

COLLECTIVE STRATEGIES IN UNREGULATED URBAN EXPANSION: CLASS AND
GENDER AS SHAPING FACTORS IN ENVIRONMENTAL ACTIVISM IN CONCON-
QUINTERO, CHILE

BY

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THESIS

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ABSTRACT

In the context of climate change and unregulated urban expansion driven by capitalist land administration practices in the Concón-Quintero region, in Chile, I aim to explore the relationships between the roles of women, levels of trust in institutions, and the strategies and mechanisms developed by two distinct communities to address water issues.

The goal is to analyze and compare these strategies through an intersectional lens based in Latin-American ecofeminist theory.

I use narrative review to examine regulatory frameworks that influence territorial administration, the role of women inside of these communities, and how socioeconomic positionality influences trust in institutions to find out how much this plays a role when elaborating collective strategies in regard to water scarcity.

The main findings indicate that in the Solar de Mantagua community (a higher-income community), women's participation is not as high as in the community of Santa Luisa, despite that the most active figures are women. Trust in institutions is high, and demands are directed towards them. However, these actions have not been efficient in solving the issue, and they still lack sufficient water for their daily activities. In the Santa Luisa community (a lower-income community), women play a key role in organizing collectively and although the trust in institutions is divergent, they have resorted to various mechanisms to obtain water for their daily activities. Currently, organized individuals have enough water for their daily activities, while those that did not are still struggling.

This confirms the initial thesis that higher socioeconomic levels correlate with greater trust in institutions and more reliance on them. Similarly, women in communities with higher socioeconomic levels are more removed from the sphere of care than women in lower socioeconomic levels, which could explain their lesser involvement in political action. It is important to note that the primary incentive is not the environment but the provision of water for their daily tasks.

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INTRODUCTION

"-How do you do it when there's no water?

-We all collect water in containers, and when someone is going to use the water, they let the neighbors know so that they don't use the water.

-Oh, I see. You shout then to your neighbors.

-(laughing) Oh no, we're not that uncivilized. We send a WhatsApp message."

(Conversation with one of the residents of Santa Luisa, 2023)

In the context of climate change, Chile is undergoing a process of desertification, which involves alterations in vegetation cover, soil quality, water availability, and the frequency of extreme weather events. Along with this, certain territorial management practices, such as unregulated urban expansion are exacerbating the problem. This is particularly evident in the coastal area of the V region, Chile, where I have selected two communities for comparison in their response efforts regarding this matter (Conaf, 2020).

These communities, as shown in figure 4, are in the stretch of Concón-Quintero, a region that I chose because it has been undergoing accelerated changes in recent years due to the growth of the metropolitan area of Valparaíso, following the Metropolitan Regulatory Plan of Valparaíso (PREMVAL, 2014). Its inhabitants have been dealing with water scarcity to carry out their daily

activities and have been organizing collectively in several ways, turning to different actors to cope with the situation.

The choice of these two communities has been careful and intentional due to their contrasts: the Solar de Mantagua community is in a high socio-economic stratum, with low interaction among neighbors and where women have a high level of involvement in the public sphere. Meanwhile, the Santa Luisa community is a low socio-economic area, with high interaction among neighbors and where the role of women is mainly confined to the domestic sphere. This comparison will allow to establish relationships and patterns between gender, class, and strategies in response to water scarcity.

As I have mentioned before, this area is regulated by the Metropolitan Regulatory Plan of Valparaíso (PREMVAL), which defines it as the metropolitan area of Valparaíso's natural path of growth despite the administrative issue of belonging to a municipality with low resources such as the Ilustre Municipalidad de Quintero that manages all regulations and permits, including building permits

Similarly, this growth is guided by the demand for this new urban land offering, which established by the PREMVAL, does not consider the interests and needs of pre-existing communities, such as the Santa Luisa community. Nor does it consider the needs or interests of real estate projects' future buyers developed within this framework, as developers sell expensive houses without even guaranteeing sufficient resources for a sustainable life, such as access to water. The Solar de Mantagua community illustrates this dynamic.

The goal of this research is to contribute to open the discussion about how the current land administration is not sustainable and is exacerbating water scarcity and it seeks to shed light on the intersectional dimensions that are worth considering when analyzing different groups of residents 'experience around water scarcity and to recognize that their worldview, and therefore their way of relating and arriving at solutions, is not uniform. This is because power dynamics associated with gender and socioeconomic class are factors that influence and shape the strategies they adopt.

In line with the above, this research addresses the following central research questions:

- What are collective strategies do residents of different income level employ to confront water? How effective are these strategies in supplying water to the community for their daily activities?
- What contributions do women make to solve issues related to water scarcity in their communities?
- What is the level of trust in institutions in each case?
- What is the relationship between the cultural role of caregiving and environmental activism?

This research is grounded in an ecofeminist perspective, to provide a comprehensive framework for understanding the dynamics surrounding water scarcity and community responses, especially within the context of women's participation in the development of collective strategies that acknowledge the interconnectedness between gender roles and environmental issues.

My research contributes by providing a deeper analysis of communities' political actions regarding water scarcity in Chile, considering factors that are often overlooked as part of the characteristics shaping collective organizing. Therefore, I use a feminist and intersectional approach to research and illustrate a range of factors at play in communities dealing with water scarcity, highlighting how power dynamics influence everyday life at various levels.

Simultaneously, I acknowledge that, due to limited resources, especially considering time constraints and the scarcity of data, particularly for the province I am focusing on Chile, the results of this study can only be considered as preliminary findings that cannot be easily generalized. Thus, this research is exploratory and will need replicating it in other context, even beyond Chile to support validate the research.

The thesis is structured to address the research questions and objectives outlined in the introduction, considering the scope that resources allow.

It is divided into several key sections. The Literature Review section is further subdivided into subtopics. Firstly, the subtopic of water provides a contextual background by examining the broader environmental and socio-economic factors influencing water scarcity in central Chile, taking as case study the Concón-Quintero region. The second topic explores the regulatory frameworks and land administration practices exacerbating water scarcity issues, shedding light on the systemic challenges faced by communities in managing water resources. The third topic

focuses on gender, and conducts a literature review on gender dynamics, highlighting how gender intersects with socio-economic factors to influence community responses to water scarcity. Finally, in the fourth topic, I conduct a similar review focusing on class dynamics to elucidate how socio-economic disparities shape access to and management of water resources.

These sections collectively lay the groundwork for the empirical investigation undertaken in the subsequent chapters, where I analyze the experiences and strategies of two distinct communities, Solar de Mantagua and Santa Luisa.

The literature review provides essential context and insights into the broader issues surrounding water scarcity and urban development in Chile. It draws on a diverse range of sources, including academic articles, books, and reports, to illuminate the complex interplay between neoliberalism, urban planning, and environmental justice.

Then, a brief methodology chapter describes the research methodology employed in the empirical investigation, including data collection methods, sampling procedures, and analytical approaches used to analyze the experiences and strategies of the Solar de Mantagua and Santa Luisa communities.

In the results chapter, I present the findings of the research, detailing the collective strategies, levels of institutional trust, and gender and class dynamics observed in the two communities. It synthesizes key findings and identifies patterns and differences between the communities.

In the discussion section, I critically analyze the results, exploring the implications of my findings. I examine the factors shaping collective action, institutional trust, and the effectiveness of strategies in addressing water scarcity. In conclusion, I offer a summary of the study's key findings, highlighting the intersections of gender, class, and institutional trust in shaping community responses to water scarcity. I reflect on the broader implications of the research and identify avenues for future research and policy interventions.

Finally, in the recommendations chapter I provide a series of suggestions targeting policymakers, stakeholders, and community members to enhance water management practices and promote

institutional awareness of gendered experiences and level of trust in institutions to address water scarcity effectively.



Figure 1: Location of Santa Luisa and Solar de Mantagua

LITERATURE REVIEW

To contextualize my research questions about the relationship between gender and class when it comes to formulating and proposing collective strategies, I will delve into the framework of the topics that are overarching this system.

First, for providing context, I will introduce a literature review about water in central Chile, where I will talk about the legal aspect of water administration in Chile according to MODATIMA, 2023, and water scarcity associated with climate change using reports from CONAF, 2017. Then, I will review the framework for land administration, according to the PREMVAL, which directly impacts the former, and some additional literature about the relationship between neoliberalism and urban expansion, where I will use theory from Vergara-Perucich, F., & Boano, C. (2020).

I will then continue with my review of literature concerning the other two components of this issue: gender and class, since these are the perspectives that I will employ for the analysis of the responses to water scarcity to illustrate, on one hand, that gender and associated gender roles impact the user's relationship with the environment and therefore, how communities organize themselves to develop strategies to cope with water scarcity in this case, as theorized by Federici, S. 2019. And on the other hand, how socioeconomic positionality impacts trust in institutions and therefore how communities rely on them or not in them when proposing solutions, according to Riffo, F., Pérez, D., Salazar, C., & Acuña, A. (2019).

I will attempt to keep the literature review concise given the scope of this research, and also, considering that this study takes place on the global south, the volume of literature is smaller than what I would encounter for global north territories. Therefore, I will closely adhere to the central themes of my research topic.

WATER

"The urn of the atmosphere, in which things seem stored to last, being more naked than anywhere, brings the mountain closer and plays some sleight-of-hand games with distance; the marvel is there, a day's journey away, and one believes to touch its rough back and the breaks of its crested hull."

Gabriela Mistral.

When I was a child, we would often travel by car from my home in the central region of Chile to visit my grandmother in Iquique, one of the cities closer to the border with Peru in the north. My sole entertainment was looking at mountains and hills—no matter where you are in Chile, you can always see a mountain. It was a journey from south to north, green to brown, and I could almost tell at what part of the trip we were just by assessing the color of those mountains.

The continental part of Chile extends along a narrow and elongated strip on the western part of South America, with more than 6,000 kilometers of Pacific coastline, between approximately latitudes 17°30' S and 56°30' S. The northernmost part of Chile is close to the Tropic of Capricorn, while the southernmost part reaches latitudes closer to the Antarctic Circle. This results in significant climatic and geographical variation along its length, from the world's driest desert, the Atacama Desert in the north, to the glaciers and forests in the south.

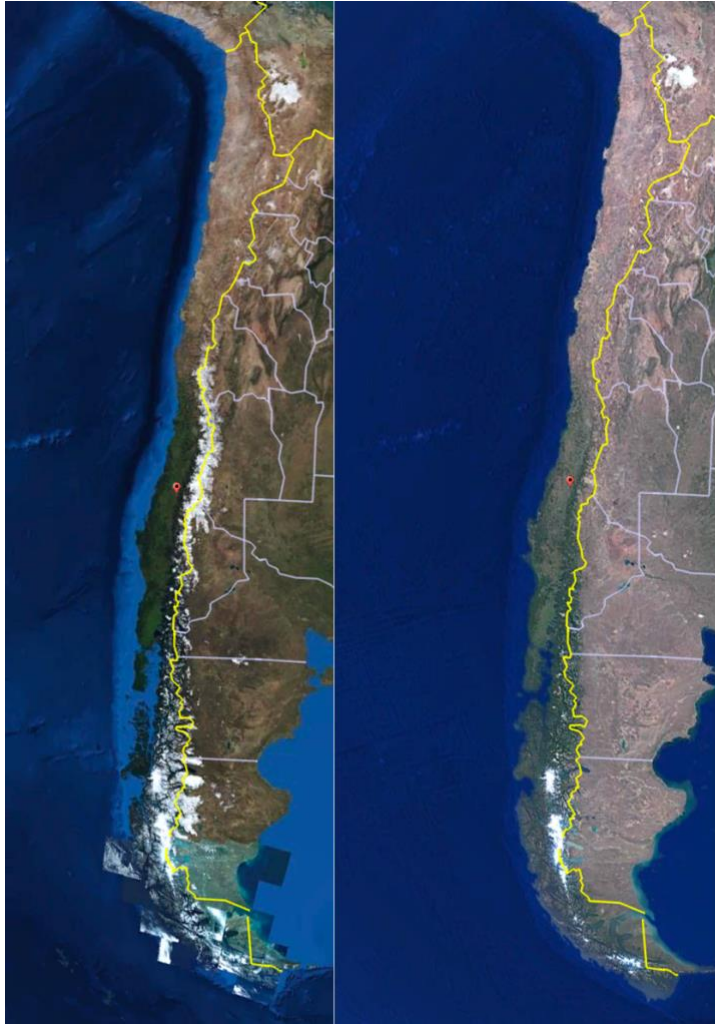


Figure 2: Comparison, Chile in 2010 (left) and Chile in 2020 (right) Google Earth.

Due to the ongoing global climate change process, the arid landscapes of the north are encroaching southward in the phenomenon known as desertification. Its effects can be assessed through indicators such as changes in vegetation cover, soil quality, water availability, and the frequency of extreme weather events. In Chile, 23% of the national territory is under threat from land degradation, while 53% is reported to be experiencing drought conditions (National Land Degradation Report, as cited in CONAF, 2020, as

depicted in the following image from that same report).

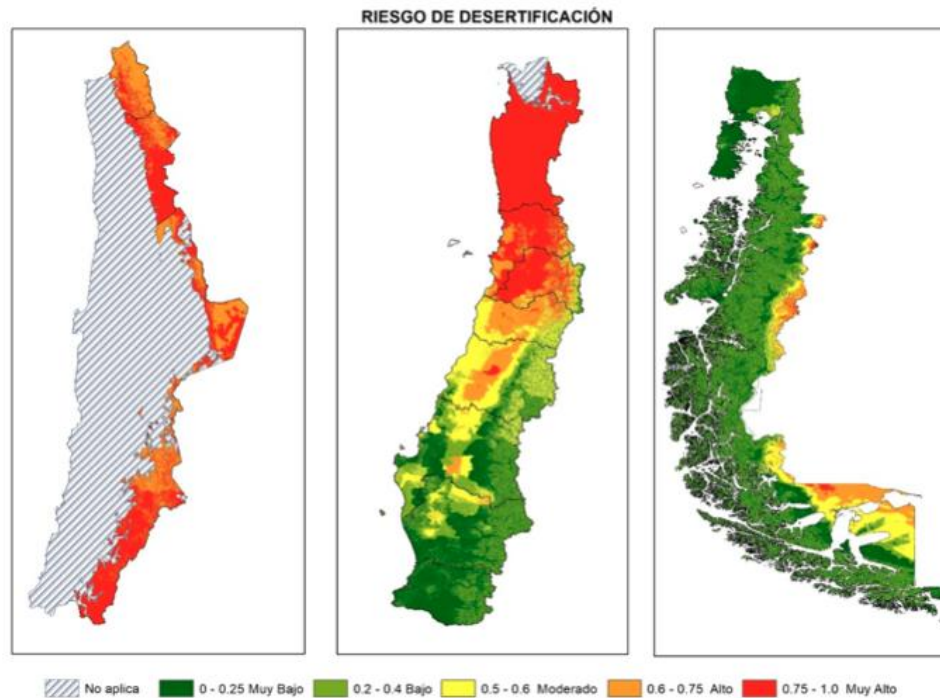


Figure 3: Desertification risk (Conaf,2020)

This phenomenon particularly affects the region of Valparaíso, where this study focuses, especially in the areas that are not mountainous. The region has 16 municipalities categorized as highly vulnerable, covering 3137553.863 Acres (Conaf, 2020).

Water's Legal framework in Chile

Water administration in Chile is unique. The Chilean water management model is based on privatization, backed by the 1980 Constitution, which recognizes property rights over water usage rights.

The 1981 Water Code reinforces this privatization by allowing the free transferability of these rights in the market, without time limitations. This fragments land ownership from water ownership and creates a registration system similar to real estate.

Despite that water is considered a national public resource in the Chilean legislation, water usage rights are traded and transferred as private assets, posing challenges in terms of compatibility with their status as a public good (Macpherson,2023).

Furthermore, the state plays a hands-off and subsidiary role in the administration and regulation of the water rights contributing to the problem of water access and scarcity. As a consequence, 80% of the country's basins over granted due to water overexploitation by private actors, and water conflicts are usually characterized by criminalization, unjust convictions, persecution, censorship, aggression and, forced environmental migration. Yet, resistance movements such as MODATIMA, the Women's Movement in Sacrifice Zones in Resistance, or the No Alto Maipo movement continue to organize and struggle for the right to water (MODATIMA, 2020). In his book "The Siren Song" on Chilean water law, Carl J. Bauer (2004) offers a critique of the Chilean model, highlighting its areas of weakness. He identifies several problems including inadequate environmental protection, river basin management, public interest representation, social equity, coordination of multiple uses, and resolution of water conflicts. Bauer suggests that the legal and institutional framework has become inadequate in addressing these issues, describing it as characterized by strong private economic rights, limited regulatory authority, and a judiciary with narrow views of the law.



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Figure 4: Activist manifestation in Santiago

Aslam et al (2019). discusses the concept of fugitive democracy, as a response to the erosion of democratic norms or institutions, (when fundamental principles and practices of democracy are gradually being weakened or undermined) to argue that democracy might not be a fixed form of government but rather a fleeting experience and emphasizes collective action. He also invites us to rethink the democratic subject, reconsidering who or what is considered the central actor or participant in democracy. Connecting Aslam with Bauer, it is worth asking who or what does the constitution protect? Who is excluded from accessing water according to the legislation? Whose interests are privileged in the Chilean regulations?

His theoretical framework provides new avenues for research, it engages post-colonial perspectives, acknowledging people's heterogeneity, and promoting experimental approaches to democratic theory and practice. This perspective challenges the assumption that elements of democracy and institutions function as intended and calls for institutions to strengthen popular power rather than weaken it, which they often fail to do. This provides an excellent frame to discuss the functioning of institutions in Chile and how they fail, especially to disadvantaged communities.

LAND DEVELOPMENT & URBANIZATION

The localities in the territory under study in this thesis were formed on estate lands, which were later transferred to the workers after the Agrarian Reform in 1962. They were given parcels of land measuring 5,000 square meters along with a house, which over time were inherited by their relatives. In some cases, these parcels were sold to entrepreneurs who built tourist centers or condominiums. According to Mrs. Erica Guajardo, president of the Rural Community Union of Chile, currently, there are few parcels remaining, but the families have grown, and the population has increased, leading to the emergence of various rural communities.

Those areas signaled as vulnerable by the desertification metrics, are mostly in the process of transformation from rural to urban. The human pressure on the territory and consumption of natural resources are important factors that can accelerate or decelerate desertification and impact water scarcity.

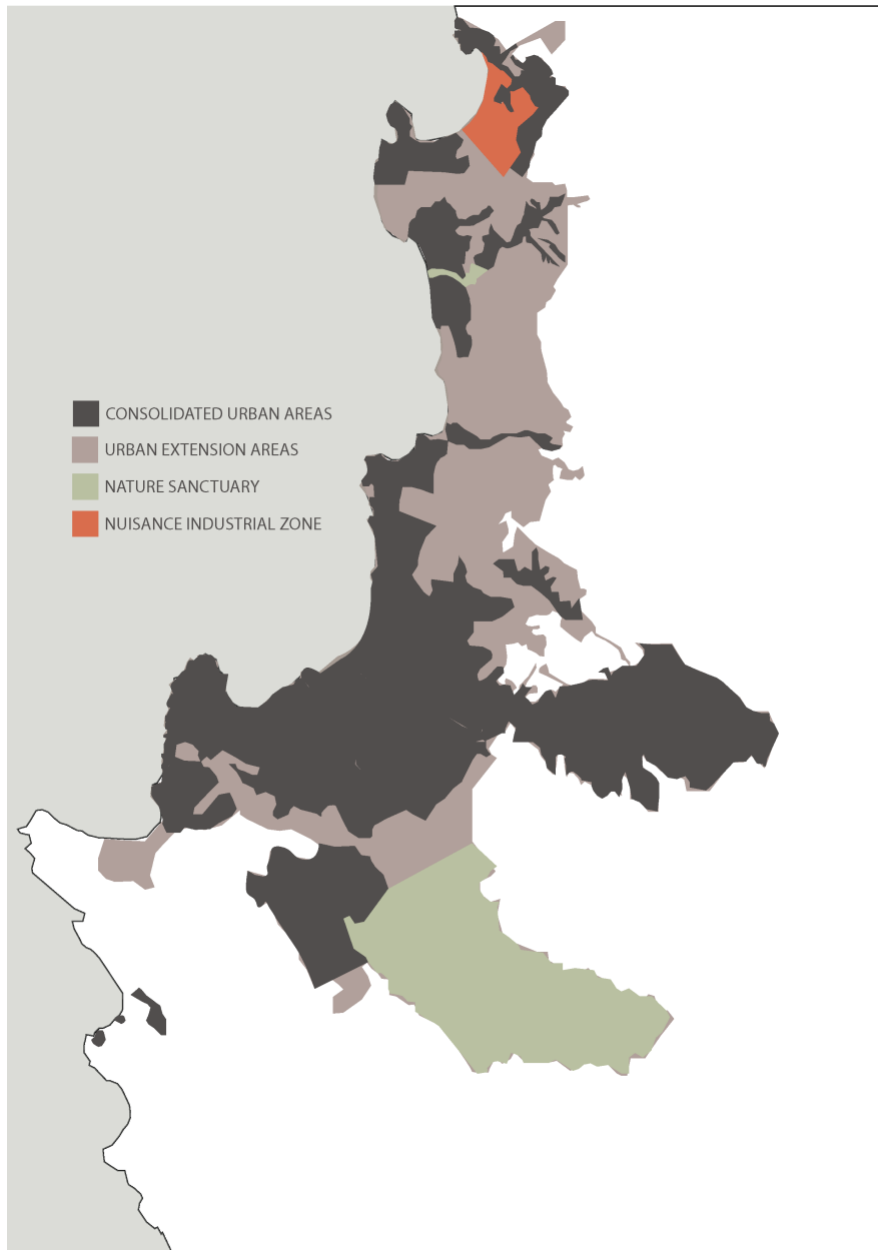


Figure 5: Illustrative map of the Metropolitan Regulatory Plan of Valparaíso (PREMVAL)

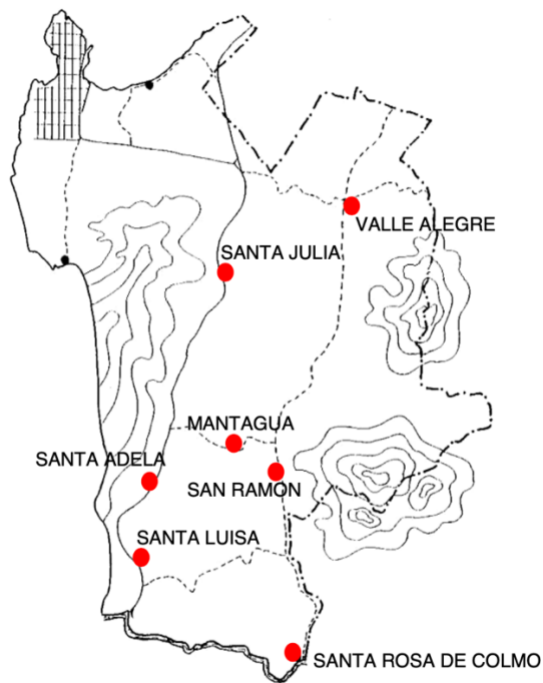


Figure 6: Rural communities in Quintero.

Vergara-Perucich, (2020) , argues how neoliberalism has reshaped urban design to prioritize capital accumulation over ethical considerations, leading to a conflict between the responsibilities of urban practitioners and the profit-driven goals of neoliberal urbanism. He also explains how urban development changed after 1979 when neoliberal policies were embraced. Instead of focusing on the common good, the government started favoring property owners and prioritizing making money over making cities better for everyone. The government promoted homeownership among low-income families, adhering to the principle that societal benefits accrue when the wealth of the affluent increases. This policy contributed to urban sprawl and a perception of land as an abundant resource, thereby facilitating its free trade for profit.

The neoliberal restructuring meant a transformation in what it means to be a citizen. Whereas in the welfare state citizenship means the right to access basic services and resources like housing, education, health and water among other, under neoliberalism citizenship is gained through consumption and access to the market to fulfill the needs. The Chilean government facilitated this dynamic through the implementation of

regulatory frameworks that predominantly favored large corporations and investors. Consequently, this approach has culminated in urban centers predominantly oriented towards financial gains. In these cities, public spaces frequently receive minimal consideration and urban development is predominantly influenced by private interests rather than collective welfare.

The stretch between Concon and Quintero, remained rural until the PREMVAL (Metropolitan Regulatory Plan of Valparaíso, 2014) designated it as urban land to project the growth of the metropolitan area of Valparaíso, converting the land use from rural to urban from day to night. This resulted in a surplus of urban land for developers, which quickly Initiated second homes targeted to high income populations from Valparaiso Metropolitan Area or Santiago. Predominantly intended for use as second residences for people from the Valparaiso Metropolitan Area, or Santiago.

Consequently, nearby established rural communities, as is the case of Santa Luisa, began to experience acute water scarcity due to the overloading of the water system in the area with the new incoming households, who have larger houses, higher water consumption coming from the irrigation of lawns and pools, coupled with the process of desertification accelerated by climate change.

GENDER

As a result, there are two types of communities in the area, the lower income groups who were already established in the land and that are characterized for having a rural background and, the newcomers, who have a higher income and an urban mindset. This difference is also expressed in the role of women, the first are more associated with the domestic sphere, since their cultural assigned role as caregivers are more rigid because of economic pressures and they support their communities taking care of the house, the children, the elderly and the sick.

Silvia Federici, in her book “Re-enchanting the World: Feminism and the Politics of the Commons” talks about how activism is currently the primary force for change in Latin America. Women play a central role in social struggles because they are disproportionately affected by issues, and directly experience the consequences of public policies in their daily lives and the bodies of their loved ones.

She highlights a notable shift towards political radicalization within these movements: Women increasingly recognize that their activism should go beyond protecting their communities from transnational companies and advocating for issues like food sovereignty and preserving seeds through seed banks, instead, they are embracing a broader mission of transforming the prevailing economic development model and create a system that respects both human beings and the environment.

For my study, in addition to the gendered experience of environmental resistance, I intersect class, and how it plays a role in how women navigate and go through this experience. Romero Leal, K. L., et al. (2022) highlights how gender and class dynamics are intertwined and play a significant role in ecological issues, particularly within the framework of ecofeminist theology. They suggest that the domination of nature and the exploitation of both the environment and marginalized groups, are closely connected and that the ecofeminist perspective not only places a new category (nature) at the center of feminist theological debates but also proposes a new epistemological approach rooted in ecofeminist philosophy.

In this context, gender refers to the roles, expectations, and power dynamics associated with being male, female, or non-binary, while class refers to socio-economic status and disparities in wealth and resources. It is crucial for my study because it implies that addressing ecological crises and working towards environmental justice requires recognizing and addressing both gender and class inequalities simultaneously, as they are deeply intertwined.

However, in my study I am cautious of essentializing complex identities by categorizing and simplifying them into fixed attributes. Following an intersectional analysis and feminist discourse, essentialization is often criticized for oversimplifying diverse groups or individuals, neglecting their internal variations and reinforcing stereotypes.

For instance, in the “Climate Change through the Lens of Intersectionality” by Anna Kaijser Annica Kronsell (2014), there is a mention of ecofeminism being regarded as essentialist by the larger feminist community. This means that some feminists critique ecofeminism for simplifying the relationship between gender and the environment, potentially overlooking the diversity of women's experiences and reinforcing a fixed notion of a woman-nature connection, and the authors argue that fluidity of identities is crucial for a more inclusive and accurate analysis of power dynamics.

CLASS

According to Rizzo et al (2019) Socioeconomic conditions play a significant role as a variable in determining trust in institutions. In his article, provides a comprehensive analysis of various factors influencing institutional trust, such as democracy, performance of institutions, citizen participation, corruption, and economic cycles. The author suggests that individuals from different socioeconomic backgrounds experience and perceive these elements differently, for instance: those in lower socioeconomic classes may have limited access to quality services, face barriers to meaningful political participation, and be more vulnerable to corruption within institutions.

Zmerli & Castillo (2015), examine the impact of income inequality on political trust in Latin American countries, going beyond the traditional focus on OECD countries with lower levels of inequality. They show how income inequality impacts individual perceptions of political trust. Whereas in low-income the perceptions on inequality and distributive justice negatively affect their political trust, high-inequality contexts, the negative relationship between fairness perceptions and political trust is weaker.

Finally, Matthews & Hastings (2013), discuss how the activism of middle-class users can disproportionately benefit them, meaning it can result in a resource allocation that favors them more compared to users from other socioeconomic strata. This argument is useful to analyze and compare the two communities I am focusing on this research in terms of resource allocation and formulation of collective strategies based on varying levels of trust in institutions and gender roles.

METHODOLOGY

Data Collection Methods.

For this study, I adopted a mixed methods approach to gather comprehensive data on the daily experiences around water scarcity, the collective strategies that have arisen from these, and how gender roles and trust in institutions have played a role in the shaping of them. For this I utilized the following methods:

- **Surveys:** I designed a structured questionnaire to collect quantitative data about socioeconomic characterization and gender roles, additionally, I considered open questions for the respondents to share their experience with water scarcity, with community engagement in political activism, and their perceptions of Institutions. The survey was distributed electronically via identified key informants of each community, who helped me post the surveys in their own diffusion channels. This resulted in 12 people responding for the community in Solar De Mantagua, and 16 in Santa Luisa.
- **Interviews:** I conducted 6 semi-structured interviews with residents from Santa Luisa and 6 semi structured interviews with residents from Mantagua. Additionally, I conducted an interviewed with the president of the neighborhood association of Mantagua and two interviews with key informants in Santa Luisa (the Coordinadora of agua potable and with the Neighborhood Association President of Santa Luisa) to delve deeper into their motivations, experiences, and perceptions regarding political activism and public services. These interviews were conducted in both formal and informal settings.

Data Analysis Methods.

I conducted data analysis using qualitative methods:

- **Qualitative Analysis:** I employed thematic analysis to examine interviews and surveys. I identified themes and patterns through systematic coding of interview transcripts, allowing for a nuanced exploration of participants' narratives and perspectives.

- **Quantitative Analysis:** I employed graphics extracted from the surveys to identify the predominancy in each response.

Justification of Approaches and Techniques:

- **Quantitative Approach:** To answer my proposed questions, I needed to select two contrasting communities in both aspects socioeconomically and the dimension of gender roles. To isolate these factors and establish this contrast I needed to develop metrics for these aspects (considering that in Chile the availability and systematization of data is limited, specially outside of Santiago) so, the quantitative data that I was able to generate from the surveys when answers were specially formatted for this endeavor served this purpose.
- **Qualitative Approach:** Because of the nature of the study, the resources for it, and cultural aspects of the communities under study it was convenient the utilization of qualitative methods of research, but specially, because this tool allowed me to provide flexibility to the respondents for them to better communicate their experiences and perceptions.
- **Survey Method:** I choose Surveys as a method because they enable the collection of data from a diverse sample within a short timeframe, facilitating broad generalizations about the characterization of the communities. Besides, to generate metrics to diagnose the socioeconomic position of each community, as well as to characterize their attitude towards traditional gender roles, this tool was highly effective since I was able to format the answers and have more control over their quantitative expression.
- **Interview Method:** Interviews were essential for capturing in-depth insights and nuanced perspectives that may not be adequately captured through surveys alone. The semi-structured nature of the interviews allowed for flexibility while ensuring key themes and topics were explored.
- **Data Analysis Techniques:** The chosen data analysis techniques were selected based on their compatibility with the research questions and the nature of the data collected. Qualitative analysis allowed for a deeper exploration of individual experiences and motivations.

RESULTS

From the survey, I was able to outline certain characteristics of both communities and compare them based on the criteria I had previously defined as relevant: socioeconomic position and gender roles.

First, to establish a socioeconomic characterization, I gathered data regarding household composition and total income, and educational level and occupation. Then, to establish certain foundations regarding gender roles, I designed questions to obtain information about gendered participation in household work and caregiving roles that could report numerical results easy to read, as well as time spent in the house, which could illustrate the tension between the domestic-public sphere.

As I mentioned in the methodology section, I estimated that the interview was a better mechanism for obtaining information regarding community and political participation, understanding the impacts of water scarcity in each case, and knowing how external forms of assistance relate to the community when formulating collective strategies, because it provides more freedom to the respondents.

In the case of Solar de Mantagua, the survey was answered by 12 people, and in the case of Santa Luisa by 16 people.

I interviewed residents of both communities in the streets, and some key informants such as the president of the neighbor association in Solar de Mantagua, The president of the neighbor association in Santa Luisa, and the coordinator of rural drinking water Santa Adela.

Table 1: Results

Aspect	Santa Luisa	Solar de Mantagua
Number of individuals in household	Predominantly "5 or more"	Predominantly "4"
Individuals under 18	Varied, with some households having 4 or more	Predominantly "2"
Individuals over 65	Consistent presence in majority of households	Mixed responses, some with none
Educational level of household heads	Predominantly completed high school	Majority with postgraduate degrees
Monthly household income (Chilean pesos)	Predominantly 500,000 to 1,000,000	Mostly 2,000,001 or more
Individuals contributing to household income	Predominantly two	Varied, some single earners, others four or more
Caregiving for children/elderly	Primarily women	Mixed responses, some primarily women, others shared
Household chores	Primarily women	Varied, some primarily women, others shared
Time spent at home daily by women	Predominantly 12 to 16 hours, some over 16	Predominantly more than 16 hours
Time spent at home daily by men	Predominantly 4 to 8 hours, some 8 to 12	Varied, mostly 8 to 12 hours

Santa Luisa:

Survey

Number of individuals residing in the household: The results indicate a varied composition in terms of the total number of individuals residing in the households surveyed, but the predominant responses regarding the total number of individuals in the households were "5 or more."

Individuals under the age of 18: Among households with multiple occupants, there are varying numbers of individuals under the age of 18. While predominantly households have a smaller number, with only one or two minors present, others report a higher count, with four or more individuals in this age group. This distribution highlights the presence of families with children or adolescents within the community.

People over the age of 65 in household: there is a consistent pattern of having at least one person over the age of 65 residing in the majority of households surveyed. This finding underscores the presence of elderly members within the community and households that are likely providing care for elderly members.

Educational level: Predominance of households where the head has completed high school. However, it is also noteworthy that a portion of households have heads with higher education or technical qualifications, suggesting a diverse educational background among household leaders.

Income: The reported monthly household income in Chilean pesos varies among respondents. Predominantly, households earn between 500,000 to 1,000,000 pesos, which equates to approximately \$700 to \$1,400 USD. Additionally, some households fall within the bracket of 1,000,001 to 1,500,000 pesos (approximately \$1,400 to \$2,100 USD), while others have incomes ranging from 1,500,001 to 2,000,000 pesos (approximately \$2,100 to \$2,800 USD) per month.

Number of people contributing to household income: the results indicate that there is a notable trend of multiple individuals contributing to the household income within the community. While the predominant number of contributing individuals to household income is two, with several

households reporting this scenario, there are also instances where four or more individuals contribute.

Caring for children or elderly: The data shows that the responsibility for caring for children or the elderly in the household is primarily shouldered by women in the majority of cases. This finding underscores the gendered division of caregiving responsibilities within the community, highlighting the disproportionate burden placed on women.

Household chores: The results indicate that household chores are primarily carried out by women in most cases. This reflects a traditional gender division of labor within the household, where women tend to take on most domestic responsibilities.

Time spent by women at home: The predominant range of time adult women spend at home daily is between 12 to 16 hours, followed closely by more than 16 hours. This suggests that women are often more confined to the domestic sphere compared to other household members, potentially limiting their opportunities for participation in activities outside the home.

Time spent by men at home: The data indicates that adult men in the household typically spend between 4 to 8 hours per day at home, with some spending slightly longer hours ranging from 8 to 12. This suggests that while men also contribute to domestic activities, they may have more opportunities for engagement outside the home compared to women.

Interviews to residents:

How is your community impacted by water scarcity? Please describe the challenges:

The community's water supply seems to be generally stable ever since the community organized to apply for the government's rural water program, (The Chilean "APR" (Agua Potable Rural) refers to rural drinking water systems established to provide potable water to rural communities in Chile. These systems are typically managed locally by community organizations or cooperatives and are often supported by government subsidies or funding) although not all residents of the community take advantage of this benefit but continue with Esval as their water provider. (ESVAL, Empresa de Servicios Sanitarios de Valparaíso S.A., is a Chilean private

company that provides water and sanitation services primarily in the Valparaíso Region.) This APR operates by pumping water from the stream, which is then directed to a groundwater well treated with chlorine by the Hydraulic Directorate, ensuring periodic monitoring for quality. However, challenges arise during peak consumption seasons, leading to recurrent supply cuts. This challenge is expected to increase over time with more people moving into the area.

Limited resources and machinery hinder swift repairs during instances of pump failure or pipeline damage, which highlights the vulnerability of the community's water infrastructure and the need for better contingency plans and access to resources to address maintenance issues, as well as solutions that are sustainable in the long run.

The responses indicate that the community faces challenges with water supply, particularly during power outages, as the APR water system relies on electricity. This results in interruptions in water supply and additional expenses for purchasing water from trucks. Some areas lack access to formal water services, relying solely on costly water truck deliveries.

How are you and your family personally impacted in your daily life due to the scarcity of water?

Regarding this question, the interviewed neighbors state that water scarcity directly impacts their family's daily life, especially during emergencies when the water supply is disrupted. This presents significant challenges, particularly regarding sanitation and hygiene, as they must adjust to limited water availability. They resort to collecting and recycling water for essential needs, prioritizing its usage meticulously. Additionally, they have implemented measures such as using wastewater for gardening and maintaining an emergency tank with a motor to mitigate the impact of water shortages.

While some claim not to be affected directly, others mention restrictions on their water consumption and the need for conservation measures. High costs associated with purchasing water from trucks are a common concern, with some households spending significant amounts on regular deliveries. Additionally, power outages exacerbate the situation by interrupting water supply.

There is also informal coordination when they use water, alerting their neighbors. However, despite these efforts, responsibly managing water resources remains a constant concern in their daily routines.

Politic participation: While a significant portion of respondents reported no involvement in any form of political organization within the community, some individuals indicated active participation. Notably, one respondent mentioned holding the position of president within the neighborhood association and territorial corporation.

Key informants: Interview with Coordinadora de Agua Potable Rural

The rural water committee was established in 2004 due to the need for potable water supply for the community when it relied solely on well water, which became contaminated with sewage as the population increased. Women in the community have played a significant role, as it was primarily a neighborhood association composed of women, led by a woman, who carried out the management. The coordinator attributes this participation to the fact that women, who spend most of their time at home raising children, dedicate themselves to ensuring the healthiest possible life for their children and consequently want the best for the community.

In Chile, communities wishing to participate in the government's Rural Potable Water Program must follow several steps. First, they need to organize as a community and form a neighborhood association or another representative structure. Then, they must identify and assess the technical and economic feasibility of the rural potable water project in their area, which may involve soil studies, water resource availability, and cost analysis. Once the project's viability has been determined, the community must submit a formal request to the Ministry of Public Works or the Ministerial Secretariat of Housing and Urbanism in their region. If the request is approved and the project is included in the program, funds are allocated for its implementation, and construction and implementation of the rural potable water system in the community proceed. Throughout the process, active participation and community commitment are essential for the project's success.

Due to this management, the community effectively has a Rural Potable Water Program, and those who have used it have no water supply problems. Some neighbors have chosen not to use

this resource, for which an initial fee must be paid, and continue to be customers of ESVAL, a private water company that provides poor service to the area. Once a week, the coordinator comes to collect payment for those without internet access.

It is also mentioned during the interview that the original families are the inhabitants of the area, and new residents, especially in the last 5 years, have arrived in the sector. The original inhabitants all know each other and have a strong sense of community.

Solar de Mantagua:

Survey

Number of individuals residing in the household: The data on the total number of individuals in households reveals a mix of household sizes within the community. The predominant household size across the surveyed responses was four individuals, with several households reporting this configuration, while some households consist of two individuals, indicating smaller family units or possibly single-person households. This diversity in household sizes suggests a range of family structures and living arrangements within the community.

Individuals under the age of 18: The data regarding the number of individuals under the age of 18 living in households indicates that there is variability in the presence of minors within the community. While some households reported no individuals under 18 years old, the predominant number was two. This variation suggests differences in family structures and child-rearing practices among residents.

Individuals over the age of 65: The data regarding the number of individuals over the age of 65 residing in households reveals a mix of responses, with some households reporting the presence of one or two elderly individuals, while others reported none. This variation suggests differing household compositions and caregiving dynamics within the community.

Educational attainment of household heads: The majority of respondents indicated possessing postgraduate degrees. This suggests a high level of educational achievement among household leaders within the surveyed community. Additionally, it underscores the potential influence of

higher education in shaping decision-making processes and resource allocation within households.

Monthly total household income in Chilean pesos: The reported total monthly household income in Chilean pesos indicates a predominance of households earning 2,000,001 pesos or more per month. In the context of the minimum wage in Chile, which as of January 2024 stands at 337,000 Chilean pesos per month, the reported household incomes of 2,000,001 or more suggest a significantly higher earning bracket for these households. This suggests a relatively affluent community in terms of income, which can influence various aspects of daily life, including access to goods and services, housing quality, and educational opportunities.

Individuals contributing to household income: The data illustrates that the number of varies among respondents. While some households rely on a single income earner, most benefit from the contributions of two earners.

Caring for children or elderly: The responses suggest a mixed pattern in the division of caregiving responsibilities within the households surveyed. While some households reported that there are no individuals requiring special care, the predominant response regarding who primarily takes care of children or the elderly in the household was "Primarily women". Additionally, some households reported that caregiving responsibilities are shared equally among household members.

Household chores: The data indicates a varied distribution of domestic chores within the surveyed households. While some households reported that household tasks are primarily carried out by women, the predominant response regarding who performs household chores in the household was "Shared equally".

Time spent home daily by women: The data reveals that the majority of adult women in the households surveyed spend more than 16 hours per day at home. This indicates a significant amount of time dedicated to domestic activities, caregiving, or other responsibilities within the household. Additionally, some women reported spending between 12 to 16 hours at home, suggesting a considerable portion of their day is spent within the household environment.

Time spent home daily by men: The data indicates that adult men in the households surveyed spend varying amounts of time at home per day. While some men spend between 4 to 8 hours at home, and some spend between 12 to 16 hours, the predominant response regarding the number of hours adult men spend at home daily was "8 12 horas" or "8 to 12 hours. This variability suggests different levels of involvement in household activities, work, or other commitments that require them to be at home for different durations. Overall, these findings reflect the diverse patterns of daily routines and responsibilities among adult men in the surveyed households.

Interviews to residents:

Water scarcity impact on the community:

The impact of water scarcity on the community is significant, presenting various challenges, according to reported. Many residents face serious issues regarding water quality due to storage problems caused by a local private company. Additionally, frequent water cuts that are communicated via WhatsApp few hours prior or restrictions further exacerbate the situation. Some attribute these challenges to poor investment planning and inadequate maintenance of the water system, leading to recurrent supply disruptions. Furthermore, the high cost and deficient service provided by the water supply company add to the community's water-related problems. Despite efforts to address these issues, such as resorting to alternative water sources, including wells, the community still experiences recurrent cuts and unexplained price hikes. This situation forces residents to remain vigilant and seek alternative water sources, especially during the dry season and holiday weekends. While some individuals have not encountered any problems, the overall lack of proper sanitation and green areas compounds the challenges faced by our community.

Personal impacts of water scarcity: The responses provided illustrate the various ways in which families are impacted by water scarcity in their daily lives, From concerns about health and reliance on bottled water for drinking to financial considerations regarding the cost of water, the effects of scarcity are evident. While some have implemented backup systems to mitigate the direct impact of scarcity, others have had to invest in supplementary systems to ensure water supply. Additionally, community-wide measures such as restrictions on watering green areas and

limitations on water usage per family highlight the collective efforts to manage water resources efficiently. Moreover, the disparity between private and public water sources underscores broader issues related to access, quality, and affordability. “We are aware that water scarcity is a national issue, but not having access to potable water from a public provider like ESVAL has been problematic for us. The water we receive from a private source is of poor quality and more expensive, adding to our concerns.”

Political participation within the community: Some respondents actively engage in political organizations within the community, such as the Neighborhood Council or Neighborhood Association, where they advocate for addressing various issues with authorities, albeit with limited success thus far. Others, however, do not participate in any form of political organization. One respondent mentions occasional legal assistance provided to the community by their spouse, who is a lawyer. Additionally, there are individuals who hold positions as substitute members or participate in specific committees within the Neighborhood Council. Overall, the level of involvement in political organizations varies among respondents, with some actively participating in community advocacy efforts while others prefer not to engage in such activities.

"La mujer por tener que criar a los hijos, pasa mayor parte en la casa, y dedica tiempo a que la vida de sus hijos sea lo más sana, y eso conlleva a querer lo mejor para la comunidad"

"The woman, due to having to raise the children, spends most of her time at home, and dedicates time to ensuring that her children's lives are as healthy as possible, which leads to wanting the best for the community."

Coordinadora de Comité Agua Rural Potable.

Coordinator for Rural Potable Water Committee.

Key informant: Interview with the President of the Neighborhood Association

The case of Solar de Mantagua is more extreme in the sense that the construction company that developed the condominium obtained water rights under another legal name (ASA), and today charges residents for the service of supplying them with water. They have wells that extract water from underground aquifers; however, the water supply from the number of wells that the company owns is not sufficient for the community, and they have also had problems with the quality and cleanliness of the water. Currently, the same construction company is expanding its projects in adjacent lands.

As a community, they have formed a neighborhood board, and the main actions they have taken to address the water problems they face have been to communicate with the authorities of Quintero. However, since they are not the provider, their possible intervention is limited. They have been advised to file a legal claim through the courts regarding the cleanliness of the water, as whether the supply is sufficient or not is not regulated by law.

When asked if they saw the possibility of mobilizing outside the institutional framework to exert pressure, for example, by making this situation public through the media or through signs, measures that would have an effect on the construction company since the problems of water faced by the community are omitted from its promotion, the response I received was that the reality is that such measures would have little support from the community, as they have a direct effect on the commercial value of the houses.

DISCUSSION

Implications of the Results on Trust in Institutions:

According to the results, the socioeconomic difference between both communities is evident. Contrasting the results regarding the way they have been collectively organizing to deal with water scarcity, we can see that in the case of Solar de Mantagua, the more economically affluent community, has resorted to the governance of the Quintero area and “Servicio de obras Hidráulicas”¹ and has also attempted to address the problem through legal means. However, both institutions have limited scope regarding the issue, not due to willingness but due to their authority: Quintero as a municipality cannot influence the issue as it involves a private entity, and from a judicial standpoint, it is difficult to address since the Chilean constitution does not establish occasional water scarcity as an attributable situation. This highlights that there is esteem or trust in institutions as being capable of solving problems. Nevertheless, the first course of action taken was to file complaints with the National Consumer Service (SERNAC)² with no response.

In the case of Santa Luisa, the community with fewer economic resources, although the government has been initially approached to provide a solution through the APR rural drinking

¹ The Hydraulic Works Service (SOH) is a governmental entity in Chile responsible for planning, designing, constructing, and maintaining works related to water and the country's water resources. This service is under the MOP (Ministerio de Obras Públicas) and aims to manage water resources efficiently and sustainably, ensuring the supply of water for various purposes such as human consumption, agricultural irrigation, hydroelectric power generation, among others.

² The National Consumer Service (SERNAC) in Chile is a governmental institution responsible for protecting consumer rights. Its main function is to ensure the defense and promotion of citizens' rights as consumers, guaranteeing that commercial transactions take place fairly and transparently. SERNAC provides information, advice, and mediation in conflicts between consumers and providers of goods and services, and it can also initiate legal actions to defend consumer rights when necessary.

water system, many neighbors have not trusted this solution and have foregone this option, preferring to pay for water trucks instead.

In Chile, the neoliberal system has had a profound impact on the psychology of its inhabitants, leading them to perceive themselves not as rights holders, but as consumers. This mentality has become so ingrained in society that solutions to everyday problems are often sought through this lens. For example, when faced with issues such as water scarcity, Chilean citizens tend to resort to consumer-oriented strategies, such as filing complaints with the National Consumer Service or paying for alternative services, such as water supply through water trucks. This consumerist mentality reflects how the economic model has shaped the perceptions and behaviors of the population, prioritizing the search for solutions through the market and relegating the idea of citizen rights and state responsibility to a secondary position.

Implications of the results in the role of care:

The results from Santa Luisa and Solar de Mantagua, reveal that even though both places have a variety of family sizes, in Santa Luisa, families tend to have more people living together, in a configuration that is more intergenerational.

In Santa Luisa, there is a consistent trend of having at least one elderly person in most surveyed households, indicating a notable presence of older individuals within the community, possibly reflecting its caregiving dynamics, as mentioned earlier. Caretakers in these households are tending to the necessities of children at the same time as they are tending to the necessities of elderly.

According to data from the Ministry of Social Development's Social Welfare Survey, 85% of those who dedicate eight or more hours a day to unpaid care work are women. Additionally, from an economic perspective, estimates from the Central Bank indicate that unpaid domestic work, including caregiving, represents more than 25% of the country's expanded GDP, more than double that of other sectors such as mining (source: El País).

Conversely, Solar de Mantagua displays more variability, with some households having elderly members while others do not. Observations suggest that family compositions are less intergenerational, with some households consisting of young families with small children, while others have older individuals who are retired. Older individuals are predominant, and one contributing factor is the limited availability of schools in this area due to its classification as an urban growth zone. As a result, residents often need to send their children to schools in the nearby cities of Concón or Viña del Mar, meaning for the caretakers that they have to spend a significant portion of their day driving their children to school, leading to increased traffic congestion and strain on the road infrastructure (Redondo, 2017).

Urban- Rural tension:

In addition to examining socioeconomic factors and gender roles in isolation, I believe that for a comprehensive analysis, it is crucial to consider another aspect: the urban-rural tension and the residents' positioning within it.

This because, as stated by Tandel, Hiranandani and Kapoor (2019) “there is no globally accepted definition of urban and rural but rather each country uses population size as a parameter for its definition” and many times those dichotomous definitions leave out values of rurality that influence political activism and the way in which communities relate to the territory.

In the case of Chile, in MIDEPLAN's Casen Survey (2018), rural area is defined as “what is not urban”, and what is urban as “Set of concentrated dwellings with more than 2,000 inhabitants, or between 1,001 and 2,000 inhabitants, with 50% or more of its economically active population engaged in secondary and/or tertiary activities.”

In turn, the Ministry of Housing and Urbanism and the Ministry of Public Works of Chile (2020) state that urban is everything that belongs to what is called the urban radius of a city, determined by its Communal Regulatory Plan. Rural is everything that is outside the urban radius of the city, determined by its Communal Regulatory Plan.

The current process of urbanization in the area of Concón Quintero according to the PREMVAL, challenge us to refrain from drawing these boundaries in a dichotomous manner or establishing a clear Rural-Urban divide. Instead, the criteria we need to understand this process of urbanization requires a more nuanced approach than just productive work or population size. The challenge is to conceptualize the rural as a way of life deeply rooted in the tangible, the sensory, and a connection with the land that transcends foreign conceptualizations, and to amplify the definition of what is urban and what is rural to include the relationship with the land and the human experience.

The urban dweller typically introduces artificial elements onto the land, often overlaying it with products of external concepts (such as the trio of manicured lawns, barbecue areas, and swimming pools), whereas the rural dweller tends to inhabit the land more authentically, as it is, embracing its original flora and natural topography, leading to a more local set of references.

If we acknowledge that urbanization often embodies global influences while rural areas tend to reflect more localized dynamics, and if we recognize that the natural progression of our landscapes leans towards urbanization rather than ruralization, then it prompts us to question the significance of rural lifestyles. We must ask whether there is intrinsic value in the rural way of life, whether rooted in identity or environmental considerations, and whether it warrants the establishment of preservation or protection mechanisms.

The community of Solar de Mantagua is strongly associated with urbanity and exhibits a culture and organization characteristic of a suburban neighborhood. On the other hand, the community of Santa Luisa, although less homogeneous than anticipated, is experiencing a process of "urbanization." Consequently, while Solar de Mantagua maintains a uniform urban character, Santa Luisa exhibits a heterogeneous nature.

This transformation extends beyond nominal territorial administration terms and encompasses the blending of its rural roots into urban processes and has been driven by the influx of new inhabitants linked to the metropolitan expansion of the greater Valparaíso area.

During an interview with the president of the neighborhood association of Santa Luisa, she highlighted the community's experience of transitioning from a rural to an urban designation:

"If you were to ask us, 'Do you want to be rural again?' I would immediately say yes, because here, when we were rural, they solved our problems right away; we did not have to wait. But now that we are urban, we must wait for Minvu (Ministry of Housing and Urban Development)"

She expressed that the community was better off when classified as rural because they received targeted programs and funds to address their specific issues. However, as urban residents, they have observed a decline in investment from institutions serving the broader metropolitan area, leaving their sector with limited support and resources.

CONCLUSION

In conclusion, this study delved into the daily experiences of communities grappling with water scarcity, exploring how socioeconomic factors, gender roles, and institutional trust influence their responses. Through a mixed-methods approach involving surveys, interviews, and key informant insights, valuable data was gathered to illuminate the complexities of water management in contrasting communities.

The findings underscored significant socioeconomic disparities between Solar de Mantagua and Santa Luisa, influencing their approaches to addressing water scarcity.

In the Solar de Mantagua community, despite the initial trust in institutions that can be seen from having turned to them in the first place to solve the problem, the community faced limitations in resolving water-related challenges due to jurisdictional constraints and legal frameworks and is still in the process of seeking assistance in mediating with the private company that happens to be the water provider in the area.

In the Santa Luisa community, similarly, institutional trust could be inferred since the most efficient solution was to turn to the government, although precisely due to mistrust, not all of the community rallied behind this solution. Additionally, this solution has not been entirely satisfactory, as the coverage area is not total, and it is not a sustainable solution over time, as the stream from which they draw water as rural potable water is a finite resource that becomes scarcer as urban expansion progresses and the area densifies.

Moreover, gendered caregiving responsibilities were evident, with women shouldering household duties and care work. Although the results show a similar scenario in formal terms

(women are in both cases the ones responsible for the caregiving role), the contrast in the intensity of this care work is evident: The intergenerational living arrangements in Santa Luisa accentuated the caregiving burden on women, emphasizing the relationship between this caregiving role and political activism within the community.

Furthermore, the study shed light on another factor that needs considering when analyzing the dynamics in activism in response to water scarcity. The urban-rural tension within transitioning communities, illustrating the complexities of community identity and lifestyle preferences. As Solar de Mantagua embraced suburban living influenced by globalized trends, Santa Luisa experienced a transformation from rural to urban designation driven by metropolitan expansion without them being consulted. This transition underscores the importance of community participation,

In essence, this study contributes to our understanding of water management practices, socioeconomic dynamics, and gendered roles within communities facing water scarcity in the Concon- Quintero area. By highlighting the complexities of community responses and the need for holistic approaches to address systemic challenges, this research provides insights for policymakers, practitioners, and researchers seeking to foster sustainable development and equitable resource management in water-stressed regions.

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APPENDIX A: APPLIED SURVEY SPANISH AND ENGLISH

ESPAÑOL

Sección de Caracterización Socioeconómica

Objetivo: Establecer la posición de la comunidad dentro del espectro socioeconómico chileno.

1. Número total de personas en la vivienda: *

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5 o más

2. En relación a la pregunta anterior, cuántas personas menores de 18 años viven en su hogar? *

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 o más

...

3. En relación a la pregunta 1, cuántas personas mayores de 65 años viven en su hogar? *

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 o más

...

4. Nivel educativo de jefe de hogar *

- ☐ Educación básica incompleta
- ☐ Educación básica completa
- ☐ Educación media incompleta
- ☐ Educación media completa
- ☐ Educación superior o técnica
- ☐ Posgrado

5. Por favor indique el ingreso total del hogar mensual en pesos chilenos: *

- ☐ menos de 500.000
- ☐ 500.000 a 1.000.000
- ☐ 1.000.001 a 1.500.000
- ☐ 1.500.001 a 2.000.000
- ☐ 2.000.001 o más

6. Número de personas que contribuyen al ingreso del hogar: *

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 o más

Seccion de Rol de Género

Objetivo: Identificar cómo se vive el rol de género en la comunidad, si hay rigidez en cuanto a la participación en las esferas pública o doméstica.

7. ¿Quién realiza principalmente el cuidado de los niños o tercera edad en el hogar? *

- ☐ Principalmente mujeres
- ☐ Principalmente hombres
- ☐ Compartido de manera equitativa
- ☐ Persona o empresa externa
- ☐ No hay sujetos que requieran de cuidado especial

...

8. ¿Quién realiza las tareas domésticas en el hogar? *

- ☐ Principalmente mujeres
- ☐ Principalmente hombres
- ☐ Compartido de manera equitativa
- ☐ Persona o empresa externa
- ☐ Otra...

...

9. ¿Cuántas horas diarias pasa(n) en casa las mujeres adultas del hogar? *

- ☐ menos de 4 horas
- ☐ 4 a 8 horas
- ☐ 8 a 12 horas
- ☐ 12 a 16 horas
- ☐ más de 16 horas

...

10. ¿Cuántas horas diarias pasa(n) en casa los hombres adultos del hogar? *

- ☐ menos de 4 horas
- ☐ 4 a 8 horas
- ☐ 8 a 12 horas
- ☐ 12 a 16 horas
- ☐ más de 16 horas

Sección impacto escasez de agua y Participación política

Objetivo: establecer relaciones entre clase, confianza en las instituciones, género y estrategias colectivas frente a escasez de agua

11. ¿Cómo es impactada su comunidad por la escasez de agua? Por favor, describa los desafíos que enfrentan. *

Texto de respuesta larga

12. ¿Cómo se ve impactado usted personalmente y su familia en su vida cotidiana debido a la escasez de agua? *

Texto de respuesta larga

13. ¿Participa en alguna forma de organización política dentro de la comunidad? Si es así, por favor, comparta los detalles. *

Texto de respuesta larga

ENGLISH

Socioeconomic Characterization Section

Objective: Establish the community's position within the Chilean socioeconomic spectrum.

1. Total number of individuals in the household:

Alternatives:

- 1,
- 2,
- 3,
- 4,
- 5 or more.

2. In relation to the previous question, how many individuals under the age of 18 live in your household?

Alternatives:

- 1,
- 2,
- 3,
- 4 or more.

3. In relation to question 1, how many individuals over the age of 65 live in your household?

Alternatives:

- 1,
 - 2,
 - 3,
 - 4 or more.
4. Educational level of the head of the household
- Alternatives:
- Incomplete primary education,
 - Complete primary education,
 - Incomplete secondary education,
 - Complete secondary education,
 - Higher or technical education,
 - Postgraduate degree.
5. Please indicate the total monthly household income in Chilean pesos:
- Alternatives:
- Less than 500,000 (Less than \$650)
 - 500,000 to 1,000,000 (\$650 to \$1,300)
 - 1,000,001 to 1,500,000 (\$1,300 to \$1,950)
 - 1,500,001 to 2,000,000 (\$1,950 to \$2,600)
 - 2,000,001 or more (\$2,600 or more)
6. Number of individuals contributing to the household income:
- Alternatives:
- 1,
 - 2,
 - 3,
 - 4 or more.

Gender Role Section

Objective: Identify how gender roles are experienced in the community, whether there is rigidity regarding participation in public or domestic spheres.

7. Who primarily takes care of children or the elderly in the household?
- Mainly women,
 - Mainly men,
 - Equally shared,
 - External person or company,
 - There are no individuals requiring special care
8. Who mainly does the household chores at home?
- Mainly women,
 - Mainly men,
 - Equally shared,
 - External person or company

7. How many hours per day do adult women in the household spend at home?
 - Less than 4 hours
 - 8 to 12 hours
 - 12 to 16 hours
 - More than 16 hours
8. How many hours per day do adult men in the household spend at home?
 - Less than 4 hours
 - 8 to 12 hours
 - 12 to 16 hours
 - More than 16 hours

Section: Impact of Water Scarcity and Political Participation

Objective: Establish relationships between class, trust in institutions, gender, and collective strategies in response to water scarcity.

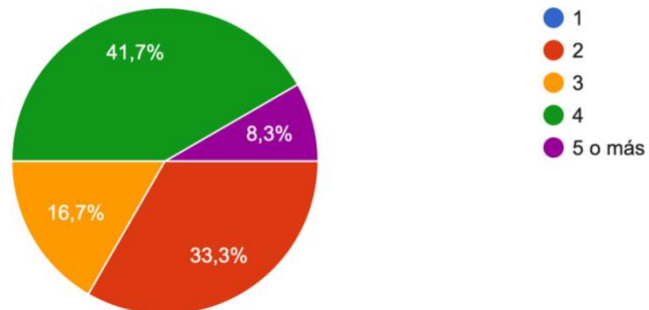
11. How is your community impacted by water scarcity? Please describe the challenges you face.
12. How are you and your family personally impacted in your daily life due to water scarcity?
13. Do you participate in any form of political organization within the community? If so, please share the details.

APPENDIX B: SURVEY RESULTS

SOLAR DE MANTAGUA

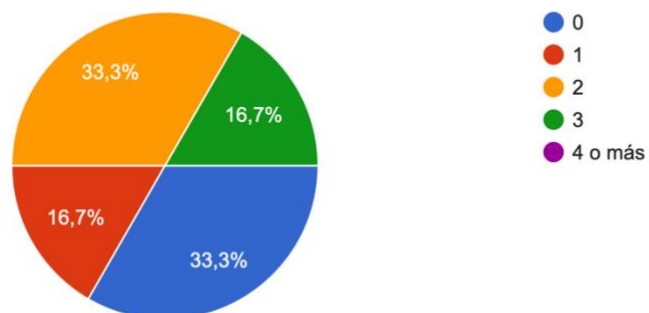
1. Número total de personas en la vivienda:

12 respuestas



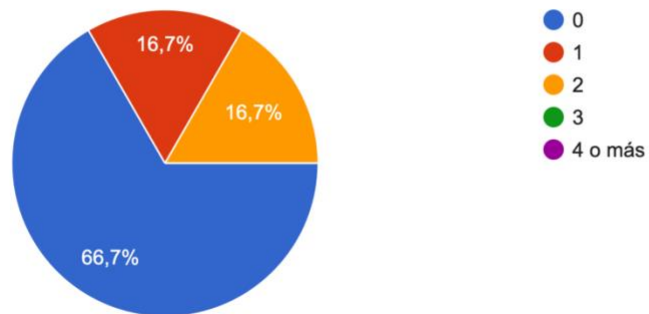
2. En relación a la pregunta anterior, cuántas personas menores de 18 años viven en su hogar?

12 respuestas



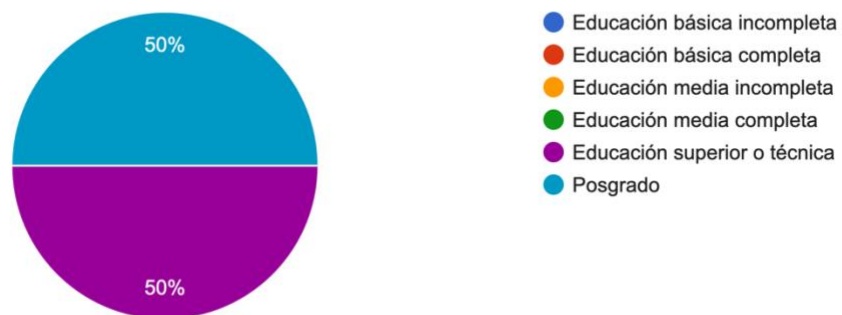
3. En relación a la pregunta 1, cuántas personas mayores de 65 años viven en su hogar?

12 respuestas



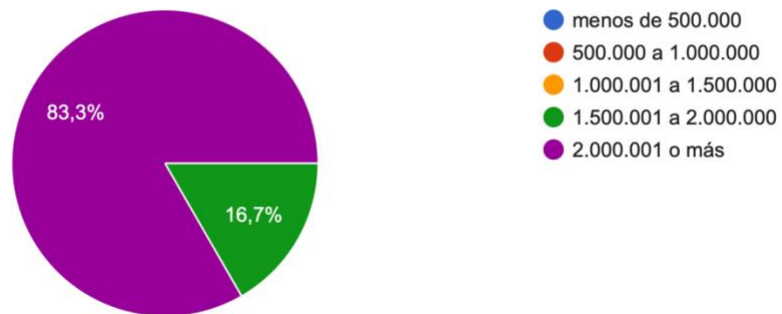
4. Nivel educativo de jefe de hogar

12 respuestas



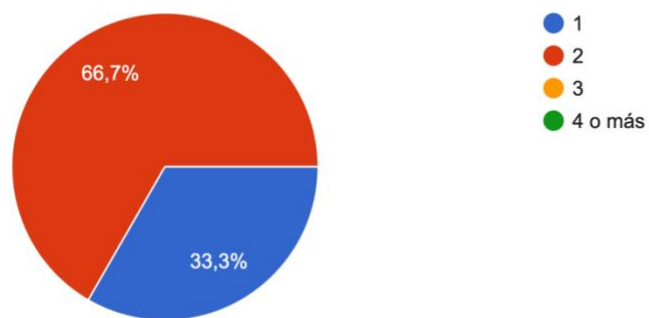
5. Por favor indique el ingreso total del hogar mensual en pesos chilenos:

12 respuestas



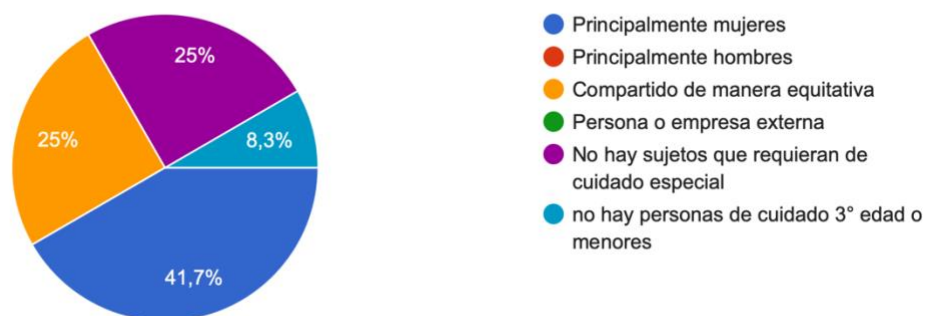
6. Número de personas que contribuyen al ingreso del hogar:

12 respuestas



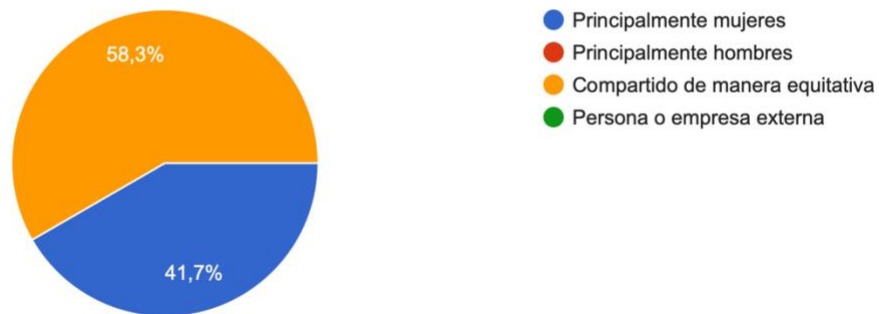
7. ¿Quién realiza principalmente el cuidado de los niños o tercera edad en el hogar?

12 respuestas



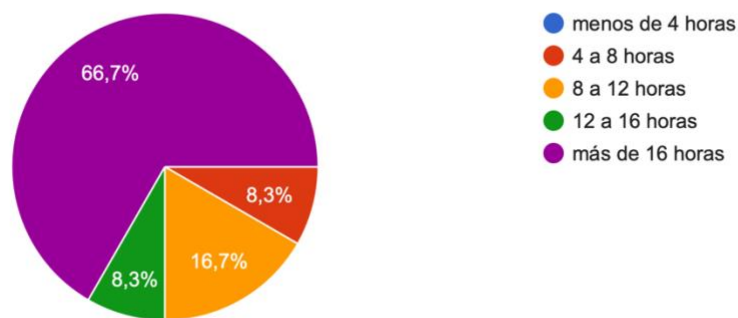
8. ¿Quién realiza las tareas domésticas en el hogar?

12 respuestas



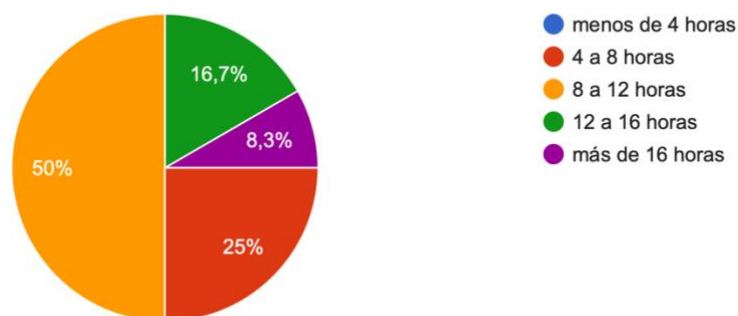
9. ¿Cuántas horas diarias pasa(n) en casa las mujeres adultas del hogar?

12 respuestas



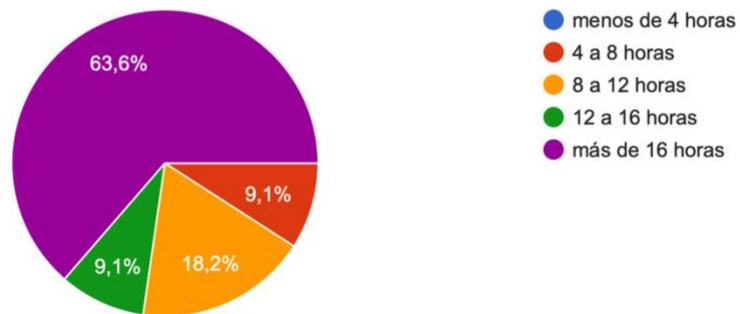
10. ¿Cuántas horas diarias pasa(n) en casa los hombres adultos del hogar?

12 respuestas



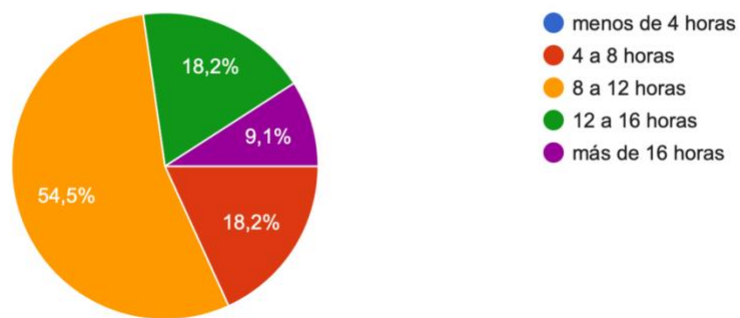
9. ¿Cuántas horas diarias pasa(n) en casa las mujeres adultas del hogar?

11 respuestas



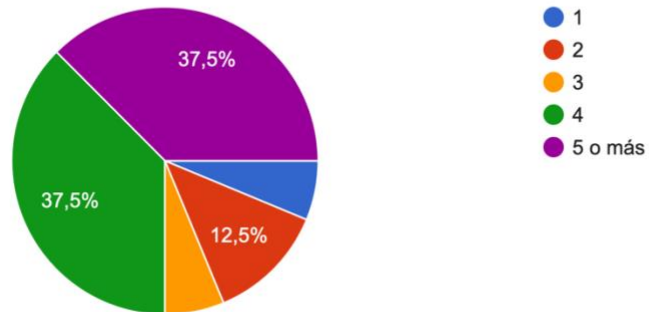
10. ¿Cuántas horas diarias pasa(n) en casa los hombres adultos del hogar?

11 respuestas



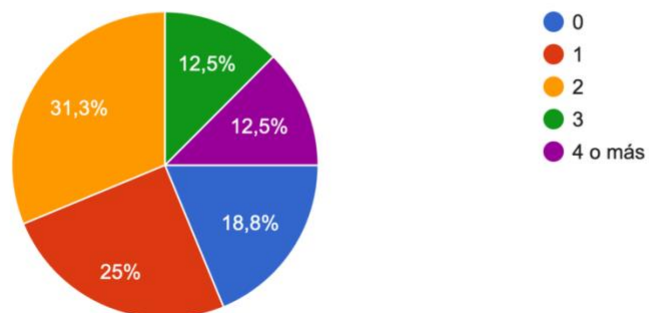
1. Número total de personas en la vivienda:

16 respuestas



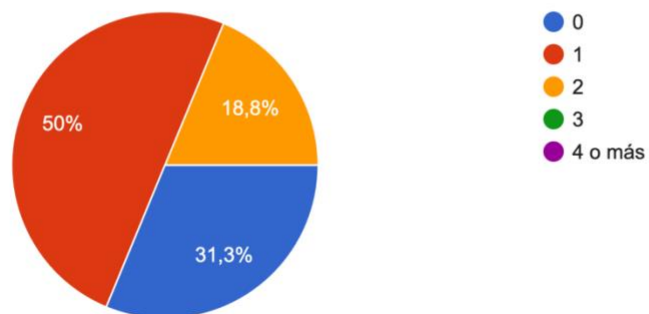
2. En relación a la pregunta anterior, cuántas personas menores de 18 años viven en su hogar?

16 respuestas



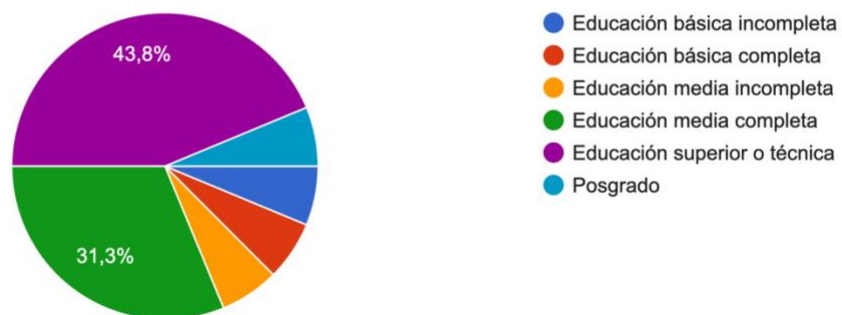
3. En relación a la pregunta 1, cuántas personas mayores de 65 años viven en su hogar?

16 respuestas



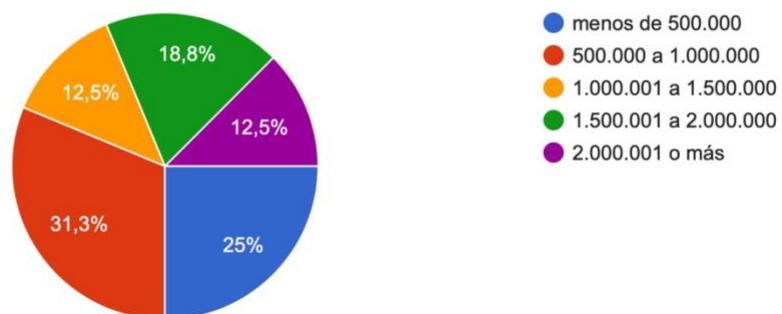
4. Nivel educativo de jefe de hogar

16 respuestas



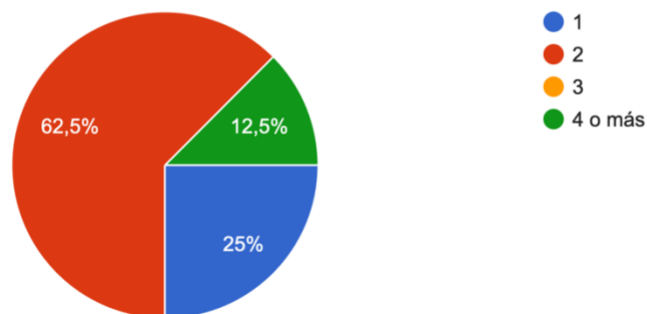
5. Por favor indique el ingreso total del hogar mensual en pesos chilenos:

16 respuestas



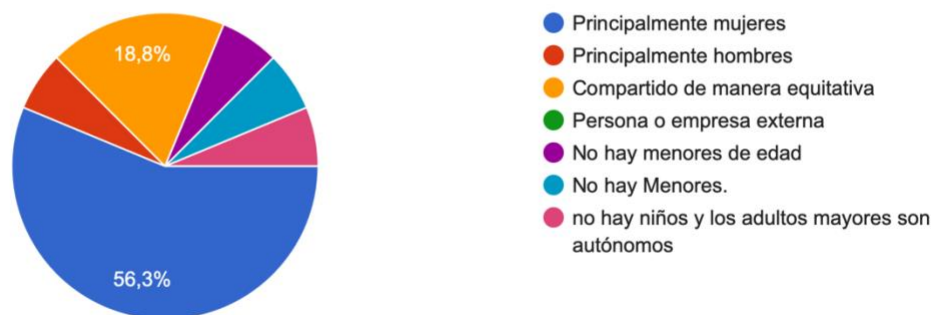
6. Número de personas que contribuyen al ingreso del hogar:

16 respuestas



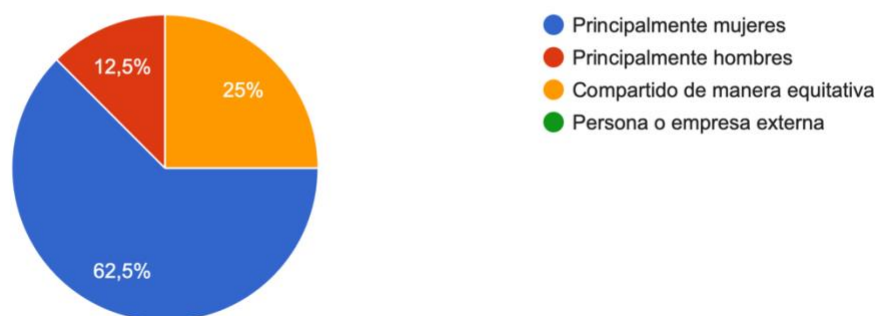
7. ¿Quién realiza principalmente el cuidado de los niños o tercera edad en el hogar?

16 respuestas



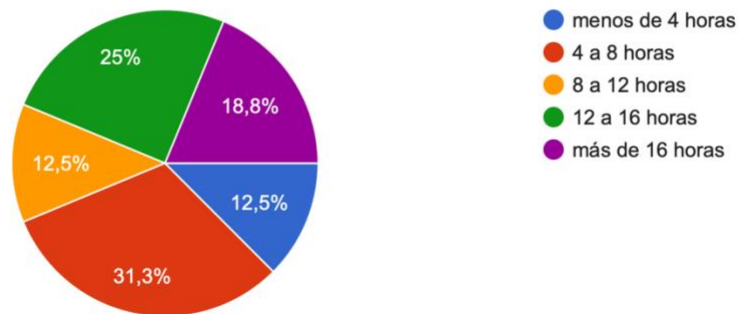
8. ¿Quién realiza las tareas domésticas en el hogar?

16 respuestas



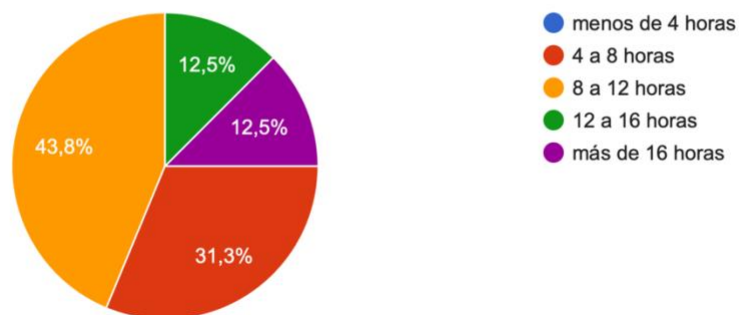
9. ¿Cuántas horas diarias pasa(n) en casa las mujeres adultas del hogar?

16 respuestas



10. ¿Cuántas horas diarias pasa(n) en casa los hombres adultos del hogar?

16 respuestas



APPENDIX C: SUPPORTING DOCUMENTS

QUINTERO	
Fojas 1 / uno	
Nº 1	Repertorio Nº 6.- Quintero, 11 de Mayo de 2007. Yo,
DERECHO DE APROVECHAMIENTO DE AGUAS	Marcelo Razón Sánchez, Conservador de Quintero,
	procedo a inscribir una reducción a escritura pública de
	la Resolución D.G.A. V Región Nº 686 de la Dirección
	Regional de Aguas, Quinta Región, de fecha 5 de
	diciembre de 2006, suscrita ante el Notario Público de
	Quillota, don Julio Abuyeres Jadue, con fecha 17 de
	Abril del año 2007, en la cual consta que: Se constituye
INMOBILIARIA CLUB MANTAGUA S.A.	a favor de INMOBILIARIA CLUB MANTAGUA S.A.
	sociedad del giro de su denominación, rol único
	tributario Nº 96.788.640-8, con domicilio en calle
	Encomenderos 253, oficina 11, comuna de las Condes,
PCR	Región Metropolitana, un derecho de aprovechamiento
	consuntivo de agua subterránea, de ejercicio
	permanente y continuo, por un caudal de 2 litros por
DIRECCIÓN GENERAL DE AGUAS	segundo y por una demanda promedio anual de 12.614
	metros cúbicos, en la comuna de Quintero, provincia de
	Valparaíso, V Región de Valparaíso. El agua se captará
	por elevación mecánica desde un sondaje, ubicado en
	las coordenadas UTM Norte 6.360.669 metros y Este
	267.029 metros. Las coordenadas UTM están referidas
	a la carta I.G.M., Datum y Elipsoide Sudamericano de
	1969. De acuerdo al estudio "informe de Zonificación
	Hidrogeológica para las Regiones metropolitana y V",
	realizado por el DARH, el que consta en el SDT Nº
	133, de mayo del 2002, aprobado por la Resolución
	D.G.A. Nº 1505, del 31 de Mayo del 2002, la captación
	se sitúa en el acuífero Cuencas Costeras Norte, sector
	Quintero, subsector Dunas de Quintero.- El predio

Figure 7: Deed water rights Solar De Mantagua

1 donde se encuentra la captación pertenece en dominio a
2 INMOBILIARIA CLUB MANTAGUA S.A. y se
3 encuentra inscrito a fojas 2920 N° 3084 del Registro de
4 Propiedad del Conservador de Bienes Raíces de
5 Quillota, correspondiente al año 1997. Establécese área
6 de protección del pozo a que se refiere esta Resolución,
7 la cual queda definida por un círculo de 200 metros de
8 radio, con centro en el eje del sondaje. Esta área de
9 protección no importa menoscabo del derecho
10 establecido en el artículo 56 del Código de Aguas,
11 como tampoco altera la situación de obras de captación
12 preexistentes que queden comprendidas en ella. La
13 Dirección General de Aguas podrá exigir la instalación
14 de sistemas de medida en la obra de captación y
15 requerir la información que se obtenga de acuerdo con
16 lo dispuesto en el artículo 68 del Código de Aguas.-
17 Requirió doña Patricia Cerda Larraín. Doy fe.-
18
19
20
21
22
23
24 Conforme con el original inscripcón
25 Corriente a Fs. N° 44 del
26 Registro de Aguas
27 del año 2007
28
29
30

06 ENE. 2012

AGUAS
MANTAGUA
2

Figure 7 (cont)



Alejandra Muñoz C <apmcpr@gmail.com>

SERNAC - FORMULARIO ÚNICO DE ATENCIÓN DE PÚBLICO

SERNAC - Modelo de atención al consumidor <no-reply@sernacresponde.cl>
Para: Alejandra Paola Munoz Cifuentes <APMCPR@gmail.com>

22 de junio de 2023, 15:38



Servicio Nacional
del Consumidor

Ministerio de Economía,
Fomento y Turismo

FORMULARIO ÚNICO DE ATENCIÓN DE PÚBLICO

Nº. CASO: R2023M8285261
FECHA INGRESO: 22/06/2023
ASIGNADO A: AMERICA
SEPULVEDA
METROPOLITANA
WEB

Datos del Consumidor(a)		
Nombres: Alejandra Paola	Apellidos: Munoz Cifuentes	Rut: 12886892-5
Dirección: EL SOLAR DE MANTAGUA 19		
Comuna: QUINTERO	Región: VALPARAISO	
Teléfono: 056--	Teléfono Celular: 9-991005852	E-mail: APMCPR@GMAIL.COM

Datos Empresa o Comerciante	
Nombre Comercial: ADMINISTRADORA DE AGUAS SANTA ADELA SPA	Rut: 76528849-5
Dirección: RUTA F 30E N 12.010	
Comuna: QUINTERO	Región: VALPARAISO

Fecha del Hecho: 01/01/2023	No. Boleta y/o Contrato: 12066
Número de Teléfono Reclamado:	Número de cliente: 374

Producto o servicio comprado o contratado: AGUA
--

Medio de pago: Transferencia electrónica	Titularidad del medio de pago: Sí
Tramo de precio: \$10.001 a \$50.000	Precio exacto: No aplica
Tramo de monto adicional gastado: \$10.001 a \$50.000	Monto exacto: No aplica
Se ha comunicado con la empresa: Sí	Respuesta de la empresa: No hubo respuesta
Medio de comunicación: Por correo electrónico	

Explique a continuación cómo ocurrieron los hechos: CONSUMIDOR PRESENTA RECLAMO POR MALA CALIDAD DE AGUA, ALZAS DE TARIFAS SIN PREVIO AVISO, MALA INFRAESTRUCTURA. SE HA HECHO RECLAMO EN SUPERINTENDENCIAS Y SEREMI DE SALUD YA QUE SE HA SUFRIDO POR LA SALUD POR CLORACION DEL AGUA. CONSUMIDOR EXIGE UNA INDEMNIZACION POR DAÑOS Y PERJUICIOS
--

Solución solicitada 1: EN PRIMER LUGAR QUE LAS TARIFAS SEAN INFORMADAS, QUE NO SEAN UNILATERALES, QUE VUELVAN AL PRECIO CORRESPONDIENTE. INVERSIONES EN INFRAESTRUCTURA Y EN LA CALIDAD DEL SERVICIO QUE ESTAN PRESTANDO Y UNA INDEMNIZACION POR DAÑOS Y PERJUICIOS POR LOS GASTOS EXTRAS QUE CONSUMIDORA HA TENIDO QUE INCURRIR POR LA MALA CALIDAD DE AGUA, EN CUANTO A SALUD
--

Figure 8: SERNAC Customer Service Form

06 de abril de 2023
Sra: ALEJANDRA MUÑOZ
De mi consideración: Junto con saludar, informo a Usted que se ha recibido en nuestra Institución, SEREMI de Salud de la Región de Valparaíso, requerimiento N°2020440. Le agradecemos haberse contactado con nosotros, ya que nos permite revisar nuestros procedimientos y mejorar la atención a nuestros usuarios/as e Instituciones. Con relación a su requerimiento le podemos informar que con fecha 05 de abril de 2023 fiscalizadores de nuestra institución concurren a lugar mencionado en Solicitud donde se constatan las irregularidades denunciadas y se da inicio al respectivo Sumario Sanitario. Ante cualquier consulta puede contactarse con la Oficina de Informaciones, Reclamos y Sugerencias, a través de los teléfonos 32-2571561, 32-2571602, 32-2571628, 32-2571579 ó 32-2571585 o mediante Salud Responde llamando al 600 360 7777. Mediante el PORTAL WEB al que se accede a través de la dirección: <http://oirs.minsal.cl/>, además puede realizar el seguimiento de su requerimiento. Finalmente, considerando que nuestra Institución acoge cada solicitud o situación presentada por usuarios/as, manifestamos especial interés y voluntad de resolver sus requerimientos y problemáticas de competencia de la SEREMI de Salud, dentro del marco de atribuciones y facultades que nos otorga la normativa vigente. Sin otro particular, saluda atentamente a Ud. Denis Hidalgo Fravega
Fiscalizadora Polivalente
Oficina de Viña del Mar
SEREMI DE SALUD REGION DE VALPARAISO

TODA PERSONA PODRÁ RECLAMAR SUS DERECHOS ANTE EL CONSULTORIO, HOSPITAL O CENTRO MÉDICO

PRIVADO QUE LO ATIENDE, SI LA RESPUESTA NO ES SATISFACTORIA PODRÁ RECURRIR A LA SUPERINTENDENCIA DE SALUD. (Extracto de la Ley N° 20.584 de Derechos y Deberes de los Pacientes)

Para conocer el estado de su trámite ingrese en nuestro sitio OIRS, al link Atención ciudadana, e ingrese el código de atención y su RUT

Figure 9: Email from the Seremi de Salud (Regional Ministerial Secretariat of Health) in response to the President of Solar de Mantagua



COMPROBANTE DE SOLICITUD DE FISCALIZACIÓN

Su **SOLICITUD DE FISCALIZACIÓN** fue registrado de manera exitosa en el Sistema OIRS con fecha **05-04-2023** y se ha generado este comprobante de registro de su trámite

Su Código de atención es: **2020440**

Solicitante (Persona Natural)

Nombre	ALEJANDRA MUÑOZ
RUT	0000000-0
Teléfono	99999999
Email	jvadelatoriente@gmail.com
Dirección	No registrada

Detalle

Institución	SEREMI VALPARAISO
Área	AGUAS SERVIDAS TRATAMIENTO Y DISPOSICION
Tema	NO DISPONIBLE

Descripción

Solicitante es la presidente de la Junta de Vecinos Santa Adela Oriente, ubicada en Carretera F-30E, Mantagua 12010, Quintero quien solicita fiscalización de manera urgente por emergencia sanitaria. La empresa responsable de esta situación es la Administradora de Aguas Santa Adela SpA. Se adjunta carta describiendo los acontecimientos.

RESPUESTA

Quien redacta: Denise Hidalgo Fravega	Cargo de quien redacta: Encargada Saneamiento Basico OTV
--	---

Fecha de respuesta: **06-04-2023**

Respuesta:

Figure 10: Inspection Request Receipt from the Ministry of Health

APPENDIX D: INTERVIEW TRANSCRIPTIONS

Español

Entrevista a presidenta de junta de vecinos Santa Luisa

La comunidad cuenta con dos proveedores de agua:

-ESVAL

-Agua rural

Los que tienen ESVAL no tienen buen suministro de agua, mientras que los que tienen AGUA RURAL tienen siempre buen suministro.

Los días Miércoles viene la señora Alejandra Cadenas a cobrar el agua rural a la gente que no tiene la posibilidad de pagar por internet.

Los habitantes del plano son los habitantes originales, y los que tienen casas en los cerros se han instalado en los últimos 5 años, entonces no los conocemos.

Los habitantes originales se conocen todos, allá viven los Soto, y los Albornoiz... Tenemos un fuerte sentido de comunidad, aquí nos ayudamos todos. Por eso que podemos superar las dificultades. Nosotros somos una comunidad rural, ahora al Minvu se le ocurrió que nosotros éramos urbanos, pero si nos hubieran preguntado nosotros nos hubiéramos quedado rurales.

Entrevista a Don René (tiene agua Rural) y a Don Francisco (Tiene Esval) Santa Luisa

Santa Luisa solía ser un fundo, del cual muchas de las familias residentes eran inquilinos y se asentaron por primera vez en forma de toma tras la reforma agraria.

Cada casa tenía una noria, hasta que Esval hace 15 años hizo la factibilidad y la instalación cuando se extendió para servir al hotel Mantagua. Según don René quien es carpintero, la instalación se hizo mal por lo que eso genera problemas de agua.

Hace 10 años consiguieron que fueran incluidos dentro de una estrategia de agua rural, que saca agua del estero Santa Adela en Santa Adela y luego con una serie de bombas la trata y la junta en el mirador Santa Luisa. (foto)

El sistema de agua rural funciona perfectamente y los usuarios que tienen ese servicio no tienen problemas de agua. Aquellos que son usuarios únicamente de ESVAL, tienen muchos problemas de agua, no alcanzando la presión para activar los cálifont. Es por esto que los vecinos (sobre todos los de la calle Santa Luisa) se ponen de acuerdo para usar el agua, se avisan, generalmente por WhatsApp, quien está haciendo uso del agua y los demás cierran las llaves. Cuando nadie está usando el agua, todos están juntando perpetuamente agua en grandes receptáculos de plástico para que cuando necesiten usar puedan apoyar el suministro de ESVAL. Si a un vecino le hace falta agua, se comparten el agua almacenada.

Don René tuvo que pagar 300 mil pesos para acceder al agua rural. Por mes paga 3 mil de base + el uso que tenga, por lo general paga alrededor de 12 mil pesos.

Entrevista a Alejandra Cadenas, coordinadora de agua rural Potable:

[10:06 a.m., 12/21/2023] 1: hola señora Alejandra, buenas tardes! mi nombre es Camila Madariaga, si se acuerda ayer conversamos sobre la posibilidad de hacerle algunas preguntas para mi investigación.

[11:28 a.m., 12/21/2023] 2: Buenas tardes, Camila

[11:28 a.m., 12/21/2023] 2: Ahora puedo

[11:28 a.m., 12/21/2023] 2: Dígame en que la puedo ayudar

[11:53 a.m., 12/21/2023] 1: Muchas gracias! Entiendo que usted es coordinadora de agua potable rural Santa Adela, que surte a la comunidad de Santa Luisa, y quería pedirle si es que me pudiera comentar por favor:

1) cómo funciona, quien provee el servicio, cómo se cobra

2) para organizarse, tuvieron algún rol significativo las mujeres de la comunidad?

[11:56 a.m., 12/21/2023] 2: Primero señalar que el comité nace por la necesidad de abastecimiento de agua Potable, ambas localidades, tanto Santa Adela, y el Mirador de Santa Luisa, solo se abastecían de pozos, lo que, llevado al crecimiento de la población, estos pozos se fueron contaminando con agua servidas.

[11:57 a.m., 12/21/2023] 2: Desde el 2004 nuestro comité extrae agua subterránea desde Santa Adela, luego se hace Potable y se entrega a ambas localidades

[11:58 a.m., 12/21/2023] 2: En cuanto a la segunda pregunta, le comento que en la época que se inicia este proyecto, ambas localidades contaban con presidenta de Junta de vecinos, y fueron ellas quienes, impulsadas por la necesidad a agua Potable para la población, llevaron a cabo esta gestión

[11:59 a.m., 12/21/2023] 2: Muchas gracias, me sirve mucho lo que me cuenta

[12:00 p.m., 12/21/2023] 1: Y en cuanto a la participación de la junta de vecinos se trata mayoritariamente de mujeres o es más bien 50 y 50?

[12:00 p.m., 12/21/2023] 2: Mayoritariamente mujeres

[12:01 p.m., 12/21/2023] 2: Yo diría que un 90 % mujeres y un 10 % hombres

[12:01 p.m., 12/21/2023] 1: Y usted a qué atribuiría eso?

[12:03 p.m., 12/21/2023] 2: Primero, que la mujer por tener que criar a los hijos, pasa mayor parte en la casa, y dedica tiempo a que la vida de sus hijos sea lo más sana, y eso conlleva a querer lo mejor para la comunidad

[12:04 p.m., 12/21/2023] 1: Muchas gracias, por último, para no quitarle más tiempo, si me permite le voy a hacer una última consulta: podría usted por favor describir cómo es la relación entre los vecinos y y las vecinas de la comunidad, si es que existe colaboración?

[12:29 p.m., 12/21/2023] 2: En realidad aquí la gente es bien solidaria y se llevan bien, sobre todo la gente que está aquí hace tiempo. Eso sí, ahora ha llegado harta gente de afuera.

[12:29 p.m., 12/21/2023] 2: Con ellos más allá de eso, (lo del agua) no existe una convivencia

[12:38 p.m., 12/21/2023] 1: Muchísimas gracias por sus respuestas, su tiempo y su disposición Sra Alejandra, me servirá mucho para mi investigación.

[12:39 p.m., 12/21/2023] 1: Que tenga una buena tarde

[12:52 p.m., 12/21/2023] 2: De nada, espero haber ayudado, y mucha suerte en su investigación.

Entrevista con presidenta de Junta De Vecinos Solar De Mantagua

Aquí el principal problema lo tenemos con Aguas Santa Adela (ASA), yo paso hablando con la representante de ASA, que tiene distinto nombre, pero al final son los mismos dueños de la inmobiliaria que son unos sinvergüenzas, nos cortan el agua a cada rato porque no hay suficiente suministro de agua. Claro porque tienen instalados algunos pozos, tienen 3 pozos que sacan 2,5 litros por segundo, para 500 casas, cuando la recomendación de la Dirección de Obras Hidráulicas es tener un suministro mínimo 1 litro por segundo por 80 casas. No quieren invertir más por ejemplo en una piscina de acumulación que podría servir para nuestro problema.

El dueño del resort acá que tenemos al lado está llenando una piscina olímpica con nuestro suministro de agua, bueno, además de camiones aljibe con agua que contrató. Con los vecinos acá contamos 50 camiones aljibe que subieron a dejar agua y que más encima se estacionaron en nuestras áreas comunes.

Con respecto a tu pregunta de cuáles son las soluciones a las que hemos llegado como comunidad, tenemos un canal de información por WhatsApp en donde nos informamos de los cortes de agua y nos ponemos de acuerdo para dejar de regar cuando la situación se pone crítica. De hecho, en los meses de verano, cuando las casas que son segunda vivienda se ocupan, ahí tenemos muy poca agua. Y eso también es un problema; la proyección hacia el futuro, porque los dueños de la inmobiliaria siguen expandiendo en otras fases la comunidad vendiendo más casas aledañas que la gente compra sin sospechar que están comprando casas que no tienen agua.

Tenemos un abogado al cual la junta de vecinos le pagamos un sueldo modesto y estamos pensando en iniciar acciones legales sobre todo en contra del problema sanitario que representa la falta de cuidado y mantención que tiene nuestro sistema de agua: logramos que vinieran a fiscalizar y tomar muestras de agua y nos informaron que el agua que nos proporciona ASA no alcanza a ser potable. A veces el agua está al descubierto, expuesta a contaminantes.

Desde la municipalidad también nos recomendaron esto, que emprendiéramos acciones legales. Nosotros nos hemos reunido varias veces con las autoridades de Quintero para hablar de esto, pero como no somos una comunidad vulnerable no nos toman demasiado en cuenta. Y frente a tu pregunta de porque no presionamos a la inmobiliaria con carteles en la entrada del condominio, eso no tendría mucha adherencia en la comunidad, ya que afectaría el valor de las casas y aquí mucha gente compró como inversión. Sin contar el hecho de que las personas no están tan involucradas como para poner de su tiempo y esfuerzo, quieren solucionar todo a través de la junta de vecinos o a través de alguna de las instituciones.

Acá hay varias mujeres en cargos de liderazgo, pero también hay hombres que trabajan para la comunidad. Aunque no somos muchas personas.

Entrevista con vecinos de Solar De Mantagua

A nosotros no nos complica tanto la situación de la escasez de agua. O sea, si dependiéramos solamente de ASA como proveedor, claro que estaríamos complicados. Pero por suerte nosotros hemos instalado en nuestra casa varias soluciones para tener un poco de

independencia, por ejemplo, tenemos un pozo propio que nos permite regar el pasto y llenar la piscina sin problemas. Además, instalamos otras soluciones, paneles solares, etc. Creo que es importante ser previsores porque la situación sólo va a empeorar cuando vendan los otros loteos acá al lado.

Nosotros llegamos al Solar de Mantagua en 2014, cuando acá casi ninguna casa estaba ocupada, y claro, al principio no tuvimos problemas de agua porque la demanda no era tanta. No estamos muy interesados en participar en la junta de vecinos, no tenemos mucho tiempo.

English

Interview with Neighborhood Association President of Santa Luisa

The community has two water providers:

- ESVAL
- Rural Water

Those with ESVAL don't have a good water supply, while those with RURAL WATER always have a good supply.

On Wednesdays, Mrs. Alejandra Cadenas comes to collect rural water payments from people who can't pay online.

The flatland residents are the original inhabitants, and those with houses in the hills have settled in the last 5 years, so we don't know them.

The original inhabitants all know each other, the Sotos and the Albornozes live there... We have a strong sense of community, we all help each other here. That's why we can overcome difficulties. We are a rural community, but now the Minvu decided we were urban, but if they had asked us, we would have stayed rural.

Interview with three neighbors of Santa Luisa (one has ESVAL as provider, the other two have APR).

Santa Luisa used to be an estate, and many of the families who are residents today were tenants and settled there for the first time as squatters after the agrarian reform.

Each house had a well until ESVAL, 15 years ago, made the feasibility study and installation when it was extended to serve the Mantagua hotel. According to Don René, who is a carpenter, the installation was done wrong, which causes water problems.

Ten years ago, they managed to be included in a rural water strategy, which draws water from the Santa Adela stream in Santa Adela and then treats it with a series of pumps and collects it at the Santa Luisa viewpoint.

The rural water system works perfectly, and users of this service have no water problems.

Those who only use ESVAL have many water problems, with not enough pressure to activate the water heaters. Because of this, neighbors (especially those on Santa Luisa street) agree to use the water, they notify each other, usually via WhatsApp, who is using the water, and the others turn off their taps. When no one is using the water, everyone is continuously collecting water in large plastic containers so that when they need to use it, they can support ESVAL's supply. If a neighbor needs water, they share the stored water.

Don René had to pay 300 thousand pesos to access rural water. He pays 3 thousand pesos per month as a base + whatever he uses, usually around 12 thousand pesos.

Interview with Alejandra Cadenas, Coordinator of Rural Drinking Water:

[10:06 a.m., 12/21/2023] 1: Hello Mrs. Alejandra, good afternoon! My name is Camila Madariaga, if you remember, we talked yesterday about the possibility of asking you some questions for my research.

[11:28 a.m., 12/21/2023] 2: Good afternoon, Camila

[11:28 a.m., 12/21/2023] 2: Now I can

[11:28 a.m., 12/21/2023] 2: Tell me how I can help you

[11:53 a.m., 12/21/2023] 1: Thank you very much! I understand that you are the coordinator of rural drinking water Santa Adela, which supplies the Santa Luisa community, and I wanted to ask if you could please comment on:

1) how it works, who provides the service, how it is billed

2) did women in the community have any significant role in organizing?

[11:56 a.m., 12/21/2023] 2: First, I would like to point out that the committee was born out of the need for drinking water supply, both localities, Santa Adela and the Santa Luisa viewpoint, were only supplied by wells, which, as the population grew, became contaminated with sewage.

[11:57 a.m., 12/21/2023] 2: Since 2004, our committee has extracted groundwater from Santa Adela, then made it drinkable and delivered it to both localities.

[11:58 a.m., 12/21/2023] 2: Regarding the second question, let me tell you that at the time this project began, both localities had neighborhood association presidents, and it was they who, driven by the need for drinking water for the population, carried out this management.

[11:59 a.m., 12/21/2023] 2: Thank you very much, what you tell me is very helpful

[12:00 p.m., 12/21/2023] 1: And as for the neighborhood association's participation, is it mostly women or is it more 50-50?

[12:00 p.m., 12/21/2023] 2: Mostly women

[12:01 p.m., 12/21/2023] 2: I would say 90% women and 10% men

[12:01 p.m., 12/21/2023] 1: And what would you attribute that to?

[12:03 p.m., 12/21/2023] 2: First, that women, because they have to raise their children, spend more time at home and dedicate time to make their children's lives as healthy as possible, and that leads them to want the best for the community.

[12:04 p.m., 12/21/2023] 1: Thank you very much, finally, not to take up any more of your time, if you allow me, I will ask you one last question: could you please describe how the relationship between the neighbors of the community, if there is collaboration?

[12:29 p.m., 12/21/2023] 2: Actually, people here are very supportive and get along well, especially the people who have been here for a long time. That said, a lot of people from outside have arrived now.

[12:29 p.m., 12/21/2023] 2: With them, beyond that (about water), there is no coexistence

[12:38 p.m., 12/21/2023] 1: Thank you very much for your answers, your time, and your willingness, Mrs. Alejandra, it will be very useful for my research.

[12:39 p.m., 12/21/2023] 1: Have a good afternoon

[12:52 p.m., 12/21/2023] 2: You're welcome, I hope I've helped, and good luck with your research.

Interview with President of Neighborhood Association for Solar de Mantagua

"The main problem here lies with Aguas Santa Adela (ASA). I constantly talk to the ASA representative, who has a different name, but in the end, they are the same owners of the real estate company who are unscrupulous. They cut off our water all the time because there isn't enough water supply. Of course, they have some wells installed; they have 3 wells that extract 2.5 liters per second, for 500 houses, when the recommendation from the Directorate of Hydraulic Works is to have a minimum supply of 1 liter per second for 80 houses. They don't want to invest more, for example, in a storage pool that could solve our problem.

The owner of the resort next door is filling an Olympic-sized pool with our water supply, in addition to hiring water tanker trucks. Here, with the neighbors, we count 50 water tanker trucks that came up to deliver water, which furthermore parked in our common areas.

Regarding your question about the solutions we've reached as a community, we have an information channel on WhatsApp where we inform each other about water cuts and agree to stop watering when the situation becomes critical. In fact, during the summer months, when the second homes are occupied, we have very little water. And that's also a problem for the future projection because the real estate owners continue to expand the community in other phases, selling more neighboring houses that people buy without suspecting that they're buying houses without water.

We have a lawyer whom the neighborhood association pays a modest salary, and we're thinking of taking legal action, especially against the health problem represented by the lack of care and maintenance of our water system: we managed to get them to come and inspect and take water samples, and they informed us that the water provided by ASA is not potable. Sometimes the water is exposed, open to contaminants.

The municipality also recommended this, that we take legal action. We have met several times with the authorities of Quintero to discuss this, but since we're not a vulnerable community, they don't pay much attention to us.

Regarding your question about why we don't pressure the real estate company with signs at the entrance of the condominium, that wouldn't have much support in the community, as it would affect the value of the houses and many people here bought them as an investment. Not to mention the fact that people aren't so involved as to put in their time and effort; they want to solve everything through the neighborhood association or through some institutions.

There are several women in leadership positions here, but there are also men who work for the community, although we are not many people."

Interview with Neighbors of Solar de Mantagua

The water shortage situation doesn't affect us that much. I mean, if we relied solely on ASA as a supplier, of course, we would be in trouble. But luckily, we have installed several solutions in our home to be somewhat independent. For example, we have our own well, which allows us to water the lawn and fill the pool without any problems. Additionally, we've installed other solutions like solar panels, etc. I think it's important to be prepared because the situation will only worsen when they sell the other plots next door.

We moved to Solar de Mantagua in 2014, when almost no houses here were occupied, and of course, at first, we didn't have water problems because the demand wasn't that high.

We're not very interested in participating in the neighborhood association; we don't have much time.