

**REDEFINING HOMEOWNERSHIP ACCESS: AN ANALYSIS  
AND POLICY DIRECTION FOR COLOMBIA**

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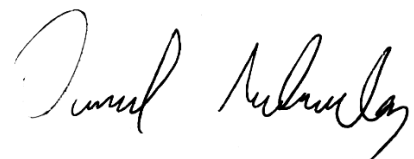
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## **STATEMENT OF AUTHENTICITY OF MATERIAL**

This thesis contains no material which has been accepted for the award of any other degree or diploma in any institution and to the best of my knowledge and belief, the research contains no material previously published or written by another person, except where due reference has been made in the text of the thesis.

A handwritten signature in black ink, appearing to read 'Daniel Melendez', written in a cursive style.

**DANIEL MELENDEZ**

Berlin, 1<sup>st</sup> of February 2024

## ABSTRACT

This paper proposes a viable pathway for enhancing access to homeownership housing for Colombia's low-income population. It first analyses the evolution of housing initiatives during the 1900s when social housing was provided directly by the government. Later, the shift in housing policies during the 1990s, aligned with the adoption of a new constitution favoring the Washington Consensus and a neoliberal approach to service provision. This shift emphasized a facilitative housing provision model where the government plays a role in enabling private market dynamics. A primary instrument for this facilitation has been the demand-side subsidy scheme. Through this initiative, households in need receive a monetary subsidy, which, combined with their savings and a loan facilitated by the banking system, enables them to bridge the affordability gap and acquire housing units from the private market.

An assessment of the country's housing deficit evolution and the impact of government housing policies reveals an existing imbalance in housing provision. On the one hand, the flagship housing acquisition program, *Mi Casa Ya*, predominantly serves middle-income households. On the other hand, the lack of continuity of the *Free Housing Program* and the shortfall in meeting the goals of the *Semillero de Propietarios* initiative have left the housing needs of the lowest-income population inadequately addressed. Additionally, the prevalent emphasis on an acquisition-focused approach, coupled with a concentration of the market on larger urban centers, exacerbates the housing deficit imbalance. The qualitative deficit outstrips the quantitative by four, and rural housing deficits are nearly four times higher than those of urban households.

To address the needs of the poorest segments of the population, this thesis draws lessons from the Chilean experience, particularly the *DS 49* program, to assess potential directions for enhancing homeownership access. Considering these insights, the thesis proposes a set of recommendations for Colombia and outlines implementation steps aimed at improving access for low-income households and those residing in rural areas.

**Keywords:** Social Housing, Affordability, Financing, Accessibility, Latin America

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## LIST OF ACRONYMS

<b>CCA</b>	<i>Agricultural Credit Bank</i> <i>Caja de Crédito Agrario</i>
<b>CCF</b>	<i>Family Compensation Fund</i> <i>Cajas de Compensación Familiar</i>
<b>CVM</b>	<i>Military Housing Fund</i> <i>Caja de Vivienda Militar</i>
<b>DANE</b>	<i>National Statistics Department</i> <i>Departamento Administrativo Nacional de Estadística</i>
<b>DS49</b>	<i>Supreme Decree 49</i> <i>Decreto Supremo 49</i>
<b>EGIS</b>	<i>Social Real Estate Management Company</i> <i>Empresa de Gestión Inmobiliaria Social</i>
<b>FRECH</b>	<i>Mortgage Portfolio Stabilization Reserve Fund</i> <i>Fondo de Reserva para la Estabilización de la Cartera Hipotecaria</i>
<b>ICT</b>	<i>Institutional Credit Institute</i> <i>Instituto de Crédito Territorial</i>
<b>MINVU</b>	<i>Chile's Ministry of Housing and Urbanism</i> <i>Ministerio de Vivienda y Urbanismo de Chile</i>
<b>POT</b>	<i>Land Use Plan</i> <i>Plan de Ordenamiento Territorial</i>
<b>PVG</b>	<i>Free Housing Program</i> <i>Programa de Vivienda Gratuita</i>
<b>RSH</b>	<i>Social Household Registry</i> <i>Registro Social de Hogares</i>
<b>SERVIU</b>	<i>Service of Housing and Urbanization</i> <i>Servicio de Vivienda y Urbanización</i>
<b>SMLV</b>	<i>Salario Mínimo Legal Vigente</i> <i>Current Legal Minimum Wages</i>
<b>UN-Habitat</b>	<i>United Nations – Habitat</i>
<b>UPAC</b>	<i>Unit of Constant Purchasing Power</i> <i>Unidad de Poder Adquisitivo Constante</i>
<b>VIS</b>	<i>Social-interest housing</i> <i>Vivienda de interés social</i>
<b>VIP</b>	<i>Priority-interest housing</i> <i>Vivienda de interés prioritario</i>
<b>VIPA</b>	<i>Housing for Savers</i> <i>Vivienda para Ahorradores</i>

# CHAPTER I: INTRODUCTION

## BACKGROUND

**Today, Latin America is the most urbanized region in the world, with around 80% of its population living in cities.** This tendency started at the beginning of the XX century with massive migrations from the countryside towards cities during industrialization. By 1950, the urban population rounded 42%, but the tendency kept growing, reaching 80% by 2015, and it is expected to reach a peak of 86% by the year 2050 (BBVA Research, 2017). Colombia has been no exception to this trend, with an urban population of 36% by 1950 and a 75% urban population by 2015.

**Rapid urbanization has increased the demand for urban shelter.** However, the lack of capacity of government institutions and the private market to respond to the population's housing demands brought the widespread of self-help housing through informal settlements. (Ferguson and Navarrete, 2003, pp. 202–204; Murray and Clapham, 2015, pp. 4–7; Chiodelli, 2016, pp. 4–5; Rojas, 2019, pp. 181–182) Different strategies have been used to address the quantitative and qualitative housing deficits, starting with social housing built and delivered by the state, aided self-help approaches, which usually involved upgrading and sites-and-services projects, and later enabling private markets to provide housing (van Lindert, Smets and Bredenoord, 2014; Chiodelli, 2016). Among the latest, there are some authors like Murray and Clapham (2015, pp. 11–12) who identified a first phase of extreme market liberalization, and a second phase characterized by a higher institutional presence to reach the lower-income population. Despite advances in the general housing situation of most countries in the region, accompanied by steady economic growth and reductions in poverty, the housing challenges are far from resolved (Rojas, 2019, p. 178). Most countries face the same challenge: housing programs have failed to reach the poorest population (Ferguson and Navarrete, 2003, p. 202; Rojas, 2019, pp. 179–181), and even when they do, the lack of quality provided has led to massive vacancy rates. Such is the case of Mexico, a country that has managed to increase private housing production to levels that could surpass the quantitative shortages. Still, the lack of adequate urban services provided in some of the housing solutions resulted in people preferring to acquire a housing solution in the informal markets, which led to massive vacancy rates in the country. (Rojas, 2019, p. 181)

**The housing policies of the Latin American countries have been shaped by the strong influence of the policy guidelines favored by the International Agencies, such as the World Bank and UN-Habitat** (Chiodelli, 2016, pp. 1–2). Colombia has not been an exception to this. At the beginning of the 1990s, there was a massive reform of the national institutions



favoring a neoliberal approach, where the private markets and local governments should play a more significant role in providing services previously centralized by the federal government. The reforms were done following the Washington Consensus, which suggested providing a well-functioning housing industry by redirecting the building, marketing, financing, and maintenance of housing from the government to the private sector. (Gilbert, 2002, pp. 310–311) The new role of the government should be to secure the functioning of the market through “property rights development, mortgage finance, targeted subsidies, infrastructure for urban land development, regulatory reform, organization of the building industry, and institutional development.”(World Bank, 1993, p. 4) The housing policy system was not an exception, and a new approach was introduced entirely because of the lack of results and the financial struggle of Colombia’s primary housing provision Institute. (Gilbert, 2004, pp. 204–206)

### **The logical model for guidance on the implementation was the Chilean housing system.**

It was designed in the 1970s, and by 1990, it had successfully created a more efficient private housing market, which took the provision and construction responsibilities away from the state. (Rojas, 2019, p. 180) The international agencies supported the model as a best practice and followed the same neoliberal ideology, which aligned with the liberal government’s ideas. Furthermore, it came from a country that shared a similar language and a common history, which could make the transfer of knowledge more effective. (Gilbert, 2004, pp. 200–202) There was a deregulation of the financial systems, which sought to attract private investment into the private construction sector, to whom the responsibility to provide housing was transferred. As the housing units offered remain only affordable for a small percentage of the people, the state would give subsidies to the poorest population, which, in the company of a mortgage provided by a private bank and previous savings of the family, would enable the acquisition of new private houses by the different households.

### **PROBLEM STATEMENT**

**After the 1990s, Colombia opted for a policy based on subsidies for the demand to address the housing shortages.** Under this scheme, the families’ previous savings would be complemented by subsidies and a hypothecary loan offered by the financial market to access a house provided by the free market. Nevertheless, this policy faces a severe contradiction; families need to prove they are poor enough to access the subsidies but simultaneously prove they have enough income to access credit. (Parias Duran, 2014) With over 56% of the population working in the informal market, many people needing housing cannot access it for lack of financing.

## RESEARCH QUESTIONS

### Central Question

- How can Colombia improve social housing policies to increase access to quality homeownership for low and middle-income households?

### Subordinated Questions

- What public policy strategies have been used to increase access to homeownership in the Global South?
- How has Colombia addressed the lack of access to homeownership in the past?
- What are the strengths and weaknesses of Colombia's approach to addressing the lack of access to homeownership today?
- What transferable lessons from Chile can be drawn to improve Colombian social housing programs?

## LIMITATIONS

**The following master's thesis will focus on access to homeownership through the enablement strategy.** As Colombia and Latin America have adopted the neoliberal enablement of markets as a solution to housing production (Rojas, 2019, pp. 185–186), most of the programs, lessons, and feasible implementation steps would be around programs under this strategy. Renting programs will not be studied, despite different experts' calls for renting inclusion into governments' agendas (Gilbert, 2008, pp. 4–7; van Lindert, Smets), these programs are considered out of reach.

**Second, the study period will focus on the period between 2011 and 2022, stopping when the new president, Gustavo Petro, took office.** The new policies implemented by this government have only recently had effects and do not have enough information to be evaluated in time. The research will concentrate on the post-housing system reform period in Colombia, delving deeper into the programs implemented by the country over the past decade.

**Because of time constraints, the research will focus on the Chilean experience.** The decision comes as it is the Latin American country that has a longer history and higher success in the addressing of housing under the enablement approach. In this way, valuable lessons from its accomplishments and failures can be drawn for the specific study of Colombia.

## RELEVANCE

**The following thesis will study Colombia's housing provision and programs to find opportunities for strengthening and improving access and affordability.** There is extended literature on the evolution of the housing programs in Colombia and critics of the system's work. Yet, to my knowledge, the contrast between Colombia's housing policy in the light of Chile's example has not been made and is expected to bring new insights and feasible improvements to policy design. Countries with similar economic development and shared history, culture, and language might be more helpful in adopting working policies. (Gilbert, 2004, pp. 4–7) Most of the subject's literature is written in Spanish so this thesis will add to English-speaking literature on the topic.

## METHODOLOGY

**The thesis will study Colombia's housing policies and the specific program DS49 - Supreme Decree 49 (Decreto Supremo 49) from Chile, to draw lessons on how to increase access to homeownership.** Concepts from economics and urban planning will be borrowed to better understand the problems concerning accessibility, affordability, targeting, and finance. The analysis will be conducted under the enablement strategy, which has become the main policy direction for the region's countries. The cases will be analyzed under this lens to suggest feasible strategies inside the existing framework of Colombia's housing policies.

## METHODS

**Literature Review:** The first is the analysis of academic production regarding housing policies in the Global South and Latin America. Scientific literature will be studied to understand the historical development of the policy through calculations and data analysis. The research focused on papers written since the year 2000. Nevertheless, recurrent cited articles or articles about subjects not covered extensively by more recent literature are also included. The researched languages were both Spanish and English.

**Sector and Affordability analysis:** to understand how accessible the country's social housing is, an affordability study will be done. It will analyze the population's income as presented in the GEIH 2018 – *Gran Encuesta Integrada de Hogares (Grand Integrated Household Survey 2018)*, the most recent information related to households' income, through Rapid Urbanism's method (The World Bank (draft), 2024, pp. 31–61). It is an Adjusted Residual Expenditure Method, in which for each decile, an income share is expected to be destined for housing (see Table 1). The shares are located from 10%-35% as the higher that an income household is, the higher the share it can destine to housing expenditure, without compromising other needs.

Later, according to the different financial conditions expected to be available for the different deciles, where higher income households have access to lower interest rates and longer loan terms, an expected loan for capacity for each decile is calculated. This value is later compared with the lowest commercial units in the market. In this way, it is shown what households can access housing and how large the affordability gap is with the help of the current subsidies.

Income decile	Housing Expenditure by Rapid Urbanism	Loan Term	Interest Rate
D10	35,0%	20	7%
D9	30,0%	15	8%
D8	25,0%	12	10%
D7	25,0%	10	12%
D6	20,0%	8	15%
D5	20,0%	8	15%
D4	15,0%	5	18%
D3	15,0%	5	18%
D2	10,0%	3	24%
D1	10,0%	3	24%

Table 1 Sector Affordability Analysis by Rapid Urbanism Method (The World Bank (draft), 2024, pp. 31–53)

**Case study:** will be done to understand the program DS49 program in Chile, which allows access to homeownership to the two lower income quintiles of the population. First, a background of the country’s specific housing policy development will be provided, before studying the functioning of the program’s policies for the subsequent analysis and evaluation.

**STRUCTURE**

**The thesis will first provide an analysis of Colombia’s housing policies to identify strengths and challenges in the system.** Based on this, the analysis of Chile’s DS49 case study will be conducted, to draw lessons for the strengthening of Colombia’s policy framework. Last, a set of policy recommendations will be made for improving Colombia’s housing policy system. To accomplish this, the thesis is structured in the following way: The second chapter will address the existing literature on housing policies in the Global South. Relevant concepts will be defined, and a historical overview of the main policy approaches and their impact and lessons will be conducted. The narrative will be based on the policy recommendations emitted by the international aid agencies, which have significantly shaped both Colombia’s and Latin America’s housing policies. The Third chapter will analyze the history of Colombia’s housing policies. It will start with an overview of the different approaches to housing throughout history, with particular attention to the transition period from the state provision of housing towards the enablement of markets since the beginning of the 1990s. Five different stages have been identified according to the literature. The first four will be presented as classified by Cevallos

and Saldarriaga (2015). These are The Hygienist Phase (1918-1942), The Institutional Phase 1942-1965, The Transitional Phase (1965-1972), and the savings and Housing Corporations Phase (1972-1990). Last, the Liberal reform to housing will be introduced, presenting the changes to the previous system, which set the basis for the working of housing policies today. The fourth chapter will study recent developments in Colombia's housing policy. It will provide a look at the country's demographic characteristics and housing deficits and, later, will look inside the different programs and their impacts between 2011-2022. The fifth chapter will give an overview of Chile's successful experience, which has already faced some of the challenges the country faces today. The last chapter will contrast and find feasible steps for implementing better policies and solutions in Colombia's context.

## CHAPTER II: HOUSING POLICIES IN THE GLOBAL SOUTH

### ADEQUATE AND AFFORDABLE HOUSING

**Housing affordability was first measured during the middle of the 19th century; it came first from empirical observations on the spending of poor households.** Based on these observations, some laws were formulated, considering a relationship between household expenditure on housing and income. The observations found that a constant household income ratio was usually destined to housing, which led policymakers to set an adequate standard (Haffner and Hulse, 2021, pp. 61–62); this number would typically be around 25%. During the second half of the 20<sup>th</sup> century, most housing experts accepted the housing expenditure ratio as a correct affordability indicator. Nevertheless, during the 1980s and 1990s, with the increases in housing costs, new debates led to finding a new indicator and definition of affordability. (Hancock, 1993, pp. 127–134; Haffner and Hulse, 2021, pp. 62–64)

One of the most cited definitions was given by MacLennan and Williams, in which:

“Affordability” is concerned with securing some given standards of housing (or different standards) at a price or rent which does not impose, in the eyes of some third party (usually government) an unreasonable burden on households. (MacLennan and Williams, 1990, p. 9)

**This definition does not concern only the cost of housing but also implies securing a minimum standard of accommodation, so any household living below this threshold would face physical or psychological challenges in their daily life.** This means that a household that affords housing under quality standards should still be considered to have housing affordability problems, which the single ratio to income indicator would not always detect. Despite the new approach conception, the authors still defend the income-ratio approach but suggest a more generous threshold for governments to measure affordability.

**Hancock later (1993, pp. 132–133) criticizes the ratio indicator as it oversimplifies some behaviors, and introduces the opportunity cost of housing expenditures in the housing affordability question.** Given the imperfectness of the market, this highlights that some people might decide to make some trade-offs between housing expenditure and other expenses. The causes for this might not be affordability but personal choice and constraints facing the consumer. For example, a person who decides to pay more for housing to acquire a particular benefit from its location could be allocated within this group. This means that the expenditure-to-income ratio could not measure these cases. Therefore, the author leans toward a residual income approach to measure affordability instead of the income ratio.

(Hancock, 1993, pp. 132–133) The residual income is measured by calculating the non-housing expenditure of a household, and then the income left for housing expenditure is compared to the price of adequate accommodation for that household. If it is too expensive, the household is considered to have affordability problems.

**The 21st century saw the discussion not only on the affordability measurement but also on the normative basis of quality-based housing affordability.** (Haffner and Hulse, 2021, pp. 64–65) The debate focused not only on the method for measuring affordability but also on the minimal thresholds that, once surpassed, should show evidence of a household's affordability problems. In this context, Stone analyses the different methods for accounting for affordability and analyzes the opportunities for them to have a solid normative approach. These are:

- Tautological: Ability or inability of households to pay for market-rate housing.
- Relative: changes in the relationship between aggregate central tendency measures (medians or means) of house prices or costs, on the one hand, and summary measures of household incomes, on the other.
- Subjective: Whatever individual households are willing or choose to spend
- Behavioral: Standards based on aggregate or average housing expenditure patterns or on the characteristics of households in areas.
- Ratio: Normative standards of a maximum acceptable housing cost: income ratio.
- Residual: Normative standards of income to meet human non-shelter needs, after housing is paid for. (2006, p. 42)

**Nevertheless, Stone says that only the last two, the housing expenditure to income ratio and the residual income, provide a normative standard that allows us to rapidly identify and take measures related to housing unaffordability.** The ratio is the oldest and most widespread of the methods in English-speaking countries. According to the author, the reason for the success is the mathematical simplicity to 'identify' households with affordability problems. Nevertheless, it has no logical or theoretical foundation since it only comes from observations of housing expenditures used as a norm out of repetition; nonetheless, they cannot always express when a household faces an affordability problem. To explain this, the author highlights the importance of housing standards, similar to the one already described by Hancock. For example, a household that to meet their non-shelter consumption acquires a 'substandard' house below the 30% threshold of affordability would not be identified as having affordability problems by the ratio measure; still, they are struggling to have adequate housing

consumption. This approach also highlights another challenge, which is: defining a normative definition of housing quality.

**Facing this difficulty, Stone favors the residual income approach.** The author finds more evidence and data for the standard of prices for non-housing consumption, such as food, clothing, health, and transport than for normative prices for a standard of housing quality, as housing is a commodity with high price fluctuations. In the residual income approach, “shelter poverty is ascertained by considering actual income and actual shelter costs against a monetary normative standard for non-shelter items, not a normative standard for shelter costs.” (Stone, 2006, p. 45) Last, to effectively measure the different sizes and compositions of households, the author creates a Shelter Poverty Scale, which allows the identification of the residual income according to the previous characteristic.

**Not only was the debate never resolved, but it gained even more complexity with the more data available through technology and the increasing financialization of housing which was deeply related to the 2007 Global Financial Crisis** (Immergluck, 2015). With this in mind, a new body of literature around urbanization, financialization, gentrification, and the proposal of more complex measurements to identify the new households with affordability problems has been written in the last part of the 21st century. It is an approach that tries to add more dimensions to the affordability debates, such as access to employment or transport, and shows how the urban transformations have proven to change the household's access to urban services. (Haffner and Hulse, 2021) Especially relatable to the situation in the Global South are the concerns around transport poverty, where the growing and spread of urban centers in poorly served land can heavily impact a family's transport budget.

**For this thesis, the Rapid Urbanism framework will be used.** Despite housing costs varying in the geographical context, Latin American countries usually face a higher housing expenditure burden. This burden increases, the lower income that the household disposes, meaning that households in the poorer quintiles face a higher housing cost burden than those in the wealthier quintiles. (The World Bank (draft), 2024, pp. 31–40) Nevertheless, for the exercise a different approach will be used where moderate assumptions are done to include a higher portion of the population. For this reason, lower income households will be expected to use a lower share of their income on housing consumption. This is done according to Engel's Law, which states that “as household income increases, the income share spent on food decrease while the proportion spent on other goods increases” (Nohn, 2023, pp. 10–11) In this way, households are expected to access housing without sacrificing other essential expenses, which some might be experiencing at the moment.



**For this reason, the model proposed is based on the residual income approach reflected in a sliding scale of affordable housing expenditure.** The households will be organized by income in deciles. To reflect the actual burden costs, the lowest share of income destined for housing will be assigned to the poorest deciles, consistently increasing to the richest ones. The suggested scale is ranged between 10-30% (The World Bank (draft), 2024, pp. 44–45). In addition to this, households face unequal access to housing financing. As the better-off households take higher loans and provide higher security of paying, they tend to have better interest rates and longer loan tenures. (The World Bank (draft), 2024, p. 47) The scale will display the different financial products available for the other households in the country. This understanding of the real affordability of households, in contrast with the real prices of the housing market, will help evaluate the workings of Colombia's housing subsidies.

## **THE ROLE OF INTERNATIONAL AGENCIES**

**International Agencies, such as the World Bank and UN-Habitat (*United Nations – Habitat*), have played a significant role in the design of housing policies in the Global South** (Chiodelli, 2016, pp. 1–2). Despite evidence that some of these institutions can pressure governments, there has been a shift towards persuasion methods instead of enforcement. This has been done mainly through technocrats and advisors, who, because of their formation and contact with what Weyland calls 'epistemic communities,' are responsible for bringing these new ideas from academia into the countries' policy design (Gilbert, 2004, pp. 202–203). These people are exposed and open to the most recent policy debates and have been the ones to link the knowledge generated in Academia and International Organizations with the national governments. The concepts and experiences transferred usually favor two directions: The best practice concept, in which countries try to adopt policies from 'successful cases' that are adapted to local contexts despite massive differences within the countries, or the implementation of countries with regional and language similarities, since the cultural, historical, and political backgrounds may prove an easier transferability of the 'successful policies.'

**The widespread policies favored by the international agencies have led to similar approaches to housing problems by the Global South governments.** Before the rise in importance of the agencies, first, there was a period characterized by 'government housing provision'. Later, according to Chiodelli (2016, pp. 3–7), there were two primary policy directions provided by these agencies: first, a period of 'Aided self-help,' which combined two main strategies, a 'Sites and Services' approach and an 'Upgrading' one; second, a period of 'Enablement' of the private market. This period of Enablement has had some transformations,

according to Murray and Clapham (2015, pp. 5–11) during the 2010s there have been higher interventions and efforts from governments to reach a broader sector of the population

## **GOVERNMENT HOUSING PROVISION**

**During the 1950s and 1960s, Latin America faced a massive urbanization process.** Nevertheless, because of the lack of resources to provide shelter for the population, there was a consensus to ignore the settlements while the formal city would absorb them. (Chiodelli, 2016, pp. 4–6) As a parallel process, the measures taken in Latin America were creating housing policies that targeted the formally employed population. The state was responsible for the financing, planning, and delivering subsidized housing, where schemes characterized by large, low-cost, mass-produced housing units were the usual. (Murray and Clapham, 2015, pp. 5–6) Nevertheless, this approach had two significant drawbacks: it was difficult to sustain within changing governments and failed to reach the poorest population. (Rojas, 2019) These conditions inevitably led to the widespread of informal settlements and low and insufficient formal housing stocks.

## **AIDED SELF-HELP**

**The fundamental reason for the spread of these settlements is that most of the population cannot afford a house in the formal market.** (Ferguson, 2008, pp. 2–4; van Lindert, Smets and Bredenoord, 2014, p. 399; Rojas, 2019, pp. 181–182) This has led the formal market to provide solutions for only a small percentage of the population, and the rest of the people are off to find housing solutions for themselves. Because of the lack of resources, most households start by acquiring a plot, usually in invasions or illegal subdivisions. The poorest people resort to subdivisions of old existing buildings in the city centers. Later, between 5 and 15 years, most households start finishing the self-built construction of their homes. (Ferguson, 2008, p. 5) There is a body of evidence proving that retrofitting informal settlements is more expensive than planning them, where the servicing of public services on already existing invasions can signify up to two or three times the initial investment of legally developed plots (Ferguson and Navarrete, 2003, p. 203). This way, properly planning self-aided solutions instead of upgrading invasions can be a more effective resource investment.

**The widespread of these settlements and the failure of the government's program to eradicate them led to a 'paradigm shift.'** This happened in Latin America in a moment of high social mobilization and demands from the settlers to improve their living conditions (van Lindert, Smets and Bredenoord, 2014, p. 398). In this process, instead of being perceived as a threat, informal settlements started being perceived as an opportunity to remedy the growing

housing problems. John Turner, acknowledging urban poverty as a structural phenomenon and the spread of slums as a symptom, proposed to design housing policies according to the demands of the poorer strata while acknowledging the limited budgets of poor countries. (Chiodelli, 2016, pp. 5–6) The solution proposed was an aided self-help scheme, where governments should enable and facilitate for the population the safe tenure of plots where they could build their housing solution.

**There have been typically two different policy schemes for the provision of self-help housing solutions: Sites and Services and Upgrading.** Sites-and-services schemes provided plots equipped with basic facilities for later development by the people into incremental housing solutions. Upgrading solutions can take a wide diversity of forms, but they are all aiming to improve the living conditions of existing informal settlements. They should comply with three basic principles: providing the basic infrastructure, guaranteeing secure land tenure, and establishing access to credit for the further self-improvement of the neighborhoods. It is important to add that most projects focused on the infrastructure aspect, many times not securing the land tenure and the former financing for the later upgrades. (Chiodelli, 2016, pp. 5–6)

**The new housing solutions developed by this tool are generally considered to have improved the living conditions of the target population.** Nevertheless, among the general critics, the housing projects could not provide enough housing solutions to decrease the housing deficits. Furthermore, the projects were not able to provide access for the whole population, but most resources stayed within the ‘most wealthy of the poor,’ who could, in the first place, afford entry into the provided solutions. (Chiodelli, 2016, p. 6)

## **ENABLEMENT**

**The second phase began for most countries during the 1990s, when they adopted the Washington Consensus, incorporating a neo-liberal approach to housing policy.** During the 1970s, Chile and Costa Rica pioneered the design of a housing policy that would replace the state’s direct production of housing to favor a financing role for a facilitated private market. (Rojas, 2019, p. 180) Summed up with the perceived problems of self-helped projects during the 1980s; which according to international organizations had not been able to scale up enough to provide a definite solution to the housing problem in the Global South (Chiodelli, 2016, p. 7), this already implemented strategy became a logical replacement. Through the promotion of this model, the World Bank hoped to achieve housing provision systems that would not only scale up but also be able to i) target the poor, ii) be more transparent, and iii) enable private market provision. (Murray and Clapham, 2015, p. 7)

**The model was based on subsidies to the demand, where the state would assist the population through monetary subsidies, which, complemented with savings and a bank mortgage, would enable citizens to acquire a house developed by the private market.** (Murray and Clapham, 2015, p. 7; Chiodelli, 2016, p. 11) To enable these conditions, two major changes had to be addressed by the countries: “The reduction in planning bureaucracy and the legislation of land titles.” (Murray and Clapham, 2015, p. 8) To reduce bureaucracy, activities were decentralized, and more processes started to be in the hands of local governments. Nevertheless, there have been lots of critics of the process of decentralization, mainly because it has not been able to achieve the expectations of efficiency and autonomy it proposed to reach (Cossani, 2017, p. 7). In the specific case of housing, it can be seen in the lack of coordination of actions within government and municipalities (Murray and Clapham, 2015); for example, the smaller local municipalities whose responsibilities increased but did not receive the appropriate funding to support and sustain the decentralized housing policies. The legislation of land titles tried to bring the poorest population into the market by providing a deed that could be used as collateral for the acquisition of a bank loan. (World Bank, 2006)

**The model has had a variety of results in the different countries it has been implemented, but despite all the experiences, it has been able to provide two common pieces of evidence.** The model has provided an increase in housing production (Murray and Clapham, 2015) that has led to a reduction of qualitative deficits, where the average deficit in the region reduced from 8% to 6% (Rojas, 2019, p. 178). Furthermore, “Estimates for 2010 indicate that government programs were responsible for 64% of all new formal houses built in Mexico, 52% in Chile, 21% in Argentina, and 19% in Colombia.” (Rojas, 2019, p. 180) Nevertheless, the massive production and bad location of housing have also proven a new problem, especially in countries such as Mexico, where many new homes tend to be abandoned because of the lack of urban services provided near the households. (Rojas, 2019) II) Its inability to reach the poorest households has left most of the housing stock in the hands of middle and high-income groups since most of the population, without access to a formal job, still depend on the illegal markets to acquire a house. (Murray and Clapham, 2015) Suppose these groups are interested in the acquisition of a house and the granting of a subsidy. In that case, they usually cannot lend the rest of the money to a financial institution since it is perceived as a small profit loan with a high risk. (Gilbert, 2000)

## **INCREMENTAL HOUSING**

**As already explained, because of the lack of affordable housing, aided self-help approaches have become the main way for low-income populations to access housing.** There are usually three stages associated with incremental housing, according to Greene and

Rojas (2008, pp. 93–99) these are i) access to land, which because of lack of availability in the formal market, is usually accessed by illegal occupation, purchase of illegal subdivisions, or government programs; ii) a basic habitable nucleus, which is essential to foster the projects benefits since the beginning for households, for this reason, families first invest heavily in minimum standards of size and quality, and later, adapt their home to their needs. iii) the incremental improvements, usually take out two faces; first the nucleus is expanded in the fastest and cheapest way possible, to rapidly accommodate all household members, once this stage is completed, improvements in quality become the natural continuation.

**There is a whole set of options when it comes to the first delivered project for incremental housing.** The cheapest, fastest, and most flexible ones are the sites and services, where only serviced plots are delivered for households to build their dwelling. By increasing investment costs and construction times, there can be core units that can provide sanitation and rooms. This improves the household's initial living standard but also reduces future flexibility. Last, they can take the form of fully delivered houses like shells, in which internal walls can be added over time, adding up more to cost, time, but also to quality.

**One of the hardest tasks is to choose the right starter option.** Not only do available resources and demand need to be matched, but also predict people's behavior in their home expansion. For example, many plots and services projects were not successful or took a long time to develop because people had no means to rapidly build a nucleus. (Greene and Rojas, 2008, p. 92) Even further, incremental housing has a stigma of being related to inadequate land in illegal subdivisions, with a lack of meeting construction and sanitation standards (Greene and Rojas, 2008, p. 91). For this reason, political acceptance becomes another major constraint. If the quality conditions and the images of the project are not good enough, the projects might not be supported and risk continuity (Nohn, 2016, p. 17). In this way, the project needs to balance, demand and resources for rapid urbanization with the cultural values and standard of living to choose the right package that can effectively address the problem while maintaining political acceptance (Nohn, 2016).

**Multi-story incremental housing is another effective option to further optimize resources.** These projects compensate the cost of higher construction standards and technical assistance, with the demand for less land, and optimization of the layout's infrastructure, such as roads and public services. (Nohn, 2016, p. 10) In this way, by acquiring less land to accommodate the same population, the projects can have better allocated land, closer to transport and social services.

**Nevertheless, governments still need to play a major role in facilitating these processes.** According to Greene and Rojas (2008, pp. 100–104), a priority should be the efforts to mobilize

good affordable land for the projects, with strategies such as simplifying land subdivisions, and/or requesting a quota or compensation for social housing to private developments. As well as the importance of technical assistance during the construction and expansion process, and alliances between different actors, to secure material supply, quality construction, and proper means for finance.

## **OWNERSHIP VS RENTAL**

**Since the 1970s there has been a global trend to favor homeownership over rental around the world; it has happened through banking systems becoming increasingly available and governments offering incentives, such as tax relief over mortgage payments, to reduce homeownership costs** (Gilbert, 2016, pp. 1–2). The main reason for the desire for homeownership is that it is conceived as a mechanism of private insurance (Kemeny, 1980, pp. 378–379; Gilbert, 2016, p. 2). This can be seen as it distorts the housing expenditure of a household on time. Housing finance requires a high household investment during the first years, in exchange for low housing costs during the latest. Kemeny frames this characteristic within the social welfare system and compares the operation of acquiring a house with the acquisition of an insurance policy against future poverty, unemployment, or other problems. This behavior matches the needs of inhabitants in Latin America, where limited social security related to informality provides a more uncertain future for many people. Even further, the owning of housing stock by the governments has been seen as a problem in taking care of the administration and maintenance of rental housing. For this reason “selling publicly owned houses to the tenants has been seen as a way to increase homeownership while diminishing state expenditure (especially maintenance costs). “ (Rolnik, 2013, p. 1062) Nevertheless, the principal problem associated with homeownership is the increasing unaffordability associated with it. Yet, people in the Global South have historically used a different option to face inaccessibility to the formal housing market, which is self-help housing (Gilbert, 2016, p. 6).

**For these two reasons, homeownership has become the principal form of tenancy in Latin America today** (Rojas, 2019, p. 185), **where most governments have encouraged it through subsidies, mainly directed to new home acquisition or upgrading of the existing housing stock** (Murray and Clapham, 2015, p. 5). According to the analysis of the 4 biggest economies of Latin America; Brazil, Argentina, Chile, and Colombia share ownership rates between 50% and 80% (Murray and Clapham, 2015, p. 5). Despite the initial increase in homeownership rates, in some countries renting has experienced a new sudden increase, because of the lower availability of urban land, governments' higher control over land invasions, and the increase in housing prices (Gilbert, 2016, p. 5) As most governments do not

own a housing renting stock, most of the renting tenure is agreed on the private market. In the continent, much of it occurs in informal settlements, where the self-helped houses can add rooms to the dwelling to generate extra income (Gilbert, 2016, pp. 4–5).

**Despite the tendency of governments to favor homeownership, there are still many benefits to renting. According to Gilbert (2016, p. 8), there are three main arguments.** First is that it provides more flexibility for households who do not wish to settle in a dwelling at the moment; groups such as students, migrants, and investors might prefer to postpone this decision. It also gives more flexibility to the different changes in household size. Second, there can be relationships between homeownership and urban sprawl, while renting is more conducive to developing compact cities. Third, the lack of mobility associated with homeownership can affect employment levels, by decreasing the flexibility to move. Renting, despite different calls from academics and policymakers to be incorporated into government agendas, still has not been extensively addressed by governments in Latin America.

## **SECURITY OF TENURE**

**Security of tenure has always been an important aspect of housing policies in the Global South, although the arguments for it have changed.** (World Bank, 2006, p. 28) In the first stage, when the World Bank focused on aided self-help solutions there were two opposite views on the security of tenure. The land cost was considered of small importance in the final price of housing provision solutions, while the security of tenure was considered essential for allowing the delivery of land at the demanded scales.

**Nevertheless, after the 1990s two new reasons appeared to place the security of tenure as a principal aspect of housing policy.** First, the evidence and studies that proved that land market policies are deeply related to the increase in housing prices and therefore, constitute a significant portion of the total housing costs. (World Bank, 2006, p. 26) Second, the appearance of Hernando de Soto's book, *The Mystery of Capital*, sees in secure land tenure an explanation of the productivity of capitalism in the West. According to the book, tenure security, and land rights have played an essential mechanism in "converting assets to usable wealth". (World Bank, 2006). In this way, the author proposes that by providing secure tenure and an option for the informal owners to use their real capital as collateral in the financial market, access to the finance systems could integrate informal settlements into the country's economy and access to housing finance.

**Another important aspect of the security of tenure is that it translates into security for informal households to invest their saving in housing upgrades; which they are reluctant to do when risking eviction** (Greene and Rojas, 2008, p. 93) For these reasons,

most upgrading programs have to come in hand with providing secure land tenure. Nonetheless, the legalization of title deeds has not delivered the economic activation it was expected. On the one hand, even with collaterals, banks are still unwilling to lend to this population sector, who are characterized by informal labor and unsteady incomes. On the other hand, many of the poorest households see it as a weaker form of tenure, where the property can be at risk by the lack of payment of land taxes or mortgages. (Gilbert, 2000, p. 185)

## **FINANCE**

**As mentioned above, the first proposed solution to the housing affordability problem was subsidized government programs where the state would oversee the managing, construction, and financing of housing.** In this context, the private sector would supply housing for the people who could afford it, while the government, through its programs, would address the poor population for whom housing was unaffordable. The lack of capacity of the government's programs and the free market to provide affordable housing caused the broader segment of the population – normally 50–70% of the population - to recurred to self-help housing in informal settlements to find their housing solutions. (Ferguson and Navarrete, 2003)

**The little-developed financial market of the Global South has not been able to provide competitive loans for households to acquire.** These cause two main problems with the finance of housing provision. The high regulation rates of the poorly developed financial systems only provided a small supply of credit where there was little competition. This impacted higher housing supply costs, especially in the formal markets. On the other hand, financial institutions were only interested in lending their money to the governments and middle- and upper-income households. (Ferguson and Navarrete, 2003; Rojas, 2019) Lending to the poorest households was seen as a risky, low-profitable operation in which banks did not want to risk their resources (Gilbert, 2000). For this reason, people would need to access new paralegal and financial markets, mostly run by loan sharks at higher interest rates. Provoking huge costs in the acquisition and upgrading of self-help housing solutions. (Ferguson and Navarrete, 2003)

**As part of the enablement strategy, the liberalization of the financial markets was one of the pillars of the new system.** It followed the massive liberation of financial markets in the Global North, where the highly regulated systems were replaced with open market solutions, where financial institutions should compete by providing lower-interest loans to attract more customers. (World Bank, 2006). In addition to this, financial institutes would take the risk of deciding who to lend money to. States had proved to have problems recollecting the money invested in housing solutions. In the case of Colombia, only 17% of the debt was being



collected by the main official Institution in charge of Housing before the neoliberal reform. (Gilbert, 2000) These measures should provide cheaper home-ownership solutions for the population.

**The enablement solutions have been useful in decreasing housing shortages. The percentage of urban households in Latin America went from 8% in 1995 to 6% in 2009.** (Rojas, 2019, p. 178) Housing production increased in some countries, such as Costa Rica and Chile, able to overcome the creation of new informal settlements and focus on improving the existing ones (Ferguson and Navarrete, 2003, pp. 201–202). Nevertheless, despite the economic growth experimented in the region, informality still predominates. This fact had ended with much of the financial sector still not covering the poor segment of the population. Financing is only provided for high- and middle-income people while borrowing from the poorest population is considered risky and does not produce major revenue. (Rojas, 2019, p. 181) Only the richest of the poor, usually belonging to the formal labor market, can access subsidies for new housing facilitated by the market (Gilbert, 2000) Still, most of the population has to resorted to the paralegal financial systems to finance their housing solutions.

**For this recent literature, there have been a lot of reflections on improving microfinancing strategies to allow settlement upgrades.** Different good practices, mainly from the private and cooperative sectors, have been highlighted for governments to scale and promote them.

## **MICROFINANCE**

**The lack of access to mortgage finance for low-income populations has translated into a constraint in their access to housing.** Between the identified difficulties by Gilbert (2000) i) There is a bias in regulations favoring mortgage lending towards completed homeownership-housing, over other types of housing ii) The difficulty to verify and assess the incomes of informal households iii) The lack of trust in people repaying their loans and iv) the low-profitability of small loans. A natural consequence of this has been the spread of self-help housing, where dwellers improve their houses incrementally over time according to newly acquired resources. The process is described by Ferguson and Smeths (2010, p. 3) as:

These families neither want nor can afford a large long-term traditional mortgage to purchase a developer-built complete unit. Instead, these households build progressively, by acquiring and upgrading title to a lot, building a makeshift shelter, replacing this makeshift shelter with permanent materials, expanding it, and lobbying government for services.

**It is a long and expensive process, where owners can take more than 15 years to see their houses completed.** (Ferguson and Smets, 2010, pp. 2–3). The process, especially in the first stages, involves savings, which take a long time to be acquired as they compete with other needs of the household. The savings are usually complemented with other sources of funding; usually informal loans from friends, family, moneylenders, and pawnbrokers, which can provide flexible arrangements between parties, acknowledging the informal working conditions.

**The authors find in Microfinance, Community-based Housing Finance, and Consumer Credit for purchase of building materials, replicable options that could greatly improve the process and scale of incremental housing.** Microfinance refers to small short-term unsecured credits, which are mostly related to micro-enterprise lending, enhancing the potential for economic development. Nevertheless, some smaller financial institutions and NGOs have incorporated housing microcredit into their agendas. In this way, very similar credits could be replicated by institutions for housing, fostering a market with great potential to grow. Nevertheless, the lack of funding for these institutions appears to be the main constraint for scaling up. These types of loans have also been granted by community organizations as a means to finance its members, or suppliers of building materials to expand their operations.

**More importantly, Ferguson and Smets (2010, pp. 7–11) see microfinance as not only a way to increase credit access but also the potential to create a complete value chain that improves incremental housing construction.** The author's recommendations for enabling this include: broadening the institutional base; establishing alliances between different stakeholders, such as real estate developers, commercial banks, and building material manufacturers; integrating existing informal lending agents with formal systems; increasing the integration of government subsidies to microcredit related products; creating diverse products that integrate home improvements with financing; and improving overall funding.

## **HOUSING SUBSIDIES**

**Housing subsidies is a term widely used but not many times precisely defined.** Haffner and Oxley (1999, pp. 146–147) define it as “the government initiatives that lower the cost of production and consumption of housing”. Furthermore, they distinguish between two kinds of subsidies. Subsidies to the demand and subsidies to the supply. On the one hand, subsidies to the demand support the group on the consumption side of the housing market. Usually, these subsidies are considered ‘conditional subject’ subsidies because their provision is linked

to specific characteristics or household consumption. On the other hand, supply-side subsidies make housing production cheaper for the producers.

**The instrument to increase housing demand should be chosen according to a wide strategy for housing provision and not as a specific solution to the target group.** In this sense "it is of critical importance designing a subsidy regime that balances (a) improving low-income households' access to adequate housing and (b) ensuring access to relatively better housing by (e.g., middle-income) households who contribute more themselves." (The World Bank (draft), 2024, p. 62) These will ensure that subsidies remain benefiting low-income populations while middle-income groups do not try to benefit from these larger subsidies. Even further, the wrong implementation of subsidies can have adverse effects such as endangering fiscal continuity, increasing market prices for households unable to access the subsidies, or being captured by not-targeted social groups. (The World Bank (draft), 2024, p. 62). The publication, *Social Protection and Housing: How to Use Housing Benefits for Harnessing a Just and Green Urban Transition* has the following list of instruments to increase housing demand (The World Bank (draft), 2024, pp. 62–81), for a better comparison, it proposes as an initial scenario a market based unsubsidized mortgage loan of 100 units, with an interest rate of 6% paid for 20 years, summing up a total debt of 174,37 units paid in equal installments of 8,72.

**Capital support: Down payment subsidies:** It consists of a one-time payment which reduces the total loan amount, in this sense, it reduces payments done over time. In the example, a 25% down payment subsidy would reduce the total payment from 174,37 to 130,73 (-25%) and each installment during the next 20 years from 8,72 to 6,54 (-25%) In this sense, it constitutes a simple cost-effective tool where 25% fiscal costs translate into a 25% affordability enhancement.

**Interest subsidy: Concesional liquidity:** Is provided to intermediary lenders, who then offer reduced interest rates to beneficiaries. In contrast to the previous example, a liquidity facility may grant a loan to a private bank interest-free for the total amount of the loan (100 units), enabling the bank to lower the beneficiary's interest rate (reduction from 6% to 2.71% which would maintain the 25% affordability enhancement). While this achieves affordability enhancement, challenges include high upfront capital needs, potential term risks, and fiscal costs. To avoid exceeding benefits, the facility should charge its cost of funds to the intermediary lender and manage term risks, potentially achieving cost neutrality. However, fiscally responsible cost recovery might limit affordability enhancements.

**Interest subsidies: Payment match:** It addresses affordability gaps by supplementing a beneficiary's payment capacity through government grants. For the mortgage loan example,

the government would pay an annual grant of 2.18, to reduce the yearly payments from 8,72 to 6,54 and maintain the 25% affordability improvement. As compound interests add up, the fiscal cost of payments would be 31,72, significantly exceeding the down payment subsidy cost. To mitigate this, an upfront deposit in an escrow account is proposed, reducing macroeconomic and lender risks. Properly setting interest rates for the escrow account is crucial.

**Buy-down:** The interest buy-down is similar to the payment match but diminishes the government contribution over time, anticipating income growth and enhanced payment capacity. Comparative to the case above, with a moderate nominal income growth of 2,9% annually, the phased reduction of the government subsidy would reduce from 2.18 in the first year to 0.28 in year 10, ceasing entirely by year 11. Remarkably, the buy-down significantly reduces the fiscal cost to 11.13, while maintaining a 25% affordability enhancement initially. Depositing the buy-down into an escrow account ensures minimal upfront capital and mitigates macroeconomic risks. However, it lacks the redistributive power of a payment subsidy and may restrict household income growth for housing improvements. Consequently, the fiscally efficient buy-down is suitable for substantial, longer-term loans, particularly for completed homes without incremental improvements, and possibly for middle-income beneficiaries requiring less redistributive support.

**“Step-up Mortgage” with growing payments:** It functions similar to a buy down, by anticipating nominal income growth, and gradually increasing installments over the loan period, but lacking government subsidy. Comparative to the case above, with a moderate nominal income growth of 2,1% annually, the first payment would be 7.72 (11% less than the 8,72-loan payment) in the first years, and increase up to 9.34 in year 10, when it would maintain the same value until the end. As amortization is delayed, interest payments would increase from 74,37 on the unsubsidized mortgage loan to 77,90. Conservative assumptions on nominal income growth and a limited growth period are crucial for prudent risk management. Step-up mortgages, suitable for households above market thresholds, can be reinforced with guarantees or insurance instruments for risk mitigation. Without fiscal support, they serve households beyond subsidy eligibility, potentially alleviating pressure from affluent households to compete for other subsidies.

**Leasehold: inflation-indexed (land) use rights:** Under a leasehold, an asset, usually land, is rented during an extended period, usually 30, 50, or even 99 years. By providing extensive use rights, such as being inheritable, transferred, or mortgageable, but not of freehold ownership, it can reduce market pressure by reducing the interests of different actors. In this way, it can work both as a secure land tenure that discourages land speculation, but still be

used as a financial instrument. For this reason, it gives a potential advantage for public housing programs in risk-prone areas. Shared land rights through collective leases, like cooperatives, further enhance this effect. Financially, a lease can mirror regular land purchase terms, including a down payment and loan amount, where the rent paid for land may be inflation-indexed, increasing affordability by adjusting to inflation. As the land is returned at the lease end, the underlying land value does not amortize, making the payment equivalent to a loan interest payment.

**Lease-to-own and rent-to-own:** Lease-to-own and rent-to-own variations involve a tenure change to ownership after the lease or rent period. Indexing inflation can enhance affordability, and a lease-to-own should amortize a portion of the asset's real value to ensure affordability at transfer. A balloon payment model, like a 10-year lease with 10% nominal amortization and a 90% balloon payment, can improve affordability by 30% in real terms, assuming 2.5% annual inflation. Complexities arise, including credit funding, property improvements compensation, asset operation, maintenance responsibilities, and legal and tax issues.

**Credit guarantee:** Credit guarantees, are often partially responsible for covering credit default. They tend to target households at the market frontier who may be ineligible for loans due to factors like informal employment or insufficient financial history. They also can prove efficient in supporting wealthier households beyond the market frontier, to capture larger subsidies. While potentially the most cost-effective, credit guarantees pose policy risks such as moral hazard, necessitating careful risk allocation and foreclosure contingencies. In developed and emerging markets, guarantee costs typically range from 1-2% of the loan amount, payable at loan disbursement.

**Demand side-rental support:** Rental subsidies, such as vouchers, cover a part or the whole rent to enhance housing access, aiming to bridge the affordability gap without deterring private investments. Usually considered a temporary provision, they are a cost-effective solution that if not constantly monitored can accumulate high fiscal costs long-term. The main advantages lie in their family-focused approach and portability, granting easy mobility. To manage costs, periodic income verification is recommended, alongside initiatives to reduce rents, such as concessional land access or liquidity. Balancing both sides of the affordability equation is crucial for the responsible use of public funds in rental subsidy programs.

## TARGETING

**The enablement strategy, as mentioned above, tries to create the conditions for private markets to supply the demanded housing for the population.** Nevertheless, as housing proved to be inaccessible to most households, the main tool for increasing the population range

that can access house prices has been the subsidies to the demand. In this way, the state facilitates a beneficiary a portion of the cost of the household, through which it can access a house provided by the free market.

**The tool for reaching the desired population is targeting, in which a program's efficiency is increased by reducing the number of population beneficiaries to a program and, therefore, increasing the amount available for these targeted groups** (Coady, Grosh and Hoddinott, 2004, pp. 5–7). According to the authors, there are three features related to targeting programs: i) Objective: the purpose of the targeting; Budget constraints: The budget destined for a specific program. Iii) Opportunity-cost: The tradeoff between the number of beneficiaries covered by the intervention and the level of transfers. The last is the most important in reaching the highest impact of the subsidies.

**The first condition for adequate targeting is the information needed to classify and understand the different group's incomes.** In the Global South, with many inhabitants working in informal markets, governments lack much information about the population. This information and its quality also have a cost to acquire, but at the same time, it secures a more effective allocation of resources. This condition of matching the program eligibility with imperfect information can result in two problems: i) Problems of exclusion, where people in need of the subsidy are not identified as such, and ii) problems of inclusion, where subsidy money goes to people who do not need it to comply with the policy objectives. If there is no proper targeting, even programs can be regressive, meaning that the random location of subsidies within the population would be more effective in addressing the poor than the chosen targeting tools. According to the evolution of housing programs targeting the local south, 25% of the programs were considered regressive. Still, on average, the measured programs could provide 25% more resources to the poor. The ten more successful programs provided between two and four times more resources to the poor than the random location of these resources (Coady, Grosh and Hoddinott, 2004, p. 84).

**The targeting tool implies widely different costs: according to Coady Grosh and Hoddinott (2004, pp. 7–11), these are:** Administrative: related to the costs of collecting the information, the better quality of information will probably be more expensive but increase the targeting precision. Private costs: related to the investment made by households to apply for processes; these can be the obtention of official documents, for example. Incentive costs: These cause behavioral changes in households to access the subsidies. Social costs: When the targeted households are identified, and for this reason, they can carry a stigma. Political costs: related to the political behavior caused by the specific targeting of certain populations. The inadequate evaluation of all the program costs can affect the tools' real effectiveness. For

example, if the private costs for accessing legal documents are too high, many households might decide not to benefit from the subsidy.

**As the previous information revealed, adequate targeting requires effort in the data collection and the program assessment and review.** For this reason, it is recommended to use subsidies for housing within a global vision and long-term framework rather than as one specific short-term reform. (World Bank, 2006, pp. 58–59) There are many different targeting methods. According to Coady Grosh and Hoddinott (2004, pp. 13–17), the main ones are Individual/ Household Assessments, where an official directly assesses the eligibility of households or individuals for the program; the ideal is to compare the results of these visits with official information of the household. Nevertheless, because of the lack of information, these are rarely conducted in developing countries, and three alternatives are commonly used:

- **Simple means test:** in which the household visit is executed but there is no verification of income.
- **Proxy means test:** A score is assigned to each household based on easily verifiable data, processed through statistical analysis. The information can be provided by the person or collected by a government official.
- **Community-based targeting:** where community members or leaders not related to the program's benefits choose the eligible people for the program.
- **Categorical Targeting:** in which groups fitting a specific category are eligible to access the benefits, usually done through easily verifiable characteristics such as age, gender, and ethnicity.
- **Self-selection:** This provides universal eligibility, but the incentives are only planned to work for the specific target they are addressing.

In conclusion, after reviewing a database of housing programs that target different methods, the authors conclude that there is no perfect method; if used and implemented correctly, all methods can help reach the desired population more effectively.

**The subsidies in the Global South have shown a predominance for home ownership instead of renting** (World Bank, 2006, p. 55; Rojas, 2019, pp. 185–186). Despite a considerable amount of the population living under rent, the lack of adequate information for targeting subsidies has resulted in seeing home-ownership programs, although not as wide-reaching, as an easier locating option for the resources. (World Bank, 2006, pp. 51–54) Despite many calls for the inclusion of the renting sector as one of the supporting policies for housing in the Global South (Gilbert, 2008; Rojas, 2019), most governments have still not considered this solution as part of the policy programs. This has left many of the population unattended since renting is still a major and unregulated phenomenon.

# CHAPTER III: A BRIEF HISTORY OF COLOMBIA'S HOUSING POLICY

Before the current shift in Colombia's housing provision, which took place in 1990, favoring a neoliberal social housing approach and supply, the country had a long history of addressing the housing issue. Figure 1 and Figure 2 will show the total population numbers and the scale of urbanization during these periods, in which Colombia experienced a high population increase with high migration towards the cities. As expected, the policy approach was deeply rooted in the country's political situation. According to Cevallos and Saldarriaga (2015), the country's housing policy before the 1990s can be divided into four stages, which will be used to present this research. These are: The hygienist phase (1918-1942), The Institutional phase 1942-1965, The Transitional Phase (1965-1972), and the savings and Housing Corporations Phase (1972-1990). A small summary will be provided on each of the phases to better understand the country's tradition of housing policies. Nevertheless, a deeper analysis will be conducted in the last phase, allowing us to understand the problems that led to a new housing provision approach while providing information to contrast the improvements and diminishments caused by the policy change. The paper identifies four principal periods:

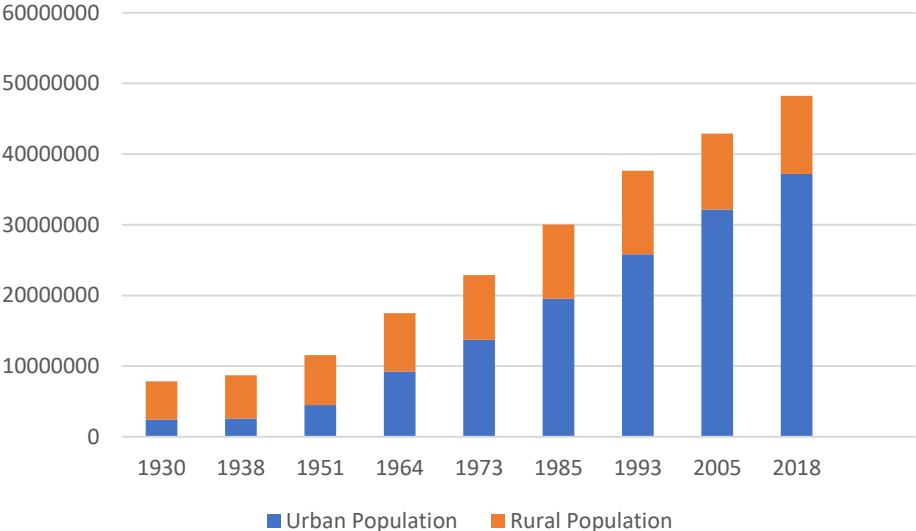


Figure 1 Evolution of Colombia's Population (DANE, 2019)

## HYGIENST PHASE (1918-1942)

The first phase in Colombia's housing policies gives origin to most public organizations that oversaw the housing provision during the century. Historically, the housing market was in the hands of urban renters (Caicedo Medina, 2015). The first time the government addressed housing was after 1918, as a health solution to the recurring epidemics, especially



after the 1918 Spanish flu. During these years, different financial institutions were founded, such as the *Banco Agrícola Hipotecario (Agricultural Mortgage Bank)* (1924) and the *CCA - Caja de Crédito Agrario (Agricultural Credit Bank)* (1931), which would first emit loans to support agriculture and later transition into financing housing supply. Later, in 1939, the *ICT – Instituto de Crédito Territorial (Institutional Credit Institute)* was founded to construct hygienic rural households; later becoming the country's most relevant institution for public housing provision. Furthermore, in 1942, a new section specialized in urban housing was established. Also, in 1942, decree 380 was emitted, which allowed the *Ministry of Finance* to emit credits for the Construction of *Barrios Populares Modelos (Popular Model Neighborhoods)*, which would be constructed by institutions denominated *Cajas de Vivienda Popular (Popular Housing Funds)*, created in the different municipalities. This phase provided a legal framework and a foundation for important institutions later. Still, it did not have much impact on the housing provision in the country. (Cevallos and Saldarriaga, 2015)

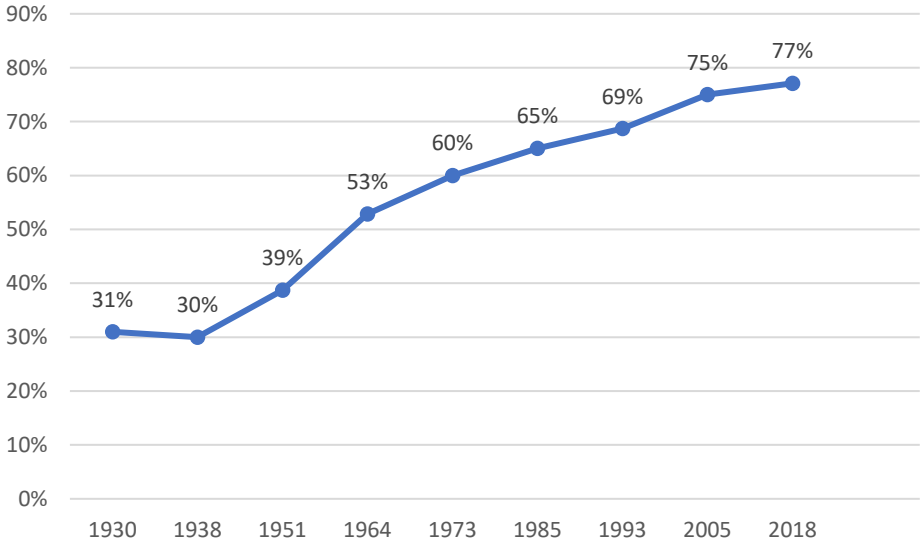


Figure 2 Colombia's Urbanization Scale Evolution (DANE, 2019)

**INSTITUTIONAL PHASE (1942-1965)**

**During this phase, the country saw the escalation of the internal conflict between the two main political parties, which deeply shaped the country’s urbanization process and, therefore, its housing provision.** Between 1942 and 1953, the period referred to as *La Violencia (The Violence)* peaked in events. The differences between liberals and conservatives, the two countries’ traditional parties, led to an internal conflict. The actions were more common in rural areas, whose gross population tended to be politically and ideologically aligned with one of the traditional parties. The intimidation and fear of repercussions by the political minorities caused a massive exodus into the cities, which were not ready to receive

and host the massive flow of population. This increasing demand for housing and the lack of a formal offer led to the widespread of informal settlements, which would prove to be one of the main focuses of housing policy from the moment (Cevallos and Saldarriaga, 2015). Despite the big differences between political parties and governments in power during this period, a continuity in housing policies and the state's role in providing housing for the population could be seen.

**The housing policies tried to focus on the assignment of budgets and the organization of the previously mentioned institutions to respond to the massive migration waves in the cities** (Cevallos and Saldarriaga, 2015). The founded institutions were responsible for managing and designing new housing solutions to provide adequate living conditions for the population. Three institutions defined this period; the ICT focused on urban housing, the CCA on rural housing, and the CVM - *Caja de Vivienda Militar (Military Housing Fund)*, founded in 1947 to supply officers and sub-officers of the army with cheap quality housing, played a significant role in the housing provision. In 1953, following this period of violence, a *coup de Tête* took place as General Gustavo Rojas Pinilla seized power to replace the conservative government and tried to bring the country back into peace. He was later replaced by a Military Board in 1957, which handled power back to an elected president in 1958. During the next four presidential terms, the liberal and conservative parties agreed to take turns in power, leading to a continuous housing policy.

### **TRANSITIONAL PHASE (1965-1972)**

**During this period, the Planes Nacionales de Desarrollo (*National Development Plans*) were first introduced.** The plans tried to rationalize and make more effective efforts in the targeting of state funding (Cevallos and Saldarriaga, 2015). It was the first time a quantitative housing measure was introduced to improve the country's overall housing situation. Product of the massive migration, and with the public housing supply not being enough to shelter the population, the informal settlements kept on spreading. To improve the situation, the governments sought to increase private investment in social housing and simultaneously strengthen the existing housing institutions. In this period, the influence of the *World Bank* and the *United States* aid institutions was very relevant as cash flows started to arrive through the *Alliance for Progress* program. The self-aided approach strategies for cheaper and, therefore, more widespread housing solutions are first introduced and used in the country. All the same, despite the increased number of delivered units, investments, and loans emitted, the production was never enough to decrease the housing deficit (Cevallos and Saldarriaga, 2015).

## **SAVINGS AND HOUSING CORPORATIONS PHASE (1972-1990)**

**From 1970 to 1974, the government of Misael Pastrana incorporated some of the major changes in the history of the housing system.** This was done through a double effort to increase the solutions provided by the housing sector: first was the private involvement in housing production, which focused on the middle- and high-income groups; second, the state would focus on the housing provision for the poorest sectors of the population. (Cuervo and Jaramillo, 2009; Cevallos and Saldarriaga, 2015) The state focused on the self-aided approach to provide housing for the poorest, combining services plots, minimal housing solutions, and basic solutions for progressive housing. Still, some fully delivered projects were financed for middle and high-income groups (Cevallos and Saldarriaga, 2015). Two mechanisms were designed for this transition that favored a market approach to housing: The first was the creation of the CAV, in which private financial corporations were allowed to give hypothecary loans and raise savings to finance the construction sector. This was parallelly done with the creation of the UPAC, which worked as an indexation mechanism for construction loans.

**Since 1972, given the high inflation rates in the country, a specific financing system for housing called UPAC was designed.** It had two main features: The first was an indexation device, where both savers' deposits and debtors' obligations were accounted for in a unit that kept updating with the inflation rate. It tried to provide the savers with positive returns over their deposits while securing the performance of long-term loans (Cuervo and Jaramillo, 2009). Second, it was a privatization of housing financing, where the Central Hypothecary Bank's responsibilities related to acquiring savings and assigning loans were transferred to the private Corporaciones de Ahorro y Vivienda CAVs. (Cuervo and Jaramillo, 2009) This can be seen in the participation of the BCH in the overall national housing provision, which went from 80% participation in the country in 1969 to 18.9% in 1973. (Cevallos and Saldarriaga, 2015)

**The UPAC system became the only financial saving that allowed the savers to immediately dispose of their money while securing at least a nominal performance of their savings.** This brought considerable savings to be destined for the construction industry. Despite modifications of the system, where the indexation would not always meet the inflation rate, the system remained successful against the rest of traditional financial products, ending in massive capital for construction investments. Nevertheless, many negativities also were involved with the system. The CAVs, which rapidly grew, started to operate through their promoters in a protected, semi-monopolized market since the smaller promoters had no access to this kind of financial source, and little need for efficiency and productivity was needed. (Cuervo and Jaramillo, 2009) The CAVs focused on the luxury sector, and only in some cases in the middle-income sector, with housing reaching peak prices because of the

closed market nature. In this way, despite the massive capitalization of the housing sector, little of it ended in housing solutions for the popular classes.

**As market housing was mostly addressed for middle and high-income sectors, the governmental promoters were left as the only ones providing social housing solutions.**

The most relevant one was the ICT Instituto de Crédito Territorial. They acted as promoters who would hire private companies for the construction of housing solutions, which were assigned to the beneficiaries with usually two implicit subsidies: the ICT would sell the units for prices below those of the market and would offer a long-term payment more favorable for the users than those offer by the financial market system. (Cuervo and Jaramillo, 2009) The institution focused mainly on providing solutions for the intermediate cities, which received most of the population from rural areas. The ICT used three main strategies: The legalization and upgrade of informal settlements, the self-aided provision of plots and starter homes, and a last program that addresses social and integration issues inside the new communities. (Cevallos and Saldarriaga, 2015)

Despite the efforts of the different public housing promoters, where in Bogotá for example, the ICT was able to produce between 30 and 40% of the legal housing stock of the city during the peak period of activity, the actions were not enough to provide enough housing solutions for the whole demand, especially in the poorer segments, who with low and irregular incomes, were not able to pay for the subsidized housing products delivered by the entity. In this context, informal housing was and still is the only solution for this population segment. For example, in Bogota, between 1973 and 1993, 20% of the housing was generated by self-aided solutions.(Cuervo and Jaramillo, 2009)

**In 1982, the national government of Virgilio Barco Vargas launched a new no-downpayment housing scheme to enable housing finance for the poorest population.**

For this purpose, two operations took place; the financing of the ICT was doubled to increase its operations, while the government tried to create favorable conditions for the private promoters to work on this branch of the demand. Despite the crisis in the construction sector as the demand for luxury housing was being saturated, negotiations between the government and the promoters were unsuccessful as they expected the government to take all the financial risks while maintaining profits similar to the luxury housing projects (Cuervo and Jaramillo, 2009). The government then decided to take the UPAC deposits to invest in social housing through the ICT. The ICT had the challenge of triplicating its operation in only a year and failed to do so. There were planning errors where projects without demand were built, lack of adequate construction of projects, and worst of all, many of the beneficiaries had no chance of paying for their homes, deeply affecting the institution's finances and the government's

founding. (Cuervo and Jaramillo, 2009) After the failure, concessions were made so that the private sector would finally participate in the social housing construction. Still, the ICT functioning and reputation would never be the same, opening the option for its replacement to favor a free-market approach.

**In conclusion, this period was characterized by a state that would put efforts into the design of programs that should solve the increasing housing deficits of the country; nevertheless, the money and efforts invested were never enough, and the informal settlements continued to grow.** (Gilbert, 2004) The enablement of the private sector and the increase in housing financing were limited to only a limited extent of the population; as Gilbert describes it, “The private sector built homes for the better off, a public agency constructed houses for a small number of poorer families, and those with little money or few contacts provided their own homes through self-help construction.” (Gilbert, 2004) With the problems of the government to increase the legal housing production, it is worth adding that informality was not always perceived as a problem, but as described by Cevallos and Saldarriaga (2015): “... it was undoubtedly convenient for the government to allow housing production in an economic informal context since it provided access to housing solutions for the poorest sectors of the population without involving major reforms in land management, state intervention over private property and the financial system, to name a few.” In this context, after the crisis of the housing institutions that provided social housing, the state adopted a new housing model.

### **THE LIBERAL REFORM OF HOUSING (1990-2011)**

**Two factors led to the possible system change: The economic and political crisis and the ICT crisis.** The first was a product of the 1980s debt crisis that made the country change its economic path, and the political shift, in which a new Constitution was approved, seeking political and administrative decentralization, with a government committed by the Washington Consensus in pursuing neoliberal reforms to policies. (Gilbert, 2004) The second is the ICT crisis: Colombia’s main housing Institution, which, as already seen in the previous chapter, could not deliver the ambitious increase in production. On top of that, during 1989, it was facing a major financial crisis and “was widely criticized for its limited production, the low quality of its housing solutions, its high administrative costs, the political criteria underpinning the distribution of its housing units, the large financial losses it made and the fact that it usually ignored local planning regulations “ (Gilbert, 2000). The people did not consider that the loans should be paid back; a 1990 study showed that only 17% of the debt was being collected, barely covering the entity's administrative costs.

**In this context, the new housing policy was introduced, together with a total reformation of the state following a neoliberal approach.** “The paradigmatic change represented by the development model limited the government to a particular set of housing policies” (Gilbert, 2004). After the housing Institutions crisis, the state was no longer perceived as capable of providing or managing housing projects for construction and rent. On the contrary, the private sector was seen as a better provider, while monetary subsidies would allow to better target the poor. The new policy was created following a model already developed by Chile in 1978, which had some successful results in the country’s housing provision. The law complied with the market enablement approach already explained in the first chapter, promoted by the World Bank to enable the private markets to address the whole housing market with the state delivering the role of facilitator.

**The new housing policies of the country were designed with a double objective: To remedy the lack of housing, which severely affects the lowest income groups, and to promote the constructor sector as a relevant economic activity that can generate jobs and indirectly dynamize other economic sectors.** (Gilbert, 2004; Cuervo and Jaramillo, 2009) This was done during the 1990s through two main policy changes to favor a liberal market housing production: The introduction of a multibank system, which replaced the specialized banking system that used to operate, and the eradication of a state promotor of social housing, which had worked over 50 years, favoring a scheme of subsidies to the demand.

**Law 45 of 1990 transforms the country’s financial system.** The previous system with specialized banks is transformed into a ‘single bank space.’ In this way, all prohibitions, and privileges that the different branches had are eliminated to favor a free competitive environment where the market allocates resources optimally. In this way, the privileges for the CAVs ended, and every financial institution could provide a hypothecary loan. The problem was that as CAVs lost their privileges, of having lower interest rates with lower fluctuations; people started to withdraw their savings to acquire better-performance products. For this reason, the indexation was modified to be no longer related to inflation, but to the general interest rate. This stopped the withdrawals from the CAVs but modified all the hypothecary loans previously acquired with these institutions.

**Law 003 of 1991 provides for a series of incentives for social housing.** In it, the previous resources used for government-promoted housing would be destined as subsidies to the demand, where the allowance of monetary subsidies seeks to increase the solvent demand. In this way, the private promoters would have to compete with the users, who, aided by the subsidies, would choose the best house available. Following these ideas, the previous ICT,

whose reputation was badly damaged, was replaced by INURBE - Instituto Nacional de la Vivienda y la Reforma Urbana. It was responsible for assigning subsidies through a punctuation system to focalize the government's efforts. It was also responsible for the selection and overview of the subsidized housing solutions so that they would achieve minimum quality standards and be sold at an adequate price. With the disappearance of the ICT, no other founding systems were left working parallel to the financial systems loans. In this way, despite the assignation of subsidies by INURBE, only the population who could access a bank payment could make the subsidy effective in buying a house, leaving in the hands of the financial system the people who would be able to use the subsidies.

**The subsidies to the demand eliminated suddenly all other financing mechanisms for the poorest population to access housing.** Most low-income families could not acquire enough savings to access subsidies, and even when they did, many banks would not lend to them as they were small loans to had a high risk of non-payment. The situation was so critical that between 20% and 30% of families who were assigned a subsidy had to renounce it because of lack of access to finance, with the number even rising to 50% in the most critical periods (Cuervo and Jaramillo, 2009, p. 15).

**After the reforms, a lot of investments in the sector created a lot of liquidity in the economy, money which was invested in luxury construction.** It reached a peak where in 1995 construction permits had increased a 95% hypothecary loans a 117% and housing prices rose to 48%. Nevertheless, this boost ended in the saturation of this demand sector, once it slowed down, prices began to drop and the interest rate grew. Because of these, the UPAC-associated loans also grew, and many people had to give back their homes as interest rates became unpayable and prices kept lowering. The situation kept worsening and in 1998, there was an order from the courts that declared it illegal to charge the indexation over the inflation value, ordered to liquidate the UPAC system, and for banks to solve their debts with their clients and give back the overcharged fees.

**According to the author, the elimination of the official housing promoters has left the state in extreme dependence on the private sector.** If the market decides to focus on a different kind of demand or finds a better investment, the government won't be able to reach its housing objectives. This is exactly what happened in Bogota during the crisis. This can be seen in Figure 3, which Figure 3 Production of VIS, VIP and Assigned subsidies for Bogota (Cuervo and Jaramillo, 2009, p. 18) compares assigned subsidies vs the construction of subsidized and non-subsidized housing in Bogota. After the construction crisis, which first affected the non-subsidized housing demand, production decreased between 1994 and 2001. There was a decrease to only 10% of the total. The crisis caused the sector to look for new segments of the population in housing under the subsidy threshold; this can be seen in the significant increase in production between 1996 and 2002. Nevertheless, as the government

focused its efforts on the recovery of the financial sector, very few subsidies were assigned at the time. But once the financial crisis was over, and the government started to significantly increase the number of approved subsidies, the construction sector decided to invert its resources in the non-subsidized sector of the demand, experiencing a boost from 2001 to 2005, while the subsidized housing experienced a strong decline. This left more than half of the assigned subsidies unused in 2005.

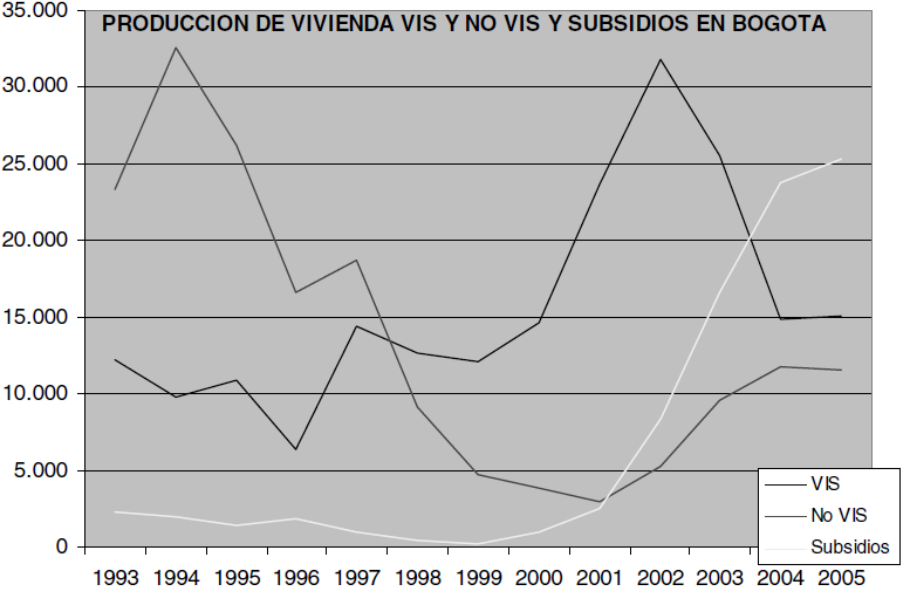


Figure 3 Production of VIS, VIP and Assigned subsidies for Bogota (Cuervo and Jaramillo, 2009, p. 18)

**Despite an increase in capitalist housing production, the general housing balance in Bogota has not been good.** When comparing the proportion of new formal houses to the formation of new homes between 1985-1993 and 1993-2005, the following can be seen. In the first period, 1,18 new houses were built for each new household in the city, meaning that the formal housing production was able to decrease the quantitative deficit for the first time. Nevertheless, despite the change to a liberal policy that sought to increase production, this could not keep up with the previous period's rhythm, and the number of new formal houses dropped to 0,56 new legal houses for every new household. As it is important to note that this happened during the construction sector crisis, it is still true that the market could not provide enough new formal houses to house the growing city.

**As a solution from the government to increase social housing supply, they incorporated the planning tool called 'Macropoyecto de Interes Social Nacional'.** They appear in 2007 as a response to the lack of available land for social housing construction in the municipalities that faced the larger housing deficits. They are planning tools that seek to provide land for large-scale projects construction of Social Interest Housing and urban infrastructure by promoting alliances between the private sector and the national government. In this way, land



and planning are made available and facilitated by the government, while the private market would be in charge of handling the housing provision.

## CHAPTER IV: THE PRESENT OF COLOMBIA'S HOUSING POLICY

The following chapter will provide an analysis of Colombia's housing provision during the most recent years to understand the strengths and weaknesses of the policy system. The chapter will first analyze the legal and financial framework in which housing is provided. Second, it will present Colombia's demographic situation concerning the housing shortages. Third, the chapter will examine the demand by understanding the household's expenditure on housing through the residual income approach explained in the methods and methodology subchapter, in contrast with the financial options available in the market. Fourth, the chapter will analyze the supply through the results of the different housing policies that the government has addressed. Fifth, an analysis of the system's working, recognizing strengths, weaknesses, and feasible improvements.

### POLICY FRAMEWORK

#### DEFINITION OF SOCIAL HOUSING

In Colombia, social housing is defined as housing under a government-set cap price. The terms refer only to market units sold under this cap price as the government does not own or rent social housing units. The main incentive for encouraging social housing supply is tax exemption, in opposition to housing for higher income sectors. According to their value, there are two categories of social housing VIS and VIP. VIS can cost up to 135 SMLVs - *Salarios Mínimos Legales Vigentes* – (*Current Legal Minimum Wages*), or 150 SMLVs in the six largest urban agglomerations (Bogota, Medellin, Cali, Barranquilla, Bucaramanga and Cartagena) where land prices are higher. VIP housing can cost up to 90 SMLVs, the cap was raised in 2019 from 70 SMLVs, as the increase in housing costs had made the VIP housing supply only 3% of the social housing supply in 2018 (The World Bank, 2021, p. 59). VIS housing projects must destine 20% of their area into VIP housing, nevertheless, most projects pay a fee to the municipality to check this requirement.

#### FINANTIAL FRAMEWROK - LAW 546 OF 1999

Law 1546 of 1999 contains the regulatory framework for the "specialized long-term individual housing finance system." As mentioned above, it was created as a response to the hypothecary crisis, partially created by the modifications in the UPAC index calculations. Product of the times, it is a highly regulated system that favors market stability but takes away freedom from banks in the creation of financial services. (Fedesarrollo-Secretaría Técnica,

2020, p. 53) Four regulatory parameters are affected by this law and play an important role in the offer of hypothecary loans. These are:

- **Loan to Value:** meaning the proportion between the loan value and the collateral value. These are 80% for social housing and 70% for non-social housing. Despite being one of the highest ones between countries, it does not seem to be a limit for the portfolio since only a few loans are close to the limit. (Fedesarrollo-Secretaría Técnica, 2020, pp. 55–59)
- **Loan payment over income:** It is the maximum proportion that a household can destine for a hypothecary loan payment. In Colombia, the limit is 30%, a similar level to countries such as Argentina, Brazil, and the U.S., while in some countries it can be up to 50%. This plays a heavy role in the access to financial products. The mission argues that in case of an increase to 40%, other methods can be used to better assess payment capacity by banks while the poorer households are used to destine a higher proportion of their income to rent.(Fedesarrollo-Secretaría Técnica, 2020, pp. 59–61)
- **Interest Rate:** The maximum interest rate for housing financing is determined by the Banco de la República (National Central Bank). This has proved a problem to accessibility, as some financial institutions, which might be willing to offer higher risk loans at a higher interest rate, such as households in informal conditions, cannot enable their access to the financial market(Fedesarrollo-Secretaría Técnica, 2020, pp. 62–63). Nevertheless, the market has become more competitive and this has translated into lower interest rates over time, as Figure 4 shows.



Figure 4, Evolution of interest rates (Fedesarrollo-Secretaría Técnica, 2020, p. 63)

- **Term:** The terms for a housing loan should be within 5-30 years. Because of the development of the market, lending institutions have increased borrowing terms. As seen in Figure 5 loan terms for social housing have increased on average from 14 years in 2009 to 20 years in 2020. Despite the existing average loans being distant from the limit, the possibility of increasing the times for a hypothecary loan can decrease the monthly payments and make housing more accessible. (Fedesarrollo-Secretaría Técnica, 2020)

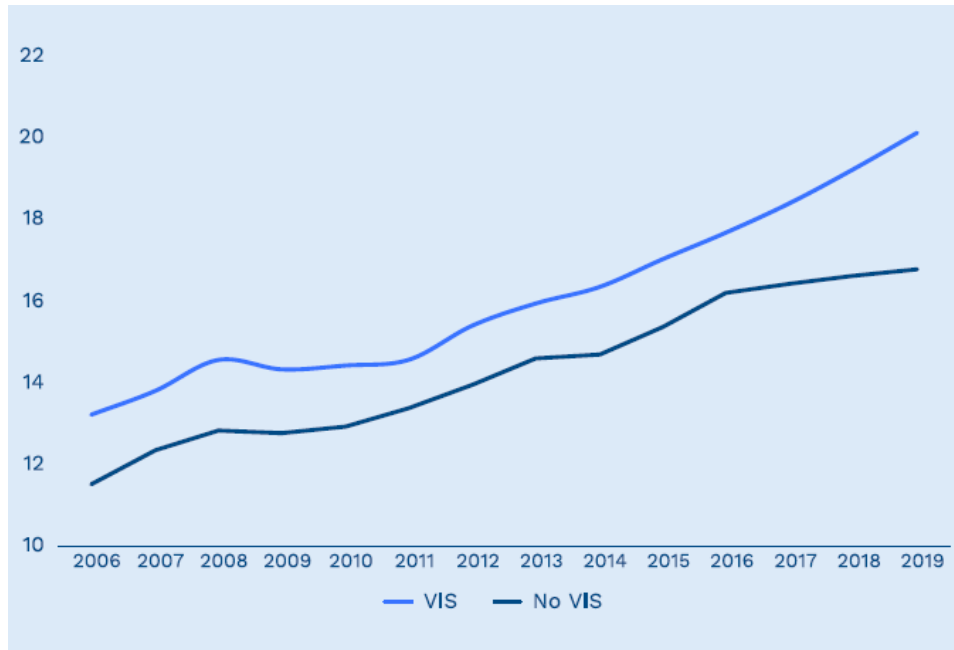


Figure 5 Evolution of Term Times (Fedesarrollo-Secretaría Técnica, 2020, p. 64)

## MICROCREDIT IN COLOMBIA

**One of the biggest obstacles for this population sector is the lack of development of a housing microcredit environment in the country.** They have arrived as a source to finance and start small businesses. In this way, with the returns of the businesses most lending institutions expect to see their loans returned, which does not happen with housing acquisition. For this reason, microcredit for housing has not gained a significant portfolio. In addition, as housing microcredit loans are not classified as a single portfolio, the lack of information about clients and the portfolio size makes it difficult to make decisions. (The World Bank, 2021, p. 79) For the portfolio to improve higher government efforts need to be done to encourage institutions for lending.

**DEMOGRAPHIC ANALYSIS**

**TENURE TYPE IN COLOMBIA**

**Despite Colombia’s policy approach favoring new home acquisition through monetary subsidies to the demand, the country has the lowest ownership rates in the region.** Furthermore, it is the only country in the region where the rates stand under 50%. A fall in ownership can be observed in Figure 6, where ownership has been steadily falling from 60% in 1993 to 38% in 2019. As the acquisition of a hypothecary loan for home ownership of social housing is a less expensive form of tenure than renting, this fact has not been able to explain the decline in ownership.(Fedesarrollo-Secretaría Técnica, 2020, pp. 85–86)

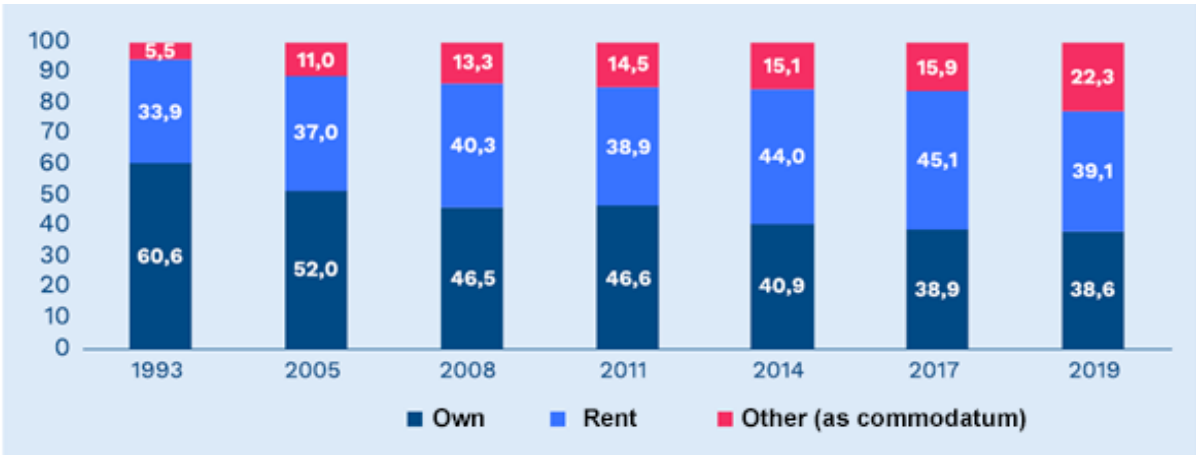


Figure 6 Evolution of Tenure Type in Colombia (Fedesarrollo-Secretaría Técnica, 2020, p. 70)

**DEFINITION OF HOUSING DEFICITS**

**As mentioned, Colombia has a tradition of addressing housing shortages by measuring a *Habitational Deficit* indicator.** This number indicates the total shortages in the country's housing supply. The number shows the sum of two indicators, the *quantitative housing deficit* and the *qualitative housing deficit*. The results of the *Encuesta Nacional de Calidad de Vida* (*National Quality of Life Survey*), were measured by crossing the predictions of the 2018 Census with the expected projections.

**On the one hand, the *quantitative housing deficit*; “... indicates the gap between the number of households and the number of available housing units”** (World Bank, 2006). Dwellings with the characteristics compelled in Table 2 are suffering from this deficit. This means that overcrowded units or units shared by multiple households are part of the deficit as they need a new house of their own, but also a shelter that is beyond improvement and should

be replaced. (DANE, 2022a). In this sense, the quantitative indicator shows houses that need to be built and added to the country's housing stock.

Category	Definition
<b>Type of Dwelling</b>	when the unit is not considered a house or an apartment, such as containers, tents, vessels, wagons, caves, or natural shelter.
<b>Exterior Wall Material</b>	When the main material of the outside walls is rough wood, boards, or planks; canes, mats, or other vegetables; waste materials; or the lack of walls.
<b>Cohabitation</b>	When a household lives in a dwelling with three or more households, in urban households, the secondary households that live with a main household and sum up to more than six people in the same house are included. Main households and unipersonal households are excluded from cohabitation deficits.
<b>Unmitigable Overcrowding</b>	When four or more people share the same room in an urban house.

Table 2 Categories for quantitative deficits (DANE, 2022a)

On the other hand, the households in *qualitative housing deficit* are those that do not meet the minimum quality and sanitary standards to be considered as an appropriate housing solution, but for which it's possible to make adjustments or interventions to solve their problems (DANE, 2022a). The possible interventions might be related to the physical conditions of the dwelling, as well as with the service provision of it. The seven deficiencies suffered are listed in Table 3. Households can experience more than one of these deficiencies but only sum as one household in deficit. Houses that suffer from this problem are chosen for the upgrading mechanisms.

Category	Definition
<b>Mitigable Overcrowding</b>	for urban areas, households with more than two to four people sharing a room. In rural areas, households with more than two people sharing a room.
<b>Floor Material</b>	Households living in dwellings where floor material is earth, sand, or mud.
<b>Kitchen</b>	In urban areas, households cooking their meals in a room used for sleeping, in a living room without a dishwasher, or in an open space.
<b>Access to Water</b>	In urban areas, households living in dwellings with no water connection.

<b>Sewer System</b>	In urban areas, households that don't have a sanitary solution, are not connected to a sewerage system or have a septic tank, latrine system, or direct connection to water resources.  In rural areas, households that don't have a sanitary solution, latrine system, or direct connection to water resources.
<b>Electrical Energy</b>	Households that have no access to electrical energy service.
<b>Solid Waste Collection</b>	Except for rural single houses, households that take no part in a trash collection scheme.

Table 3 Categories for Qualitative Deficits (DANE, 2022a)

The gross numbers of the housing deficit might prove useful for understanding the general situation and challenges faced by the country. Nevertheless, for a better understanding of the different challenges and needs that the housing programs should target, two evaluations of the existing housing deficits will be presented. A relationship between housing deficits within rural and urban households, and the relationship between housing deficits and municipality sizes.

#### EVOLUTION OF HOUSING DEFICITS

The following chapter will compare the total housing deficit of the country as it has evolved during the years since the enablement approach was completely introduced. The information exposed is presented during the last three censuses done in the country, 1993, 2005, and 2018. The information is presented in the total number of households suffering from a habitational deficit (Figure 8) and the percentage of households with deficits over the total number of households (Figure 7).

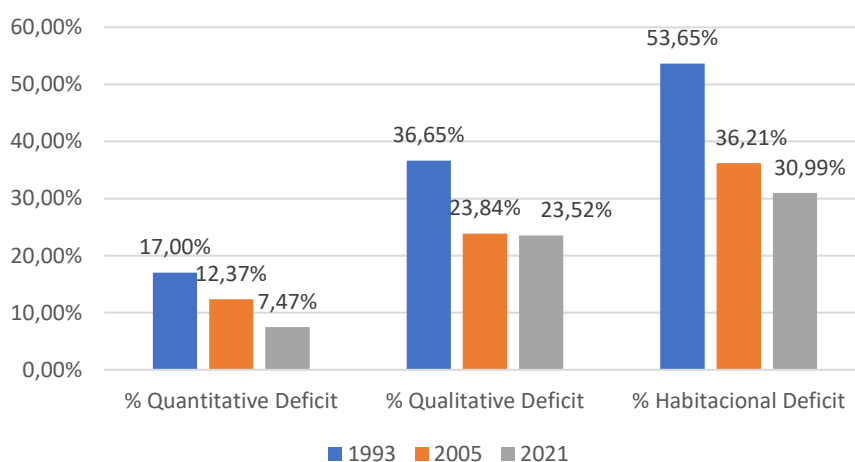


Figure 7 Evolution of Percentage of Housing Deficits by type (DANE, 2022a)

**As seen in Figure 7, Colombia’s housing deficit is mostly qualitative, where the qualitative numbers in each period more than double the ones in the quantitative deficit.** The qualitative deficit, despite its magnitude, has been kept out of the central scope of the country’s housing policies, which have focused on enabling the provision of new homes. For this reason, the upgrading of the existing housing stock has played little relevance in the last few years. The figures also make evident a general decrease in the housing deficit percentages, although the decrease is lower for the qualitative deficit than for the rest. According to the World Bank (2021, p. 41), this is partly because of a change in the methodology between these years, with more strict quality standards today.

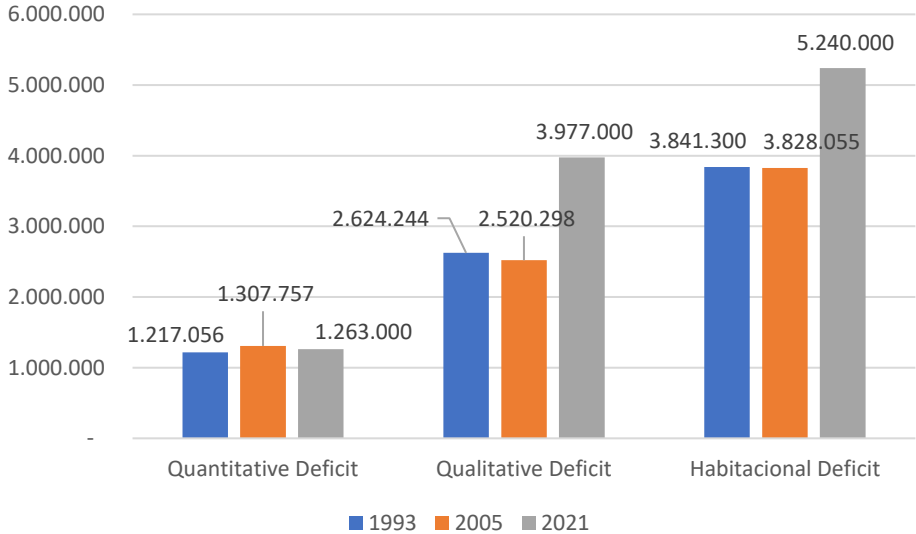


Figure 8 Evolution of Number of Households in Housing Deficits by type (DANE, 2022a)

**When these numbers are compared to the total number of households in Figure 8, new differences in the decreases can be seen.** On the one hand, as the quantitative percentage deficit is decreasing, and the total number of households in deficit is only experiencing a small decline, it’s evident that the production of new housing solutions that account for the quantitative deficit is very similar to the number of new households. On the other hand, there is an increase in the total number of households experiencing qualitative deficits, meaning that the upgrading of houses is even lower than the appearance of new households with qualitative demands.

**In general, the data has shown good results in the solutions provided for the quantitative deficit with a steady deficit reduction.** Despite this, higher efforts are required to provide not only housing for new households but also for those existing ones in need of new homes. Nevertheless, the solutions for the qualitative deficit are insufficient, not only for its magnitude but for the increase of households in deficit.



**URBAN AND RURAL HOUSING DEFICITS**

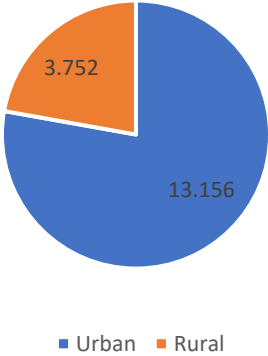


Figure 9 Percentage of Urban and Rural Households (DANE, 2022a)

As explained in Chapter III and shown in Figure 2, the fast urbanization rate of the country made a shift from a rural country to an urban one during the XX century. The consequences of this can be seen in the household’s distribution realized during 2021. In it, 78 % of the country’s households are urban, while only 22% remain rural. A tendency that population estimations expect to increase.

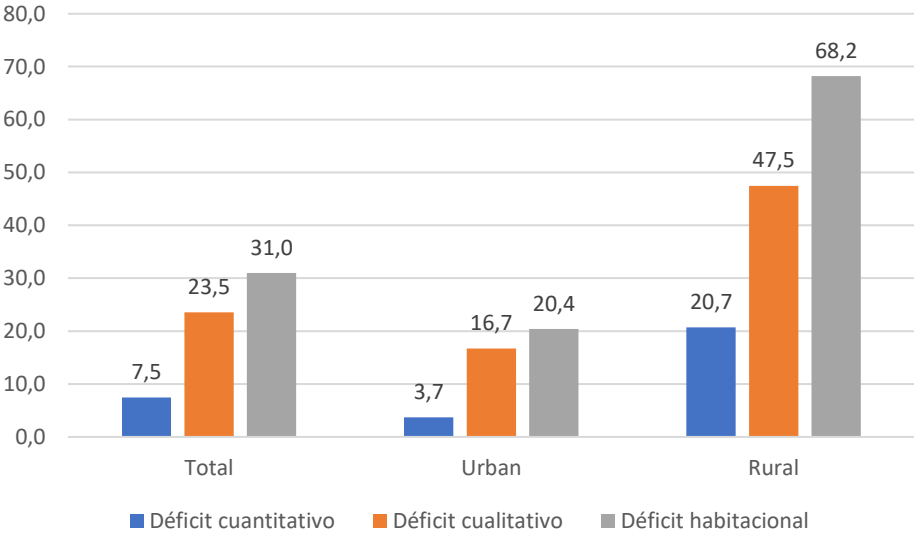


Figure 10 Percentage of urban and rural Housing Deficits by type (DANE, 2022a)

Figure 10 shows the percentage of urban and rural households in deficit. First, it is noticeable how a much higher proportion of rural households are facing both qualitative and quantitative deficits. When around one of every five urban households faces any kind of deficit, two out of three households in rural areas face a housing deficit. Not only this, but rural

households face also a higher proportion of quantitative deficits, which tend to be more severe and more expensive to remedy. One of every five deficit households in the city faces a quantitative problem, while more than one of every three face the same difficulties in the rural areas.

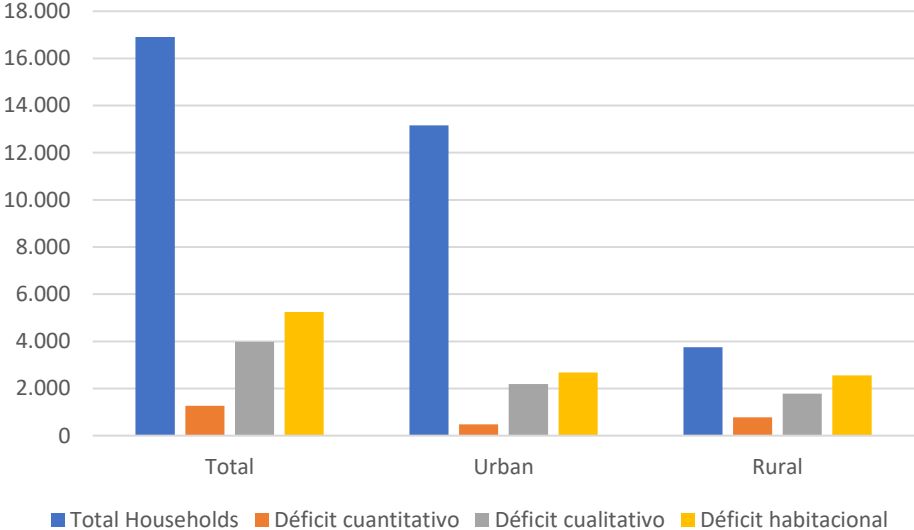


Figure 11 Total Number of Households and Housing Deficits (DANE, 2022a)

**When looking at the total housing deficits shown in Figure 11, there is evidence that the total households in deficits of urban and rural areas are very similar.** Nevertheless, the problem is severe when considering that for every three urban households, there is a rural one. The country’s housing policies have focused on the enablement of the market. Nevertheless, this market has directed its efforts to the opportunities found in the urban areas. It is natural, not only because they remain scattered throughout the land, where demand is lower, and the economies of scale are of no use; but also, because households in rural areas are poorer than the urban ones. Even further, as most of the country’s economy originates in urban centers, with higher access to formal labor; this has caused difficulties to access subsidies in rural areas.

	Deficit	Rural %	Urban %	Total %
Quantitative	Type of Dwelling	0,2	0,0	0,1
	Exterior Wall Material	20,0	2,5	6,4
	Cohabitation	0,1	0,4	0,4
	Unmitigable Overcrowding	0,8	0,9	0,9

Qualitative	Mitigable Overcrowding	20,5	10,9	13,0
	Floor material	18,1	1,8	5,4
	Kitchen	5,7	4,1	4,4
	Access to Water	39,8	2,4	10,7
	Sewer system	21,9	7,7	10,8
	Electrical Energy	7,7	0,1	1,8
	Solid Waste Collection	12,2	1,8	4,1

Table 4 Percentage of Households in Qualitative and Quantitative Deficits (The World Bank, 2021)

**Table 4 displays the percentage of households that face one or more deficit situations.**

The numbers are not hierarchized, as one household can face one or more deficits. In the quantitative deficit, the main issue is wall material for both urban and rural households. Nevertheless, it is more severe in the rural areas, where one in every five households does not have adequate walls, whereas in the urban areas, one in every 40 households faces this challenge. Nevertheless, this fact is also explained in the methodological change introduced for the accounting of 2020 measures, where houses made from not treated wood would not be considered adequately structured and are included in the housing deficit (World Bank, 2006, p. 41; DANE, 2022b, p. 10).

**Related to the qualitative deficit, the difficulties faced by urban and rural households are different.** The two biggest challenges in rural areas are related to public service provision, with two of every five households facing water supply problems and one of every five lacking a proper sewerage system. The following is expected, given the greater difficulties and costs of bringing public services to less densely populated land. Even energy coverage, the cheaper and easier public service to expand, is missing in one of every 13 households. In contrast, the public service provision in cities is better, with the sewerage system being the second major category with 7,7% coverage and the water supply category the fourth with 2,4% coverage. The situation also makes sense, given that the density of urban areas provides easier and less expensive coverage of the system. In addition, urban sewerage systems are more expensive to build and maintain than water supply infrastructure. Last, the provision of electrical energy is good in cities, with only one in a thousand households facing deficits, which can be explained by the easier infrastructure provision.

**In the other categories related to the dwelling state, the relationship is even more different.** One of every five households suffers from mitigable overcrowding in rural areas, double the number in urban areas. Nevertheless, this is the main problem related to the qualitative deficit in urban areas, while it's only the third one in the urban sphere. The floor material is still a relevant topic in rural areas, with 18,1% of households not having an adequate one; in contrast, only 1,8% of urban households face this problem.

**As seen in the previous section, rural households face a lot more challenges than their urban counterpart.** Public service provision, especially related to water and sewerage systems, is still the biggest concern despite big challenges in the dwelling structure yet to be made. Related to the dwellings, the wall material still plays a major role in the housing deficit.

**HOUSING DEFICIT GEOGRAPHICALLY AND BY MUNICIPALITY SIZE**



Figure 12 Regions of Colombia

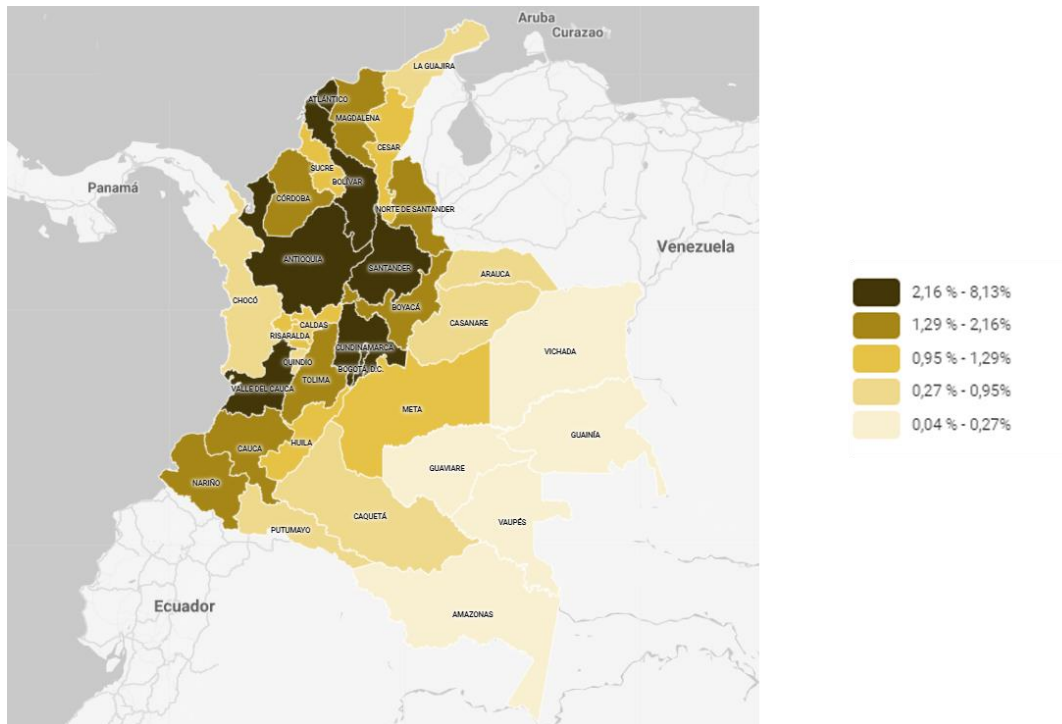


Figure 13 Distribution of Colombia's population by department. (DANE, 2018)

**Figure 13 shows the distribution of Colombia's population.** In it, it can be seen that most of the population lives in the Andean region, where the height of the mountains has provided a more comfortable climate for the population. It can also be seen that the Caribbean and Pacific coasts have less population than the Andean region, and last, the Amazon region is the least inhabited in the country. Contrasting this distribution with the housing deficits reveals different patterns in the regions.

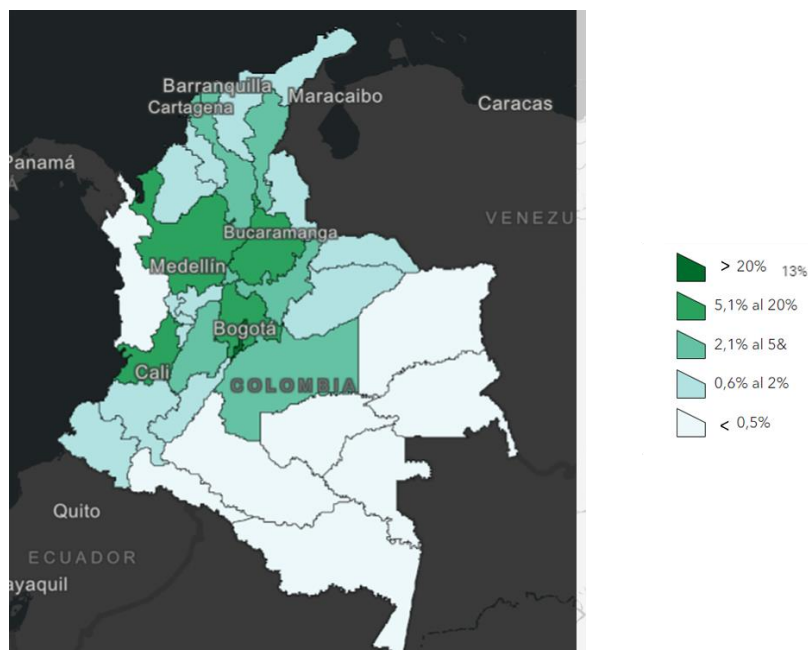


Figure 14 GPI Per Capita by Department (DANE, 2018)

**Figure 14 shows the PIB per capita by department.** As can be seen, most of the wealth of the country is produced in the Andean region, where most of the population is located. Three departments on the right stand out, which are, Arauca, Meta, and Vichada, in them, the presence of oil wells has provided this region with a significant income. In contrast, the Amazonian and the Pacific regions are some of the poorest, where the presence and effort to conserve the tropical rainforest have kept massive infrastructure investments, farming activities, and the presence of industry away.

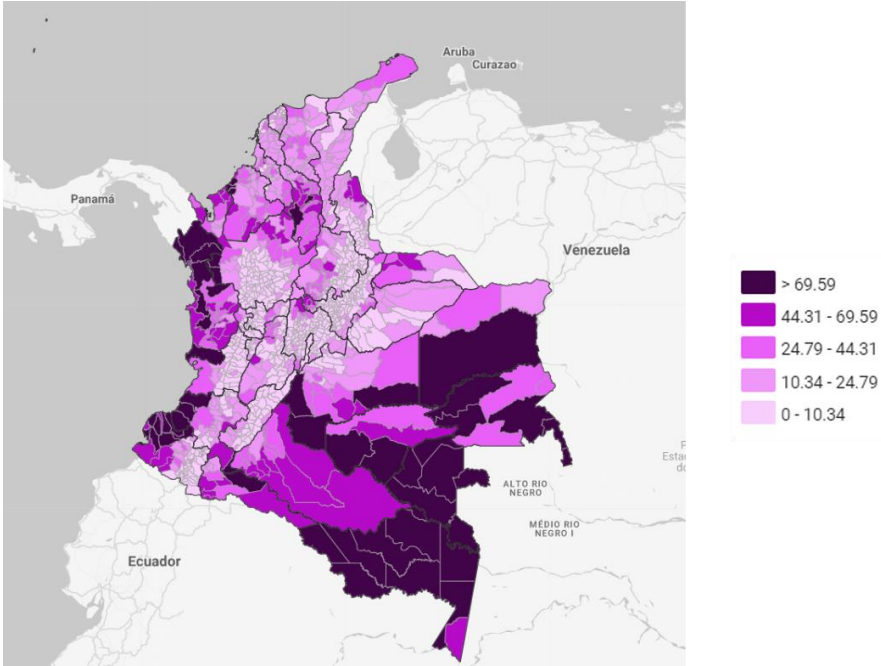


Figure 15 Quantitative Housing Deficit by Municipality (DANE, 2018)

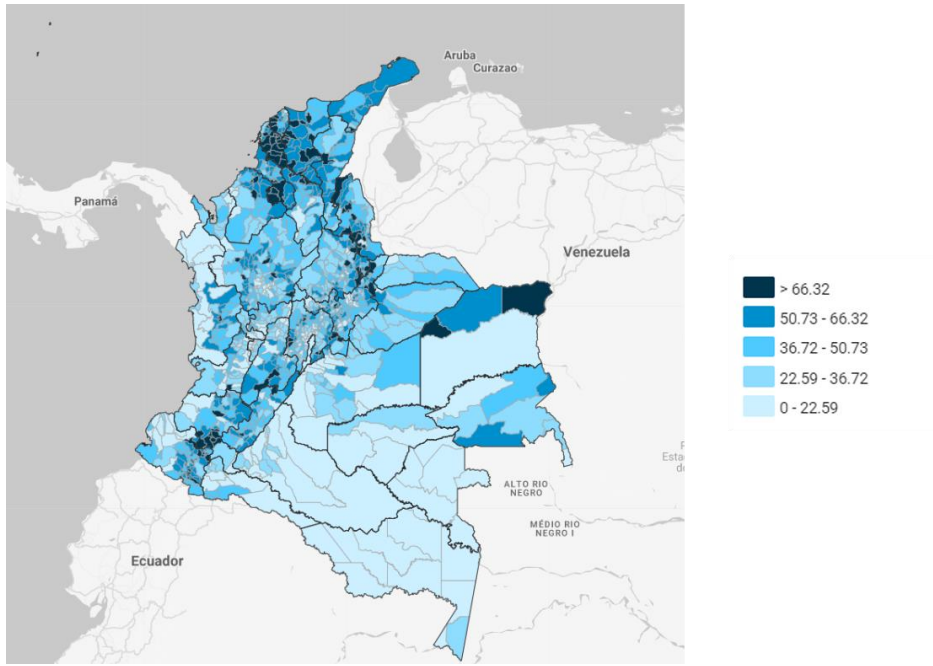


Figure 16 Qualitative Housing Deficit by Municipality (DANE, 2018)

**When looking at the map of the quantitative deficits, it can be seen that they are geographically focused in the less populated and poorest regions of the country.** This means a higher focus on the Amazon region and another important focus on the Pacific region. Not only are these regions less populated, but they also have more extreme weather conditions since they both are tropical jungles. The following is also related to less availability and higher cost of construction materials in the region. This shows how housing solutions most use diverse approaches to tackle the different challenges of every region.

**In contrast, the qualitative deficits, as can be seen, are focused on higher populated regions like the Caribbean region and the Andean region.** These are regions with intermediate cities and higher resources, as seen in the previous map. The presence of urban centers has benefits in the use of economies of scale and the provision of public services to help tackle such problems. Nevertheless, as already mentioned before, one of the main problems of Colombia’s housing policies is the lack of solutions available for upgrading the existing housing stock and the lack of solutions for rural areas.

MUNICIPALITY CATEGORY	NUMBER OF MUNICIPALITIES	AVERAGE HOUSEHOLDS	TOTAL HOUSEHOLDS	POPULATION DISTRIBUTION
1. >1 million	6	780,149	4,680,896	33%
2. Agglomerated	25	56,619	1,415,478	10%
3. 300,000-1million	12	129,892	1,558,699	11%
4. 100,000-300,000	35	41,859	1,465,075	10%
5. 20,000-100,000	308	9,902	3,049,905	22%
6. <20,000	736	2,569	1,890,592	13%
<b>Total</b>	<b>1,122</b>	<b>12,532</b>	<b>14,060,645</b>	<b>100%</b>

Table 5 Population Distribution by Municipality Size (The World Bank, 2021, p. 46)

**The World Bank analysis of Colombia's housing found a relationship between municipality sizes and the deficit size and type that they face** (The World Bank, 2021, pp. 44–47). Table 5, as presented in the publication, shows the criteria for classifying the municipalities by size. The first category refers to Colombia's six biggest municipalities: Bogota, Medellin, Barranquilla, Cali, Cartagena, and Bucaramanga. The agglomerated category refers to municipalities that are connected to cities with more than a million people and can benefit from the services provided by them. The rest is divided into a range between 300,000 and a million people, followed by 100,000-300,000 people, 20,000-100,000 people, and the smallest group, which hosts a population of less than 20,000. As can be seen, a third of the households live in the six largest municipalities. If we consider the agglomerated municipalities relative to the largest cities, together, they host over 44% of the population, which

shows the importance that these urban centers and the policies addressed to and by them can have in the total housing deficits. The second largest group is the municipalities that host between 20,000 and 100,000 people, housing over 22% of the population. The rest of the groups host similar numbers of people under very different conditions.

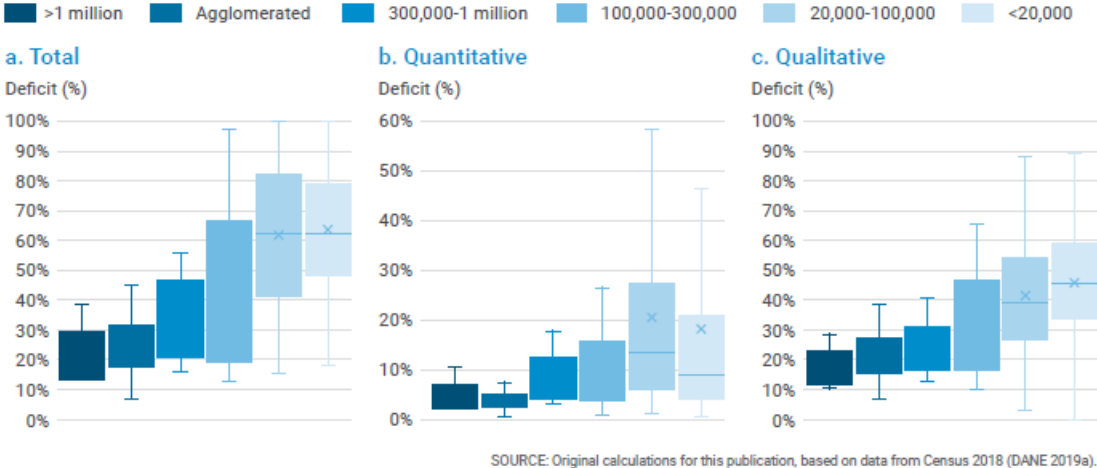


Figure 17 Housing Deficit in Colombia by Municipality Size (The World Bank, 2021, p. 46)

**In the analysis, a relationship between the size of the city and the existence of the deficits was established, in which the higher the municipality’s population, the lower the percentage of deficits that could be found.** (The World Bank, 2021, p. 46) The percentage of households in deficit is shown in Figure 17. The number is not a surprise, given that larger municipalities have more resources and autonomy when providing solutions to housing compared to their smaller counterparts. Both in quantitative and qualitative deficits, the tendency for smaller municipalities to have bigger deficits can be seen. Nevertheless, in the quantitative deficits, the larger cities have provided larger deficits than the agglomerated ones, as the cities between 20,000 to 100,000 people have larger deficits than the ones with populations under 20,000 people. This is different from the case of qualitative deficits, where the tendencies were maintained.

**Conversely, when analyzing the data according to the totals and not the percentage, it can be seen that because of the deficits accumulated by municipalities in the 20,000-100,000 range, they hold the biggest housing deficits in both the quantitative and qualitative components.** Despite the low representation of the population, the municipalities of less than 20,000 people are the second largest municipalities in both quantitative and qualitative deficits. In third place, despite the low percentage of households in deficit in these cities, as they hold the biggest population, cities of over a million.



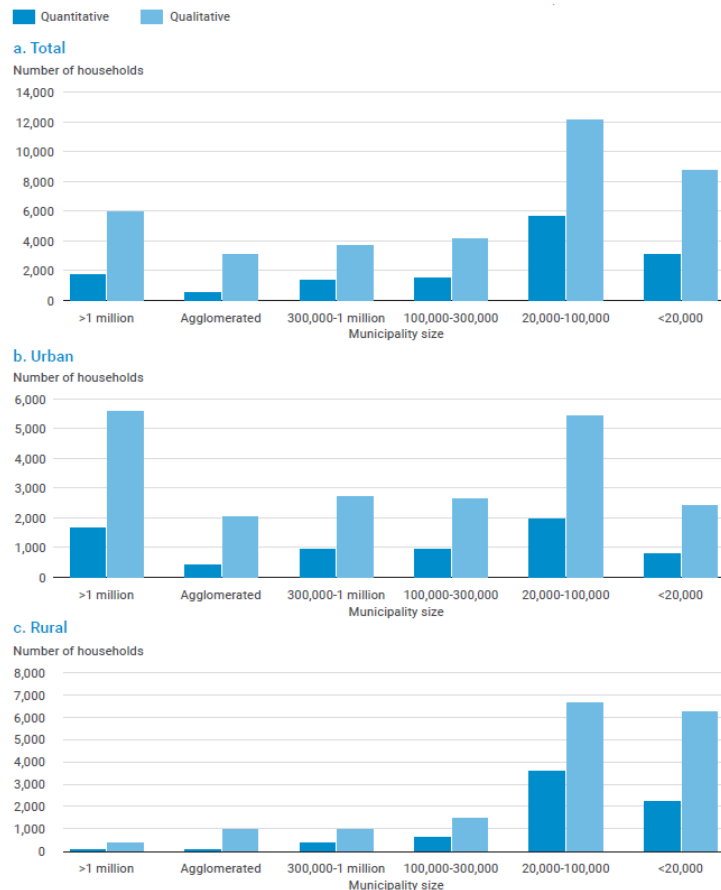


Figure 18 Housing Deficits in Colombia by Municipality Size (The World Bank, 2021, p. 47)

## COLOMBIA'S RECENT HOUSING PROGRAMS

**Historically, Colombia has focused on home-ownership programs and new housing.** In both approaches of Colombia's housing policy, both when the state played the role of constructor and later when the state played the role of enabler, the focus was on new housing. The following figure, based on the one designed by the Ministry of Housing, contains a classification of Colombia's housing programs based on the targeted population according to income. At the same time, it shows the kind of deficit that the program seeks to address, whether it's qualitative through upgrading or quantitative through the construction of new units. Each one of these programs will be explained:

- FRECH - *Fondo de Reserva para la Estabilización de la Cartera Hipotecaria (Mortgage Portfolio Stabilization Reserve Fund)* Interest-Rate Subsidies
- VIPA – *Vivienda para Ahorradores (Housing for Savers)*
- Mi Casa Ya (Mi Home Now)
- Semillero de Propietarios (*Savings fund for future Homeowners*)
- PVG - Programa de Vivienda Gratuita (*Free Housing Program*)
- Casa Digna Vida Digna (*Dignified House, Dignifies Life*)

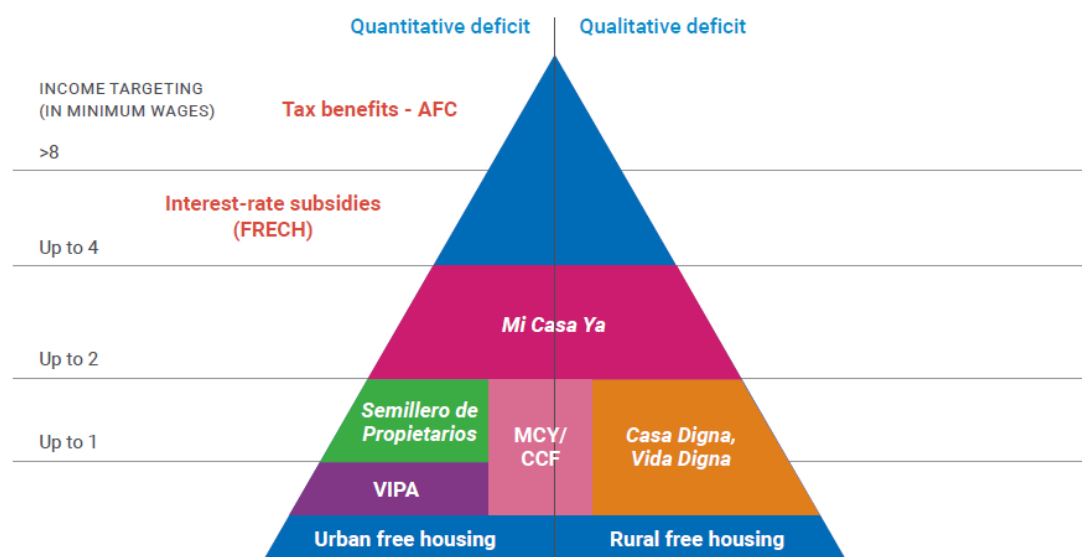


Figure 19 Recent Housing Programs in Colombia (The World Bank, 2021, p. 74)

## FRECH INTEREST-RATE SUBSIDIES

**As already mentioned in the literature review, financial institutions are unwilling to lend money to the poorest population segments.** These loans are considered high-risk and administrative intensive while simultaneously producing low earnings for banks. Despite a decline in interest rates during the last years, banks still charge higher interest rates for social housing, “during the last five years, mortgage interest rates for social housing were on average 1.5 percentage points higher than non-social rates.” (The World Bank, 2021).

**There was concern in the country related to the effects of the Global Financial crisis of 2007.** In previous years, as a result of the 1999 crisis, the FRECH was created to protect mortgage consumers from possible inflationary pressures. (Hofstetter, Tovar and Urrutia, 2011, p. 8) Facing the crisis opened the chance for using this fund, and the government created the FRECH subsidy program, in which a part of the fund’s money would be used as an interest rate subsidy to help stabilize the construction sector.

**In 2009, through decree 1143, the Central Bank was authorized to first offer this subsidy, with an initial value that was expanded to up to 950 trillion pesos (US\$450 billion).** The subsidy consisted of a “direct subsidy to the interest rate of new mortgages, offered by existing financial institutions to new loan debtors.”(Hofstetter, Tovar and Urrutia, 2011, p. 8) The program “provided an interest rate subsidy four or five percentage points to individual mortgage loans for housing units with a price lower than 135 SMLVs, with no restrictions on family income to limit access” (The World Bank, 2021, p. 75).

**There are mixed results in the relationship with the subsidy.** It achieved support for the construction industry by counterbalancing the effects of the crisis in the housing market. The value of mortgage loans experienced an increase of 38% in the country after the first year of the program (Hofstetter, Tovar and Urrutia, 2011, pp. 18–19) and proved to increase the purchasing power of lower-income households by 42%, and of middle-class households by 23%. (The World Bank, 2021, p. 75) Nevertheless, according to Hofstetter, Tovar, and Urrutia (2011, p. 24), around one-third to one-quarter of the money, at least during the first year of the subsidy, ended in the hands of the banks, which proves disproportionate in terms of the investment. Additionally, as the program was not targeted at the poorest households, the main beneficiaries of the program were the middle- and high-income households.

**FRECH II started in 2012 with a new investment trying to improve the targeting of the previous version of the FRECH subsidies.** In this occasion, subsidies were targeted at households whose income was below four SMLVs, which would enjoy a reduction of their negotiated interest rates by four percentage during a seven year period. (The World Bank, 2021, p. 75)

#### **VIPA**

**VIPA was a program designed to increase the reach of home ownership to households that, because of their low savings capacity, have not been able to acquire a downpayment for a home.** The first version was launched in 2013, addressed to households whose income was lower than two SMLVs, to locate 86.000 subsidies for the sum of 2,1 trillion pesos (US\$1.05 billion) (Función Pública, 2023). First, the program gave a subsidy of 25 SMLVs to families that proved to have saved the initial 5% cost of a VIP unit. The subsidy was later enhanced to 30 SMLVs, which saved a downpayment of 2% of the cost of the house since the national government decided to cover the loans given by the banks with guarantees. (The World Bank, 2021, pp. 75–76). In 2017, the program was incorporated into the Mi Casa Ya program, which will be explained below.

#### **MI CASA YA**

**Introduced in 2015, it has become the main program for subsidized housing acquisition.** The program consists of the convergence of two subsidies. First, a subsidy for the downpayment of a social interest house; for households whose income is between 0-2 SMLVs, a subsidy of 30 SMLVs is allocated; for households whose income is between 2-4 SMLVs, the subsidy corresponds to 20 SMLVs. Second, a subsidy to the interest rate agreed upon with a

financial institution for a hypothecary credit or leasing during the first seven years. For VIP houses, the covered value is 5% points; for VIS houses, the value is 4% points.

**First, when the program was created through decree 1581 of 2015, it would only cover households with income between 2-4 SMLVs, while VIPA was targeted at the lower income groups.** Later, through Decree 729 of 2017, the program was expanded to households between 0-2 SMLVs with a progressive subsidy. In addition, through Decree 1533 of 2019, households can access a different subsidy given by the CCF - *Cajas de Compensación Familiar (Family Compensation Fund)*. These are social welfare institutions, funded through employer contributions, that provide a range of benefits and services to employees and their families. When a household has an income below two SMLVs, the Fund can assign its beneficiaries a subsidy for 20 SMLVs. The subsidy can be added up to the Mi Casa Ya subsidy and sum up to 50 SMLVs.

**The choice of beneficiaries for the program is partially translated to the financial sector.** In *Mi Casa Ya* subsidy covers only a percentage of the unit, and families need to acquire a hypothecary loan or leasing granted by a bank to complete the dwelling’s cost. Before, the government would first assign subsidies, but as many financial institutions rejected them, they would need to give up the subsidy. For the *Mi Casa Ya* program, the process is reversed, as the application for the subsidy is done in parallel with the application for the bank’s loan. If the person is granted the loan, the bank sends all the necessary documentation to the Housing Ministry, who reviews the information and approves the subsidies according to the arrival order. In this way, subsidies are not granted to beneficiaries who will not be able to use them.

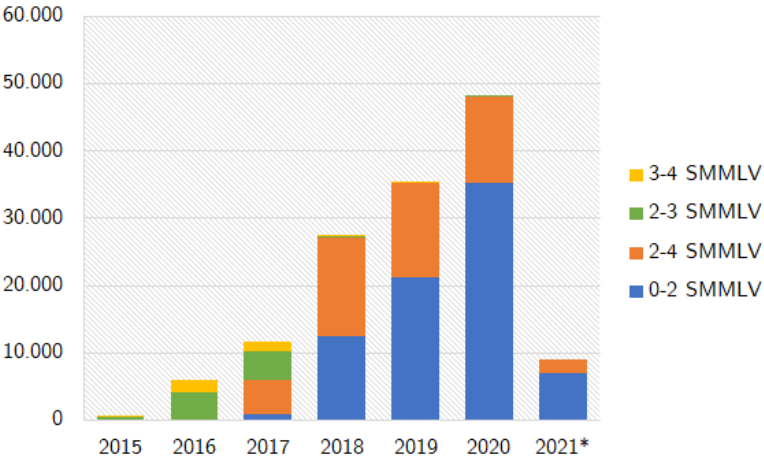


Figure 20 Number of Assigned Mi Casa Ya Subsidies by Income (López Uribe and Sánchez Torres, 2022, p. 4)

**Figure 20 shows the amount of located subsidies of the Mi Casa Ya program.** As can be seen, there has been a steady increase in the number of assigned subsidies, from around 6,000 in 2016 to almost 50,000 in 2020. Also, the changes in the program done in 2017 and 2019 have allowed a progressive location of the subsidies in the lowest income group. Changing from none in 2016 to around half in 2017, and later almost 75% in 2020. Both the progressive coverage of low-income groups and the higher coverage of interest rates for VIP housing have successfully expanded this market to be more affordable for the low-income population. Nevertheless, the program mostly benefits middle-income families.

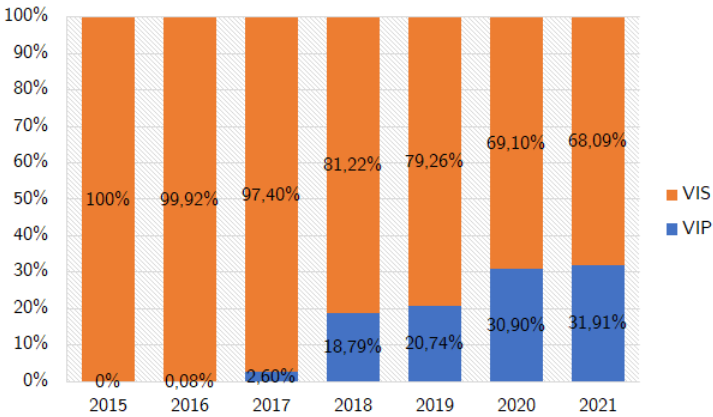


Figure 21 Proportion of VIS and VIP Housing from Mi Casa Ya (López Uribe and Sánchez Torres, 2022, p. 4)

**SEMILLERO DE PROPIETARIOS**

**High rents have prevented many households willing to own from saving the necessary amounts for a down payment, and access housing finance.** For this reason, the *Semillero de Propietarios* has appeared as a new rental subsidy scheme for low-income families which enables them to acquire enough savings to access housing finance. It is addressed at the populations whose income is lower than two SMLVs. “The beneficiary families receive a rental subsidy equal to 60% of a minimum wage, and households must make a monthly deposit of 25% of SMLVs during a 24-month period.” (The World Bank, 2021, p. 77) This means that after two years of saving, the family should have an amount over six SMLVs. Other than support to the families, the subsidy has two main purposes: for households to save enough money for a downpayment to acquire social housing, and to provide selected households with a credit history so that financial institutions will be willing to extend loans to them. It is a complementary subsidy to Mi Casa Ya, so low-income households can first access the financial market and a subsidy for a social housing unit.

**The results of the program have not been positive.** Despite the goal to allocate 80,000 subsidies in the first two years starting in 2019, in September 2020 only 1,311 subsidies have been granted (The World Bank, 2021, p. 77). The government requirement of renting through a certified estate broker that ensures adequate housing standards has proven a challenge for the Colombian renting market. As most of the low-income renting is conducted informally only a few houses have been declared suitable for a subsidy allocation.

#### **PROGRAMA DE VIVIENDA GRATUITA**

**Current housing policies have not allowed the low-income sectors of the population to access the housing market. This has left a high number of subsidies remain unassigned.** A partial response to this was the PVG created by the government in 2012 to give an alternative to housing for families victims of the armed conflict, families linked to governmental programs for extreme poverty eradication, and families victims or living at risk of natural hazards. (Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022)

**Once the goal to construct 100,000 housing units with a budget of 4.2 trillion pesos (US\$2.1 billion) (Parias Duran, 2014) was set by the national government, the Housing Ministry of Colombia defined the total number of houses that should correspond to each one of the 32 states on the country.** The first phase took place between 2012-2015, with 93,220 houses built in 295 projects in 213 municipalities. The second phase took place between 2016-2021, with 17,735 houses built in 135 new projects in 127 municipalities. Housing typologies can be diverse as are the size of the projects, ranging from multistory buildings to single houses between 20 to 4,080 units; being the average project of 350 in phase I and 170 in phase II. (Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022, pp. 9–10)

**The program's legal mechanism for land management was the *Macroproject of Social National Interest*.** They gave the National Government power for the projects' planning, financing, and land management to the extent that it could overrun the existing urbanistic norms of municipalities and cities. (Parias Duran, 2014) Three different management systems were allowed to participate (Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022):

- Private: The National government bought housing units from private construction companies on land owned by the constructors at prices below the Priority Interest Housing limit (70 SMLV).

- Public: Selection of constructors by the national government for developing housing projects on land given by the municipalities. The cost, including the value of the land, should be below the Priority Interest Housing limit (70 SMLV).
- Agreement: Acquisition of housing projects promoted, managed, and constructed by the municipalities or states. Agreements between different institutions take place. The final price of the houses should be below the Priority Interest Housing limit (70 SMLV)

**An estimated 35% of projects were constructed under the private mode, 26.15% under the public scheme, and 38.85% under the agreement mode.** Once the houses are built, the Ministry of Housing and the local town hall office define the proportion of homes given to vulnerable groups. Once the most vulnerable groups were assigned a house, a lottery would take place to provide the remaining dwellings within the next most vulnerable group. (Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022, p. 9).

**However, “the program started to exhibit problems with social infrastructure supply, high crime rates, and shortage of labor.** As a result, the Ministry developed an assistance program for beneficiaries of PVG, which included social and community assistance and urban infrastructure development.” (The World Bank, 2021, p. 77) In this context, the housing projects started to include the construction of roads and sidewalks to guarantee the connection with the municipalities’ road system. Even further, interinstitutional arrangements were made to include complementary services for housing, such as sports courts, internet connection, police stations, and educational centers (Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022, p. 14).

**The results, which compared the beneficiaries of the polls with the non-winners, showed that the families that inhabit the projects have easier access to the city and transport, and live closer to urban services such as schools, hospitals, police, banks, and supermarkets.** Despite living in safer zones, the safety perception of the areas is not good, which might relate to the weakening of their social networks when moving. The beneficiaries have also experienced more and better employment than the non-beneficiaries of the polls.(Camacho Gonzáles, Caputo Leyva and Sánchez Torres, 2022, pp. 27–41) Nevertheless, by totally subsidizing the houses, the coverage of the program was greatly reduced. It was able to benefit only 2,5% of families with a housing deficit. (The World Bank, 2021, p. 77) “If PVG’s past rate were maintained, a free-housing solution for the 5.1 million families in the quantitative and qualitative deficit would cost US\$76.5 billion – or 181 years’

worth of the current national-level annual expenditure on housing” (The World Bank, 2021, p. 77)

## **CASA DIGNA VIDA DIGNA**

**The program was designed to give a new boost to the different housing upgrading and home-retrofitting interventions.** Home retrofitting has been addressed discontinually in the housing policies, there were resources mobilized at the beginning of the 1990s, and efforts in urban areas between 2007 and 2009, and this program became a new approach to the strategy. Nevertheless, municipalities have made great efforts in neighborhood upgrading programs, but this has only been possible in large cities with considerable budgets, such as Medellin and Bogota (The World Bank, 2021, p. 78)

**The program had three different phases: “: land and title regularization, slum upgrading, and home retrofitting.”**(The World Bank, 2021) The idea is that the programs should be prioritized in this order. First, the tenure should be secured by legalizing the neighborhoods so people can own the title of their land; later, the public services like water, electricity, and sewerage should be secured; last, the interventions to improve the household conditions, structure, and wall materials before, quality and habitability of spaces, such as kitchens, floors, and finishes. The neighborhoods eligible for improvement should be located in not high-risk public land areas; the Ministry has focused its interventions on public spaces, schools, nursing homes, and parks.

**The program is aimed at urban households in ownership or living in qualitative deficit houses for at least five years, subject to overcoming the deficit through upgrading.** The subsidy consists of 100% financing of the interventions for households whose income is below four SMLVs and who live in a house whose value is under 135 SMLVs or the social housing top defined by the municipality. In 2020, the income was changed to two SMLVs and started including rural areas.

**The home interventions are subject to a diagnosis elaborated by a government-approved official, which should define and approve the needed interventions.** There are considered two different kinds of upgrades: locative and structural. The first refers to operations to improve the structure of the house, such as roof, beams, structural walls, or non-structural elements to make the house resistant to earthquakes; the subsidy for improvements for these upgrades can cost up to 18 SMLVs. Locative improvements refer to improvements in public services, improvement of living conditions, or improvement of comfort; they can deliver a subsidy costing up to 12 SMLVs(Ministerio de Vivienda, 2021, pp. 8–9).



**The program is done in parallel with the Ministry of Social Prosperity and the Ministry of Agriculture.** It aimed to achieve a goal of 600,000 beneficiary households: 251,500 beneficiary households by the Ministry of Housing. 325,000 home retrofitting interventions, subsidies for home materials, and neighborhood upgrades are to be financed and executed by the Ministry of Social Prosperity. And 23,500 home retrofitting interventions and title regularizations are to be financed and executed by the Ministry of Agriculture. The program has not been able to fulfill the assigned goal because of fiscal constraints and operational capacity; the program’s budget was reduced from \$130 billion pesos (US\$ 35.2 million) to \$35 billion pesos (US\$ 9.5 million). (The World Bank, 2021, p. 80)

**The lack of success of this policy led to the creation of a new program by the recently elected government.** The program is called *Cambia Mi Casa (Change my House)*, which aims to do 400,000 home upgrades with subsidies of up to 22 SMLVs. The program targets rural areas and the smallest municipalities and decentralizes the operation by involving social and community organizations. The impact and results are yet to be evaluated.(Ministerio de Vivienda, 2023)

**AFFORDABILITY STUDY AND PERCENTAGE OF POPULATION COVERED BY PROGRAMS**

Income decile	Monthly Income in Pesos	Monthly Income in dollars	Housing Expenditure by the 2018 Census	Housing Expenditure by Rapid Urbanism
D10	\$6.620.500	\$2.243	14,6%	35,0% \$784,95
D9	\$3.036.660	\$1.029	17,2%	30,0% \$308,60
D8	\$2.214.747	\$750	20,0%	25,0% \$187,56
D7	\$1.760.308	\$596	22,9%	25,0% \$149,08
D6	\$1.399.635	\$474	26,4%	20,0% \$94,83
D5	\$1.124.092	\$381	29,8%	20,0% \$76,16
D4	\$935.510	\$317	34,1%	15,0% \$47,54
D3	\$751.786	\$255	37,8%	15,0% \$38,20
D2	\$509.564	\$173	45,7%	10,0% \$17,26
D1	\$197.826	\$67	55,6%	10,0% \$6,70

Table 6 GEIH Income deciles compared to Rapid Urbanism(Fedesarrollo-Secretaría Técnica, 2020) <sup>1</sup>

<sup>1</sup> For the exercise the SMLVs had a value of \$781,242 in 2017 year of the pole, and a dollar was equivalent to \$2,952 pesos.

**The following exercise will compare the housing supply offered by the market and the real affordability from the demand.** The difference provided between these two will allow us to understand what groups can access an affordable home under the existing subsidy system. The information will present the income corresponding to each population decile according to the most recent data, the results of the *GEIH 2018*, processed by the *Mortgage Portfolio Deepening Mission 2020* (Fedesarrollo-Secretaría Técnica, 2020). According to the GEIH, the values of renting costs are presented in Table 6, and contrasted with the Rapid Urbanism framework explained in the methods chapter. There is an evident difference when despite the expectancy of costs for housing to decrease as the population has lower income, these increases. A possible explanation for this is that families are having to sacrifice a share of the expenditure that should be spent on other needs, such as food, health, and or transport, to be able to access housing over their real affordability options. For this reason, the values proposed by rapid Urbanism will be used, so the exercise reveal financing that households can comfortably sustain.

Income decile	Monthly Income in Pesos	Number of Minimal Wages
D10	\$6.620.500	8,47
D9	\$3.036.660	3,89
D8	\$2.214.747	2,83
D7	\$1.760.308	2,25
D6	\$1.399.635	1,79
D5	\$1.124.092	1,44
D4	\$935.510	1,20
D3	\$751.786	0,96
D2	\$509.564	0,65
D1	\$197.826	0,25

*Table 7 Monthly income equivalence to Minimum wages According to GEIH 2018 (Fedesarrollo-Secretaría Técnica, 2020)*

Income decile	Monthly Income in Pesos	Monthly Income in dollars	Loan Term	Interest Rate	Affordable Loan	Monthly savings	Affordable Down-payment	Subsidy Eligibility	Down-payment Subsidy	Affordable House
D10	\$6.620.500	\$2.243	20	7%	\$ 101.245	20	\$15.699	> 4 m.w	\$0	\$ 116.944
D9	\$3.036.660	\$1.029	15	8%	\$ 32.292	20	\$6.172	2 - 4 m.w	\$5.293	\$ 43.758
D8	\$2.214.747	\$750	12	10%	\$ 15.695	20	\$3.751		\$5.293	\$ 24.739
D7	\$1.760.308	\$596	10	12%	\$ 10.391	20	\$2.982		\$5.293	\$ 18.665
D6	\$1.399.635	\$474	8	15%	\$ 5.284	20	\$1.897	1 - 2 m.w	\$7.939	\$ 15.120
D5	\$1.124.092	\$381	8	15%	\$ 4.244	20	\$1.523		\$7.939	\$ 13.706
D4	\$935.510	\$317	5	18%	\$ 1.872	20	\$951		\$7.939	\$ 10.762
D3	\$751.786	\$255	5	18%	\$ 1.504	20	\$764	< 1 m.w.	\$7.939	\$ 10.208
D2	\$509.564	\$173	3	24%	\$ 440	20	\$345		\$7.939	\$ 8.725
D1	\$197.826	\$67	3	24%	\$ 171	20	\$134		\$7.939	\$ 8.244

Table 8 Housing Affordability with Mi Casa Ya Subsidy According to GEIH 2018 and Rapid Urbanism Framework (The World Bank (draft), 2024) (Fedesarrollo-Secretaría Técnica, 2020)

For the exercise displayed in Table 8, first, a monthly housing expenditure is defined by crossing the monthly income by decile, with the affordable percentage of housing expenditure as proposed by Rapid Urbanism. According to this, different financing options were assigned to each decile, where higher-income households could enjoy loans with lower interest rates and longer terms. This allows us to calculate an affordable loan amount. To this value, a 20-month saving is added, determined by the housing expenditure value as a downpayment. Last, according to their income group and access to the *Mi Casa Ya* subsidy, the subsidy amount would be considered. In this way, the addition of the affordable loan, the downpayment, and the subsidy if applicable would sum up the amount of an affordable house for each II.

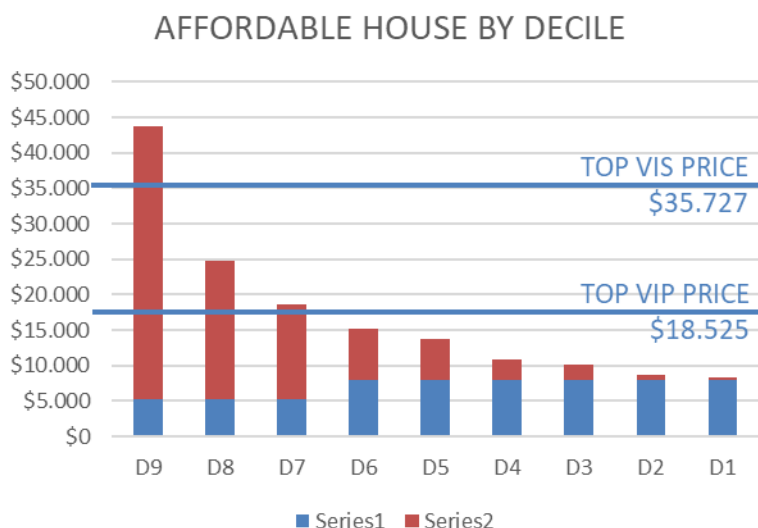


Figure 22 Housing affordability by decile (US dollars)

Figure 22 shows the values of the previous exercise crossed with the prices of Social Housing in 2017. 70 SMLVs for VIP housing and 135 for VIS housing. Decile 10 is not presented on the graphic. First, it's remarkable to see how many people are covered by the *Mi Casa Ya* subsidy system, as seen in Table 7, deciles 7-9 are eligible for subsidies for 20 SMLVs, and deciles 1-

6 are eligible for 30-minimum wages. This means that over 80% of households have an income that would make them eligible for the program. Despite the increase in the subsidy amount, Deciles 5-6 cannot comfortably access VIP housing, but probably might be able to by making some trade-offs related to non-housing expenditure. Nevertheless, the lower middle-class deciles and low-income population cannot access formal housing, even with the help of the Mi Casa Ya program. In this way, it can be seen how the Mi Casa Ya program could make efforts to better address middle-income families while better locating subsidy amounts, but also makes evident the need for a new program to reach low-income families.

**DIAGNOSIS OF COLOMBIA’S HOUSING FRAMEWORK**

**Colombia has increased its housing provision performance through the enablement of the private market.** The results of these efforts have been an increase in the housing production of the country, which manifests in a reduction of housing deficits. The number of new units sold between 2012 to 2020, increased from around 100,000 units to 137,200. In this way, the total housing deficit was reduced from over 50% of the housing stock in 1993, to close to 30% in 2021. Consequently, the qualitative component of the deficit descended from 17% in 1993 to 7% in 2018. Thus, the paradigm shifts from a state provision for social housing, in exchange for a market enablement has proven successful. Nevertheless, it has taken over 30 years of constant attempts and improvements to achieve these results.

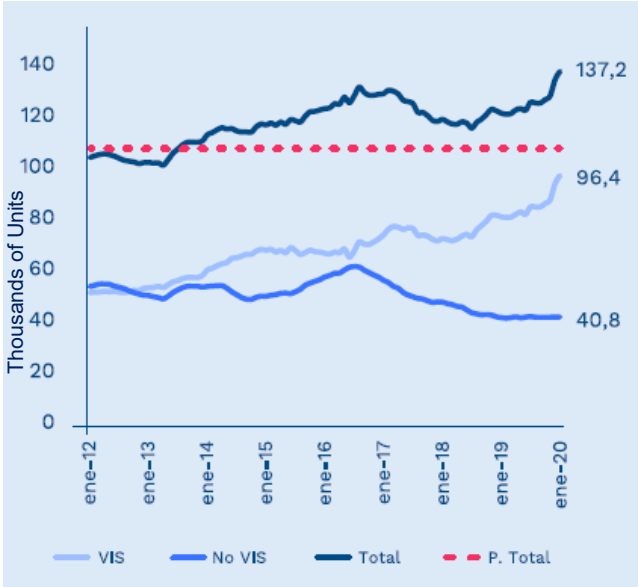


Figure 23 Number of Sold New Housing Units (Fedesarrollo-Secretaría Técnica, 2020, p. 19)

**The main tool for this success has been the subsidy to the demand, which has enabled households to acquire a dwelling provided by the private market.** After the economic crisis at the end of the 1990s, the scheme came in hand with improvements in the macroeconomic

situation of the country and a reduction of poverty levels. This has caused a deepening of the housing finance portfolio, which has become more accessible and competitive, reducing the interest rates, and providing longer terms for loans. The results can be evidenced in the increase in subsidies granted for social housing, as seen in Figure 24. These subsidies have been mostly addressed to new housing, which has experienced a peak in the sold of new units from around 50,000 in 2012 to 96,400 in 2020; almost double of the previous production.

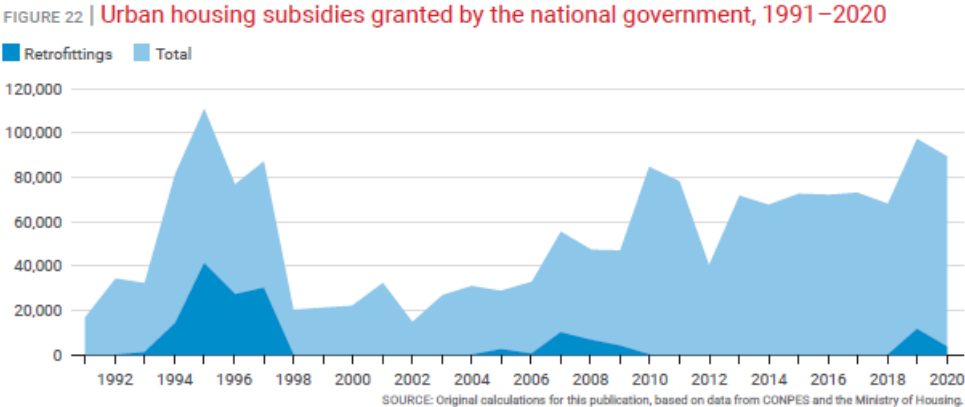


Figure 24 Urban Housing subsidies granted by the National Government (The World Bank, 2021, p. 74)

**Nevertheless, these results have been reached by providing housing only for the most attractive markets.** As there is more wealth and demand for housing in the large cities and for a better-off population, the private sector has focused construction efforts on them. This has produced an imbalance in the housing deficits of the country where housing deprivation has remained high according to its geographical situation – in rural areas, and small municipalities – and according to income, where the poorest population housing needs have remained unattended. On the one hand, as seen in Figure 10, the housing deficit constitutes 20,4% in the urban areas, compared to 68,2% in the rural ones, almost four times higher. Even further, when comparing the housing deficits between large urban areas of over a million people, with municipalities of under 100,000, housing deficits locate themselves between 12-30% on the first, against 40-80% on the latest.

**On the other hand, the social housing offer, available on the market, can only be accessed by the middle-income population.** In the affordability analysis, where the different income groups were assigned a portion of their income to access housing, found that even with the assignation of the Mi Casa Ya subsidies, only the highest five income deciles could comfortably access the cheapest social housing solutions provided by the market, constituting the VIP housing standard according to the 2018 data. The situation looks worse when the overall increase in land and therefore housing, led to an increase in the value of VIP housing

to 90 SMLVs. There have been different governmental attempts to access this population, this could be seen in the PVG, the VIPA, and the later *Semillero de Propietarios*.

**Despite the different attempts, the programs have not been maintained through time.**

The first one proved to be able to reach the poorest households only by completely subsidizing housing, acknowledging that the lower-income population did not have the means to access housing. In this way, by managing and organizing the demand, was able to locate subsidies in the municipalities and for the population where they were more needed. The problem with it was the high fiscal efforts, which could not be sustained through time. The VIPA only worked for a short period, before it became a different modality of the *Mi Casa Ya* program, in it, higher downpayment subsidies were assigned for the lower-income population to access the program, nevertheless as already shown in the affordability analysis, only remains affordable to middle-income population. Last, The *Semillero de Propietarios* was conceived as a rental subsidy, with the idea that vulnerable beneficiaries were able to turn part of the subsidy into savings, saving up an amount of 6 SMLVs during the first two years. This amount was thought to work as a downpayment of the *Mi Casa Ya* subsidy, which with a financial loan should allow houses to acquire a house provided by the market. Nevertheless, the proposal has not worked because of the lack of housing units approved by the ministry for being beneficiaries of the rental subsidy. Still, there is no guarantee of financial access for the beneficiary population even with the granted downpayment.

**Last, to boost the economy, the main tool for improving the housing provision has been the acquisition approach, where the government would assign subsidies for new housing.** As shown in Figure 24, most of the assigned subsidies have been to housing acquisition, while subsidies for retrofitting have been uncoordinated efforts through time, and not part of an integral strategy. In this way, the quantitative deficit has been greatly reduced, but the quantitative deficit remains high. This means that the informal settlements of self-help which has been the main way for the low-income population to access housing, still have many deficiencies both in service provision and in quality. Today, the total quantitative deficit is 7,5% versus a qualitative deficit of 23,5%. In this way, the subsidies to the demand success have happened in parallel to an oblivion for the underserved parts by the market.

**The lack of an upgrading policy to come in hand with the ABC scheme has led to an imbalance in the housing deficits.** The ABC scheme is a cost-efficient solution for addressing quantitative deficits, given that one housing solution can solve all the deficits that a household faces. However, the qualitative deficits would be most effectively addressed by the upgrading approach since smaller investments would be made to tackle the specific needs of households. The lack of an upgrading strategy that received the same efforts as the

acquisition approach has left the qualitative deficits unaddressed both in the rural and urban areas.

**The World Bank paper evaluating Colombia's housing system calculated a gross total cost of eliminating Colombia's housing deficits.** The net present value of eliminating the quantitative housing deficits in the country would imply an investment of US\$16.3 million with today's ABC scheme and US\$29,7 billion dollars with free housing (The World Bank, 2021, p. 109). In the previous example, upgrading was not a contemplated solution for the quantitative component. On the other hand, if the qualitative component was solutions through the acquisition approach, it is estimated to cost US\$43.7 billion through today's housing subsidies and US\$79,5 billion on free housing. If the solution is through an upgrade approach, the price would be 21.5 billion for structural retrofitting and 3.4 billion through microcredit<sup>2</sup> solutions. (The World Bank, 2021, p. 109)

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<sup>2</sup> microcredit cost is equivalent to subsidizing, for 5 years, a portion of the payment installments (5 SMLVs) necessary to cover the intervention defined earlier.

## CHAPTER V: LATIN AMERICAN CASE STUDIES

### CHILE

#### BACKGROUND

**Between the 1950s and 1970s, the Chilean housing model was based on a private market that attended the higher-income sectors but failed to do so with the lower-income households.** For this reason, the public sector became the primary source of social housing production. The state played the role of manager of the land and the actor in charge of building and controlling social housing. (Fuster-Farfán, 2019, p. 9) Nevertheless, production was only half of what was needed to reduce the housing deficit. (Gilbert, 2002, p. 309)

**After the 1975 military coup, a new housing model was shaped where the private sector would produce public housing in response to the free market instead of the state.** (Gilbert, 2002, p. 10; Greene and Mora, 2020, p. 71) Conscious of the incapacity of low-income people to acquire a new house, subsidies were given to them so that they could afford a home provided by the market. The new model effectively reduced the number of government officials, provided decent accommodation, and increased production to levels that diminished the housing deficits. (Gilbert, 2002, p. 310) In 1979, the government took market liberalization one step further. As a way to lower land prices and enable the construction of cheap social housing, Santiago's urban limit was abolished (Greene and Mora, 2020, p. 71); the government decided that land is not a scarce good; therefore, any public intervention over the land use is eliminated to favor the optimal location of uses distributed by the market. In this way, the government gave up even its urban planning faculties and left it in the hands of the market (Imilan, 2016, p. 5). Nevertheless, prices did not drop, and Santiago grew almost 70% of its urban area in the five following years until the urban limit was again restored.

**Despite the outline of the program, the government had to assume a more active role because developers and banks lacked interest in building and financing low-income housing.** The Ministry of Housing had to directly contract housing projects and provide loans for low-income households to which commercial banks did not want to lend. (Rojas, 1999, p. 2) During these years, the military government did not allow land invasions or the spread of informal settlements. (Greene and Mora, 2020, p. 71) It is a period characterized by their eradication to free up better land for the formal city. (Imilan, 2016, p. 5) These facts made the housing deficit express through a phenomenon that came to be known as *allegados*. These were persons or families forced to co-live with other relatives or friends in a legally overcrowded home. (Greene and Mora, 2020, p. 72)



**In 1990, the change to a new democratic regime did not change the neoliberal policy direction that the country had taken, but it brought new challenges.** During these years, housing policy increased the delegation of responsibilities to the market (Imilan, 2016, p. 7), which supplied homogeneous mass housing at cheap, peripheral locations that lacked access to services. This emphasis on mass production, in which the state organized demand, planned the settlement, and outsourced the construction, was done partly out of fear that the unsatisfied housing situation of the 'allegados' would lead to a massive reappearance of informal neighborhoods, destabilizing the newly democratic government. (Greene and Mora, 2020, p. 72) The new production scheme greatly increased housing production, reaching historical peaks of production. Between 1990 and 2009, the housing deficit was reduced from 30% to 7%, where 79.000 subsidized houses were built each year, from a total of 106.000 units constructed yearly. (Imilan, 2016, p. 7) This meant that around 75 % of new houses constituted social housing. Nevertheless, it became known as a period where housing production was characterized by low-quality production in underserved city areas. (Imilan, 2016, p. 7; Greene and Mora, 2020, p. 72)

**At the beginning of the 2000s, the adverse effects of the poorly located and served housing projects of the 1990s started to be evident.** The research "Los Con Techo" in 2005 (the ones with roofs) showed that for many families that had shelter, their current homes were unable to provide a good quality of living. The development of massive low-quality housing projects in the periphery, in neighborhoods designed without public space, lacked not only urban facilities but also access to transport and employment opportunities. This fact concentrated the vulnerable population in isolated zones and generated a new kind of poverty and exclusion. (Imilan, 2016, p. 9; Greene and Mora, 2020, p. 76)

**On the one hand, as a response to this, the new programs started focusing on higher quality, diversification, and complexity.** (Greene and Mora, 2020, p. 76) There is a transition within the same subsidiary system, where instead of changing the paradigm, the same system uses social promotion strategies to provide a higher sense of belonging to the market solutions. (Fuster-Farfán, 2019, p. 10) During the 1990s, the state organized the demand, planned the residential complexes, and externalized the construction. In 2006, the EGISs - *Empresa de Gestion Inmobiliaria Social (Social Real Estate Management Company)* were introduced, a private entity in charge of all the stages of the housing projects. The EGIS can be public, usually assembled by municipalities where the private market has no interest in acting; private non-profit, usually foundations, international aid agencies, and churches; and private, as enterprises in the search for profit. The state has deregulated further its role and has the only function of assigning subsidies to the beneficiaries. (Imilan, 2016, pp. 10–11) Nevertheless, the subsidies encourage correcting the system's wrongs instead of reinventing it. This can be

seen in the conditions created for a wider variety of subsidies depending on the household composition or the specific characteristics of the house to be acquired. For example, additional subsidies are given for larger families, elderly populations, or disadvantaged people, while projects in better locations with renewable energy, among others, benefit from another battery of subsidies. (Fuster-Farfán, 2019, p. 11) In 2011, the requirement for assigning subsidies did not have to be through an EGIS. Therefore, the person is not involved in the unit design, but the beneficiary can postulate individually to acquire a house offered by the real estate market. In 2014, the figure of EGIS changed its name to *Entidades Patrocinantes (Sponsoring Entities)*, but their function remains the same (Imilan, 2016, pp. 13–14). Today, the main subsidies provided by the MINVU - *Ministerio de Vivienda y Urbanismo de Chile (Chile's Ministry of Housing and Urbanism)* include (Salvi del Pero, 2016, p. 12):

- Homeownership for low-income households: Subsidy DS 49 of 2011
- Homeownership for middle-income households: Subsidy DS1 of 2011
- Rent-to-buy subsidy: Housing leasing DS 120 of 1995
- Subsidy for housing regeneration: DS 255 of 2006
- Subsidy for housing expansion: DS 255 of 2006
- Tax deduction for mortgage interests
- Rental Subsidy: DS 52 of 2013

**On the other hand, improvements to the poorly served neighborhoods started to be addressed.** The following happened In 2006 through the program 'Quiero mi Barrio' (I Love My Neighborhood.) (Imilan, 2016, p. 13; Greene and Mora, 2020, p. 5). It involved upgrading 300 neighborhoods in the country that were considered vulnerable; many of these were part of the social housing solutions provided in the 1990s. It's a participative design with the community coordinated by a multidisciplinary team, which results in the design of a public space intervention for the neighborhood. Three hundred new neighborhoods were considered again for intervention in 2014. (Imilan, 2016, p. 13)

**The last years of the housing policies in Chile have been the improvement of what Fuster-Farfán calls Hybrid Neoliberalism,** characterized by its "aims to establish a new paradigm in social housing policies through the implementation of exceptional actions: they are of a higher standard and contextual and cultural relevance, but eventually unique and not very replicable." (Fuster-Farfán, 2019, p. 11) A progressive transference of responsibilities from the state to the private sphere has reached this manifestation. (Imilan, 2016, p. 11) Today, the space for high-quality projects well integrated into the cities has become an exceptional reality within social housing; nevertheless, it is not the product of the housing policies themselves but of the management capacity of the inhabitants and officials.(Fuster-Farfán, 2019, p. 22)

**EVOLUTION OF HOUSING DEFICITS**

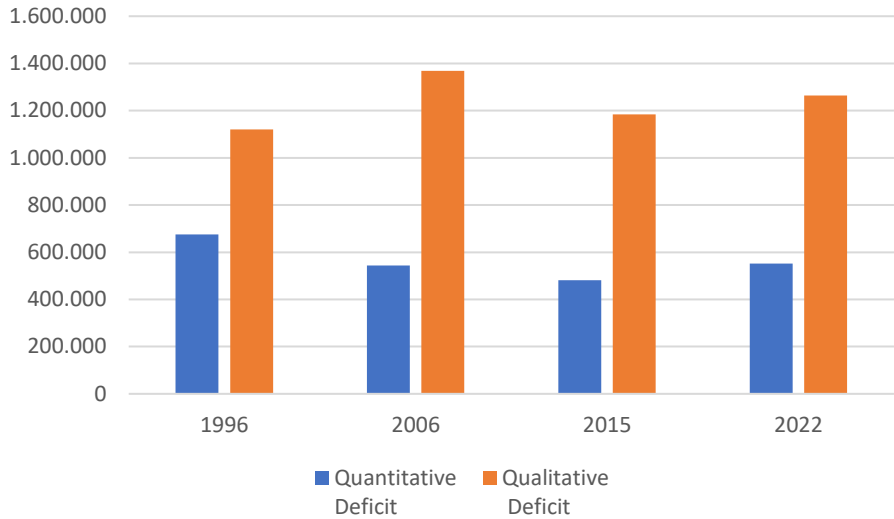


Figure 25 Evolution of Total Housing Deficits by type (Centro de Estudios de Ciudad y Territorio, 2023a, 2023b)

**Figure 25 and Figure 26 show the evolution of the housing deficits of Chile and display the results of the working of the housing policies.** While looking at the totals, it is evident that the qualitative component has played a major role in the housing deficit, which more than doubles the number of households quantitative deficit. After 2006, coincident with the results of the investigation *Los Con Techo*, started a significant reduction of the qualitative deficits, showing that the incorporation of the upgrading programs was successful. Nevertheless, despite a decrease of 3% between 2015 and 2022, the total number of deficient households has increased, probably showing that the total of upgraded dwellings dropped below the appearance of the number of new households.

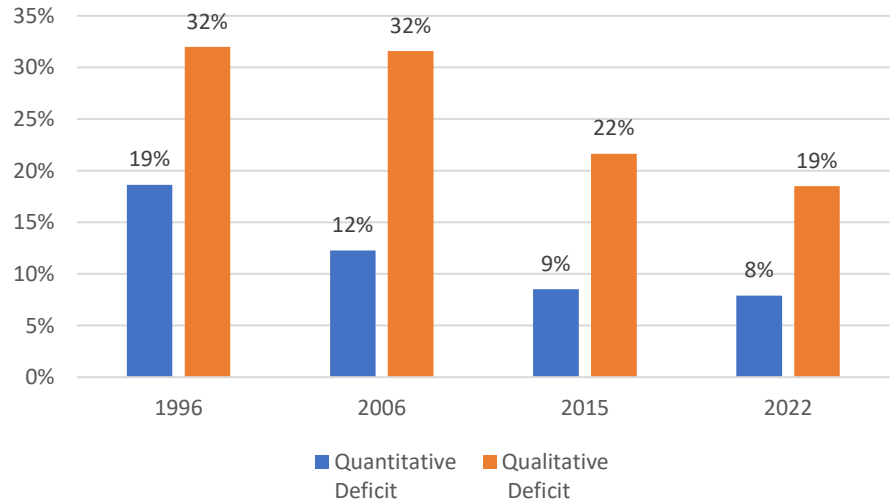


Figure 26 Evolution of Percentage of Housing Deficits by type(Centro de Estudios de Ciudad y Territorio, 2023a, 2023b)

**Around the quantitative deficit, there is a very important improvement during the first 20 years of enablement.** It reduced from 19% to 9%, later, between 2015 to 2022, there was a drop of only 1% of households in deficit, which represents an increase in the number of total households in deficit. The higher focus on the quality of the projects and the involvement of the community in the design of low-income housing programs might explain the increase in the total number of households in deficit in the most recent period.

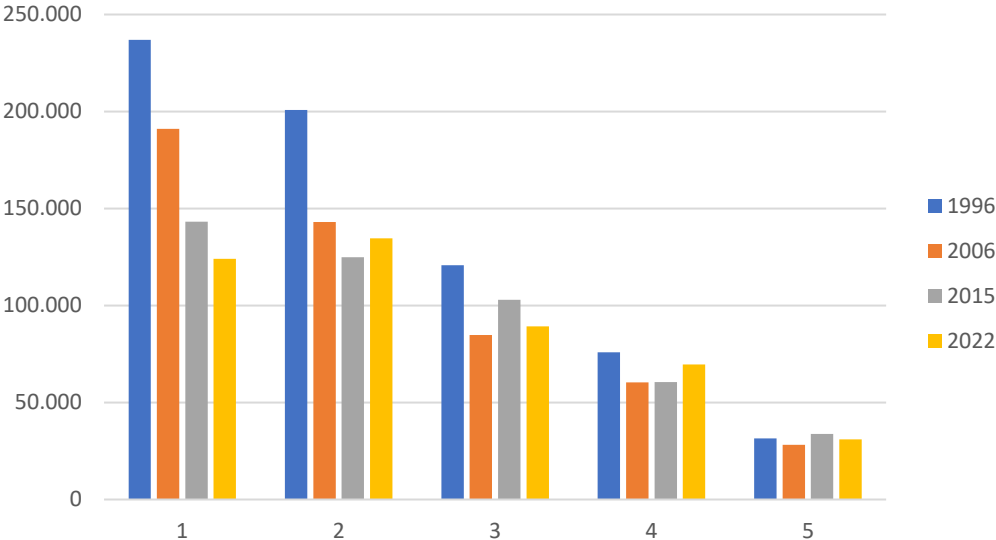


Figure 27 Evolution of Quantitative Deficit by Quintile(Centro de Estudios de Ciudad y Territorio, 2023a, 2023b)

**Figure 27 shows the evolution of the quantitative housing deficits by quintile.** In this way, it allows us to have a broad look at the work of the targeting mechanisms for home acquisition. It can be seen how despite the increase in population, the total households in Quintiles IV and V are still around the same totals. Quintile III has experienced an average reduction of about 25% of the total deficit, despite an increase between the years 2006-2015. The highest improvements can be seen in lower-income quintiles. Showing that programs have been able to target the lower-income population. Between 1995 and 2015 was an important reduction for quintiles I and II. Quintile I reduced the 2022 deficit to almost half of the 1996 deficit. While the reduction for Quintile II was around a third. These numbers show that housing programs have been able to benefit the lower-income population. As mentioned in the background section, the possible reduction in the construction rhythm might be associated with the new focus on improving the average project quality.

## DEEP DIVE: THE CASE OF PROGRAM DS49

**As seen in the previous section, part of the success of the Chilean housing policies are the different mechanisms and programs that favor diverse income groups' needs.** Nevertheless, this research will focus on the program “Fondo Solidario de Elección de Vivienda DS49” as Chile’s housing program promoting access to homeownership for low-income households.

**The program was first introduced in 2011 as a subsidy for low-income households belonging to the two lowest-income quintiles of the population.** It is the main answer from the state to the people who, because of their low income and poverty, cannot access housing by themselves or through a hypothecary credit. The decision to provide dwelling units with beneficiaries' minimal cost originates from previous experiences in which a high concentration of low-income households was unable to fulfill the debt service. According to the 2017 census, one-third of the households in this quintile have a housing deprivation, up to around 245.000 families. (Jeri, Cannobio and Vásquez, 2020, pp. 4–15) Before, there was a different subsidy for this income group, DS No 174-I, but problems in the targeting, quality, and location of the housing projects brought together the redesign of the program. For example, DS 49 improved the minimum standards for the projects (including playgrounds and sports facilities) and reduced the maximum number of dwellings per project (Salvi del Pero, 2016, pp. 15–17).

**The resources assigned for the program are directly allocated to the SERVIUs – “Servicio de Vivienda y Urbanización” (Service of Housing and Urbanization) on each territory according to the Budget Law.** The SERVIUs are autonomous Institutions from the State, one assigned to each region, which depends on the Ministry of Housing for personnel and budget. (Jeri, Cannobio and Vásquez, 2020, p. 36) The SERVIU should oversee the delivery of projects and manage the payments. Only when no housing offer exists should the entities get involved in the design processes. The central office defines the construction norms, the social services, and the subsidy location by territory and family. (Jeri, Cannobio and Vásquez, 2020, pp. 4–5)

**As in its predecessor, the private sector becomes the principal of processes related to delivering housing, such as postulation of the families, land acquisition, architectural design, and participation.** In this way, the interested community or group needs to find an EP that will guide them through the whole process, having the community involved in the planning and design of the housing solution. The first stage is conducted without the assignation of the subsidy, where based on a selected plot, a project’s technical feasibility study needs to be executed and approved. Once this stage is accomplished, a *promise of sale* is signed, followed by the delivery of a preliminary project, which should be approved by the municipality before

postulation before the SERVIU. In this way, the project is selected but tied to the delivery of an approved construction project by the municipality, and the actual transaction for the plot. (Robertson & Partners, 2021, pp. 38–40) Once the subsidies are assigned and the project is constructed, there is an additional stage called *Apoyo a la Conformación del Nuevo Barrio* (Support for the Conformation of the New Neighborhood) which lasts at least nine months after the project's delivery, which aims to support the integration of the families into the new neighborhood.

**The eligible households must not be unipersonal homes whose added income belongs to the poorest quintile.** The families should have the minimum required amount for postulation in a savings account. Today, targeting is realized through the RSH - *Registro Social de Hogares* (Social Registry of Homes), an information system that combines self-reporting with administrative databases from different state entities. It is considered an advantage over the previous system, the Ficha de Protección Social, which was based on self-reporting and was more open to fraudulent behavior. (Salvi del Pero, 2016, p. 16) Participants should move into the subsidized dwelling and live in it for five years before they can dispose of it. (Salvi del Pero, 2016, p. 15)

**There are five subsidy modalities:**

- Acquisition of an existing dwelling, new or used by individual postulation.
- “Construcción en Nuevos Terrenos” – CNT: (New Land Construction): Construction of housing projects of up to 160 dwellings, with communal spaces and green areas; or Megaproyectos – MP (Megaprojects): done in stages summing up to 600 dwellings. Housing Committees, Non-Profit Organizations, Municipalities, and Corporations must postulate these projects.
- “Construcción de Pequeños Condominios” – CPC (Construction of Small Condominiums): Construction of small condominiums 2-9 dwellings
- “Construcción en Sitio Propio -CSP” (Construction on own-site), Construction of one or more houses in a plot belonging to the household (can be executed by self-construction).
- “Densificación Predial” – DP (Plot Densification): Construction of one or more houses in a plot with existing dwellings, divided into one or more additional plots (Can be executed by self-construction).

**Depending on the project type, the projects can have three stages:** First is technical, legal, and social assistance for the selected households. Second is the financing of the project through subsidies. And last, a technical review of the projects during and at the end of the process. The second stage has the highest budget participation, where 95% of the program

cost is addressed to subsidies, with the rest being destined for technical assistance, which can be private or provided by the SERVIU.(Jeri, Cannobio and Vásquez, 2020, p. 49)

**The total amount for the project construction consists of the household savings, the D.S. 49 main subsidy, and the supplementary subsidies.** The subsidy is measured in “Unidades de Fomento” – UF (Foment Units), a Chilean indexed currency linked to inflation, whose exchange is controlled by the Central Bank. For this study, one UF is equivalent to 42,33 dollars. These should be destined for acquiring a house which should not cost more than 950 UF (US\$ 40,213.5) in some remote regions where construction is more complex, or municipalities have higher land costs (Salvi del Pero, 2016, p. 16), the unit cost can be up to 1050 UF (US\$44.446,5). The previous savings required are 10-15 UF (404-607US\$) equivalent to around 100%-150% of a SMLVs in 2023. The main subsidy amount starts at 314 UF (US\$ 13.290,68), which can be increased depending on the type of dwelling and location. The rest of the subsidies are given to encourage an increase in the quality of housing and neighborhoods. These are:

- Location Subsidy for 120 or 200UF (US\$ 5,079.24- \$ 8,465.40),
- Height densification (buildings over three floors) for 110 UF (US\$ 4655,97),
- Disability household member subsidy 20 or 80 UF (US \$846,54 - \$3386,16),
- Additional area subsidy (dwellings over 37,5m<sup>2</sup>) for 50 UF (US\$ 2116,35),
- Prize for additional savings (over 10 UF at the postulation) until 30 UF (US\$ 1269,81).

**In the acquisition of used dwellings, properties should be sold below 1300-1400UF depending on the region. To encourage the offer of used housing, the sellers are granted a voucher.** It has a price of 50UF, meaning around 5% of the top dwelling value. It should be redeemed for housing acquisition up to 2.200 UF in the next 12 months, expecting that the household that sold the dwelling would upgrade to a better housing unit.

## **EVALUATION OF THE DS49**

**The program DS49 acknowledges the problem of the poorest population's lack of saving capacity and access to financial products.** The program addresses one of the biggest challenges of the enablement strategy, which is the lack of interest of the private market in serving the lower-income sectors. Constructors are not interested in the projects as they provide little returns on investment when compared to projects targeted at higher-income populations. In this way, the government creates a series of incentives to mobilize the potential demand, increasing the administrative and fiscal efforts to provide housing solutions for the population and places not attractive to the private market.

**The decentralized model, in which the budget is destined for the different territories, can effectively address the specific housing deficits.** This allows the focus of efforts on the regions with higher housing deprivation. At the same time, this geographical differentiation provides more flexible subsidy amounts for areas where construction costs or land are more expensive. The involvement of the communities is also an important trait of the project. The company of the EPs during the organization of the demand and the arrival to the new neighborhoods can be very important, not only in building community ties but also in overseeing of the approved designs. Nevertheless, the higher involvement of the communities is a process that also demands time. With all the steps for organizing the demand, getting approval for the project, and being granted a subsidy processes can take over five years (Robertson & Partners, 2021, p. 95). When this is added up with the lower assignment percentage of subsidies, communities have little certainty of the project’s future.

**The analysis conducted on the program between the years 2016 and 2019 shows a growing increase in the number of complementary subsidies.** It represented 17,2% of the budget in 2016 and became 61,9% of it in 2019. The incentives for the specific subsidy conditions may encourage housing providers to provide better-quality projects and locations. (Jeri, Cannobio and Vásquez, 2020, p. 40) The most used one is the location subsidy, which rewards “conditions of proximity to water utilities, main road, school, primary health center, and public transport.” (Salvi del Pero, 2016, p. 18) It was used in a total of 57,2% of the subsidized dwellings. When compared to construction projects CNT and MP, it's 83,7%. Nevertheless, it has just proved effective for most families to maintain the quality of their previous location instead of worsening it. (Jeri, Cannobio and Vásquez, 2020, pp. 34–35)

Typology	2016	2017	2018	2019	No info	Total
Collective	1980	9324	13645	11186	2497	38632
Individual	397	823	583	481	298	2582
Construction	2377	10147	14228	11667	2795	41214
Acquisition	1341	2535	3221	1530	2806	11433
Total	3718	12682	17449	13197	5601	52647

Table 9 Delivered Dwellings by Modality 2016-2019 (Jeri, Cannobio and Vásquez, 2020, p. 28)

**The matching between the postulant families and the assigned subsidies has an average of 6,6% of allocated subsidies each year.** It means that many of the families who applied are not chosen as subsidy beneficiaries since the amount of assigned subsidies is much lower than the proportion of requests. Nevertheless, it is low compared to the number of assigned subsidies in the previous program version, where between 2011 and 2013, 24% of subsidies were given. (Jeri, Cannobio and Vásquez, 2020, pp. 23–25) It means there could



be improvements, where lower subsidy amounts (or partial repayment) would allow to support more households.

**The program delivered 52.467 housing solutions between 2016 and 2019, 9,2% of the delivered dwellings by the MINVU in the same period.** (Jeri, Cannobio and Vásquez, 2020, p. 27) This means that an average of 11.761 families have received a home each year, accounting for 1,3% of the potential population of the quintile (Jeri, Cannobio and Vásquez, 2020, p. 27). Nevertheless, compared to the approximately 245.000 people living in housing deprivation between this quintile, it constitutes 4,8% of the most vulnerable population each year. Assuming this population will remain stable in the following years, it would take 21 years to address the most vulnerable people and 33% of the potential population today on the quintile.

	2016	2017	2018	2019
Subsidy Postulants	16204	60823	59900	50421
Selected Households	2555	5327	3030	3392
% of selected households	15,77%	8,76%	5,06%	6,73%

Table 10 Percentage of assigned subsidies over postulations (Jeri, Cannobio and Vásquez, 2020, p. 25)

**The combination of additional subsidies has proved an effective way to encourage the market to improve the quality of projects.** It has provided a more diverse production of social housing, where the project’s beneficiaries can have a higher control of the outcomes that meet their specific needs. Robertson & Partners (2021, p. 92) saw a greater diversity of areas and programs in the DS49 than on the DS19 for middle-income households, with areas ranging between 45-70 for the first, and 55-60 for the second. of projects of different. This can be seen in the increase in the assignment of the location subsidy, which has secured better locations for projects.

**The program manages to access the poorest population.** Nevertheless, it does so by heavily subsidizing the home-acquisition. Only around 1% of the total price of the project limit (950UF) constitutes savings (10-15UF), and no amount of money is expected to be recovered from the projects. The program's high cost reflects the little response concerning the number of applicants. This can be seen in Table 9, where less than 10% of applicants received a subsidy. An incremental amount of savings, depending on the household's income and vulnerability, could help provide better returns for the program. This way, maybe fewer postulants would apply each year, but more assigned subsidies could be possible, increasing the program coverage with the same fiscal effort. Nevertheless, it also raises the question of whether different tenancy forms other than home ownership could be more effective for addressing this deficit.

## CHAPTER VI: RECOMMENDATIONS FOR COLOMBIAN HOUSING POLICIES

**First, it was seen how Colombia had started closing the housing deficit gap by the enablement of the market.** Even so, it has been shown how the development of this market has been only done in the most attractive segments. Housing policies have focused on home-acquisition strategies, which have improved housing conditions in large urban centers, especially for middle-income families. Yet, rural areas, small municipalities, and the lower-income segments have not benefited significantly from these policies. The PVG was an exception during the period, where higher institutional efforts had to be made; as organizing the demand for the projects, but the targeting efforts paid off, and the program was extended to underserved municipalities and populations. Nevertheless, the high fiscal effort was not continued, and the lack of urban infrastructure was a problem not contemplated in the initial designs.

**This last chapter will focus on policy recommendations for improving access to housing.** First, it will present some general recommendations for improving the general policy environment, focusing on the definition of minimal housing, targeting, and finance. Second, it will propose a set of modifications for the existing subsidy programs Mi Casa Ya and FRECH rate subsidies. Last, it proposes two general programs for the low-income population, one based on the acquisition approach and the other one based on the upgrading approach. Each one of these programs will have a set of strategies to focus efforts on rural zones and small municipalities.

### REDEFINING ADEQUATE AND AFFORDABLE HOUSING

**As seen before, Colombia uses the SMLV, as a unit to calculate the values of social housing.** It is used to calculate the eligibility for subsidy assignment, the subsidy size, and the price caps for social housing units. The use of SMLV as a unit has the advantage that they maintain households' acquisitive power during time, as wages are adjusted every year according to inflation and economic growth. Chile also uses an indexed unit, the UF, which also maintains the acquisitive power of households updated and relates subsidy amounts to these units.

**In Colombia, Social Housing has been defined by a cap price.** As mentioned in Chapter IV, the construction of VIP housing and VIS housing are encouraged through tax exemptions to support supply. Despite the existence of manuals for correct material assembly, tubes, and electrical systems, there are no minimum requirements for areas and number of spaces. For

this reason, as most construction companies are free to balance costs and quality, most social units tend to be small and constructed on badly served land in peripheral locations, where land prices are cheaper. In this way, cap prices have created a homogenous dwelling production, that does not recognize the needs and compositions of different households.

**The problem is not resolved only by establishing minimum household areas and dimensions.** On the one hand, if the same cap prices are maintained, the increase in minimum area requirements could increase the average costs of social housing, making construction companies compensate for the cost with cheaper and worse-served land. On the other hand, by having more extensive areas with increased cap prices, the final price of the dwelling unit would increase making housing less affordable. Nevertheless, the lack of minimal quality standards associated with housing can also create problems in targeting. For example, in the city of Bogota, minimum dwellings (15-20m<sup>2</sup>) have been conceived as luxury apartments for students and bachelors, who in their early years with lower income, are also eligible for subsidies (Caracol Radio, 2021). For this reason, for the new POT - Plan de Ordenamiento Territorial (Land Use Plan) the city decided to establish a minimum area for social housing of 42m<sup>2</sup>. While the solution helps to discourage the target of subsidies in wealthier populations, it also can restrict product flexibility such as the use of incremental housing solutions to increase housing accessibility by lowering prices with lower initial investments.

**The solution proposed by DS49 seems to be able to tackle both problems.** By encouraging and 'rewarding' some planning desired behaviors with additional subsidies- such as well-served locations, densification projects that decrease urban sprawl, and additional areas for the dwellings- they are providing the private market with more flexibility to address the diverse population's needs. These will allow more differentiated products from the constructors, and the people with more diversity of products where to choose from. A location subsidy should be included in the offer of additional subsidies, since providing more adequate land not only improves the living conditions of the new dwellers, but also compensates for the costs of building schools, hospitals, and other social infrastructure for the new peripheral locations.

## **IMPROVEMENTS IN TARGETING METHODS**

**There is one big difference between Chile and Colombia and that is the method to identify the targeted population.** Colombia has recently used two different methods: for the PVG, the government organized the demand, identifying households' victims of the armed conflict, families in extreme poverty, and victims of natural hazards. Based on these numbers, a correspondent number of subsidies was assigned for each of the 32 territories. In this way,

official documentation from databases was used to assign possible subsidy beneficiaries. Later, once households were postulated, and the Ministry of Social Prosperity made sure they did not own a house; dwellings were assigned according to vulnerability level, with the most vulnerable households being prioritized in dwelling assignation. When there were not enough houses for the vulnerability level, a poll would be made between the beneficiaries with the same vulnerability. In this way, targeting was a thorough process to be able to reach the desired population. In contrast, the 'Mi Casa Ya' subsidy is related to a hypothecary loan or leasing granted by a bank. The application for the subsidy is done in parallel with the application for the bank's loan. If the person is granted the loan, the bank sends all the necessary documentation to the Housing Ministry, which assigns the subsidies according to the arrival order. In this way, subsidies are not granted to beneficiaries who will not be able to use them, a problem that was very common during the 2000s.

**In Chile, the method for choosing the poorest households is the RSH, an information system that combines self-reporting with administrative databases from different state entities.** By having a universal information system, it is more precise at choosing the desired households and income deciles for which Chile targets with its programs. Also, having a unique database saves fiscal costs by having different information systems run and updated by different entities.

**It is needed to have two different target systems for the working of the different programs.** One addressed housing poverty for which additional governmental efforts are needed; and one for market-making, for the population which the private market is willing to finance. The target system for the *Mi Casa Ya* program works well with the enablement strategy. The delegation on the role of banks to postulate the candidate and work as a first filter to approve households for subsidies has been effective. Later, the government checks and confirms the household's eligibility. It has become a fair and transparent way to direct subsidies for middle-income families who count on access to the financial system. The subsidies are granted according to application number and are secured to be addressed for households who are secured to use it since they have a hypothecary loan approved. Nevertheless, as subsidies have caused a fulfillment of the offer in the most attractive markets, the larger municipalities, it has left the smaller municipalities underserved. In this way, the government should have a subsidy system focusing on the smaller municipalities to secure a higher target population and make them more attractive to the private market. On the *Mi Casa Ya* targeting system, there seems to be a risk that banks will try to bias subsidy elections to benefit the better-off households among the targeted population. Nevertheless, even if the process was done after subsidies were assigned, the bank would still hold the power to assign or not subsidies to the population. In this way, by not only providing targets for the overall

program, but specific subsidies should also be assigned to the lower income groups of the population, that can still access housing through the Mi Casa Ya program.

**On the other hand, as financial markets do not cover most of the population, a different targeting system for the lower deciles of the population is necessary.** In Colombia, there was a previous information system called SISBEN, which was the database responsible for addressing the different vulnerability degrees. The process realized for the PVG, would have been more effective by being related to a unique universal system as was SISBEN, there is no sense in having a different set of tools that addressed vulnerability, as it increases administrative costs and makes the different tools easier to be related to fraud. Nevertheless, the country has worked for improvements in the RSH tool very similar to the one used in Chile. This information should not only show income and vulnerabilities but in case it starts registering housing deficits in the selected households, information on public service provision, and the design of housing strategies could be much more efficient. This targeting system should focus on addressing the population underserved by the market. In this way, it should propose specific projects for municipalities and areas that have higher quantitative and qualitative deficits and where the government should make higher efforts to organize the demand for the private market to supply.

## **ENHANCE FINANCIAL ACCESS**

**As seen in Chapter IV, the finance market has experienced a steady increase in volume and competition.** In this way, the loan times have increased, and the interest rates have diminished. Also, hypothecary loans have experienced an increase in number, from 108.000 operations in 2008 to 179.000 operations in 2018 (Asobancaria, 2020, p. 101) Nevertheless, despite the increase in access to financial markets, still a big segment of the population cannot access housing finance. As mentioned in Chapter II, this happens mainly because of two reasons, on the one hand, the high informality rates among the lower-income population don't provide enough security for the financial sector to loan to this sector. On the other hand, as the low-income population is related to low-value loans that involve high risk, most banking institutions prefer to compete with middle- and high-income populations. To improve formal access to finance for the lower-income population the wide implementation of microfinance is the natural continuity. For this, an agenda to promote new institutions into the market, and recognize the difficulties for access is essential.

**Informality seems to be the main problem for access to the financial system.** Between the first three deciles, informality reaches up to 96% of the population, and even in the highest income deciles, informality constitutes 8% of the households' income. (Asobancaria, 2020, p.

101) First, there should be improvements in the targeting tools to have more complete information on people's incomes. As mentioned in the previous subsection, the use of the new tool RSH will provide a universal system that will allow better targeting of subsidies. By making this information available to loan institutions as well, they could be more willing to lend to part of the informal population.

**Second, to expand the market, the participation of public development banks like Findeter and Bancoldex could extend development loans for microfinance institutions that want to invest in their housing portfolio, as well as the participation of public banks such as Banco Agrario, with microcredit products addressed for this segment of the population** (The World Bank, 2021, p. 143). Third, the use of guarantees can be a mechanism for improving access even to informal households. This is a mechanism already functioning for the hypothecary loans of the Mi Casa Ya subsidies, where since the year 2020, through the *Fondo Nacional de Garantías (National Guarantee Fund)*, the hypothecary loans are partially covered by the institution enabling wider access for the Mi Casa Ya program. Nevertheless, in the little-developed microfinance sector, the guarantees could increase the desire of private investors and banks to participate in this unattended market segment. Fourth, through subsidies for the downpayment for retrofitting interventions, families would have more flexible payment amounts, providing a wider base both to access home upgrading and a larger client base for microcredit lending institutions.

**Today, because of the lack of development of microfinance, retrofitting interventions are completely subsidized by the government.** As the development of the housing microfinance portfolio would take some time, there should be a progressive approach to the upgrading program. This will be further explained in the improvements for the upgrading program in the following subsections. But it's important to highlight that, even in the case of Chile, a wealthier country with a more developed financial system, housing finance is not accessible for the poorest deciles of the population. Therefore, the DS 49 program was designed without incorporating financial resources and depends on heavily subsidizing households which are bringing a small amount as investment.

**IMPROVEMENTS IN MI CASA YA AND FRECH SUBSIDIES**

Income decile	Monthly Income in Pesos	Number of Minimal Wages	Mi Casa Ya Subsidy Eligibility	Amount in SMLVs	Proposed Mi Casa Ya Subsidy Eligibility	Proposed Amount in SMLVs
D10	\$6.620.500	8,47	> 4	0	> 4	0
D9	\$3.036.660	3,89	2 - 4	20	3-4	10
D8	\$2.214.747	2,83			2-3	20
D7	\$1.760.308	2,25			1,5-2	30
D6	\$1.399.635	1,79			1-1,5	40
D5	\$1.124.092	1,44	< 1	30	<1	40
D4	\$935.510	1,20				
D3	\$751.786	0,96				
D2	\$509.564	0,65				
D1	\$197.826	0,25				

Table 11 Proposed Mi Casa Ya downpayment subsidy.

**As already shown in the accessibility exercise, even with the Mi Casa Ya subsidies, only the households between the first four deciles can comfortably access housing.** Despite some efforts to increase the subsidy amount, such as the convergence of subsidies granted by the family funds, these are only accessible for a very narrow percentage of the population, mostly in the higher deciles where formal employment is more common. There can be some improvements in the Mi Casa Ya program to better address and distribute the subsidies while maintaining the improvements in housing production. For example, a more fragmented subsidy scale as shown in Table 11 could maintain the same fiscal efforts but provide an increased subsidy for lower deciles by reducing the subsidized amount for the higher ones. In this way, decile 9 would experiment with a reduction in the subsidized amount, which would be increased for deciles 5 and 4. In this way, the subsidies would be targeted toward the middle-income population. Nevertheless, these changes could have resistance from the construction sector, which prefers to provide offers to better-off households, since they provide higher revenues.

**For the lower-income population on the bottom three deciles, to whom housing is not affordable and financial products are not accessible, there needs to be a combination of an upgrading approach and an acquisition one to tackle both housing deficits.** It is recommended the incorporation of specific targeting of programs that do not require private bank finance, which are not willing to lend to this population. The previous experience of the country with the PVG provided valuable lessons in how the country could coordinate the demand and step in where the private market has not been able to provide.

## RECOMMENDATIONS FOR HOME ACQUISITION PROGRAMS FOR LOW-INCOME POPULATION

### **The low-income households cannot access housing, even with the help of subsidies.**

Today, the flagship program for housing acquisition in Colombia, Mi Casa Ya, although allows households between the lower deciles of the population to be eligible, cannot benefit from the program as they cannot secure the financial access necessary to complement the government side subsidy. Therefore, self-help housing was and still is how the poorest population has found a housing solution. The current government program, *Semillero de Propietarios*, although meant well to turn a rental subsidy into a way to raise a downpayment for housing acquisition has not been successful because of the little rental units approved by the government to benefit from the program. An exception to this was during the working of the PVG, as it acknowledged the lack of savings capacity by completely subsidizing a minimal house. Still, the fiscal efforts were considerable, there was no return from the projects and the efforts were not continued. For this reason, the proposed solution is to have a system of subsidies for the lower incomes that acknowledges the lack of financial access, but that can also be sustained over time.

**Even Chile, a wealthier country with a more developed financial system recognizes the same difficulties through the design of the DS 49 program.** It tries to address the two poorest quintiles of the population and does so by not incorporating access to finance into the application process. In this way, both programs are designed to reach the population underserved by the market. Chile's DS 49 has an important lesson to its Colombian counterpart and is that it allows many different modalities for construction. As already mentioned, in the program's description, between the modalities supported by Chile, there are the construction of smaller projects, such as the Construction of Small Condominiums, the Construction on own-site, and Plot Densification. The last two of these programs allow self-construction schemes. In this way, the program recognizes and enables not only the private construction market, that might not be interested in serving this population but recognizes the reality of self-aided help and informal labor. In this way, binding subsidies help with technical assistance courses and correct overseeing of the construction process by the Housing Ministry or delegated entities, such as in the case of the DS49, the subsidies can help improve access to quality housing, especially important related to a country with high seismic activity. Also, an important feature of self-construction is the saving in the labor costs of the construction. According to data, the labor on the construction of social housing units corresponds to 36,2% of the cost of the construction. If this labor is to be provided by the beneficiaries, the subsidies can have a greater impact. In this way, a big lesson from Chile is to include the reality of progressive construction and self-construction in the housing policy system.



**Progressive housing appears as a natural solution that can make use of the country's self-construction reality and provide a home below the prices of a social housing unit in the country.** In this way, the idea is to decrease the prices from a VIP house of 90 SMLVs to a subsidy closer to the subsidy assignment of a *Mi Casa Ya* program of 30 SMLVs. With the value being of a third, the need for an increase in the subsidy for the most vulnerable group seems necessary, which could locate a subsidy in the range of 50-60 SMLVs. A critical choice for this scheme is the choice of a minimal unit. In this case, the use of a minimal house equipped with a kitchen, a bathroom, and one starting room. This choice is given to provide a solution for the household so they can immediately move in, to diminish the burden cost of housing. As seen in Table 6, despite the expectancy of lower-income households to destine a lower portion of their income into housing to care for basic needs, this has not remained a fact in Colombia. The low availability of housing has caused the poorest population to have an increasing part of their income used as rent to afford housing. The lowest decile had as much as 50% of their income destined for rent, with the provision of housing, households could destine part of the income they used to destine for rent, as savings for future home improvements.

**In this way, the diminished costs associated with the tenancy type can help improve saving capacity, so that this money can be of use for further development of the unit.** Another advantage of this dwelling is that in case the households decide in the future to access microfinance to improve their houses, the dwelling can be used as collateral and guarantee in the housing acquisition. This fact can help improve housing conditions in an even smaller time for their residents. Nevertheless, the main risk related to this scheme is the public acceptance of this housing type. The choice of a minimal housing unit is also related to handling public expectation, where minimal housing can provide small spaces, yet maintain a standard and appearance of quality and healthiness. Another important topic could be the provision of badly served land, which lacks social services and infrastructure, as happened during the first stage of the free housing program.

**These programs should be prioritized by the national governments to the underserved parts of the country by the private market.** In this way, such as the subsidy location of Chile, and like the previous experience of the PVG, the Housing Ministry should define the number of beneficiaries in the different municipalities, according to the biggest deficits. In this way, not only the deficits would be improved where more needed, but the new housing offer in small municipalities could help reduce the average price of rental housing. Also as shown by Chile, the incorporation of different caps according to construction and land prices in the regions could improve the average quality of the projects. Nevertheless, in larger municipalities already served by the market, the larger and wealthier administrations could play a more active role in

the planning and overseeing of the projects and provide a climate where the private market could provide this type of housing. Probably in larger cities with usually larger land prices, and progressive housing schemes. In these cases, the Chilean example of incremental subsidies according to provision should be investigated, such as creating densification projects that contemplate multistory options.

**Despite not being a main strategy, the flexibility of Chile's housing policies has allowed for the introduction of progressive housing in the projects.** The most famous example is the Elemental project of Quinta Monroy, designed by the architect Alejandro Aravena. The project was constructed in 2003 before the DS49 project was incorporated. Still, its lessons remain valuable. In the project, to maintain residents in a well-provided area of the city, the design team opted for incremental housing units in height, in this way, they would secure the possibility of having decent accommodation in the present, a large house in the future, while always being located in well-served areas of the city, close to jobs and social services (Quinta Monroy / ELEMENTAL, 2007).

**A special strategy for rural households should also be addressed.** For these projects, as they remain far apart, the economies of scale are of little use. In this way, different strategies for improving conditions should be tackled. One important lesson from Chile was the acknowledgment of different scales of projects. Even small projects for self-construction in self-owned plots are contemplated between the modalities, and that should also be the case that Colombia follows. Another important lesson that Colombia could incorporate to make the process more standardized and therefore simple could be the use of prefabricated homes. In this way, the technical assistance and supervision of the projects could be much simpler, as could the acquisition and approval of licenses for the projects. Even further, it could develop a market on its own for prefabricated housing, which could improve quality and lower prices by competition.

## **RECOMMENDATIONS FOR HOME UPGRADING PROGRAMS FOR LOW-INCOME POPULATION**

**The strategy for the design of the upgrading program *Casa Vida Vida Digna*, seems to have correctly prioritized the stages of home retrofitting interventions.** The program proposes first to secure tenure and legalize existing neighborhoods; later address public service provision and last to improve households' conditions. Nevertheless, there is one problem with the program creation which is the participation of three different ministries in the subsidy assignment. It would be recommended to delegate the role played by the *Agriculture Ministry* and the *Ministry of Social Prosperity* to the *Housing Ministry*. In this way, a larger and

more integrated strategy can be designed, requiring less coordination between the ministries. According to the strategy, the *Housing Ministry* should focus first on the security of tenure and the provision of public services.

**To improve the program's efficacy and impact, the program should prioritize the interventions not on households, but on specific neighborhoods and municipalities where the lack of public services is a priority.** In this way, economies of scale can be of help, optimizing the officials work and material acquisition. This would allow the government officials or contractors to do integral projects for the legalization, design and further upgrading of existing households. As already shown before, most of the qualitative deficits focus today on municipalities with less than 100.000 people, which are usually the ones with fewer resources, therefore efforts by the national government should prioritize them over the larger municipalities, with which higher participation on the legalization and provision of public services could be expected.

**As the deficits remain high, the first efforts done by the government must focus on providing access to public services.** In this way, the government works on what the citizens cannot easily achieve, but in relationship to home improvements, citizens could play a higher role than what the program contemplates. As suggested by Ferguson and Smets (2010) the advantages of microcredit not only should stay in the financing options, but should use the whole potential of delivering entire value chains. In this way, the government through both incremental housing and the upgrading programs has the potential to enable this market. As mentioned, core houses would be the optimal housing solution provided for low-income population. Nevertheless, the upgrading of these houses should be taken care of by them. The logic in the upgrading should be the same. Where the government should support, the most basic home interventions that are given to subsidiary households through home acquisition. In this way, the government could provide subsidies and cover a part of the most urgent home interventions on the existing housing stock. Such as sanitary services as seismic-resistance walls and cover.

**The rest of the expansion should be taken care of by households themselves.** Still, the government can provide plenty by enabling the expansion to microcredit lending, as explained before. In this way, improvements could be subsidized up to an amount, while completed with access to a microloan and savings. The efforts should expand, and involve other major stakeholders, such as construction material providers, real estate companies; which by working together could offer more complex and competitive products for the potential upgrading market. It would be important that these improvements and subsidies were tied to technical capacitation and inspection from housing Ministry officials or delegated contractors.

Again, the focus on efforts in specific municipalities or neighborhoods would greatly increase the efficiency of these operations.

**The addressing of rural deficits is harder, as houses remain farther apart, and is harder to benefit from economies of scale.** Nevertheless, these are the households that are facing the heavier deficits. A feasible solution would be to try to standardize interventions as much as possible for rural households. For example, instead of the need for piped water supply, and sewerage system, efforts should be made to find the most standardized and optimal ways for individual water purification systems and the use of septic tanks. Also, as already mentioned in the previous chapter, the use of prefabricated spaces, such as bathrooms and kitchens could help improve the program's efficiency, quality, construction times, and inspection.

## **CONCLUSION**

**Colombia's housing deficit has started to decrease during the last 30 years of enablement.** The subsidy to the demand scheme, which has become the main instrument to close the gap between the demand and supply, has allowed this. The recent success of the strategy has been in the increasing differentiation (segmentation) and integration (alignment) of targeting approaches, which has enabled a progressive allocation of subsidies across income groups. Nevertheless, they have proved to not cover all aspects of the housing deficit as the informal and low-income population has remained underserved. Furthermore, the economies of scale favored in large urban centers have led them to become the private sector focus, with a lack of supply for smaller cities and rural areas.

**In conclusion, the recommendations provided aim to create a more inclusive, flexible, and efficient housing policy in Colombia.** By redefining the concept of adequate and affordable housing, improving targeting methods, enhancing financial access, and refining existing subsidy programs, the government can create a sustainable framework that addresses the diverse needs of its population. The programs must experience a continuity over time, where the constant funding, monitoring, and improvement of the programs can help overcome today's challenges. Another topic that was not addressed in the thesis, but could have important repercussions in housing policy, is the integration of rental programs in the overall country's strategy, alternatives, or improvements for the *Semillero de Propietarios* remain to be seen.

**Gustavo Petro's government is the first left government to reach the presidency in the country's history.** It remains interesting to see how the new government will address the housing challenges and manage relationships with the construction sector. Some changes have been proposed, such as the targeting of Mi Casa Ya subsidies through the SISBEN and

the replacement of CDVD with *Cambia Mi Casa*, which by further decentralizing operations, tries to involve the community organizations in the program scheme (Ministerio de Vivienda, 2023). It is still soon to evaluate these new programs, but there is still much to be done.

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- The World Bank (2021) *Striking a Balance: Toward a Comprehensive Housing Policy for a Post-COVID Colombia*. Washington, DC: The World Bank. p.74
- Figure 25      Evolution of Total Housing Deficits by type
- Own graphic based on: Centro de Estudios de Ciudad y Territorio (2023a) 'Déficit Habitacional Cualitativo Casen 1996-2022'. Available at:  
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Figure 26 Evolution of Total Housing Deficits by type

Own graphic based on: Centro de Estudios de Ciudad y Territorio (2023a) 'Déficit Habitacional Cualitativo Casen 1996-2022'. Available at: [https://centrodeestudios.minvu.gob.cl/resultados/?\\_sft\\_categoria\\_repositorio=demanda-y-deficit-habitacional](https://centrodeestudios.minvu.gob.cl/resultados/?_sft_categoria_repositorio=demanda-y-deficit-habitacional) (Accessed: 15 January 2023).

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Figure 27 Evolution of Quantitative Deficit by Quintile

Own graphic based on: Centro de Estudios de Ciudad y Territorio (2023b) 'Déficit Habitacional Cuantitativo Casen 1996-2022'. Available at: [https://centrodeestudios.minvu.gob.cl/resultados/?\\_sft\\_categoria\\_repositorio=demanda-y-deficit-habitacional](https://centrodeestudios.minvu.gob.cl/resultados/?_sft_categoria_repositorio=demanda-y-deficit-habitacional) (Accessed: 15 January 2023).