

Conflict Plantations

Chapter 3: Stolen land and fading forests in Chile

May 2022





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Environmental Paper Network, Colectivo Viento Sur, Global Forest Coalition

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EXECUTIVE SUMMARY

Chile is home to the second largest coastal temperate rainforest on the planet: the Selva Valdiviana, or Valdivian Temperate Forest. Located between the Pacific Ocean and the Andes, these forests are shaped by winds and heavy rains, making them the only temperate rainforest in South America and home to unique fauna and flora such as the ancient araucarias (monkey puzzle trees) and alerces (some of the oldest trees in the world). In recent decades, these forests have been largely replaced by timber plantations grown to supply the paper industry, and the last remaining stands are threatened by further industry expansion.

The expansion of the paper industry in Chile has been dominated by the company, Celulosa Arauco y Constitución (Arauco), the largest in the industry. Originally a public company, Arauco was privatized during the military dictatorship, which began with a military coup against Salvador Allende in 1974. The military rulers granted a paper mill and a forestry company (both previously under public control) to a rich oil trading family, called Angelini. Celulosa Constitución and Celco, after further mergers, became Celulosa Arauco y Constitución. The company then obtained over a million hectares of land from the military junta, much of it taken from the Mapuche communities, and received generous subsidies to convert the land into timber plantations. Local communities were forcibly evicted by Arauco officials, backed by the army.

Timber plantations expanded by a factor of ten between 1975 and 2007 and now occupy almost half (43%) of the Southern-central Chilean landscape. Meanwhile, natural forests shrunk. For example, in the Nahuelbuta Mountain Range between the Bio Bío and Araucanía regions, in the 25 years between 1986 and 2011, one third of natural forests were replaced by timber monocultures.

The return of democracy in Chile did not remedy the damage wrought by the dictatorship. Natural forests have not been restored, nor have stolen lands been returned to their traditional owners. On the contrary, large-scale plantations have continued to expand and put pressure on surrounding habitats. Their intensive consumption of water has depleted the water table and this, in conjunction with climate change, is causing a wave of drought and forest fires that directly threatens the remaining natural forests, as well as the global climate. At the same time, when indigenous communities tried to reclaim their traditional lands, they encountered violence and criminalisation that grew into an escalation of protests and repression.

While paper is touted as an environmentally friendly alternative to plastic, many are unaware that it is associated with the abuse of indigenous communities, loss of the last natural coastal forests, and massive greenhouse gas emissions. This is clearly the case for the paper industry in Chile. To address these social and environmental injustices, the remaining natural forests must be protected and plantations need to be restored with native species. Furthermore, traditionally owned lands must be returned to indigenous communities and Free, Prior and Informed Consent should be fully implemented.

Arauco, as the major paper company in Chile and having benefited heavily from a process of forest destruction and indigenous rights abuses, should be the first to show good faith and truly change its business practices on the ground.



Bosque Naranja, Photo: Rosario Nieto Chadwick (Creative Commons Attribution 3.0 Unported)

SOCIAL IMPACTS

The stolen land

Julio Faúndez González would never forget that day in 1974. He was tending to the fields of the Cooperativa Mundo Nuevo in Curanilahue, when his land was visited by officers of Bosques Arauco - the forestry arm of what would later become Arauco y Constitución, a business giant whose activities range from solid timber to pulp and paper production. The Arauco officers arrived together with a judge, a contingent of the military police (*Carabineros*) and other soldiers. They ordered the local community to meet in the local school, where they told them that all the land they traditionally used was actually state property, and that it had been acquired by Forestal Arauco to develop its plantations. As some villagers grumbled, an army officer added a clear threat: "We have enough ammunition, and the river is wide".¹ For the local people there was no option but to comply: a few months before, on September 11th 1973, the army led by General Augusto Pinochet had overthrown the legitimate government, eradicated democracy and established military rule. In the process 130,000 people, including actual or potential dissenters, were arrested and thousands tortured, killed, or simply 'disappeared'.² The villagers of Curanilahue knew well that any resistance to the new rulers would have cost them their lives.



Before being overthrown by the army, the government led by Salvador Allende had passed land reforms that included the restitution of land to traditional communities and to the Mapuche indigenous people. But Allende was now dead, killed as the army tanks bombed the presidential palace. Following the military coup in 1973, around 65% of the land restored to communities by the land reform was returned to their previous owners.³ Huts were burned and machinery, animals, harvests and other goods confiscated along with the land.⁴

The story of Mr. Faúndez González and the Curanilahue community is not an isolated case. Many other communities in Southern Chile suffered the same fate: between 1974 and 1994, a total of 1,700,000 hectares were seized by large companies and planted primarily with radiata pine and eucalyptus.⁵ Most of the dispossessed communities were Mapuche. The violence inflicted on them by soldiers and paramilitaries during the dictatorship, targeted not only those who had participated actively in the recovery of lands during the land reform (including the leaders), but also their families and the Mapuche social fabric as a whole.⁶

¹ "Balas hay hartas y el río es ancho" Universidad de Chile, Expansión forestal y desterritorialización rural en Curanilahue, March 2019, <http://repositorio.uchile.cl/handle/2250/170113>

² "Collins, Stephen (16 December 2000). "Now open – Pinochet's torture chambers". The Daily Telegraph. London. Retrieved 20 April 2010. <https://www.telegraph.co.uk/travel/722163/Now-open-Pinochets-torture-chambers.html>

³ Rosamel Millaman and Charles Hale et al. Chile's Forestry Industry, FSC Certification and Mapuche Communities, November 2016, <https://ga2017.fsc.org/wp-content/uploads/2017/10/Chiles-Forestry-Industry-FSC-Certification-and-Mapuche-Communities-FINAL.pdf>

⁴ Rosamel Millaman and Charles Hale et al.,

⁵ Villa, Patricio, Proyecto de ley que extiende el Decreto 701 amenaza con más "bosques que matan," 15th July 2013, available at: <http://resumen.cl/2013/07/proyecto-de-ley-que-extiende-el-decreto-701-amenaza-con-mas-bosques-que-matan/>

⁶ Perez-Salez, Pau et al. (1998) Muerte y desaparición forzada en la Araucanía: una perspectiva étnica. LOM, Santiago.

Arauco alone obtained control over 1,117,788 ha of land, of which 766,762 was planted with fast-growing species.⁷

Each summer, every time we saw clouds of smoke around Lleu-Lleu Lake, in the basin of Lleu-Lleu Lake, my dad said to me "they're burning the trees, the forestry company. They're here now." This is what I heard. I always saw them burning the native forest and they caused lots of fires which were "accidental", but in truth they were started deliberately in order to replace what was there with the single-crop cultivation of pine and eucalyptus that we see today. In those days, in the 80s, I felt that the landscape was being changed. First of all by Pinochet, because CONAF transferred a huge amount of land – which had been going through the process of land reform – to private companies, and then these forestry companies started setting up their operations and destroying what was left of the native forest, replacing it with pine and eucalyptus.

–Adolfo Millabur, interview led by Rosamel Millamán.⁸

With the active support of the military dictatorship a handful of powerful forestry companies, led by Arauco and CMPC, acquired large tracts of land destined to become monoculture forestry plantations.⁹

- CMPC (Compañía Manufacturera de Papeles y Cartones de Puente Alto S.A.) and its sister company, Forestal Mininco, were already well established at the time of the military coup. They are controlled by the Matte family.¹⁰
- Arauco Group was built by the Angelini family, one of the richest in the country and owners of Chile's main oil company, CoPeC (Compañía de Petróleos de Chile). Angelini's business in the forestry sector began during the military dictatorship, when the new rules allowed a public forestry company called Celco to be privatized and acquired by the Angelini Group. They were also given lands taken from the Mapuche communities and other peasants, and generous subsidies to convert that land into timber plantations. Later, in 1979, the military government transferred the property of the pulp mill Celulosa Constitución, a public company, to CoPeC and the Angelini family. Celulosa Arauco and Celulosa Constitución merged and became Celulosa Arauco y Constitución, still controlled by the Angelini family.

In some cases, these companies obtained the land from state institutions, despite the fact that it was already owned by local communities, as in the Curanilahue case. In other instances, the company bought the land from villagers, but the company decided the price and the local families were forced to sell. Those who resisted faced intimidation and direct aggression, such as having their huts burned down.¹¹

On the land taken from the Mapuche people, Arauco, CMPC, and other forestry companies developed extensive plantation stands, largely subsidized by the state. The dictatorship gave generous tax exemptions to pulp-wood plantation development. It also published Decree DL 701, conceding 10 years grants covering 75% of the cost of the development and management of plantations. 50% of this went directly to the company and 25% to shareholders.¹² Between 1974 and 1994, such incentives were granted to 807,203 hectares of timber plantation.¹³

In this way, from 1974 to 2003, the state subsidized the establishment of 1.2 million hectares of plantations, distributing a total of USD 875 million to landowners. Two thirds of this amount, USD 600 million, went to just two companies, Forestal Arauco and CMPC (then called Mininco).¹⁴

⁷ Rosamel Millaman and Charles Hale et al., 2016.

⁸ Rosamel Millaman and Charles Hale et al., 2016.

⁹ Martín Correa et al., La Reforma Agraria y las tierras mapuche. Chile 1962-1975, 2005, <https://www.worldcat.org/title/reforma-agraria-y-las-tierras-mapuches-chile-1962-1975/oclc/60569435>

¹⁰ Foreign Affairs, Meet the Mattes, The Family -- And Paper Company -- That Helped Build Chile's Economy, June 2013, <https://www.foreignaffairs.com/articles/chile/2013-06-12/meet-mattes>

¹¹ Universidad de Chile, Expansión forestal y desterritorialización rural en Curanilahue, March 2019, <http://repositorio.uchile.cl/handle/2250/170113>

¹² DL 701, <https://www.leychile.cl/Navegar?idNorma=6294>

¹³ Villa, Patricio, 2013.

¹⁴ Villa, Patricio, 2013.

At the end of this project, 78% of tree plantations were owned by large companies, while only 4% were in the possession of small farmers, according to the Survey of Forest Resources 1997.¹⁵

Back to democracy, but no land back

Despite its misery, the community of Curanilahue is unique in being the only one that has had its rights recognized by the Chilean justice system. This happened as the result of an incident in which Mr Faúndez González, together with 35 families, tried to re-occupy their original land, were accused of trespassing by Arauco and beaten by the police.¹⁶ In this case the court found that, because of some irregularities in the paperwork, Arauco was unable to prove ownership of the land it claimed.¹⁷ If Mr. Faúndez González thought that his dream was finally going to be fulfilled, he was wrong: the community is still struggling to reclaim its land, despite the court sentence in August 2019. Forestal Arauco has continued to harass the community through legal actions and by invading their small holdings. Surprisingly, the company recently obtained an injunction against the villagers from Curanilahue Guarantee Court. On the morning of May 27 2020, in the middle of the Covid-19 pandemic, they sent their contractor companies¹⁸ to break into the area and destroy buildings and other structures. While preparing to resist the forest contractors, Julio Faúndez González suffered a heart attack and died. He hoped to see his land rights finally recognized, but he lost his life while being harassed by the company.¹⁹

However, unlike the case of Curanilahue, in many instances of land grabbing perpetrated under the dictatorship, the courts recognized Arauco's legal rights over the stolen land because the formality of land registration was considered correctly registered. Consequently, the claim made by the Mapuche communities to their traditional lands has been classified as a criminal offense and handled with brute force, including tear gas, batons and arrests. Such brutality has occurred in Sara de Lebu,²⁰ Laraquete,²¹ Yani²², at Fundo Rucahue - Külche,²³ and in Malleco,²⁴ Elicura²⁵, and Tirúa.²⁶

The loss of traditional land - and with it, livelihoods, culture and spirituality - is not the only impact suffered by Mapuche indigenous communities. The remaining land they have is being adversely

¹⁵ Marien González-Hidalgo, ¿Agua para quién?. Escasez hídrica y plantaciones forestales en la provincia de Arauco, January 2016, https://www.researchgate.net/publication/327542349_Agua_para_quien_Escasez_hidrica_y_plantaciones_forestales_en_la_provincia_de_Arauco

¹⁶ Universidad de Chile, Expansión forestal y desterritorialización rural en Curanilahue, March 2019, <http://repositorio.uchile.cl/handle/2250/170113>

¹⁷ Arauco had registered the land as "smallholder". Corte desestima apelación de Bosques Arauco y falla a favor de integrantes de recuperación territorial en Curanilahue" Resumen.cl. 6 de agosto, 2018. <https://resumen.cl/articulos/corte-desestima-apelacion-de-bosques-arauco-y-falla-a-favor-de-integrantes-de-recuperacion-territorial-de-curanilahue>

¹⁸ "Forestal Arauco, por intermedio de empresas contratistas, estuvo intentando penetrar al sector de "Bajo la Gansa" (parte del fundo Mundo Nuevo que se encuentra a algunos kilómetros al sureste del campamento), con la finalidad de cosechar los pinos del lugar." And "las empresas contratistas ingresando al predio y volviendo a destruir las construcciones de los campesinos", Resumen, A la memoria de don Julio Faúndez, campesino fallecido resistiendo a Forestal Arauco <https://resumen.cl/articulos/a-la-memoria-de-don-julio-faundez-campesino-fallecido-resistiendo-a-forestal-arauco>

¹⁹ Resumen, Campesino falleció durante hostigamiento de Forestal Arauco en recuperación territorial de Curanilahue, <https://resumen.cl/articulos/campesino-fallecio-durante-hostigamiento-de-forestal-arauco-en-recuperacion-territorial-de-curanilahue>

²⁰ Resumen, Carabineros reprime nuevo intento de recuperación territorial mapuche en Sara de Lebu, <https://resumen.cl/articulos/carabineros-reprime-nuevo-intento-recuperacion-territorial-mapuche-sara-de-lebu>

²¹ Resumen, Toma y desalojo de pobladores en Laraquete: otro ejemplo de la "irresponsabilidad" social empresarial de Celulosa Arauco, <https://resumen.cl/articulos/toma-y-desalojo-de-pobladores-en-laraquete-otro-ejemplo-de-la-irresponsabilidad-social-empresarial-de-celulosa-arauco>

²² Resumen, Entre represión e incendios se mantiene recuperación mapuche en Yani, <https://resumen.cl/articulos/video-entre-represion-e-incendios-se-mantiene-recuperacion-mapuche-en-yani>

²³ Lof Külche em conflicto, Denuncia de violencia por parte de fuerzas especiales, January 2014, <https://lofklvcherrecuperando.jimdofree.com/fundo-rucahue/>

²⁴ Resumen, Comunidad mapuche Rankilko inicia nuevas recuperaciones territoriales en bajo Malleco, <https://resumen.cl/articulos/comunidad-mapuche-rankilko-inicia-nuevas-recuperaciones-territoriales-en-bajo-malleco>

²⁵ Resumen, Comunidades inician proceso de recuperación en valle de Elicura: Acusan fuerte represión policial, June 2021, <https://resumen.cl/articulos/comunidades-inician-proceso-de-recuperacion-en-valle-de-elicura-acusan-fuerte-represion-policial>

²⁶ Resumen, Mapuches denuncian que carabineros robaron joyas de ayudante de Machi durante desalojo en Tirúa, August 2020, <https://resumen.cl/articulos/mapuches-denuncian-que-carabineros-robaron-joyas-de-ayudante-de-machi-durante-desalojo-en-tirua>

affected by the nearby plantations, mostly due to depletion of water resources. Fast growing trees require large amounts of water and in the areas surrounding plantations, water levels of wells often drop dramatically, making subsistence agriculture impossible. These plantations have continued to expand and now cover three million hectares.²⁷

The rapid development of the forestry industry did not lead to economic benefits that compensated local communities for the losses suffered. In fact, a study published in 2013 by the Ministry of Social Development, revealed that the regions where the forestry and pulp and paper industry is most developed, are also the poorest in Chile. La Araucanía is the region with the highest income-based poverty index, at 27.9%, followed by the region of Los Ríos with 23.1%, Bío Bío with 22.3%, and finally Los Lagos with 17.6%. These regions are also home to a disproportionate amount of people living in extreme poverty: In La Araucanía 10.6% of people are in extreme poverty, followed by Bío Bío and Los Ríos with 8% each, and Los Lagos with 5.7%. For comparison, the national average is 4.5%.

If using indicators of social well-being that include health, employment, social security, education, and housing, the poverty indices in these regions are even higher: La Araucanía continues to be the region with the highest proportion of the population living in poverty with 28.5%, Bío Bío with 22.4%, Los Ríos with 22.9%, and Los Lagos with 26.1%. Again, for comparison, the national average is 20.4%.²⁸

This is another reason why Mapuche protests have been growing and why forestry activities are seen as a direct threat to local people's livelihoods. Indeed, in a symbolic case, 77% of the local population voted against the presence of timber plantations in the Tirúa municipality (Arauco).²⁹

The conflict over Mapuche lands

With the end of the dictatorship came a renewed hope that Mapuche communities would regain their traditional lands. However, the government and courts considered the property titles held by the paper giants legitimate, despite the fact that in many cases the land was acquired in the context of violence and intimidation. Disillusioned, Mapuche groups tried to re-occupy their land, but were expelled by police forces. For two decades, protests grew, and were met only with violence. Forestry companies portrayed themselves as "victims," claimed their property was occupied by so-called 'criminals', and demanded firm action from the state. The Chilean authorities acted in support of the forestry and pulp & paper giants and treated the protests as common crimes, such as conspiracy, threats and livestock rustling. Consequently, the militarized police (a corps known as the Carabineros, still marked by the time of the military rule³⁰), were often sent to disband the Mapuche when they tried to reclaim their land, and restore order. Emergency laws such as the Anti-terrorism Law³¹ (which dates back to the time of the dictatorship of Augusto Pinochet) and the Domestic Security Act, have both been used to manage the land conflicts. This has led to an increasing militarization of the Mapuche districts, as exemplified by police force expenditure in the provinces of Arauco, Malleco and Cautín, in the table below.

²⁷ Conaf, Superficie de plantaciones forestales según estructura, en hectáreas. año 2020, July 2021, https://www.conaf.cl/wp-content/files_mf/1641495534Cifras_oficiales_CatastroCONAF_Julio2021.xlsx

²⁸ Ministerio de Desarrollo Social, Resultados Encuesta CASEN 2013, available at <http://www.ministeriodesarrollosocial.gob.cl/resultados-encuesta-casen-2013/>

²⁹ Resumen Comunidad de Tirúa decide que se retiren empresas forestales, March 2020, <https://resumen.cl/articulos/comunidad-de-tirua-decide-que-se-retiren-empresas-forestales-tras-historica-votacion-en-consulta-ciudadana>

³⁰ John R. Bawden, The Pinochet Generation: The Chilean Military in the Twentieth Century, University of Alabama Press, September 2016 <https://books.google.de/books?id=ELScDAAAQBAJ&printsec>

And: Amnesty International, Chile: Deliberate policy to injure protesters points to responsibility of those in command, November 2019, <https://www.amnesty.org/en/latest/news/2019/11/chile-responsable-politica-deliberada-para-danar-manifestantes/>

³¹ Amnesty International, Chile: Authorities must stop criminalizing Indigenous Mapuche people under the Anti-Terrorism Law, May 2018, <https://www.amnesty.org/en/latest/news/2018/05/chile-autoridades-deben-dejar-de-criminalizar-personas-mapuches-a-traves-de-ley-antiterrorista/>

Police force expenditure in Arauco, Malleco and Cautín:			
Year	Arauco	Malleco	Cautín
2006	283,834,159	333,014,293	717,552,046
2007	314,342,177	372,806,925	659,801,376
2008	313,629,649	444,087,677	867,080,709
2009	279,136,084	443,829,430	846,472,793
2010	327,599,594	487,695,876	695,262,128
2011	335,800,563	463,048,064	768,305,522
2012	426,728,283	552,875,115	940,174,850
2013	726,314,168	605,351,867	881,386,061
2014	1,462,487,754	810,915,850	1,127,407,389
2015	2,253,790,202	732,479,304	1,036,497,540

Source: Carabineros de Chile³²

An Interior Ministry report has also documented a steady increase in the number of police officers, deployed armoured vehicles, and arrests taking place in regions where indigenous people are the majority population.³³ This did not stop during the COVID19 pandemic, in fact in June 2020, the Minister announced that more army personnel and equipment would be deployed in the Bio Bío and Araucanía regions.³⁴

In October 2021, the government declared the “State of exception in the southern macrozone” in the regions of Bio Bío, Araucanía, Malleco and Cautín, where the majority of Mapuche indigenous people live. This measure allowed for an exception to be made of constitutional rights in these areas, as well as the deployment of the army to quell public unrest, and was justified with “serious alterations of public order”.³⁵ Luckily, the measure was not in force for long, as elections brought in a new government which was more inclined to deal with indigenous people's demands by having a dialogue with them, rather than sending in the army. However, the actions taken by the previous government had left its mark and exacerbated tensions, making it more difficult to work towards a solution.



Photo: Resumen.cl

As a result of dealing with social protests using emergency measures and emergency laws, between 2009 and 2013, eighty Mapuche individuals accused of crimes related to protests against land-

³² Found in: Rosamel Millaman and Charles Hale *et al.*, 2016.

³³ El Desconcierto, Carabineros casi triplicó su dotación en zonas de ataques en el sur desde 2014, March 2016, <https://www.latercera.com/noticia/carabineros-casi-triplico-su-dotacion-en-zonas-de-ataques-en-el-sur-desde-2014/>

³⁴ El Desconcierto, Gobierno reactiva su estrategia en la zona: Envía Fuerzas Armadas y a ministros de Defensa y de Interior a La Araucanía, June 2020, <https://www.eldesconcierto.cl/nacional/2020/06/23/gobierno-reactiva-su-estiones-en-la-zona-envia-fuerzas-armadas-y-a-ministros-de-defensa-y-de-interior-a-la-araucania.html/amp/>

³⁵ Today-In-24, Piñera decrees a State of Exception in the southern Macrozone – Q13, October 2021, <https://today.in-24.com/News/450528.html> <https://www.eldesconcierto.cl/nacional/2020/06/23/gobierno-reactiva-su-estiones-en-la-zona-envia-fuerzas-armadas-y-a-ministros-de-defensa-y-de-interior-a-la-araucania.html/amp/>

grabbing were imprisoned in State facilities. Since then, there have been eight criminal cases, through which a hundred people from the Mapuche population have been charged with crimes of a terrorist nature. However, of these, only four were convicted and then only for minor common offenses. That so few people have been sentenced, demonstrates how widely misused the Anti-terrorism Law has been.³⁶

The misuse of the Anti-Terrorism Law to criminalize Mapuche protests has been denounced by Amnesty International, ³⁷ “Chile having already been condemned by the Inter-American Court of Human Rights in relation to the application of the Anti-Terrorism Law against the Mapuche people”.³⁸



Photo: Resumen.cl

In 2013, an independent UN expert publicly called upon the Chilean government to change legislation to prevent anti-terrorism law being used in a discriminatory way against the Mapuche: “The anti-terrorism legislation has been disproportionately and unfairly applied against Mapuche defendants, and has been implemented without a coherent policy for distinguishing those cases that meet the threshold test for an act of terrorism and those that do not,” said Ben Emmerson, the United Nations Special Rapporteur on Promotion and Protection of Human Rights while Countering Terrorism.³⁹ He also reported allegations of “gunshot injuries on the elderly and on women and children. Despite the existence of apparently credible evidence and judicial findings, the expert was informed that no criminal prosecutions had been instituted”.

The National Institute of Human Rights (INDH) has also denounced the use of force in criminal prosecution and that police intervention against members of the Mapuche population has been allowed to happen with impunity.⁴⁰

In the last two decades, several Mapuche activists have been killed in connection with land conflicts with pulp & paper companies. Here are a few cases:

- In 2020 Antonio Treuquil, a traditional Mapuche spokesperson, was murdered. His community is involved in a land dispute over traditional territories with the pulp and paper company Arauco. The day before he was murdered, Treuquil had given a radio interview to the University of Chile radio, in which he publicly reported that he had been receiving death threats from the police.⁴¹

³⁶ Observatorio Ciudadano y otros, Informe de organizaciones de sociedad civil y de pueblos indígenas en relación al Sexto Informe Periódico de Chile al Comité de Derechos Humanos de Naciones Unidas, June 2014.

³⁷ <https://www.amnesty.org/en/latest/news/2018/05/chile-autoridades-deben-dejar-de-criminalizar-personas-mapuches-a-traves-de-ley-antiterrorista/>

³⁸ <https://www.amnesty.org/en/latest/news/2017/05/chile-cierre-de-investigacion-por-crime-contralider-mapuche-pone-a-pueblos-originarios-en-peligro/>

³⁹ UN News, Chile must stop using anti-terrorism law against Mapuche indigenous group – UN expert, July 2013, <https://news.un.org/en/story/2013/07/445902-chile-must-stop-using-anti-terrorism-law-against-mapuche-indigenous-group-un>

⁴⁰ Instituto Nacional de Derechos Humanos, Informe Anual Situación de los Derechos Humanos 2015, INDH, p. 202, available at: <http://www.indh.cl/informe-anual-situacion-de-los-derechos-humanos-en-chile-2015>

⁴¹ EPN, Indigenous Mapuche Forest Activist Murdered in Chile by Police, June 2020,

<https://environmentalpaper.org/2020/06/indigenous-mapuche-forest-activist-murdered-in-chile-by-police/>

- In 2018, Juan Mendoza Lebu was killed in the context of a land conflict with Arauco.⁴² Four years earlier, in 2014, his son Víctor Mendoza Collío was killed when he was just 14 years old.
- Rodrigo Melinao Lican was killed in 2016, aged 27, in connection with a land conflict with Bosques Cautín.⁴³
- Jaime Mendoza Collío died in 2009, aged 24, from a shot fired by the *Carabinero* Miguel Jara, in connection with a land conflict with Arauco and CMPC (Mininco).⁴⁴
- Zenén Alfonso Díaz Nécul, aged 17, was killed in 2005 by a forestry truck at a protest against CPMC.⁴⁵
- Edmundo Alex Lemún Saavedra, aged 17, was killed in 2002 in connection with a land conflict with CMPC.⁴⁶ Only nineteen years later, Marco Treuer, the former *Carabineros* colonel that killed him, was convicted of murder after pressure from the Inter-American Court of Human Rights.⁴⁷ However, Treuer was soon released because over the years the crime had been barred.⁴⁸
- Pablo Marchant, aged 29, was killed in connection with a land conflict with CMPC (Mininco).⁴⁹



Photo: Resumen.cl

Chile has also been accused of violating the ILO convention 169,⁵⁰ approved by the country in 2008 and in force since 2009. Article 13.1 of the convention requires that governments respect the deep relationship between indigenous peoples and their ancestral lands, while article 14.1 recognizes their right to ownership and possession of lands traditionally occupied by them. Finally, article 15.5

⁴² El Mostrador, Araucanía recargada: lonko muerto y tomas de terrenos tensionan a La Moneda, January 2019, <https://www.elmostrador.cl/noticias/pais/2019/01/03/araucania-recargada-lonko-muerto-y-tomas-de-terrenos-tensionan-a-la-moneda/>

⁴³ Voices in Movement, In Memory of Mapuche Land Defender Rodrigo Melinao Lican, Five Years After his Assassination, August 2018, <https://voicesinmovement.org/mapuche-territory-chile-in-memory-of-mapuche-land-defender-rodrico-melinao-lican-five-years-after-his-assassination/>

⁴⁴ Mapuexpress, Jaime Mendoza Collío: Crónicas del asesinato de un defensor del Wallmapu, August 2016,

<https://www.mapuexpress.org/2016/08/12/jaime-mendoza-collio-chronicas-del-asesinato-de-un-defensor-del-wallmapu/>

⁴⁵ El Desconcierto, Sentencias sin cárcel e investigaciones vacías: Los mapuche muertos que Chile olvidó, November 2018, <https://www.eldesconcierto.cl/2018/11/20/sentencias-sin-carcel-e-investigaciones-vacias-los-mapuche-muertos-que-chile-olvido/>

⁴⁶ Diario, 15 mapuches asesinados en los gobiernos de la Concertación y la derecha, November 2018,

<http://www.laizquierdadiario.cl/15-mapuches-asesinados-en-los-gobiernos-de-la-Concertacion-y-la-derecha>

⁴⁷ The Washington Post, Opinión: El próximo gobierno de Chile debe terminar con la impunidad policial, October 2021,

<https://www.washingtonpost.com/es/post-opinion/2021/10/18/chile-protestas-18-octubre-aniversario-carabineros-elecciones-2021/>

⁴⁸ El Disconcierto, Caso Álex Lemun: Tribunal sentencia a tres años a Marco Treuer y da por cumplida la pena, October 2021, <https://www.eldesconcierto.cl/nacional/2021/10/25/caso-alex-lemun-tribunal-sentencia-a-tres-anos-a-marco-treuer-y-da-por-cumplida-la-pena.html>

⁴⁹ Interferencia, El eluwun de Pablo Marchant, el weichafe de la CAM que fue sepultado en territorio en recuperación de Forestal Arauco, July 2021, <https://interferencia.cl/articulos/el-eluwun-de-pablo-marchant-el-weichafe-de-la-cam-que-fue-sepultado-en-territorio-en>

⁵⁰ ILO, C169 - Indigenous and Tribal Peoples Convention, 1989 (No. 169),

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

recognizes their right to be consulted before the initiation of any project involving resource prospection or exploitation on their lands. It also states that they must benefit from such activities and receive fair compensation for any damages which they may sustain as a result of such activities.

These provisions have been, and still are, repeatedly violated. Furthermore, the convention has not been implemented in the Supreme Decree N° 66 of the Ministry of Social Development (2014), which only requires consultation for projects that have a *direct* impact on communities, not for those that have "likely direct impact," as the ILO Convention 169 states.

Asked by EPN to comment on the findings of this report, Arauco replied with a letter in which the company claims that these descriptions of land conflicts "are groundless and do not involve ARAUCO employees",⁵¹ highlighting the company's adherence to the mechanisms implemented by the State. Arauco stresses that it "transferred 4,645 hectares to communities through State mechanisms, and there is a formal agreement in place to transfer an additional 8,287 hectares to communities through CONADI".

This is commendable; however, one may note that Arauco controls a land bank of 1,117,788 ha, and the 4,645 ha of returned land are less than a mere 0.5% of its land bank, while the additional 8,287 ha yet to be returned are less than 1% of the land bank total.

In fact, even the 0.5% Arauco claimed to have given back has not been returned. Only CONADI can buy (with public money) land to give it to the indigenous communities. Both CONADI and previous governments have been criticized for minimizing land distribution, or - in the few cases where this happened - for awarding land in paternalistic ways, making a political use of what should have been a right.⁵²

Indigenous communities are not demanding charity or subsidized land acquisitions by CONADI, they demand the fulfilment of their natural right to live and manage their ancestral lands according to their traditional custom (*Az Mapu*⁵³) and according to the *UN Declaration of Indigenous Rights* (art. 26)⁵⁴ and *ILO Indigenous and Tribal Peoples Convention* (Part 3).⁵⁵

Meanwhile, according to local media, Arauco, as well as other operators, is selling the most controversial land to international companies, to avoid being asked to return these territories to the traditional rights holders, as the new Chilean government seems to be more open towards indigenous rights.⁵⁶ If these media accounts are confirmed, they would cast a dark shadow on the good faith of paper companies in resolving land conflicts.

⁵¹ Celulosa Arauco y Constitución S.A.. Letter to EPN, May 2022, see annex in this document

⁵² El Mostrador, Negociación política vs. garrote: ejecución del presupuesto de tierras de la Conadi revela severas contradicciones, November 2021, <https://www.elmostrador.cl/noticias/pais/2021/11/17/negociacion-politica-vs-garrote-ejecucion-del-presupuesto-de-tierras-de-la-conadi-revela-severas-contradicciones/>

⁵³ Miguel Melin Pehue, *et al.*, *Azmapu*, Una Aproximación al Sistema Normativo Mapuche desde el Rakizuum* y el Derecho Propio, 2016, <https://bibliotecadigital.indh.cl/bitstream/handle/123456789/984/azmapu.pdf>

⁵⁴ United Nations, UN Declaration of Indigenous Rights, September 2007, https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

⁵⁵ International Labour Organization (ILO), C169 – Indigenous and Tribal Peoples Convention, 1989 (No. 169), June 1989, https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:55:0::NO::P55_TYPE,P55_LANG,P55_DOCUMENT,P55_NODE:REV,en,C169/Document

⁵⁶ El Mostrador, La otra internacionalización del conflicto mapuche: empresas forestales venden sus predios a fondos de inversión extranjera, March 2022, <https://www.elmostrador.cl/destacado/2022/03/14/la-otra-internacionalizacion-del-conflicto-mapuche-empresas-forestales-venden-sus-predios-a-fondos-de-inversion-extranjera/>

ENVIRONMENTAL IMPACTS

Once upon a time there were forests here

Seen from above, the single layer of uniform plantation trees gives the impression that a huge coat of paint is covering the valleys and hills. This picture has become normal in the forest landscapes of Southern-central Chile, in the provinces of Bío Bío (Araucanía) and Los Ríos (Valdivia). This area was once home to undisturbed temperate forests, but now only one tree species flourishes, either pine or eucalyptus.

Chile is still home to the second largest coastal temperate rainforest on the planet: the Selva Valdiviana, or Valdivian Temperate Forest. Located between the ocean and the Andes, unique fauna and flora is found here, such as the ancient araucarias (monkey puzzle trees) and alerces.

Despite this, over half of these rich coastal forests have been cleared, according to the World Resources Institute⁵⁷ in a process that has accelerated over the last half century. Timber plantations expanded by a factor of ten between 1975 and 2007. They now occupy 43% of the Southern-central Chilean territory.⁵⁸



Araucaria trees; on the background, the Llaima volcano. Conguillío National Park, Araucanía, Chile. Photo: Luis Bartolomé Marcos. (Creative Commons Attribution-Share Alike 4.0 International)

In its letter, Arauco claims that Chile has 14.6 million hectares of native forests, and 2.4 million hectares are productive forest plantations.⁵⁹ According to the official Forest Survey, only 6.102.633 hectares of mature native forests remain (and according to CONAF, plantations are actually 3 million ha)⁶⁰ and given the global significance of Chile's native forests, such an extension of plantations is

⁵⁷ World Resources Institute, Chile's Frontier Forests, April 2002, <https://www.wri.org/publication/chiles-frontier-forests>

⁵⁸ Laura Nahuelhual *et al.*, Land-cover change to forest plantations: Proximate causes and implications for the landscape in south-central Chile, *Landscape and Urban Planning*, July 2012

⁵⁹ Arauco letter to EPN, see annex.

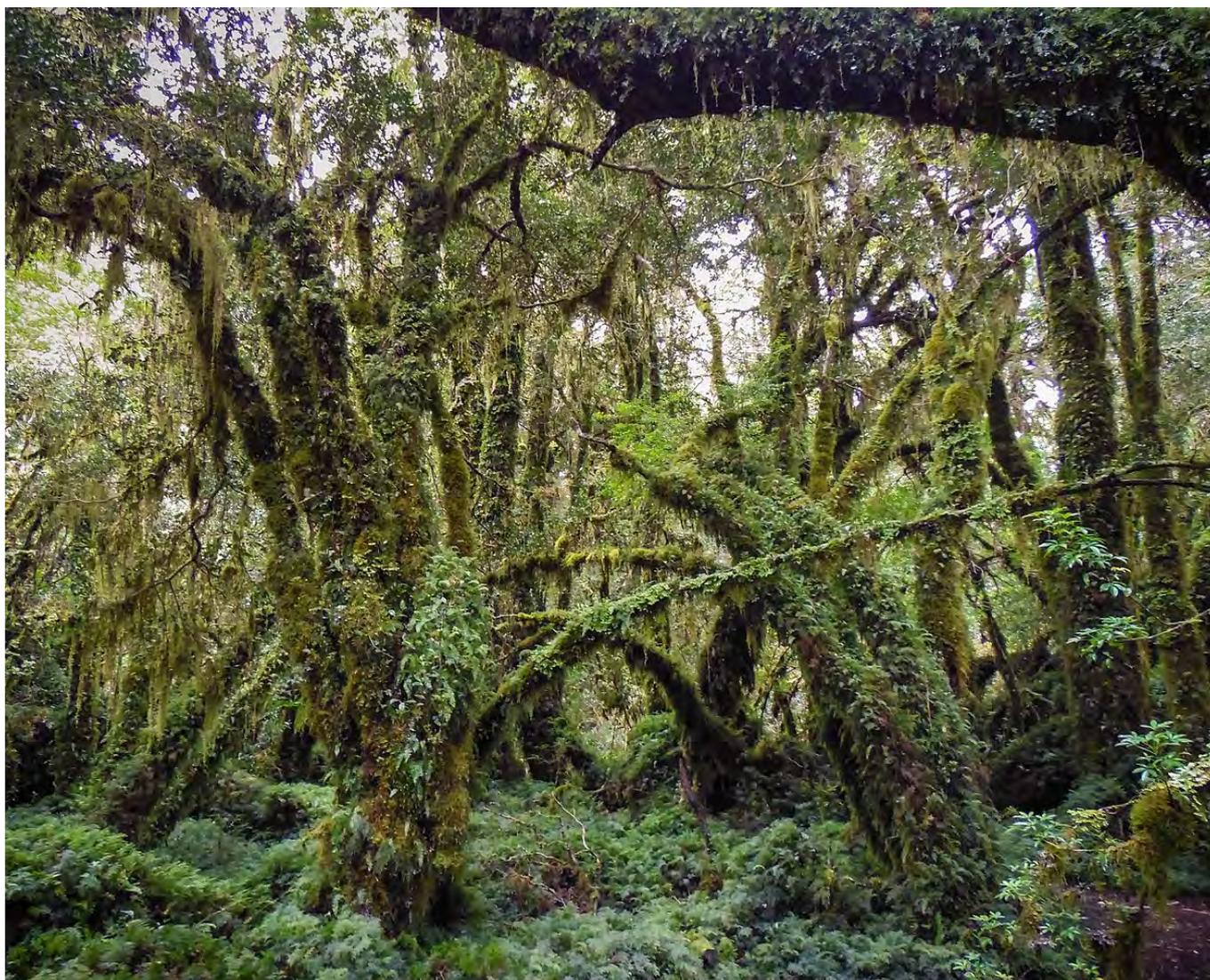
⁶⁰ CONAF, Bosques en Chile, <https://www.conaf.cl/nuestros-bosques/bosques-en-chile/>

highly relevant.⁶¹ The main issue is the fact that the figures Arauco provided about plantations vs natural forests are nation-wide data. Plantations however are concentrated in Southern Chile, and here is where their expansion threatens natural forests.

A scientific analysis of satellite images of native forests in the Nahuelbuta Mountain Range between the Bio Bío and Araucanía regions, reported that, in the 25 years between 1986 and 2011, a third of natural forests were replaced by timber monocultures.⁶² A similar study reported a 33.2% loss of natural forests in the Cordillera de Nahuelbuta.

Protected areas do exist, but they are few and far between, mostly located in remote parts of the Andes while leaving other areas, even those of high biodiversity, unprotected.⁶³ Industrial wood plantations continue to fragment the remaining stands of native forest into ever-smaller parcels.

The expansion of industrial plantations at the cost of natural forest is not reported as deforestation, because the FAO includes tree plantations in its definition of forest cover. However, this land use change has dramatically impoverished the rich biodiversity that once shaped these regions.



Enchanted forest, Parque Nacional Queulat. Región de Aysén, Chile. Photo: Natalia Reyes Escobar (Creative Commons Attribution-Share Alike 4.0 International)

⁶¹ Eduardo Neira *et al.*, Global Forest Watch, Chile's Frontier Forests, 2002, http://pdf.wri.org/gfw_chile_full.pdf

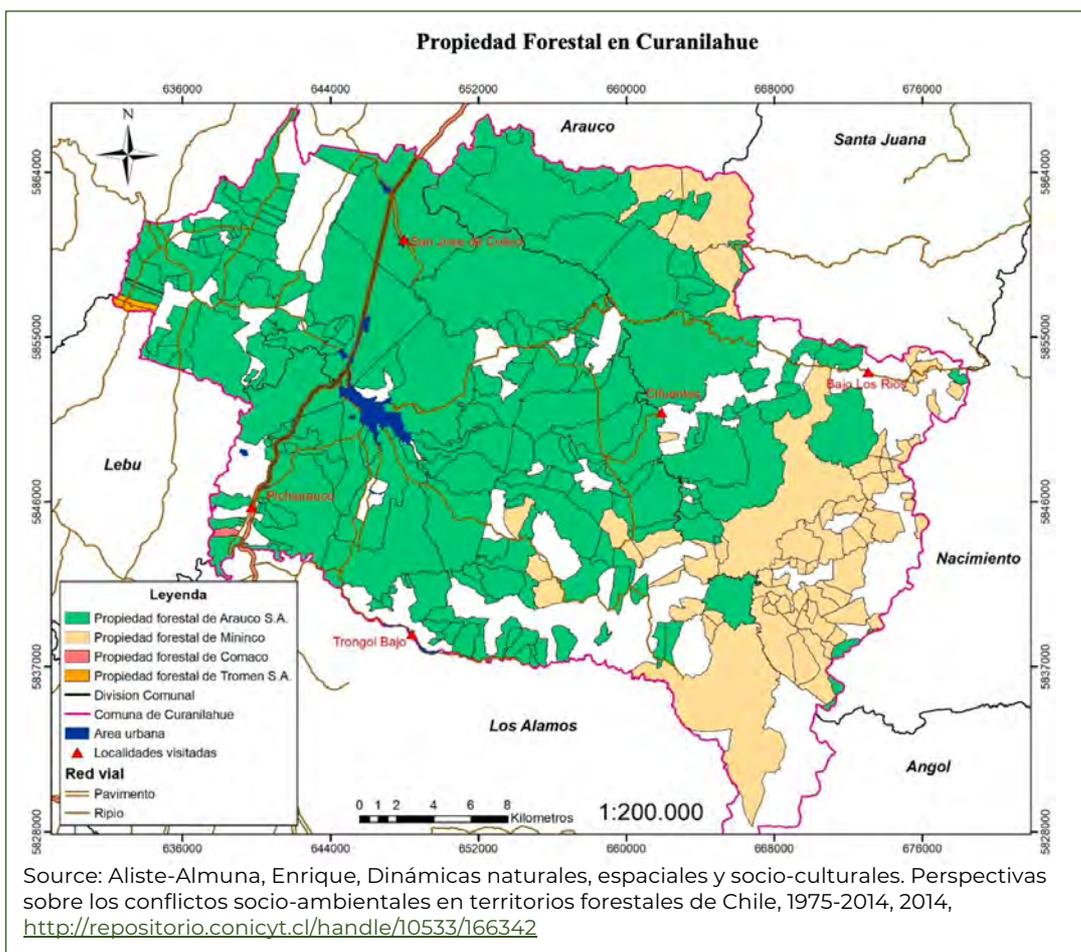
⁶² Samuel Otavo *et al.*, Fragmentación progresiva y pérdida de hábitat de bosques naturales en uno de los hotspot mundiales de biodiversidad Progressive fragmentation and loss of natural forests habitat in one of the global biodiversity hotspot, *Revista Mexicana de Biodiversidad*, December 2017, <https://www.sciencedirect.com/science/article/pii/S1870345317302191?via%3Dihub>

⁶³ Julian Moll-rocek, When forests aren't really forests: the high cost of Chile's tree plantations, Mongabay, August 2014, <https://news.mongabay.com/2014/08/when-forests-arent-really-forests-the-high-cost-of-chiles-tree-plantations/>

Arauco claims that “Plantations help to recover the soil and control erosion; they are an important source of biodiversity – there is an abundance of flora and fauna that inhabit the plantations”.⁶⁴ This is however a claim contradicted by science. According to scientists from the Karlsruhe Institute of Technology, “Plantation forestry lowers biodiversity and does not provide additional habitats for specialist plants and animals. At this scale, weak edge effects due to the presence of native forests are observed. In total, plantation forestry tends to promote plant invasions and impairs the survival of endemics. At this scale, plant species communities were predominantly native and endemic in forests, predominantly introduced in plantations.”⁶⁵ “The great majority of planted forests have low forest integrity scores, because they are invariably associated with dense infrastructure, frequent canopy replacement, and patches of farmland,” as pointed by another study.⁶⁶

Unfortunately, industrial timber plantations need to continuously expand on to new land, as they are not sustainable in the long run: “5-7 rotations, then the erosion of the soil makes further management impossible and the owner must look for more land,” says Claudio Donoso, of Agrupación Ingenieros Forestales por el Bosque Nativo.⁶⁷ A scientific study of microbial nitrogen in these plantations confirms Donoso’s concerns.⁶⁸

From the 1970’s onwards, natural forests have been lost mainly because they have been directly replaced by industrial plantations. In recent years, industrial plantations stabilized. However, it must be noted that it is difficult to further expand after having converted almost half (43%) of the Southern-central Chilean landscape. In some municipalities, most of the land has been turned into pulp plantations, like in the case of Curanilahue, (see map below) and would have been very difficult to further expand.



⁶⁴ Arauco letter to EPN, see annex.

⁶⁵ Andreas Ch. Braun *et al.*, *Biodiversity: Assessing the impact of plantation forestry on plant biodiversity: A comparison of sites in Central Chile and Chilean Patagonia*, Global Ecology and Conservation, April 2017, <https://www.sciencedirect.com/science/article/pii/S235198941630155X>

⁶⁶ H. S. Grantham *et al.*, *Anthropogenic modification of forests means only 40% of remaining forests have high ecosystem integrity*, 2020, <https://www.nature.com/articles/s41467-020-19493-3>

⁶⁷ Interview with Claudio Donoso, of Agrupación Ingenieros Forestales por el Bosque Nativo, in Resumen, *Plantar Pobreza*, November 2014, <https://www.youtube.com/watch?v=A42dHCxuJlw> (min.30)

⁶⁸ Cecilia A Pérez *et al.*, *Coupling of microbial nitrogen transformations and climate in sclerophyll forest soils from the Mediterranean Region of central Chile*, December 2017, https://www.researchgate.net/publication/322166218_Coupling_of_microbial_nitrogen_transformations_and_climate_in_sclerophyll_forest_soils_from_the_Mediterranean_Region_of_central_Chile

Despite this, Arauco's Annual report 2020⁶⁹ identified a wider area planted with Eucalyptus than the previous report (2019)⁷⁰ suggesting an expansion of 4,352 ha in just one year. The same report also indicates 57,523 ha scheduled for planting.

Despite this, plantations are still expanding via partnerships with individual owners, and they are also under *intensification*: pine is progressively being substituted with eucalyptus, which offers higher yields, at the cost of greater soil erosion and water capture. Due to this, the remnants of native forests are now disappearing mainly because industrial plantations are progressively draining entire landscapes. This impact, in combination with drier seasons caused by climate change, may have fatal results.⁷¹

In its letter,⁷² Arauco states they put in place a restoration program with "25,000 hectares declared as converted after 1994 (of which just 7,563 recovered)". However, most of the conversion occurred in the two decades before 1994 and has not been restored.

Arauco also claims they restored burned land, but this is required by the law, and it is not commendable to have land which burned intensively in the first place.

⁶⁹ Celulosa Arauco y Constitución S.A., Sustainability Report 2020, https://www.arauco.cl/aus-nz/wp-content/uploads/sites/16/2017/07/REPORTE_INGLES-WEB.pdf

⁷⁰ Celulosa Arauco y Constitución S.A., Sustainability Report 2019, https://www.arauco.cl/mo/wp-content/uploads/sites/25/2017/07/REPORTE_INGLES_2019_web.pdf

⁷¹ See:

- Gayoso, J. and Iroumé, A. Impacto del manejo de plantaciones sobre el ambiente físico, 1995, <http://revistas.uach.cl/index.php/bosque/article/view/4963>
- Echeverría, C.; Huber, A. and Taberlet, F. Estudio comparativo de los componentes del balance hídrico en un bosque nativo y una pradera en el sur de Chile, 2007, https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0717-92002007000300013
- Granados, D. and López, G. Fitogeografía y ecología del género Eucalyptus. Revista Chapingo Serie Ciencias Forestales y del Ambiente, 2007, https://www.researchgate.net/publication/237038023_Fitogeografia_y_ecologia_del_genero_Eucalyptus
- Huber, A.; Iroumé, A.; Mohr, C. and Frêne, C., Efecto de las plantaciones de Pinus radiata y Eucalyptus globulus sobre el recurso agua en la Cordillera de la Costa de la región del BíoBío, Chile, 2010, https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0717-92002010000300006

⁷² Arauco letter to EPN, see annex.

Where has all the water gone?

The trees started to dry out. At first their leaves turned yellow, then brown, until finally they fell to the ground. The valley was once a green paradise, but now all that remains are patches of natural forest with desiccated canopies. Only the regular fabric of the plantations, their trees ordered like little soldiers of a huge army, seem to continue on unaffected, growing over hills and valleys, overcoming every visible obstacle.



Photo: Esteban Paredes Drake

José Toro Huenulao cries for the water that seems to have gone forever. “Now there is no water in the summer, not even for the animals. Everything has dried up: swamps, plants of *nalcas*⁷³...now there are just pine trees, they have killed everything else.”⁷⁴ He and his Mapuche community of Tricauco have seen Arauco and CMPC (Mininco) settling in the area and expanding their plantations around Ercilla. A very similar story is told by Sergio Cayupe, of the Mapuche community of Lumako. “Here there were springs with water,” he says, “but with the plantation they have finally dried up. In the wintertime there is a bit of water, but when summer comes, they dry up completely, there is not a drop of water. It is because there are many plantations. That is why the water is drying up in all the communities in the sector of Lumako.”⁷⁵ Alongside the expansion of industrial timber plantations, stories about the disappearance of streams are common. According to the director of the school of Quetrahue, in the same village of Lumako, there is no longer fresh water to supply the school: “Today the pupils have to come to school bringing their water. Besides the risk this poses to health, this is a great burden, as most of them suffer from the same problem at home”.⁷⁶

The sacredness of water is deeply rooted in Mapuche culture, for without water there is no life (*genule ta ko, gerkelayafuy ta mogen*). In the Mapuche language (*mapuzungun*) there are at least ten words to say “water”. *Lig-ko* refers to clearwater, *Xayengko* is the water of torrents, *Rüga-ko* is underground water, *Kurü-ko* (pron. Curicó) are dark or black waters. But there is also *Rag-ko* (where

⁷³ *Gunnera tinctoria*

⁷⁴ Alfredo Seguel, “Radiografía al Conflicto Forestal en el Gulumapu http://www.ambiente-ecologico.com/ediciones/informesEspeciales/011_InformesEspeciales_InformeSobreForestacionEnChile.pdf

⁷⁵ Khla Nagnegei Taiñ weichangepan. Gisela Frías, Invasión Forestal, Centro Internacional de Investigaciones para el Desarrollo 2003, <https://docplayer.es/20875040-Invasion-forestal-khla-nagnegei-tain-weichangepan.html>

⁷⁶ Alfredo Seguel, “Radiografía al Conflicto Forestal en el Gulumapu, http://www.ambiente-ecologico.com/ediciones/informesEspeciales/011_InformesEspeciales_InformeSobreForestacionEnChile.pdf

the name Arauco comes from) for clayey waters, *Folil-ko* for water roots, *Kollü-ko* for brown water, *Menu-ko* for wetland or springs, *Ümüll-ko* for the water that moves circularly, *Filu-ko* (pron. Viluco) for the waters inhabited by snakes, and *Koyla-ko* for the water that deceives. And there are a hundred toponyms linked to water throughout the Mapuche lands, not to mention names associated with the sea, lakes, mists, vapors, and waters in mountains, forests, volcanoes and other ecosystems.



Photo: Papouten (Creative Commons Attribution-Share Alike 4.0 International)

The land is also central to Mapuche culture, and the name *Mapu-Che* itself binds the notion of land or earth (*Mapu*) with the notion of person (*Che*). The Mapuche first lost most of their land when it was taken away by colonizers and corporations. Now they are losing the water too. What remains of Mapuche lands and of the relics of natural forests, is now surrounded by industrial plantations. As a result, they are progressively drying out, because these plantations distort the natural functioning of the water table. Eucalyptus requires an average of 30 liters of water every day.⁷⁷ When planted at a density of 400 trees per hectare, a plantation may absorb 12,000 liters per hectare every day. Pine requires less, although like other plantation species, it still requires large amounts of water, as well as nutrients, to maintain its rapid rate of growth.⁷⁸ Therefore monoculture tree plantations, especially at industrial scale, affect entire landscapes, impacting on the water table, reshaping flora and fauna, and modifying soil quality.⁷⁹

A scientific study on water runoff has clearly identified the impact of plantations on water yield, in cases where native forest cover has dramatically declined and non-native tree plantations have

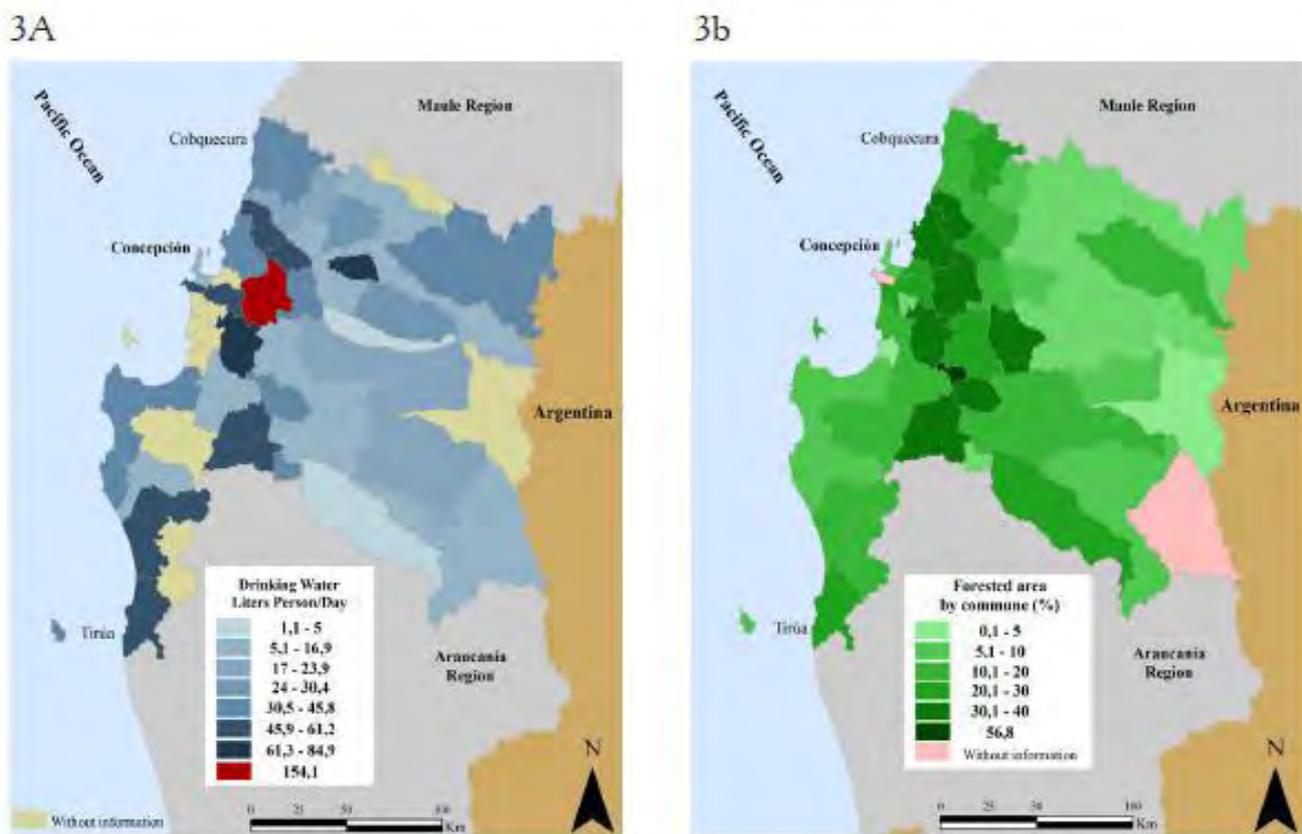
⁷⁷ Janine M. Albaugh, Peter J. Dye and John S. King, Eucalyptus and Water Use in South Africa, February 2013, <http://www.hindawi.com/journals/ijfr/2013/852540/>

⁷⁸ R. O. Teskey And D. W. Sheriff, Water use by Pinus Radiata trees in a plantation, 1996, See: <http://treephys.oxfordjournals.org/content/16/1-2/273.full.pdf>

⁷⁹ Rosamel Millaman and Charles Hale et al. 2016.

expanded.”⁸⁰ These results have been confirmed by another study which investigated the impacts of *Pinus radiata* and *Eucalyptus globulus* plantations on the water resources of coastal forests in the Bio Bío region.⁸¹

More recent research into wood plantations and water resources concluded that, “forestry development has generated socio-spatial dynamics of environmental degradation and water scarcity in Southern Chile.”⁸² The researchers produced a map comparing water scarcity with intensity of the forest industry, showing a correlation between the two factors.



From: Robinson Torres-Salinas et al.⁸³

As a result, and in combination with climate change, the region has experienced the driest decade in recorded history.⁸⁴ One direct impact is the need to provide water to communities by tank truck. For example, in the Araucanía region, 31 of 32 municipalities had to be supplied with water by tank truck between January and June 2013. This cost the community USD 1.8 million (1,377 million Pesos).⁸⁵

And while municipalities can still receive water through emergency measures, there is no such remedy for the water shortage of natural forests. This is concerning, since the degradation of the water table is happening in conjunction with higher temperatures caused by global climate change. A recent study on the Mediterranean sclerophyllous forests of central Chile showed that, between 2010 and 2017, nearly one-third of the region's forests were affected by extreme browning. The study

⁸⁰ “We estimate a decrease in runoff from 13.1 to 7.5 mm/summer for PPN and from 7.3 to 5 mm/summer for CQA, refer to the period 1991–2000 compared to 1981–1990. (...) This study clearly shows the important effect that land-use change can have on water yield and to our knowledge this is the first study documenting the decrease in summer runoff in a landscape where native forest cover has dramatically declined and forest exotic plantations have expanded.” Christian Little, Revealing the impact of forest exotic plantations on water yield in large scale watershed in South-Central Chile, June 2009, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.619.648&rep=rep1&type=pdf>

⁸¹ Antonio Huber et al., Eucalyptus globulus sobre el recurso agua en la Cordillera de la Costa de la región del Bio Bío, Chile, 2010, https://scielo.conicyt.cl/scielo.php?pid=S0717-92002010000300006&script=sci_arttext

⁸² Robinson Torres-Salinas et al., Forestry development, water scarcity, and the Mapuche protest for environmental justice in Chile, March 2016, https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-753X2016000100008

⁸³ Robinson Torres-Salinas et al., 2016,

⁸⁴ El Àgora, Chile afronta la peor sequía de su historia, August 2019, <https://www.elagoradiario.com/agua/chile-afronta-la-peor-sequia-de-su-historia/>

⁸⁵ Cristian Frêne et al., Agua en Chile, https://bosquenativo.cl/wp-content/uploads/2019/06/2014_12_agua_chile_.pdf

suggests that higher temperatures caused by climate change affect the capacity of natural forests to adapt to drought.⁸⁶

A further threat to natural forests, caused by industrial tree plantations draining the land and exacerbated by climate change, is the growing risk of forest fires.



Photo: Esteban Paredes Drake

The previous governments did not listen to the warnings from scientists until, in August 2021, it had to issue an emergency “Plan against the drought”.⁸⁷ The plan, however, focused on a generic appeal to the public to limit their use of water, rather than the actual causes of the drought, such as the plantations, which were not mentioned.

Land on fire

On the morning of January 27th in 2017, the sun rose over Santa Olga in South-central Chile, 240 kilometres south of Santiago. Nobody was able to see through the curtain of smoke. Where once was a town, now lay a desert of ashes, on which only the twisted skeletons of charred structures rose. A few women embraced each other in silent grief. They had lost everything they had. The houses and fields of most of the 5,000 inhabitants of Santa Olga were gone. During the night, the fires had devastated over an estimated 270,000 hectares and spread more than 40 Km. More than 1,000 houses had burned in the flames and some 4,000 people had fled their homes.

Santa Olga was not the only town destroyed by the fires. During that month, a wave of fires devastated more than 600,000 hectares of land including scrubland, plantation forests, agricultural land, native forests, and homes. The BBC commented that they were, “the worst fires in the history of

⁸⁶ Alejandro Miranda *et al.*, Forest browning trends in response to drought in a highly threatened mediterranean landscape of South America, August 2020, <https://www.sciencedirect.com/science/article/abs/pii/S1470160X20303381>

⁸⁷ Prensa Presidencia, Presidente Piñera presenta plan contra la sequía: “Todos tenemos que ser parte de la solución”, August 2021, <https://prensa.presidencia.cl/comunicado.aspx?id=178875>

Chile”.⁸⁸ Eleven people died in the blazes and around 6,000 were evacuated from their homes or were injured. Entire communities were burned to the ground. Several hundred miles away, Chile’s capital Santiago, was shrouded in haze.⁸⁹

Scientists have found that non-native pine and eucalyptus forests planted to supply pulp and timber mills in central Chile are contributing to the massive fires.⁹⁰



Photo: Pablo Trincado (Creative Commons Attribution 2.0 Generic)

Other studies have indicated that Chile’s plantations are affecting “anthropogenic climate change, the growing area of urban-rural interface (areas where housing and vegetation formations converge or mix) and the increase in forest plantations of species of high flammability, among others” and that “the conversion of land to rapid growth plantations increases the risk of fires.”⁹¹ They also add that “Extensive forest plantations favor the spread of fire, since they are composed of a type of dense and flammable fuel (mostly rapid growth pines and eucalyptus) that is continuously distributed throughout the landscape and that, in addition, is usually not correctly managed.”

For more than forty years, Chile has implemented economic development policies that have favored an industrial forestry model based on the use of non-native species that are highly flammable, such as pine and eucalyptus. Government after government have ignored warnings from experts, organizations defending the environment, communities affected by the forest industry, and victims

⁸⁸ BBC, Chile hace frente a los peores incendios forestales de su historia, January 2017, <https://www.bbc.com/mundo/38709247>

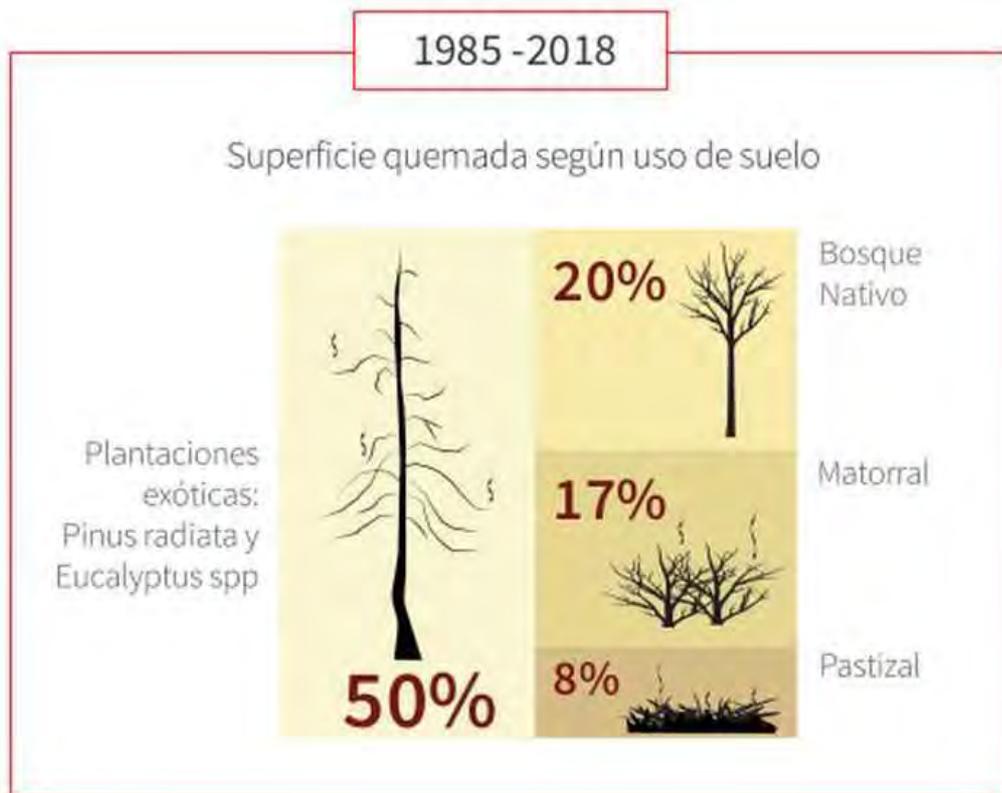
⁸⁹ Infobae, Cuánto le costó a Chile la devastadora ola de incendios forestales, January 2017, <https://www.infobae.com/america/america-latina/2017/02/17/cuanto-le-costó-a-chile-la-devastadora-ola-de-incendios-forestales/>

⁹⁰ D. B. McWethy et Al, Landscape drivers of recent fire activity (2001-2017) in south-central Chile, 2018, <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0201195#sec013>

also <https://resumen.cl/articulos/estudio-alerta-peligro-creciente-megaincendios-causa-plantaciones-forestales-cambio-climatico>

⁹¹ CR2 – Center for Climate and Resilience Research (Universidad de Chile), Incendios en Chile: causas, impactos y resiliencia, <http://www.cr2.cl/wp-content/uploads/2020/01/Informe-CR2-IncendiosforestalesenChile.pdf>

of drought. They have turned a blind eye to biodiversity loss, forest destruction, and the ecological problems that tree plantations cause.⁹²



Burned areas by land use. Source: (CR)2⁹³

The scientific community sent a clear warning to Chilean decision makers: “future climate change predictions indicate more recurrent, intense, and temporally extended droughts for central and South-central Chile. Under this scenario, land-use planning and fire and forest management strategies must promote a more diverse and less flammable landscape mosaic limiting high load, homogenous, and continuous exotic plantations.”⁹⁴



Photo: Resumen.cl

A more recent scientific study published by Nature warns decision makers that subsidies have “increased tree cover through expansion of plantations of exotic species, but decreased the area of

⁹² A. Lara and Thomas T. Veblen, Forest plantations in Chile: a successful model? January 1993, https://www.researchgate.net/publication/316283410_Forest_plantations_in_Chile_a_successful_model

⁹³ Centre for Climate and Resilience Research, Incendios forestales en Chile: causas, impactos y resiliencias, 2020, <https://www.cr2.cl/wp-content/uploads/2020/01/Informe-CR2-IncendiosforestalesenChile.pdf>

⁹⁴ Mauro E. Gonzalez, Susana Gomez Gonzalez, Antonio Lara, Rene Garraud, and Ignacio Diaz-Hormazabal, The 2010–2015 Megadrought and its influence on the fire regime in central and south-central Chile, Ecosphere, August 2018, <http://www.forestal.uach.cl/manejador/resources/gonzlezetal-2018-ecosphere-2.pdf>

native forests. Chile's forest subsidies probably decreased biodiversity without increasing total carbon stored in aboveground biomass".⁹⁵

However, the interests of powerful families and the forestry and paper industry prevailed: the government drafted a new forest law, aimed at expanding tree plantations an additional 500,000 hectares in 20 years (25,000 hectares per year), with an annual budget of USD 37.5 million. The plan was supported by the World Bank which, in December 2019, signed an Emission Reductions Payment Agreement with Chile through the Carbon Fund of its Forest Carbon Partnership Facility.⁹⁶



Photo: Resumen.cl

In March 2021 the Court of Molina ordered the arrest of seven firefighters working for Arauco. They were charged with starting a fire that burned 15,000 hectares of forest in the National Park of Siete Tazas, in February 2020. The firefighters may have been motivated to ignite the fires in order to obtain more work. However, according to local media, forestry companies have used fires to clear the land and evict the original inhabitants, as a first step to developing pine and eucalyptus plantations.



Photo: Resumen.cl

⁹⁵ Robert Heilmayr, Cristian Echeverría & Eric F. Lambin, Impacts of Chilean forest subsidies on forest cover, carbon and biodiversity, June 2020, <https://www.nature.com/articles/s41893-020-0547-0>

⁹⁶ Forest Carbon Partnership, Chile, <https://www.forestcarbonpartnership.org/country/chile>

Seas at risk

The effluents discharged by Arauco's mills impact sea biodiversity as well as the fisheries sector. At the Horcones mill, there are strong concerns from local fishing communities regarding the impact of the company's expansion plans on the quantity and the quality of fish available. Questions asked during the consultation process of the EIA revealed that Arauco has done very limited monitoring of the impacts.⁹⁷

There have been protests in Valdivia⁹⁸ ever since Arauco announced its plans to build a 32 kilometer pipeline to discharge wastewater from their pulp mill directly into the sea. The Lafkenche communities, concerned about the impacts on fish⁹⁹ and therefore on their small-scale fisheries sector, made blockades with boats to make it impossible for Arauco to complete the EIA for the pipeline. Then, as was feared, in May 2004, only four months after the plant began operating, a massive environmental disaster occurred when effluents were dumped into the Cruces River.¹⁰⁰

Arauco branches out into biomass

Increasingly around the world, pulp and paper mills are installing dedicated biomass boilers alongside traditional cogeneration units to take advantage of incentives, subsidies, and support for producing electricity from burning wood. Arauco has built several such boilers, including at its Horcones, Trupan, Nueva Aldea, and Valdivia pulp mills.

The boilers are deliberately built to generate more energy than is required to power the mill, and to use more wood than can be supplied from the surplus by-product of on-site pulping operations alone. Thus a significant amount of wood that is burned in the biomass power plant must be sourced from eucalyptus and pine plantations, which further incentivises their expansion.

Arauco claims that the electricity it produces in its biomass boilers is carbon neutral and sells carbon credits based on the emission reductions it says it achieves by displacing fossil electricity in the public grid. The false assumption that burning wood from "sustainably managed" forests or plantations is carbon neutral, means that carbon dioxide emissions from combustion aren't accounted for, despite the large body of evidence which shows that electricity generation from biomass is highly emissive.

Ultimately, the creation of these biomass boilers serves only to greenwash Arauco's activities, while in reality it compounds the social and environmental impacts that the pulp mills are responsible for, and the wider social impacts of the industrial tree plantation model.

The environmental and social impacts of the Valdivia plant are documented in this report, published by EPN, Colectivo Viento Sur and GFC in October 2021: <https://environmentalpaper.org/wp-content/uploads/2021/11/Valdivia-case-study.pdf>

The water pollution had serious impacts on aquatic biodiversity, including in the Carlos Anwandter Nature Sanctuary and caused a steep decline in bird populations shortly after the dumping took place.¹⁰¹ It affected many species, including the red-fronted coot, white-winged coot, red-gartered coot, spot-flanked gallinule and black-necked swan, and caused the total number of birds to drop by 74% between 2004 and 2012. Aquatic mammals such as the coypu, fish species, and aquatic plant species such as the large-flowered waterweed, were also impacted.¹⁰²

⁹⁷ SEIA, Evaluación de Impacto Ambiental (SEIA) por modificación al proyecto "Modernización. Ampliación Planta Arauco" February 2013, http://seia.sea.gob.cl/archivos/Res_037-2014_MAPA.pdf

⁹⁸ Movimiento por la Defensa del Mar, Resumen actualizado Conflicto ducto de CELCO en Mehuin, October 2010, <https://movimientoporladefensadelmar.wordpress.com/2010/10/22/resumen-actualizado-conflicto-ducto-de-celco-en-mehuin/>

⁹⁹ Bienes Comunes, Mehuín, el ducto de la discordia con Celulosa Arauco, August 2014, <https://www.eldesconcierto.cl/bienes-comunes/2014/08/14/mehuín-el-ducto-de-la-discordia.html>

¹⁰⁰ Universidad Austral de Chile (2005). Estudio sobre origen de mortalidades y disminución poblacional de aves acuáticas en el Santuario de la Naturaleza Carlos Anwandter, en la Provincia de Valdivia, informe final. Valdivia, Chile.

¹⁰¹ WRM, Uruguay: The Ence, Arauco and Stora Enso's eucalyptus and pulp fairytales, June 2009, <https://wrm.org.uy/articles-from-the-wrm-bulletin/section2/uruguay-the-ence-arauco-and-stora-ensos-eucalyptus-and-pulp-fairytales/>

¹⁰² ONAF (2006) Plan Integral de Gestión Ambiental del Humedal del Río Cruces. Valdivia, Chile



Celulosa Arauco, in Constitución. Photo: Valeria Valenzuela

In addition, the environmental disaster had immediate social impacts, including on the health of communities living in close proximity to the disaster, such as the coastal community of Mehuín, but also on those up to 60km away from Valdivia.¹⁰³ For communities dependent on fishing, agriculture and tourism, the impacts were particularly severe.

Arauco claims that “Pulp production, as demonstrated by Finland, Sweden, and other countries that use the most advanced technology, is perfectly compatible with biodiversity conservation.”¹⁰⁴ This is an unsubstantiated claim. Beside the fact that the Scandinavian pulp and paper industry has its environmental problems too,¹⁰⁵ the case of pollution at the Horcones mill was recognised and sanctioned by the Civil Court of Valdivia on July 26th 2013,¹⁰⁶ citing the damage caused, the plant's negligence, institutional mismanagement and the company's delayed response to the disaster. Despite an independent expert hired by the court stated that the company should be liable for around 100 million Euros in damages, the sentence imposed by the court was far more lenient.

¹⁰³ Palma, K. (2013). Desarrollo Forestal en la Región de los Ríos. Análisis de la resistencia y el impacto en la comunidad Mapuche Lafkenche en la Bahía de Maiquillahue. 1996-2007. Tesis de Pregrado. Universidad Austral de Chile, Valdivia, Chile.

¹⁰⁴ Arauco letter to EPN, see annex.

¹⁰⁵ In January 2022 the Finnish Supreme Administrative Court denied the environmental permit to the Finnpulp mill in Kuopio, Finland, due to concerns over pollution, see: <https://www.finnpulp.fi/en/press/>

¹⁰⁶ Mongabay, Court orders logging company to clean up pollution disaster in Chile wetlands, January 2014, <https://news.mongabay.com/2014/01/court-orders-logging-company-to-clean-up-pollution-disaster-in-chile-wetlands/>



Authority with dead swans from the Carlos Anwandter Nature Sanctuary. Photo: Daniel Boroschek.

In its letter, Arauco writes that “information provided by Universidad Austral, as well as by the Center for Wetland Research located in Valdivia and supported by ARAUCO, both demonstrate through their investigations that the population of fauna, especially bird species in the Carlos Anwandter Sanctuary, show a sustained increase.”¹⁰⁷ This is good news, however credit for this positive development goes to the Civil Court of Valdivia, that ordered Arauco to create an artificial wetland, appropriate for native species, upriver from where the dumping occurred in the Cruces River, (i.e., in an area not impacted by the Arauco mill), and also ordered Arauco to clean up the pollution disaster in the Carlos Anwandter Nature Sanctuary. In fact, the sentence states that “after the start of the plant’s activities, the existing fauna on the site practically disappeared in a very short period of time.” It is also worth mentioning that the *Center for Wetland Research* is not an independent institution, it is a body established and financed by Arauco, to implement the court verdict.¹⁰⁸

In 2020 the citizen’s movement Action for Swans requested once again the preventive closure of the Valdivia plant due to concerns over pollution in the wildlife sanctuary.¹⁰⁹ In early 2020 the Valdivia pulp mill was upgraded to produce pulp for the textile industry, making it the first such producer in Chile.¹¹⁰ Following the upgrade, residents of the Mariquina Commune observed changes in the sanctuary, which caused concern among local residents and the scientific community, and are currently being investigated.¹¹¹

¹⁰⁷ Arauco letter to EPN, see annex.

¹⁰⁸ Celulosa Arauco y Constitución S.A., Sustainability Report 2014, <https://www.arauco.cl/wp-content/uploads/2017/07/Sustainability-Report-2014.pdf>

¹⁰⁹ Riolinea, Piden cierre de Celulosa Arauco para investigar eventual relación con cambios en el Santuario de la Naturaleza, December 2020, <https://www.riolinea.cl/piden-cierre-de-celulosa-arauco-para-investigar-eventual-relacion-con-cambios-en-el-santuario-de-la-naturaleza/>

¹¹⁰ Mundomaritimo, Arauco desde 2020 producirá por primera vez pulpa textil en Chile para exportar al mercado asiático, October 2019, <https://www.mundomaritimo.cl/noticias/arauco-desde-2020-producira-por-primera-vez-pulpa-textil-en-chile-para-exportar-al-mercado-asiatico>

¹¹¹ The environmental and social impacts of the Valdivia plant are documented in this report, published by EPN, Colectivo Viento Sur and GFC in October 2021: <https://environmentalpaper.org/wp-content/uploads/2021/11/Valdivia-case-study.pdf>

ARAUCO COMPANY PROFILE

Company structure

Arauco (Celulosa Arauco y Constitucion) is a forestry company based in Chile. The company has production facilities in Chile, Argentina, Brazil, Uruguay, the United States, and Canada.¹¹²

Arauco is a subsidiary (99.98%) of Empresas Copec, Chile's largest privately owned industrial group. This group is active in forestry, fisheries, mining, and in the distribution and marketing of transport fuels. Empresas Copec's main income comes from fuel and 17% comes from its forestry operations.

Empresas Copec in turn is a 60.82% subsidiary of Antar Chile. The remaining shares are owned by pension funds (7.82%) and other financial investors (31.36%). Antar Chile's major shareholder is the Angelini Group (belonging to the Chilean Angelini family).¹¹³

Financiers & investors of Arauco

From 2016 to 2021 Arauco received USD 5.625 million in loans and underwriting from financial institutions, with JP Morgan Chase and Scotiabank providing the majority of this.¹¹⁴ See the table below:

Loans and underwriting services to Arauco, by financier (Jan 2016 - Dec 2021, US\$ mln)

Sum of Per Investor Value (in mln US\$)				
Investor Parent	Investor Parent Country	Loans	Underwriting	Grand Total
Bank of America	United States		319.58	319.58
BNDES	Brazil	3.83		3.83
BNP Paribas	France	378.17		37.17
Credicorp	Peru		99.72	99.72
Credit Suisse	Switzerland	72.00		72.00
Export Development Canada	Canada	75.00		75.00
Finnvera	Finland	151.68		151.68
HSBC	United Kingdom	100.00		100.00
JPMorgan Chase	United States	351.68	1,069.58	1,421.26
Link Capital Partners	Chile		0.01	0.01
Mitsubishi UFJ Financial	Japan	272.00	66.67	338.67
Mizuho Financial	Japan	72.00		72.00

¹¹² Arauco (n.d.), "About Arauco - About Arauco", online:

<http://www.arauco.cl/informacion.asp?idq=1039&parent=1033&idioma=22>, viewed in October 2016.

¹¹³ Empresa Copec (n.d.), "Empresas Copec at glance", online: <https://www.empresascopec.cl/en/about-empresas-copec/> viewed in February 2022.

¹¹⁴ Information provided by Profundo, December 2022. Please see Arauco's Dodgy Deal profile on the BankTrack for more financial detail: <https://www.banktrack.org/company/arauco>

Santander	Spain	251.68	636.25	887.94
Scotiabank	Canada	347.00	869.59	1,216.59
SMBC Group	Japan	172.00	316.67	488.67
Grand Total		2,247.04	3,378.06	5,625.10

Over the same period (2016-2021), Arauco received USD 46.146 million in shares and bonds from both national and international investors:

Top 20 share and bond holding in Arauco, by financier (latest filing date Nov 2021, US\$ mln)

Sum of Per Investor Value (in mln US\$)				
Investor Parent	Investor Parent Country	Bondholding	Shareholding	Grand Total
MetLife	United States	34,385.51		34,385.51
AFP Capital	Chile	6,846.67	261.37	7,108.04
AFP Habitat	Chile	94.56	354.23	448.79
Principal Financial Group	United States	40.26	289.26	329.51
Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	0.78	283.17	283.95
State Street	United States	5.27	256.15	261.42
Banco de Chile	Chile	0.30	260.07	260.37
Inversiones Golfo Blanco	Chile		217.80	217.80
Vanguard	United States	66.14	120.86	187.00
Inversiones Senda Blanca	Chile		163.35	163.35
BlackRock	United States	55.22	94.39	149.61
Servicios y Consultoria	Chile		128.25	128.25
Banco Bice	Chile	4.01	119.41	123.42
TIAA	United States	109.74	5.98	115.71
Agroforestal e Inversiones Maihue	Chile		107.76	107.76
Inversiones Lo Recabarren	Chile		102.84	102.84
Guggenheim Capital	United States	98.25		98.25
Government Pension Fund Global	Norway		86.85	86.85

In 2020, Arauco had outstanding loan amounts with the following financial institutions:

Manager name	Investor Parent	Investor Parent Country
Scotiabank	Scotiabank	Canada
BNP Paribas	BNP Paribas	France

Banco Interamericano de Desarrollo	The Inter-American Development Bank	United States
Banco BBVA	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain
Finnvera	Finnvera	Finland
DnB Nor	DNB	Norway
Banco República Oriental del Uruguay	Banco Republica	Uruguay
Citibank	Citigroup	United States
Itau	Itaú Unibanco	Brazil
Santander	Santander	Spain
Banco Votorantim	Votorantim Group	Brazil
Banco Bndes	BNDES	Brazil
Banco del Estado de Chile - NY Branch	Banco Estado	Chile

The MAPA project

In 2011, Arauco announced its “*Modernización y Ampliación Planta Arauco*” (MAPA) project. This project consists of adding a third pulp line to the Arauco pulp mill in the Bío Bío Region (Chile), with an annual capacity of 1.5 million tonnes of short fiber pulp per year, plus a biomass boiler which, alongside a cogeneration plant, will inject 166 MW of electricity into the public grid.¹¹⁵

Local communities protested against the MAPA project¹¹⁶ and filed claims against the company’s environmental assessment of it twice (in 2014 and in 2015), but both times their claims were voided. Workers have also complained about poor labor conditions.¹¹⁷ In July 2019, local media reported that a Mapuche archaeological site had been desecrated during building work for the Arauco MAPA project.¹¹⁸

¹¹⁵ Arauco (2016, May), Corporate Presentation 2015, p. 33

¹¹⁶ OLN, “Durante 23 años celulosa Arauco se las ha arreglado sin necesidad del ducto, y lo pueden seguir haciendo”, August 2019, <http://olca.cl/articulo/nota.php?id=107658>
ampliación de Celulosa Arauco con proyecto MAPA, <https://resumen.cl/articulos/video-alertan-por-contaminacion-marina-tras-la-ampliacion-de-celulosa-arauco-con-proyecto-mapa>

¹¹⁷ Resumen, Trabajadoras de Celulosa Arauco critican condiciones laborales y Proyecto MAPA, <https://resumen.cl/articulos/video-trabajadores-de-celulosa-arauco-critican-condiciones-laborales-y-proyecto-mapa>

¹¹⁸ Resumen, Fotos confirmarían hallazgos arqueológicos mapuche en ampliación de Celulosa Arauco, August 2019, <https://resumen.cl/articulos/fotos-confirmarian-presencia-restos-arqueologicos-mapuche-en-ampliacion-celulosa-arauco>

DEMANDS

Demands to Arauco

Arauco has a 50+ year history of land grabbing and conversion of large tracts of land, with severe social and environmental impacts on wider areas. Resolving social conflicts and remediating harm may take decades. Here we outline some first steps necessary to start such a process in good faith.

- Respect Free, Prior and Informed Consent (FPIC) of local communities and especially of indigenous communities and publicly commit to remedy past harm due to failure to respect FPIC;
- Bring its sustainability policies in line with international ESG standards such as the UNGPs and OECD Guidelines, and fully respect human rights, including when managing land conflicts;
- Have open and constructive dialogue with local and national representatives of the Mapuche people and commit to avoid resorting to the police as a means to address conflicts;
- Review land acquisitions between September 1974 and March 1990 (dictatorship time) and commit to return all the land that has been unfairly acquired (owners forced to sell, unfair transition conditions, unfair price etc.) This will include land acquired later by third parties, if there has not been due diligence before the acquisition over prior unfair acquisition;
- Inform local communities about the company's commitment to review past land acquisitions;
- Inform local communities about their rights according to the terms of the new policy;
- Publicly declare that the militarization of the Mapuche regions and the use of anti-terrorist legislation will only worsen the conflict and demand that the government rapidly de-escalates military intervention and instead supports a dialogue;
- Make a commitment not to buy any land that has been previously acquired in violation of the present policy;
- Make a commitment not to acquire wood-fibre from other operators whose land has been acquired and cleared in violation of the present policy;
- Develop and agree with key stakeholders, a methodology for identifying, classifying and mapping land and social conflict, in their supply chains. Results of the conflict mapping must be made public and include an open process for additional stakeholder input;
- All members of affected communities will be informed of the conflict mapping and about the opportunity to present a grievance and how to do this, including the possibility to refer to independent NGO advisors and access independent mediation;
- Implement an immediate moratorium on further plantation expansion or intensification;
- Complete a detailed baseline study on the current ecological and hydrological conditions of the area, including water table and groundwater quality, to serve as a basis for future analysis. This will include credible strategies, guidelines and Standard Operating Procedures (SOPs) to protect the current water table and water quality, to be shared and agreed with stakeholders;
- A plan has to be developed on-site and off-site to prevent chemical, pesticide and genetic pollution of aquatic ecosystems and the atmosphere. This must prohibit use of Genetically Modified Organisms (GMOs) and toxic, bio-accumulative and persistent pesticides, including those on the FSC 'Highly Hazardous' list and SAN prohibited pesticide list. Measures must be taken to avoid worker and community exposure to any potentially harmful chemicals;
- Implement a full moratorium on infrastructure development, clearing, and new planting in areas with social and land conflict. This moratorium will support efforts to reach agreement on conflict resolution processes, conduct joint participatory mapping, and resolve conflicts in areas with social and land conflict. This moratorium must apply to the company's own operations as well as those of subcontractors;
- Publish Standard Operating Procedures aimed at urgently resolving all pending cases fairly, ensuring adequate compensation for damage, and eventually giving back land if requested. This will include developing Standard Operating Procedures (SOPs) and Conflict Resolution Units: SOPs shall be developed and agreed with key stakeholders and made public. Priority SOPs include: Free, Prior, and Informed Consent harm; Participatory Mapping; Security; and a robust, transparent and accessible Grievance Mechanism;
- Establish conflict resolution units, with the necessary authority and training required to mobilize resources and resolve conflicts, and equipped with action plans and timeframes

which have been agreed with communities and their chosen advisors. All communications with, and commitments to, communities must be documented and shared publicly;

- Publish a transparent complaints procedure for land conflicts and other impacts sustained by affected communities;
- Social conflict resolution and grievance management should be managed with the help of a third party, in order to avoid a situation where the personnel involved in an abuse are in charge of evaluating whether or not a grievance is legitimate. Independent mediation should also be automatically adopted in a conflict resolution process, if one party is not satisfied with the outcome;
- All subcontractors will accept this policy and incorporate it into their SOP and any serious policy violation by subcontractors, or their operatives, will automatically lead to contract termination;
- Transparency: publication of full versions of the following documents:
 - Environmental impact assessments;
 - Hydrology studies;
 - A list of all past land acquisition agreements, including maps;
 - Local consultation minutes and land allocation plans;
 - HCV and HCS studies;
 - Plantation management plans, biodiversity offset management plans, prescriptions and SOPs;
 - Results of conflict mapping.

Demands to Arauco partners

Buyers, investors and financiers may have concerns about being associated with a company involved in longstanding land disputes, which have caused other severe social and environmental impacts. If companies continue to do business with Arauco, this could result in reputational risks. Moreover, the social conflicts are of such an extent that they may result in stranded assets, due to conflict escalation.

As business partners who are profiting from Arauco's practices, we expect Arauco's buyers, investors, and financiers to use their leverage to demand Arauco address the ongoing impacts, by agreeing to and successfully implementing (as per independent third-party audit) the demands made in this report. If Arauco fails to act responsibly, business partners should close supply contracts, divest, and suspend financial and services agreements.

Annex – **STATEMENT FROM ARAUCO**

Letter from Arauco, 24 May 2022

Ahead of publication, the authors of this paper sent Arauco a list of main findings to give the company the opportunity to comment in advance of the publication, requesting to supply a comprehensive, accurate, and referenced information to substantiate their comments. The letter we received includes a number of counterclaims with no evidences nor references. For transparency, and with the agreement of Arauco, we add their response as an annex, together with our original email.



Environmental Paper Network

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Arauco y Constitución SA

Av. El Golf 150, Piso 14
7550107 Las Condes
Santiago, Chile

To:

Mr. **Roberto Angelini Rossi**
Mr. **Manuel Enrique Bezanilla**

Cc:

Mr. **Ivan Chamorro L.**
Mr. **Juan Anzieta**

Monday, 16 May 2022

Dear Sirs,

The Environmental Paper Network, Colectivo Viento Sur and Global Forest Coalition have conducted a study based on well documented public sources, examining the impacts of the paper industry in Chile, which focuses on the activities of your enterprise, Arauco, the major paper company in the country.

We would like to offer you the opportunity to comment on the findings of this international report on the environmental and social impacts of your company's operations in Southern-central Chile, ahead of its publication.

We welcome your comments by Tuesday 26 May 2022 end of the business which will give us time to review them before we publish the report.

The findings and conclusions of our report are the following:

1. Land conflicts

During the military dictatorship, Celulosa Arauco y Constitución obtained by the governmental agencies, the rights over a million hectares of land. Much of this land was taken from the Mapuche or other local communities. In some cases, local communities were forcibly evicted by Arauco officials, backed by the army. In most of the cases, the land was never returned to the traditional communities, and land conflicts has been repeatedly addressed by resorting to authorities.

2. Natural forest loss

At the same time, Arauco and other forestry companies also converted a large amount of natural forests into plantations. In some areas of Chile, a third of natural forests were replaced by timber monocultures. The remnants of native forests are now disappearing mainly due to drought, caused by a combination of climate change and the impact of large-scale timber plantations on the water table of entire landscapes.

3. Forest fires

Drought conditions have been exacerbated by extensive fires, which are fuelled by a landscape covered in dense and flammable timber plantations, including those developed and managed by Arauco. Scientists have warned that future climate change predictions indicate there will be more recurrent, intense, and temporally extended droughts in Central and South-central Chile. Under this scenario, land-use planning and fire and forest management strategies must promote a more diverse and less flammable landscape mosaic, limiting high load, homogenous, and continuous exotic plantations.

4. Intensification

While industrial plantations are still expanding, they are also under intensification, which includes substitution of pine with eucalyptus, as the latter offer higher yields. This will likely intensify drought and water stress, threaten the survival of the surrounding natural forests and/or subsistence agriculture, and increase the risk of large-scale forest fires.

5. Sea Pollution

Pollution due to mill effluents have had serious impacts on aquatic biodiversity, including in the Carlos Anwandter Nature Sanctuary and caused a steep decline in bird populations, with impacts on local fishing.

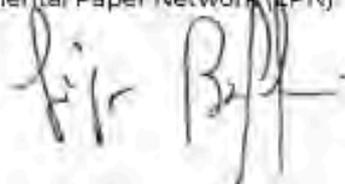
The report will include details of your company's structure. We plan to publish information identifying the impacts listed above and based on the best available information, informing traders, financiers and consumer companies with the aim of activating Arauco to implement a comprehensive plan for the remediation of environmental and social harm.

If you dispute any of our findings, either with regard to company ownership, events which have occurred, the impacts on traditional communities or the environment, or any other findings, please provide us within the deadline indicated with a written explanation as to why the report's conclusions are in error. We welcome your comments and any supporting evidence. In any event, we request that you supply us with comprehensive, accurate, and referenced information. If you would like to send us additional information that you believe sheds further light on our findings, then we would be happy to review it.

We are also willing to publish a statement from your company, if limited to a single page (3,500 characters), as an annex in our report. In order to include any input from you in our publication, we would need to receive your reply by no later than the end of the business day, Chile Standard Time (CLT) on Tuesday 26 May 2022.

We look forward to hearing from you.
Best regards,

Sergio Baffoni
Environmental Paper Network (EPN)



May 24th, 2022

Sergio Baffoni
Environmental Paper Network

Dear Sergio.

We are in receipt of your letter dated May 16, 2022, in which you raise a few concerns regarding ARAUCO's activities and the forest industry.

As a company, we are always open to dialogue with stakeholders that are interested in the development of our industry, or our business in particular, -in order to improve the impact of our activities on communities, territories, and ecosystems.

With regards to the issues that were raised, and without meaning to be overly exhaustive, we can state the following:

Though the relationship between the Mapuche communities and the Chilean government has been controversial since the creation of the Republic, this issue has become especially relevant as of late.

However, situations like those described in your letter regarding land conflicts are groundless and do not involve ARAUCO employees. In any case, we find it is appropriate for interested organizations to rectify unjust situations of the past.

In Chile, the State has implemented mechanisms to return the land to Mapuche communities and ARAUCO has expressed its total availability in adherence to these mechanisms, and we are willing to cooperate to solve this problem. In fact, as of today, we have transferred 4,645 hectares to communities through State mechanisms, and there is a formal agreement in place to transfer an additional 8,287 hectares to communities through CONADI.

Regarding the loss of native forests, Chile has 17 million hectares of forests, of which 14.6 million are native forests, and 2.4 million are productive forest plantations. Furthermore, 29% of ARAUCO's forestland encompasses native forest, and protection and conservation areas with high social and environmental value, are duly protected and conserved for future generations.

Moreover, in Chile, a great majority of pine and eucalyptus plantations did not replace the native forest, since the land that was planted on was eroded from previous agricultural uses.

In fact, from an environmental point of view, these plantations were a very good solution because, in addition to helping to recover the soil and control erosion, they are an important source of biodiversity –there is an abundance of flora and fauna that inhabit the plantations–; they are a renewable resource and help to reduce the negative effects of climate change.

It is estimated that 10% of forest plantations were established by substituting native forests. In the remaining 90%, eroded soils were recovered.

In ARAUCO's case, the company signed an agreement with CONAF in June 2003 through which it committed to non-conversion of the native forest and not to encourage third parties to do so. This has led the company to develop protocols and applications that guarantee the effective conservation management of native forests within the company's forestland.

In this context, and under the Forest Stewardship Council (FSC) international certification, areas in which direct conversion had taken place were identified (most of which happened on the property of small and medium-sized landowners who later sold their plantations to Arauco), accounting for no more than 2% of the company's forestland. In addition, since 2018, a restoration program has been underway, in which the entire area will be reconverted to native forest, prioritizing areas that connect high conservation value mosaics, and that have positive social implications for communities.

The native forest restoration program in Chile includes three lines of work that involve: 25,000 hectares declared as converted after 1994, and in which work has advanced on 7,563 hectares since 2012 to date; 15,000 hectares of native forest affected by wildfires, of which more than 80% has recovered its vegetation cover, in some cases even matching the levels before the fires; and 10,000 hectares of vegetation cover in protected areas.

In addition, it is important to note that the plantation surface in Chile is not expanding. In fact, within a decade, the total surface diminished. The intensification that is indicated in your letter is not the general rule either.

Concerning fires, and considering a context in which climate change, droughts, the action of humans and willful misconduct can strongly increase the risk of wildfires, prevention work must be a priority and part of a joint effort developed by the company with communities, authorities, and institutions. A network needs to be established to ensure safety and wellbeing in matters of prevention, warnings, and education regarding this issue.

At ARAUCO, the main objective is to reduce the occurrence of fires, and when they do happen, to fight them with expert teams and state-of-the-art machinery, so as to reduce their propagation. In this process, the most important aspect is the social prevention of fires, through education and dissemination on the proper use of fire, wildfire fuel management, and the coordinated response of different public and private institutions.

Thus, the challenge is also to educate and disseminate measures for prevention, through the development of about 400 activities in the areas of greatest occurrence, and by supporting the Community Prevention Network. This organization articulates prevention work done by 345 Local Prevention Committees, where neighbors, local authorities, CONAF, the Fire Department, Police Department, and several businesses and other organizations, work together. ARAUCO participates in 266 of these Local Prevention Committees.

Additionally, ARAUCO has created a structural protection network for wildfire fuel management. This includes barriers and control checkpoints throughout protection belts in inhabited areas that are adjacent to plantations and industrial complexes. Here, the company annually maintains a fuel break and a buffer zone (plantation where preventive silvicultural actions are developed), and forestland protection clusters whose purpose is to reduce fire propagation and facilitate firefighting.

Lastly, regarding the pollution events mentioned in your letter, it is important to know that the information provided by Universidad Austral, as well as by the Center for Wetland Research located in Valdivia and supported by ARAUCO, both demonstrate through their investigations that the population of fauna, especially bird species in the Carlos Anwandter Sanctuary, show a sustained increase. Pulp production, as demonstrated by Finland, Sweden, and other countries that use the most advanced technology, is perfectly compatible with biodiversity conservation.

Rather than “argue” over the veracity of the judgments presented in your letter, we would like to extend you an invitation, to obtain first-hand knowledge regarding the reality of our operations. Our doors are permanently open for dialogue, constructive criticism, alternative perspectives, and the co-construction of a better forestry sector.

Best regards,

Juan Anzieta
Environmental Manager
ARAUCO