The Progressive Housing Program in Chile 1990-2002

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A study of successful practices in affordable housing
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Prologue

Various countries of Latin America have undertaken reforms of the housing sector as they seek to improve the efficiency of the sector and to use public resources devoted to affordable housing more effectively. Theoretical and empirical bases for these reforms indicate that facilitating the operation of the housing markets – land, financing and construction materials – leads to increased levels of efficiency in the sector and in public interventions. Even considering the vast differences between countries, it is apparent that the reforms have followed a relatively similar pattern based on three types of action:

- Based on the identification of private supply of new homes and financing, and of the market niches that the private sector can supply in the absence of entry barriers, excessive risks and public sector interference, the reforms aim at withdrawing the public sector from the roles of supplier or direct financer and put them in the hands of the private sector.
- Enabling markets put into place measure like: land use reforms and subdivision regulation to facilitate the supply of residential land; development of mortgage finance mechanisms to facilitate mortgage issuers access to long term financing and encourages them to supply a growing portion of the market; provision of direct subsidies to low-income households to help them to obtain private financing for finished houses (new or existing).
- Execute settlement-upgrading programs for informal neighborhoods in order to give the beneficiaries security of land ownership and the minimal conditions of habitability, generally to the lowest income households.

This pattern of intervention emphasizes the importance of expanding the flow of new housing as it helps solve the problem pond by the rapid growth of household formation that all Latin American and Caribbean countries have faced in recent decades.

This approach to reform is still insufficient in light of available evidence indicating that a significant, and often crucial, volume of new housing production comes from the progressive construction process. At times, the process complies with land use and subdivision norms, but in the majority of the cases it fall outside the norms, and is conducted with little or no external support. The insufficiency of the approach is more evident when taking into account the fact that the progressive builders operate in markets for construction raw materials strongly interconnected with those of the formal builders and buyers. Thus, it is necessary to expand the housing sector reforms to facilitate the operations of housing markets, particularly to facilitate the operation of the building materials markets and prefabricated elements necessary for progressive houses construction.

In order to make progress in incorporating progressive housing issues in the housing sector reforms, policies and programs should support all the ways used by the population in solving their shelter issues. In order to increase the flow of new housing solutions in all countries in Latin America and the Caribbean, the formal sector of the economy must focus not only on expediting the finished housing production, but they must also provide greater accessibility to progressive housing solutions. In addition, the problem of improving the existing stock of houses is not merely a matter of improving tenure and sanitary conditions in informal settlements, but requires the support of the gradual improvement of the existing houses.

This is a complex challenge for housing sector reform. In addition to facilitating the operations of the markets for finished houses, it is necessary to fully incorporate into public policy programs to support the progressive process of home construction and improvement, the most common solution to the housing

problems of middle to low-income households, taking full advantage of their potential, solving their limitations and inefficiencies. Various aspects of the housing sector operation gain importance by adopting this perspective. Those worth mentioning include: (a) access to affordable residential land under secure land tenure or full property; the progressive provision of basic sanitation, roads, public lighting and urban services to residential land subdivisions affordable to these households, (b) the production and distribution of construction materials for the gradual improvement of the homes and, (c) financing mechanisms adaptable to progressive housing and settlement development for local governments, public utilities and households.

Chile has been a pioneer in introducing enabling reforms for housing markets and has achieved significant increases in the production of new homes. Public programs have also improved the quality of the informal housing stock through neighborhood upgrading projects, while also conceiving and executing national programs in support of the progressive construction of housing benefiting low-income households. The present study prepared by Margarita Greene reviews the recent Chilean experience in the design and execution of the Progressive Housing Program initiated in 1990 and its recent evolution towards the programs: Solidarity Housing Fund (*Fondo Solidario de Vivienda*) and Dynamic Social House without Debt (*Vivienda Social Dinámica sin Deuda*). This experience confronts many of the key themes identified in the previous paragraphs and its analysis provides significant lessons for the design and execution of similar programs in other countries of the region. The study explores the evolution of the Chilean housing policies in support of the progressive construction of housing starting in the 1950s, but concentrating on the experience of the last twelve years of execution of the Progressive Housing Program. Additionally, it analyzes the operative mechanisms used, document quantitative results in terms of numbers of houses supported and the qualitative results comparing the current situation of housing subdivisions and specific homes with the initial solution received from the program.

The Division of Social Programs of the Department of Sustainable Development hopes that the publication of this study contributes to improve the design and execution of the housing policies that include housing solutions affordable to most low-income households.

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Abbreviations

CAS	Committee for Social Assistance
CASEN	National Socioeconomic Characterization Survey
CORVI	Housing Corporation
DFL2	Decree Law No. 2
DS420	Supreme Decree No 420
FSV	Solidarity Housing Fund
MINVU	Ministry of Housing and Urban Development
PAP	Popular Savings Program
ONG	Non-Governmental Organization
PET	Special Workers' Program
PMB	Neighborhood Upgrading Program
PRIS	Inter-communal Master Plan of Santiago
PRMS	Metropolitan Master Plan of Santiago
PVB	Basic Housing Program
PVP	Progressive Housing Program
RMS	Santiago Metropolitan Region
SERVIU	Housing and Urban Development Service
SUBDERE	Vice Ministry of Regional Development
UF	Unidad de Fomento (unit of account to index costs, debts, and payments) See Table 7 for US$ equivalents.
VSDsD	Dynamic Social Housing without Debt

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Introduction

This document is a part of a study of best practices on low-cost housing in Latin America and the Caribbean carried out by the Social Program Division of the Inter-American Development Bank. The final object of the study is "to determine the manner in which programs supporting the progressive construction of houses can be included in Bank-financed programs in support of the reform of the housing sector." Accordingly, an analysis of the international experience of programs supporting the different methods of building low-income household homes is useful in identifying successful factors and limitations of their dissemination in Latin America and the Caribbean.

Within this frame of reference, an analysis of the evolution of the Progressive Housing Program (PVP) of Chile identifies its achievements and problems. The Government of Chile has been executing this program – initially with support from the IADB – since 1990, now recognized as the one of earliest Latin American experiences that has supported this form of housing construction.

The study involves an analysis of the evolution of the PVP since its initiation to date (covering its objectives, methods of operation, allocation of recourses and relevant characteristics), the compilation and analysis of the housing production statistics and a qualitative analysis of the evolution of a variety of constructed housing through the PVP. The analysis ascertains the factors of success and limitations that determine the results reached to date.

Following this introduction, the document contains a chapter of general antecedents outlining the context in which the program originated and then developed. Also presented are the conditions of the country in terms of housing needs and production. The third chapter describes the program operation: its objectives, types of solutions, modalities of operation, process of submitting applications and assignment of benefits and forms of financing. The fourth chapter includes a brief report of the program from the perspective of "twelve years later," analyzing its management experience from the perspective of the quantity of solutions produced and aspects of focalization and self-help building. Likewise, a brief Study of Cases is included, which describes the visits to four PVP settlements, one year and twelve years after occupation by the beneficiaries. The fifth chapter introduces two courses of action included in the New Housing Policy of 2002, natural continuations of the PVP in its two modalities. Finally, the sixth chapter presents the conclusions that emphasize both the problematic and positive aspects of the PVP, from the perspective of transferring this experience to other countries of the Region.

The document also includes four annexes. The first presents the legal framework of the PVP in comparative form according to phase and modality; the second illustrates examples of initial condition and proposed expansion of dwellings; and the third annex presents additional statistical tables with respect to the Chilean housing needs, the housing demand, new home completion of recent years and other data of interest. The fourth annex is a map of Chile and its regions.

General Background

The demographic-territorial development of Chile during the twentieth century was characterized by a demographic explosion, a rapid process of urbanization and a significant concentration of the country's population in just a few cities. This explosion led to significant housing deficiencies: shortage of houses, overcrowding, household duplication "allegamiento" (the incorporation of married children, relatives and unrelated families into the house), land seizure and informal settlements.

Thus, from the middle of the century, social housing constituted a theme of great political and social importance, forcing the successive administrations to implement governmental programs for low-income households. Until the early 1990s, and in spite of the efforts deployed through various perspectives, courses of action and institutional arrangements, the growth of the population surpassed the annual production of houses, worsening the problem year to year.

Urban Evolution

Similar to other countries in Latin America, Chile suffered a strong demographic explosion during the twentieth century, along with a high concentration of its population settling in the larger cities. The population grew from a little more than three million to more than fifteen million at the beginning of the present century, while the concentration of the country's population in Santiago grew from 10% in 1907 to 32% by the end of the century[1] (see Picture 1 and Figure 1).

Table 1
Population of the Country and Santiago According to National Census

Año	Población País	Población Santiago	% Población Santiago/país
1907	3.231.022	332.724	10.3%
1920	3.730.235	507.296	13.6%
1930	4.287.445	696.231	16.2%
1940	5.023.539	952.075	19.0%
1952	5.932.995	1.376.584	22.8%
1960	7.641.115	1.907.378	25.0%
1970	8.884.769	2.230.895	27.4%
1982	11.275.440	3.654.760	32.4%
1992	13.348.401	4.295.593	32.1%
2002	15.116.435	4.658.687	30.1%

Source: Armijo, 2000; INE, 2003.

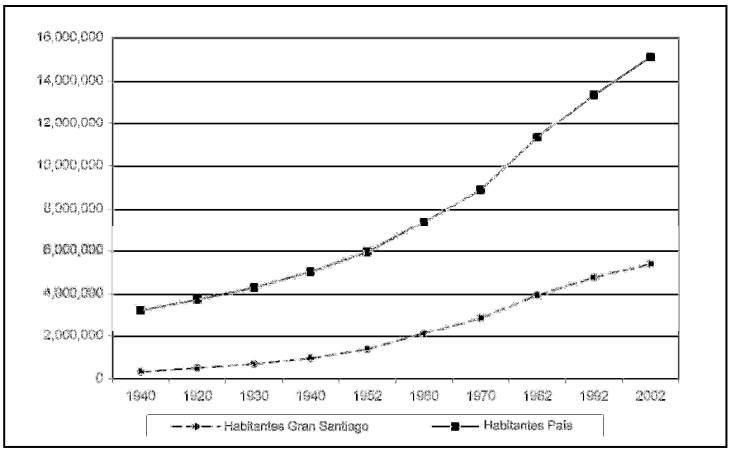
The large cities were not always capable of adequately accommodating the rural population, which arrived in search of better opportunities of employment, health and education. In the case of Santiago, during the first decades of the twentieth century, an important part of the poor immigrant population settled in the center of the city, occupying the large, old houses left by higher income households,

[1] These figures correspond to the population of the province of Santiago; considering the population of Greater Santiago (which, aside from the homonymous province, includes the communities of San Bernardo and Puente Alto) the concentration grew to 35.4% in 1992 and 35.8% in 2002, according to the data of the most recent census carried out in the country.

subdivided to receive the new inhabitants. They settled in the "cités," as well, built originally for the middle-income sector and then becoming progressively over populated.

The conditions of these houses gradually worsened and were characterized by significant overcrowding, poor sanitary conditions and, in some cases, dangerous structural conditions. At the same time, and particularly beginning in the 1950s, another portion of the poor immigrants settled informally in the periphery of the large cities, forming true rings of urban poverty and lacking infrastructure and equipment, taking on the name mushroom settlements.

Figure 1
Population of the Country and Santiago According to Census



Beginning in the middle of the last century, Chile responded to these problematic situations through the implementation of programs that incorporated self-help building and the organized community as valuable resources in satisfying the housing needs of the poorest individuals. Nevertheless, these programs were conceived as palliatives to eradicate the problematic situations –informal peripheral settlements, and unhealthy housing situations in the city center – and not as means to increase housing production starting with a minimal unit. It was not until the mid-sixties, with the Residential Sites Operation ("Operación Sitio), that the significance of progressiveness was understood as "initially modest solutions but capable of improvement in time,"[2] and this concept was incorporated in the government programs of new housing production.

Phases of Progress

Five phases are distinguishable in the Chilean housing policy history concerning progressiveness, which involves eleven progressive strategies. The Program of Progressive Housing (PVP), and more recently, the Dynamic Social Housing without Debt (VSDsD) and the Competitive Funds, incorporate characteristics of each one of the prior phases.

[2] Definition of progressive housing as given by one of the main authors of the Program of Progressive Housing (PVP) in Chile; Architect Joan MacDonald (see MacDonald, 1987).

Table 2 shows a schematic chronogram of the ten main progressive programs carried out in Chile from the middle of the 20th century. It identifies the lead administration and main institutional milestones in housing and urban development. Also recognized is the creation of the Housing Corporation (CORVI), the Ministry of Housing and Urban Development (MINVU), the Housing and Urban Development Services (SERVIUs), the legal instruments relating to the housing production and urban development (Decree Law No. 2 [DFL2] and the Inter-communal Master Plan of Santiago [PRI]).

Table 2: Chronogram of Progressiveness in Chile

	Carlos Ibáñez del Campo	Jorge Alessandri Rodriguez	Eduardo Frei Montalva	Salvador Allende Gossens	Junta Militar de Gobierno	Augusto Pinochet Iriart	Patricio Aylwin Azocar	Eduardo Frei Ruiz Tagle	Ricardo Lagos Escobar
	CORVI	PRIS DFL2	MINVU			SERVIU PNDU-DS420		PRMS	
	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963		1964 1965 1966 1967 1968 1969 1970 1971 1972 1973			1974 1975 1976 1977 1978 1979 1980 1981 1982	1983 1984 1985 1986 1987 1988 1989	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003	
Informal Settlements									
Self Building and Mutual Help									
Eradications Program									
Residential Sites Operation									
Illegal Settlements									
Household Duplication									
Neighborhood Improvement Program									
Chilean Neighborhood Program									
Progressive Housing Program									
Dynamic Social Housing without Debt									
Competitive Funds									
APPROACHES – PROGRESSIVENESS	EMERGENCY – ERADICATION		NEW SOLUTIONS			WITHOUT STATE SUPPORT	RADICATION	RADICATION + NEW SOLUTIONS	
	PHASE I		PHASE II			PHASE III	PHASE IV	PHASE V	
	WELFARE STATE					TRANSITION	ENABLING MARKETS - SUBSIDIARY		

The realization of the importance of self-help building and a focus on the eradication of problematic situations characterize the first phase, while the second phase is characterized by an understanding as of progressiveness a strategy for the production of new solutions. An abandonment of state support distinguishes the third phase and the fourth, for valuing the in situ improvement of deficient settlements. The fifth and present phase involves in situ improvements, as well as the conceptualization of progressiveness as a strategy to generate new housing solutions.

The eleven progressive strategies share a central focus on the production of "housing solutions" rather than on finished housing, and emphasize the importance of self-help activities of the dwellers to complete the housing construction. The most significant differences lie in the perception of the problem. Initially they were thought of as emergency responses to the housing and sanitation problems, whose ultimate solution was eradication. Then, they were perceived as new housing solutions, and in a third phase, this strategy was abandoned as an institutional answer. In a fourth phase it was again understood as an emergency response to a sanitary problem, yet the building efforts of the settlers were now valued – materially and socially– seeking to stabilize them in the same place. Finally, the fifth phase combines the development of a new solution for the homeless, with that of the solution in situ for the inhabitants of deficient housing settlements (see Table 3).

Table 3: Characterization of Courses of Action

		Emergency	New Solutions	Without State	In Situ Solutions
I	Informal Settlements			■	
	Self-help Building and Mutual Help	■			
	Eradication Program	■			
II	Residential Sites Operation		■		
	Illegal Settlements		■		
III	Household Duplication			■	
IV	Neighborhood Improvement Program				■
V	Progressive Housing Program		■		
	Chilean Neighborhood Program				■
	Dynamic Social Housing without Debt		■		
	Competitive Funds		■		

Phase I: Self-help Building and Eradication

In the middle of the 20th century, during the government of Carlos Ibáñez del Campo, a cooperation agreement was signed between Chile and the United States to carry out cooperative housing programs, based on the notion that the families contribute their own work to the construction of the houses. Introduced during this period was the concept of "self-help building," which refers to the method of erecting a dwelling through "one's own effort and mutual help." The texts of the period indicate that there is "mutual aid" between settlers and that it should be "assisted," requiring the help of an outside group, state, municipal or private. Within this framework, and under the patronage of the recently created Housing Corporation (CORVI), programs that focused on the allotment of urbanized land, construction materials and technical aid were initiated (Bravo 1993; Haramoto, 1983).

An example of this is the Germán Riesco Neighborhood, initiated in 1955, which housed 650 families ousted from their precarious houses on the banks of a watercourse running along the southeast part of Santiago, the Zanjón de la Aguada. Initially they were provided with lots including sanitary services, and a cement block factory was constructed to produce the materials within the community. In a second phase, through self-help building, continuous front houses were constructed, with an average size of 49 m^2 (see Figures 2 and 3).

Figure 2: Housing of the Germán Riesco Settlement.

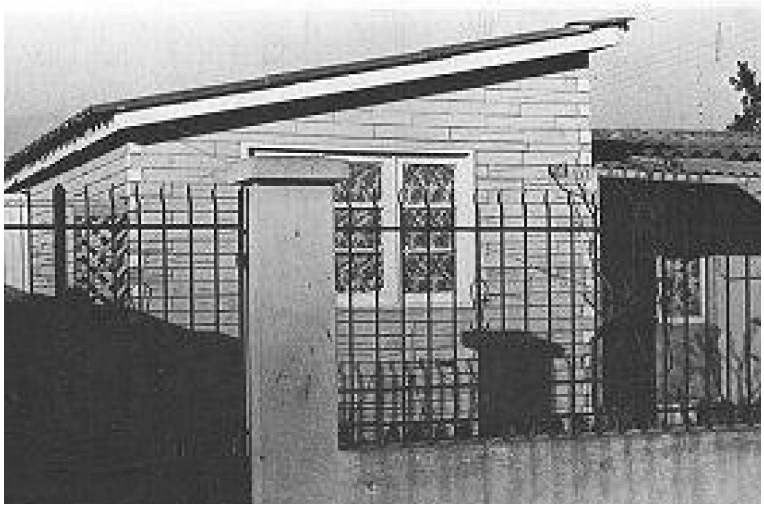
Source: Haramoto, E. (1985). En CA 41, p.71

Figure 3: Germán Riesco Settlement, Self-help Building and Mutual Aid Program

Source: Haramoto, E. (1985). En CA 41,

At the end of the 50s and beginning of the 60s, the government of Jorge Alessandri Rodríguez, reinforced the eradicating concept involved in this type of program. Under the patronage of the CORVI, the Eradication Program implemented the transfer of the population to serviced lots. Here they installed temporary houses in the back of the lots, in order to build the permanent house in the front at a later point, either through self-help building or by hiring construction companies. The CORVI coordinated the process with the Army (for transporting, temporary tents and lighting provisions), Carabineros (the national police force that maintained order and prevented the reoccupation of land), the National Health Service (emergency health services), Social Assistance Directorate (offering food during the moving days), the Ministry of Public Works - MOP (that provided schools and shelter according to necessity) and the Municipality.

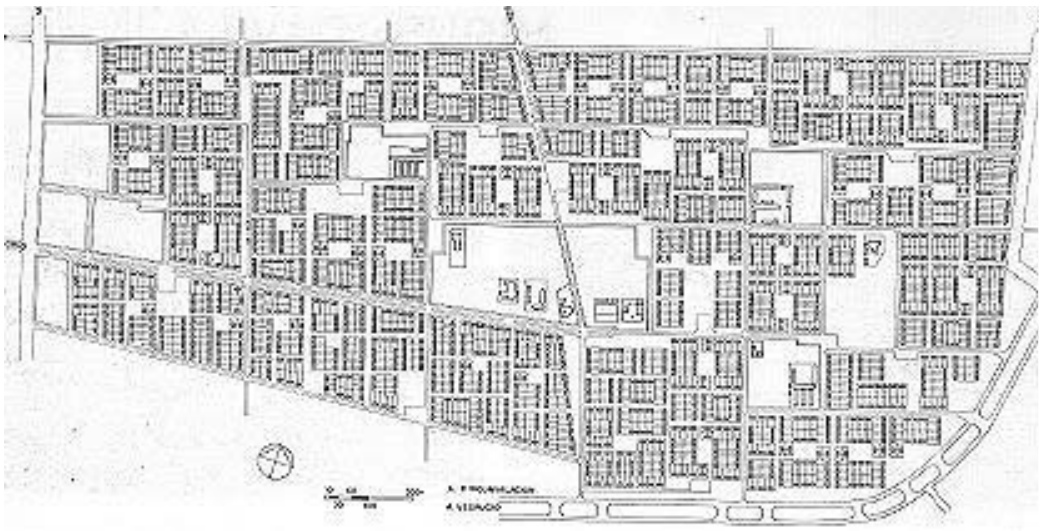
Figura 4: Vivienda en población San Gregorio



Fuente: Haramoto, E. (1985). En CA 41, pp.75

The first eradication executed by the CORVI created the San Gregorio Neighborhood, which involved 25,000 habitants of spontaneous settlements. The urbanized lots included sanitary units with bathrooms. Later, through self-help building and the participation of the housing companies, they constructed houses measuring 38 m^2 with two bedrooms, a bathroom, eat-in kitchen and a covered area for washing clothes. They used a construction system based on prefabricated wood panels. (see Figures 4 & 5).

Figure 5: San Gregorio Population, Eradication Program



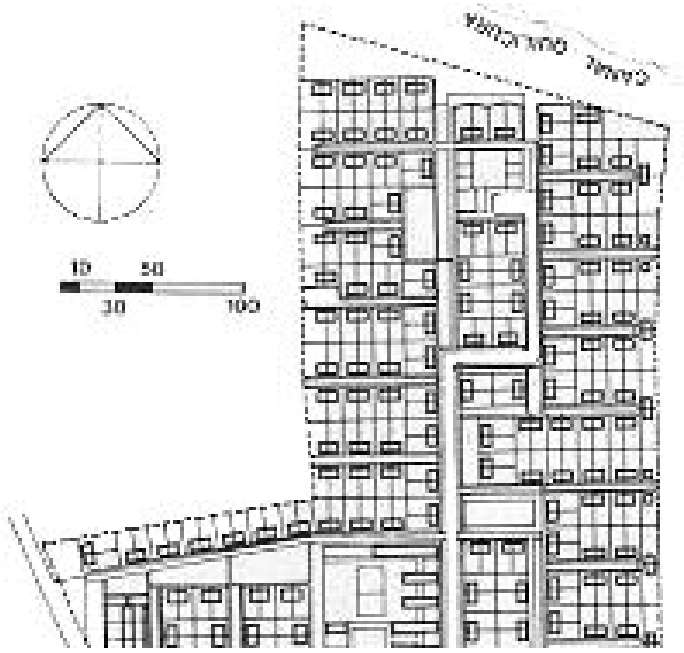
Fuente: Haramoto, E. (1985). En CA 41,

The José María Caro Neighborhood, south of Santiago, is another example of this type of operation, which included the allocation of serviced lots to eradicated populations as the first phase of definitive housing.

Phase II: New Solutions

In 1965, the government headed by Eduardo Frei Montalva, implemented the Residential Sites Operation that, although resembling the previous programs of eradication and self-help building in terms of housing solution, is a program of new housing solutions, rather than emergency or provisional. The Ministry of Housing and Urban Development (MINVU) promoted and implemented the program as the first housing option of the Popular Saving Plan (PAP). The goal was to provide single-family urban lots with basic services, urbanization infrastructure, and community facilities in order to complement the more traditional systems of new house production, and cater to the needs of the "homeless" households. This program distributed between 70,000 and 110,000 solutions throughout the municipalities of the country. This program was fundamentally different from previous programs: quantitatively, it was the largest state-sponsored program to date and qualitatively, it was considered not as a "lesser evil" rather a real possibility of initiating a progressive housing process, in both a physical and social dimension.

Figure 6: Conchalí Neighborhood, Residential Sites Operation



Fuente: Haramoto, E. (1985). En CA 41, p. 84

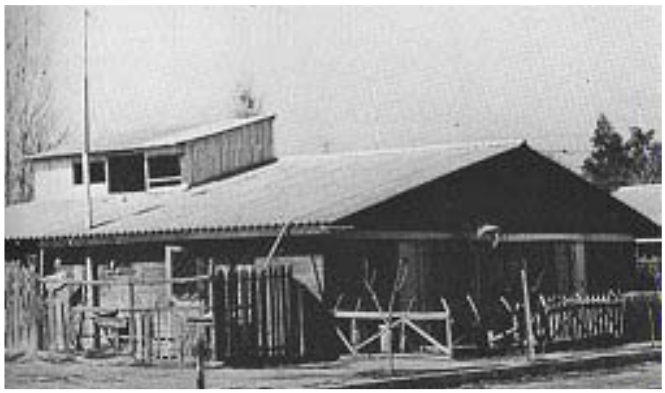
In its initial phase, the Residential Sites Operation developed single-family lots of 160 m^2, with wire mesh fences, compressed stone streets, curbs, communal water supply, electricity and lighting. In some qualified cases, for example in the Conchalí Neighborhood (see Figures 6 & 7), a prefabricated wood shelter measuring 20 m^2 was also provided. In the second phase, individual water connections and electricity meters, a sewer system, and paved sidewalks and streets were added to the initial urbanization.

Figure 7: Housing in the Conchalí Neighborhood

Source: Haramoto, E. (1985). En CA 41, p.85

In the early 70s, the socialistic government of Salvador Allende Gossens discontinued the progressive and self-help building programs promoted by prior governments. Under the predicament that the Residential Sites Operation did not comply with original conditions, as eventually the program consisted of non-urbanized land allotment[3], and that self-help building was inconvenient, the government discontinued these programs. During this period, many argued that self-help building was discriminatory against the low-income households (making the case that the resulting dwellings were lower in quality and that the laborers were exploited), and that self-help building was inefficient from an economic point of view (houses were costly and the system did not generate new jobs, doing little to reduce unemployment).

Figure 8: Housing in the Nuevo Amanecer Neighborhood



Source: Haramoto, E, (1985). En CA 41, p.93

[3] In the final years of the Site Operations, it was pejoratively called "Chalk Operation," as in some cases the land was allotted without urbanization, marking the limits with chalk on the ground.

Nevertheless, during this period, the peripheral growth of the large cities through informal settlements, named "camps," continued at a considerable rate. Although lacking formal legal endorsement, and even though the majority of the land was taken over illegally, many considered this action in the 70s as "the most important urban operation of the century" (Santa María, 1973). The MINVU created a department to manage the camps and support these housing operations. Figures 8 and 9 illustrate an example of this type of project, the Nuevo Amanecer Neighborhood supported by the CORVI in 1972.

The support given to these operations varied greatly. It included support to the community organization, design of the street layout, crushed stoned street construction, provision of temporary shelters (provisory homes measuring 18 m^2, built with wood panels, which were prefabricated and easy to assemble by the beneficiaries), the provision of water trucks to supply temporary drinking water and/or the implementation of social assistance offices. Even though the process was considered provisional, finished homes were constructed and allocated to the beneficiaries, ending up definitive in structure.

Figure 9: Nuevo Amanecer Neighborhood - Illegal Settlements Operation

Source: Haramoto. E. (1985). En CA 41. p. 92

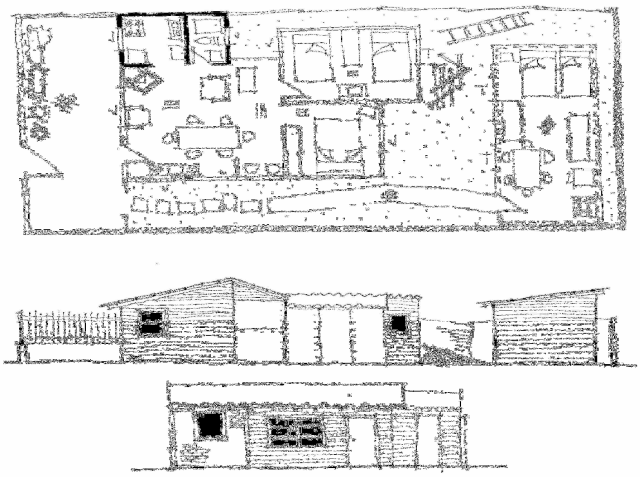
Phase III: Without State Support

In 1973, the military government abruptly stopped the process of illegal land occupation and camp formation. During the 17 years of military government, the illegal occupation of land was strictly monitored and controlled, limiting informal peripheral urban growth. During this period, the government favored the housing units constructed by the formal sector. Nevertheless, self-help building in the back of the sites satisfied the demand and promoted household duplication ("allegamiento") for the new families without access to formal solutions. Thus, the manifestations of the housing deficit changed. The old informal settlements that surrounded the cities were replaced by household duplication, as the poor families were able to accommodate the population growth within their own sites and homes.

Household duplication, a frequent and complex phenomenon in poor Latin-American sectors, occurs when more than one household is forced to share a home or site, due to the lack in housing solutions. This phenomenon, extensively studied and described, involves multiple situations, generally associated with poverty. Traditionally, it is classified either as external or internal, with the external allegamiento (site) directly relating to the housing shortage and the internal allegamiento (home) relating more directly to survival strategies of deficient social groups facing severe housing deficiencies.

In this phase, the progressive actions of the residents were fundamental in the construction of second homes on the sites, accomplished without public assistance and, in some cases, with support of non-governmental organizations. Generally, they are precarious houses constructed of wood panels without insulation, one or two rooms and no bathroom of their own, sharing one with the main house (Figure 10).

Figure 10: Lot with the Inhabited Home behind the Site (External Allegamiento)

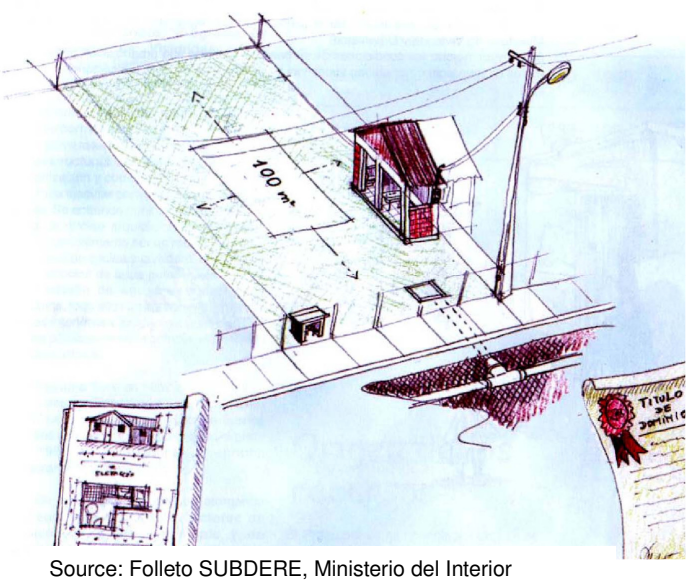


Phase IV: Radication

Due to the growth of informal settlements with deficient sanitary infrastructure surrounding the larger cities, and the health problems thus affecting the population, the implementation of a massive sanitation program was essential. In 1982, with the support of the IADB, Chile initiated the Program of Serviced Lots, later called the Sanitation Program and eventually gaining recognition as the Neighborhood Upgrading Program (PMB).

Regardless, the program was not created as nor considered a housing program; rather it was developed as a legal and sanitary upgrading program for existing substandard settlements. It usually allocates a freehold housing solution, including an urbanized lot measuring a minimum of 100 m^2 (connected to the water line, electricity and a sewer system) with a small sanitary unit including a bathroom and kitchen, measuring between 8 and 14 m^2 (see Figure 11).

Figure 11: What Did the PMB



Source: Folleto SUBDERE, Ministerio del Interior

The program, executed by the office of the Vice Minister of Regional Development (SUBDERE) at the Minister of the Interior, was implemented through the municipalities. It only financed the eradication of families when adverse geographic conditions and risks eventually made it extremely difficult for setting then 'in situ'.

Phase V: Radication and New Solutions

Finally, in the fifth phase, under the government of the Accord for Democracy of Patricio Aylwin Azocar (1990), new solutions were re-incorporated into the concept of progressiveness, while at the same time continued executing radication programs of substandard settlements. As radication continued with the PMB, the Chile-Neighborhood Program gained recognition. This program integrated interventions of various sectors with the traditional components of the neighborhood improvement programs, community facilities, employment promotion, health and educational infrastructure, social support services and, in general, significant participation of the beneficiaries. The Progressive Housing Program (PVP) implemented new solutions as part of the New Housing Policy formulated in 2002, introducing two new programs: Solidarity Housing Fund (*Fondo Solidario de Vivienda*) and the Dynamic Social House without Debt (*Vivienda Social Dinámica sin Deuda*).

Housing Deficit

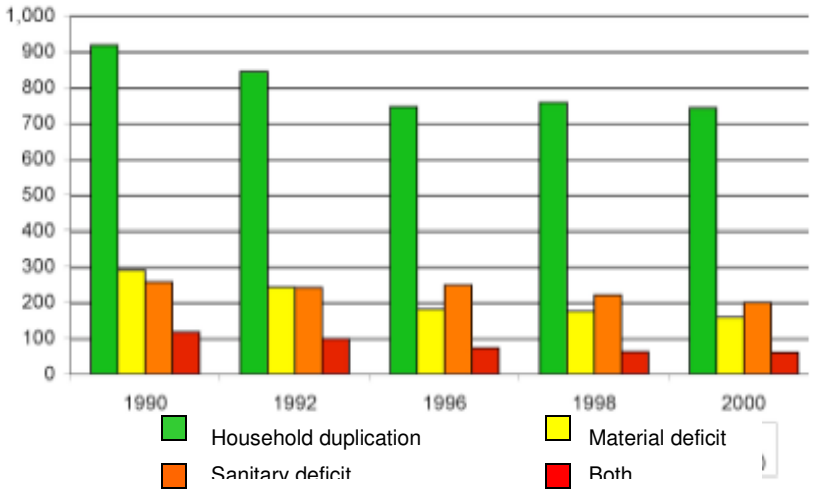
In the beginning of the 90s, according to estimations of the Ministry of Planning (MIDEPLAN, 2000), the quantitative housing deficit surpassed 900,000 units. Due to the significant restriction in creating new precarious settlements established by the military government of 1973, a large part of this deficit manifested in what was considered the most significant housing problem of the moment: the household

duplication phenomenon (MINVU / DITEC, 1993). In fact, according to the National Economic Associate Characterization survey (CASEN), housing duplication (housing a second household) affected 42.4% of the homes.

These disturbing figures, as well as the economic and political instability arising from the illegal occupation of land, prompted the government of the Accord for Democracy to implement new housing programs capable of quickly responding to the needs of the beneficiaries. The establishment of the Progressive Housing Program (PVP) enhanced the progressive housing movement and became an important addition to the array of housing programs offered through the MINVU, specifically targeting the needs of those housing a second household and those without a home.

Through the PVP and other programs initiated by the MINVU, an increase in the annual production of new housing units was achieved in the early 90s. During the next ten years, Chile experienced a significant reduction in the housing deficit, both quantitatively and qualitatively[4] (see Table 4 and Figure 12).

Figure 12: Homes Affected by Housing Deficit in the Period 1990-2000 (in thousands)



Source: CASEN Survey 2000

Table 4: Homes Affected by Housing Deficit in the Period 1990-2000 (in thousands)

	1990	1992	1996	1998	2000
Household Duplication	918.756	844.851	746.190	758.201	743.450
Material Deficit	290.340	242.603	181.451	176.274	159.469
Sanitary Deficit	257.773	241.590	248.836	221.090	200.575
Both (Material & Sanitary)	118.081	99.570	73.240	62.493	61.135

Source: CASEN Survey 2000

Note: Some homes present the qualitative and quantitative deficit equally appearing in both categories, thus making it difficult to compute the total housing deficit

[4] For a description and analysis of the Chilean housing system and politics of this period, see Rojas (2000).

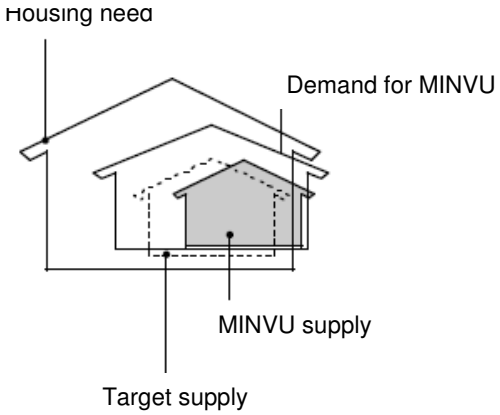
Operational Aspects of the PVP

The Supreme Decree (D.S.) 140/90 of the MINVU defines the operational aspects of the PVP, later modified through the D.S. 123/92 and the D.S. 156/96 of the MINVU. These decrees determine the different modalities of operation, focalization, types of benefits offered, financing mechanism and application requirements for each PVP modality. Annex 1 summarizes these topics.

Origin and Objectives of the Program

The government of the President Aylwin initiated the Progressive Housing Program in the early 1990s. The technical team of the Accord for Democracy organized this program as a rapid response to the significant housing deficit of the moment. Figure 13 graphically presents the housing situation and the new governmental goals of the period. The three house silhouettes, decreasing horizontally in size, depict the magnitude of the housing need, the collective demand as well as the housing solutions offered by the MINVU programs at that time. The fourth image, the segmented house, is slightly larger in size and out of phase towards the other direction, representing the new government's production goal.

Figure 13: The Housing Situation in Chile, During the Initial Stages of the PVP

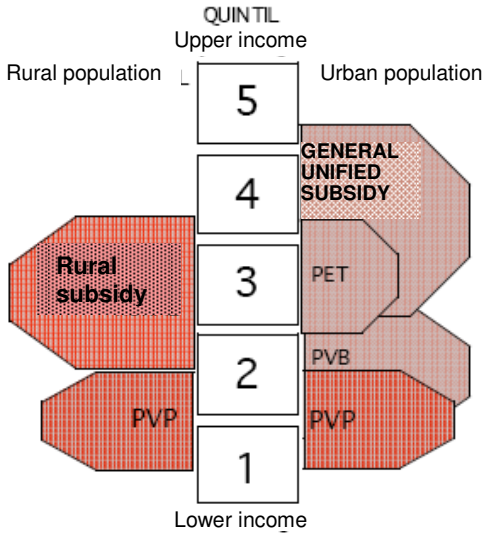


Source: Vice-Secretary Presentation MINVU, 1990

The production increase and focus on the poorest individuals, represented in the previous image by the size and off-setting of the house images, gained significant importance in the new program, the Progressive Housing Program. According to the MINVU's definition, the PVP is a "program of social housing directed towards the poorest sectors and, especially, towards families doubling up with others "*allegamiento*" (MINVU, 1990).

Again, the graphics illustrate the focus of this new line of action in the existing housing programs, targeting mainly the urban and rural poor.

Figure 14: Intersection of the PVP with the Housing Programs of t he MINVU Vice-Ministry Presentation MINVU, 1990



The PVP complemented the existing programs and aimed to satisfy most crucial housing need of the poorest families, having a healthy place to live. Families doubling up with other families and those who did not have the minimum amount of savings and credit history to qualify for a home from the Basic Housing Program of the MINVU were given special priority. Four fundamental aspects characterize this program:

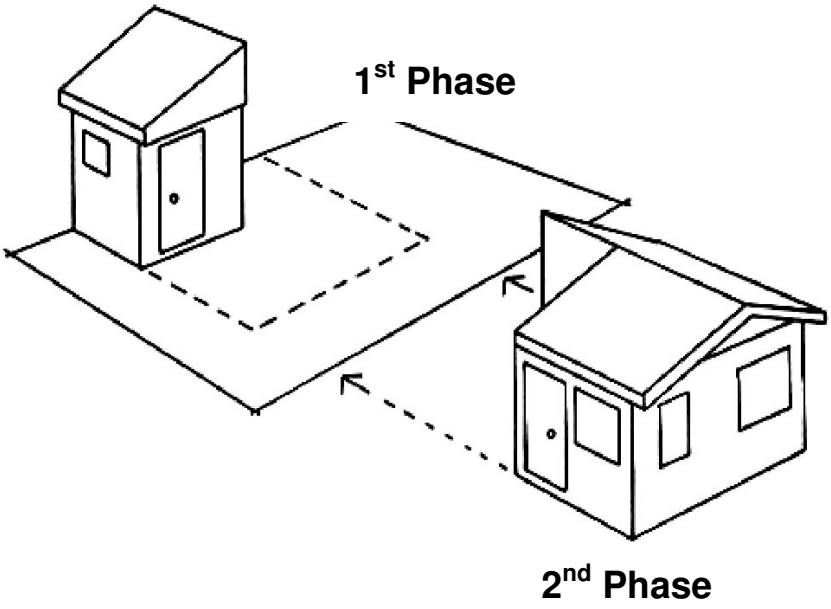
1. It explicitly incorporates the progressiveness of the housing solution.
2. It focuses on new housing solutions.
3. It considers the participation of the beneficiaries in the management and execution of the project.
4. It seeks the expertise of private agencies for technical assistance and housing construction.

Solutions

Progressive housing was designed for urban and rural households. Its construction was broken down into two phases; in the first phase, an urbanized site is allotted (with a connection to drinking water, a sewer system, electric power and streets with curbs) with ownership title and a sanitary unit, including at a minimum a kitchen, bathroom with WC, sink and shower. The second phase financed additional rooms in one or two floors. In the case of the rural households, the program contemplated the option of inverting the order of the two phases. Figure 15 depicts an image prepared by the MINVU for the dissemination handouts used when the program began. Likewise, in Figure 16, additional images exemplify the graphic and didactical components of each phase, emphasizing the progressiveness of the solution and the participation of the beneficiaries.

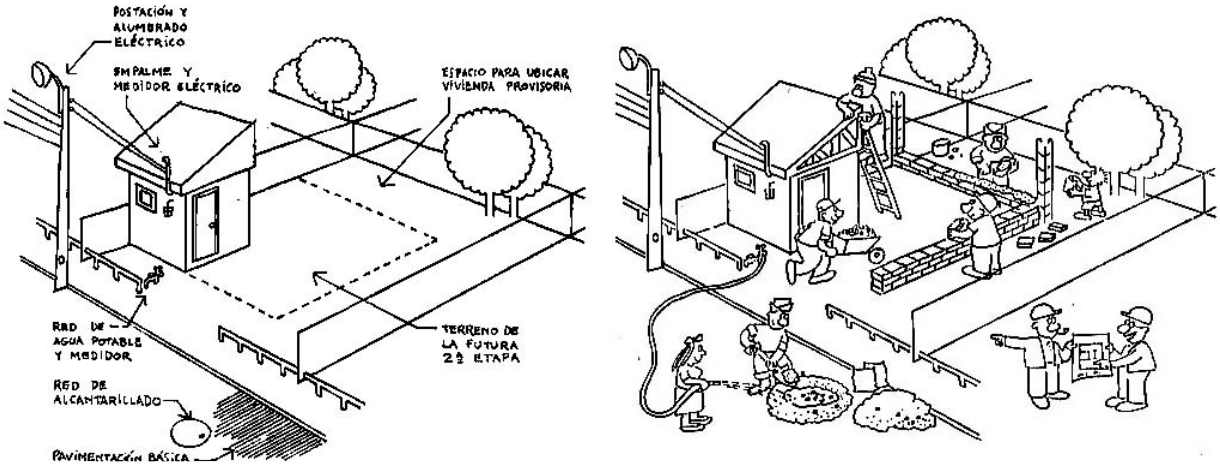
According to Chilean social housing norms, the minimal site size is 60 m^2 for two-story homes (in this case, when the proposed improvement included two floors) and 100 m^2 for one-story homes, with the front of the lot measuring at least three meters.

Figure 15: Phases of the PVP



Source: Folleto MINVU

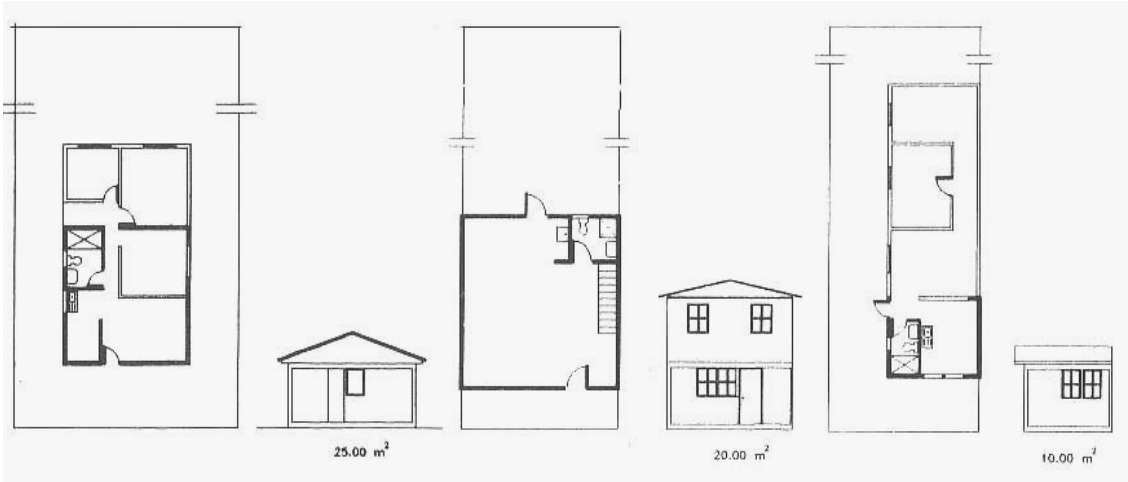
Figure 16: Two Phases of the PVP



. Source: Folleto MINVU

It is important to emphasize that progressive housing solutions did not follow one specific prototype from northern to southern Chile, but incorporated a variety of designs according to the region, operation modality and construction company or managing agency. The initial typological classification separated housing solutions into three types: detached, semi-detached and continuous facade. Figure 17 illustrates the differences in these three prototypes**.**

Figure 17: Typology of Progressive Housing



Source: MINVU, 1994

Annex 2 gives examples of initial units and of different projects of future expansion possibilities of the initial house. They range from units closely comparable to a sanitary unit, to others resembling a finished home, and include examples of solutions that insinuate a future expansion.

Modalities of Operation

The program has two modalities of operation, SERVIU and private, and both can be either individual or collective. The SERVIU modality corresponds to the traditional method of MINVU operation within the existing social housing programs after the 80s, when they implemented the system of "subsidizing the demand." The private modality corresponds to the most significant innovations proposed by the Progressive Housing Program during this time. Additionally, a third type of operation exists, introduced in March of 1994, the "lot densification".

SERVIU and Private Modalities

Within the SERVIU modality, the Housing and Urban Development Service (SERVIU) of the corresponding Region sought the expertise of the construction companies to construct the low-cost houses with minimal standards (living and urbanization standards, materiality and lot size). On the other hand, the National Registry of Applicants allocated houses according to a strict scoring system.

Within the private modality, the beneficiary, or group of beneficiaries, supplies the site (already purchased or with a purchase agreement in place), and in some cases, the architectural project as well. The SERVIU assists in financing the project, assigning resources from the subsidy program. This system requires complex management prior to the beneficiary obtaining the site: in organizing the proposals, the selection process and the final offering. This is an important role taken on by Non-Governmental Organizations (ONG). These private agents help applicants to organize themselves, secure the subsidies and obtain adequate technical assistance.

In general, the NGO concentrated its efforts on advising applicants on how to organize the joint request for subsides, offering technical support, motivating the progressive construction and improvement of the houses and assisting with the technical inspection of the sites. They even participated in the construction of some of the housing solutions. Private Foundations also supported the beneficiaries, whether financially or in the management of the projects. Certain foundations, such as the San José de La Dehesa

Foundation, offered financial support to complement the government subsidies, enabling the construction of larger, better quality homes. The "Fundación Hogar de Cristo" (Christ's Home Foundation), a private entity, offered its support by organizing the housing construction and through financial aid, which helped families to fulfill the savings requirement supplemented by the SERVIU subsidy.

Given that in the private modality the beneficiary usually already owns the site, he is able to devote a greater amount of resources to the construction of the housing solutions. To the contrary, in the case of the SERVIU modality solutions, the beneficiary must use part of the funding to purchase the land and to the urbanization infrastructure. This difference is apparent in the size of the initial unit obtained by the beneficiary, which is greater in the houses built under the private modality. As shown in Table 5 and Figure 18, the initial unit under the private modality sites ranges from 25 to 35 m^2 in area, while those built under the SERVIU modality range from 10 to 15 m^2 in area.

Table 5: Area Range According to Modality of Operation

Area Range	PVP SERVIU	PVP Private
6.0 to10 m^2	30.43%	2.17%
10.1 to 15 m^2	41.63%	11.77%
15.1 to 20 m^2	21.93%	24.57%
20.1 to 25 m^2	3.26%	6.92%
25.1 to 35 m^2	2.71%	48.58%
More than 35 m^2	0.05%	6.02%

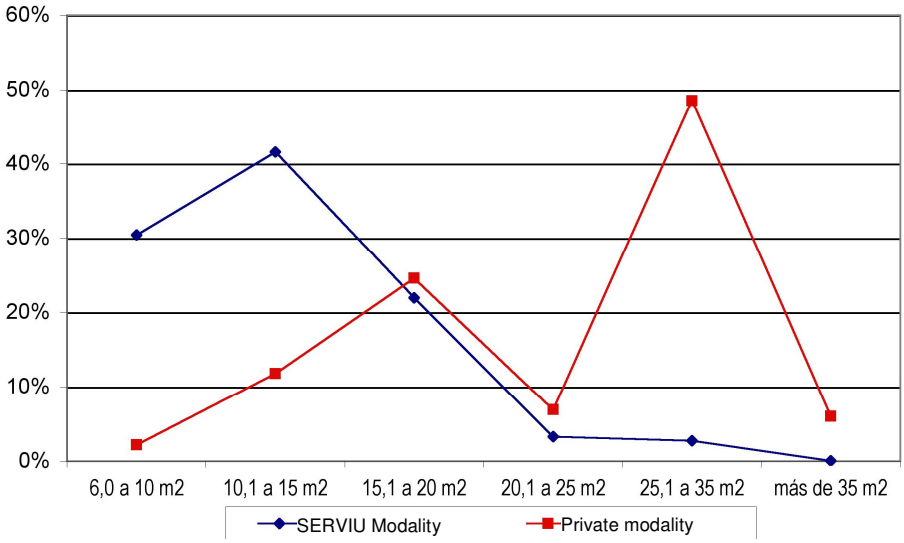
Source: MINVU, 1994

Collective and Individual Application

Aside from the two modalities of operation of the program, two application modalities exist: individual and collective. In both application methods, it is possible to choose between the two modalities of the program: SERVIU or private. The individual application includes those natural persons registered to receive a benefit in the program's eligibility evaluation system, while the collective proposal assembles cooperatives or groups of organized applicants.

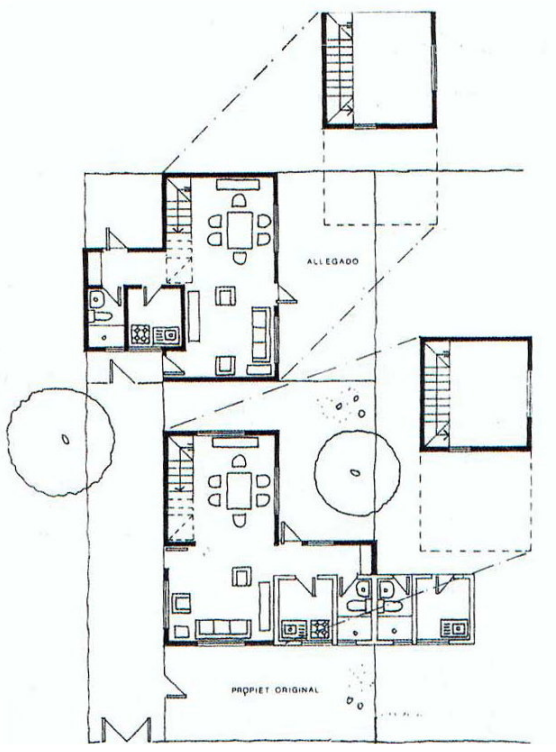
According to interviews taken amongst the beneficiaries of the program, both methods have advantages and disadvantages. Although the group proposal appears advantageous, as it strengthens community and neighborhood ties, there are cases of organizations forming solely to obtain a house, yet dismantling before receiving the benefit, further complicating the process. In some cases, according to beneficiaries interviewed in the program, the groups often dissolve during the extremely long waiting period for housing allocation.

Figure 18: Frequency of Area Range According to Modality



Source: MINVU, 1994

Figure 19: Lot Densification in Lo Hermida



Source: MINVU / DITEC (1994; p53)

Lot Densification

In March of 1994, the Progressive Housing Program, recognizing that the doubling up of households (*allegamiento*) outside the house but within the site existed in many urban areas, incorporated the Private Programs of Lot Densification into its programs. This modality aims to solve the duplicate household problem by subdividing the existing lots, creating new homes for those families doubling up.

In general, the process includes a first phase PVP for the duplicated household, with a new house built at the back of the lot, as well as a first or second phase of the PVP (depending on the degree of consolidation) for the owner of the lot. Figure 19 is an example of one of these cases.

Application and Allocation System

The program based its application and allocation system on the System of the Basic Housing Program, in force since 1984. The following are the application requirements:

a) Applicant must be a natural person, 18 or over, single or married, and not a homeowner (neither the applicant nor their spouse).
b) Applicant must have been surveyed by the social stratification system: Committee for Social Assistance Form (CAS) during the last 24 months.
c) Applicant (or spouse) must have a savings account for the house.

The applicant must indicate which progressive housing phase he/she is applying for, the application modality, and the modality of operation. As a reference, they also must indicate a preference for the site community and locality. In order to apply for the second phase, the applicant must have benefited from the first phase of the program, or be an owner of a lot with services and be up to date in loan payments. The solution assignment is based on a system of points according to the information described in the box below:

Box 1
Method of assigned points

1. Social stratification, allegamiento and housing need. This score is figured out by subtracting the score obtained by the applicant CAS assessment from 780, and including points for allegamiento and housing need determined by the MINVU. This result, once divided by six, becomes the base score.
2. Ten points are assigned for each member of the family. If the applicant is a widower or single parent, or if someone in the family is disabled, they are assigned ten additional points
3. A half of a point is given for each month the applicant has been registered in the system (including applications to other housing programs) and one point for each month they have waited beyond 48 months.
4. In the case of the SERVIU modality, they award one point and a half for each UF of accredited savings, maxing out at eight UF, which is the minimum required to be eligible. In the private modality and the lot densification modality, with site ownership, they give half a point for each UF in savings up to the amount required to be eligible, and 0.05 point for each additional UF in savings. In the second phase, they award one point for each UF of accredited savings and 0.05 point for each additional UF savings.
5. If the applicant owns the site, in the case of a request of the first private phase, they award 10 points.
6. For each accredited UF of savings contributed to the applicant by an outside company or sponsor (only in cases of private program proposals regardless of the phase), 0.3 point is given and 0.05 point is awarded for each assigned UF over 10.
7. If the applicant complies with all requirements of the proposal, they gain 50 points.
8. In the case of collective proposals, they award 0.25 point for each month the applicant has been in the process, and one point for the average permanence of the partners.

In the case of lot densification, applicants may apply jointly with the original site owners, or they may apply individually. The following possibilities are considered:

a) Land without sanitary unit: the owner and the doubling household apply to the first phase of the PVP.
b) Land with sanitary unit: the owner applies to the second phase and the doubling household to the first phase.
c) Land with consolidated housing; the individuals of doubled household apply to the first phase of the PVP.

Financing

Originally, the financing of the housing solution provided by the Progressive Housing Program was composed of three parts: a housing subsidy, the beneficiary's savings and a mortgage credit. Initially, the maximum value for each phase was 120 UF and 70 UF[5] according to the information in Table 6, with the exception of the XI Region, which, due to its severe climate, was capped at 200 UF for the First Phase. In the private modality, another exception was made for petitioners not yet owning the site, allowing a maximum of 10% of the subsidy for the purchase of the site or transfer of the deed.

Table 6: PVP Financing (in UF)

	1990-1992		1992-1996		1996-2002	
	First Phase	Second Phase	First Phase	Second Phase	First Phase	Second Phase
Accredited Savings	3	5	3	5	8[3]	5
Subsidy	100	35	120	35	132	18
SERVIU Mortgage Credit	17	30	17	30	0	47
Total	120[1]	70	140[2]	70	140	70

Note 1: In the XI Region, 200 UF was allowable in the First Phase.
Note 2: In the Province of Palena, XI and XII Region, 200 UF was allowable in the First Phase.
Note 3: 3 UF during the proposal phase and 8 UF once assigned housing.

The applicant had five to eight years in which to pay the mortgage loan, with a minimum dividend of 0.3 UF and a maximum of 20% of the total income of the beneficiary family. If the beneficiary applied to the second phase without paying the entire debt of the first phase, the PVP combined the debts.

Nevertheless, the PVP altered the financing plan twice. First, due to the difficulties of producing the first phase for a cost of less than 120 UF[6], they increased the maximum housing value in the first phase to 140 UF during the second year of execution. In addition, they increased the maximum amount for the Province of Palena and the XII Region to 200 UF (D.S. 123/92 of the MINVU).

Then, in 1994, new studies brought to light the difficulties faced by the families in paying the dividend, estimating that 37% of the beneficiaries were behind in payment and 10% considered the debt impossible to pay back (Ducci and Greene, 1994). At the same time, given the shortage of resources of the target group, setting aside a significant portion of their income to pay the debt contradicted the objective of consolidating the house. Thus, in 1996, the mortgage loans were suppressed, and the state enlarged the subsidy to 132 UF (150 UF if the applicant opted out of the second phase beforehand). In addition, they changed the minimum required savings to 8 UF (3 UF during the application phase and completing the 8 UF once the housing was assigned). At the same time, the PVP modified the financing of the second phase to include a subsidy of 18 UF, savings of 5 UF and a maximum SERVIU loan of 47 UF. They maintained the original conditions of the loan (D.S. 156/96 of the MINVU).

[5] The UF, *Unidad de Fomento*, is a unit of account indexed to the Consumer Price Index (CPI) with one month of surplus, thus reflecting the internal inflation. Table 7 provides the UF exchange rates from 1990 – 2003.
[6] The most significant deterrent in producing progressive housing at this cost ceiling was the high price of land.

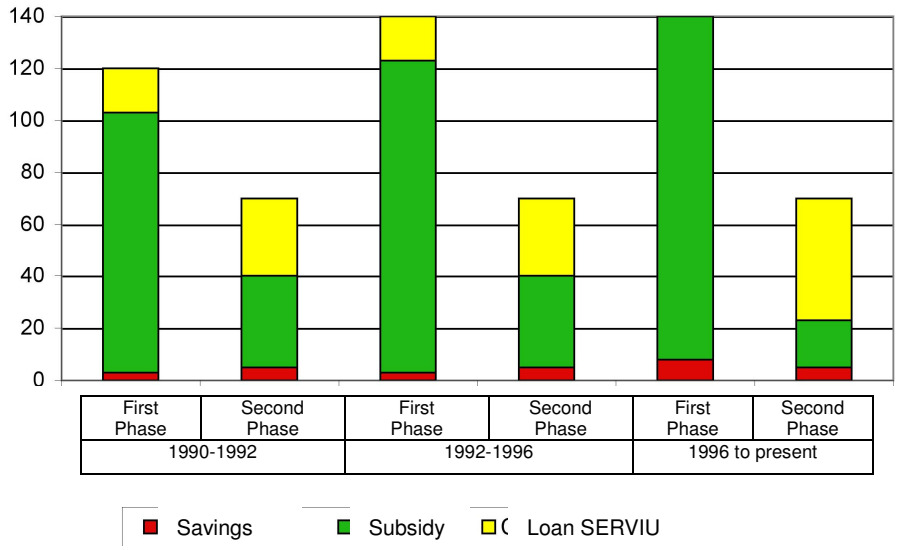
Table 7:
UF Values from 1990 - 2003

Year	UF $	USD $	USD for UF
1990	5,435.28	296.76	18.32
1991	7,045.43	337.23	20.89
1992	8,288.69	369.75	22.42
1993	9,427.79	383.93	24.56
1994	10,623.53	430.45	24.68
1995	11,535.39	405.78	28.43
1996	14,483.21	408.53	35.45
1997	13,282.14	423.79	31.34
1998	14,097.38	453.39	31.09
1999	14,685.87	475,68	30.87
2000	15,067.93	520.45	28.95
2001	15,771.44	571.12	27.61
2002	16,262.66	667.28	24.37
2003	16,743.68	722.48	23.18
2004	16,918.36	573.64	29.49

Note: The UF value corresponds to January 1st of each year and the dollar value corresponds to an average in January of each year.

Table 6 and Figure 20 show the three phases of PVP financing. The graph illustrates the increase of the housing cost assumed in 1992, the decrease of the loan requirement in the first phase after 1996 (which was significantly absorbed by the second phase) and the increase of the accredited savings requirement.

Figure 20: PVP Financing (in UF)



Twelve Years Later

In this chapter, the first twelve years of the Progressive Housing Program are examined, considering three significant aspects: the number of housing solutions delivered, beneficiary characteristics and the level of consolidation attained by the houses. Thus, the chapter begins with a brief recount of the housing solutions delivered, distinguishing them according to phase, modality and region. This review is followed by an analysis of the PVP's targeting and the extent to which it reached the most impoverished. Third, a description is made of the type of housing and urban image created by the PVP neighborhoods. Lastly, the fourth section includes a brief study of PVP settlements visited one year and twelve years after their completion.

Completed Solutions

Between 1991 and 2002, 44,774 first phase progressive housing units where constructed through the SERVIU modality and 63,634 subsidies of the first phase private modality were paid. Additionally, between 1992 and 2001, 15,150-second phase subsidies were paid, all through the private modality.

First Phases

A review of the first phase production data indicates an annual increase in home production between 1991 and 1996, with 5,800 homes completed in 1991 and then surpassing 11,500 in 1996. Smaller figures were recorded between 1997 and 1998, falling to approximately 8,000. Yet, in 1999, housing production reached 10,000 units, settling at approximately 9,000 from that point forward. Table 8 illustrates this production data, itemized by modality and region.

Table 8: First Phases Finished and Full Subsidies According to Modality and Region

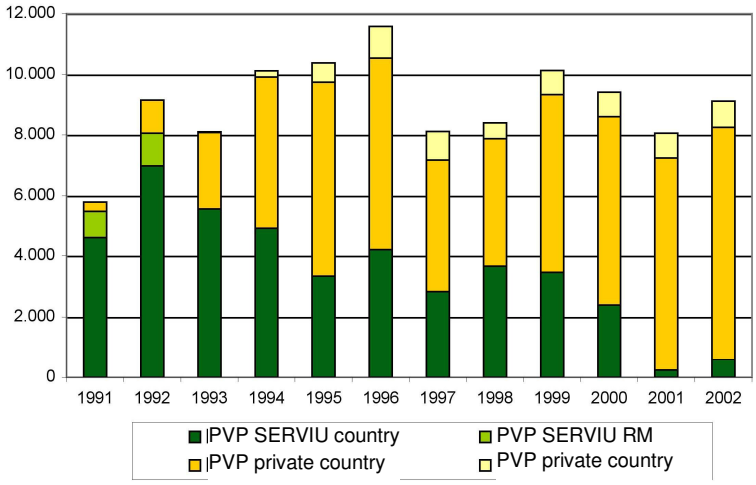
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
SERVIU country	4,596	6,986	5,577	4,935	3,343	4,207	2,829	3,669	3,459	2,394	232	588
SERVIU RM	892	1,067	0	0	0	0	0	0	0	0	0	0
Private country	313	1,116	2,502	4,989	6,413	6,340	4,342	4,204	5,891	6,197	7,011	7,652
Private RM	0	.0	17	200	626	1,031	939	523	786	836	811	895
TOTAL	5,801	9,169	8,096	10,124	10,382	11,578	8,110	8,396	10,136	9,427	8,054	9,135
SERVIU	94.6%	7.8%	68.9%	48.7%	32.2%	36.3%	34.9%	43.7%	34.1%	25.4%	2.9%	6,4%
Private	5.4%	12.2%	31.1%	51.3%	67.8%	63.7%	65.1%	56.3%	65.9%	74.6%	97.1%	93.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %	100.0 %
Country	84.6%	88.4%	99.8%	98.0%	94.0%	91.1%	88.4%	93.8%	92.2%	91.1%	89.9%	90.2%
RM	15.4%	11.6%	0.2%	2.0%	6.0%	8.9%	11.6%	6.2%	7.8%	8.9%	10.1%	9.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %	100.0 %

Source: DITEC Report, Statistical Department, MINVU

In terms of modality, the PVP incorporated the system implemented by the Progressive Housing Program in the 1980w, the SERVIU modality. In 1991, they completed more than 5,400 houses through the SERVIU modality and in 1992; production reached more than 8,000 units. However, beyond that year, SERVIU production diminished from year to year, dropping to about 3,000 annual housing solutions

between 1995 and 2000, and declining even further to 232 units in 2001, and 588 in 2002. Nevertheless, the increase in private modality production during these years compensated for this significant decrease (see Figures 21). The production level climbed slowly. In 1991, the private modality contributed to only 313 housing solutions, while in 1992, the production barely reached 1,000 homes. Yet, annual production consistently increased through 2002, surpassing 8,500 housing units.

Figure 21: Finished First Phases According to Modality and Location



Source: Based on the data of the DITEC Report, MINVU

The transition from the SERVIU modality to the private modality brought to attention a problem already manifesting in the production system of the Basic House Program. This caused a crisis in the Progressive Housing Program and generated a new modality, which later transpired to the Basic House Program.

Beginning in the 80's, the Progressive Housing Program (PVB) operated in the SERVIU modality, allowing mass production of low-cost housing throughout much of the country on sites provided by contractors and securing a satisfactory relationship between the private and public sectors. On one hand, this allowed the free competition amongst firms in the construction industry. While on the other hand, it allowed the government agencies to discontinue their participation in the complex urban land market. However, with time, and especially as well-located and easy to urbanize land became more scarce, the system lost momentum; contractors had less interest in offering land and the location and quality of land and housing worsened. This concern, initially manifested in the Basic Housing Program, later caused a crisis in the Progressive Housing Program, where the value added by the home to the initial land appraisal was insufficient.

This difficulty and the participatory philosophy of the Government of the Alliance for Democracy gave rise to the private modality, which gained significance not only in the social housing production, but also in other governmental social programs. In fact, the New Housing Policy initiated in 2002 validated this modality under the title Competitive Funds for Solidarity Housing Projects, defining it as "a new MINVU housing program designed to produce housing solution to families living below the line of poverty."

Another important characteristic of the first phase of progressive housing production directly related to the previous discussion is the distribution among regions of the solutions. In contrast to the Basic Housing Program, the Progressive Housing Program constructed mainly outside of the Metropolitan Region of Santiago (RMS). In fact, the first phase production of the RM had little significance, gaining some preeminence in 1991 and 1992, when they built nearly 1000 homes under the SERVIU modality. In 1996 and 1997, production under the private modality reached a similar level. From 1998 going forward, the first phase progressive production stabilized with an annual average production of 750 houses.

The difficulties of building mass quantities of progressive housing in the Metropolitan Region of Santiago originated with the high cost of land in Santiago. This mandated a change in house typology of the PVB: from building single-family homes in the large cities of the country to constructing apartment buildings. This option is more difficult for the PVP, relegating the Program as a feasible solution only in smaller cities with less costly land. Currently, and with considerable consistency, the PVP is the program considered more suitable for smaller cities and less populated towns.

Second Phases

The second phases have developed rather differently than the first. Noticeably, there is a significant decrease in quantities: the amount of paid subsidies did not reach 2,600, and the yearly average produced in the second phase was 1,500 (see Table 9). Figure 22 compares the annual production of first and second phases between 1991 and 2002. Additionally, it is important to emphasize that, due to the complexity involved in constructing on inhabited lots, the program operates only under the private modality.

Figure 22: Completed First and Second Phases

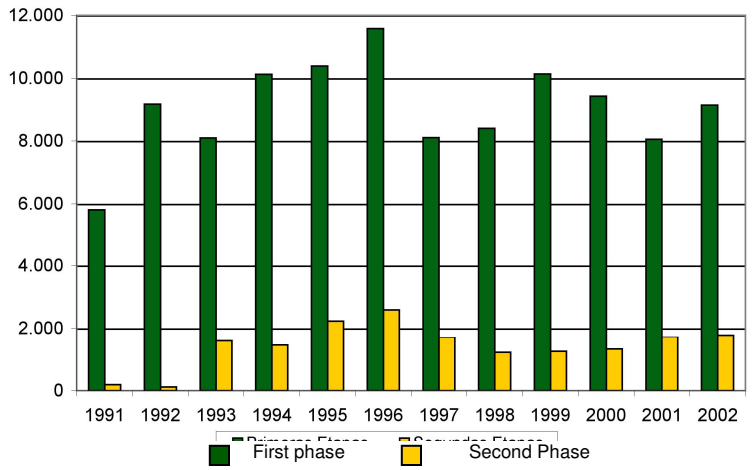


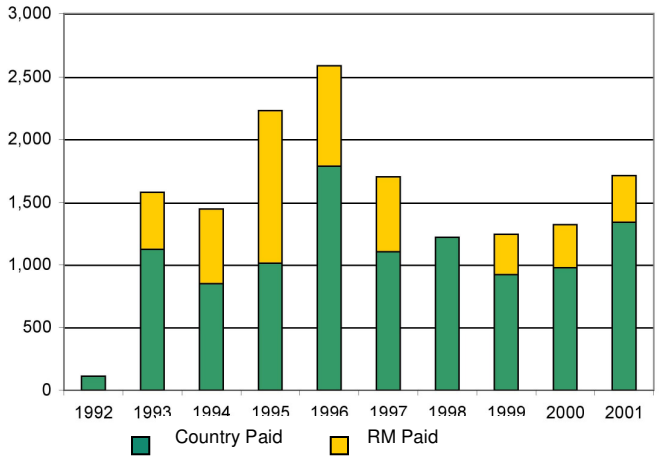
Table 9: Second Phase: Granted and Paid Subsidies According to Region

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Granted, country	865	1,788	659	1,812	1,932	1,240	2,360	1,339	1,637	1,640	15,272
Granted, RM	2,530	222	1,769	426	1,171	327	0	546	213	266	7,470
Total	3,395	2,010	2,428	2,238	3,103	1,567	2,360	1,885	1,850	1,906	22,742
Paid, country	111	1,122	848	1,012	1,788	1,103	1,217	919	975	1,337	10,432
Paid, RM	0	459	602	1,214	799	600	0	323	344	377	4,718
Total	111	1,581	1,450	2,226	2,587	1,703	1,217	1,242	1,319	1,714	15,150
Paid/granted country	12.8%	62.8%	128.7%	55.8%	92.5%	89.0%	51.6%	68.6%	59.6%	81.5%	68.3%
Paid/granted RM	0.0%	206.8%	34.0%	285.0%	68.2%	183.5%	0.0%	59.2%	161.5%	141.7%	63.2%
Paid/granted Total	3.3%	78.7%	59.7%	99.5%	83.4%	108.7%	51.6%	65.9%	71.3%	89.9%	66.6%
% paid country/ Total	100.0%	71.0%	58.5%	45.5%	69.1%	64.8%	100.0%	74.0%	73.9%	78.0%	68.9%
%paid RM / Total	0.0%	29.0%	41.5%	54.5%	30.9%	35.2%	0.0%	26.0%	26.1%	22.0%	31.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

In the end, more than a natural continuation of an action plan for phases, the second phases became an exception, as they were less attractive to the beneficiaries and construction companies. This is largely a result of the 24-month wait requirement for applicants in moving from the first to second phase. Given that the initial housing solutions are habitable on a provisional level and used mainly for emergency needs, either because they are not fully enclosed or insufficient in size, within the 24-month period the applicants often engage in a construction process of their own, using materials of variable quality depending on their resources and capacities. Thus, once the family is authorized to apply to the Second Phase, their constructed home does not necessarily comply with the proposed project. Therefore, the feasibility of transitioning to the second phase "type" is less attractive to the family. In turn, not all of the families in a neighborhood apply for the Second Phase, making it difficult for the construction process to gain critical mass, causing construction and supervision costs to increase and diminishing the interest of construction companies to participate.

With respect to the distribution of the production in the country, it is important to note that it tends to diminish in the Metropolitan Region of Santiago, while remaining stable in the rest of the country (see Figure 23).

Figure 23: Second phase: Paid subsidies According to Location



Targeting

In spite of improvements in targeting of government programs over time, certain deficiencies continue to arise in reaching the target population. According to data of CASEN (2000), nearly 20% of the housing subsidies are allocated to upper middle-income households (see Table 10).

Table 10: Houses and Subsidies by Socioeconomic Level of the Population

Socioeconomic Level	1989	1990-2000
Upper Middle	38.6%	18.8%
Middle	11.2%	8.8%
Low Middle	32.7%	46.1%
Low	17.5%	23.9%

Source: CASEN 2000

Designed for the needs of the population relatively excluded from traditional social housing programs, targeting is especially important in the PVP.

The first problem in targeting has to do with the type of solution delivered. Many, including the former Housing Minister Alberto Etchegaray, whose administration initiated the program, have the opinion that "…perhaps the most realistic solution for the very poor is the Basic House Program, rather than the PVP, as the beneficiaries have less capacity to continue with its development." This viewpoint had greater significance in the initial stages of the program, when the beneficiaries were not only required to consolidate the home, but also had to pay a dividend for the initial loan granted by the SERVIU. Realization of the problems affecting the beneficiaries led to the elimination of the loan for the first phase, replacing it with a larger subsidy and more savings. Although intended to facilitate the expansion of the houses delivered by the program, this measure did not help targeting, as the savings requirements increased, therefore excluding the very poor individuals.

On the other hand, similar to the other MINVU programs, the PVP's program operates under the assumption that the number of applicants is significantly higher than the quantity of houses delivered, thus the program was directed towards the neediest families. Nevertheless, in this case, the number of applicants decreased more than expected; especially in the second phase, (in fact only 2.5% of the population applied for subsides from the PVP).

In the progressive housing program, low enrollment is the result of the families opting for a more complete home, inducing them to save more. This manifested in a paradox: even though the process required greater savings and a longer waiting period to obtain a home, the majority of the poor and indigent groups, those mainly targeted in this program, preferred other solutions such as Basic House. In fact, many of the beneficiaries interviewed asserted that the main reason for electing the progressive housing program was the rapid delivery of the solution.

Table 11: PVP Applicants According to Socioeconomic Level

	I	II	III	IV	V
Basic Housing	32	30	22	13	3
Progressive Housing	38	26	22	12	2
Neighborhood Improvement	34	25	22	16	3
Rural Subsidy	48	25	15	9	3

Source: CASEN 1996

The targeting of the PVP varied with time. In the first program evaluation carried out in 1994, results affirmed that poor or indigent beneficiaries received approximately 84% of the allotted housing. On the other hand, CASEN 1996 established that nearly 50% of the program applicants were poor or indigent (Table 11); and in 2000, the same CASEN survey determined that participation in the progressive housing program by poor and indigent families reached 63%.

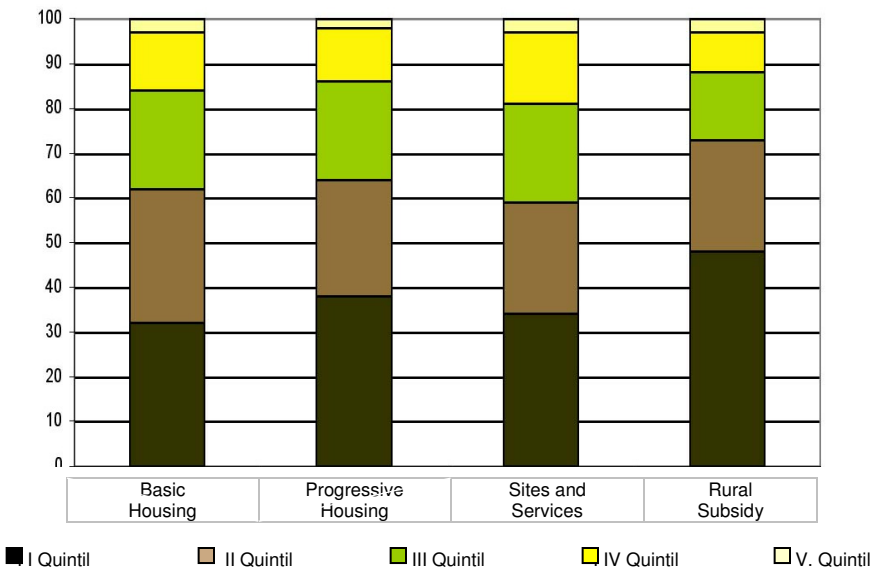
Table 12 and Figure 24 differentiate between the beneficiary population of the housing programs, intended mainly for the poorest individuals by income quintiles, affirming that the targeting of the PVP was almost identical to the Basic Housing Program targeting, with only 38% and 32% of its beneficiaries in the poorest fifth of the population.

Table 12: Beneficiary Households Based on Income Quintiles, According to the Program (in %).

		Indigent		Poor		Above Poverty	
		% Total Subsidies	% Program Total	% Total Subsidies	% Program Total	% Total subsidies	% Program Total
Urban	Stage I	9.5	17.0	11.0	41.8	3.4	41.3
	Stage II	3.0	18.2	2.6	32.3	1.2	49.5
Rural	Stage I	9.8	17.8	5.1	12.5	9.7	69.7
	Stage II	3.3	27.3	2.3	25.8	1.4	46.9

Source: CASEN 1996

Figure 24: Beneficiary Households Based on Income Quintiles, According to the Program (in %)



Source: CASEN 1996

Housing Consolidation

The most striking characteristic of the Progressive Housing Program is progressive self-help building by the beneficiaries of the program. The initial units are at least $6m^2$, with some units reaching up to $35m^2$.

Figure 25 and Table 13 illustrate the average area of initial housing units and expansions constructed by the settled population. Noticeably, the private modality homes initially have a greater average area, due

to the beneficiary participation in construction, while the SERVIU homes have a greater average area of expansion, eventually reaching the size of the private modality homes.

Table 13: Average Area According to Modality of Operation.

	Initial Area	Area Expanded	Final Area	Area per person
SERVIU Modality	12.56 m2	13.8 m2	26.39 m2	6.3
Private Modality	24.66 m2	10.1 m2	34.76 m2	8.3

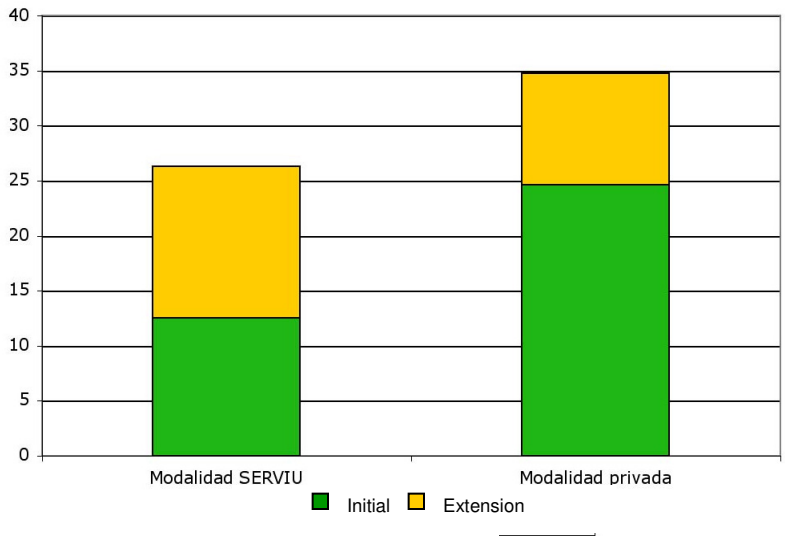
Source: Ducci y Greene, 1994

Likewise, the private modality homes usually have a greater lot size (200 m^2 compared to 60 and 100 m^2 in the SERVIU modality homes), a larger front area (8 to 12 meters compared to 3 m^2 in the SERVIU modality) and a configuration similar to semi-detached houses.

Self-building, the most unique characteristic of the program, was a commended as well as a criticized concept. On one hand, the programs permitting the beneficiaries to build and modify the dwelling unit according to their necessities were considered positive, yet on the other hand, some encountered significant difficulties in consolidating the initial solutions, especially the neediest groups such as the single-mothers and elderly households.

Another difficulty denounced by many was the lack of technical assistance provided to the owners in expanding and consolidating the final dwelling units. This caused constructive problems in the expansion of some houses, as poor quality materials were used, leading to an unstable finished unit. Thus, in a significant number of cases, the result was not as expected; units were poorly consolidated (for example the simple attachment of a prefabricated wood shelter to the PVP supplied basic unit) or not consolidated at all (inhabited in the initial unit). In response to this problematic issue, by 1995 the PVP recognized the need to establish formal technical assistance programs to help program beneficiaries, although its implementation was not free of problems.

Figure 25: Initial Average Area and Enlargement of Available Housing Services According to Modality



Source: Ducci y Greene, 1994

At the city level, low housing consolidation had a negative effect on the urban image of the settlements. The progressive housing communities appeared to promote an image of poverty and precarious living that did little for the beneficiaries or the neighboring areas. In fact, they were accused of resembling camps and informal settlements. To alter this negative reputation, some communities constructed houses with a continuous facade, hoping to portray a more homogenous, refined urban image. Nevertheless, beneficiary families received this method with skepticism, considering it an obstacle in their privacy and limiting the future growth of the dwelling unit.

The precarious image of informal self-building was worsened in those cases when projected community facilities, such as parks, social gathering sites, daycare centers, and infrastructures (such as paved sidewalks) were constructed with extremely low standards or not built at all.

Another difficulty, also on a city level, was the dilemma of where to locate the housing solutions. The PVP is a low-density solution requiring a significant amount of urban land. As the funding for land purchase was insufficient, the houses were built on clearly disadvantaged areas with low-cost land: either in the outskirts of the city, or near railroad lines, garbage dumps or other undesirable facilties that reduced the commercial value of the land. This reinforced the spatial social segregation that characterized the country's larger cities.

In general, the settlements repeated the regular gridiron pattern of most cities. In order to maximize the number of housing solutions in the available land, they were structured on the bases of narrow passages, with only certain streets that connected the settlement with the rest of the city. Examples of these configurations are the RPC and La Frontera de Puente Alto Settlements, which are part of the Case Studies in the subsequent discussion.

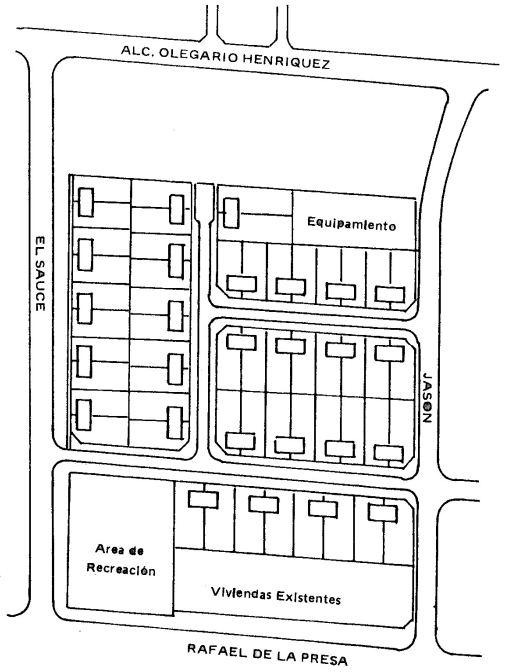
Case Studies

The study selected four PVP settlements, close to Santiago, and built in the first year of the program (1990) (see MINVU/DITEC, 1992). Three of them were part of a prior study carried out one year after the initial housing was delivered (Ducci and Greene, 1994). In this study, visits were made to the dwelling units with registered plans, in order to evaluate the success of the housing consolidation process of this period.

Llo Lleo Settlement, San Antonio

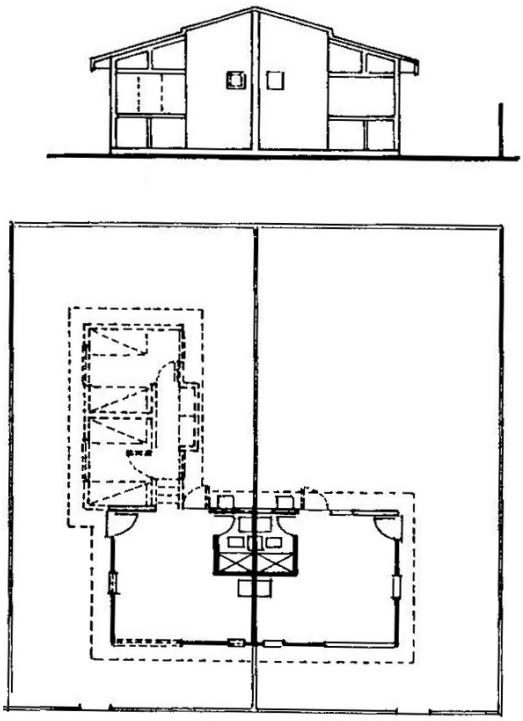
This case focused on the eradication of an illegal settlement (called "tomas") relocated to SERVIU properties, where they constructed 54 housing solutions of 19.8 m^2. Box 2 summarizes the characteristics of this settlement. Figures 26 and 27 illustrate the lot division plan and the initial housing, in which the segmented lines indicate the proposed enlargement for the second phase. It is important to emphasize the lack of practicality in this proposed expansion, positioned in the center of the site without making use of the dividing walls.

Figure 26: Settlement Plan
Llo Lleo, San Antonio



Source: MINVU / DITEC (1992; p.47)

Figure 27: Initial Endowment, ial, Población
Llo Lleo Settlement, San Antonio



Source: MINVU / DITEC (1992; p.47

The photos presented in the preceding page demonstrate the significant variety of housing situations found in settlements twelve years after the delivery of the units to the beneficiaries. Certain dwelling units were well-consolidated (Figure 28), while others were expanded with precarious materials (Figure 29) and still others were not expanded, yet modestly improved by adding a semi-attached prefabricated wood shelter to the primary unit and enclosing the lot (Figure 30). The subsequent photo gives an example of a home with medium-consolidation, expanded with wood (Figure 31), while the next photo exhibits the interior patios of the dwelling units, in which the complexity of the internal occupation of the lot is apparent, a result of the informal constructive process and the installation of doubling households in the lot (*allegamiento*) (Figure 32). The next photo presents the main street of the El Sauce community (Figure 33), with a combination of facades and diverse fences. The last photo consists of a multipurpose playing field situated in the southwest corner of the community, marked as a recreation area in the original land subdivision plan, and of the frontage of a building housing the Integra Foundation (Figure 34).

Figure 28: Consolidated House, Llo Lleo Settlement, San Antonio

Figure 29: Precarious Enlargement, Llo Lleo Settlement, San Antonio

Figura 30: Mediagua adosada a dotación, Población LloLleo, San Antonio

Figure 31: Medium Consolidation, Llo Lleo Settlement, San Antonio

Figure 32: Interior Patios, Llo Lleo Settlement, San Antonio

Figure 33: Main Street (El Sauce), Llo Lleo Settlement, San Antonio

Figure 34: Integra Foundation Neighborhood & Multipurpose Playing Field, Llo Lleo Settlement, San Antonio

Box 2:
File Summary: Llo Lleo Settlement, San Antonio

- Origin of the Community: Eradication of the illegal occupation of the Juan Aspe site.
- Socio-economic characteristic: Settlement of fishermen with unstable incomes due to erratic work opportunities. This was a group proposal of the SERVIU modality.
- Public Transportation: Microbus terminal adjacent to the community, with routes throughout the entire city.
- Residential Satisfaction: In general, the settlers considered the construction quality satisfactory.
- Residential Consolidation: Only three houses expanded by adding a second floor. The majority simply added a semi-attached, prefabricated wood shelter to the dwelling unit.
- Habitability: The majority of the houses included doubling up of households within the dwelling. The sites were small, making it difficult to build a second house towards the back of the lot.
- Equipment: They have made efforts to provide the settlement with community facilities. Currently, there are two multipurpose playing fields, the offices of the Integra Foundation, JUNJI daycare centers, two churches, a sports club, paved sidewalks and passages executed through the Participatory Pavements Program and a park with a playground.
- Contracting Table:

Number of dwellings	54	Total cost	6,480 UF
Constructed area of the unit	19.80 m^2	Settlement investment including land	6,480 UF
Total constructed area	1,069.20 m^2	Average investment	120 UF
Land Owner	SERVIU	Land value	6.06 UF/m^2

- Contracting Table:

Land area of the typical lot	162 m^2	Housing grouping	semi-detached
Typical land frontage	9 m	Height of unit	1 floor

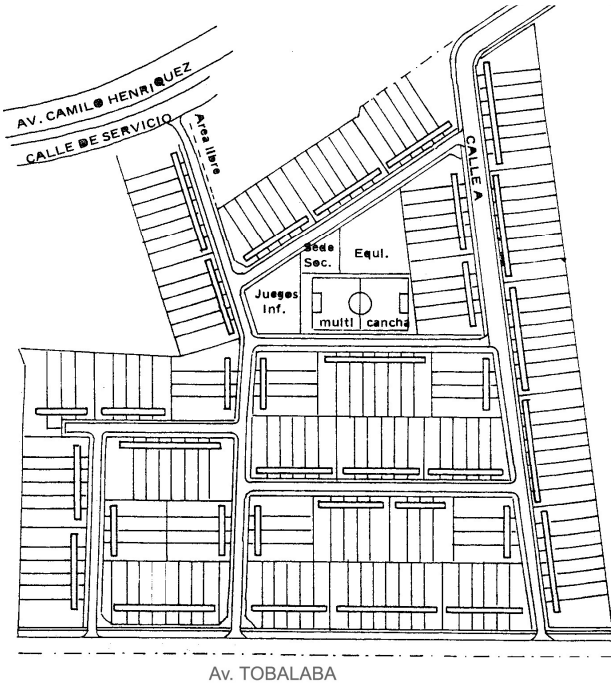
- Technical Specifications:

Foundation	concrete	Pavement	concrete
Walls	reinforced brick	Roof	fiber cement plates
Sewer system	PVC network	Water system	cooper tubing
Electricity	plastic tubes		

La Frontera Settlement, Puente Alto

The La Frontera settlement was a product of the eradication of the 1992 *Parque de Los Reyes* illegal occupation of land. The settlement consisted of 203 solutions with lots of 100 m², and one-story housing units of 11.03 m² constructed with a continuous frontage. Figure 35 illustrates the settlement plan, while figure 36 depicts the initial housing unit with proposed expansion in segmented lines. The lots offer 22.0 meters backyard space and 4.5 meters of frontage (see Box 3 for a settlement summary). The elongated front was one of the restrictions for the future growth of the dwelling, eventually leaving the house interior rooms without external light. In fact, the proposed enlargement included two bedrooms with single beds placed along the room walls, as the initial bedroom width could not surpass 2.3 meters.

Figure 35: Settlement Plan La Frontera, Puente Alto

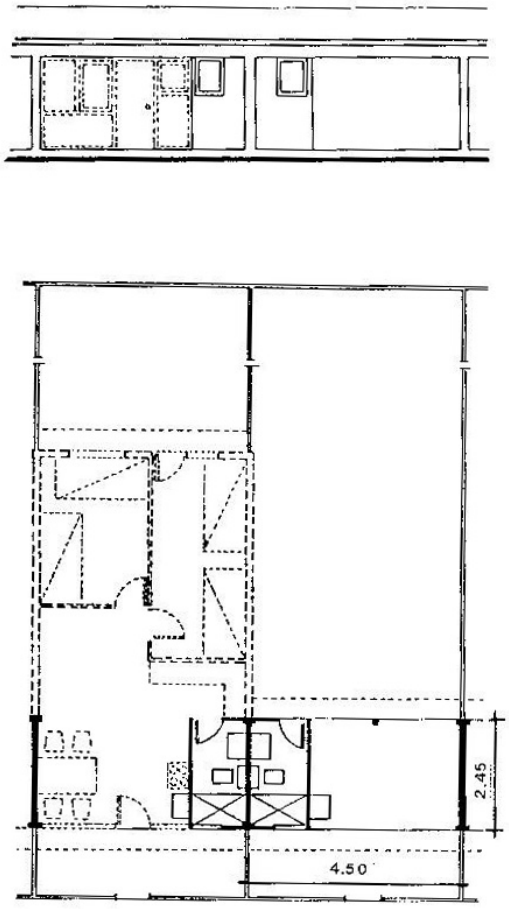


Source: MINVU / DITEC (1992; p 87)

The following figures present two houses visited twelve years after the original units were distributed, both considered exceptions as they are at the end of the block, therefore built on much wider lot sizes than other dwellings.

Figure 37 corresponds to a couple with a three-year-old daughter, in which the main source of income comes from the husband's sporadic work as construction laborer. At the time of the interview, he was working. This house has two bedrooms, a dining area and a small kitchen space constructed with rather unstable wood subdivisions without insulation. Figure 38 shows the interior kitchen space. The site also included a one room prefabricated wood shelter in which the extended family lived.

Figure 36: Initial Housing Solution, La Frontera, Puente Alto



Source: MINVU / DITEC (1992; p.87)

Figure 37: Case 2: Twelve Years after the Allotment of the Initial Housing Solution, La Frontera, Puente Alto

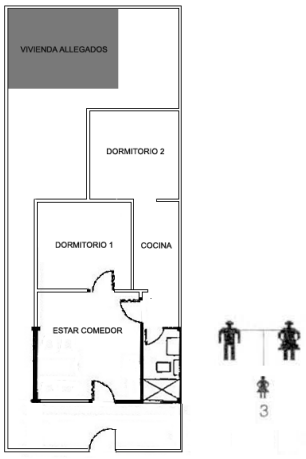


Figure 38: Precarious Interior, La Frontera, Puente Alto

Figure 39: Case 3: Twelve Years after the Allotment of the Initial Housing Solution, La Frontera, Puente Alto

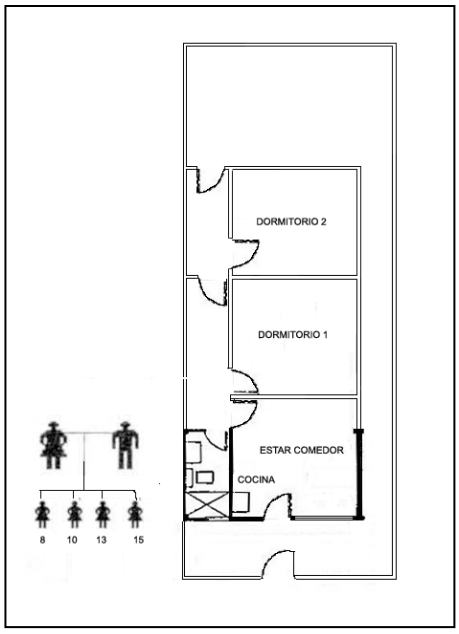
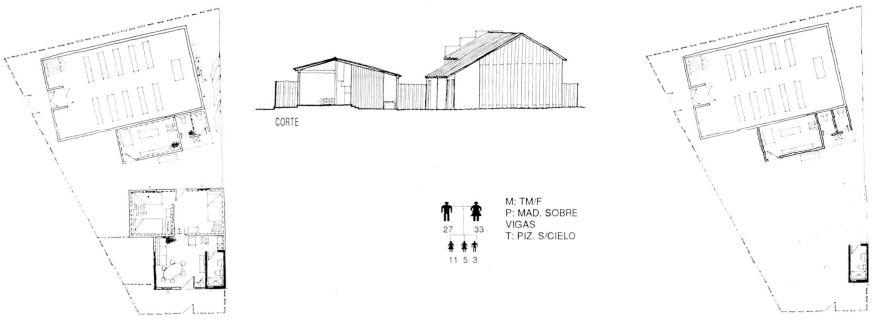


Figure 39 illustrates a unit in La Frontera visited twelve years after the delivery of the initial housing unit. It demonstrates a critical situation of over-crowding, as the unit, built for a couple and four children between the ages of 8 and 15, consists of only two bedrooms.

Figure 40 demonstrates an exceptional case. As indicated by the drawing to the left of the main image, one year after delivery of the initial housing unit, a couple of ages 27 and 33 and their three children, between the ages of 11 and 13, lived in a pre-fabricated wood shelter, without insulation, a wood floor and a roof without a ceiling. The shelter was semi-attached to the main house consisting of two bedrooms for the original applicants. Adding to the precariousness of this case, a church of significant size, built from wooden panels and a wood floor, occupied the back of the lot. Twelve years later, the family had abandoned the lot, leaving it for exclusively for church.

Figure 40: Case 1: One and Twelve Years after the Allotment Initial Housing Solution, La Frontera, Puente Alto



After 1 year

12 years after

Box 3:
File Summary: La Frontera Settlement, Puente Alto

- Origin of the Community: Eradication of the Parque de los Reyes camp in 1992. Group application.
- Socio-economic characteristic: High unemployment. In general, inhabitants worked in construction.
- Public Transportation: Microbus routes along La Florida Avenue (Camilo Henriquez) and metro bus routes to the Bellavista Station of La Florida (Stop 14). These passed through the center of the community.
- Residential Satisfaction: In general, the settlers considered the solutions satisfactory.
- Residential Consolidation: Forty-four houses changed the brick façade, twelve have second floors and ten have installed commerce or workshop. The settlers did not seek technical help in the expansions, which were typically constructed of recycled materials, including wastes. The unaided expansions led to several evident problems: joint roof and connections with the existing unit, poor insulation and other issues.
- Habitability: There was little prevalence of duplicate housing, as these families had been recently relocated to their own homes outside the settlement. The sites were small, making it difficult to build a second house at the back of the lot.
- Community facilities: Little progress has been made in building community facilities. There is a multipurpose playing field, built three years ago, a park close to the settlement, a social club and a few deserted playgrounds.
- Contracting Data:

Number of dwellings	203	Amount of the contract	23,142 UF
Constructed unitary area	11.09 m^2	Settlement investment including land	24,360 UF
Total constructed area	2,251.27 m^2	Average investment	120 UF
Land Owner	SERVIU	Land value	10.02 UF/m^2

- Contracting Table:

Typical land area	100.12 m^2	Group formation	continual
Typical land frontage	4.5 m	Height of unit	1 floor

- Technical Specifications:

Foundation	concrete	Pavement	concrete
Walls	reinforced brick	Roof	fiber cement plates
Sewer system	PVC network	Water system	PVC network
Electricity	external plastic tubes		

In general, the community's condition is marked with housing under construction and, although certain sectors consist of low-level consolidation, the beneficiaries continually promote and work towards higher levels of consolidation. Unfortunately, the lots have their back to the main street connecting the settlement with the rest of the city and public transportation circulation route, (Camilo Henriquez Avenue), projecting an unattractive exterior image of the settlement Nevertheless, this same street offers a more superior urban image when viewed from the front (which is towards the interior of the settlement).

Figure 41: Interior Street, In Front of the Community Facilities
La Frontera, Puente Alto

The deterioration of the public facilities and urban equipment in the community area is another negative aspect in La Frontera's housing program. The center of the settlement, designated for a playground, multipurpose playing field and social club in the original lot plan, was found poorly maintained (Figure 42), resembling a more an empty lot than a recreation and social center.

Figure 42: Sports Facilities, La Frontera, Puente Alto

The final pictures presented below contain an image of house that constructed a second floor (Figure 43) and an interior road ending in farmland, showing the tendencies of these settlements to be build out to the very edges of the city, practically bordering open countryside (Figure 44).

Figure 43: Two-story House La Frontera, Puente Alto

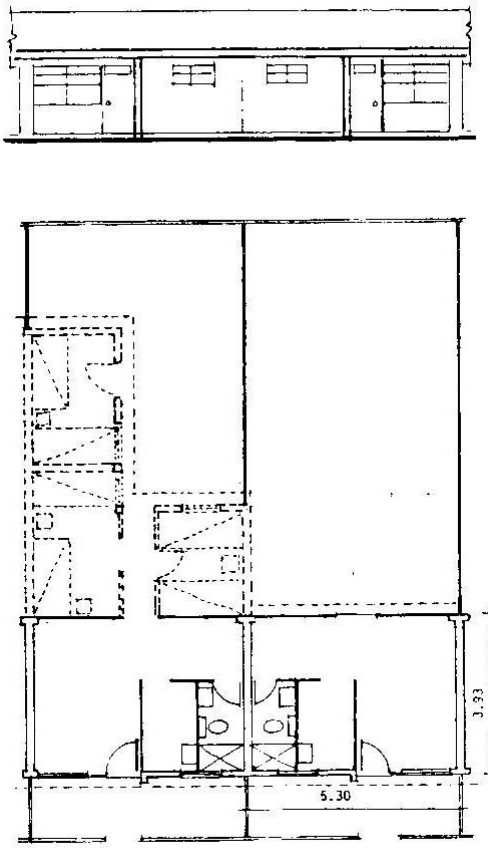
Figure 44: Interior Road, Ending in Farmland, La Frontera, Puente Alto

Settlement RPC; Con Con

The RPC settlement Con Con is arguably one of its most successful examples, since it showed high levels of consolidation and residential satisfaction from its conception. In contrast to the majority of the projects designed to help the poorest, this housing site is close to the rest of the city, rather than spatially and socially segregated, maintaining the connection to city's main urban areas and helping assimilate them with the rest of the population. In fact, basic housing communities surround the site, contributing to the successful integration of the settlement with the city, and preventing it from becoming an isolated pocket of poor families.

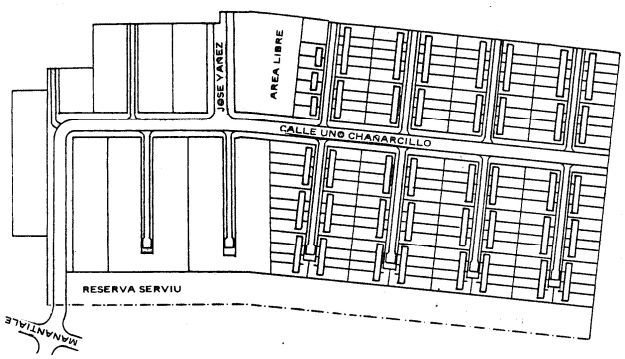
The RPC Settlement consisted of 165 housing solutions, each 20.98 m^2 with 100 m^2 of land (19.00 x 5.30 meters of frontage). Figures 45 and 46 illustrate the settlement plan and initial housing solution (see Box 4 for the file summary of the settlement).

Figure 45: Initial Housing Solution, RPC Settlement, Con Con



Source: MINVU / DITEC (1992; p.52).

Figure 46: RPC Settlement Plan, Con Con



Source: MINVU / DITEC (1992; p.52)

Figures 47 and 48 illustrate cases visited one and twelve years after delivery of the initial housing solution. Figure 47 depicts a case in which two bedrooms were constructed within the first year of inhabitance. Twelve years later, the house had the same number of rooms and constructed area, yet the materials had changed significantly. The walls, initially built of wood panels without lining, and hastily finished, were now wood panels properly insulated, lined and diligently finished.

The subsequent example, Figure 48, exemplifies a case in which the dwelling expanded towards the back of the site. After one year, the house had two bedrooms, while after twelve years it had grown to a three-bedroom house with a workshop run by the owner.

Box 4:
File Summary: RPC Settlement, Con Con

- Origin of the Community: Eradication of the 1992 San Pedro illegal occupation of lands. It was an individual application organized in committees. The homes contained bathrooms, a kitchen and a multi-use room and paved streets with sand and riprap for the sidewalks (in many cases they were not constructed).
- Socio-economic characteristic: The population worked mainly in the oil refinery of the National Oil Company (Empresa Nacional de Petroleo) in Ventanas and in tax-collection.
- Public Transportation: Microbus routes along Manantiales Avenue and Chañarcillo (through the center of the housing community), which connected with Con Con, Reñaca and Valparaíso.
- Residential Satisfaction: The people were pleased with the solutions.
- Residential Consolidation: The high level of home improvements is noteworthy. Many expanded with brick rooms. Twenty-nine houses expanded with a second floor, five expanded to include commerce space, along with selling products.
- Habitability: There were few who doubled-up with other households, as these individuals had been recently relocated.
- Community facilities: Improvements in community facilities, multipurpose playing field and community center.
- Contracting Data:

Number of dwellings	165	Amount of the contract	19,800 UF
Constructed unitary area	20.98 m^2	Settlement investment including land	19,800 UF
Total area constructed	3,461.70 m^2	Average investment	6,480 UF
Land Owner	SERVIU	Land value	5.72 UF/m^2

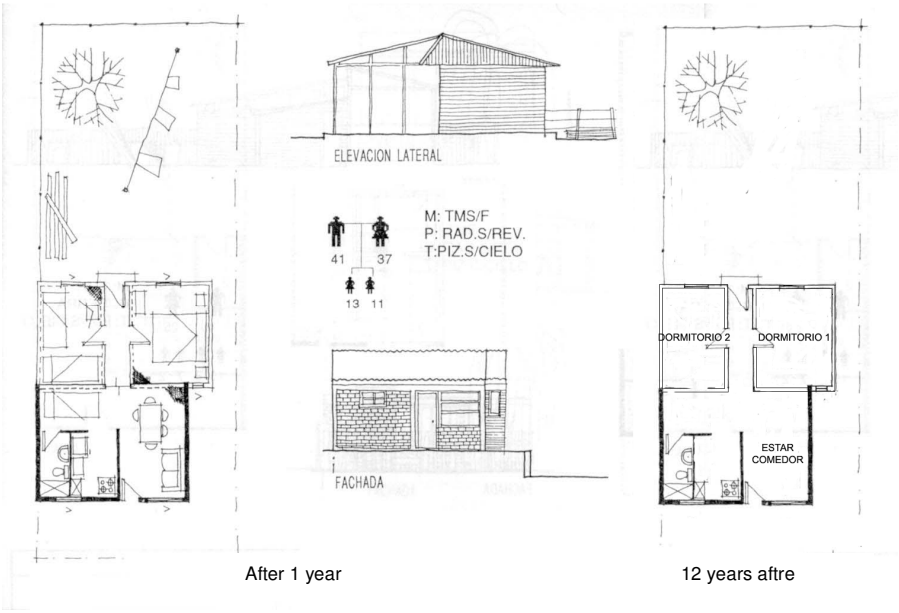
- Contracting Table:

Typical land area	100.17m^2	Group formation	semi-detached
Typical land frontage	4.5 m	Height of unit	1 floor

- Technical Specifications:

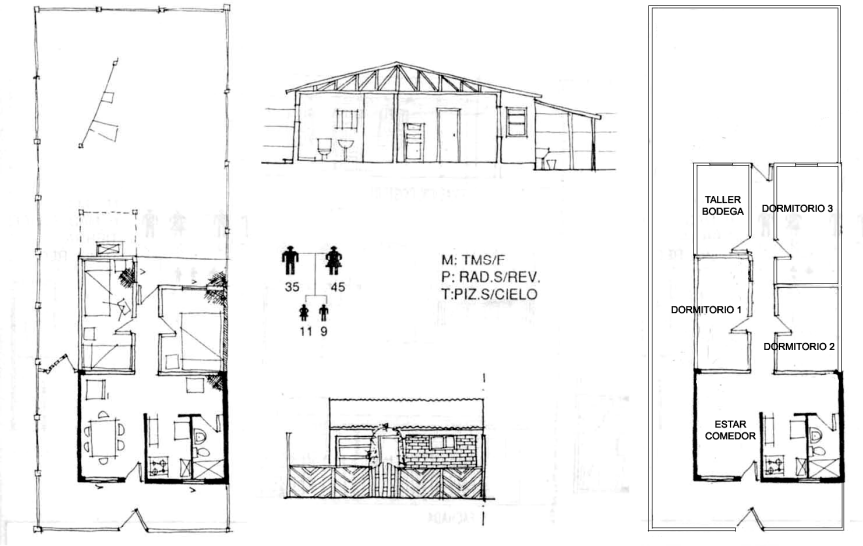
Foundation	concrete	Pavement	concrete
Walls	reinforced brick	Roof	fiber cement plates
Partitions	wood	Sewer System	red PVC
Electricity	external plastic tubes	Water System	PVC net

Figure 47: Case 4: One and Twelve Years after the Allotment of the Initial Housing Solution. RPC Settlement, Con Con



After 1 year 12 years aftre

Figure 48: Case 5: One and Twelve Years after Delivery of the Initial Housing Unit, RPC Settlement, Con Con



The following pictures show cases of significant consolidation, Figure 49 in particular. Figure 50 depicts a typical neighborhood street, while Figures 51 and 52 depict two typical dead-end streets. The final three photos present a view of the varied topography surrounding the settlement, with a view towards the west border in Figure 53, towards the south in Figure 54 and towards the east in Figure 55.

Figure 49: Consolidated Home RPC Settlement, Con Con

Figure 50: Neighborhood Life RPC Settlement, Con Con

Figure 51: Typical Interior Dead-end Street, RPC Settlement, Con Con

Figure 52: A Typical Street RPC Settlement, Con Con

Figure 53: West Border, RPC Settlement, Con Con

Figure 54: South Border, RPC Settlement, Con Con

Figure 55: East Border, RPC Settlement, Con Con

Moreira Castillo Settlement, Paine

The Moreira Castillo Settlement involves 158 housing solutions, each measuring 12.94 m^2 with 100 m^2 lots. In contrast to the previous settlements, each lot has a greater frontal area measuring 7.0 meters, with the back area measuring 14.3 meters. Figures 56 and 57 illustrate the initial plan of the housing units delivered to the beneficiaries in this settlement.

In Moreira Castillo a greater level of consolidation is apparent in the streets connecting with the city and significant deterioration and less consolidation at the borders, particularly the border facing O'Higgins Avenue, where the local train passes. A sufficient level of consolidation is visible in the center of the settlement, along Buin Street, although decreasing around the border. The south and east borders, where the canal runs, are the poorest and more precarious. The open space planned for playgrounds, multipurpose playing field and social gathering areas, has deteriorated due to poor maintenance (see Box 5 for settlement summary).

The subsequent figures show two lots visited one and twelve years after delivery of the initial housing solution in which the beneficiaries made material rather than spatial improvements. Figure 58 illustrates a home built initially of wood panels and dirt floor, later reinforced with stuccowork, brick walls and concrete flooring. The house shown in Figure 59 already had brick walls when initially delivered, yet improved its facade, installed a new bathroom and dining room windows and replaced the wood shutters with proper windows. They had also changed the fence and built a roof to protect the entrance to house, yet they did not expand the built area.

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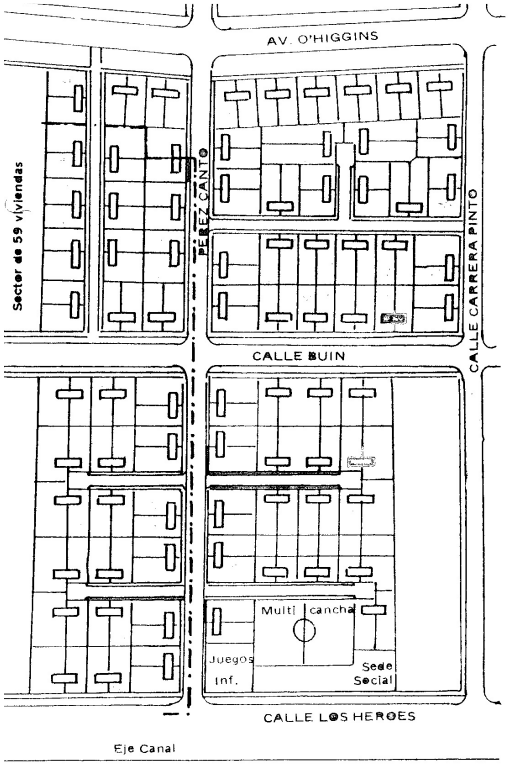
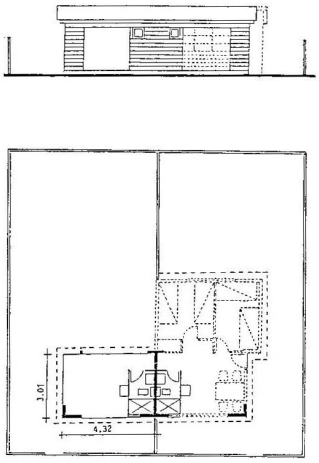
Figure 56: Settlement Plan, Moreira Castillo, Paine.



Source: MINVU / DITEC (1992; p.86)

Figure 57: Initial Housing Solution, Moreira Castillo Settlement, Paine



Sourcee: MINVU / DITEC (1992; p.86)

Figure 58: Case 6: One and Twelve Years after Delivery, Moreira Castillo Settlement Paine

Figure 59: Case 7: **One and Twelve Years after Delivery, Moreira Castillo Settlement Paine**

Box 5:
File Summary: Moreira Castillo, Paine

- Origin of the Community: Individual applications. Beneficiaries came from the illegal land occupations in the area. They did not build the second phase of the settlement, thus the roads have no continuity and end in a pasture ground.
- Public Transportation: The microbus routes pass through the perimeter street, connecting the settlement with the center of Paine, Buin and San Bernardo.
- Residential Consolidation: Twenty-two houses were expanded to include a second floor and eighty-two were initially constructed with brick. Four homes installed commerce.
- Community facilities: There has not been an overall improvement in this area. They have not constructed a multipurpose playing field or a park, and the streets remain unpaved. The settlement does have a community center built of wood panels.
- Other aspects: Although the sector is described as quiet, it has problems with delinquent minors.
- Contracting Data:

Number of dwellings	158	Amount of the contract	19,800 UF
Constructed unitary area	13.00 m^2	Settlement investment including land	19,800 UF
Total area constructed	2,054 m^2	Average investment	6,480 UF
Land Owner	SERVIU	Land value	5.72 UF/m^2

- Contracting Table:

Typical land area	100 m^2	Group formation	semi-detached
Typical land frontage	7 m	Height of unit	1 floor

- Technical Specifications:

Foundation	concrete	Pavement	concrete
Walls	reinforced brick	Roof	fiber cement plates
Partitions	wood	Sewer System	PVC net
Electricity	exterior plastic tubes	Water system	PVC net

The following photos present consolidated dwellings and a general view of the settlement twelve years after delivery of the initial housing solutions. Figure 60 shows a two-story house, Figure 61 shows a look at an interior road and Figure 62 is a view of the settlement in its whole, from the plaza. Figure 63 gives an example of a well-consolidated sector. Figure 64 is a photo taken of a road which dead ends in the shrubs with the pastures stretching out in the distance. Figure 65 shows dwellings in front of the canal, with dirt roads and paved sidewalks.

Figure 60: Two-story Home, Moreira Castillo Settlement, Paine

Figure 61: Interior Road, Moreira Castillo Settlement, Paine

Figure 62: View of the Settlement from the Square, Moreira Castillo Settlement, Paine

Figure 63: Well-consolidated Homes, Moreira Castillo Settlement, Paine

Figure 64: Street Ending in Shrubs, Moreira Castillo Settlement, Paine

Figure 65: Homes In Front of the Canal with Dirt Road, Moreira Castillo Settlement, Paine

New Housing Policy

After 2002, The Ministry of Housing and Urban Planning introduced the New Housing Policy. It is comprised of four programs focused on the low-income population: one for the poor and middle-income groups, and three for the emerging middle-income groups (Table 14).

Table 14: New Housing Policy 2002

Directed Towards	Programs
Low-Income Population	Competitive Funds for Solidarity Housing Projects Dynamic Social Housing without Debt The Chile Neighborhood Program Rural Subsidies
Low and Middle-Income	New Basic Housing
Emerging Middle-Income	Unified subsidy Subsidy of Urban Renewal or Zones of Priority Development Subsidy to the Hereditary Rehabilitation

It is important to emphasize that the four programs designed to help the households with the scarcest recourses are clearly progressive. In fact, is feasible to associate the Dynamic Social Housing without Debt (VSDsD) with the SERVIU Progressive Housing modality and the Competitive Funds for Solidarity Projects (FCVS) with the Progressive Housing private modality. Going back to the categories initially established in this document (Table 3), these two programs consist of new urban solutions, while the Chile Neighborhood Program focuses on radication of substandard settlements. All three programs make up the basis of the government's support for the neediest sectors of the Chilean society.

Solidarity Housing Fund

The Solidarity Housing Fund (FSV) is a program designed to provide housing solutions to families below the poverty line who have not been granted a housing subsidy in the past. In addition, they must have participated in previously organized groups and be registered with the SERVIU. The program will not consider individual applications.

The program provides a subsidy that, combined with the applicant's savings to finance the construction of one or more of the following housing solutions:

- A new dwelling consisting of a living and dining room, kitchen, bathroom and one bedroom.
- Land densification (construction of another dwelling on one lot).
- House construction on the same lot where families reside.
- Acquisition and improvement of existing homes.
- Acquisition and rehabilitation of dwellings in "cites" (old inner-city minimum houses for low-income households).
- Acquisition, rehabilitation and subdivision of old buildings, later converting them to homes.
- Other comparable solutions.

Parks and community facilities often complement these solutions, significantly improving the conditions of the neighborhood. Along with the subsidy, the program provided technical assistance for the contracting and execution of the projects.

Financing and Application

The maximum subsidy granted to each family in the group is 280 UF (except in the XI and XII Region communities of the Palena province and Isla de Pascua, where the program allows larger subsidies), of which the family can utilize 180 UF to finance the construction of the dwelling, and 120 UF for land development.

In order to participate in this program, applicants must register with the SERVIU's Integrated Registry of Applicants (Registro Unico de Inscritos). The program allows each family one inscription in the Registry (the head of household, the spouse or live-in partner, in accordance with the valid CAS social evaluation form). Single individuals (one-person households) over the age of 60 may participate, as well as disabled and indigenous individuals. Individual households cannot surpass 30% of the total families in the group.

For group applications, the group must have a minimum of 10 families (with the exception of cites projects and old buildings). Groups must be sponsored by non-profit accredited organizations (such as municipalities, foundations, corporations, co-ops and technical assistance service providers registered at the MINVU's Consultants Registry, along with the regional SERVIU). Sponsoring entities are responsible for organizing the groups, preparing the projects and negotiating the permits and approvals. In addition, they are responsible for presenting the groups and projects to the regional committees and administering the savings plan fulfillment.

Project Selection

The criteria for the selection process include the following:

1. Group vulnerability: percentage of single-parent households, families with disabled members, families with terminally ill members, families with adults over 60 and/or children less than 15.
2. Social eligibility according to the Local Plan of Social Action.
3. Poverty condition reflected in the CAS score.
4. Lower average subsidy requested.
5. Greater average third party contribution.

The regional SERVIU assigns no less than five points for each of these five criteria, with a maximum of 100 points. The project with the highest score for each Region gets the maximum score possible while the project with the lowest qualification receives zero points. The projects with intermediate scores receive scores in a lineal relation to both extremes.

Added to the total score from the selection is:

1. Points assigned by the Jury.
2. Additional points (a maximum of 20) for feasible projects not selected in previous calls.

Projects are selected strictly according to score, with projects that have Certificate of Final Prequalification given first priority. If resources allow, more projects are selected from the remaining projects, with Conditional Certificates of Prequalification given by SERVIU from those included in the Project Bank (Banco de Proyectos).

The Regional Jury is presided over by the Governor of the Region (Intendente) and is comprised of the Regional Secretary of the Ministry of Housing and Urban Development, the Director of the SERVIU, the Regional Secretary of the Ministry of Planning, a representative of the Regional Chapter of the Association of Municipalities and a Regional Counselor.

The Solution

The projects must be incorporated within the Project Bank of the Competitive Funds for Solidarity Housing Projects and must have the approval of the Municipal Planning Office along with the feasibility study for the basic urbanization (potable water, sewer system, electricity). Furthermore, the proposed neighborhoods must comply with the minimum facilities standards described in Table 15.

Table 15: Facility Requirements Competitive Funds Projects

No. of Dwellings	Minimum Facility Units
30 to 70	Playground - 200 m^2 Recreational Sports Facility - 80 m^2.
71 to 200	Playground - 400 m^2 Recreational Sports Facility - 200 m^2 Multipurpose Room - 120 m^2.
201 to 300	Playground - 800 m^2 Multipurpose playing field - 600 m^2 y Multipurpose Room - 120 m^2. .
	For one or two-story dwellings, the construction permit should account for future expansion, reaching a final constructed area of no less than 50 m^2

In addition to the subsidy, they provide a maximum technical assistance of 10 UF per family for construction contracting and supervision. Through 2005, the Competitive Fund had granted approximately 30,000 subsidies and a little more than 7,000 were paid. (see Table 16).

Table 16: Paid and Granted Subsidies of Competitive Funds

	Granted Subsidies	Paid Subsidies
2001	2,200	0
2002	7,646	1,080
2003	19,118	6,244

Dynamic Social Housing without Debt

The Dynamic Social Housing without Debt (VSDsD) program benefits applicants who are unable to obtain credit from the financial companies, with a CAS score of 543 points or less (which can vary). In collective applications, this limit corresponds to the group's average CAS score. The objective of this housing solution is to combine quality and quantity. Meaning that, there is a significantly smaller unit allotted and it must be complemented by the efforts of the beneficiary families. However, according to the government "the quality will be at least equivalent to that of the dwellings provided by the existing Basic Housing Program".

Financing and Application

This program offers a maximum subsidy of 280 UF (with a maximum subsidy for the construction of 180 UF and a maximum subsidy for land and urbanization of 120 UF). The maximum price of the dwelling is 300 UF and the minimum savings requirement to apply is 10 UF.

In order to participate in the application process, interested families must be registered with the Registry of the SERVIU and have a valid CAS assessment. They must not own a dwelling at the time, or have previously benefited from housing program or subsidy provided by the State or the Municipalities. In addition, they must have the minimum required savings amount (10 UF).

Project Selection

Points are given according to the following:

1. CAS II Assessment, evaluating the social stratification, "allegamiento" (duplicate household situation), and housing need.
2. Family groups:
   - For each members of the family group.
   - For single parents, widowed or divorced, with dependent children or other dependents of the applicant.
   - If, on top of the previous criteria, one or more of the children are younger than 15 years old.
   - For the applicant, their spouse or any member of the family group who is registered with the National Registry of the Disabled.
3. Length of time in the application process.
4. Required savings amount.
5. Applicant's habilitations.
6. Collective proposal.
   - For each calendar month that the application has been in process.
   - For each month of continuance or average waiting time of others within the group.

Solution

The Dynamic Social Housing without Debt program allocates a dwelling of approximately 25 m^2, with a minimum growth potential of 50m^2 incorporated into the design, to be constructed at a future time through the efforts of the beneficiary family or through organized neighborhood help. The dynamic housing is built in communities of 300 units or less, depending on the case, with sub-developments growing to no more than 60 units with community facilities. Through the present, the program has contracted close to 14,000 solutions and completed approximately 3,600 units (see Table 17).

Table 17: VSDsD: Contracted and Completed through March 2004

	VSDsD: Contracted	VSDsD: Completed
2002	6,510	0
2003	6,886	3,659

Conclusions

The Progressive Housing Program (PVP) evaluation and analysis made it clear that the concept of progressiveness had been integrated in the Chilean housing policy for more than half a century. Until the mid-sixties, most considered progressiveness as the integration of self-help home building with the government line of action in housing, and it was generally used as a strategy for solving sanitary problems in informal settlements. Moreover, many viewed progressiveness as a methodology of settlement eradication. Between 1964 and 1970, the Operation Site emerged as the forerunner to the Progressive Housing Program, already incorporating progressiveness as a new housing production strategy.

The Neighborhood Improvement Program (PMB), introduced in Chile in 1982, is another significant experience incorporated in the present progressive housing programs, promoting the solution in situ of the urbanization problems faced by the settlements and providing support for expansion of the initial house unit. The present version of the PMB, the Chile Neighborhood Program, is completing the settlement regularization work initiated by the PMB, adopting an inter-sector management approach, thus considered an extended version of the original sanitation plan.

The PVP, initiated in 1990, integrated progressiveness as a concept - initially modest dwellings, later consolidated through the active participation of the beneficiaries – increasing the production level of new dwellings. The foremost value of the program at the time was the involvement of the settlers, not only as self-builders, but also as project managers: in searching for and selecting the land, in contracting the Non-Governmental Organizations for assistance and in organizing the overall effort. This experience led to the New Housing Policy and the private modality introduced in 2002, later becoming the Competitive Funds for Solidarity Housing Projects.

Table 6
The Progressive Housing Program (PVP): 1990

The PVP originated as an answer to the household duplication and homeless households problem with the following FIVE basic characteristics:

- Explicit incorporation of progressiveness of the housing solution.
- Focused on new housing production.
- Emphasizing participation of the beneficiaries (management and construction).
- Incorporating private agents for technical assistance and construction (ONGs).
- Supporting two phases of implementation.

On the other hand, the SERVIU Progressive Housing Program modality attempted to emulate the practices of the Basing Housing Program, based on subsidizing the demand for projects offered by the construction companies that supplied the land and the basic unit. This approach was an attempt to implement a new program with a tested execution modality.

Initially, the primary focus of the Progressive Housing Program was to cater to a previously neglected sector of the population, making them homeowners and bringing a feasible product within their reach. They referred to the program as “a housing solution for the homeless and those doubling up with other households (allegados)”. In this manner, the PVP offered a low-cost solution to the large quantitative housing deficit in Chile. This program stimulated the development of additional programs in the Ministry

of Housing, increasing the opportunities for the most displaced groups to attain their own homes. Through the Progressive Housing Program, the MINVU recognized those previously excluded from traditional social housing programs as subjects of their housing politics.

The Progressive Housing Program was designed for people of insufficient economic resources, but with aptitude to manage, organize and develop a dwelling progressively. One of the initial mistakes of the program was in distributing homes to groups who were incapable of developing them progressively: such as single-parent families or elderly people.

The PVP continued to improve and refine their financing mechanisms. The elimination of the mortgage payments (after 1996) was a significant alteration to the program, freeing the beneficiaries of the debt payment and permitting them to use these funds for the improvement of the initial housing unit. This change was integrated into the new program called Dynamic Social Housing without Debt (VSDsD), considered the current SERVIU modality.

The urban impact of the PVP has not been always commendable, especially in larger cities where the housing projects have neither consolidated nor integrated with their neighborhoods, nor with the rest of the city, creating various segregated poor neighborhoods. It is possible to attribute this to the poor location of the land selected for these programs. On the other hand, there are successful PVP settlements, mostly built in mid-sized cities with lower land costs, which have efficiently connected to the infrastructure and have had strong community and household participation (due mainly to the seasonal work structure of the beneficiaries). One such example is the Con Con settlement, consisting of a mixture of progressive and basic housing, with an exceptional level of housing consolidation and integration with the city. In evaluating such cases twelve years after construction, it is difficult to distinguish between the progressive settlements and those constructed under the Basic Housing Program.

Due to the high incidence of the cost of land in the total cost of the housing solutions, progressive dwellings were built outside of the major cities in Chile. When the program started, due to the lack of interest on the part of construction companies to offer land and basic units, progressive housing solutions were developed on SERVIU property. Thus, two years into the program, they stopped building in the Metropolitan Region. Real estate developers were unwilling to devote land to these projects, as they were not very profitable. In certain cases, small construction companies with clear social service objectives, stepped in and took charge of housing construction. These businesses, due to modest financial backing and little experience, as much in construction as in fund administration, often left the housing sites unfinished.

The development of the dual modalities, private and SERVIU, was one successful PVP accomplishment recognized within the housing policy of the Government as a counterpoint and as a learning tool. There were aspects of each modality that worked in some housing solutions, yet not in others. Thus, both modalities were integrated in the New Housing Policy of 2002.

In spite of building thousands of progressive dwellings during the last twelve years, a significant portion of these, including first phase dwellings, serviced lots, neighborhood improvement and sanitary units, required a final second phase to achieve full consolidation. The second phase PVP projects were considered expensive, low quality and not meeting the expectations of the beneficiaries. There is still a pending need for a program that offers support in finishing these housing units.

Table 7
Progressive Housing Program: Merits and Risks

PVP Merits	PVP Risks
Reaching the poor. Operating as a national program. Mass production at a low cost.	Creating precarious settlements. Urban Sprawl Low quality housing.

In conclusion, it is important to highlight the following ten lessons gained from over fifty years of experience in Chile supporting progressive housing:

1. The Progressive Housing Program, and presently the Dynamic Social Housing without Debt and Solidarity Housing Fund, have managed to articulate the work of two important actors in housing for the poor: the public sector and the community organizations. The next challenge is to involve private financing (banking systems, micro-credit).
2. The system of the Dynamic Social Housing without Debt, or the Progressive Housing Program SERVIU modality, benefits from economies of scale and greater productivity. Therefore, to produce less expensive dwellings it requires:
   - Medium or large size construction companies.
   - A reasonable cost of land.
   - A finished dwelling of some complexity in which economies can be achieved through the construction process.
3. The PVP in its private modality, or Competitive Funds, needs time for:
   - Ensuring the commitment of government officials.
   - Local authorities to adopt the system and the management and monitoring of the process.
   - The construction industry to adapt to flexible products and continual construction processes.
   - The beneficiaries to comprehend accept and adopt the housing solution.

   A strong communication effort is essential for a successful maturation process.
4. The private modality presents comparative advantages for:
   - Smaller construction companies.
   - Internal city growth or central densification (or other exceptional cases such as the market for resale houses and lot subdivisions).

   Additionally it has the advantage of greater community participation, therefore encouraging the development of community ties.

5. The Competitive Fund operates through a Project Bank, which pre-qualifies each project concerning their technical, legal and financially viability before releasing it to the bidding process. Accordingly, it is promoting quality in the management and prioritization process for the program.
6. The program to promote Residential Mobility is required not only lifting the sales restrictions on social dwellings, but also making subsidies available to purchase previously owned homes.
7. In spite of the numerous social housing programs available, a segment of the population still has difficulty in securing housing. That includes a segment that it is not exceptionally poor, yet unqualified for a private mortgage loan. This sector requires the attention of a special program.
8. Progressive housing has unique design requirements, not only in spatial terms (such as construction phases) but in technology, building materials and management practices. Technical and social assistance are also required from the inception.
9. The settlements or households that do not reach a minimum level of consolidation after a given time (approximately seven years) require special support; otherwise, they run the risk of turning into slums.
10. Finally, a progressive housing governmental program must consider the housing needs of the impoverished population at a national level. Yet, while implementing the solutions, they should be able to recognize and incorporate the special local exigencies.

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Annex 1: PVP According to Stage and Modality

	FIRST STAGE SERVIU MODALITY	FIRST STAGE PRIVATE MODALITY	SECOND STAGE PRIVATE MODALITY	LAND DENSIFICATION PRIVATE MODALITY
Directed to:	1. Those who do not own a home. 2. Those looking to begin their own housing project. 3. Will complete the dwelling with a second stage subsidy, through their labor and family resources. 4. Those able to save 8 UF.	1. Those who have a lot within a community, or have a promissory purchase agreement for a site (with an unsettled debt of no more than 18 UF). 2. Those looking to begin a housing project on their own: the urbanization of a lot and, at a minimum, the construction of a bathroom and kitchen. 3. Those prepared to undertake, individually or in a group, the entire process, from contracting to supervising the construction and the technical assistance. 4. Those who are able to save 8 UF (only if they have unsettled debt for the purchase of the lot).	1. Those who have been beneficiaries of the first stage of the Progressive Housing program yet have not been able to complete the final home within two years. 2. Those that have been allocated a small, sanitary unit or similar solutions yet want to expand the initial unit. 3. Those prepared to undertake the management and supervision of the project with technical assistance 4. Those who are capable of saving and making monthly mortgage payments, if requesting credit.	1. Those who share a home with extended family (allegados) and obtain owner authorization to build on the same lot. 2. Those who have been allocated a small, sanitary unit or similar solution yet want to expand their dwelling, petitioning with the family sharing their lot "allegados." 3. Those prepared, preferably in groups, to assume the management and supervision of the project with technical assistance.
What is delivered:	First stage of the dwelling: 1. An urbanized lot (with lighting, water, a sewer system and pavement). 2. A small sanitary unit consisting, at a minimum, of a bathroom and kitchen	1. Free technical assistance. 2. A subsidy certificate with which the individual or group contracts and supervises the project. • Urbanization of the site (with lighting, water, a sewer system and pavement). • Construction of the housing unit, consisting of a bathroom and multipurpose space for the kitchen and two beds.	1. Free technical assistance. 2. A subsidy certificate that, along with the savings and a loan, allows the construction of an additional habitable area, complementing the first stage. 3. Availability of a loan granted by the SEVIU, with a preferential interest rate.	1. Free technical assistance. A subsidy certificate that combined with savings and authorized credit allow. • For the "allegado": the construction of their own home. • For the lot owner (if applying at the same time as the "allegado"): building additional space or improvements depending on the condition of the home.
Financing:	1. State subsidy of 132 UF. 2. Minimum savings by the applicant of 8 UF (3 UF at registration and 5 UF by the first stage).	1. State subsidy of 32 or 150 UF (when refusing the second stage assistance). Beneficiaries may use up to 10 UF to complete payment for the land. 2. Minimum savings: If the lot has been paid for, the applicant is not required to have savings. If there is an outstanding debt on the lot, they must save 3 to 8 UF, depending on the amount of the debt.	1. The cost of the second stage is approximately 70 UF (*) is in financed according to the following criteria: • If they received a subsidy of up to 100 UF for the first stage, the subsidy is 18 UF. • If they received 132 UF, the subsidy is 35 UF. • If they received 100 UF, the subsidy is 100 UF. • Obligatory savings of 5 UF. • Credit: 47 UF if they received a subsidy of 18 UF in the second stage or 30 UF if they received a subsidy of 35 UF in the second stage.	The cost and financing of both housing solutions corresponds to the rules established by the first and second stage of the private modality.

	FIRST STAGE SERVIU MODALITY	FIRST STAGE PRIVATE MODALITY	SECOND STAGE PRIVATE MODALITY	LAND DENSIFICATION PRIVATE MODALITY
Application Requirements:	1. Have a valid CAS II survey 2. A savings account in the name of the applicant or spouse. 3. In the case of a group application, the head of the group must be personally qualified.	1. Have a valid CAS II survey 2. Demonstrate ownership of a plot. 3. If the site is not entirely paid up, or with a promissory purchase agreement, or if the applicant would like to receive points through savings, the applicant Applicants must have a savings account in his/her name. 4. In cases of group applications, the head of the group must be personally qualified.	1. Have a valid CAS II survey. 2. A savings account in the name of the applicant or spouse. 3. The applicant must have been a beneficiary of the first stage, owning a serviced lot or similar solution. 4. If the applicant has outstanding debt from the first stage, he/she must be current in scheduled payments. 5. If the applicant wants to assume a loan: there must be not outstanding liens or mortgages of any type (except liens from a SERVIU first stage subsidy). 6. The applicant must not have declined the second stage subsidy during the first stage. 7. In cases of group applications, the head of the group must be personally qualified.	1. A savings account in the name of the applicant or spouse. 2. The applicant must present the technical project clearly showing densification potential of the lot. 3. In the case of group applications for land densification, the head of the group must be personally qualified. First Stage: 1. The applicant, or spouse, must not own or have been assigned a dwelling, nor have received a housing subsidy in the past. 2. Accredited ownership for the lot Second Stage: 1. The applicant must have been a beneficiary of the first stage, owning a serviced lot or similar housing solution, and the lot must have densification potential. 2. The applicant must not have declined the second stage subsidy during the first stage.

Annex 2: Housing Solution

Figure A2.1: Villa Las Américas, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.27)

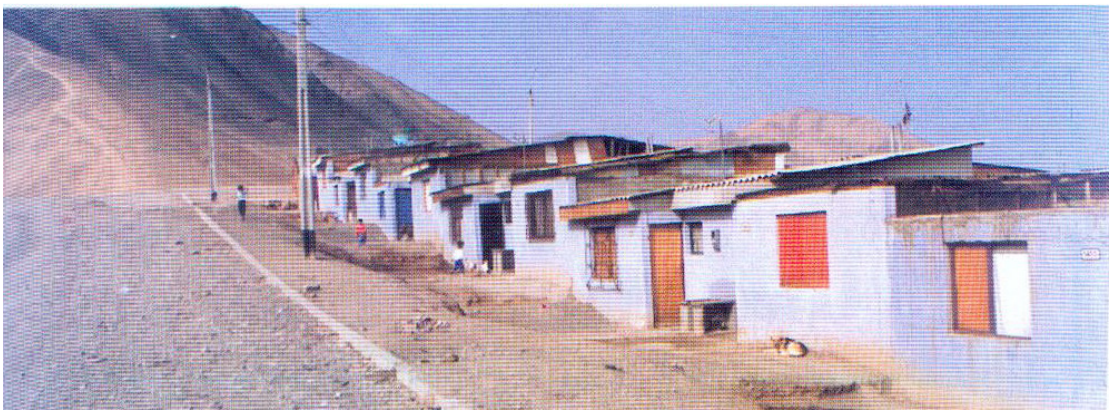

Figure A2.2: Floor plan Housing Solution, Villa Las Américas, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.26)

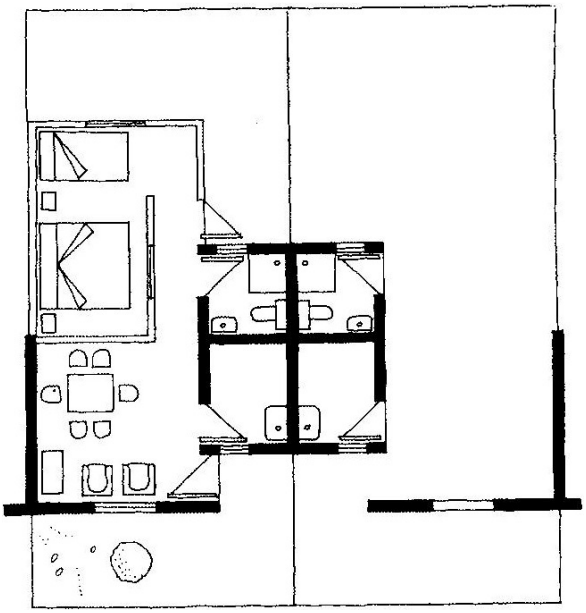

Figure A2.3: Villa Las Américas, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.26)

Figure A2.4: Oscar Bonilla Neighborhood, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.25)

Figure A2.5: Floor Plan Housing Solution, Oscar Bonilla, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.25)

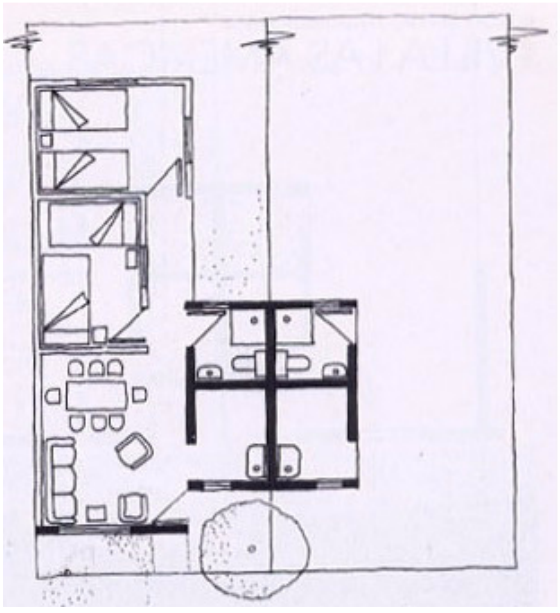

Figure A2.6: Oscar Bonilla Neighborhood, Antofagasta, Region II. Source: MINVU / DITEC (1994; p.24)

Figure A2.7: El Edén de Vallenar Neighborhood, Vallenar, Region II. Source: MINVU / DITEC (1994; p.32)

Figure A2.8: Floor Plan Housing Solution, El Edén de Vallenar, Vallenar, Region II. Source: MINVU / DITEC (1994; p.32)

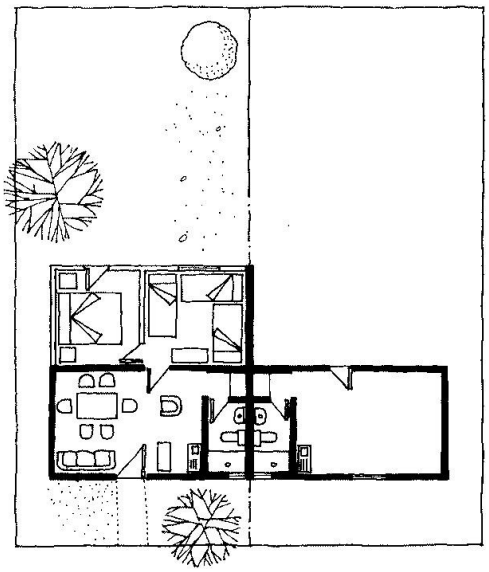

Figure A2.9: El Edén de Vallenar Neighborhood, Vallenar, Region II. Source: MINVU / DITEC (1994; p.32)

Figure A2.10: Tierras Blancas Neighborhood, Coquimbo, Region IV. Source: MINVU / DITEC (1994; p.38)

Figure A2.11: Floor Plan Housing Solution, Neighborhood Habitation Tierras Blancas, Coquimbo, IV Region. Source: MINVU / DITEC (1994; p.38).

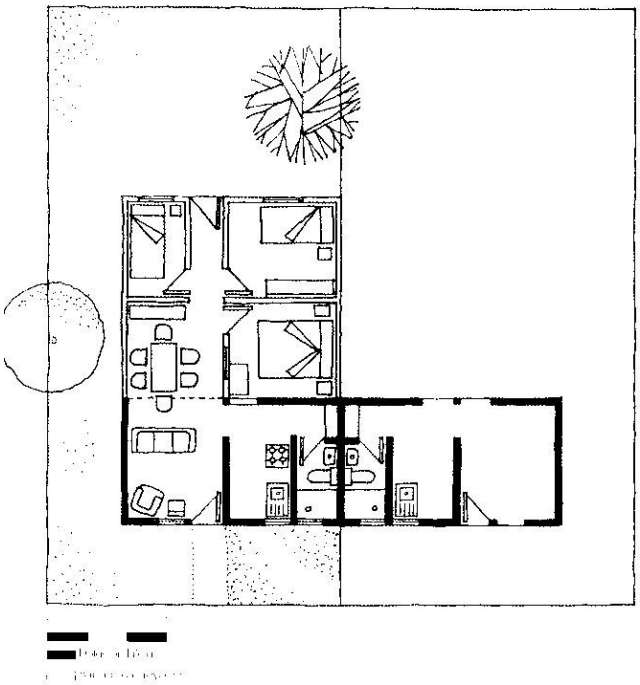

Figure A2.12: Tierras Blancas Neighborhood, Coquimbo, Region IV. Source: MINVU / DITEC (1994; p.38).

Figure A2.13: Aconcagua Sur Neighborhood, Quillota, V Region V. Source: MINVU / DITEC (1994; p.47).

Figure A2.14: Aconcagua Sur Neighborhood, Quillota, Region V. Source: MINVU / DITEC (1994; p.46).

Figure A2.15: Aconcagua Sur Neighborhood, Quillota, Region V. Source: MINVU / DITEC (1994; p.47).

Figura A2.16: Cortes solución habitacional Las Plamas de Rodelillo, Valparaíso, V Región. Fuente: MINVU / DITEC (1994; p.45).

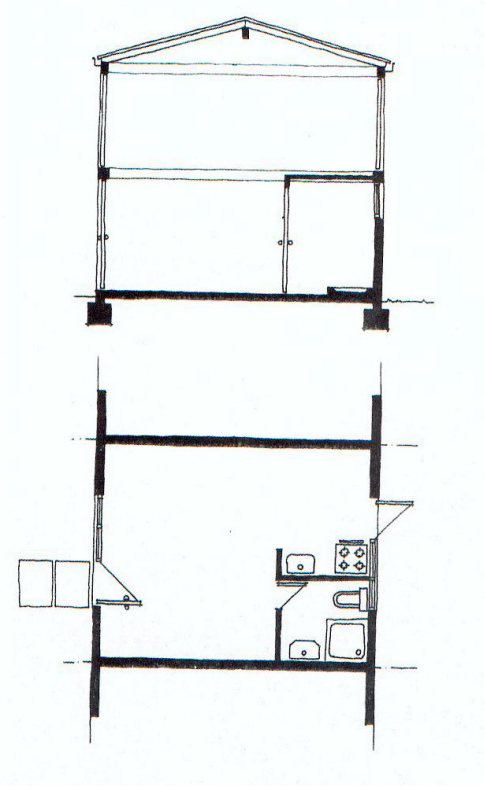

Figura A2.17: Conjunto habitacional Las Plamas de Rodelillo, Valparaíso, V Región. Fuente: MINVU / DITEC (1994; p.45).

Figura A2.18: Conjunto habitacional El Porvenir, El Porvenir, VIII Región. Fuente: MINVU / DITEC (1994; p.70).

Figura A2.19: Conjunto habitacional El Porvenir, El Porvenir, VIII Región. Fuente: MINVU / DITEC (1994; p.70).

Figure A2.16: Section, Housing Solution Las Plamas de Rodelillo, Valparaíso, Region V. Source: MINVU / DITEC (1994; p.45).

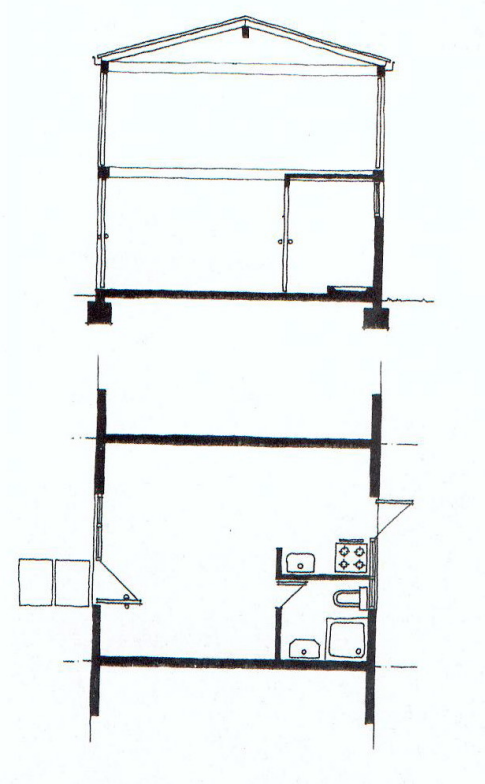

Figure A2.17: Las Plamas de Rodelillo Neighborhood, Valparaíso, Region V. Source: MINVU / DITEC (1994; p.45).

Figure A2.18: El Porvenir Neighborhood, Region VIII. Source: MINVU / DITEC (1994; p.70).

Figure A2.19: El Porvenir Neighborhood, El Porvenir, Region VIII. Source: MINVU / DITEC (1994; p.70).

Figure A2.20: El Porvenir Neighborhood, El Porvenir, Region VIII. Source: MINVU / DITEC (1994; p.70).

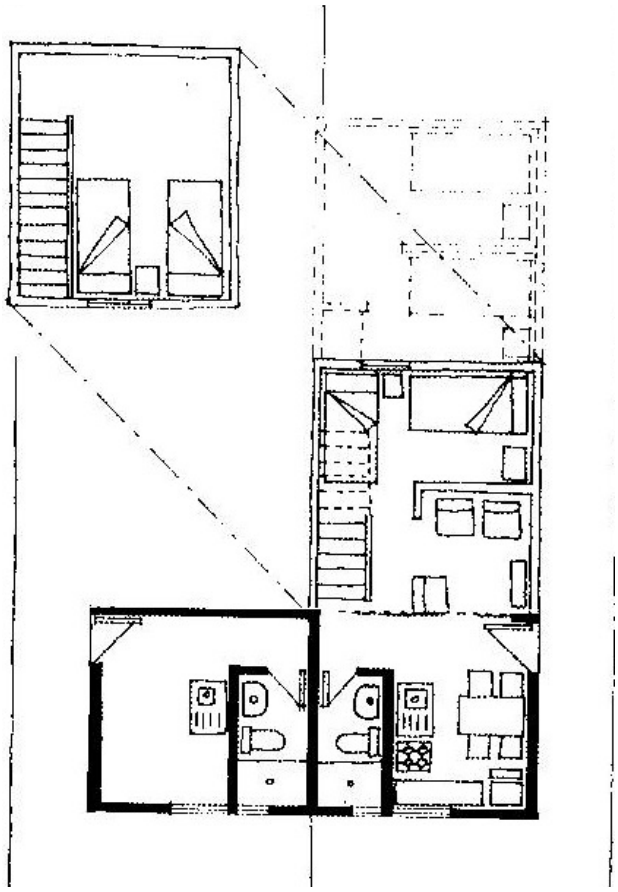

Figure A2.21: El Porvenir Neighborhood, El Porvenir, Region VIII. Source: MINVU / DITEC (1994; p.70).

Figure A2.22: Villa Austral Neighborhood, Temuco, Region IX. Source: MINVU / DITEC (1994; p.75).

Figure A2.23: Floor Plan Housing Solution, Villa Austral, Temuco, Region VIII. Source: MINVU / DITEC (1994; p. 75)

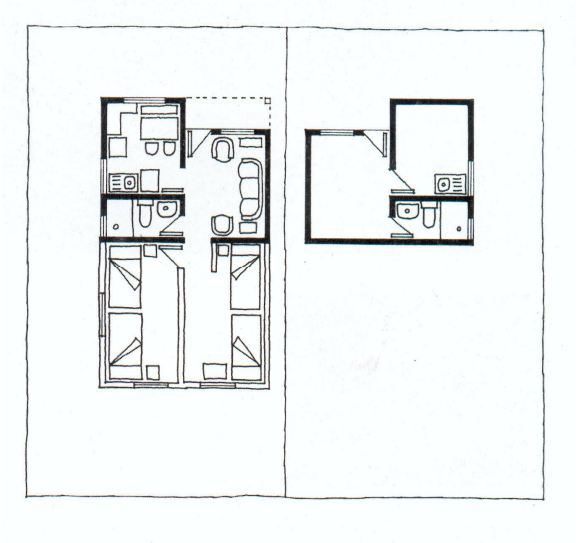

Figure A2.24: Villa Austral Neighborhood, Temuco, Region IX. Source: MINVU / DITEC (1994; p.75).

Figure A2.25: Floor Plan Housing Solution, Vista Hermosa, Carahue, Region IX. Source: MINVU / DITEC (1994; p.74).

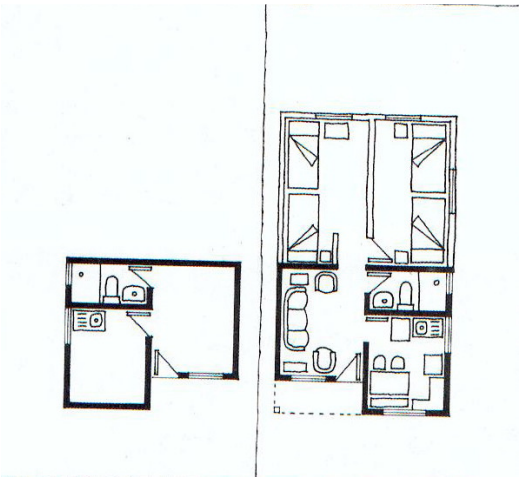

Figure A2.26: Eusebio Lillo Neighborhood, Punta Arenas, Region XII. Source: MINVU / DITEC (1994; p.91).

Figure A2.27: Eusebio Lillo Neighborhood, Punta Arenas, Region XII. Source: MINVU / DITEC (1994; p.91).

Figure A2.28: Floor Plan Hosing Solution, Eusebio Lillo, Punta Arenas, Region XII. Source: MINVU / DIREC (1994; P.91)

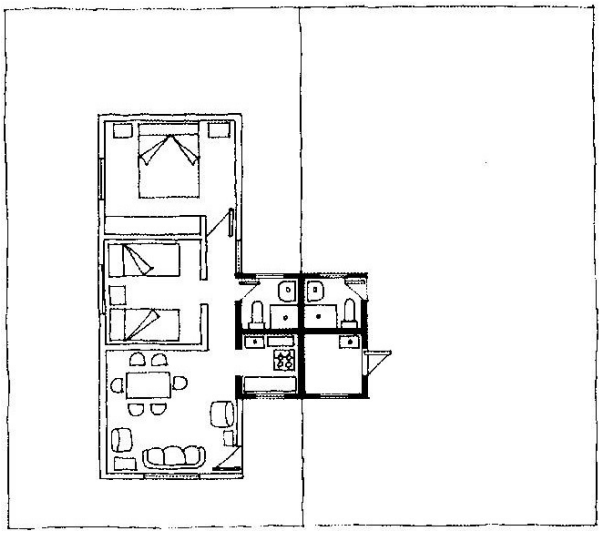

Figure A2.29: Eusebio Lillo Neighborhood, Punta Arenas, Region XII. Source: MINVU / DITEC (1994; p.91).

Annex 3: Statistics

Housing Deficit

Table A3.1: Housing Deficit Levels

Serviced Lots	13.3 %
Progressive Housing Stage I	10.7 %
Progressive Housing Subsidy Stage I	7.7 %
Progressive Housing Stage II	5.1 %

Source: CASEN 1996

Table A3.2: Housing Deficit According to Location: Urban or rural (% of homes)

	Without Housing deficit	With Housing deficit	With "duplicate household " (allegamiento)	With "duplicate household " and housing deficit	Total
Urban	66.5	2.5	28.6	2.4	100
Rural	37.8	36.1	14.6	11.5	100
Total	62.5	7.1	26.6	3.8	100

Source: CASEN 2000

Table A3.3: Housing Deficit According to Income Levels
(% of homes)

	Without Housing Deficit	With Housing Deficit	With "Duplicate Household " (Allegamiento)	With "Duplicate Household " and Housing Deficit	Total
I	46.6	15.2	29.5	8.7	100
II	52.3	8.6	33.9	5.2	100
III	61.5	5.7	29.9	2.9	100
IV	68.9	4.4	25.2	1.5	100
V	83.4	1.7	14.5	0.4	100

Source: CASEN 2000

Progressive Housing Programs Applications

Table A3.4: Registered PVP Applicants According to Zone and Income Levels

	Stage	I	II	III	IV	V	Total
Urban	I	10,020	8,379	6,551	2,786	1,916	29,652
	II	2,145	2,996	1,957	2,745	405	10,240
Rural	I	2,973	951	664	268	321	5,177
	II	243	9	145	251	54	783

Source: CASEN 1998

Table A3.5: Percentage of Family Units Registered in Housing Programs, According to Income Levels

	I	II	III	IV	V
Family Units	20.4	25.2	22.7	19.3	12.3

Source: CASEN 2000

Table A3.6: Percentage of Family Units Applying for Subsidies, by Program and Year

	1996	1998	2000
Progressive Housing Stage I	6.1	7.5	6.7
Progressive Housing Stage II	1.7	2.4	1.9
Basic Housing	14.3	-	39.7
Rural Subsidy	22.9	-	11.3

Source: CASEN

Table A3.7: Number of PVP Applications According to Region and Type of Application
(Through October 2001 (p).)

Region	Type of inscription	SERVIU Stage I		Private	
		Regular	Special	Stage I	Stage II
Tarapacá	Individual	834	-	197	61
	Group	62	-	37	13
Antofagasta	Individual	2,867	-	57	37
	Group	1,172	-	86	21
Atacama	Individual	1,656	17	6	535
	Group	140	-	51	31
Coquimbo	Individual	1,007	21	584	181
	Group	788	-	38	-
Valparaíso	Individual	431	-	1,185	402
	Group	814	-	1,545	261
Libertador	Individual	926	-	1,044	423
	Group	676	-	2,626	338
Maule	Individual	2,824	16	323	260
	Group	1,168	-	457	193
Bío-Bío	Individual	2,026	23	1,192	108
	Group	584	-	3,054	194
La Araucanía	Individual	16,751	26	1,021	535
	Group	4,674	-	366	397
Los Lagos	Individual	-	-	211	74
	Group	-	-	877	104
El Gral. Carlos Ibáñez	Individual	-	-	132	217
	Group	-	-	551	53
Magallanes	Individual	677	-	-	-
	Group	28	-	-	37
Metropolitan Region	Individual	352	-	1,888	712
	Group	88	-	465	588
Total	Individual	30,351	103	7,840	3,545
	Group	10,194	-	10,153	2,230

The Facts

Table A3.8: Housing Investments: 1990 – 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
PVP	1,508	12,850	17,177	32,430	10,336	6,464	8,356	10,157	7,966
PVP Subsidy	-	-	-	-	12,624	16,211	16,268	13,850	12,477

Source: CASEN 1998

Table A3.9: Constructed Housing: 1990 – 2000

Public Housing	821,677
Private Housing	452,762
New Housing Needs	827,822

Table A3.10: Progressive Homes Completed under the SERVIU Modality, by Year and Region

		1991	1992	1993	1994	1995	1996	1997	1998
I	Tarapacá	372	720	1042	436	422	238	278	500
II	Antofagasta	356	779	258	450	160	371	99	120
III	Atacama	170	400	586	506	160	100	216	223
IV	Coquimbo	594	1170	0	350	200	490	25	476
V	Valparaíso	410	441	414	122	336	177	68	0
VI	Libertador	389	240	396	350	198	233	0	215
VII	Maule	590	350	161	50	484	261	58	386
VIII	Bío-Bío	637	904	501	498	330	224	100	100
IX	La Araucanía	572	852	886	816	446	746	1034	652
X	Los Lagos	540	864	986	1,087	644	1010	562	936
XI	El Gral. Carlos Ibáñez	56	32	170	0	0	0	0	0
XII	Magallanes	0	144	287	0	123	95	164	61
RM	Metropolitan Region	892	1,067	0	0	0	0	0	0
	Total	5,578	7,963	5,687	4,665	3,503	3,45	2,604	3,669

Table A3.11: Granted Subsidies, First stage, Private Program, by Year and Region

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
I	0	0	200	208	0	283	73	150	136	201	
II	87	81	318	261	531	342	117	170	264	130	
III	0	0	0	0	0	0	0	45	0	53	
IV	1,190	1,128	477	536	899	960	1,976	1,992	2,133	1,302	
V	605	921	1,244	704	1,321	950	919	1,500	1,133	1,224	
VI	981	1,350	1,094	800	1,351	1,084	1,041	1,709	1,769	2,222	
VII	670	1,260	627	508	577	300	1,506	689	436	833	
VIII	0	0	954	915	1,615	1,673	740	1,169	1,268	1,694	
IX	229	526	648	477	1,225	1,500	1,858	1,113	859	438	
X	130	712	697	612	544	455	825	281	0	325	
XI	65	156	179	176	169	230	171	286	146	221	
XII	0	0	0	0	0	0	292	0	0	0	
RM	708	868	2,299	1,064	2,092	906	0	629	1,069	984	
	4,665	7,002	8,737	6,261	10,324	8,683	9,518	9,733	9,213	9,627	11,738

Source: Statistical Annex N°453, November 2001

Table A3.12: Paid Subsidies, First stage, Private Program, by Year and Region

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
I	0	0	165	180	63	190	49	79	71	119
II	73	95	192	246	355	261	226	162	149	152
III	0	0	0	0	0	0	0	0	0	2
IV	370	642	1325	724	294	543	613	1072	1,521	2,428
V	64	256	463	1,393	1,023	759	437	834	1,091	985
VI	354	937	495	732	809	956	523	890	1,071	1,089
VII	185	258	668	783	979	411	1,286	331	380	391
VIII	0	0	346	1,194	1,414	149	215	1,431	982	797
IX	0	0	695	412	673	663	610	782	498	618
X	45	275	475	527	526	342	445	196	238	203
XI	25	39	165	222	204	68	242	114	196	227
XII	0	0	0	0	0	0	81	0	0	0
RM	0	17	200	626	1031	939	0	786	836	811
	1,116	2,519	5,189	7,039	7,371	5,281	4,727	6,677	7,033	7,822

Source: Statistical Annex N°453, November 2001

Table A3.13: Granted Subsidies, Second stage, Private Program, by Year and Region

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
I	-	-	39	89	163	18	65	41	30	17	
II	14	43	23	16	49	27	84	26	21	4	
III	-	-	25	22	21	-	23	282	318	334	
IV	-	-	54	394	79	97	231	277	348	153	
V	109	188	153	84	210	253	220	137	200	300	
VI	252	170	213	282	337	205	490	202	230	211	
VII	427	508	32	418	361	448	489	130	94	167	
VIII	-	140	-	306	400	58	223	58	177	90	
IX	-	600	60	119	136	78	24	113	176	123	
X	-	52	25	-	37	-	400	25	-	91	
XI	63	46	35	34	64	56	70	48	43	150	
XII	-	41	-	48	75	-	41	-	-	-	
RM	2,530	222	1,769	426	1,171	327	-	546	213	266	
Total	3,395	2,010	2,428	2,238	3,103	1,567	2,360	1,885	1,850	1,906	3,292

Table A3.14: Paid Subsidies, Second Stage, Private Program, by Year and Region

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
I	-	-	-	27	76	129	19	10	31	32
II	13	44	23	-	15	29	21	73	15	8
III	-	-	-	1	17	14	7	1	10	303
IV	-	-	20	248	111	64	44	64	178	229
V	-	-	80	136	141	64	123	177	116	82
VI	43	145	160	109	335	248	390	199	425	315
VII	-	119	437	329	444	361	217	209	82	147
VIII	-	134	6	70	481	44	243	77	18	42
IX	-	579	4	7	62	75	25	22	42	148
X	-	49	27	1	0	28	79	32	52	5
XI	-	52	50	36	31	47	1	55	6	26
XII	55	-	41	48	75	-	48	-	-	-
RM	-	459	602	1214	799	600	-	323	344	377
Total	111	1,581	1,450	2,226	2,582	1,703	1,217	1,242	1,319	1,714

Table A3.15: Housing Assigned, Average Subsidy, Credit, Housing and Savings Value

Year	Number of Homes	Average in UF			
		Subsidies	Credit	Home Value	Savings
1992	6,736	96.27	20.93	118.36	7.02
1993	3,736	127.07	16.07	145.07	7.06
1994	4,525	127.04	18.32	140.61	7.11
1995	2,778	128.79	18.31	138.92	7.21
1996	1,994	134.67	17.49	151.35	6.53
1997	1,162	141.16	0.90	150.00	7.94
1998	2,951	160.91	18.69	191.89	12.29
1999	2,503	160.05	0.05	168.13	8.02
2000	1,184	175.29	0.00	183.29	8.02
2001	1,179	175.27	0.06	183.50	8.17

Table A3.16: Average Area – SERVIU Modality

	1991	1992	1993	1994	1995	1996	1997	1998	Average
I	6.31	30.03	24.31	7.93	8.50	13.68	19.20	23.70	16.71
II	6.69	6.88	19.87	15.73	18.96	18.96	18.96	15.66	15.21
III	10.31	11.81	17.43	13.80	10.50	14.01	13.06	13.10	13.00
IV	14.13	13.23		13.44	14.17	20.18	13.00	13.58	14.53
V	6.68	15.41	15.08	15.16	15.47	10.03	13.56		13.06
VI	16.69	16.69	16.75	23.91	27.12	24.06		17.18	20.34
VII	6.96	7.00	16.88	15.57	15.31	16.32	16.31	15.18	13.69
VIII	7.37	10.73	13.22	13.17	13.13	13.05	13.05	13.05	12.10
IX	9.69	15.80	12.43	14.37	13.15	14.21	14.23	14.93	13.60
X	10.84	10.45	14.99	13.96	13.86	13.77	13.16	14.78	13.23
XI	14.26	10.00	11.74						12.00
XII		6.00	12.88		12.88	13.27	13.27	16.51	12.47
RM	10.24	13.77							12.01
Promedio	10.01	12.91	15.96	14.70	14.82	15.59	14.78	15.77	15,27

Table A3.17: Average Area- SERVIU Modality

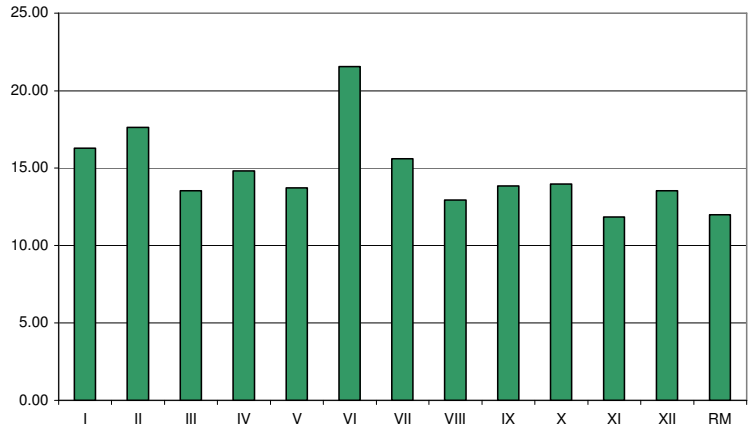

Table A3.18: Average Cost (UF/home)

	1991	1992	1993	1994	1995	1996	1997	1998	Average
I	115.16	104.96	125.23	135.64	135.68	146.85	157	156.5	134.63
II	116	115.98	135.96	134.7	137	137	137	150	132.96
III	113	116	136	137.12	137	137	155.35	154.64	135.76
IV	120	118		138	138	157.27	158.16	158	141.06
V	120	120.92	129.63	135.74	137.31	140.51	151.68	-	133.68
VI	116.84	116.72	136.66	136.5	140	173.61	-	136	136.62
VII	115	115	137	137	137	140.4	145	152	134.80
VIII	116.27	138.83	139	136.8	138	138	157.14	158.92	140.37
IX	120	138.5	138.5	138.67	138.5	144.13	144.71	153.41	139.55
X	140	138.54	138.36	138	138	139.7	156.41	151.61	142.58
XI	198.96	183.75	208.45		-	-	-	-	197.05
XII		200	223		228	282	282	277.39	248.73
RM	138.84	135.77			-	-	-	-	137.31
Average	127.51	134.07	149.8	136.82	145.86	157.86	164.45	164.85	147.65

Size of Households

Table A3.19: Size of Households per Income Level and Subsidy Program

	Stage	I	II	III	IV	V	Total
Urban	Progressive Housing Subsidy	4.9	4.6	3.4	4.2	3.7	4.4
	Progressive Housing Stage I	5.0	4.1	3.6	3.7	2.3	4.3
	Progressive Housing Stage II	4.7	4.5	4.0	2.8	4.1	4.4
Rural	Progressive Housing Subsidy	3.8	4.0	2.5	3.0	-	3.5
	Progressive Housing Stage I	3.6	4.3	3.9	4.0	4.0	3.9
	Progressive Housing Stage II`	-	2.0	-	-	-	2.0

Source: CASEN

Annex 4. Chile with Regions