



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



HOUSING POLICIES TO INCREASE RESILIENCE TO DISASTER AND CLIMATE RELATED EVENTS IN COLOMBIA

CARLOS ARIEL CORTES MATEUS, LUIS MIGUEL TRIVEÑO CHAN JAN

Bogota, D.C. Colombia . Washington D.C, USA

Carlosc7@hotmail.com, ltriveno@worldbank.org

**Paper prepared for presentation at the
“2018 WORLD BANK CONFERENCE ON LAND AND POVERTY”
The World Bank - Washington DC, March 19-23, 2018**

Copyright 2018 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



1. Abstract

The loss of human life and the high economic damages and losses generated by natural disasters, force governments to think of integral strategies that increase the resilience of the housing stock through the retrofitting of existing housing, the promotion of voluntary resettlement for households living in areas where risk cannot be mitigated, and the creation of incentives for the planned expansion of the supply of new formal housing in well located and safe areas.

Colombia has actively engaged in the implementation of programs to increase the resilience of homes and neighborhoods through the use of instruments of territorial planning, disaster risk management, regularization, slum upgrading, structural housing retrofitting, resettlement of homes and the construction of new housing. This paper shows Colombia's use of all these tools and presents lessons learned that could be applied in other developing countries.

2. Key Words:

Disaster Risk Management

Housing Policies

Housing Retrofit

Resettlement

Urban Resilience



3. INTRODUCTION

This document analyzes the role Colombia's housing policy played in increasing the resilience to disasters and climate-related events.

The first part of the document shows the global context of Latin America and the Caribbean and Colombia in relation to the economic impacts and life losses due to the occurrence of natural disasters. It is estimated that the cost of reconstruction is more than four times the cost of prevention through risk reduction strategies such as the structural improvement of existing homes or the resettlement of homes located in areas where risk cannot be mitigated.

In Colombia, for example, from 1998 to 2016, about 1.7 million homes were affected by events of natural origin, which required an investment of more than 5,600 million dollars to recover only the homes. This date represents about 13 times what is invested per year by Fonvivienda¹ in the allocation of subsidies in urban land. In the same period of time, 9,325 people died due to the emergencies presented, 24,500 were injured and about 1,800 they were reported as missing.

In the second part, presents the normative and institutional framework of Colombia for Disaster Risk Management in the Country and the guidelines for the incorporation of Risk Management in the Territorial Ordering Plans are reviewed. Currently, 90% of the Territorial Ordering Plans (POT) of Colombia are under review. This is an opportunity for municipalities to incorporate risk management into their plans and to define precise guidelines for the resilience of cities and neighborhoods.

Subsequently shows the general guidelines for population resettlement in Colombia and emphasizes the Bogotá experience. Is very important encourage more voluntary resettlement of households living in hazard areas where risk cannot be mitigated.

This is followed by a brief explanation of Colombia's housing policy, indicating the Programs focused on reducing the quantitative and qualitative housing deficit, including experiences in housing structural improvement, property regularization and slum upgrading. This chapter includes complementary information from Colombia is presented related to its population, housing deficit, housing stock, settlements

¹ The National Housing Fund is the Government Entity that is responsible for assigning housing subsidies to the Colombian population (Decree 555 of 2003)



of informal origin, slum upgrading, among other aspects. Between 2003 and 2016, housing policies in Colombia have already resettled 33,800 from low-quality housing in high risk areas to safer homes in safe areas.

Subsequently an analysis of the incorporation of risk in the housing policy is shown. Are analyzed of the elements that a housing policy should have in order to contribute to the reduction of human, economic and social losses due to the effects of the natural disasters. Finally, some conclusions and recommendations for optimizing Colombia's housing policy are shown, in order to increase resilience to disasters.

We hope that this document can serve as a reference for other countries that share similar situations in terms of threats, risks, vulnerabilities of buildings of informal origin, built from mass displacement processes or simply in the absence of sufficient affordable housing.

4. CONTEXT

The rapid urbanization that occurs worldwide, where it is estimated that close to three million people move to the cities weekly, added to the threat, vulnerability and risk conditions, as well as the high rates of housing deficit in our countries, force governments to think about the implementation of strategies and the adoption of public policies that allow them to provide new safe houses and bring existing homes out to minimal standards, seeking, among other things, the minimization of human losses and, of course, the reduction of recovery costs in the face of the occurrence of natural disasters.

According to the World Bank², natural disasters affect in a greater percentage, people in poverty and those most vulnerable. It is estimated that a percentage higher than 70% of the areas most exposed to disasters are found in low-income countries, and that the world's poor - a third of whom live in areas where multiple hazards exist - are the most vulnerable. The study also states that, for developing countries the economic impact of disasters can become critical.

According to the Emergency Events Database (EM-DAT) compiled by the Center for Research on the Epidemiology of Disasters (CRED) of the Catholic University of Louvain in Brussels, Belgium, worldwide,

² Natural Hazards, Unnatural Disasters-2012



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



between 1972 and 2010 10,051 disasters occurred of which 1,690 occurred in Latin America and the Caribbean. Of these, 1,192 were of climatic origin, 347 of geological origin and 114 of biological origin.

On the other hand, according to information from the Economic Commission for Latin America and the Caribbean (ECLAC),³ for 28 Countries of the Region, where the economic and social impact estimates of 88 disasters have been analyzed in the 1972-2010 period, it has been estimated that the total cost of the damages was approximately 213 billion dollars, causing around 309,742 deaths and affecting about 30 million people. A high concentration of these disasters occurred in Central America.

In the aforementioned report and from the sectoral point of view, ECLAC estimates that the damages were distributed as follows:

- i) In the social sector, where housing and human settlements are included, 49.5% of the damages occurred,
- ii) In the productive sector 34.1%, and
- iii) In the infrastructure sector, 16.4%.⁴

According to ECLAC, the concentration of damages according to the origin of the disaster is shown in the following table, where those that are related to a geophysical origin affected the social sector by 74%. See Table No 1.

	Sectors		
Origin of the Disaster	Productive	Infrastructure	Social
Disasters of geophysical origin	20%	7%	74%
Disasters of climatic origin	52%	28%	20%

Table No 1. Source: ECLAC. The estimation of the effects of disasters in Latin America 1972-2010

³ Publication: Estimation of the effects of disasters in Latin America 1972-2010. Economic Commission for Latin America and the Caribbean

⁴ The social sector includes: a) education; b) health; c) housing and human settlements. The Productive: a) agricultural and forestry; b) industry; c) trade and services. The Infrastructure sector includes: a) water and sanitation; b) transportation and communications; c) energy.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Colombia shares this problematic. The Country is located in one of the most seismically active areas of the earth, forming part of the Pacific Ring of Fire, with a very strong incidence of the Nazca Plate, the South American Plate and the Caribbean Plate, which generates a very important tectonic emplacement on its territory.



Map No 1. Tectonic Plates

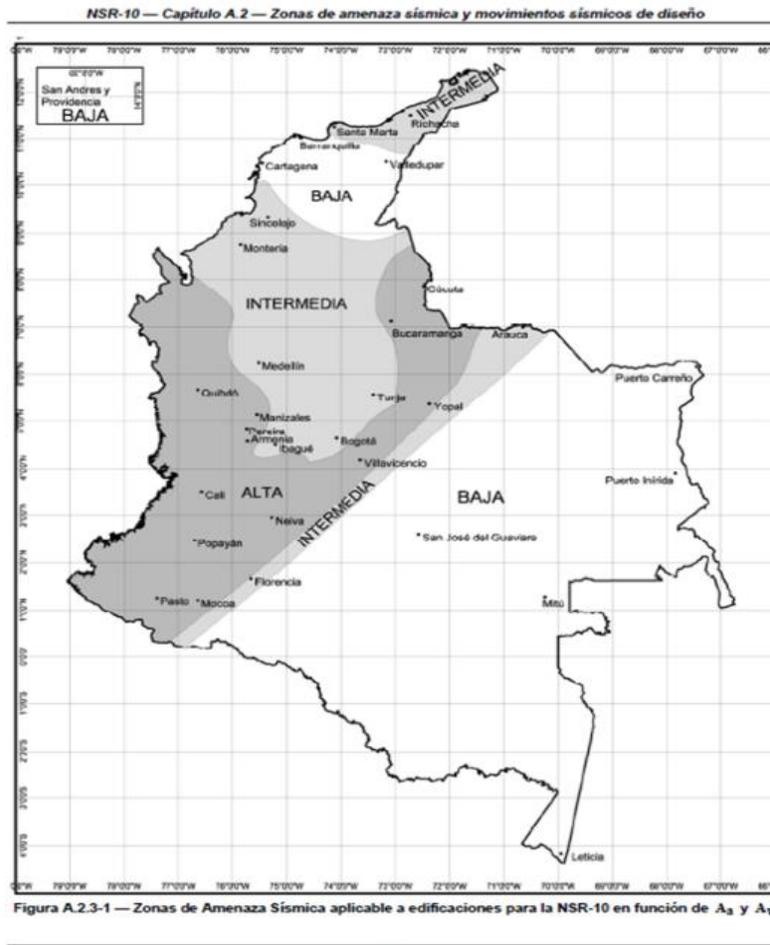
Additionally, Colombia has a system of seismically active geological faults that is quite important, which, added to the above, generates greater vulnerability for population. In Colombia, in accordance with figures from the Advisory Commission for the Mechanism of Earthquake Resistant Construction⁵, 87% of the population lives in areas of high and intermediate seismic hazard.

⁵ Consultative Body of the Government of Colombia, created with Law 400 of 1997



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Map No 2. Seismic Hazard Areas Colombia. Source: Regulation NSR-10.

Likewise, and in accordance with information from the National Unit for Disaster Risk Management UNGRD (for its acronym in Spanish)⁶, in Colombia, 28% of the population lives in areas susceptible to flooding and 31% of the population in susceptible areas of landslide.

Just by analyzing the emergency information from the Risk Management Unit of Colombia, on events that took place between 1998 and 2016, it is possible to see the impact of hazards over the housing stock: in this period a total of 1,681,886 homes were affected, as shown in the following table.

⁶ Unit that directs, guides and coordinates Disaster Risk Management in Colombia



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Year	Affected Housing by Type of Event												TOTAL Affected Housing
	Earthquake			Landslides			Floods			Others			
	Destroyed Homes	Damaged Homes	Affected Housing	Destroyed Homes	Damaged Homes	Affected Housing	Destroyed Homes	Damaged Homes	Affected Housing	Destroyed Homes	Damaged Homes	Affected Housing	
1998			-	216	262	478	1.077	5.960	7.037	657	2.858	3.515	11.030
1999	17.566	61.927	79.493	732	2.600	3.332	3.176	19.775	22.951	1.551	3.849	5.400	111.176
2000	-	97	97	451	1.307	1.758	1.368	6.429	7.797	662	3.053	3.715	13.367
2001	-	-	-	110	243	353	161	3.119	3.280	1.297	11.141	12.438	16.071
2002	-	-	-	304	680	984	638	2.898	3.536	319	6.600	6.919	11.439
2003	-	-	-	240	511	751	636	8.286	8.922	1.240	8.015	9.255	18.928
2004	367	2.421	2.788	138	602	740	1.040	32.154	33.194	661	13.891	14.552	51.274
2005	-	227	227	957	2.186	3.143	10.869	32.800	43.669	898	15.262	16.160	63.199
2006	-	-	-	830	4.125	4.955	1.823	29.752	31.575	672	20.174	20.846	57.376
2007	395	1.815	2.210	425	2.702	3.127	1.634	25.784	27.418	1.296	9.016	10.312	43.067
2008	1.251	2.477	3.728	1.334	7.287	8.621	3.726	120.901	124.627	847	11.866	12.713	149.689
2009	-	27	27	505	4.213	4.718	2.039	40.223	42.262	603	16.262	16.865	63.872
2010	-	33	33	4.997	45.162	50.159	6.278	314.830	321.108	1.022	18.037	19.059	390.359
2011	-	3	3	3.871	32.588	36.459	3.468	272.939	276.407	677	13.966	14.643	327.512
2012	22	1.282	1.304	636	9.381	10.017	1.034	57.694	58.728	1.215	52.934	54.149	124.198
2013	589	5.599	6.188	222	1.796	2.018	1.056	34.351	35.407	1.118	31.237	32.355	75.968
2014	1	745	746	105	929	1.034	730	31.904	32.634	1.496	30.419	31.915	66.329
2015	699	3.790	4.489	198	619	817	559	18.653	19.212	1.203	23.926	25.129	49.647
2016	4	724	728	76	388	464	334	21.368	21.702	568	13.923	14.491	37.385
TOTAL	20.894	81.167	102.061	16.347	117.581	133.928	41.646	1.079.820	1.121.466	18.002	306.429	324.431	1.681.886

Table No 2. Affected Housing by Type of Event (1998 to 2016). Source: UNGRD. Own elaboration.

The highest percentage of affected homes were related to emergencies caused by floods, as shown below.

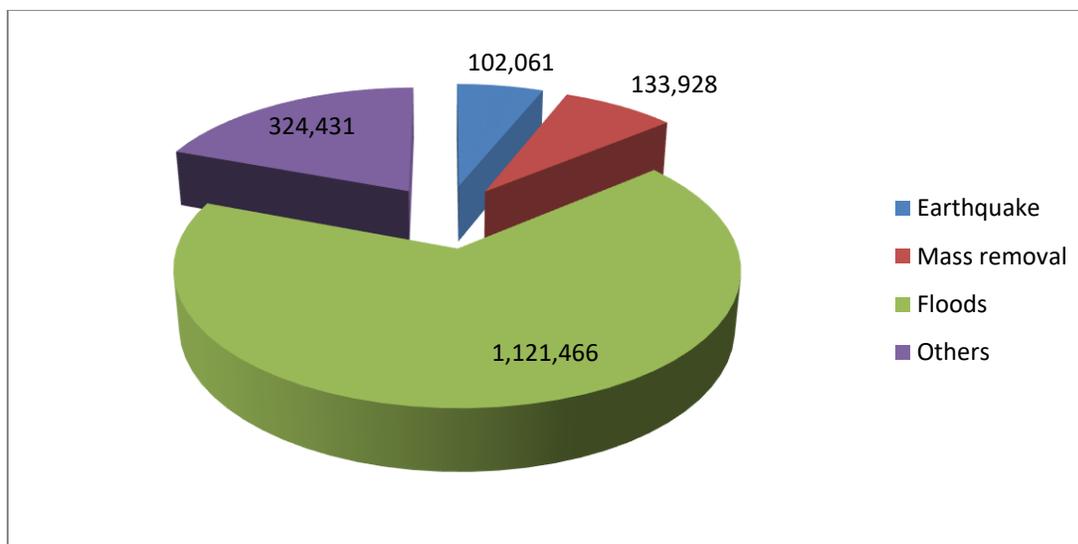


Figure No 1. Affected Housing by Type of Event. Source: UNGRD. Own elaboration

In relation to the people affected with these emergencies, between 1998 and 2016 around 9,325 people died due to the emergencies presented, 24.500 were injured and about 1.800 they were reported as missing.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



	Earthquake	Landslides	Floods	Others	Total
Dead people	1.919	1.584	589	5.233	9.325
Injured	8.659	1.669	1.192	12.905	24.425
Missing	731	182	233	580	1.726

Table No 3. People affected with emergencies, (1998 to 2016). Source: UNGRD. Own elaboration.

If the analysis is performed on the estimated costs for the replacement of destroyed houses and the repair of damaged houses, it is estimated that the cost incurred to bring back the affected stock to its previous conditions (destroyed + damaged), would be US\$ 5,609 Million Dollars, as shown in the following table. The above represents about 13 times what is invested per year by Fonvivienda in the allocation of subsidies in urban land or five times the cost of the Free Housing Program.

Año	Damage to Housing				TOTAL	TOTAL
	Destroyed Homes	Estimated Cost of Destroyed Housing Replacement (in USD)	Damaged Homes	Estimated Cost of Repair of Damaged Homes (In USD)	Affected Housing	Estimated Cost of Attention to Affected Housing (In USD)
1998	1.950	\$ 33.150.000	9.080	\$ 22.700.000	11.030	\$ 55.850.000
1999	23.025	\$ 391.425.000	88.151	\$ 220.377.500	111.176	\$ 611.802.500
2000	2.481	\$ 42.177.000	10.886	\$ 27.215.000	13.367	\$ 69.392.000
2001	1.568	\$ 26.656.000	14.503	\$ 36.257.500	16.071	\$ 62.913.500
2002	1.261	\$ 21.437.000	10.178	\$ 25.445.000	11.439	\$ 46.882.000
2003	2.116	\$ 35.972.000	16.812	\$ 42.030.000	18.928	\$ 78.002.000
2004	2.206	\$ 37.502.000	49.068	\$ 122.670.000	51.274	\$ 160.172.000
2005	12.724	\$ 216.308.000	50.475	\$ 126.187.500	63.199	\$ 342.495.500
2006	3.325	\$ 56.525.000	54.051	\$ 135.127.500	57.376	\$ 191.652.500
2007	3.750	\$ 63.750.000	39.317	\$ 98.292.500	43.067	\$ 162.042.500
2008	7.158	\$ 121.686.000	142.531	\$ 356.327.500	149.689	\$ 478.013.500
2009	3.147	\$ 53.499.000	60.725	\$ 151.812.500	63.872	\$ 205.311.500
2010	12.297	\$ 209.049.000	378.062	\$ 945.155.000	390.359	\$ 1.154.204.000
2011	8.016	\$ 136.272.000	319.496	\$ 798.740.000	327.512	\$ 935.012.000
2012	2.907	\$ 49.419.000	121.291	\$ 303.227.500	124.198	\$ 352.646.500
2013	2.985	\$ 50.745.000	72.983	\$ 182.457.500	75.968	\$ 233.202.500
2014	2.332	\$ 39.644.000	63.997	\$ 159.992.500	66.329	\$ 199.636.500
2015	2.659	\$ 45.203.000	46.988	\$ 117.470.000	49.647	\$ 162.673.000
2016	982	\$ 16.694.000	36.403	\$ 91.007.500	37.385	\$ 107.701.500
TOTAL	96.889	1.647.113.000	1.584.997	3.962.492.500	1.681.886	5.609.605.500

Table No 4. Source UNGRD. Own elaboration

Notes: It is estimated that the attention of each destroyed dwelling is in the order of US \$ 17,000. On the other hand, it is estimated that the attention of each damaged house amounts to \$ US 2,500 Dollars



In retrospective, with these reconstruction costs, it would have been possible to virtually close (97%) the qualitative housing deficit in the country, estimated at 2 million units.

This is particularly important, as in Colombia, the vulnerability is increased due to the high presence of substandard housing. According to estimates from the Ministry of Housing, City and Territory and the National Department of Planning DNP (for its acronym in Spanish), in Colombia, between 45% and 65% of informal urban areas where substandard housing is predominant.

Similarly, it is established that 20% of the population lives in high risk areas and 63% have qualitative deficiencies. Likewise, it is estimated that 58% of the housing stock is of informal origin, with a great variance among the different municipalities of the country. According to the World Bank, 37% of families do not have adequate housing.

Moreover, the publication "State of the Cities of Latin America and the Caribbean 2012" from UN-Habitat indicates that in Colombia 13% of the urban population lives in slums.

Below are some events of natural disasters in Colombia, which have shown a devastating impact on the loss of human lives and a high investment value in public resources for the recovery of the affected areas.

1999 COLOMBIA EARTHQUAKE AT COFFEE AXIS OR EJE CAFETERO.

The most important event in the recent history of Colombia corresponds to the Coffee Axis Earthquake, which happened on January 25, 1999 at 1:19 pm (local time) and which had a magnitude of 6.2 on the Richter scale, with an estimated depth of 10 km.

This event affected 5 departments and 32 municipalities, leaving nearly 1,900 people dead and 560,000 affected. According to information from ECLAC, about 80,000 homes were affected, of which 15,566 homes were destroyed and 61,927 homes were damaged.

It is estimated that the economic losses were in the order of 1,590 million dollars, which represented 1.84% of the GDP (gross domestic product), of that year in Colombia. In order to face the emergency and the reconstruction process of the affected areas, the national government created the Fund for the reconstruction of the Coffee Axis, FOREC, which lasted approximately 5 years.



1983 COLOMBIA EARTHQUAKE AT POPAYÁN, CAUCA

According to information from the Inter-American Development Bank (IDB), the Popayán earthquake left losses in the order of 378 million dollars, which represented about one percentage point of that year's GDP in Colombia.

The earthquake affected more than 10 thousand people and left about 300 people dead. This earthquake prompted the issuance of regulations on earthquake-resistant earthquake design and construction, and through Decree 1547 of 1984, the National Calamity Fund was created.

2010 – 2011 CLIMATIC EVENT –IN COLOMBIA

During the period from October 2010 to May 2011, one of the most important climatic events took place.

According to information from the Inter-American Development Bank (IDB) and from ECLAC, the climatic event left a balance of 3,219,239 people affected and 1,374 people died. It has also been estimated that the damages amounted to 6,500 Million Dollars

In order to face the tasks of emergency attention and the rehabilitation process, the National Government created “Colombia Humanitaria” as a sub-account of the Risk Management Fund of the National Disaster Risk Management Unit of Colombia.

According to IDB-ECLAC, the sectors with the greatest share of damages were habitat (44%) and infrastructure (38%); followed by social services and public administration (11%) and productive sectors (7%). In habitat, the most important sector was housing (38% of the total damages), and among this, the houses with total loss (24% of the total damages). This indicator reflects the social tragedy caused by the winter wave, due to the number of people left homeless

Today, after 6 years of the event, the Adaptation Fund continues to carry out works to rebuild affected areas and risk mitigation activities.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



5. NORMATIVE AND INSTITUTIONAL FRAMEWORK FOR THE MANAGEMENT OF DISASTER RISK IN COLOMBIA.

In Colombia, Law 1523 of 2012 adopts the national disaster risk management policy and establishes the National System of Disaster Risk Management. This law establishes that disaster risk management "is a social process aimed at the formulation, execution, monitoring and evaluation of policies, strategies, plans, programs, regulations, instruments, measures and permanent actions for knowledge and reduction of risk and for disaster management, with the explicit purpose of contributing to the security, well-being, quality of life of people and sustainable development. "

"Risk management is an indispensable development policy to ensure sustainability, territorial security, collective rights and interests, improve the quality of life of populations and communities at risk and, therefore, is intrinsically associated with the planning of the safe development, with the sustainable environmental territorial management, in all the levels of government and the effective participation of the population "

Now, in front of the Organization, Direction and Coordination of the National System of Management of the Risk of Disasters, it is established that the members of said System are: 1. The public entities. For its mission and responsibility in the management of sustainable social, economic and environmental development, in sectoral, territorial, institutional and investment projects. 2. Private entities with spirit and non-profit. For its intervention in development through its economic, social and environmental activities. 3. The Community. For its intervention in development through its economic, social, environmental, cultural and participatory activities.

The National System Directorate instances are:

- i) The President of the Republic,
- ii) The Director of the National Unit for Disaster Risk Management,
- iii) The Governor in their respective jurisdiction and
- iv) The District or Municipal Mayor in his or her respective jurisdiction.



In addition to the above, the national system has the following instances of orientation and coordination, whose purpose is to optimize the performance of the different public, private and community entities in the execution of risk management actions.

- a. National Council for Risk Management.
- b. National Unit for Disaster Risk Management.
- c. National Committee for the Knowledge of Risk.
- d. National Committee for Risk Reduction.
- e. National Committee for Disaster Management.
- f. Departmental, district and municipal councils for risk management.

However, the objective of the National Risk Management System in Colombia, in accordance with the provisions of Law 1523 of 2012, is "To carry out the social process of risk management with the purpose of offering protection to the population in the Colombian territory, improve security, well-being and quality of life and contribute to sustainable development "

Likewise, the following are established as specific objectives:

- I. Develop, maintain and guarantee the process of knowledge of risk through actions such as:
 - a). Identification of risk scenarios and their prioritization to study in greater detail and generate the necessary resources for their intervention.
 - b) Identification of risk factors, understood as: threat, exposure and vulnerability, as well as the underlying factors, their origins, causes and transformation over time.
 - c) Analysis and evaluation of risk including the estimation and sizing of its possible consequences.
 - d). Monitoring and monitoring of risk and its components.
 - and). Communication of risk to public and private entities and to the population, for the purposes of public information, perception and awareness.
- II. Develop and maintain the process of risk reduction through actions such as:
 - a). Prospective intervention through prevention actions that avoid the generation of new risk conditions.
 - b) Corrective intervention through mitigation actions of existing risk conditions.
 - c) Financial protection through retention and risk transfer instruments.



III. Develop, maintain and guarantee the process of disaster management through actions such as:

- a). Preparation for disaster response through organization, warning systems, training, equipment and training, among others.
- b) Preparation for recovery, call: rehabilitation and reconstruction.
- c) Response to disasters with actions aimed at serving the affected population and restoring the affected essential services.
- d). Recovery, call: rehabilitation and reconstruction of socioeconomic, environmental and physical conditions, under criteria of security and sustainable development, avoiding reproducing situations of risk and generating better living conditions

Within the framework of the second specific objective, (Risk Reduction), this obligation to reduce the risk of disasters is raised at the public policy level, through compliance with the actions indicated above.

On the other hand, within the framework of the aforementioned Law 1523 of 2012, the creation of the National Fund for Disaster Risk Management is established, where the management of the expense is the responsibility of the Director of the National Unit for Risk Management of Disasters

The Fund seeks to support national and territorial entities in their risk awareness, prevention, mitigation, response and recovery efforts, understood as: rehabilitation and reconstruction and with sufficient reserves of immediate availability to deal with disaster situations.

The resources of the National Fund for Disaster Risk Management will be subject to the appropriations assigned for this purpose in the National General Budget and are contained in the Medium Term Expenditure Framework - MGMP. The Board of Directors will establish the distribution of these resources in the different sub-accounts in accordance with the priorities that are determined in each of the risk management processes.

Now, on the normative dispositions indicated in the Law 1523 of 2012, the Territorial Entities (Department Governors and Municipal Mayors) can manage resources for the mitigation of risks before several Entities or Sectors of the Government, like for example:

A. Resources of the General Royalty System



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



- B. The different sectors for which it is required to mitigate the risk. For example, the water sector, infrastructure, roads, housing, health, education, etc.
- C. Resources of the Fund Adaptation in activities related to the damages caused by the La Niña Phenomenon 2010-2011.
- D. Own resources of the Territorial Entities

It is very important to advance in the strengthening of the Municipalities in the management of the risk in their territories and in the articulation with the sectoral policies.

6. THE INCORPORATION OF RISK MANAGEMENT IN THE PLANNING OF THE TERRITORY.

The main basis for disaster prevention should be control over the territory, in such a way that the available areas are used in an adequate, planned manner and that protect the life and heritage of the people who inhabit them.

It is clear that the most powerful instrument for disaster risk management, which allows the reduction of vulnerability to disasters, is territorial ordering. In addition to the above and to the extent that buildings already exist in areas of risk, processes must be planned to reduce vulnerability, by intervening with the environment and with the structures already built.

In agreement with the National Disaster Risk Management Unit and the Ministry of Housing, City and Territory, compared to the Integration of Risk Management and Territorial Organization, two (2) moments are presented to develop the Technical Studies:

- a. For and in the revision of the Territorial Ordering Plans (POT):
 - Basic Studies of threat (Mass Movements, Flood, Torrential Avenue, earthquakes, etc),
 - Identification of exposure,
 - Definition of areas with risk status (consolidated / developed areas),
 - Definition of areas with threat condition (object of development by POT),
 - Definition of non-structural measures in areas of threat condition or risk condition (model, perimeters, urban regulation) to control or reduce threat conditions or risk conditions and avoid new risk



Currently, 90% of the Territorial Ordering Plans (POT) of Colombia are under review. This is an opportunity for municipalities to incorporate risk management into their plans and to define precise guidelines for the resilience of cities and neighborhoods

b. In the Execution - Implementation of the Territorial Ordering Plans (POT):

- Detail Studies: Zones condition of threat or risk condition (categorizes vulnerability and risk / defines mitigability or non-mitigability of risk).
- Definition of non-structural measures in risk areas (urban regulation, protective soils) and structural (works, relocations) to control or reduce the risk or avoid generating new risk.

In the following figure the Normative Framework is shown: Risk Management and Territorial Ordering Plans (POT)

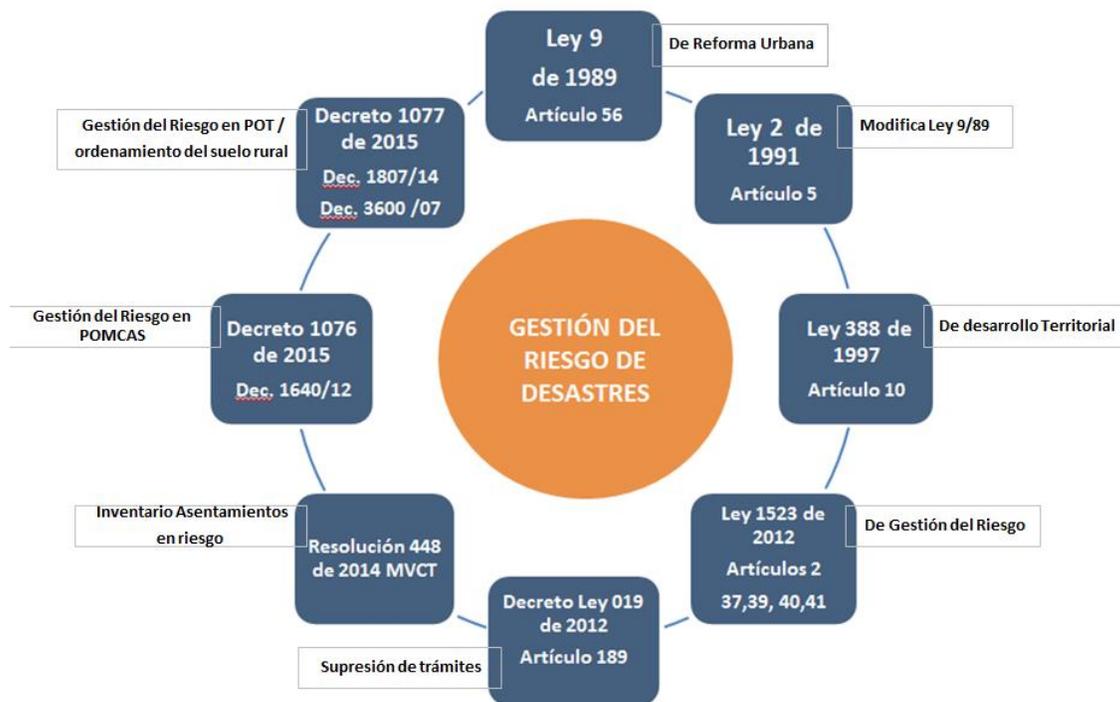


Figure No 2. Risk Management and Territorial Ordering Plans (POT)

It is important to bear in mind that the UNGRD Disaster Risk Management Unit places at the disposal of the Municipalities and the Citizenship in general, a series of documents, guides and booklets that allow



them to incorporate the risk in their territorial planning plans. The websites where they can be found are listed as an annex to this document.

7. GUIDELINES FOR POPULATION RESETTLEMENT IN COLOMBIA

In Colombia there is no National Policy nor a normative framework for the Population Resettlement. This has allowed the processes to adapt to the needs of the population to be resettled. Notwithstanding the above, the resettlement processes are carried out considering the applicable international regulations ratified by the Government of Colombia.

INTERNATIONAL REFERENCES

The following are some of the international references that are considered to advance population resettlement processes in Colombia:

- The San José Convention of Costa Rica (linked through Law 16 of 1972), which states that "No person may be deprived of his property, except by payment of just compensation, for reasons of public utility or of social interest and in the cases and according to the forms established in the law." (Article 21).
- Guiding Principles of internal displacement of the International Committee of the Red Cross - ICRC, especially number 6, protection against arbitrary displacement, and number 7, which urges that the displacement be made only after exhausting all possible alternatives.
- Declaration of Human Rights of the United Nations "Every human being shall have the right to protection against arbitrary resettlements away from his home or place of habitual residence."
- Arbitrary resettlements are internationally prohibited in the case of large-scale development projects, which are not justified on a superior or primordial public interest.
- Before deciding on the movement of people, the competent authorities will ensure that all viable alternatives to avoid it have been explored. When there is no alternative, all necessary measures will be taken to minimize displacement and its adverse effects.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



- The authorities responsible for displacement are ensured to the maximum extent possible that adequate accommodation is provided for displaced persons under satisfactory conditions of security, food, health and hygiene and that members of the same family are not separated (United Nations Principle 7).
- We will always seek the free and informed consent of the displaced (United Nations Principle 7).
- The competent authorities will try to involve affected people, particularly women, in the planning and management of their resettlement (United Nations Principle 7).
- Displacement will not be carried out in a way that violates the rights to life, dignity, freedom and security of those affected (United Nations Principle 8).

CONSTITUTIONAL NORMS OF COLOMBIA

- Sentence C-153-94 interprets article 1 of the Political Constitution of Colombia (1991) affirms the obligation of the State is to seek social justice in each of its actions, avoiding violating the rights by acts of the administration.
- In turn, Judgment C-153-94 of the Constitutional Court guarantees private property as a general rule, except for reasons of public utility, but stating that the procedures must take into account "not only the basic constitutional guarantees referred to the right to life, integrity and the right of defense, but also the need to act, by the State, giving effective responses and allowing the development of benefits rights, among which the right to housing, in conditions of dignity is one of the most important."

LAWS

In general, they are related to the acquisition of the physical property, determining in the cases of public utility or social interest the special procedures that must be followed (chapter III of the 9th law of 1989, modified by chapter VII of law 388 of 1997).

This Law establishes a basic procedure to perfect the sale of the property when it is done voluntarily by its owner, or failing that, the administration is free to initiate the expropriation procedure.



CONCEPTUAL ELEMENTS OF THE POPULATION RESETTLEMENT

The Resettlement of population is defined as the set of actions aimed at the relocation of housing and programs aimed at maintaining or improving the quality of life of families in the new territory, as a result of the existence of a risk. This treatment can be generated either for reasons of public utility, environmental preservation or non-mitigable risk rating.

Due to the social cost involved in the resettlement, this must be minimized to the maximum and, if unavoidable, the capacity of the settlement to receive families within its own space through urban reordering actions will be analyzed.

In Colombia, the resettlement originates mainly from three causes of displacement:

1. By Public Work
2. For Armed Conflict
3. For Disaster Risk or Post-disaster Care

In Colombia, the resettlement guide for populations at risk of disaster of the World Bank is taken as reference, which has the following structure:

- Phase 1. Criteria to determine if the Population should be Resettled. i) Analysis according to Risk, ii) the possibility of mitigation, iii) community participation.
- Phase 2. Aspects to be defined before the Preparation of the Resettlement Program. i) The impacts of displacement and resettlement are reviewed, ii) An analysis of the dimensions (Physical, legal, economic, social, cultural, psychological, environmental, political and administrative and Territorial) is carried out, iii) Organizational and communications.
- Phase 3. Analytical Phase to formulate the Resettlement Program. i) Elaboration of Censuses, ii) socioeconomic and cultural studies, iii) inventory of buildings and buildings, iv) study of titles, v) information analysis methodology, vi) Analysis of resettlement alternatives.



- Phase 4. Process for the Formulation of the Resettlement Program. i) Collective resettlement, ii) Individual resettlement, iii) Communication, consultation and agreement, iv) reestablish socio-economic conditions of the population that does not move.
- Phase 5. Execution of the Resettlement Program

THE CASE OF POPULATION RESETTLEMENT IN BOGOTA.

Bogotá is a benchmark at the national level in processes of Population Resettlement. The District has a normative instrument that frames the processes of Population Resettlement in the Capital of the Republic. Decree 255 of 2013 establishes the procedure for the implementation of the resettlement program for families who are in high risk conditions in the Capital District and other provisions are dictated.

In practice, households that meet the requirements indicated in the Population-Based Risk-Based Resettlement Program may receive three types of assistance from the District.

1. The first is "Transitional Relocation Assistance", which is an economic instrument through which the Popular Housing Fund provides temporary access to decent housing for families affected by an emergency or an imminent risk, with in order to protect your life. The maximum value of this Help is up to 1 Minimum Wage (US \$ 230), which will be used exclusively to cover the value generated by the temporary location of the family, until its definitive relocation.
2. The second is the Unique Value of Recognition -VUR, which is a financial instrument through which it will be provided to families located at high risk not mitigable in strata 1 and 2 or its legal equivalent, access to a solution of replacement housing in the national territory and that in a general and uniform way represents the real rights of ownership or possession that fall on the houses. According to current regulations, the maximum value of the VUR can be up to 50 Minimum Wages, that is, US \$ 12,300.
3. The third value that can be received by the household that is going to be resettled is a subsidy granted by the public entities that are authorized to do so. This value can not exceed 20 minimum wages, that is, US \$ 4,918

Below is an exercise to estimate the cost of resettling an eligible household in the District of Bogotá program. The following assumptions are established: i) The Home receives the maximum value for VUR,



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



ii) it is estimated that the Home takes 36 months to get the definitive solution, that is, it pays 36 lease installments, iii) the Home receives a subsidy from the District of 20 minimum wages, iv) an estimated 10% of the recognition values, for operating costs of the staff of the Popular Housing Fund of Bogotá.

Type of Recognition	Description	Value in COP	Value in US \$
Unique Value of Recognition VUR	A single value is granted for 50 SMLMV	\$ 36.885.850	\$ 12.295
Transient Relocation Assistance	A maximum monthly value of 1 SMLMV	\$ 26.557.812	\$ 8.853
Complementary Contribution Without Overcoming Value VIP	It can be granted up to 20SMLMV by value of Subsidy	\$ 14.754.340	\$ 4.918
Operational Costs of the Bogota CVP until the Resettlement is effective	A fixed cost of the 10% of the value of the recognitions	\$ 7.819.800	\$ 2.607
TOTAL		\$ 86.017.802	\$ 28.673

Table No 5. Cost of resettling an eligible household in the District of Bogotá program

The resettlement of a household with the conditions indicated above can cost US \$ 28,673.

8. HOUSING POLICIES IN COLOMBIA

THE HOUSING DEFICIT

According to information from the National Administrative Department of Statistics “DANE”, Colombia has a Population of 48,529,859 Inhabitants as of February 2016, where 76% corresponds to urban population and the remaining 24% to rural population. The Capital of the Country is Bogotá D.C, which has 7,963,379 Inhabitants.

Based on the 2005 Census, Colombia has a Housing Deficit of 3,828,055 households, corresponding to 36.2% of all households in the country. Of these, 1,307,757 (12.4%) corresponds to quantitative deficit and 2,520,298 (23.8%) corresponds to qualitative deficit.

Now, taking as reference the Great Integrated Household Survey (GEIH) conducted in 2014 and considering the census of 2005, the Center for Studies of Construction and Urban and Regional Development CENAC, advanced for the Ministry of Housing, City and Territory an update of the deficit figures, which establish that in Colombia there is a Housing Deficit of 3,347,487 Millions of Housing, of



which 1,273,427 correspond to Quantitative Deficit (9.4%) and 2,072,705 Million Qualitative deficit (15.3%).

On the other hand, the inventory of housing units in Colombia for 2007 amounted to 9,530,375 (for a total of 11,374,978 households estimated in the same year, according to DANE data, in their estimates 1985-2005 and projections 2005 -20 households, national and departmental by area).

According to information from the DNP, CAMACOL and the consulting firm Urban Economics, between the period of 2014 to 2015, 282.6 thousand additional homes were created in Colombia, while the total number of homes started in the same period was 266.8 thousand. units, that is to say, 94.4% of households are currently being covered, with a formal housing offer.

The graph shows that the distance between the formation of new homes and the production of housing has been shortened, however there is still a shortage in this respect and the lack of new housing referenced in the quantitative deficit of Colombia continues to be lacking.

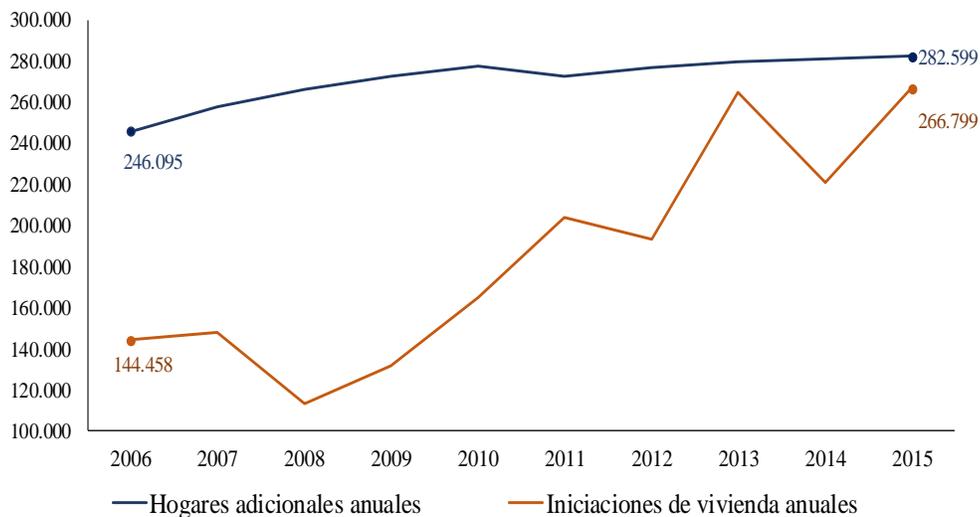


Figure No 2 Source: DNP. Elaboration Urban Economy

GOVERNMENT PRIORITIES IN TERMS OF HOUSING

As shown in the previous chapter, the economic impact and loss of human lives due to the effects of natural disasters is very high. Notwithstanding the foregoing, the governments in Latin America and the Caribbean



have prioritized their resources for the construction of new housing projects, that is, to reduce the existing quantitative deficit. In contrast, they do not prioritize resources for the structural improvement of homes with deficiencies, typically located in settlements of informal origin and inhabited by a highly vulnerable population.

In Colombia, for example, according to information from the National Housing Fund - Fonvivienda, from 2003 to 2016, 98% of the resources were focused on the allocation of subsidies for the acquisition or construction of new housing on land urban and only 2% for improvement projects

Focus on:	Modality	Number of Homes	%	% Agrup	Sum of Value Assigned (COP)	Sum of Value Assigned (USD)
Quantitative deficit	HOUSING ACQUISITION	395.816	78%	85%	\$ 7.492.709.124.701	\$ 2.497.569.708
	LEASE	20.568	4%		\$ 105.564.436.206	\$ 35.188.145
	CONSTRUCTION ON OWN SITE	13.610	3%		\$ 116.069.757.423	\$ 38.689.919
Qualitative Deficit	ENABLING OF TITLES	44.739	9%	15%	\$ 7.486.230.637	\$ 2.495.410
	IMPROVEMENT	12.732	3%		\$ 89.791.607.564	\$ 29.930.536
	HEALTHY IMPROVEMENT	19.090	4%		\$ 70.032.229.925	\$ 23.344.077
Total general		504.507	100%	100%	\$ 7.849.465.503.371	\$ 2.616.488.501

Table No 6. APPROACH OF SUBSIDIES FONVIVIENDA. Source: Fonvivienda. Own elaboration.

Likewise, other public and private entities that allocate family subsidies of housing to households according to their particular conditions, have assigned the subsidies indicated below, in the period 2010 - 2016, where it is shown that there has been no priority of these entities in the delivery of subsidies for housing improvement.

Subsidies Assigned by Other Entities (Period 2010 -2016)								
Entity	Subsidies Assigned			Enfocado a:	Subsidies Assigned			
	Number of Subsidies	Value COP	Value USD		Number of Subsidies	Value COP	Value USD	%
Family Compensation Funds	325.128	\$ 4.077.924	\$ 1.359,31	Quantitative Deficit (New and Used Lives)	320.455	\$ 4.043.148	\$ 1.347,72	99,15%
				Qualitative Deficit (Improvement)	4.673	\$ 34.776	\$ 11,59	0,85%
Popular Housing of Military Housin	49.441	\$ 1.313.726	\$ 437,91	Quantitative Deficit (New and Used Lives)	49.441	\$ 1.313.726	\$ 437,91	100%
				Qualitative Deficit (Improvement)	-	\$ -	\$ -	0%
Banco Agrario de Colombia	101.727	\$ 1.721.108	\$ 573,70	Quantitative Deficit (New and Used Lives)	88.297	\$ 1.577.788	\$ 525,93	92%
				Qualitative Deficit (Improvement)	13.430	\$ 143.320	\$ 47,77	8%
TOTAL	476.296	\$ 7.112.758	\$2.370,92	Quantitative Deficit (New and Used Lives)	458.193	\$ 6.934.662	\$ 2.311,55	97,50%
				Qualitative Deficit (Improvement)	18.103	\$ 178.096	\$ 59,37	2,50%

Table No 7. Source: Fonvivienda. Own elaboration.

A similar situation arises in Central American countries like Guatemala, where according to information from the FOPAVI Housing Fund, in 2016 only 89 subsidies were allocated for home improvement, expansion or repair and in 2017, only 28 subsidies were assigned for this modality representing less than 1% of the Entity's resources for the last year.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Tipo de Solución Habitacional	Año 2016			Año 2017 Diciembre de 2017		
	No Subsidios	Valor en Quetzales	Valor en USD	No Subsidios	Valor en Quetzales	Valor en USD
Subsidio aprobado para adquisición de lote con servicios básicos	36	Q 2.088.000	\$ 284.511	354	Q 20.257.576	\$ 2.760.297
Subsidio aprobado para adquisición de Lote con Vivienda	131	Q 3.746.750	\$ 510.532	29	Q 831.650	\$ 113.321
Subsidio aprobado para el mejoramiento, ampliación y reparación de vivienda	89	Q 2.202.500	\$ 300.113	28	Q 693.042	\$ 94.434
Subsidio aprobado para construcción de vivienda	2.868	Q 89.177.850	\$ 12.151.374	3.286	Q 100.064.646	\$ 13.634.809
	3.124	Q 97.215.100	\$ 13.246.530	3.697	Q 121.846.914	\$ 16.602.860

Table No 8. Source: Fopavi. Own elaboration.

It is contradictory that although the qualitative deficit indexes are higher in the great majority of the countries of the region, the state prioritizes the allocation of resources for the reduction of the quantitative housing deficit.

INSTITUTIONAL SETTING AND HOUSING PROGRAMS

The Housing Policy of Colombia presents a wide variety of instruments that seek to promote both supply and demand and that seek to reduce the housing deficit (Quantitative and Qualitative).

The National Government of Colombia, since the enactment of Law 3 of 1991, evolved towards the care of the most vulnerable households through the allocation of a family housing subsidy to the demand, leaving behind its function as a State Constructor, which had been developing with the ICT Territorial Credit Institute.⁷

In the aforementioned Law 3, the National System of Housing of Social Interest was created, composed of public and private entities that perform functions that lead to the financing, construction, improvement, relocation, authorization and legalization of titles of housing of this nature.

From that moment, the Family Housing Subsidy (SFV) is established, as a state contribution in cash or in kind, granted once to the beneficiary household in order to provide a social housing solution, without

⁷ Created in 1939 with the Law 200 of the same year as an Institute focused on the construction and financing of Rural Housing. With the reforms of 1942 and 1948 the ICT went on to grant loans to cooperatives of employees and to the construction and adjudication of urban housing.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



restitution fee. provided that the beneficiary complies with the conditions established by the Law. It also provides that the amount of the subsidy will be determined by the National Government in accordance with the available resources, the final value of the housing solution and the socioeconomic conditions of the beneficiaries.

Since the creation of the Fonvivienda National Housing Fund in 2003, the Housing Policy in urban land has evolved significantly, but it is only until 2012 that a great boost is given to housing in Colombia and the sanction Law 1537 of the same year, by which rules are issued to facilitate and promote urban development and access to housing and other provisions are dictated. Before 2012, subsidies were assigned on average for US \$ 95.5 million per year and after 2012 on average US \$ 413.4 million per year, that is, there was an increase of four times what was coming. assigning.

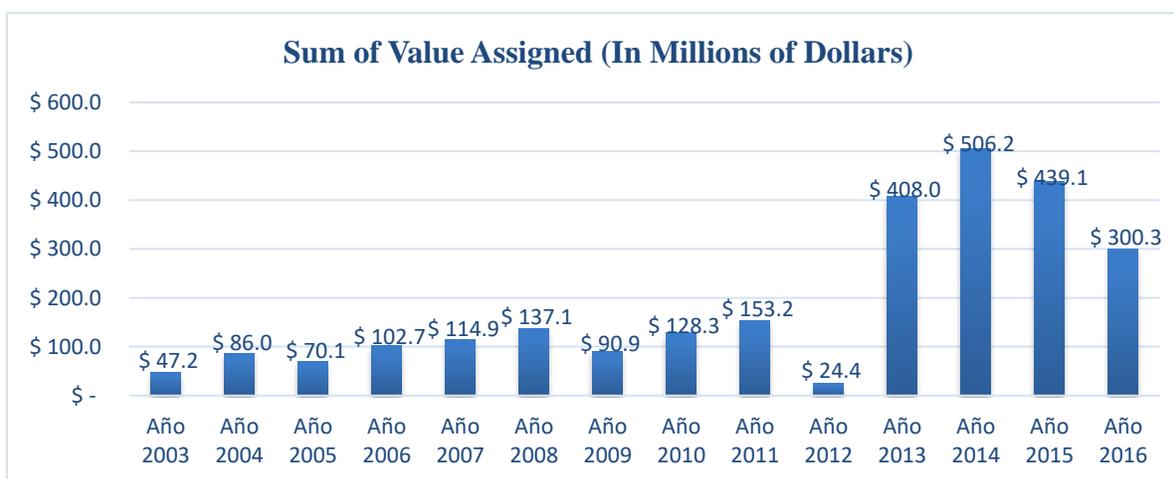


Figure No 3. Source: Fonvivienda. Own elaboration.

The composition of subsidy allocation by Fonvivienda, disaggregated by subsidies for new housing and for improvement, is shown in the following graph, which clearly shows that the priority in the allocation of resources has been in the reduction of the quantitative deficit of housing.

Only during the years 2007, 2008 and 2009 there was an effort in the allocation of subsidies for the improvement of structural housing, healthy improvement and processes of massive housing titling, which in any case contribute to the decrease of the qualitative housing deficit in Colombia.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018

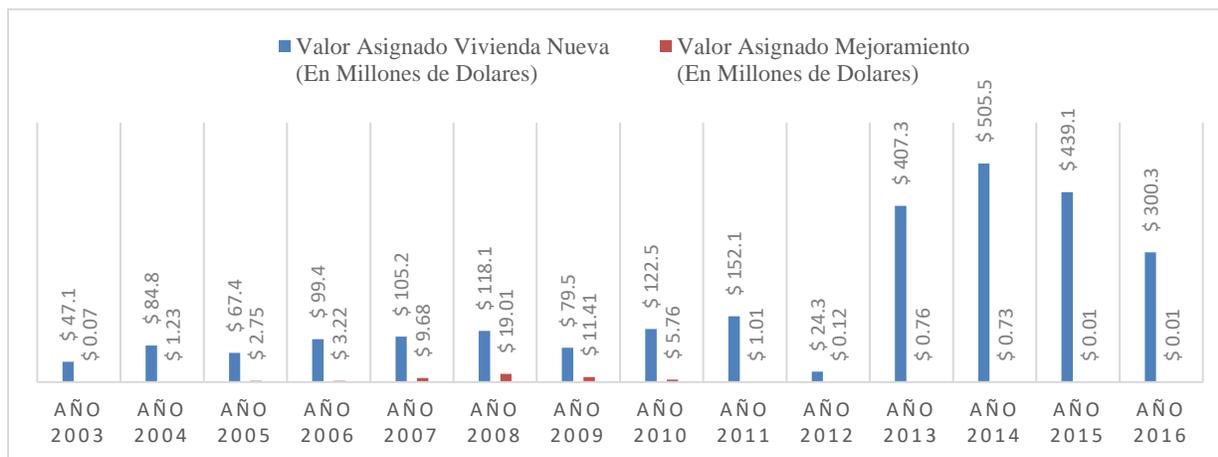


Figure No 4. Source: Fonvivienda. Own elaboration.

Now, if the allocation of subsidies is analyzed, accounting for those made by other Entities of Colombia empowered for this purpose, such as the Ministry of Agriculture that assigns subsidies to households located in rural land, the Family Compensation Funds that serve their members (formal workers) and the Caja Popular de Vivienda Militar, who looks after the affiliated military personnel, is similarly evident that after 2012 there has been a significant increase in the allocation of subsidies.

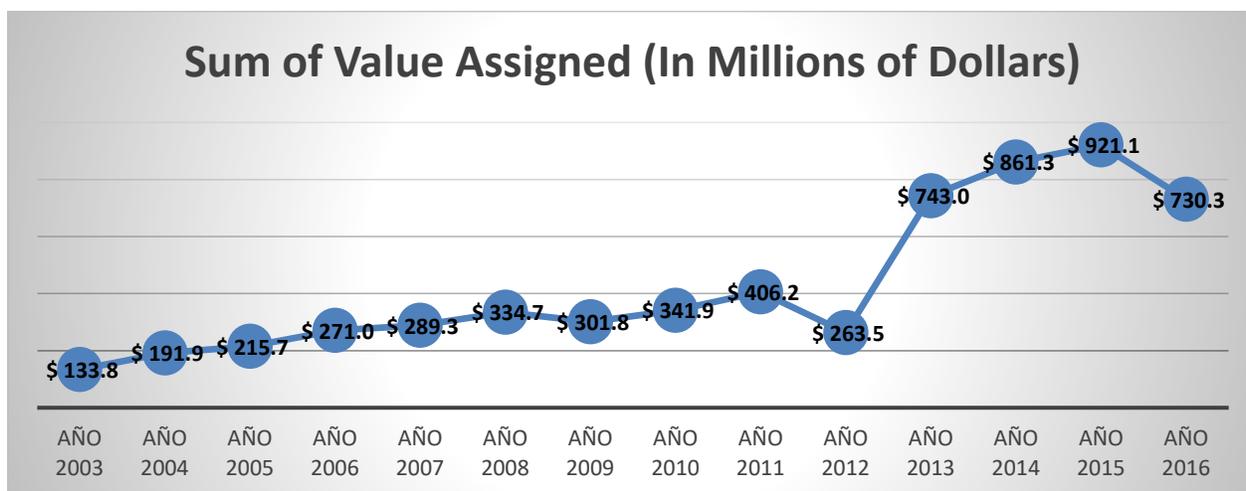


Figure No 5. Sum of Value Assigned by year. Source: Fonvivienda. Own elaboration.

8.1. PROGRAMS TO ADDRESS THE QUANTITATIVE HOUSING DEFICIT

Currently from FONVIVIENDA there are four programs for the construction of new housing located in urban areas, that is, focused on the reduction of the quantitative housing deficit and six for the reduction of the qualitative deficit.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



The first is the “PVG” Free Housing Program, which focuses on the care of people living in extreme poverty, those displaced by the internal armed conflict and those affected by natural disasters, or who are located in areas of unmeasurable risk. These households have an income of less than 1 minimum wage, that is, less than US \$ 230. This program operates only in urban areas.

FONVIVIENDA grants the household a subsidy in kind, for 100% of the cost of the housing unit, estimated at US \$ 17,000. The program in its first phase executed 103,000 houses of priority interest, with an investment of close to US \$ 1,300 million and currently 30,000 additional houses are being built.

With the implementation of the Free Housing Program, the technical conditions of the dwellings were improved in the same way, compared to the projects executed before 2012. It went from 32 square meters to an average of 47 square meters. Likewise, the finishes of homes, roads and urbanism were improved.

The second program is called "Housing for Savers VIPA", which is focused on households with incomes between 1 and 2 monthly legal minimum wages (US \$ 230 and US \$ 460). FONVIVIENDA grants a subsidy between US \$ 5,745 and US \$ 6,895, which complements the savings and the mortgage credit granted to the beneficiary household, for the acquisition of a house of priority interest of up to US \$ 17,000.

The beneficiary households can be formal or informal workers, as long as they meet the conditions for the granting of the mortgage loan. It is important to bear in mind that the amount of the mortgage loan granted under this program is in the order of US \$ 12,000 (70% of the value of the home), with a term between 15 and 20 years and a rate of 12.5% per year.

In addition to the above and as a complement to the subsidy indicated, the Government grants a subsidy benefit at the interest rate that covers up to 5 percentage points of the mortgage loan rate granted to the household, for a period of 7 years. The above means that the household assumes the debt at a rate of 7.5% per year and the national government covers the remaining 5 percentage points. In this Program, from 2014 to April 2017, about 42,000 subsidies were assigned to the 87,000 housing units planned and an equal number of loans have been placed with the interest rate benefit.

The third program is called "My House Now" and focuses on households that are formal workers, with incomes between 2 and 4 minimum legal monthly salaries (US \$ 460 and US \$ 920). The National Housing



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Fund grants a subsidy between US \$ 2,575 and US \$ 4,295, which complements the savings and mortgage credit granted to the beneficiary household for the acquisition of affordable housing up to US \$ 33,000

Same as in the previous program, the Government grants a subsidy benefit at the interest rate that covers up to 4 percentage points of the mortgage loan rate granted to the household, for a period of 7 years. This program is ongoing and aims to build 130,000 new homes. It is important to bear in mind that the amount of the mortgage loan granted under this program is in the order of US \$ 23,100 (70% of the value of the home), with a term between 15 and 20 years and a rate of 12.5% per year

The latest program for the acquisition of new housing is called "Interest rate subsidy ", which focuses on Colombian households that have incomes below 8 legal monthly minimum wages (US \$ 2,000). In this program, the Government grants a subsidy benefit at the interest rate that covers up to 2.5 percentage points of the mortgage loan rate granted to the household, for a period of 7 years. The strategy was born as an anti-cyclical measure taking into account the slowdown of the Colombian economy.

The following table shows a summary of the subsidies granted by the National Government in each of the programs indicated above.

No	Program	Description of beneficiary households	Formal or informal workers	Subsidy given by the Government
1	"Free Housing Program"	Households with income less than 1 minimum wage, that is, less than US \$ 230	Informal workers	subsidy in kind, for 100% of the cost of the housing unit, estimated at US \$ 17,000
2	"Housing for Savers VIPA"	Households with incomes between 1 and 2 monthly legal minimum wages (US \$ 230 and US \$ 460)	Formal or informal workers	Subsidy between US \$ 5,745 and US\$6,895 + (a) Subsidy on the interest rate that covers 5 percentage points of the mortgage loan rate
3	"My House Now"	Households with incomes between 2 and 4 monthly legal minimum wages (US \$ 460 and US \$ 920)	Formal workers	Subsidy between US \$ 2,575 and US\$4,295 + (b) Subsidy on the interest rate that covers 4 percentage points of the mortgage loan rate
4	"Subsidy on the interest rate"	Households with income less than 8 minimum wage, that is, less than US \$ 2.000	Formal workers	(c) Subsidy on the interest rate that covers 2,5 percentage points of the mortgage loan rate

Table No 9. Source: Fonvivienda. Own elaboration.



It is necessary to indicate that of the above mentioned programs, it is the one of free housing where processes of resettlement and care of homes affected by natural disaster situations are promoted. According to information from Fonvivienda, of the 100 thousand homes of the Program, 70% went to homes displaced by violence, 15% for extreme poverty homes and the remaining 15% for homes affected by natural disasters or that were located in areas of non-mitigable risk. This means that in practice approximately 15,000 households were resettled to safe areas.

In addition to this, Colombia, from 2003 to 2017, a total of 33,754 subsidies have been allocated for the resettlement of households located in areas of non-mitigable risk or affected by natural disaster, through special programs.

However, it should be noted that the allocation of subsidies for the relocation of households is not articulated with duly planned population resettlement programs. That is to say, this type of programs is limited to the relocation of people, but they are not considered integral strategies from the social, economic, employment, etc. point of view.

This is largely due to the fact that in Colombia there is no comprehensive population resettlement policy, but rather that the interventions that are made are based on the World Bank Resettlement Guide. A general description of the population resettlement processes in Colombia will be given below.

6.2. PROGRAMS TO ADDRESS THE QUALITATIVE HOUSING DEFICIT

Regarding the programs to address the qualitative deficit of housing, in Colombia, the actions are concentrated in the granting of family subsidies for Housing Improvement (Structural and / or Health related), contributions for housing connectivity to potable water services (program of intradomiciliary networks) and that is complemented with strategies for the titling of goods and the Slum Upgrading Program.

STRUCTURAL HOUSING IMPROVEMENT.

The Housing Improvement Program, as mentioned above, has not been a priority for the National Government. The above is reflected in the amount of resources allocated for this modality. In spite of the



above, Decree 1077 of 2015 consolidates the requirements and procedures that allow the execution of housing improvement projects in the country.

During the years 2007, 2008 and 2009, the largest number of housing improvement subsidies was assigned, mainly by the National Single Market for Improvement, where the allocation of 2,715 subsidies was achieved in 24 projects in 11 municipalities.

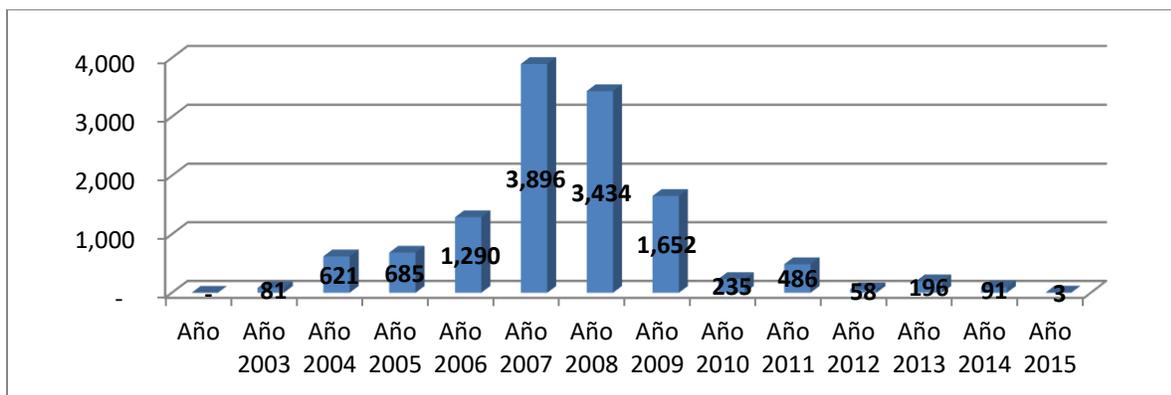


Figure No 6. subsidies for structural improvement. Source: Fonvivienda. Own elaboration.

In Colombia, the process of allocating subsidies for the structural improvement of housing in urban land is carried out through competitive bids, where the housing plans compete with each other for the resources allocated to each department for the contest.

It is important to bear in mind that Decree 1077 of 2015 defines departmental participation coefficients according to the highest concentration of poverty and housing deficit. From the total of available resources, the available slots are established by department and then the contest is opened.

In these cases, the bidder of the project must be the Territorial Entity, who must obtain a certificate of eligibility and must provide complementary resources. The value of the subsidy granted by Fonvivienda for the improvement modality is of up to eleven and a half minimum legal monthly salaries in force (11.5 smlmv), that is to say US \$ 2,890 approximately.

Likewise, the Bidder is in charge of organizing the demand for homes. After the eligibility process and qualification of the housing plans, the households start the application process to the subsidy, in accordance



with the quotas assigned. After this the execution of the improvements and the collection and legalization of the subsidies begins. The following five (5) stages must be completed:

- Stage 1: Opening of processes by Fonvivienda.
- Stage 2: Formulation of the Projects by the Bidders.
- Stage 3: Eligibility of the Projects before the Findeter Evaluation Entity.
- Stage 4: Nomination of households, qualification and Grant Allocation by Fonvivienda
- Stage 5: Execution and supervision of projects and procedures for collection and legalization of subsidies

This procedure of application of the subsidies under this modality, considers that in the development of the five (5) mentioned stages, they must fulfill 117 steps and interact with 60 actors. The estimated time to complete the process is about 2 years, until the legalization of the subsidies. That is, until the improvement of the home is finished and delivered to the home and the total value of the subsidy has been paid

It should be noted that despite the complexity of the process, this was not the cause of the decrease in resources for improvement programs. The main reason was the Government's decision to prioritize the financing of new housing projects.

Regarding the processes of Structural Improvement of Housing in Colombia, it is important to highlight some important aspects that differentiate it with other programs in Latin America and the Caribbean. The first of these is the implementation of a technical expertise process on single-story homes, which has the backing of the Advisory Commission for Resilient Earthquake Constructions, which allows for the assessment of the vulnerability of the home and the identification of different options for structural improvement that could make the unit safer. This technical procedure and act of recognition of buildings acts as a construction license for housing improvement projects, and in practice significantly reduced costs for the licensing process and reduced the terms for the issuance of construction licenses.

In the case of two and three-stories housing, it is allowed to apply the Manual of Evaluation and Seismic Reinforcement for Housing Vulnerability Reduction of Build Change and Swisscontact, which was approved by the Resilient Earthquake Advisory Commission, through Resolution 014 of 2016. In these



cases, the normal licensing procedure must be completed before the urban curators or the municipal planning offices

Notwithstanding, the National Government enacted the Law 1848 in 2017, through which the figure of "CURADURIA CERO" is created, which obliges all Municipalities and Districts to charge a zero value for the issuance of licenses for the improvement of housing, in cases where the acts of recognition indicated above are implemented. It is expected that this strategy will contribute to the formulation of more structural housing improvement projects.

The second element to be highlighted is the prior requirement of the urbanization legalization of the settlements in which the improvement projects are formulated. This allows that from the ordering of the territory, the mayors have identified the settlement and have included it within the functional structure of the Municipality. This process of urbanization legalization implies the identification of risks that can be mitigated and those that cannot, the availability of aqueduct services, drainage and electric power and the existence of facilities and public spaces of the neighborhoods and are a prerequisite for the development of the projects.

The third element to be highlighted is the property titling procedures for the beneficiaries of the improvement. Although it is not a prerequisite for the application of the subsidy, it is necessary to ensure legal security in tenure of the homes that are improved.

The fourth important element, that although it is not a requirement for the application of the improvement subsidy, is the requirement of protection of the liberated areas by the territorial entities in case of a resettlement. After relocating the homes and demolish existing buildings where risks cannot be mitigated. The good use of these liberated spaces allows the settlements to have a better public space or areas of recreation or environmental protection.

HEALTH RELATED HOUSING IMPROVEMENT.

The Health Related Housing Improvement Program aims to improve the basic health conditions of the most vulnerable households, through repairs or locative improvements that do not require the obtaining of permits or licenses by the competent authorities. These repairs or locative improvements are associated, as



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



a priority, with the habilitation or installation of bathrooms, washrooms, kitchens, hydraulic and sanitary networks, and other conditions related to the renovation and improvement of the façades of a house, in order to progressively achieve the conditions of a healthy home

Between the years 2008 and 2010, 19,090 subsidies were assigned for a value of US \$ 23.3 Million Dollars. The individual value of each subsidy is 8 minimum wages, that is approximately US \$ 1,300 per household, with minimum salary values for the year 2009.

Grand Total Year	Sum of # Homes	Sum of Value Assigned (In Millions of Dollars)
Year 2008	9.453	\$ 11,35
Year 2009	5.638	\$ 6,76
Year 2010	3.999	\$ 5,24
Total	19.090	\$ 23,34

Table No 10. subsidies assigned for healthy improvement. Source: Fonvivienda. Own elaboration.

The subsidy allocation procedure began with the opening of call for projects by Fonvivienda who evaluated and made the interventions viable. It should be noted that in many cases interventions were carried out on housing that was not structurally reinforced.

SPECIAL PROGRAM OF HOUSING IMPROVEMENT OF THE ADMINISTRATIVE DEPARTMENT OF SOCIAL PROSPERITY DPS (SOCIAL PROSPERITY)

The Administrative Department for Social Prosperity DPS (Social Prosperity), an entity attached to the Presidency of the Republic of Colombia, through the Program for the Improvement of Housing, grants an incentive to the population that has deficiencies or basic housing deficiencies.

This incentive is defined as "an economic incentive in kind that allows the beneficiary household to improve one or more of the basic housing deficiencies or deficiencies of its housing solution in the intervention modalities established by Social Prosperity; carried out in a comprehensive manner with a component of social accompaniment, which seeks to generate changes in a sustainable way in the healthy habits of the



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



families receiving care, aiming at the fulfillment of the objectives set by the National Government in terms of poverty reduction "

The incentive is focused on Households linked to the Red Unidos Strategy, Vulnerable Groups, households that are victims of internal armed conflict in conditions of poverty and homes of community mothers.

Within the acceptable modalities within the framework of the Social Prosperity Improvement Program, on which the projects can be structured, are: i) Improvement of the Sanitary Unit, ii) Improvement of the Kitchen Unit, iii) Improvement of the Housing Unit for Overcome Overcrowding or Housing Deficiencies, iv) Improvement of Floors, v) Improvement of Covers and vi) Special Modalities focused on special population.

As can be seen, the Program for the Improvement of the Department for Social Prosperity does not include within its modalities the structural recovery of housing. The value of the incentive depends on the intervention modality, without exceeding the 16.8 minimum salaries, that is US \$ 4,130 dollars.

According to information from Social Prosperity, in 2013 the delivery of the nearly 43,000 incentives for approximately US \$ 120 Million Dollars was achieved.

INTRADOMICILIARY NETWORKS FOR HOUSING.

The objective of the Program is to promote access to public services of water supply and sewerage, through the construction or improvement of intradomiciliary and residential connections when technically required water and sewerage services, through budgetary contributions of the Nation and / or territorial entities as a counterpart that cover their costs, in the real estate object of the program

The contribution of the Ministry of Housing is of up to 10 minimum wages, that is to say US \$ 2,460 per household, resources that can be invested in: i) household connections of aqueduct and sewerage, ii) intradomiciliary connections of aqueduct and sewerage.

The integrating elements of the intra-household connection are: a. Sink, including the faucet and drain taps, b. Sanitary, including furniture and taps, c. Shower, including the poma, taps of a key, drain siphon and



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



floor grid, d. dishwasher made up of a pot, tap and drain taps, e. Laundry room with a key and drain, f. Storage tank when necessary, g. maximum one record per property. With the Program, intervention of 32,161 homes in 25 municipalities of 24 departments benefiting 143,089 Colombians was achieved

PROGRAM OF PROPERTY REGULARIZATION

The national government established an agreement with the Superintendency of Notaries and Registry of Colombia, which canceled the costs generated by the procedures of writing and registration before public instruments.

Territorial entities are responsible for the identification and processing of applications and the titling process is carried out within the framework of a cooperation agreement between the municipalities and the Ministry of Housing, City and Territory.

IMPROVEMENT OF NEIGHBORHOODS

The Integral Improvement of Neighborhoods MIB is a strategy to reduce urban poverty, through the set of physical, social, environmental, economic and legal-legal actions for the integration and inclusion of slums within the functional and productive structure of the city.

It seeks to improve the living conditions of the poor and extreme poverty, by renewing their housing environment jointly between the Nation, the municipality and the community. This program contributes to achieve the goals of social progress, sustainable development and poverty reduction, that is, greater prosperity for the entire population, through the urban ordering of the neighborhood, the legalization and regularization of it, and the execution of works of basic infrastructure and equipment.

The document CONPES (National Council for Economic and Social Policy) 3604 of 2009 establishes the Guidelines for the Consolidation of the Comprehensive Neighborhood Improvement Policy (MIB). The central objective is to strengthen the territorial entities in the urban management and normative application related to programs of integral improvement of sustainable neighborhoods (PMIB).

The document established as the Specific Objectives, the following:



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



1. Improve the knowledge of risk conditions in precarious settlements as an input to advance programs and projects of MIB.
2. Promote the articulation of policies and instances at the national, regional and local levels to focus investments in the PMIBs
3. Harmonize national and local regulations for the intervention of the zones subject to integral improvement.
4. Adopt the necessary tools to improve institutional capacity at the national and local levels through the National MIB Program with the purpose of supporting territorial entities in the formulation and implementation of MIB programs and projects at the local level.
5. Generate primary information on the part of the competent entities related to the conditions of precarious settlements and MIB projects in the cities of the country.
6. Promote citizen participation in the formulation and implementation of the PMIBs that guarantee the sustainability of the processes

From the Intervention Scale it can be said that the Comprehensive Neighborhood Improvement Programs are part of Integral Urban Projects - PUI and establishes that the Intervention Components are the following:

I. Ordering:

- Urban regularization
- Urban legalization

II. Home public services:

- Local Aqueduct Networks
- Local sewage networks and rainwater
- Cleanliness (solid waste)
- Local electrification networks



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



III. Risks, recovery and environmental protection:

- Risk mitigation works
- Environmental recovery

IV. Accessibility and Mobility:

- Vehicular access roads, connection of the neighborhood
- Platforms, cycle routes, stairways

V. Housing:

- Housing Improvement
- Resettlement
- Own Site Construction
- Property regularization

VI. Public Space and Equipment:

- Green areas, Alameda
- Children's parks
- Courts and sports center
- Day-care centers, schools, schools
- Community rooms

VII. Social development:

- Participatory Planning
- Social organization
- Coexistence
- Productive processes

VIII. Local strengthening:

- Identification of operational capacity
- Prioritization of investments and the evaluation of the impact of the investment



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



9. LEGAL AND INSTITUTIONAL FRAMEWORK FOR THE IMPLEMENTATION OF HOUSING POLICIES

In accordance with what is described in Decree 3571 of 2011, the Ministry of Housing, City and Territory has as its main objective to achieve, within the framework of the law and its powers, formulate, adopt, direct, coordinate and execute public policy, plans and projects in the area of territorial and urban planned development of the country, the consolidation of the system of cities, with patterns of efficient and sustainable use of land, taking into account the conditions of access and financing of housing, and the provision of public services potable water and basic sanitation.

In 2003, the National Housing Fund - Fonvivienda was created, as a Fund with legal personality, its own assets, budgetary and financial autonomy, without administrative structure or its own staff; subject to budgetary and fiscal regulations of the national order and attached to the Ministry of Environment, Housing and Territorial Development, today the Ministry of Housing, City and Territory.

Fonvivienda, which currently carries out its functions in accordance with the provisions of Decree-Law 555 of 2003, has among its objectives to consolidate the National Housing Information System and implement the policies of the National Government in terms of housing of urban social interest .

Unlike INURBE, Fonvivienda decided to outsource its activities in an Operating Entity (Function carried out by the Family Compensation Funds), in an Evaluation Entity (Findeter or the Family Compensation Funds) and in a Supervisory Entity (Fonade and Findeter in the current one housing policy).

On the other hand, it is important to bear in mind that the work of attention in the field of housing, of vulnerable households in rural land, is under the responsibility of the Ministry of Agriculture, through the Banco Agrario de Colombia.

10. CONCEPTUAL ELEMENTS THAT SHOULD HAVE A HOUSING POLICY, TO CONTRIBUTE TO THE DECREASE OF HUMAN, ECONOMIC AND SOCIAL LOSSES BY EFFECTS OF DISASTERS.

10.1. GENERAL CONSIDERATIONS REGARDING PUBLIC HOUSING POLICIES FOCUSED ON REDUCING VULNERABILITY TO DISASTERS



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



In spite of the efforts that have been made in several Latin American countries, in the sense of including risk management within housing policies and territorial planning, we see little effectiveness in them, taking into account that the actions of prevention and mitigation are not specifically addressing the threat and risk scenarios that are being generated. The aforementioned is evident in the fact that there continue to be great affectations, especially on the population with the lowest resources.

If we review the situation of Colombia in this matter, despite having considered the incorporation of disaster risk in the Land Management Plans, we see that 97% of these had not contemplated this variable within their planning instruments. At present 81% of the POT lost validity, so this is an opportunity to solve this problem. The Government of Colombia is betting on a new generation of Territorial Ordinance Plans, called Modern POTs, which will allow, among other things, to analyze the threats and risks of the territories.

On the other hand, despite the fact that Colombia has a national disaster risk management policy and a National Disaster Risk Management System, we still see major effects such as those that occurred in the City of Mocoa, Department of Putumayo in the year 2017, where the number of deceased people is close to 300 or, in the City of Manizales, Caldas, where there were great impacts due to a mass removal process that left about 20 people dead, more than 500 families affected and about 80 homes with problems. According to estimates of the Autonomous Corporation of Caldas, CORPOCALDAS, the recovery works could cost close to 18 Million Dollars.

It is very important to bear in mind that the prevention of disasters can not only remain on paper, but on the contrary it must be closely linked to public policy decisions and the generation of instruments, but above all in the application and effective implementation of them over the territory.

Likewise, the fundamental basis for reducing vulnerability to disasters is directly related to the decisions made about the territory. Hence, the plans of territorial ordering become more relevant in these matters.

However, the rapid growth of cities and the existing inequality in the world, are factors that promote the formation of new human settlements without planning processes and that generates them to be executed in a disorderly manner and in most cases high zones. risk. This is one of the main factors in the increase in the vulnerability of the communities in the face of the occurrence of earthquakes, landslides, floods, etc., especially for the population with the lowest resources.



10.2. ELEMENTS TO BE TAKEN INTO ACCOUNT IN PUBLIC HOUSING POLICIES.

There is no doubt that the formulation of public housing policies should consider a comprehensive view of the problem that includes elements for the construction of new projects and for the improvement of human settlements already built, many of them of informal origin.

In the first instance, the element of territorial organization will be addressed, which is common to the execution of new housing processes and the intervention and legalization of those already built. Subsequently they will expose particular elements for each of them.

10.2.1. TERRITORIAL PLANNING AS THE BASIS OF AN ADEQUATE HOUSING POLICY.

As mentioned above, the main basis for disaster prevention must be control over the territory, in such a way that the available areas are used in an adequate, planned manner and that they protect the life and heritage of the people who inhabit them. Some experts refer to this process as the diminution of the degree of exposure to threats. The foregoing indicates that the activities must be carried out on the areas where they offer the least danger, such as not locating buildings in areas susceptible to flooding, or mass removal, etc.

In addition to the above and to the extent that buildings already exist in areas of risk, processes must be planned to reduce vulnerability, by intervening with the environment and with the structures already built. It is clear that the most powerful instrument for disaster risk management, which allows the reduction of vulnerability to disasters, is territorial ordering.

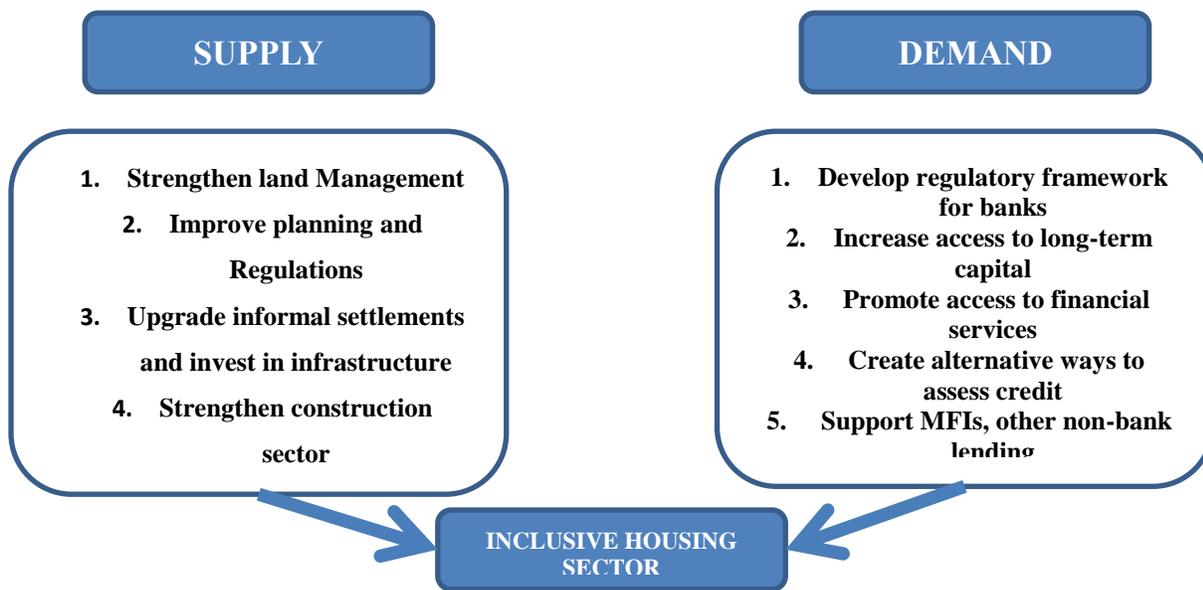
10.2.2. THE HOUSING VALUE CHAIN

To think of a comprehensive housing policy that encourages the resilience of cities, it is recommended to consider the entire value chain of housing and thus promote affordable housing. This value chain approach, according to the World Bank, allows analyzing and addressing the process of production and supply of housing, from the perspective of supply and demand. It also allows identifying the elements that must be improved and that must be addressed by housing policies.



In the value chain concept, from the supply side, key inputs such as land, infrastructure and construction must be considered. These elements are framed in the planning processes of the territory and the ordering as such.

On the other hand, from the perspective of demand, the different financing options available to both developers and consumers of housing must be addressed. A formal housing supply system is complex and requires an integrated sequence of inputs (for example, land, materials and infrastructure), along with the regulatory, institutional and financial capacities needed to support them.



10.2.3. IN TERMS OF NEW HOUSING

Within the framework of an integral housing policy, the promotion of new housing projects that attend in a planned manner, the deficit of quantitative deficit existing in the countries is fundamental. The promotion of quality projects that guarantee optimal location conditions (threats and risks), connectivity to public services, accessibility, proximity to the workplace of the inhabitants and facilities and social infrastructure should be considered.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



On the other hand, the housing supply for low-income households must be expanded, through the generation of financial instruments appropriate to the households' ability to pay, as well as incentives and exemptions to the public and private sectors for the generation of land that can be built up. quality housing projects.

In addition to the above, the prevention of disasters must be controlled by controlling the threats that may arise, through the requirement of compliance with Technical Regulations and Seismic Resistance. This must be linked to the requirement in the implementation of appropriate construction processes and the rigorous use of materials that meet specific technical standards.

The supply of basic public water and energy services, together with wastewater disposal and treatment systems, contribute significantly to increase the resilience of the territories and thus reduce vulnerability to disasters.

10.2.4. THE EXISTING HOUSE.

In the cities of Latin America and the Caribbean there is a high concentration of households inhabiting houses that are part of settlements of informal origin, which have been shaped by faults in the housing market, poor territorial planning, high cost of the developable land, and the inadequate territorial management of the risk, generating the territorial and functional exclusion of the cities. According to UN-Habitat information, in Latin America 26% of the population lives in slums.

In order to prevent the occurrence of disasters in these areas, work must be done to define public policies that allow the reduction of housing vulnerability and the mitigation of risk in precarious settlements.

The aforementioned can be achieved through the Housing Intervention, advancing housing improvement processes, mainly focused on the structural recovery of the same. These interventions should be complemented with interventions that allow the healthy intervention of housing, that is, overcoming deficiencies in the supply of drinking water, energy, drainage, bathrooms and kitchen.

Likewise, another type of complementary strategies can be implemented, which will allow households to include eco technologies for savings in water and energy consumption.



However, elements that allow interventions on the environment, that is to say in the Integral Improvement of the Neighborhoods, through interventions that allow mitigating the existing risk, intervening on urban planning and legalization, should be included in the housing policy guidelines. urban development, improve home public services, recovery, environmental protection and management of liberated areas and intervene in works of accessibility and mobility, as well as legal security of tenure.

Finally, it is very important, starting from the assessment of the risk of human settlements, to advance processes of relocation or resettlement of homes to safe areas and release the areas at risk for environmental protection or construction of green areas or recreational public spaces.

10.3. DISASTER RISK MANAGEMENT

All of the above must be complemented by a disaster risk management policy that allows municipalities to develop, maintain and guarantee the process of knowledge and risk reduction and disaster management.

As mentioned in the previous chapter, disaster risk management, "is a social process aimed at the formulation, execution, monitoring and evaluation of policies, strategies, plans, programs, regulations, instruments, measures and permanent actions for knowledge. and the reduction of risk and for disaster management, with the explicit purpose of contributing to the security, well-being, quality of life of people and sustainable development. "

It is very important to advance in the strengthening of the Municipalities in the management of the risk in their territories and in the articulation with the sectoral policies.

10.4. INSTITUTIONALITY.

In any case, the institutional framework that allows for the articulation of sectoral policies must be guaranteed, in this case housing policies, with policies for land use planning and disaster risk management.

This must be complemented with the appropriation of resources that allows both municipalities and national entities to carry out actions that allow them to understand risk, prevention, mitigation, response and recovery, understand: rehabilitation and reconstruction.



11. MAIN CONCLUSIONS

1. The most powerful instrument for disaster risk management, which allows the reduction of vulnerability to disasters, is territorial ordering. The main basis for disaster prevention should be control over the territory, in such a way that the available areas are used in an adequate, planned manner and that protect the life and heritage of the people who inhabit them. In addition to the above and to the extent that there are already buildings located in risk areas, processes must be planned to reduce vulnerability, by intervening on the environment and on structures already built.
2. Addressing the consequences of natural disasters, in addition to the loss of human lives, can cost four times more than investing in prevention strategies such as the improvement of existing housing or the resettlement of homes located in areas of non-mitigable risk.
3. In the housing policy should promote and encourage comprehensive actions that consider the ordering of the territory, risk management and housing improvement programs, resettlement, the Integral Improvement of Neighborhoods and construction of new quality housing.
4. In order for a Housing Policy to contribute to the increase of Resilience, it must equitably consider, on the one hand, instruments for the construction of new, quality and well-located housing, which guarantees an adequate supply to minimize the risk of establishing settlements of informal origin, and on the other hand subsidy instruments for structural improvement of housing, integral improvement of neighborhoods, asset titling and population resettlement processes.
5. Colombia has many of the ingredients for the implementation of programs that increase the resilience of slums. On the one hand, there are proven experiences in territorial ordering and planning, disaster risk management, urbanization legalization and integral improvement of neighborhoods. On the other hand, there are procedures that allow the structural improvement of housing, the assessment of the vulnerability of homes with procedures endorsed by the earthquake resistance commission, the resettlement of homes and the construction of new housing.



Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 19-23, 2018



Notwithstanding the foregoing, it is considered that procedures for the execution and financing of housing improvement projects should be optimized. Among the elements to be improved are:

- ✓ The reduction of procedures for the formulation and viabilization of projects.
- ✓ The Regulation of Law 1848 of 2017, regarding the procedures for construction licenses and costs. Particularly, the strategy of not charging for the construction license in cases of housing improvement, should be implemented quickly, which will allow greater speed and zero cost in the licensing processes of structural improvements.
- ✓ Strategies should be sought that allow the articulation of Microfinance and of the traditional financial sector, with the improvement subsidies granted by the national Government.
- ✓ Promoting at policy level, strategies for capacity building, economic reactivation and entrepreneurship of vulnerable households that live in settlements of informal origin.

6. The voluntary resettlement of population located in areas of non-mitigable risk should be promoted. Some strategies that could be implemented are the following:

- ✓ Articulating the different values of Recognition (VUR, Transitional Relocation Assistance and complementary subsidy contributions, Bogotá case), with housing leasing strategies, in order to allow households to use the temporary relocation resources to pay the rent and the Unique Value of Recognition VUR and the Subsidy, to exercise option of purchase of the house.
- ✓ Guaranteeing that households that relocate voluntarily, maintain the same socioeconomic level and the same benefits of the social programs of the state, and that they can pay the same value for the public utilities they had before the resettlement process. Likewise, the exemption of property and other tax payments that motivate the transfer of risk areas must be guaranteed.
- ✓ Promoting Housing Projects that are receptors of resettled households, with investments and multi-sector infrastructures (schools, health centers, sports facilities, public space, etc.). That is, new urban developments with higher quality indexes.
- ✓ It is important to generate incentives for the participation of the private sector in these projects

12. REFERENCES

1. Colombia, Ministerio de Ministerio de Vivienda, Ciudad y Territorio. (2014). Libro “Cien años de políticas habitacionales” Bogotá.



2. Colombia, Departamento Nacional de Planeación de Colombia – DNP. (2012). Libro “Misión Sistema de Ciudades. Una política nacional para el sistema de ciudades colombiano con visión a largo plazo”. Bogotá.
3. Colombia, Unidad Nacional para la Gestión del riesgo de Desastres de Colombia UNGRD. (2016). Documento – Presentación “Integración de la Gestión del Riesgo y el Ordenamiento Territorial Municipal. Bogotá.
4. USA, World Bank. (2012). Libro “Análisis de la gestión del riesgo de desastres en Colombia Un aporte para la construcción de políticas públicas”, Washington, D.C
5. Kenia, Programa de las Naciones Unidas para los Asentamientos Humanos, ONU-Hábitat. (2012). Estado de las Ciudades de América Latina y El Caribe.
6. Colombia, Cámara Colombiana de la Construcción de Colombia CAMACOL, (2015) Políticas para impulsar la demanda de vivienda en Latinoamérica: una mirada a las experiencias recientes. Federación Interamericana de la Industria de la Construcción. Bogotá.
7. USA, Banco Interamericano de Desarrollo BID. (2012). Libro “Un espacio para el desarrollo: Los mercados de vivienda en América Latina y el Caribe”, Washington, D.C.
8. Colombia, Ministerio de Vivienda, Ciudad y Territorio de Colombia. (2015). Decreto 1077 de 2015, Por medio del cual se expide el Decreto Único reglamentario del Sector Vivienda, Ciudad y Territorio de Colombia. Bogotá.
9. USA, Economic Commission for Latin America and the Caribbean. (2012). Publication: Estimation of the effects of disasters in Latin America 1972-2010. Washington, D.C.

13. TABLES



14. Table No 1. Source: ECLAC. The estimation of the effects of disasters in Latin America 1972-2010.
15. Table No 2. Affected Housing by Type of Event (1998 to 2016). Source: UNGRD. Own elaboration.
16. Table No 3. People affected with emergencies, (1998 to 2016). Source: UNGRD. Own elaboration.
17. Table No 4. Source UNGRD. Own elaboration
18. Table No 5. Cost of resettling an eligible household in the District of Bogotá program
19. Table No 6. APPROACH OF SUBSIDIES FONVIVIENDA. Source: Fonvivienda. Own elaboration.
20. Table No 7. Source: Fonvivienda. Own elaboration.
21. Table No 8. Source: Fopavi. Own elaboration
22. Table No 9. Source: Fonvivienda. Own elaboration.
23. Table No 10. subsidies assigned for healthy improvement. Source: Fonvivienda. Own elaboration

24. FIGURAS

25. Figure No 1. Affected Housing by Type of Event. Source: UNGRD. Own elaboration
26. Figure No 2 Source: DNP. Elaboration Urban Economy
27. Figure No 3. Source: Fonvivienda. Own elaboration
28. Figure No 4. Source: Fonvivienda. Own elaboration
29. Figure No 5. Sum of Value Assigned by year. Source: Fonvivienda. Own elaboration
30. Figure No 6. subsidies for structural improvement. Source: Fonvivienda. Own elaboration

31. MAPS

32. Map No 1. Tectonic Plates
33. Map No 2. Seismic Hazard Areas Colombia. Source: Regulation NSR-10.