

Socio-environmental topics from Social Work. The experience of the University of Atacama, Chile (2008-2023)

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Abstract

The article analyzes the experience of the Social Work degree at the University of Atacama, Chile, on socio-environmental issues. In recent decades, the region has had an increase in conflicts in this area, which requires progress in training and research processes that are adapted to this context, in a region whose extractivist model has generated territorial disputes between various actors, with local communities being the most affected.

Under a documentary research methodology with secondary sources, the main actions and products in the period 2008-2023 are described and analyzed, reflecting a sustained increase in the production of research on socio-environmental matters in the undergraduate career and from the attached professors.

In conclusion, training in Social Work and the discipline must consider the relationship between society and nature as transcendental, especially when this training is carried out in and from extractivist contexts or zones of sacrifice where all the actors of the educational process are part of that context, living daily with the effects that this condition produces.

Keywords: Social Work; Environmental issue; Extractivism; Socio-environmental conflicts; Sacrifice zones.

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Temáticas socioambientales desde el Trabajo Social. La experiencia de la Universidad de Atacama, Chile (2008-2023)

Resumen

El artículo analiza la trayectoria de la carrera de Trabajo Social de la Universidad de Atacama, Chile, en materia de producción académica e investigación en temáticas socioambientales. Esta región en las últimas décadas ha tenido un aumento de conflictos en esta materia, lo que requiere avanzar en procesos formativos e investigativos que se adecúen a dicho contexto, en una región cuyo modelo extractivista ha generado disputas territoriales, entre diversos actores siendo las comunidades locales las más afectadas.

Bajo una metodología de investigación documental con fuentes de carácter secundario, se describen y analizan las principales acciones y productos en el periodo 2008-2023 reflejando un sostenido aumento en la producción de investigaciones en materias socioambientales en la carrera a nivel del pregrado y desde los y las docentes adscritos/as.

En conclusión, la formación en Trabajo Social y la disciplina, debe considerar la relación sociedad-naturaleza como trascendental, sobre todo cuando esta formación se realiza en y desde contextos extractivistas o zonas de sacrificio en donde todos los actores del proceso educativo son parte de dicho contexto, conviviendo cotidianamente con los efectos que esta condición produce.

Palabras clave: Trabajo Social; Cuestión ambiental; Extractivismo; Conflictos socioambientales; Zonas de sacrificio.

Summary: 1. Introduction, 2. Methodology, 3. Findings: 3.1 Research to qualify for the bachelor's degree in Social Work, 3.2 Research projects associated with socio-environmental issues, 3.3 Scientific publications on socio-environmental issues, 4. Conclusions, 4. Bibliographical references.

1. Introduction

The Atacama region in northern Chile has a semi-arid climate and is endowed with unparalleled wealth, exemplified by the natural phenomenon known as the "flowering desert." Throughout its history, the region has been close to large-scale mining. Agua Amarga, located in Vallenar in the early 19th century, was the first mining deposit that spurred the region's mining wealth. Subsequently, the Discovery of the Chañarcillo Mineral in 1832 would become the most crucial event in the region's history (Cortés-Lutz & Olivares-Di Paolo, 2017).

This Discovery brought countless benefits to the region and the country. 1857, the School of Mines was inaugurated, becoming one of the first institutions to graduate mining experts. Cortés-Lutz and Olivares-Di Paolo (2017) note that the initial curricula featured arithmetic and history, confirming the aim to train mining professionals with a comprehensive education. These and other historical events explain the cultural and social attachment that mining has in Atacama.

This history changed in the last century from the 1960s onward, with new scenarios emerging for the activity. The entry of Compañía Minera de Aceros de Pacifico (CAP) into the Huasco area was one of the first activities to face opposition from communities in later decades due to the high pollution caused by the population.

The Instituto Nacional de Derechos Humanos (INDH, 2022) identified 131 socio-environmental conflicts in Chile. Of these, 37% are energy-related, and 26 % to mining. In the case of Atacama, there are 11 ongoing socio-environmental conflicts, several of which have been emblematic over the past three decades. The pollution of the Huasco commune by the CAP's Guacolda thermoelectric project since the 1960s, the pollution caused by the national copper company [CODELCO] in Chañaral Bay (Quintana-Muñoz, 2022), the conflict over the installation of the Pascua Lama project in the Chilean-Argentine¹ transborder territory and the installation of a mega industrial project by the national company AGROSUPER in the Freirina commune (Duarte-Hidalgo *et al.*, 2020). All of these projects are located in the Huasco province; meanwhile, in the Copiapo province, the possible installation of the Castilla thermoelectric plant in the 2010s and other large-scale mining projects have also provoked a series of conflicts.

In 2015, as a result of the hydro-meteorological event, Atacama faced one of the socio-natural disasters that would mark a before and after in the region's environmental history. Beyond the climatic event that caused an unusual amount of rain for the territory and its semi-arid climate, the situation was worsened by the fact that the material carried by the flood contained particulate matter from the tailings in various parts of the region, such as in Chañaral, for example.

¹ During the 2000s, and with pre-established mining exploration conditions in the 1970s, the Canadian capital arrived in the area to install the gold and silver mining project that would be the largest project in the world for the Barrick Gold Mining Company.

In this scenario, the region has come to be seen as a sacrifice zone². As Gudynas (2009) points out, "the conditions of marginalization, unemployment, and poverty have been used as justification for implementing high-cost ecological ventures, forcing painful choices between, for example, unemployment or pollution" (p. 17).

In this context, a public university connected with regional concerns must recognize this reality and better incorporate ways to understand it into its training processes. That is why the social work program considers the socio-environmental issue a key element in its training processes and ways to understand it better. The social work program considers the socio-environmental issue a key element in its training, especially since the discipline has a historical and political tradition rooted in social issues and the defense of human rights and social justice.

This documentary research aims to describe and analyze the trajectory of the social work program in terms of academic production and research on socio-environmental issues.

The underlying question of this research is: To what extent does the disciplinary training in Social Work at the University of Atacama contribute to the regional context in terms of academic production and research on socio-environmental issues.

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The unique Bachelor's program in Social Work was created in 2005. That same year, through Executive Decree 072 of 2005, the social work program was formally established within the faculty of legal sciences at that institution.

The current curriculum has been in place since 2014, aligned with a new social context at both the regional and national levels. This new educational proposal is based on a competency-based approach adopted at the time by the University of Atacama, which involves the integration of attitudes, knowledge, and skills in education (Tobón, 2006, cited in Duarte-Hidalgo and Mora-Castillo, 2016). A competency-based model incorporates the transferable credit system (SCT) and embeds critical thinking as a hallmark of the program.

The program's graduation profile aims to train social work professionals in two areas of practice: transformative social intervention and transformative social research; establishing the ethical and political nature of the educational proposal, taking into account the Community, local, and regional context, which, as already mentioned, has the particular condition of being and atavistic zone.

² According to various studies, at least eight sacrifice zones are identified at the national level. These zones are understood as territories that generally share certain characteristics, territories with a high concentration of contaminants of various types (chemicals, miners, among others) that have generated a high social and environmental impact on the territory, and territories generally associated with highly vulnerable territories.

In its foundations, this curriculum critically analyzes the social reality, mentioning “an economic, social and political model that fosters inequalities, presenting a scenario of contradictions, ruptures, and complexities to which the program has an ethical responsibility” (Executive decree 11 of 2014, p. 3).

It also proposes that the focus of social worker training will be on individuals and their contexts. It further states that it assumes the scenarios presented by the region as its own and seeks to develop strategies aimed at highlighting diversity, questioning inequality, and addressing the tensions and contradictions that affect individuals, communities, and the environment.

In this sense, its foundations presented a clear intention to be an educational Project contextualized and situated according to the demands and needs of Atacama, mentioning among its bases the need to address issues related to the “environment”.

The approach to environmental issues is a concern that emerged in the late 1960s with the “ecological crisis”, when the first criticisms of development models and the serious impact on natural resources appeared. Since 1972, with the first United Nations (UN) conference on the human environment, international meetings have taken place, leading to various international standards to reverse environmental degradation. The Brundtland Report, better known as the *Our common future report* (1987), the Montreal Protocol (1988) within the framework of the Vienna Convention to protect the ozone layer and the Report of the *Report of the United Nations Conference on Environment and Development* (1992) are international treaties that express concern for environmental issues as a global challenge in which states, civil society and international organizations recognize the need to address this topic. However, the solutions proposed do not question the prevailing development model but rather adopt measures to reduce the environmental impact of economic growth.

Various authors (Carrizosa-Umaña, 2000; Leff, 2004; 2006; Lievano-Latorre, 2013) agree that the basis of this environmental and ecological crisis is linked to the rationality humans have employed so far, the way we relate to nature and even questioning the way knowledge is generated, how reality has been understood, and how we inhabit the planet.

This crisis, which has various manifestations (global warming, climate change, deforestation, among others), results from the anthropocentric relationship between humans and nature. As Leff (2010) argues, nature only makes sense as it is seen as a source of raw materials for the market economy.

Indeed, the interpretation of the socio-ecological/climate crisis must include a long-term view of the historical dynamics of capitalism and its relationship with a specific ecological/

environmental regime, as well as the anthropocentric vision that permeates our Civilization (Svampa & Viale, 2020).

Regardless of the approach taken to address the socio-environmental crisis, solutions are required that involve not only technological alternatives but also profound changes in the economic patterns of industrialized countries, incorporating an ethic of sustainability into their production models (Botia-Flechas & Preciado, 2019). Moreover, from a Latin American perspective, the explanations and causes are linked to a pattern of accumulation that has seen how the natural resources of the Global South have been used to benefit the economic development of the countries of the Global North.

The Latin American approach: Between extravism and the eco-territorial turn

The readings and interpretations of the socio-environmental issue from Latin America derive from our colonial character. Machado-Aráoz (2015) argues that the first act of territorial ordering and resource possession occurred during the conquest period. According to Machado-Aráoz (2015), “extractivism and territorial ordering are not recent phenomena at all but have their roots in the very origins of the world system” (p. 15). The process of natural resource extraction in Latin America has occurred since the conquest period, developed through a form of global territorial ordering that gave rise to the current extractivist regime.

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Machado-Araoz (2015) also points out that modernity was born with this first act of territorial ordering, expressed in the Treaty of Tordesillas of 1494. He sees this treaty as the first formal legal instrument defining the first concrete modality of world division and also establishing the geographic space of who are its rightful owners and the air space of the possessed objects. In the words of Souza Santos, it draws that abyssal line that separates history from prehistory, the human from the subhuman, the subject from the object.

In its symbolic sense, this initial territorial organization created the fundamental and foundational definition of the current global geography, delineating the zone of plunder on one side and accumulation on the other. Extravism, therefore, refers to the origin of the world system, not just an emerging phenomenon in the current ecological-political context of the 21st century.

According to Machado (2017), extractivism as a colonial practice is a principle of epistemic, economic, ecological, and political structuring of modern capitalist civilization. It originates from and with capitalism as a necro-economic colonial system. It originates from and with capitalism as a necro-economic colonial system. It began in America; it invents it and imposes its name and its place in the world: a mining territory, a social and geographical space for mere extraction. By inventing it in this way, it also creates the world system as a whole: it creates the center and “its” peripheries, or rather, the invention/imposition of the periphery – a chasm-like space of extraction, a sacrifice zone – enables the grandiose construction.



This assertion by Machado (2017) reinforces the idea that extractivism is not the result of some destiny but has been and continues to be a political and civilizational choice that negatively shapes territories and economies, generating a new dependence expressed in the increased export of raw materials and the advancement of the process of re-privatization, concentration, and foreignization of our local economies.

The above reinforces the widely used concept of "sacrifice zones" in Latin American reality. The sacrifice zones in Chile concentrate on the impacts produced by the energy demands of extractive activities, especially mining and its derivatives (Bolados-García, 2016). This conceptual expression originated in the United States in the 1980s to refer to areas receiving or contaminated with radioactive waste produced for decades by the nuclear industry, which, since its establishment in the 1940s and 1950s, had negligently handled its radioactive waste (Folchi, 2020).

In Chile, this notion was adopted by various social movements in the 2000s, embracing this idea to refer to territories burdened with pollution resulting from productive activities that had a high impact on the population. As Folchi (2020) states:

It is not a technical concept nor a legal category; therefore, there are no parameters to "objectively" classify a place as a "sacrifice zone." This is a social and political category in construction used to denounce – and try to reverse – an ethically inadmissible situation: The existence of places whose inhabitants seem to have been condemned to live in a severely contaminated environment, which directly or indirectly implies a violation of their most basic rights. (p. 34)

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Five sacrifice zones³ have been identified in Chile (Hormazabal-Poblete *et al.*, 2019). However, this term is also used for all territories where large-scale production sacrifices other social and local cultural practices. There is a close relationship between extractivism and sacrifice zones in Chile since it is in these zones that environmental injustice conditions are created, and large volumes of natural resources are extracted.

This extractivist condition correlates with the economic forms adopted by countries in the global south. From the 1990s onwards, a series of structural adjustments were observed in Latin America to favor foreign investment in various economic sectors, with the raw material extraction industry seeing a considerable increase. This phenomenon has generated various resistances across Latin America, particularly in projects related to mining, as the impacts of this activity are

³ According to the Terram Foundation, in Chile, the sacrifice zones are those territories where the decarbonization plan promoted by the government administration of former president Sebastián Piñera Echeñique would currently operate. The areas considered are Quintero Puchuncaví, Valparaíso region; Coronel, BíoBío region; Huasco, Atacama region; and Tocopilla, Antofagasta region.



quantitatively and qualitatively significant. Natural goods such as land and water resources are affected, and environmental impacts that are difficult to repair over time are generated.

Svampa and Viale (2020) identify three phases of what they call neo-extractivism: the phase of positivity between 2003-2008, the phase of multiplication of megaprojects between 2008 and 2013, and the phase of exacerbation of neo-extractivism from 2014 to the present. The first phase was sustained by progressive and conservative governments who saw the export of raw materials as the solution to economic problems under a narrative that promised to slow down poverty, with a significant increase in fiscal spending to solve critical issues. After this phase, from 2018-2023, there was an explosive increase in large projects across Latin America, and the South American initiative known as IRSSA emerged. In opposition to this process, various manifestations occurred in Peru, Chile, and Argentina to oppose this new stage.

Nationally, the phases of this neo-extractivism, as mentioned by Svampa and Viale (2020), have their counterparts in Chile, starting from the progressive policies implemented by the state since the 2000s through various mechanisms promoting foreign investment, generating all kinds of measures to unlock capital and thus indiscriminately extract natural resources.

For example, the Binational treaty between Chile and Argentina, a protocol tailored to mining investments, was established to exploit a vast area of the Andes Mountains range in transborder territory involving small rural communities that sustain themselves based on local economies (agriculture, livestock, etc.).

The period between 2008 and 2013 has a strong correlation in Atacama. During this period, large projects like Pascua Lama by the mining company Barrick Gold in the Chilean-Argentine territory and the pig processing plant by Agrosuper, among others, were intended to be established.

On the other hand, social movements face this extractivist advance with new repertoires of collective action. As Svampa and Viale (2020) state, socio-environmental struggles in Latin America laid the foundations for a common language of territorial valuation, reflecting a crossover between an environmentalist narrative and a community-based indigenous matrix that places the defense of land and territory at the center of the struggles.

Social work and environmental issues

Social Work has evolved in response to the social concerns of each era and has also been influenced by dominant social and political models. Almost half a century ago, the reconceptualization movement sought to transform the discipline, moving away from a purely instrumental vision. However, the imposition of neoliberalism during the military dictatorship of the 1970s established an ideological project that controls much of the global economy and social

relations (Vivero-Arriagada, 2020). This situation has caused tensions in Social Work, with an instrumentalized version in line with the subsidiary state since the 1990s and a critical version that seeks to recover the principles of the reconceptualization process.

In October 2019, Chilean society began a profound reflection on fundamental social issues, such as the right to health and education. Following successive mass protests, the country demanded a change to a new political constitution to replace the 1980 constitution designed during the dictatorship. This massive social uprising is an expression of accumulated anger over the injustices and inequalities generated by the neoliberal policies implemented by the government of Augusto Pinochet (Duarte-Hidalgo *et al.*, 2022).

The social uprising challenged both citizens and professionals, social agents, and politicians, among others. Social Work also became involved in that historical moment on different fronts, from political activism to deep reflection on the context of that time, restoring a critical perspective and highlighting its ethical-political component.

October 18 gathers various social concerns; however, it is fair to point out that collective actions on socio-environmental issues have been manifesting for over a decade. Some research and articles have been documenting this (Arellano-Escudero, 2017a; 2017b; Jerez- Henríquez, 2015a; 2015b; Mora-Castillo *et al.*, 2017).

Thus, the social-environmental issue has been a problem since the second half of the last century and calls for examining how social sciences contribute to the debater and the necessary transformation to address the current deep ecological crisis.

Leff (2001) already challenged the social sciences, stating that they were not up to the current contingency, adding that political authorities, both globally and nationally, have not shown the will to reverse the entropic death of nature, worrying only about turning ecological crisis into a new market and business niche without proposing new strategies to minimize negative impacts on the biosphere and the earth. The so-called "Green economy".

The emergence of territory as an analysis element has been strengthened in recent decades. This eco-territorial turn, referred to by Svampa and Viale (2020), also points to the increasing incorporation of the socio-environmental/territorial dimension in Social Work and social sciences. Indeed, the notion of territory has been strongly present in recent decades in development and social policy designations (territorial development and territorial policies, among others) (Panez-Pinto, 2020).

In the case of Social Work, a narrative has been emerging that shifts the focus from individuals as the central element to the "territory" as the primary concern, even displacing the idea of "the local" of "the community" with "the territorial" (Panez-Pinto, 2020). Under this

premise, any intervention could be labeled as “territorial” simply by being confined to a geographic space. This reductionist view of the territory is often strongly present in professional and workspaces, especially those related to the implementation of social policies. Therefore, there is criticism regarding the approach that has been taken towards the territory, developed from theoretical perspectives that are often imprecise and eclectic, which would constitute a way of masking new conservative offensives, dressed in novel terminology but devoid of a solid and deep (Saravia-Cortés & Panez-Pinto, 2022).

Regarding research productions on environmental issues, a multiplicity of conceptual approaches is used to refer to the environmental dimension. Categories such as “environment”, “sustainable or sustainable development”, “eco-territorial issues”, and “socio-environmental field” are some of the terms used to refer to this field.

The author Sepúlveda-Hernández (2018) provides an interesting analysis of the presentations made at the 2018 World Conference on Education and Social Work. Mora-Castillo and García-Carmona conclude that the socio-environmental dimension is growing into the disciplinary discussion at a global level.

In Latin America, there has been an increase in research and publications on environmental issues and social Work, although it remains peripheral. Approaches like those from Colombia by Liévano-Latorre (2013) or Quintana-Ramírez (2019; 2022) stand out.

According to Panez-Pinto and Mendoza-Arriagada (2023), in Latin America during the 1990s, a series of pioneering Works on the linkage between Social Work and socio-environmental issues were recorded. Some of these contributions came from Colombia (Liévano-Latorre, 2013). According to Panez-Pinto and Mendoza-Arriagada (2023) this academic production.

Anticipated the Anglo-Saxon debate of the second decade of the 2000s, where concepts such as “Green Social Work” (Dominelli, 2012) or “Environmental Social Works” emerged (Gray, 2013), which are related to understanding the fundamental place of environmental issues in structural inequities. (p. 57)⁴

In Chile, the approach from the discipline of Social Work to these issues has been developed through research related to socio-environmental conflicts. For example, studies on the impact produced by mega-mining in cross-border territories (Duarte-Hidalgo *et al.*, 2020; Jerez-Henríquez, 2015a; 2015b; Mora-Castillo & Álvarez-Manríquez, 2021); the presence of arsenic contamination in Quintero Puchuncavi Bay, Valparaiso region (Arellano-Escudero, 2017a); el conflicto socio territorial por la instalación de Agrosuper en Freirina (Duarte-Hidalgo *et al.*, 2020) la contaminación ambiental en Chañaral (Quintana- Ramírez, 2022).

⁴ Translated by the authors



Most of these publications are territorially situated to investigate conflicts and address them from a perspective where the territory is not only conceived as a delimited geographical space (material dimension) but also with other aspects (cultural, social, and historical) almost always influenced by the power relations (Haesbaert, 2013). However, it is also plausible to point out that the interpretive frameworks are entirely abroad, as is the case at the Latin American level.

Nevertheless, there is a growing interest in expanding research into fields that allow for a discussion of the theoretical and methodological approaches that Social Work has concerning environmental issues, proposing interdisciplinary perspectives with a Latin American character (Panez-Pinto & Mendoza-Arriagada, 2023; Sepúlveda- Hernández & Úcar-Martínez, 2018).

Methodology

This research is exploratory-descriptive in nature and uses a predominantly quantitative approach based on descriptive statistics. It utilizes public archive material from the Social Work department and the University of Atacama.

Archive material is understood as “written texts that have not been obtained from experiences designed by the researcher, an analyst, another professional, or an individual with already determined objectives, but are selected from those that have been susceptible to preservation thanks to various social and institutional mechanisms that constitute them as documents (Narvaja-De Arnoux, 2006, p. 3).

The document analysis corpus is composed of the following documents, reports, and databases:

- Review of internal databases with records of undergraduate theses.
- Access to the library to review undergraduate studies linked to environmental issues.
- Review of the Vice Rectorate of Academic Research and Postgraduate Studies database.
- The research and postgraduate commission of the social work department prepared the report.
- Record of publications from the department.

The information was analyzed using descriptive statistics and frequency analysis and was organized into three areas (undergraduate theses, scientific publications, and awarded research projects). The data were transferred to SPSS software, where the most relevant data (research titles, publications, keywords, type of research, territories in which they are developed, etc.) were recorded. In the case of undergraduate theses, criteria such as a year completion, thesis scope,

keywords, and reference framework were established. Data was then analyzed, and percentages and trends were derived from that information.

3. Findings

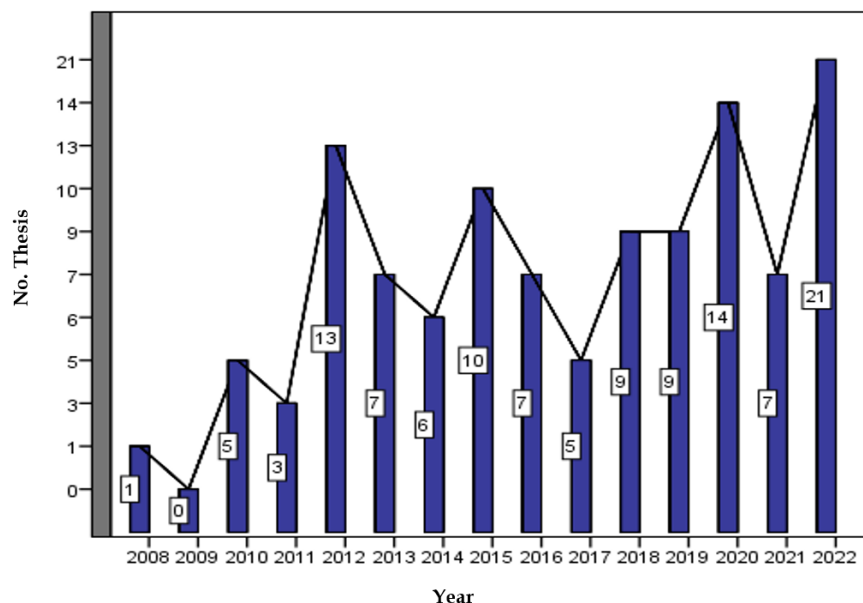
The results are grouped into three aspects: The first refers to undergraduate research between 2008 and 2023, the second to projects awarded by the academic unit linked to environmental issues, and the third to publications developed by departmental faculty members.

3.1 Research to obtain a bachelor's degree in Social Work

To date, 117 undergraduate research projects have been developed to obtain the Bachelor of Social Work degree in 18 years of trajectory and 12 graduating classes. The research topics are selected randomly and based on the students' interests.

In recent years, there has been a growing increase in theses, coinciding with the larger number of students graduating. In the first semester of 2013, 21 of these were completed, representing a significant increase compared to previous years (see Figure 1). This is due to the increase in students entering the program in recent years thanks to free higher education.

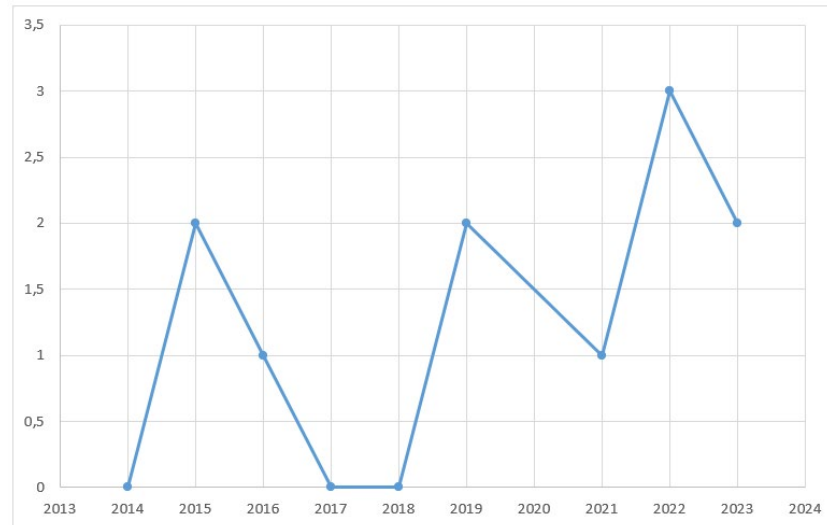
Figure 1. Number of research projects per year (2008-2023).



Source: own elaboration based on Sanhueza and Salvatierra (2022) and files of the Department of Social Work, UDA. (IBM SPSS Statistics Processor).

As shown in Figure 2, out of the total number of theses (117), 11 are related to socio-environmental issues. However, the remaining number of research projects is distributed among other topics typical of the discipline (education, health, childhood, etc.). This represents almost 10% of the total undergraduate research from 2008 to date.

Figure 2. Theses related to socio-environmental topics by year (2008-2023).



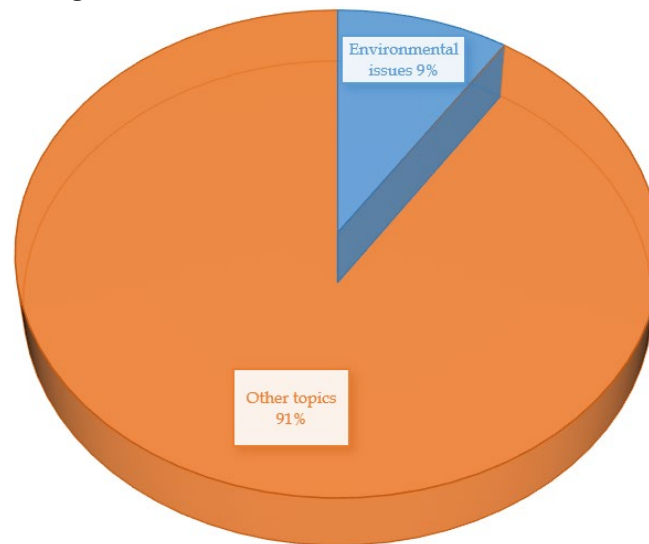
Source: own elaboration based on Sanhueza and Salvatierra (2022) and files of the Department of Social Work, UDA.

The increase in these research projects is primarily attributed to the regional context of the period (2028-2023), during which there was also an increase in socio-environmental conflict in the Atacama region. This coincides with the economic context throughout Latin America from 2014 to the present, a period during which, according to Svampa and Viale (2020), there is an exacerbation of extremism as according to Svampa and Viale (2020), there is an exacerbation of extractivist as various mechanisms are generated across the continent, including Chile, to promote the arrival of foreign investment by creating all kinds of measures to unblock capital and thus extract natural resources indiscriminately.

Adding to this scenario is a specific event in 2015: a flood that affected the entire Atacama region due to intense rainfall that was unusual for this area. In light of this, the social work program focused much of its Work (intermediate practices, theses, and outreach activities) on contributing to the post-food phase. Four research projects related to the flood were carried out on topics such as the forced displacement of families in Copiapó due to the effects of contamination and socio-territorial transformations in populations affected by the flood, among others. These studies conclude that these impacts are also related to the socio-environmental situation of the region, which worsened after the flood.

When analyzing the data from recent years, it was observed that the largest number of research projects (see Figure 3) is concentrated from 2019 to the present, which coincides with the first graduating class off the program with the current curriculum (2018-2019).

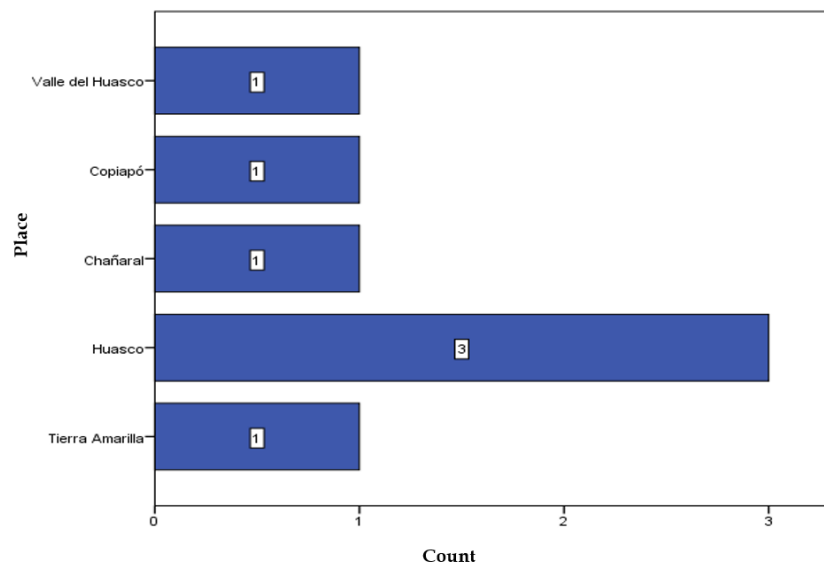
Figure 3. Percentage of research on socio-environmental issues (2008-2023).



Source: own elaboration based on Sanhueza and Salvatierra (2022) and files of the Department of Social Work, UDA. (IBM SPSS Statistics Processor).

Regarding the topics of these research projects, most analyze cases of socio-environmental conflicts and/or problems and their effects on the inhabitants. It is a contextual approach since these studies were conducted when the conflicts were in full development.

Figure 4. Geographical scope of the research projects (2008-2023).



Source: own elaboration from the Department of Social Work, UDA files. (IBM SPSS Statistics Processor).

As shown in Figure 4, the greatest interest in the studies is in the commune of Huasco (3) and/or in the Guasco Valley (1). The research associated with Huasco concerns the impact caused on the territory and its inhabitants by the pollution produced by the Pacific Steel Company, which has been present in the territory since the 1960s and then entered a phase of socio-environmental conflict between 2010 and 2020.

It should be noted that the students conducting these research projects are inhabitants of these areas, making their interest in working on them a response to their personal experience of living in a “sacrifice zone” (Bolados-García *et al.*, 2021) such as the port city of Huasco, where the Guacolda Thermoelectric plant and the Pacific Steel Company [CAP] are located.

Students live with these realities and, in some cases, are part of the collective resistance actions in their territories, making knowledge construction more meaningful. Communities are no longer willing to accept projects without social license (Wagner, 2012), especially those related to large-scale mining.

On the other hand, regarding the social work program, a significant aspect is the territorial deployment that occurs through these investigations, which allows the academic unit to broaden its perspective towards territories far from the commune of Copiapo, where the program is offered. For example, the commune of Huasco is approximately 191,000 km away from the regional capital, making it essential to generate knowledge in these more distant territories. Thus, the commitment to the regional context is reinforced, and the commitment expressed in the curriculum and the University itself is made visible.

However, despite this deployment of undergraduate research in these topics and territories, it can be observed that graduates of the program do not work on these issues after graduation, as the job market in the region offers opportunities in other areas of the profession, such as education, childhood, etc. Thus, the experience of researching environmental topics remains a personal experience territorially situated based on the student's own lived experiences, but it has not yet found a place in the job market, posing a challenge to the profession and the University itself.

When reviewing the theoretical framework of these investigations, it can be identified that political ecology is chosen as the main framework to support these investigations, as observed in Table 1:

Table 1. Conceptual theoretical framework, undergraduate research (2008-2023).

APPROACH	MENTIONS
Political Ecology	4
The political ecology of emotions	2
Sacrifice zones	3
Ecofeminism	2
Good living paradigm	1
Epistemologies of the south	1
Social Metabolism	1
Territory	4
Biopower	1

Source: own elaboration.

When comparing and analyzing theoretical-conceptual issues within these undergraduate investigations, it can be noted that there are different levels of adherence to the theoretical framework, with these addressing paradigms, approaches, theories, and concepts all used with different meanings.

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However, the analysis shows that most theses are situated from "critical" perspectives and under a Latin American viewpoint. Political ecology is the most prominent, focusing on its main ideological bases, such as criticism of the neoliberal economic model about nature and the inequalities that arise in territories.

In recent decades, political ecology has become an interdisciplinary field widely used in Latin America for the comprehensive analysis and study of socio-environmental conflicts, utilizing tools from disciplines such as sociology, anthropology, and geography (Alimonda, 2011; Leff, 2006). Methodologically, these are qualitative investigations under an interpretive or constructivist paradigm of an exploratory and descriptive nature. This approach allows for a situated perspective on the study territory and its subjects. The instruments include the semi-structured interview, and as a method of analysis, the *semantic categorical* approach is used, which adds richness by capturing experiences, emotions, lived experiences, and perceptions from the communities themselves in these territories. Qualitative research on socio-environmental conflicts is highly enriching because it places the subjects at the center of the Work, as declared in the program's graduation profile.

Despite having a curriculum that attempts to adapt to the region's reality, an explicit *curriculum* on socio-environmental issues is not established. Rather, the influence of faculty members aligned with the Community, territory, and environment research line encourages the

development of undergraduate research in this area. Collaboration with other academic actors from other universities has also led to an increase in undergraduate research in this field.

Even though there are no specific courses on socio-environmental topics, students address these issues in their theses, which results from articulation between their research interests, personal experiences, and faculty guidance.

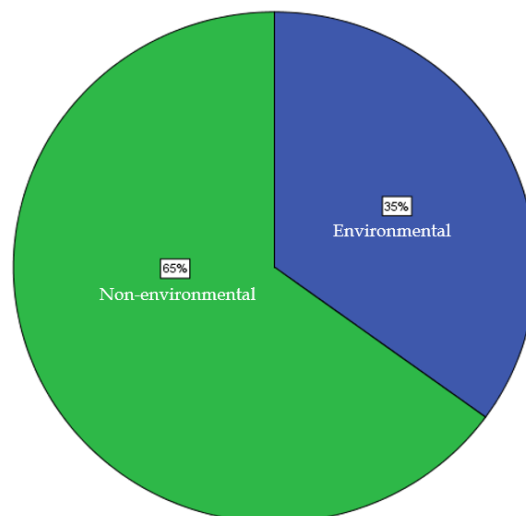
In this sense, it is necessary to deepen and question which theoretical approaches are most appropriate to better understand the society-nature relationship and how these can be articulated to think about forms of intervention from social Work that address these socio-environmental issues (Sepúlveda-Hernández & Úcar-Martínez, 2018).

3.2 Research projects associated with socio-environmental issues

The social work department has 11 academics. In 2018, the department's research lines were formalized, establishing a line called "community and territory and environment" with six academics whose publications and research have steadily nourished this area.

The vice-rectorate for research and graduate studies has a competitive fund with research resources. Seven of the twenty projects awarded in Social Work correspond to projects linked to the "Community and territory" line, representing 35% of the total awarded projects (see Figure 5).

Figure 5. Percentage of Department projects vs. Environmental projects (2008-2023).



Source: own elaboration based on files from the Department of Social Work, UDA. (IBM SPSS Statistics Processor).

This trajectory coincides with the return of faculty from their doctoral studies (2016 y 2022), who address these concerns in their research (see Table 2).

Table 2. Internal projects awarded in Social Work (2008-2023).

Year of funding	Research topic
2012	Historical configuration of the environmental problem from communities and political-administrative institutions. Coordinates for governance and sustainability in Atacama.
2013	A look at the reconfiguration of the territory based on the conflict of the Castilla Thermoelectric project in the Atacama region, Chile.
2017	Let us think about territorial planning: "Giving meaning to the community and territory" from the social subjects of the commune of Chañaral, Atacama region.
2018	Environmental courts and regional governance of natural resources: governance, new environmental institutions and the state.
2021	Modernization of the state and regional governance in Atacama (2018- 2020). Analyses of governmentality, state, and territory.
2023	Recovery of the environmental history of the Huasco valley, Atacama. Between extractivism and resistance.
2023	Initiative for the valuation and protection of high Andean salt flats and wetlands in the Indigenous colla community of the Paipote Gorge, Copiapo commune, Atacama region.

Source: University of Atacama, Vice-rectorate for research and graduate studies.

The research topics funded by the University of Atacama, from 2012 to 2023, related to environmental issues in the Atacama region, Chile, address topics related to environmental courts, regional government, state modernization, and recovery of the environmental history of the Huasco Valle, among others.

These investigations can be classified into two principal areas. One includes research on socio-environmental/territorial conflicts (mining, energy, lithium) from critical perspectives developed in specific territories.

Another group of investigations approaches the historical configuration of Chilean environmental institutions and how they interact with the previously described context, as these conflicts strain those institutions and general new structures. In the words of Merlinsky *et al.* (2018), this is part of the productivity of conflicts in their socio-legal scope.

Regarding the temporal scope of these investigations, the research is territorialized through case analysis, addressing issues related to territories and the presence of socio-environmental conflicts. Territories like the Huasco Valley of Chañaral are present in the research, which, according to numerous studies, have been impacted by extractivist practices (Bolados-García, 2016). Similarly, the latest research developed is linked theoretically and practically to the impact

of lithium extraction on the protection of salt flats from the perspective of indigenous communities in the region.

In this regard, the territory category is widely used in most publications, establishing aspects related to the conflict and tensions within them. The territory is used as an analytical category, referring to a broad understanding of the territory but also symbolic aspects such as culture and local history, among others (Haesbaert, 2013).

Similarly, there was an interest in analyzing the power relations that characterize these phenomena in both conflict research and research on governmentality and environmental institutions.

3.3 Scientific publications on socio-environmental issues

To date, fifteen publications (see Table 3) on socio-environmental topics are part of the research line called Community, territory, and environment with a broader dispersion of topics. Most of the publications are situated from a qualitative approach. Critical frameworks for analysis are adopted, such as political ecology, collective action, and ecofeminism, among others.

Table 3. Publications on Socio-Environmental issues (2008-2023).

Authors	Year	Title
García, A.	2017	Governmentality and water: Analytics of power in the Atacama Desert.
García, A.	2017	Privatizing Water, Producing Water Subjects: The Politics of Scale in the Socio-Hydric Mobilization against Pascua Lama and HidroAysén in Chile.
Quintana-Ramírez, J.	2019	Territory, Memory, and Gender: The meaning of political participation of the women of Atenco, Mexico.
Duarte-Hidalgo, C. <i>et al.</i>	2020	Collective action, Antagonisms, and community resistance in the territorial conflict of Freirina.
Duarte-Hidalgo, C. <i>et al.</i>	2021	Political practices of hope in contexts of sacrifice zones.
Mora, A. Álvarez, L.	2021	Territorial planning and socio-environmental conflicts related to mining Huasco Province and Chubut in defense of the territory.
Mora, A.	2021	Resistance and resilience: Alternatives for thinking about the pandemic.
Mora, A.	2021	Socio-natural Disasters and Poverty: An Analysis from Emergency Decrees Issued in Chile.
Quintana, J.	2022	I am creating (in) secure territory amid socio-environmental disasters: Meaning of territory and emotions in chañaral, Chile.
Duarte-Hidalgo, C., <i>et al.</i>	2022	Weaving narratives: Processes of resistance and women's organization in a sacrifice zone.

García, A.	2022	Discursive practices of environmental institutionalism and livelihoods in local territories: Mega mining vs. small scale agriculture, the case of Pascua Lama Chile.
Duarte-Hidalgo, C. <i>et al.</i>	2022	Feminisms in sacrifice zones: the case of Atacama and its implications for social work education.
Burgos, C., Duarte-Hidalgo, C., Olivares, V & Pino, K.	2023	Weaving identities and stories about the boarding school of the Copiapó mining school and the student residence of the University of Atacama.
García-Carmona, A	2023	Neoliberal State and the Rise of Environmental Institutionalism in Chile.
Quintana-Ramírez, J, Castillo A.	2023	Interview with Alba Orozco Cisneros: "The memories remain in our history".

Source: Executive decree No. 11 of 2014.

In academic publications, the gender dimension is notably incorporated into the study of socio-environmental topics. The authors highlight the role of women in defending territories, discuss the body-territory dimension, and emphasize the resistance that women in Atacama have had to extractivist practices.

In this sense, new analytical categories are constructed based on the region's reality around the notion of "sacrifice," which, as already mentioned, reinforces the idea that Atacama is a "sacrifice zone" due to its mining character, leading women to lead the struggles for environmental and other rights.

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4. Conclusions

For decades, social sciences have questioned the extractivist production model. However, this discussion has not been fully addressed in this field despite the debate on the ethical-political dimension of Social Work (Panez-Pinto & Mendoza-Arriagada, 2023).

The regions with an extractive productive matrix, distant from large cities, are the ones that suffer the most from the consequences of this model. The social work program, located in a region marked by sacrifice and at a university with a mining tradition, has shifted towards a new curricular approach since 2014 to better connect with the territory. The experiences and knowledge gained make the student and academic community protagonists of the effects of living in sacrifice zones. The training is situated and is not based on a subject-object logic.

Regarding the proposed objective for this inquiry, there is a growing and necessary research focus on socio-environmental issues, both at the undergraduate level and through the research and scientific production of the faculty members of this academic unit. Despite this, its national visibility is limited. Although this research is valid at the regional level, greater visibility could generate new synergies with other regions of the country that are also affected by the extractivist logic.



Some necessary curricular transformations must be made in Social Work to continue strengthening this growing research and academic production. If one of the discipline's core areas is the socio-environmental field, the curriculum must incorporate content that integrates new understandings of environmental phenomena. The epistemological understanding of social sciences should be permeated by a broader comprehension, incorporating environmental knowledge as a new paradigm that breaks with the society-nature duality so present in social sciences.

Political ecology, as an interdisciplinary field of action, allows for a greater understanding of these types of conflicts. It provides theoretical-methodological keys that enhance a stronger connection with communities and actors involved in a conflict.

If Social Work is committed to the territories through individual or collective initiative, the data corroborates that interest in elevating environmental issues is increasing. This raises the question of what is happening in other regions with social work programs similar to Atacama's, where these issues are also present, particularly in the more extreme or remote regions. Certainly, conflicts associated with the mining and energy industries may have different nuances, especially in semi-arid zones like Atacama. However, other territories nationwide are also intersected by extractivism, where social Work is present and where the socio-environmental dynamic appears with little strength.

Beyond the particular experience analyzed in this research, the focus is on highlighting the need to build a Latin American and territorial perspective from Social Work that addresses the specific characteristics of regions affected by extractivism and makes visible the construction that is carried out by those who inhabit these sacrificed/sacrificial territories. In this sense, the students and academics of social Work in the Atacama region become active agents of the context, both as those affected and as members of collective actions against the logic of extractivism.

The tension in the discipline lies in whether the socio-environmental field is a relevant axis of concern for Social Work or whether social workers are researching and (or intervening in) related issues. This duality is observed in the various studies conducted on the subject, most of which aim to understand socio-environmental and eco-territorial conflicts and highlight environmental issues in specific territories (case studies). However, there needs to be more discussion about disciplinary training in this area.

Social work training in this area must continue to grow. However, other universities should also promote it in extractivist contexts involving other productive activities, such as forestry and salmon farming in the south. Synergies and work networks must be generated to strengthen this dimension within the discipline.

The discipline has been incorporating this dimension into its Work with a certain slowness, but it cannot be detached from it, given its ethical-political commitment. At least in this territory, the link between socio-environmental issues and Social Work has come to stay, representing a clear connection with the context in which it develops, both in the disciplinary and professional realms.

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The authors unequivocally state that there is no conflict of interest in the writing or publishing of this article, reinforcing the integrity and impartiality of the research.

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5. Bibliography references

- Alimonda, H. (Coord.). (2011). *La naturaleza colonizada: ecología política y minería en América latina*. CICCUS; CLACSO.
<https://biblioteca.clacso.edu.ar/clacso/gt/20120319035504/natura.pdf>
- Arellano-Escudero, N. (2017a). Arsénico sobre Puchuncaví: metabolismo de la minería y sufrimiento ambiental. *Revista Iberoamericana de Viticultura, Agroindustria y Ruralidad*, 3(10), 71-91. https://revistarivar.cl/images/vol4-n10/04_Rivar10-Arellano.Escudero.pdf
- Arellano-Escudero, N. (2017b). Intervención socioambiental: intersecciones del Trabajo Social y la institucionalidad ambiental. *Revista de Trabajo Social*, (91), 3-11. <https://doi.org/10.7764/rts.91.1-11>
- Bolados-García, P. (2016). Conflictos socio-ambientales/territoriales y el surgimiento de identidades post neoliberales (Valparaíso-Chile). *Izquierdas (Santiago)*, (31), 102-29. <https://dx.doi.org/10.4067/S0718-50492016000600102>



- Bolados-García, P., Morales-Urbina, V., & Barraza-López, S. (2021). Historia de las Luchas por la Justicia Ambiental en las Zonas de Sacrificio en Chile. *Historia Ambiental Latinoamericana y Caribeña (HALAC)*, 11(3), 62-92. <https://doi.org/10.32991/2237-2717.2021v11i3.p62-92>
- Botia-Flechas, C. J., & Preciado, J. (2019). Resiliencia comunitaria: defensa del agua y del territorio en la cuenca del río Sumapaz, Colombia. *Perspectiva Geográfica*, 24(1), 13-34. <https://doi.org/10.19053/01233769.8425>
- Carrizosa-Umaña, J. (2000). *¿Qué es ambientalismo? La visión ambiental compleja*. IDEA; PNUMA; CEREC.
- Cortés-Lutz, G., & Olivares-Di Paolo, M. F. (2017). *Chañarcillo cuando de las montañas brotó plata* (Vol. 2). *Museo Regional de Atacama*. https://www.museodeatacama.gob.cl/sites/www.museodeatacama.gob.cl/files/images/articles-88574_archivo_01.pdf
- Decree 072 of 2005. [Universidad de Atacama]. Approves the Plans and Programs of the Social Work Career and Social Work Degree. April 5 of 2005.
- Duarte-Hidalgo, C., & Mora-Castillo, A. (2016). Renovación curricular, una oportunidad para repensar el Trabajo Social en la Universidad de Atacama. *Revista de Docencia Universitaria (REDU)*, 14(1), 203-224. <https://polipapers.upv.es/index.php/REDU/article/view/5763/6367>
- Duarte-Hidalgo, C., López-Rojas, C., Ochoa-García, P., & Salazar-Enríquez, P. (2020). Acción colectiva, antagonismos y resistencia comunitaria en el conflicto socio-territorial de Freirina. *Eleuthera*, 22(2), 170-188. <https://doi.org/10.17151/elev.2020.22.2.11>
- Duarte-Hidalgo, C., Rodríguez-Venegas, V., Araya-Lai, P., & Milla-Yáñez, S. (2022). Violencia generizada en las dictaduras latinoamericanas. Miradas desde el Trabajo Social. *Revista Intervención*, 12(2), 41-54. <https://doi.org/10.53689/int.v12i2.158>
- European Economic Community. (1988). *Montreal Protocol on substances that deplete the ozone layer - Declaration by the European Economic Community*. [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21988A1031\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21988A1031(02))
- Executive decree 11 of 2014. [Universidad de Atacama]. By which the Curriculum of the Department of Social Work, Curriculum, is established. September 10 of 2013.
- Folchi, M. (2020). Zonas de Sacrificio: distinto origen, mismo destino. In Vicerrectoría de Investigación y Desarrollo, Universidad de Chile y Programa de Reducción de Riesgos y Desastres (CITRID), *Los territorios que habita(re)mos: ¿Qué futuro existe para las zonas de sacrificio?* (pp. 29-34). Universidad de Chile, VID. <https://doi.org/10.34720/z5ew-4395>
- Gudynas, E. (2009). Desarrollo Sostenible, posturas y desafíos en la construcción del espacio urbano. *Vivienda popular*, (18), 12-19. <http://www.gudynas.com/publicaciones/GudynasDesaSustVPopular09.pdf>
- Haesbaert, R. (2013). Del mito de la desterritorialización a la multiterritorialidad. *Cultura y Representaciones Sociales*, 8(15), 9-42. <https://doi.org/10.22201/crim.20078110e.2013.401>
- Hormazabal-Poblete, N., Maino-Ansaldo, S., Vergara-Herrera, M., & Vergara-Herrera, M. (2019). Habitar en una zona de sacrificio: Análisis Multiescalar de la comuna de Puchuncaví. *Revista hábitat sustentable*, 9(2), 6-15. <https://dx.doi.org/10.22320/07190700.2019.09.02.01>

- Instituto Nacional de Derechos Humanos [INDH]. (2022). *Mapa de conflictos ambientales en Chile*. www.indh.cl
- Jerez-Henríquez, B. (2015a). Conflictos ecoterritoriales transfronterizos y megaproyectos extractivistas en cuencas compartidas de la Patagonia. *Revista nuestramérica*, 3(5), 56-73. <http://www.redalyc.org/articulo.oa?id=551956251006>
- Jerez-Henríquez, B. (2015b). Conflictos ecoterritoriales, megaproyectos de minería y centrales hidroeléctricas en los andes patagónicos: escenarios y desafíos emergentes para el Trabajo Social. *Revista Intervención*, (4), 41-48. <https://doi.org/10.53689/int.v1i4.22>
- Leff, E. (2001). *Ciencias Sociales y formación ambiental*. Editorial Gedisa.
- Leff, E. (2004). Racionalidad ambiental y diálogo de saberes. Significancia y sentido en la construcción de un futuro sustentable. *Polis. Revista Latinoamericana*, (7), 1-35. <https://doi.org/10.32735/S0718-6568/2004-N7-269>
- Leff, E. (2006). *Aventuras de la epistemología ambiental: de la articulación de ciencias al diálogo de saberes*. Siglo XXI.
- Leff, E. (2010). Imaginarios sociales y sustentabilidad. *Cultura y Representaciones Sociales*, 5(9), 42-121. <https://www.culturayrs.unam.mx/index.php/CRS/article/view/457>
- Liévano-Latorre, A. (2013). Escenarios y perspectivas de Trabajo Social en Ambiente. *Trabajo Social* 15(15), 219-233. <https://revistas.unal.edu.co/index.php/tsocial/article/view/42586>
- Machado, H. (2017). Territorios, modernidad y geografía de la dominación: una mirada poscolonial. In P. Rincón and A. Beuf (Eds.), *Ordenar los territorios. Perspectivas críticas desde América Latina* (pp. 3-23). Universidad de los Andes; Universidad Nacional de Colombia; Instituto Francés de Estudios Andino.
- Machado-Aráoz, H. (2015). Ecología política de los regímenes extractivistas. De reconfiguraciones imperiales y re-ex-sistencias decoloniales en nuestra América. *Bajo el volcán. Revista del posgrado de sociología. BUAP*, 15(23), 11-51. <http://www.apps.buap.mx/ojs3/index.php/bevol/article/view/1268>
- Merlinsky, G., Toledo, V., Schimidt, M., Fernández, S., Tobías, M., Langbehn L., Pereira, P., & Capalbo, T. (2018). *Defender lo común qué podemos aprender de los conflictos ambientales*. Universidad de Buenos Aires. <https://geaiigg.sociales.uba.ar/wp-content/uploads/sites/209/2019/07/Libro-Cuadernillo-Defender-lo-comun-VERSION-WEB.pdf>
- Mora-Castillo, A., Duarte-Hidalgo, C., & Rodríguez-Vanegas, V. (2017). Conflicto socioterritorial por la instalación de la Termoeléctrica Castilla en la región de Atacama. Desafíos y aprendizajes para la intervención en Trabajo Social. *Cuaderno de Trabajo Social*, 10(1), 18-43. <https://cuadernots.utem.cl/?p=181>
- Mora-Castillo, M. A., & Álvarez-Manríquez, L. V. (2021). Ordenamiento territorial y conflictos socioambientales vinculados a la minería: provincias de Huasco y Chubut en defensa del territorio. *Perspectiva Geográfica*, 26(1), 63-86. <https://doi.org/10.19053/01233769.11108>
- Narvaja-De Arnoux, E. (2006). *Análisis del discurso: modos de abordar materiales de archivo*. Santiago de Arcos.

- Panez-Pinto, A. (2020). La irrupción del territorio: discusiones en Trabajo Social a partir de los conflictos territoriales en América Latina / Abya Yala En F. Saravia-Cortés, M. A. Urquieta and B. Ortega-Senet (Eds.), *Espacialidades en la intervención social: debates para América Latina* (pp. 91-112). RiL editores.
- Panez-Pinto, A., & Mendoza-Arriagada, C. (2023). Extractivismo, conflictos ecoterritoriales y Trabajo Social en América Latina: Contradicciones y contribuciones profesionales. *Propuestas Críticas en Trabajo Social*, 3(6), 49-76. <https://doi.org/10.5354/2735-6620.2023.68976>
- Quintana-Muñoz, J. (2022). Haciendo territorio (in)seguro en medio de desastres socioambientales: significados del territorio y emociones en Chañaral, Chile. *Revista Austral de Ciencias Sociales*, (42), 107-128. <https://doi.org/10.4206/rev.austral.cienc.soc.2022.n42-06>
- Quintana-Ramírez, A. P. (2019). El Trabajo Social y la dimensión ambiental. *Trabajo Social Global-Global Social Work*, 9(17), 65-88. <https://doi.org/10.30827/tsg-gsw.v9i17.8460>
- Quintana-Ramírez, A. P. (2022). La gestión colectiva del agua, una lectura desde el Trabajo Social. *Perspectivas: revista de trabajo social*, (39), 77-105. <https://doi.org/10.29344/07171714.39.3014>
- Sanhueza, D., & Salvatierra, P. (2022). *Revisión sistematizada de las investigaciones de pregrado de la carrera de Trabajo Social en la Universidad de Atacama entre los años 2008 y 2019* [Unpublished undergraduate work]. Universidad de Atacama.
- Saravia-Cortés, F. A., & Panez-Pinto, A. E. (2022). Constelación espacial de conceptos para Trabajo Social: ambiente, lugar, territorio y paisaje. *Trabajo Social*, 24(2), 241-266. <https://doi.org/10.15446/ts.v24n2.97954>
- Sepúlveda-Hernández, E. (2018). Trabajo social en el campo socioambiental: discusiones, énfasis y desafíos a partir de la Conferencia Mundial de Trabajo Social 2018. *Revista Perspectivas: Notas sobre intervención y acción social*, (32). <https://doi.org/10.29344/07171714.32.2032>
- Sepúlveda-Hernández, E., & Úcar-Martínez, X. (2018). Intervención y cuestión socioambiental. *Socializar conocimientos*, 1(1). <https://socializarconocimientos.org/archivos/>
- Svampa, M., y Viale, E. (2020). *El colapso ecológico ya llegó. Una brújula para salir del (mal)desarrollo*. Siglo veintiuno editores.
- United Nations [UN]. (1987). *Our common future report*. Alianza.
- United Nations [UN]. (1992). *Report of the United Nations Conference on Environment and Development*. <https://www.un.org/esa/dsd/agenda21/Agenda%2021.pdf>
- Vivero-Arriagada, L. A. (2020). Condiciones para una Neo-Reconceptualización del Trabajo Social en Chile, Latinoamérica y el Caribe. *Prospectiva. Revista de Trabajo Social e intervención social*, (29), 193-212. <https://doi.org/10.25100/prts.v0i29.8241>
- Wagner, L. (2012). Uspallata: ecos sociales de la megaminería en un valle andino, Claroscuro. *Revistas del Centro de Estudios sobre Diversidad Cultural*, (11), 191-215. <http://hdl.handle.net/2133/12688>