnahme: Das Beispiel der Holz- und Wasserwirtschaft in Südkhile (2015–2021), which was funded by the German BMBF and DAAD.

5. For a selected list of documents, see Table A3 in the appendix.

6. According to the business association Corporación Chilena de la Madera (<https://www.corma.cl/quienes-somos/sedes-regionales/sede-la-araucania/>, accessed December 28, 2019).

7. A third company, Masisa, is backed by Swiss capital and produces mainly wood panels and chipboard.

8. Own calculation from INFOR (2022:31) and company reports from Forestal Arauco (2018) and CMPC/Mininco (2017).

9. Own calculation based on INFOR (2022:173) and World Bank data (<https://data.worldbank.org/indicator/NE.EXP.GNFS.CD?locations=CL>, retrieved May 2, 2023).

10. While pulp is mainly exported for further processing by the paper industry in China, which has become the biggest customer, the U.S. and Europe are important customers for panels, chipboard, and other wood products. Data from Estadísticas Forestales (<https://wef.infor.cl/comercio/comerciointernacional.php>, accessed June 10, 2020).

11. See Table A2 in the appendix for a list of interviewees.

12. The semi-public CONAF, established by the state but administered under private law, is responsible for the control of the forestry sector and the national parks, as well as preventing and extinguishing forest fires.

13. At the same time, the state’s lack of assertiveness *vis-à-vis* private actors cannot be explained solely by the weakness of the state; we must also consider its fundamental interest in the growth of the extractive industries (Pizarro 2020).

14. Chilean System of Certification of Sustainable Forestry, or CERTFOR. It later merged with the international PEFC.

15. As early as 2010, about 4.7 million tons of wood pulp worldwide were FSC-certified, which corresponded to about 9 percent of the total global supply (Forum Ökologie und Papier 2013:42).

16. The three chambers correspond to the basic principles of the FSC: environmentally appropriate, socially beneficial, and economically viable management of the world’s forests.

17. Unlike the FSC Pure seal, FSC Mix does not require 100 percent of the fibers to come from FSC-certified wood; only 70 percent of the wood fibers must be FSC-certified or recycled raw materials. The FSC Recycled seal means that only recycled material has been used.

18. Overall, FSC International had an EBITDA of over USD 12 million in 2022 (FSC 2023:52).

19. See for example “La complicidad de certificadoras ambientales en la catástrofe forestal en Chile: El sello FSC que no regula,” *El ciudadano*, April 8, 2023 (<https://www.elciudadano.com/actualidad/la-complicidad-de-certificadoras-ambientales-en-la-catastrofe-forestal-en-chile-el-sello-fsc-que-no-regula/03/22>).

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APPENDIX

TABLE A1. The 10 FSC Principles

Principle 1: Compliance with the Law	The Organization shall comply with all applicable laws, regulations and nationally-ratified international treaties, conventions and agreements.
Principle 2: Workers' Rights and Employment Conditions	The Organization shall maintain or enhance the social and economic well-being of workers.
Principle 3: Indigenous Peoples' Rights	The Organization shall identify and uphold Indigenous Peoples' legal and customary rights of ownership, use and management of land, territories and resources affected by management activities.
Principle 4: Community Relations	The Organization shall contribute to maintaining or enhancing the social and economic well-being of local communities.
Principle 5: Benefits from the Forest	The Organization shall efficiently manage the range of multiple products and services of the Management Unit to maintain or enhance long term economic viability and the range of environmental and social benefits.
Principle 6: Environmental Values and Impacts	The Organization shall maintain, conserve and/or restore ecosystem services and environmental values of the Management Unit, and shall avoid, repair or mitigate negative environmental impacts.
Principle 7: Management Planning	The Organization shall have a management plan consistent with its policies and objectives and proportionate to scale, intensity and risks of its management activities. The management plan shall be implemented and kept up to date based on monitoring information in order to promote adaptive management. The associated planning and procedural documentation shall be sufficient to guide staff, inform affected stakeholders and interested stakeholders and to justify management decisions.
Principle 8: Monitoring and Assessment	The Organization shall demonstrate that, progress towards achieving the management objectives, the impacts of management activities and the condition of the Management Unit, are monitored and evaluated proportionate to the scale, intensity and risk of management activities, in order to implement adaptive management.
Principle 9: High Conservation Values	The Organization shall maintain and/or enhance the High Conservation Values in the Management Unit through applying the precautionary approach.
Principle 10: Implementation of Management Activities	Management activities conducted by or for the Organization for the Management Unit shall be selected and implemented consistent with the Organization's economic, environmental, and social policies and objectives and in compliance with the Principles and Criteria collectively.

Source: Forest Stewardship Council, retrieved April 25, 2023 (<https://my.fsc.org/my-en/fsc-principles-and-criteria>).

TABLE A2. Interviews Quoted

Interviewees	code	Date
Senior employee of CONAF	e1	14.03.2016
Former employee of CMPC/Mininco	e2	14.03.2016
Management consultant in the forestry sector	e3	05.04.2016
Employee of an NGO and member of the FSC	e4	13.04.2016
Member and former president of FSC Chile	e5	21.04.2016
Staff member of FSC Chile	e6	19.07.2016
Staff of an NGO working in the forestry sector in Chile and internationally	e7	26.04.2020
Former employee of Forestal Arauco	e8	11.5.2016
Social and environmental activist from Temuco	a1	20.05.2016
Forest engineer and member of FSC Chile	f1	02.06.2016
Management consultant in the forestry sector	e9	21.06.2016
Employee of an NGO as well as FSC member	e10	03.06.2016
Independent forest engineer	f9	22.12.2021
Rural resident (non-Mapuche, commune of Galvarino)	r1	20.3.2019
Rural resident (Mapuche, commune of Galvarino)	r2	18.3.2019
Rural resident (Mapuche, commune of Galvarino)	r3	27.4.2016
Rural resident (Mapuche, commune of Galvarino)	r4	18.3.2019
Rural resident (Mapuche, commune of Galvarino)	r5	18.3.2019
Rural resident (Mapuche, commune of Galvarino)	r6	4.5.2016
Rural resident (Mapuche, commune of Galvarino)	r7	3.5.2016
Rural resident (non-Mapuche, commune of Curanilahue)	r8	5.11.2019
Rural resident (non-Mapuche, commune of Curanilahue)	r9	5.11.2019

TABLE A3. Evaluated Documents and Secondary Data

Maps of land use in the La Araucanía Region (Chile) of the Observatorio Regional de la Universidad Católica de Temuco, 2016
Annual reports of the forestry companies Forestal Arauco, CMPC/Mininco, and Masisa for 2014–2018
Survey of the Chilean Census of 2017
Reports of the Food and Agriculture Organization of the United Nations, 2015–2022
Annual reports of the Chilean National Forestry Institute (INFOR), 2015–2022
Internal as well as publicly available documents and reports of the Forest Stewardship Council, 2016–2022