

Environmental Social Work in Chile. Moving towards Green Social Work

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Abstract


Within the framework of the formation of the Green Social Work at international level, the article presents the results of a documentary research whose objective sought to characterize the situation of Chilean environmental Social Work, based on its historical background, their contributions in the hierarchies of environmental intervention and the main social problems derived from the environmental crisis that demand their specialized intervention. Qualitative documentary research was conducted organized by categories of analysis. The results indicate that Chilean environmental social work has incorporated environmental intervention strategies that seek to motivate the population to adopt behaviors that contribute to the preservation of natural resources, the protection of biodiversity and the application of environmental principles in their daily actions. It is concluded that the efforts of Chilean Social Work contribute to the international concept of Green Social Work and its declaration of caring for the planet as a professional duty.

Keywords: Environment; Environmental Justice; Environmental Intervention Hierarchies; Social Work; Environmental Social Work. Green Social Work.

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Trabajo Social Ambiental en Chile. Avanzando hacia un Green Social Work

Resumen

En el marco de la conformación del Green Social Work a nivel internacional, el artículo presenta los resultados de una investigación documental cuyo objetivo buscó caracterizar la situación del Trabajo Social ambiental chileno, a partir de sus antecedentes históricos, sus contribuciones en las jerarquías de intervención ambiental y los principales problemas sociales derivados de la crisis ambiental que demandan su intervención especializada. Se realizó investigación documental cualitativa organizada por categorías de análisis. Los resultados indican que el Trabajo Social ambiental chileno ha incorporado estrategias de intervención ambientales que buscan motivar a la población para la adopción de conductas que contribuyan a la preservación de los recursos naturales, la protección de la biodiversidad y la aplicación de los principios ambientales en sus acciones cotidianas. Se concluye que los esfuerzos del Trabajo Social chileno aportan al concepto internacional de Green Social Work y en su declaración de cuidar el planeta como deber profesional.

Palabras clave: Medio Ambiente; Justicia Ambiental; Jerarquías de Intervención Ambiental; Trabajo Social; Trabajo Social Ambiental; Trabajo Social verde.

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Summary: 1. Introduction, 2. Methodology, 3. Findings, 3.1. Historical overview of environmental social Work in Chile, 3.2. Contributions of environmental social Work to the hierarchies of environmental intervention, 3.3. Social Work and social problems arising from the environmental crisis, 4. Conclusions, 5. Bibliographical references.

1. Introduction

“La humanidad ha abierto las puertas del infierno” [The humanity has open Hell’s doors] Gutiérrez (2003, párr. 3.)

Social Workers pay urgent attention to environmental problems, recognizing that their leading causes are the deepening of contaminating processes associated with the current global extractivist economic model (Uribe-Sierra y Panez-Pinto, 2022). From the international perspective, the main problem corresponds to climate change that affects the planet's environmental security, being referred to as evidence of a triple crisis that also involves contamination and biodiversity loss because of deforestation, soil degradation, and species extinction (Intergovernmental Panel on Climate Change [IPCC], 2023; United Nations [UN], 2023; World Meteorological Organization [WMO], 2023). In the face of this urgent situation, the United Nations Organization has proposed the 2030 Agenda for Sustainable Development (General Assembly of the United Nations, 2015), that targets the international efforts to achieve a sustainable future, based on 17 goals related to critical areas of development. Nevertheless, the evaluation report of the 2030 Agenda estimates that date progress does not exceed 15% of the total, 48% of the goals show minimum progress, and 37% have stagnated or shown no progress, which increases concerns about the global environmental situation (UN, 2023).

For Melo *et al.* (2023), climate change results from the atmosphere heating due to the accumulation of greenhouse gases generated by the fossil fuels that sustain the global economic model and directly affect the ecosystem and human life sustainability. In Chile, the consequences of climate change are evident. According to the País Report (Universidad de Chile, 2023), the national territory is highly vulnerable to climate change. Significant increases are observed in the maximum and minimum extreme temperatures in the different insular and continental territories of the country; there are changes in the historical precipitation regimes causing mega-droughts, heavy rainfall in short periods associated with severe flooding, increase in summer heat waves and winter cold waves; decrease in the soil moisture and increase in the average temperature and acidity level of the sea. In addition, destructive storm surges have been observed, causing loss of beaches, bays, and coastal borders; a decrease of flow and tributaries of lakes, wetlands, dams, reservoirs, and water mirrors; an isotherm increase of 0% in the mountainous zone causing flood risks; glacier retreats and decrease in the duration and extent of the seasonal snow cover.

In addition to the above, environmental problems in Chile are associated with the so-called sacrifice zones and the adverse environmental effects derived from the life forms and work that take place in the urban and rural territories of the country. The sacrifice zones correspond to territories that support extractive activities and highly polluting industrial processes linked mainly to mining, fossil fuels, and energy; the environmental consequences directly affect human health and natural ecosystems (Bolados-García *et al.*, 2021). In Chile, industrial complexes are identified as main sacrifice zones in the coast communes of Mejillones and Tocopilla (Antofagasta

Region), Huasco (Atacama Region), Quintero-Puchuncaví (Valparaíso Region) and Coronel (Bío-Bío Region), which are strategically considered for the operation of the national energetic matrix, regardless of its negative environmental externalities (Allain, 2019). These industrial activities seriously deteriorate the quality of life of the locations and cause socioenvironmental conflicts that confront the environmental activities with the social organization demands that seek to defend their quality of life and natural resources (Retamal-Maldonado *et al.*, 2021). In a broad definition, the sacrifice zone denomination also includes the various territories of the country affected by mining tailings, agrochemical contamination in agricultural areas, substitutive forest plantations of native forests, depredation of marine biomass by industrial fishing, contamination of seabed by aquaculture activities, and concentration of landfills in communal and intercommunal areas (Uribe-Sierra & Panéz-Pinto, 2022).

Regarding the environmental problems of rural productive areas, the country's extractivist development model is based on intensive practices applied to natural resources. From there, the conformation of agricultural, forestry, mining, and fishing production circuits oriented to the export and raw materials, characterized by a high concentration of ownership and an accumulation of national and transnational capitals that put pressure on the environment to maintain their levels of economic profitability (Castañeda-Meneses & Salamé-Coulon, 2021). As a result, negative externalities are generated, including erosion of productive soils, overexploitation and degradation of natural resources, fragmentation of ecosystems, loss of biodiversity, contamination of water, air, and soil due to the use of chemicals and antibiotics, and the advance of transgenic and allochthonous species that affect the balance of territorial occupation and the survival of native species (Universidad de Chile, 2023). The main environmental problems in urban areas are atmospheric pollution from greenhouse gas emissions, noise pollution, inadequate waste management, and urban mobility. In addition, there is a permanent demand for natural resources to meet the energy, fuel, and supply needs that sustain the functioning of large cities, the risk of fires in urban forest areas, and the loss of green areas due to a lack of resources for their maintenance or de facto occupation for their living purposes (Bergamini *et al.*, 2017).

Facing this adverse panorama, social workers have had to diligently incorporate these issues into their professional repertoire to help address the environmental problems described above. At the international level, a broad configuration linked to Social Work Environment (Barthel *et al.*, 2021; Drolet *et al.*, 2016; Payne, 2020), highlighting in this framework the Green Social Work perspective proposed by Dominelli (2018) and supported by the International Federation of Social Work FITS; which is conceived as an innovative approach to environmental problems from the professional practice and includes the holistic approach of the profession with people and living beings (flora, fauna and physical ecosystems) emphasizing the natural relationship between all its constituent parts. Its actions address the social consequences of the environmental crisis and are based on the perspective that the professional duty to care for others also includes caring for planet Earth. Its main concerns are natural disasters, green agricultural

practices, food security, human-induced disasters, health disasters, extreme weather events, disaster-driven migration, urban polluting industries, and environmental education (Dominelli, 2012). On a Latin American Level, it is a growing professional concern expressed from conceptual and reflective contributions to environmental problems and experiences (Dolores-Bautista & García-García, 2023; Panéz-Pinto and Mendoza-Arriagada, 2023; Quintana-Ramírez & Castellanos-Martínez, 2023). At the national level, it is considered an emerging professional field whose repertoire is in the process of being shaped from the bases provided by the historical professional heritage and by the renewed environmental demands emerging from the territories and because of the climate crisis (Burdiles *et al.*, 2023; Saavedra & Marchenzini, 2020; Vallejos-Laming, 2023).

The foundations of environmental Social Work are associated with the Right to Environmental Justice, whose antecedents arise from the Rio Declaration on Environment and Development, which recognized the triad of environmental citizens' rights of access to information, participation, and justice in environmental matters (UN, 1992). According to Contardo-Cortés (2023), these rights seek to guarantee civil society access to information of environmental relevance, meaningful and appropriate participation in decision-making on environmental matters, leveling of asymmetries in the influence of the various social groups in legislative or judicial processes, and increased possibilities of reparation for environmental damage; guarantees that ensure the substantive right to live in a healthy and pollution-free environment. Furthermore, their professional actions are intertwined with the environmental principles of reduction, reuse, and recycling, identified as “the three Rs”, which guide environmental education actions on responsible consumption (Lara-González, 2008). Within the framework of the contributions of the circular economy, these principles have been enriched with the new environmental principles of reorder, reformulate, repair, revalue energetically, redesign, reward, renew, and recover, forming a renewed proposal of environmental principles known as 10R or “the ten Rs” (Gaztelumendi *et al.*, 2019).

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Within this framework, the article presents the results of documentary research whose objective is to characterize the current situation of Chilean environmental Social Work from its historical background, its distinctive contributions to the hierarchies of environmental intervention, and the main social problems associated with the environmental crisis that demand its specialized intervention. With this, it seeks to make visible the contributions of Chilean Social Work to the conformation of Green Social Work at the international level.

2. Methodology

Documentary research was carried out with a qualitative approach, developed from the interest in the social problems associated with the environmental issues that are presented currently and the opportunities they represent for the performance of the profession. The variables selected were oriented to rescue the historical advances and contributions of Chilean



Social Work in environmental problems from the review of documents and publications related to the topic of interest. In this sense, written texts are conceived as schemes of social organization of contents and as active agents in the circulation of information (Rivera-Aguilera, 2017). The documentary corpus was organized into two categories of analysis. The first corresponds to the historical documentary review of professional performance that allowed the characterization of a historical semblance of environmental Social Work in Chile. The second is made up of specialized information on environmental issues provided by scientific articles, public policies, legal texts, and international reports, which made it possible to define the professional contributions in the hierarchies of environmental intervention and to identify the main social problems arising from the environmental crisis that demand specialized intervention.

The information search criteria corresponded to national and international environmental problems, hierarchies of environmental intervention, and the performance of Social Work in historical and contemporary environmental problems. The information gathered was organized and analyzed based on Rose (1996), which considers the characterization and analysis of the contents, knowledge, expert knowledge, and experiences contributed by each document to organize and categorize the results obtained around the defined research objective. Ethical aspects were safeguarded using the corresponding citation in the use of information of interest obtained from the documentary corpus.

3. Findings

3.1 Historical Semblance of Environmental Social Work in Chile

The professional repertoire of Chilean Social Work has been linked from its beginnings to promoting environmental issues in the country's urban and rural territories. In fact, since its foundation as a profession in 1925, an urgent hygienic and sanitary imprint was installed with emphasis on family education that sought to favor the access of the urban and rural population to maternal and child health care, with particular interest in pregnancy control and professional childbirth care, management of infectious and contagious diseases, food handling, vector control and proper disposal of household waste (López-Campillay, 2018; Simón-Ruiz & Sánchez-Andaur, 2017). Throughout the following decades, the concern of improvements in the hygiene and health conditions of homes in the urban centers was added through the systems implementation of potable water supply and excreted elimination, together with the waste disposal and removal regulation, being the main professional contribution in these matters the environmental educational actions carried out around the correct use and maintenance of the concreted sanitary advances (Bravo & Martínez, 1993; MacDonald, 1983).

Decades later, Social Work added to its hygienic and sanitary approach in rural areas the concern for the protection of natural resources through the professional accompaniment carried out in the peasant settlements that benefited from the Agrarian Reform, a process of structural

changes in land ownership that was initiated in Chile in 1962 and that lasted until the coup d'état in September 1973. In this period, the profession contributed to the processes of literacy, cooperation, and peasant unionization, defined as central strategies to achieve peasant autonomy in the management of natural resources that they would obtain through the reformist process (Corporación de la Reforma Agraria [CORA], 1970). The profession also accompanied, in socio-educational terms, the efforts made by public investments to improve rural health services and to provide adequate material and infrastructural conditions for rural homes (Castañeda-Meneses, 2018).

In a convergent manner, from the 1960s onwards, Social Work began to implement the method of community organization and development sponsored by the Pan American Health Office (Ware-Farrar, 1967), its first applications were in health education and urban environmental sanitation programs (López-Campillay, 2018). These experiences were defined on a pilot basis, which made it possible to monitor the implementation processes, validate the importance of social participation in overcoming problems that affected the various territories, and recognize the legitimacy of social organizations as representatives of the needs and demands of the population. At the time of the coup d'état in September 1973, the method of community organization and development was applied by Social Work throughout the territory, by the sectoral priorities defined by the public policies of the time (Castañeda-Meneses & Salamé-Coulon, 2016).

During the dictatorial years, Chile began to implement an extractivist development model based on the exploitation of natural agricultural, forestry, mining, fishing, and aquaculture resources, which imposed intense pressures on the ownership of resources and production standards to ensure favorable returns for the economic groups that owned the investments. With this, environmental concerns began to express incipiently in rural territories linked to the actions of non-governmental organizations that accompanied the rural areas during the dictatorship and where Social Work formed part of interdisciplinary work teams, from where it contributed to socio-educational and socio-legal aspects linked mainly to subsistence farming and livestock production (Bengoa, 1984; Castañeda-Meneses & Salamé-Coulon, 2019; Cruz & Leiva, 1982; Cruz & Rivera, 1984; Gómez, 1990; Grupo de Investigaciones Agrarias de Chile [Chilean Agricultural Research Group] [GIA], 1979). However, the findings regarding practices that depredated natural resources and substituted for traditional practices that began at that time were made within a sectoral logic, focused, and openly politically opposed, and it was impossible to communicate these concerns to the dictatorial centers of power that promoted the extractivist economic model, given the risk of political repression that this information represented. Therefore, there was no progress in regulations or inspections favorable to environmental protection concerning natural resources in this period.

At the same time, professional performance in this period in governmental organizations kept Social Work linked to its traditional hygienic and sanitary imprint, implemented in a limited

way through individual or family intervention modalities and with a marked assistance orientation, given that the processes of social organization and community participation were openly repressed for not being part of the ideological conceptions of the dictatorial authorities (Castañeda-Meneses & Salamé-Coulon, 2022). As a result, aspects linked to environmental issues continued to be interpreted by the profession from a sanitary perspective and the advances achieved by the materiality of the provision of essential services and sanitary infrastructure. Within this framework, it is worth highlighting the enactment of Law 18138/1982, which gave rise to the Housing and Sanitary Infrastructure Construction Program, known as the Neighborhood Improvement Program, and the continuity of the Rural Drinking Water Program initiated in 1964 with the Basic Rural Sanitation Plan (López-Campillay, 2018). In both programs, Social Work contributed to socioeconomic characterization processes that made it possible to define the allocation of benefits to applicant families. Likewise, during the 1970s, actions began to measure air quality indexes in the country's metropolitan areas, which allowed the formalization of the technical bases for the regulatory standards that began to be applied from the 1980s onwards (Labraña *et al.*, 2021). With this, professional attention was directed towards socio-educational actions to prevent respiratory diseases, particularly in the elderly, children, and chronic patients.

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From 1990 and with the return to democratic rule, environmental issues did not centrally occupy the public agenda because economic growth and the transitional political stability allowed these concerns to be limited to focalized situations, which were formally handled by the corresponding governmental agencies (Delamaza, 2012). The first relevant milestone in these matters occurred in 1994, with the constitution of the National Environmental Commission (CONAMA) under the Ministry of National Assets, the legal predecessor of the current Ministry of the Environment, which officially began operating as a portfolio in 2010. The same year, Law 19300/1994 on General Bases of the Environment was enacted, which, among its subjects, defined the Environmental Management Instruments, the Environmental Impact Assessment System in charge of the Environmental Assessment Service, the participation of the community in the Environmental Impact Assessment Procedure; Environmental Quality and Nature Preservation and Environmental Heritage Conservation Standards; Emission Standards; Management, Prevention or Decontamination Plans; Responsibility for environmental damage; Control and the Environmental Protection Fund.

In the 1990s and 2000s, the link between Social Work and the environment continued to develop, based mainly on its health tradition, with the incipient addition of actions associated with social management and environmental education for the community protection of the territory's natural resources (Bastías, 1997). However, Social Work did not incorporate a leading role in the development of the processes associated with the Environmental Management Instruments, the Environmental Impact Assessment System, or in community participation in the Environmental Impact Assessment Procedure, as these subjects are perceived as specialized and carried out by technical consultancies or private organizations, outside of the traditional

performance in public organizations. Consequently, with some exceptions, other social science professions have occupied and validated the socio-environmental work opportunities that the regulations represent.

The initial stability of the first decades of democratic normalization gave way sometime later to growing social discomfort related to the unquestionable adverse environmental effects caused by the extractive activities carried out in the different territories. Its primary means of expression have been the citizens' movements that have raised open conflicts with the institutions and the environmental and economic regulations in force. The founding milestone was the citizens' movement "Acción por los Cisnes" in the commune of Valdivia (Región de Los Ríos) which in 2004 denounced the massive death of black-necked swans in the Carlos Andwanter Nature Sanctuary, environmental disaster associated with the start-up of the Celulosa Arauco y Constitución CELCO plant in the neighboring commune of San José de la Mariquina (Delamaza, 2012). After significant community social protest actions were carried out, which were joined by massive demonstrations in other cities in the country, the company was condemned for environmental damage in an unprecedented way. Subsequently, in 2010, citizen protests stopped the construction of a thermoelectric power plant in the national marine biodiversity reserve Pingüino de Humboldt, located in the Coquimbo Region. In 2012, nationwide demonstrations were held against the Hidroaysén project, which envisaged the construction and operation of five hydroelectric power plants in the Aysén Region. The Patagonia Sin Represas movement led the social protest that paralyzed the project. To this was added the cancellation of the mega-project of pig farms in the commune of Freirina (Atacama Region) due to protests by its inhabitants.; and the demonstrations of the Aysén Social Movement against the centralized decisions of the authorities that did not consider their regional economic and environmental reality (Allain, 2019).

This environmental social protest has spread in recent years to various territories due to the critical episodes of pollution in the sacrifice zones and approval of extractive projects in other regions of the country, highlighting the opportunity it represents for Social Work concerning accompanying citizen organizations in ongoing environmental conflicts, through community, inter-institutional and intersectoral networking. Similarly, and in line with the progress of these dynamics, Social Work has progressively incorporated socio-educational intervention strategies in environmental matters in all its areas of Work, which seek to motivate the population to adopt behaviors that contribute to the preservation of natural resources, the protection of biodiversity and the application of environmental principles in their daily actions, in order to protect life on the planet and contribute to its conservation for future generations.

3.2 Contributions of Environmental and Social Work to Environmental Intervention Hierarchies

The socio-environmental intervention of Social Work is based on the formulation of a socio-environmental diagnosis (Castañeda-Meneses, 2023), which is conceived as an informed



professional judgment regarding the territory and its population, with particular attention to the conditions of access, ownership, use, distribution, and protection of available natural resources. It focuses on the environmental conditions of the territory, considering the prominent historical landmarks of occupation, settlement, and urbanization. It seeks to define the territory's potential and vulnerabilities to environmental risks and to identify and prioritize the community's main environmental problems. To this end, it is considered that the institutional framework, public and private organizations, present services in the territory, and the community organizations representing the interests of the population directly involved in the environmental problems diagnosed are considered. These references will be the basis for socio-environmental intervention processes involving community, inter-institutional, and inter-sectoral networks.

The formulation of programs, projects, or work plans for the problems identified and prioritized in the socio-environmental diagnosis is based on the professional knowledge of Social Work provided from its historical trajectory, which includes social intervention with families for assistance and promotion community organization and development for assistance and promotion; protection of natural resources; socio-educational interventions on hygiene, health, and environmental protection; socio-legal orientation; social management and Work in community networks, inter-institutional and inter-sectoral.

This professional heritage is transferable to the hierarchies of environmental intervention provided by Bonilla *et al.* (2022), the UN (2018), and the Environmental Assessment Service (SEA, 2014), allowing us to characterize Social Work's contributions to various environmental problems. This environmental intervention hierarchy recognizes actions associated with prevention, minimization, mitigation, repair, and compensation.

Environmental prevention seeks to anticipate the negative impacts produced by damage to biodiversity and other components of the environment. Social Work has an essential potential in this type of preventive action due to its extensive socio-educational and social management experience over the decades in various contexts, themes, and interest groups. Thus, the professional contribution to environmental prevention can be illustrated through actions carried out with organized communities in the prevention of forest fires in urban or rural risk areas through weeding, elimination of micro-dumps and maintenance of firebreak areas, or in the organization of community response capacity to socio-environmental disasters, through the identification of safe evacuation areas, clearing access for emergency vehicles, setting up emergency communication systems between neighbors and signage on risks and safety zones.

In environmental minimization, the aim is to reduce the duration and intensity of the environmental impacts on the affected territories. In this second type of environmental action, social Work brings socio-educational knowledge into play to promote family and community initiatives that limit the adverse impact of human action on natural resources or the territory. Thus, encouraging public transport over private transport, promoting the responsible use of

energy in the home, and socio-educational actions that disseminate the environmental principles of recycling, reuse, and reduction of organic and non-organic waste illustrate this concept.

Regarding environmental mitigation, these actions are aimed at rehabilitating or restoring degraded ecosystems. Given that environmental damage has already been inflicted, sometimes causing unrest and social protest, mitigation actions require efforts in terms of the participation of social organizations, the commitment of public authorities, constancy about the defined timeframe, and responsibility about the available resources; conditions that must be present in order to make possible convergences that allow the environmental rehabilitation or restoration purposes defined as being of interest to the population to be carried out within limited timeframes. The contribution of Social Work lies in the advanced management of inter-institutional networks and community networks that allow it to convene participatory efforts around objectives of common good, contributing to the viability of mitigation actions in the territories, which can be illustrated in environmental actions such as forestation of eroded soils, planting networks of urban tree groves or rescue of landfills or degraded areas to transform them into urban parks.

In environmental repair, the aim is to restore the components or elements of the environment that have been damaged, aspiring to reach a quality like that which they possessed prior to the negative environmental impact. If this is not possible, restoring their basic properties is sought. This environmental action identifies impacts on the environment, individuals and families, and productive, social, or cultural activities linked to the affected natural resources, aiming at an integral reparation. Sometimes, these reparatory actions involve economic compensation for the affected persons and communities. Its implementation requires legal backing, committed social participation, intersectoral support, conditions that make it mandatory, and viability and monitoring of the progress made over time. The cleanup of bays, rivers, or watercourses contaminated by fuels or percolated liquids that have been accidentally or intentionally dumped into the waters and that affect fishing, agricultural, or tourist activities in the territory illustrate the context in which this type of environmental action is carried out. Within this framework, the socio-legal accompaniment of Social Work to the demands of social organizations and the development of socio-educational processes that contribute to the management of the environmental effects of critical episodes or to the transitory or definitive productive reconversion are part of the actions in which the profession can contribute to the repair of ecosystems.

Finally, environmental compensation operates on irreversible environmental damage. It seeks compensation for the affected components, the restitution of habitats, the replenishment of ecosystems, or the implementation of compensatory recovery actions in other territories that are equivalent to the disaster or environmental damage that occurred. Environmental compensation should be proportional to the losses and demonstrate concrete and recognizable environmental improvement or conservation products without damaging or putting collateral pressure on other

ecosystems. In these actions, Social Work contributes interdisciplinarity in highly complex actions such as resettlement processes or relocation of local communities affected by severe environmental pollution or irretrievable loss of coastal edge due to destructive tidal waves, where the knowledge associated with family and community intervention contributes to an adequate implementation of the defined environmental compensation conditions.

3.3 Social Work and social problems arising from the environmental crisis

From the documentary research carried out and considering the progressive advance of the global environmental crisis, it is possible to recognize the following social problems linked to the intervention of Social Work. These problems are associated with professional actions carried out by the State and implemented mainly through socio-educational and participative intervention approaches.

- a. Population affected by socio-natural disasters. The multiple expressions of socio-natural disasters triggered by the environmental crisis of the last decades show the profound social consequences caused by the vulnerabilities of the territories. The magnitude of material losses caused by mega-fires, destructive tidal waves, floods, prolonged droughts, torrential rains, or floods warns that these are not exceptional situations that can be quickly recovered but represent recurrent conditions requiring projective actions and permanent monitoring. Socio-natural disasters update the expert management of Social Work in the first assistance response to emergencies and project socio-educational actions, social management, social organization, and intersectoral Work for long-term processes related to the reconstruction of homes and affected infrastructure, together with prevention actions that prevent the occurrence or improve the response capacity to new destructive episodes.
- b. Water scarcity. One of the country's leading environmental problems is the scarcity of fresh water, as a result of the mega-drought that has affected a large part of the national territory in the last decade due to the effects of climate change the other hand, due to the regulations of the Water Code (Decree 1122 of 1981) that allowed the privatization of water resources through the granting of water rights for agro-industrial and mining companies (Instituto Nacional de Derechos Humanos [INDH], 2021). As a result, agro-industry accounts for 72% of the extractive consumption of irrigation water, reaching 96% in the Maule Region, while mining accounts for 56% of extractive consumption in the Antofagasta Region (Morales-Estay, 2021). The reduction of water due to the effect of drought and production overdemand is directly observable in rivers, lagoons, estuaries, groundwater, reservoirs, and dams, in addition to the retreat of mountain glaciers, causing a growing insecurity in the supply of drinking water in urban areas and situations of rationing or shortages in rural areas. It also affects peasant agriculture, causing the loss of crops, the death of animals, and the invaluable cultural and

patrimonial loss of ancestral lifestyles and work styles that have formed the historical basis of local and regional identity. Social Work's socio-educational environmental actions on this issue seek to contribute to the care of water as a scarce natural resource through environmental minimization, promoting responsible water use and household reuse in safe and efficient conditions.

- c. Shortages and higher prices of staple foods. The consequences of climate change on food production chains are immediately evident because extreme weather conditions directly affect the expected yields of agricultural and livestock production cycles. In addition, average ocean temperatures are warming, affecting the availability of biomass, aquaculture production, and marine algae (Melo *et al.*, 2023). All these situations directly impact the food supply of the population and the market values that products can reach due to a limited offer. All these situations directly impact the population's food supply and the market values that products can reach due to a limited supply. These conditions significantly affect the lower-income population, who see their opportunities to purchase food diminished and their access to balanced nutrition weakened. In this problem, Social Work contributes to environmental minimization through motivational and socio-educational actions that allow the development of collective initiatives aimed at managing community purchases and the exchange of social knowledge that facilitate the renewal of the food menus and the use of the abundance of seasonal products, facilitating adjustments in family budgets in the face of shortage and lack of food.
- d. Losses of jobs in forestry and agriculture. Primary activities based on agricultural and forestry resources are the first to be damaged in their productive cycles due to climate change and the unstable conditions that affect their production. According to the Office of Agricultural Studies and Policies (ODEPA, 2019), the sector generates 10% of total employment at the national level, which rises to 27% on average in the agricultural regions of the central-southern part of the country. This employment is distributed in crops, fruit, vegetables, livestock, and forestry, with female employment estimated at 41% of total jobs and 70% in hiring for seasonal summer harvesting tasks. The progressive loss of employment resulting from the environmental crisis drives rural-urban migration, densifying the cities with new inhabitants who put pressure on the available resources to meet their basic needs, even when carried out in precarious conditions. In this aspect, professional experiences linked to job training and productive reconversion with a focus on female employment represent opportunities for Social Work intervention associated with environmental compensation in the face of increased unemployment in rural families' living and working conditions due to forestry and livestock farming.

- e. Population affected by heat waves. Long periods of prolonged periods of exceptionally high temperatures and humidity are defined as heat waves. Occasionally, they occur continuously exceeding cycles of five days or more, which is defined as extreme heat waves (López-Campillay, 2018). These climatic conditions affect the population in general and fragilize plant and animal life in the territories. This situation is dire for the elderly, children, and adolescents, social groups that require a greater capacity to adapt to the adverse climate situation and demand an appropriate provision of essential drinking water and sewage services, preferential conditions for the provision and preservation of food, constant hydration, body sun protection, adequate living conditions for episodes of extreme weather, timely health care and socio-educational actions on self-care contents carried out in formats that are understandable to their age and abilities (Sandoval-Diaz *et al.*, 2023; Ministerio de salud, 2017). Specifically, health risks to the population's health in cities are declared due to the existence of urban heat islands. Given that cities have a low capacity to retain humidity and a high capacity to absorb store, and emit heat due to their asphalt and concrete environments, living conditions are affected by heat islands that exceed the average temperatures expected for the commune or locality (Ubilla-Bravo & Rodríguez-Seguel, 2022). This situation demands Social Work environmental prevention actions linked to the socio-educational task, with particular attention to the most at-risk population groups, together with the monitoring of compliance with the labor obligations of sun protection that must be applied in outdoor activities and that allow the minimization of the environmental effects on the population.
- f. Population affected by occupational heat stress. According to the International Labor Organization (ILO, 2019), heat stress is the excess heat the body receives above the levels it can tolerate, impairing its physiological capacities. Excess heat increases occupational risks and vulnerability; it can lead to hyperthermia and ultimately result in death due to general decompensation. Its effects have a direct impact on work activities carried out outdoors or associated with intense physical efforts and which are linked to the agriculture, fishing, livestock, forestry, construction, energy, mobility, tourism, sports, waste collection and services sectors, estimating a productive loss of 80 million jobs by 2030 due to the increase in temperatures. Similarly, the World Health Organization recognizes the influence of exposure to ultraviolet solar radiation as an essential cause of skin cancer diagnosis in work contexts (World Health Organization [WHO], 2021). Occupational heat stress also affects intramural workspaces with no air conditioning conditions because warmer hours impede work performance or slow the productive dynamics. In general, the performance of informal jobs, the absence of social security, and the conditions of poverty conspire negatively in the severity of the situation. In this type of problem, Social Work contributes to socio-educational actions of environmental prevention linked to self-care and monitoring compliance with the

conditions that make possible the minimization of adverse environmental effects in the performance of work activities carried out outdoors.

- g. Climate displaced population. This corresponds to people forced to abandon their usual places of residence temporarily or permanently due to drastic changes in the environmental conditions of their surroundings (Pernía *et al.*, 2022). This includes environmental disasters such as floods, droughts, or destructive tidal waves that directly affect natural resources and the traditional economic practices that are based on them, forcing people to migrate to other geographic areas to reach basic subsistence levels (Pernía *et al.*, 2022). Generally, this problem affects young and adult populations of fully productive and reproductive age, so their forced displacement, which seeks to provide livelihoods to support their families, generates depopulation of the affected areas. This situation demands Social Work actions of environmental compensation, contributing to security and stability in the routes, initial reception processes, and the labor and social reinsertion of displaced persons.
- h. Climate trapped population. People who cannot leave the territories affected by climatic difficulties are forced to seek forms of survival in places that are becoming increasingly adverse regarding their living conditions. This situation primarily affects rural women and the elderly, who have fewer opportunities to successfully insert themselves into higher-skilled urban labor spaces or in physical jobs linked to agriculture or mining (Véliz-Rojas *et al.*, 2023). Actions associated with environmental mitigation and remediation are critical to this problem, and Social Work is a facilitator in the complexity of implementing these processes.
- i. Negative environmental impact of the population's purchasing decisions and consumption habits. The available information makes it possible to establish that the population's purchasing decisions affect the environment because the impact of the massive productive processes that sustain the consumption of goods and services is not always considered, and that involves an enormous expenditure of energy and inputs and a significant emission of residues or waste (Acuña-Moraga *et al.*, 2022). According to data provided by the Report on the State of the Environment (Ministerio del Medio Ambiente de Chile, 2020), Chile generates an average of 19.6 million tons of solid waste per year, 55% of which is of industrial origin and 42% of which is household waste. Of this total, only a meager 22% is revalued, while 78% is disposed of in landfills, dumps, or micro-dumps. Household waste corresponds mainly to organic waste, plastic containers, textiles and packaging, and large waste from the end of life of household appliances, furniture, and bedding. However, there is a growing interest on the part of the population to join the recycling chain using containers available in urban areas and in the regulatory use of reusable bags for shopping in stores, and supermarkets. Faced with this problem, Social Work contributes to environmental

prevention and minimization actions through socio-educational processes that allow the population to adopt purchasing habits and consumption decisions based on environmental principles that favor environmental protection and efficient waste management.

- j. Psychosocial effects of the environmental crisis on the population. The critical advances of global warming and environmental deterioration in the territories cause negative personal feelings linked to the permanent concern for the future, frustration due to the insensitivity of political and economic agents linked to decision-making, and demotivation to carry out daily actions for environmental protection, due to the perception of uselessness derived from their implementation. Likewise, personal or couple decisions about not having offspring are declared in a pessimistic projection about the future that is considered openly adverse for the sustainability of new generations (Rojas-Betancurt & Hernández-Quirama, 2021). Faced with this situation, social workers deploy a specialized professional repertoire that seeks to welcome psychosocial discomfort and contribute through the hierarchy of environmental actions to reverse the feelings of hopelessness in the face of a future that is presented under undeniable conditions of uncertainty.

4. Conclusions

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Currently, the planet's future holds an adverse promise of climate instability and environmental deterioration that directly affects the sustainability of life in the years to come. Environmental issues have become a cross-cutting concern in all sectors, demanding convergence in the efforts required to guarantee the protection of the various ecosystems, adjust lifestyles and production, and work to a responsible relationship with the availability and renewal of available natural resources. Because of this concern, environmental care has ceased to be a specialized topic of the natural sciences. It has become a demand that must be resolved from different areas of knowledge. Within this framework, the efforts of Chilean Social Work are generally in line with the international concept of Environmental Social Work and specifically with the perspective of Green Social Work and its declaration of caring for the planet as a professional duty, thus symbolizing the resignification of the professional environmental knowledge developed over the decades and which is called upon to contribute to the environmental justice demanded by the welfare of people and territories affected by pollution, climate change or deterioration, degradation and overexploitation of their ecosystems.

The environmental performance of Chilean Social Work must assume the challenge of reversing the professional gap concerning the specialized management of the current environmental management regulations and instruments, which have been shaped by public-private processes far from traditional tasks and, therefore, have subtracted the profession from

opportunities to carry out socio-environmental interventions recognized and validated by the social and labor environment.

However, the experiences in which Social Work professionals have been incorporated into environmental experiences from foundations, non-governmental organizations, or consulting services demonstrate the relevance of environmental hierarchy actions carried out by advanced management in socio-educational processes, the accompaniment of social organization in the territories and the potential of their specialized contribution from the social sciences for interdisciplinary Work.

Finally, it is stated that environmental Social Work in Chile represents the professional effort to assume the despair of the population in order to resignify them into opportunities for the future through the promotion of social behaviors of environmental responsibility that summon the necessary propositional, reflexive and critical counterpoint, capable of demanding environmental justice and challenging the hegemonic decision-making processes of the global economic, political and technological actors that persevere in their indolence in the face of a crisis that unequivocally threatens life on the planet.

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