

HOUSING RESPONSE TO EARTHQUAKES SEPTEMBER2017 IN MEXICO.





	1. Project Introduction					
	2.	. Location of the attended municipalities				
	3.	Objectives	5			
	4.	Community and Housing assessment:	6			
1.1	Bacl	rground	6			
1.2	Phys	sical Characteristics of the State of Chiapas	6			
1.3	Ove	rall context after the earthquake	7			
1.4	Mu	nicipalities and localities selection	8			
1.5	Affe	cted families selection	10			
1.6	Ben	eficiaries socio-demographic profile	11			
	5.	Social intervention and workshops organization	13			
	6.	Technical constructive advice	14			
	7.	Architectural proposal	14			
	8.	Self-production Housing and supervision	16			
	9.	Challenges and difficulties	17			
	10.	Learned lessons	17			
	11.	Beneficiaries list	19			
	12.	Photographic memory	23			
	13.	Bibliographic references	27			

1. Project Introduction

On September 19, 2017, an earthquake of magnitude 7.1 Richter scale occurred with an epicenter in the southeast of Axochiapan, Morelos at 1:14:40 hrs. It was located in the state boundary between the states of Puebla and Morelos, leaving serious damages in the states of Morelos, Puebla, State of Mexico, Tlaxcala, Guerrero, Oaxaca, Chiapas, Veracruz and Mexico City (UN Mexico).

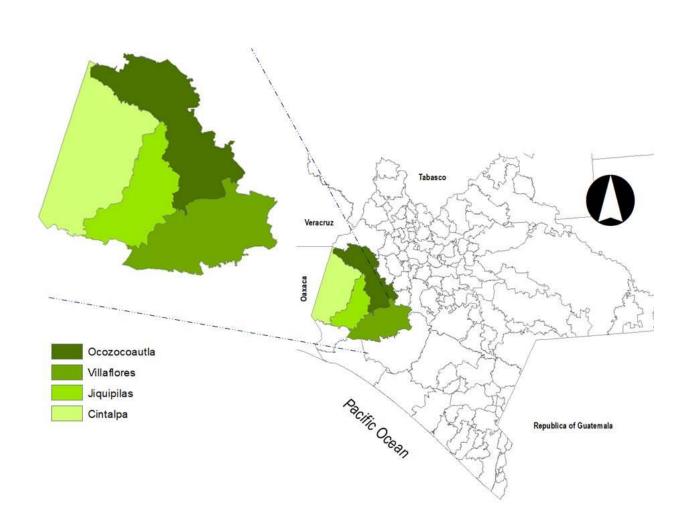
This geographical area is located in a region with high seismic activity, which according to data from the National Seismological Service has increased its frequency in recent years. Particularly in Mexico, vulnerability to seismic events is exacerbated not only by intensity and frequency; but also by the degree of social deprivation that prevails in a large part of the population, which represents greater risk during these events.

In these circumstances, Habitat for Humanity Mexico (HFHM) as an association that promotes housing as an important human right, launches the Reconstruction Program of 1,446 homes in the states of Oaxaca, Chiapas, Puebla, Morelos, and Mexico City. Through this program, more than 45,000 direct and indirect jobs were generated in the affected communities. The main purpose was to get 4,300 people to recover their homes, in addition to promoting a sense of belonging by strengthening the social fabric within the communities.

This report is prepared in order to provide a broad overview of all the activities carried out during the project. For us, it is essential to inform our donor about the progress of the project in each of the locations where HFHM is participating. This document is also a means for verification the impact of the association, and also to share the strengthening the social fabric reached in the affected communities.

It is important to mention that the main achievements at the community level were the development of skills that will allow families to be resilient communities to face this type of natural events.

2. Location of the attended municipalities



3. Objectives

Goal

A Housing comprehensive reconstruction in the Zona Frailesca and the Central Zone of Chiapas affected by earthquakes, through a recovery process to build resilient communities, strengthening community capacities for coordination, planning, management, and monitoring of the earthquakes recovery process.

Objectives

- Provide a habitable and durable dwelling to families affected by the earthquakes, providing advice and technical constructive supervision during the process.
- Strengthen local organizational capacities through a process of social and educational participation with families affected, in order to organize the reconstruction of housing.

4. Community and Housing Assessment

1.1. Background

Mexico is located in an area of high seismicity due to the interaction of five tectonic plates: North America, Cocos, Pacific, Rivera, and the Caribbean. This is the reason why, according to the National Seismological System (SSN), an average of up to 15 quakes is reported daily throughout the Mexican territory.

Chiapas is one of the states in the country with the highest seismicity, due to the convergence of the Caribbean Plate and the Cocos Plate in front of its coasts. On September 7, 2017, at 23:49 hrs, an earthquake with a magnitude of 8.2 on the Richter scale was recorded at a depth of 45.9 kilometers, with an epicenter 133 kilometers from Pijijiapan, Chiapas. As a result, damages were estimated in more than 100 thousand houses.

The movement was felt in states of the central and southern areas of the country but the greatest damage occurred in Chiapas and Oaxaca, especially in the area of the Tehuantepec Isthmus. Since then, the SSN has reported more than 26,000 aftershocks whose magnitude has reached 6.1 degrees.

1.2. Physical Characteristics of the State of Chiapas

Physical Geography The entity borders the north with Tabasco; to the east with the Republic of Guatemala; to the south with the Republic of Guatemala and the Pacific Ocean; to the west with the Pacific Ocean, Oaxaca and Veracruz-Llave. It has an approximate territorial extension of 75 344 Km2 and represents 3.8 percent of the total area of the country.

Regarding the natural environment, in the orography of the state, seven physiographic regions may be distinguished (Pacific Coastal Plain, Chiapas Sierra Madre, Central Depression, Central Highlands, Eastern Mountains, Northern Mountains, and the Gulf Coastal Plain). Its hydrological resources represent 30% of the country, the major rivers are Grijalva and Usumacinta, Belisario Domínguez (La Angostura), Manuel Moreno Torres (Chicoasén), Nezahualcóyotl (Malpaso), and Angel Albino Corzo (Peñitas).

Chiapas is located in the intertropical fringe of the planet; however, the climate is modified by the variations in the relief, presenting climates of the warm, semi-warm, temperate climate and cold. In terms of humidity, there are areas with heavy rains throughout the year, as well as large extensions with a perfectly defined rainy season (May-October) and a dry season (November-April).

Seismicity. Chiapas, separated from the rest of the country by the Isthmus of Tehuantepec, is part of the main seismic zone of Mexico. The seismic chart of Chiapas shows that the entire surface of the state is under the influence of active continental and submarine foci, according to records (Figueroa, 1973) movements have been generated that have reached the intensity of VIII (Minor damages in design structures) on the Mercalli scale.

It is possible to observe that the highest concentration of epicenters are located in the border region with Guatemala, off the Pacific coast, although there have been significant movements in other regions of the state.

1.3. Overall context after the earthquake.

After the earthquake a state of emergency was declared by 92 municipalities, with the following damages: 16 deceased, 172 injured; 242 thousand 997 homes affected, 1 million 480 thousand people affected; 16 thousand 796 homes with total damage, 41 thousand 569 with partial damage; 113 schools with total damage, 2 thousand 173 with partial damage; 33 health-care units with total damage, 161 with partial damage; 141 churches with total damage, 321 with partial damage; 75 commercial premises with total damage and 583 with partial damage.

In light of the emergency situation, the Chiapanecans received only humanitarian aid from the same population and influential federal support, the majority coordinated by state authorities with a lot of opacity. Under this scheme, the government granted 120 thousand MXN to the victims for self-construction, through Bansefi cards

considering four scheduled administrations of 30 thousand pesos each, without technical assistance, in a highly seismic zone, and with input prices such as cement and the steel in continuous increase. This support was insufficient for the population to rebuild adequate housing after the disaster (Miceli, 2018).

Characteristics of the houses affected by the earthquake

There are traditional houses in the area, with a rectangular plan, gabled roofs or with extended slopes reaching a maximum height of five meters and a minimum height of three point five meters or three meters.



Construction system based on stone foundations, 40 cm adobe walls, overlapping at the vertices in each corner of the building, without an enclosure.

Source of information: Internet. San Cristóbal de las Casas, Chiapas.

Cover based on wooden beams and roof. Several houses with gable roofs with wooden structure, planks and clay tile, a maximum height of 3.30 and a minimum of 2.8. Foundations of stone are used in the area, walls based on adobe blocks with a thickness of 40 cm.

In general, the dwellings in the intervention zones are characterized by traditional construction, with local materials; the age of damaged homes ranges between 21 and 72 years, in addition to the lack of maintenance and the seismic peculiarities of the entity, increased the risk of affectation by earthquakes.

1.4.Municipalities and localities

selection

One of our first actions was to gather information from official and civil organizations sources related to the impact of earthquakes in Chiapas. We obtained information on

proximity and accessibility, communities with high indicators of economic vulnerability and taking into account that their livelihoods were affected by the earthquakes; we also consider communities willing to collaborative work and to a community organization.

Subsequently, based on the information, the visits made to the different municipalities and the collaboration of various partners allowed us to make decisions about the locations to be intervened and the profile of the beneficiaries.

Data table 1. Municipalities and localities intervened.

State		Municipalities / Number of Fuente. Elaboración propia Locality Beneficiaries	
	1	Cintalapa	21
		Cintalapa	12
		Emiliano Zapata	9
	2	Jiquipilas	15
		Jiquipilas	14
		Miguel Hidalgo	1
	3	Ocozocuautla	17
		Espinal de Morelos	17
CHIAPAS	4	Villaflores	109
4		Benito Juárez	59
≝		Colonia Juan Pablo	3
天		Cristóbal Obregón	1
		Cuauhtémoc	5
		Jesús María Garza	29
		Josefa Ortiz de Domínguez	1
		Melchor Ocampo	1
		Nuevo México	1
		Tierra y Libertad	1
		Villaflores	8
		Grand total	162

The project is developed in the sociodemographic regions of the Central Zone and the Fraylesca Zone. The Central Region of Chiapas is composed of 22 municipalities, including Jiquipilas, Cintalapa, and Ocozocuautla, these areas are characterized as a region of agricultural production. The Frailesca Zone or also

Fraylescana Region is integrated by 6 municipalities, including Villaflores, this region is characterized by its high agricultural and livestock production. This region receives its name due to the abundance of friars that crossed this region in the past since the friars, in their Dominicos majority, were owners of haciendas and they were also in charge of the evangelization. After the earthquake productive activities were damaged, because families have prioritized allocate the few resources they have for the reconstruction of their houses.

1.5. Affected families selection

After the assessment to identify the damages in the selected localities, the criteria that the beneficiaries had to cover to be able to access the project were defined.

- Total or partial loss of housing.
- Families that received FONDEN card and are willing to invest the resources in the reconstruction of their home.
- Priority to families in vulnerable condition: Women heads of households, older adults, handicapped family members, families in a situation of economic poverty.
- Families that accept the accompaniment of HFHM through the Integral Technical Advisory.





Source of information: HFHM files.

The next step was the outreach with the community, which at the first moment was complicated by the political, economic and social context. The fraud background in the area and the change of federal administration, where many supports were conditioned by a vote, hindered the process. However, the focus of the HPHM staff through home visits, meetings with neighbors and recommendations among relatives, friends or neighbors, as well as a clear and detailed explanation of our work model, facilitated the approach with the communities. For most from the owners, it was easy

to comply with the documentary requirements, in some cases, to obtain a proof of the address and the deeds made it difficult for them to follow the process.

4.6 Beneficiaries socio-demographic profile

Of the beneficiaries that satisfactorily cover the requirements, 58% are women, with ages between 55 and 60 years. In terms of occupation, household chores predominate. While in terms of schooling, most have studied at the basic level (elementary and junior high school) completed.

This information allows us to profile our beneficiaries with a significant percentage of older adults, characteristic of rural communities that have completed the demographic transition, but their last generations are still present. It is an aging population with low birth and mortality rates, and with a reduced natural growth.

Many of these people are in situations of fragility or dependency problems, to which is added a contextual reality of lack of services and absence of interventions. All this involves an obvious risk of isolation and a loss of opportunities in environments that restrict the possibilities of participation.

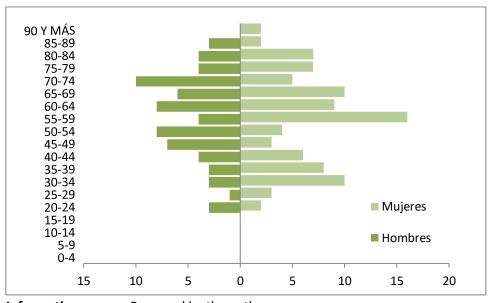


Chart 1. Population pyramid, beneficiaries.

Information source: Prepared by the authors.

5. Social intervention and workshops organization

The integral intervention methodology incorporated, as a fundamental basis, the organization of the beneficiaries in mutual aid committees, integrating nine committees in all the communities. The objective was to encourage the participation of the community and to mobilize it in favor of itself, looking forward to contributing towards community resilience, that is a collective condition to overcome disasters and massive situations of adversity and the capacity to build on them. This confirms that before a disaster event, some communities fall into despondency and despair, while others fight adversity and overcome difficulties.

The workshops given during the reconstruction process to the affected families had the purpose of promoting the interest and the learning of skills that facilitate the resilient development of the people, through the sensitization, recognition, empowerment, valuation, and use of our abilities and personal resources.

We look to empower people's skills so that they do not lose their sense of belonging and help themselves in vulnerable situations, resolve conflicts and organize as a community to help each other. It is essential that they appropriate their home and inhabit it in an adequate and healthy way, using the spaces in a correct way, providing educational tools to the families so that they carry out the work of promoting practices and healthy habits in the home.

Training families. The objective of the formative - organizational processes was to generate community spaces where the impact of what was lived was socialized and the strengths that worked to mitigate the crisis and the post-crisis were recognized. We promoted resilience and the creation of family and neighborhood level response plans through a comprehensive accompaniment. Throughout the process, the following workshops were implemented:

Data table 2. Workshops implemented to the families.

Workshop	Objective	Topics
HFHM's Identity.	Participants will know the institutional identity of HFHM: who HFHM is, what we do, how we do it, the products we offer, so participants will understand our work scheme clearly.	What is identity? - What HFHM is? – HFHM's Mission and Vision.

Organization and Strengthening of Local Committees	We seek that the members of the Local Committees reflect on the importance of having an organized group, the advantages of the organization and finally to form a Local Committee.	What is organization?, Why do we organize?, Aspects to strengthen the organization, Elements and responsibilities of the Local Committee, - Formation of a local contextualized committee to the emerging reconstruction program.
Housing and Habitability	The participants will recognize the concept of habitability and its importance within their homes, relating their family-community context to their uses, needs, and desires in such a way that they improve and reduce the risks of their home and environment, all this according to the current situation.	Self-construction, living, and habitability Habitability's needs in my home - Reinforcement How do I inhabit my home?
Housing and Healthy Habitat	The participants will acquire the knowledge essential to generate healthy attitudes and practices both within the home and in its immediate surroundings.	-Right to adequate housing and its relation to healthy housing, -Elements of adequate housing, -Healthy HousingThe house and its environmentImportance of consumption and management of water resourcesHousing and waste solidsHygiene in housing and vector control.
Resilience	Participants will recognize the concept of resilience and its relationship with their environment, as well as the specific situation of their own house.	-What is resilience? -Elements of the resilience cycleResilience applied in my environment.
Construction basic principles	To get the beneficiaries to know and identify the basic construction principles in order to intervene in their current home or in a future stage of remodeling.	-Preliminary construction activitiesStructural recommendations for the construction of foundations, walls, and roofs.

Information source: Prepared by the authors.

This training process significantly determined the participation of the family members in the construction, including the participation of spouses, children, daughters-in-law, sons-in-law, brothers-in-law, and brothers. During activities such as cleaning debris, repelling, painting, preparing the mix, sticking block, digging, passing mix and pouring sand was where there was greater participation of family members.

6. Technical constructive advice

The attention provided to families for the correct execution of the work is an accompaniment that starts from the moment of the conceptualization of the architectural project through participatory design. Thus we seek to strengthen the establishment of the committees that allow the transfer of information through the workshops and ends with the follow-up of the work that is provided to each project. We ensure the quality of each house through technical advice that is carried out in the following stages:

- 1. Diagnosis, survey and detection of needs.
- Architectural proposal
 - Participatory design for architectural proposal.
 - Budget.
 - Work program.
 - Self-construction and housing supervision.
 - Logistics organization with the community for the delivery of construction materials.
 - Advice on costs of materials and labor.
 - Construction monitoring and supervision.
- 3. Final delivery of the work.

The houses will be rebuilt by the families through the process of self-production in which they will be active actors during the process, for managing labor, as well as the work through mutual aid or self-construction.





Fuente. Archivo Hábitat.

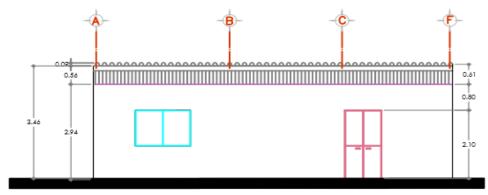
7. Architectural proposal

In this phase, the drawings of the architectural and executive project are initiated to obtain the authorization of the construction.

The dimensions of each project respond to the particular needs of each community and the minimum habitable dimensions according to the number of members of each family. The spatial configuration of each house is appropriate to the family basic needs, looking to meet the basic criteria of habitability and visualizing possible growth in housing in the future.

The houses will be built with solid block or hollow in their walls, polished floor, covered with sheets and sanitary solution. The types of new housing, whether complemented or made from scratch, are built according to the environment.





Architectural Project: Manuel Solís Conde. Beneficiary Jesús M. Garza, Chiapas. HFHM file.

8. Self-production Housing and supervision

The process of self-production is understood as the soil management, construction and distribution of housing under the direct control of its users individually or collectively, which can be developed through the participation of third parties or through self-construction processes.

During the project, this modality was strengthened through the introduction of families to the constructive process through the community organization where the social promoter carried out mutual assistance activities; and the committee defined which family would receive the support as a priority.

The families were accompanied by the Technical Advisor in the field through periodic visits where the progress and construction processes were verified.

70% of the owners participated in the construction of their own houses predominantly in activities such as hauling materials, cleaning debris, peeling, and painting. Meanwhile, the 30% who did not participate was due to age and health problems.

9. Challenges and difficulties

- Insufficient family income to pay for labor.
- The families did not have enough economic income, therefore, they dedicated very little money for the construction of their houses. The solution was to organize them with the committee for mutual support between beneficiaries and family members, either for construction support among all or lowering construction costs between bricklayers who are part of the relatives of the committee.
- Low-skilled labor and empirical construction.
 Workshops were held on the basic principles of construction, to ensure that beneficiaries recognize the basic elements of housing and its proper execution.

.

10. Learned lessons

- The work experience allows us to conclude that the design and application of joint work models between and with the beneficiaries is the best way to take advantage of their knowledge and skills. In addition to recognizing the desire of some of them to participate, learn and collaborate in the project, beyond just being recipients of aid.
- Great learning is planning. We must consider several scenarios (most adverse) and elucidate possible solutions to minimize the impact on delays, both in the constructive part and in the organizational part with the families.
- In processes of reconstruction, empathy is fundamental, because it helps to recognize the families' needs and generates a more effective communication between them and us, which will be reflected in a more effective support.
- It is necessary to promote and maintain greater contact and control with suppliers, innovating in forms of collaboration, monitoring, control, and production of the elements that we provide to the beneficiaries.

- Promote greater integration and collaboration among the beneficiaries, their master builders and our technical team, for better quality in their houses, and thus take advantage of the experience of master masons.
- Look for an approach with each of the families according to their situation: context, level of affectation, family and economic situation. Also, propose various schedules that address possible delays or difficulties.
- Understand that families can show or manifest needs that for our vision are not a priority and, nevertheless, express understanding and support for them.
- To consider important a broad technical participation and a humble and compassionate look for facing disasters, in particular, to adapt to the cultural context and thus be able to share the necessary architectural knowledge to correct future errors.

11. Beneficiaries

Table 3. List of Beneficiaries.

NBR	NAME	MUNICIPALITY	LOCALITY
1	ADA LINDA CAMACHO ARCE	CINTALAPA	EMILIANO ZAPATA
2	ADAN GARCIA MENDOZA	CINTALAPA	EMILIANO ZAPATA
3	BERTHA TRINIDAD SILAS	CINTALAPA	EMILIANO ZAPATA
4	CARLOS MORALES ARCE	CINTALAPA	EMILIANO ZAPATA
5	LUVIA LOPEZ TOLEDO	CINTALAPA	EMILIANO ZAPATA
6	MARIA MEY ORTIZ LAZARO	CINTALAPA	EMILIANO ZAPATA
7	MODESTA TRINIDAD MARTINEZ	CINTALAPA	EMILIANO ZAPATA
8	SADIA EUGENIA CRUZ CAMACHO	CINTALAPA	EMILIANO ZAPATA
9	MELANI TRINIDAD ARCE	CINTALAPA	EMILIANO ZAPATA
10	CLARA ELENA VERA MENDEZ	CINTALAPA	CABECERA
11	LUDIVINA DURANTE MAZARIEGOS	CINTALAPA	CABECERA
12	MARIA DEL SOCORRO CRUZ CRUZ	CINTALAPA	CABECERA
13	MERCEDES SALINAS TRUJILLO	CINTALAPA	CABECERA
14	AMELIA CRUZ CASTELLANOS	CINTALAPA	CABECERA
15	RAUL ERAY ESCOBAR	CINTALAPA	CABECERA

16	CANDELARIA PEREZ CLEMENTE	CINTALAPA	CABECERA
17	MARIA DEL REFUGIO RODRIGUEZ CRUZ	CINTALAPA	CABECERA
18	MARIA DOLOREZ LLAVEN MORALES	CINTALAPA	CABECERA
19	MARIA ELENA LOPEZ MOGUEL	CINTALAPA	CABECERA
20	MERCEDES MARTINEZ ARCE	CINTALAPA	CABECERA
21	RITA CRUZ HERNANDEZ	CINTALAPA	CABECERA
22	YOLANDA LOPEZ SANTOS	JIQUIPILAS	CABECERA
23	AIDA DOMINGUEZ CRUZ	JIQUIPILAS	CABECERA
24	DAGOBERTO ISIDRO CALDERON ESQUINCA	JIQUIPILAS	CABECERA
25	CANDELARIA URBINA GALDAMEZ	JIQUIPILAS	CABECERA
26	PABLO CRUZ OVANDO	JIQUIPILAS	CABECERA
27	RAFAEL LOPEZ CRUZ	JIQUIPILAS	CABECERA
28	RAFAEL SALINAS LOPEZ	JIQUIPILAS	CABECERA
29	NELLY ESQUINCA CRUZ	JIQUIPILAS	CABECERA
30	MARIA DE JESUS CASTRO LOPEZ	JIQUIPILAS	CABECERA
31	MARIA DE JESUS VALENCIA LOPEZ	JIQUIPILAS	CABECERA
32	FAUSTO DURAN CRUZ	JIQUIPILAS	CABECERA
33	HERLINDA LAZARO CRUZ	JIQUIPILAS	CABECERA
34	ROSA LILA ESPINOZA VEGA	JIQUIPILAS	CABECERA
35	ANTONIO RIOS PEREZ	JIQUIPILAS	CABECERA
36	AIDE NUÑEZ SARMIENTO	OCOZOCOAUTLA	ESPINAL DE MORELOS
37	MARIA GRISELDA PIMENTEL SARMIENTO	OCOZOCOAUTLA	ESPINAL DE MORELOS
38	CLARA SARMIENTO MELGAR	OCOZOCOAUTLA	ESPINAL DE MORELOS
39	ANGEL MEDINA SARMIENTO	OCOZOCOAUTLA	ESPINAL DE MORELOS
40	VIRGINA NUÑEZ CORZO	OCOZOCOAUTLA	ESPINAL DE MORELOS
41	MONICA SARMIENTO HERNANDEZ	OCOZOCOAUTLA	ESPINAL DE MORELOS
42	SAUL OCHOA GORDILLO	OCOZOCOAUTLA	ESPINAL DE MORELOS
43	BERNANDINO VELAZQUEZ LOPEZ	OCOZOCOAUTLA	ESPINAL DE MORELOS
44	TERESA FLORES MORALES	OCOZOCOAUTLA	ESPINAL DE MORELOS
45	BLANCA LUZ JIMENEZ PIMENTEL	OCOZOCOAUTLA	ESPINAL DE MORELOS
46	DANIEL AGUILAR ROMERO	OCOZOCOAUTLA	ESPINAL DE MORELOS
47	VICTOR MANUEL ESPINOZA CAPITO	OCOZOCOAUTLA	ESPINAL DE MORELOS
48	JOSE IGNACIO GALDAMEZ OCHOA	OCOZOCOAUTLA	ESPINAL DE MORELOS
49	GABRIEL ROMERO REYES	OCOZOCOAUTLA	ESPINAL DE MORELOS
50	MARIA DE LOS ANGELES PIMENTEL NUÑEZ	OCOZOCOAUTLA	ESPINAL DE MORELOS
51	JUAN CAPITO MOGUEL	OCOZOCOAUTLA	ESPINAL DE MORELOS
52	CARMEN LOPEZ GOMEZ	OCOZOCOAUTLA	ESPINAL DE MORELOS
53	MARIA DEL CARMEN DIAZ CRUZ	JIQUIPILAS	MIGUEL HIDALGO
54	MARGARITA URBINA SARMIENTO	VILLAFLORES	BENITO JUAREZ

55	ALEJANDRINA LEON FERNANDEZ	VILLAFLORES	BENITO JUAREZ
56	MARLIT CHACHON URBINA	VILLAFLORES	BENITO JUAREZ
57	LUCRECIA CRUZ VIDAL	VILLAFLORES	BENITO JUAREZ
58	ORFILIA SALINA MENDOZA	VILLAFLORES	BENITO JUAREZ
59	ARIOSTO ALAMILLA ENRIQUEZ	VILLAFLORES	BENITO JUAREZ
60	SELENE SANCHEZ ALAMILLA	VILLAFLORES	BENITO JUAREZ
61	JOSEFA SANCHEZ CHACON	VILLAFLORES	BENITO JUAREZ
62	MARIA SUSANA ROJAS CRUZ	VILLAFLORES	BENITO JUAREZ
63	AMINTA VAZQUEZ NANGUELU	VILLAFLORES	BENITO JUAREZ
64	MERCEDES URBINA MORALES	VILLAFLORES	BENITO JUAREZ
65	BULMARO BASQUEZ NANGUELU	VILLAFLORES	BENITO JUAREZ
66	JAVIER CHACHON PEREZ	VILLAFLORES	BENITO JUAREZ
67	ARODI ALFARO SARMIENTO	VILLAFLORES	BENITO JUAREZ
68	ALFREDO JOSE VICENTE	VILLAFLORES	BENITO JUAREZ
69	CAMILA CHACHON SANCHEZ	VILLAFLORES	BENITO JUAREZ
70	SILVIANA CRUZ FONSECA	VILLAFLORES	BENITO JUAREZ
71	MAGNOLIA PEREZ SOLIS	VILLAFLORES	BENITO JUAREZ
72	GUADALUPE JIMENEZ VAZQUEZ	VILLAFLORES	BENITO JUAREZ
73	NORMA SALINAS PEREZ	VILLAFLORES	BENITO JUAREZ
74	BENIGNA JIMÉNEZ PÉREZ	VILLAFLORES	BENITO JUAREZ
75	YERI ENRIQUE MADRIGAL	VILLAFLORES	BENITO JUAREZ
76	MANUELA RODRIGUEZ ZAMBRANO	VILLAFLORES	BENITO JUAREZ
77	NAYELI PEREYRA OVANDO	VILLAFLORES	BENITO JUAREZ
78	MARTHA BEATRIZ HERNANDEZ SESMA	VILLAFLORES	BENITO JUAREZ
79	YADIRA CERVANTES VAZQUEZ	VILLAFLORES	BENITO JUAREZ
80	ISABEL GONZALEZ RUIZ	VILLAFLORES	BENITO JUAREZ
81	DORA LUZ CRUZ CASTRO	VILLAFLORES	BENITO JUAREZ
82	ANTOLIN CRUZ MOLINA	VILLAFLORES	BENITO JUAREZ
83	PILAR CASTRO CIGARROA	VILLAFLORES	BENITO JUAREZ
84	AMPARO VAZQUEZ SARMIENTOS	VILLAFLORES	BENITO JUAREZ
85	FRANCELIA NUCAMENDI MARTINEZ	VILLAFLORES	BENITO JUAREZ
86	FRANCELIA CERVANTES LIEVANO	VILLAFLORES	BENITO JUAREZ
87	MARIOLY MENDEZ MACIAS	VILLAFLORES	BENITO JUAREZ
88	CARLOS NÁJERA CRUZ	VILLAFLORES	BENITO JUAREZ
89	MARIA DEL CARMEN ENRIQUEZ SÁNCHEZ	VILLAFLORES	BENITO JUAREZ
90	CRISTIANIS CASTRO RINCON	VILLAFLORES	BENITO JUAREZ
91	MANUEL ANGEL NUCAMENDI VELASQUEZ	VILLAFLORES	BENITO JUAREZ
92	MARÍA TERESA SÁNCHEZ PÉREZ	VILLAFLORES	BENITO JUAREZ
93	JOSE ANTONIO MENDOZA GÓMEZ	VILLAFLORES	BENITO JUAREZ

94	MARIA ANTONIA MENDOZA SARMIENTO	VILLAFLORES	BENITO JUAREZ
95	DIONEY GOMEZ REYES	VILLAFLORES	BENITO JUAREZ
96	EVANGELINA GALLEGOS HERNANDEZ	VILLAFLORES	BENITO JUAREZ
97	NALLELY TECO MENDOZA	VILLAFLORES	BENITO JUAREZ
98	MARIA DEL SOCORRO ALBORES GOMEZ	VILLAFLORES	BENITO JUAREZ
99	MARIA NELI ENRIQUEZ MOLINA	VILLAFLORES	BENITO JUAREZ
100	GILBERTO ALAMILLA ENRIQUEZ	VILLAFLORES	BENITO JUAREZ
101	BIBIER MOLINA CRUZ	VILLAFLORES	BENITO JUAREZ
102	MARIA DEL SOCORRO AGUILAR NUCAMENDI	VILLAFLORES	JESUS MARIA GARZA
103	AURA AGUILAR NUCAMENDI	VILLAFLORES	JESUS MARIA GARZA
104	FLAVIO MONTERO PÉREZ	VILLAFLORES	JESUS MARIA GARZA
105	ROSARIO FLORES JOSE	VILLAFLORES	JESUS MARIA GARZA
106	MERCEDES VAZQUEZ GOMEZ	VILLAFLORES	JESUS MARIA GARZA
107	CLASET PEREZ VELÁZQUEZ	VILLAFLORES	JESUS MARIA GARZA
108	JARED MERCELINO NUCAMENDI VELÁZQUEZ	VILLAFLORES	JESUS MARIA GARZA
109	CANDELARIA TORRES UTRILLA	VILLAFLORES	JESUS MARIA GARZA
110	TOMAS DOMINGUEZ PÉREZ	VILLAFLORES	JESUS MARIA GARZA
111	OLGA LIDIA FONSECA GUMETA	VILLAFLORES	JESUS MARIA GARZA
112	FERNANDO GUADALUPE CHACHON MOLINA	VILLAFLORES	JESUS MARIA GARZA
113	ANALEYVI DOMINGUEZ ALBORES	VILLAFLORES	JESUS MARIA GARZA
114	BLANCA ALICIA GRAJALES GÓMEZ	VILLAFLORES	JESUS MARIA GARZA
115	MANUEL SOLÍS CONDE	VILLAFLORES	JESUS MARIA GARZA
116	HEMA HERNÁNDEZ HERNÁNDEZ	VILLAFLORES	JESUS MARIA GARZA
117	JORGE AGUILAR CALVO	VILLAFLORES	JESUS MARIA GARZA
118	JORGE LUIS AGUILAR GONZÁLEZ	VILLAFLORES	JESUS MARIA GARZA
119	MARIA DEL ROSARIO GRAJALES ALFARO	VILLAFLORES	JESUS MARIA GARZA
120	ARODI HERNANDEZ GOMEZ	VILLAFLORES	JESUS MARIA GARZA
121	JESUS VICENTE NANGUELU	VILLAFLORES	JESUS MARIA GARZA
122	ADELIN LOPEZ GUMETA	VILLAFLORES	JESUS MARIA GARZA
123	RONULFO DURANTE NAFATE	VILLAFLORES	JESUS MARIA GARZA
124	REGINA OVANDO URBINA	VILLAFLORES	JESUS MARIA GARZA
125	HORACIO PEREZ MONTERO	VILLAFLORES	JESUS MARIA GARZA
126	HERNINIO PEREZ RAMIREZ	VILLAFLORES	JESUS MARIA GARZA
127	VERONICA PATRICIA GUTIERREZ JOSE	VILLAFLORES	JESUS MARIA GARZA
128	ROSALINDA GOMEZ CRUZ	VILLAFLORES	JESUS MARIA GARZA
129	AMÉRICA SOLÍS DÍAZ	VILLAFLORES	BENITO JUAREZ
130	MARIO ANTONIO NURICUMBO VÁZQUEZ	VILLAFLORES	BENITO JUAREZ
131	MACIEL ARCE ACERO	VILLAFLORES	BENITO JUAREZ
132	ARELIS ZAMBRANO LEÓN	VILLAFLORES	BENITO JUAREZ

133	MARÍA GUADALUPE CAMACHO SÁNCHEZ	VILLAFLORES	BENITO JUAREZ
134	ADOLFO REYES SOL	VILLAFLORES	BENITO JUAREZ
135	RICARDO CHACÓN	VILLAFLORES	BENITO JUAREZ
136	RAQUEL PÉREZ SALINAS	VILLAFLORES	BENITO JUAREZ
137	ROSA MARÍA MORALES PÉREZ	VILLAFLORES	BENITO JUAREZ
138	JESÚS CHACÓN MORALES	VILLAFLORES	BENITO JUAREZ
139	DIOCLESIANO HERNÁNDEZ CHACÓN	VILLAFLORES	VILLAFLORES
140	ERASMA RAMÍREZ FLORES	VILLAFLORES	VILLAFLORES
141	URSINA CURIEL LOPEZ	VILLAFLORES	VILLAFLORES
142	MARTHA MORALES CAPISTRÁN	VILLAFLORES	VILLAFLORES
143	MAGALY JIMENEZ LOPEZ	VILLAFLORES	VILLAFLORES
144	MAGDALENA MORALES FLORES	VILLAFLORES	VILLAFLORES
145	TIRSO TORRES DUAL	VILLAFLORES	VILLAFLORES
146	MANUELA CRUZ SANCHEZ	VILLAFLORES	VILLAFLORES
147	GUADALUPE MOLINA LOPEZ	VILLAFLORES	JUAN PABLO
148	MANUEL DE JESUS ESTRADA INTERIANO	VILLAFLORES	JUAN PABLO
149	RUFILIO LOPEZ MOLINA	VILLAFLORES	JUAN PABLO
150	HERIBERTO NAFATE PEREZ	VILLAFLORES	JESUS MARIA GARZA
151	JOSE ALBERTO CRUZ LEON	VILLAFLORES	BENITO JUÁREZ
152	SANTIAGO GRAJALES GUTIERREZ	VILLAFLORES	CRISTOBAL OBREGON
153	LUZ CLARITA MOLINA JOSE	VILLAFLORES	CUAHUTEMOC
154	VICTOR ALONSO ROBLES VICENTE	VILLAFLORES	CUAHUTEMOC
155	HUGO ALBERTO MORENO VAZQUEZ	VILLAFLORES	CUAHUTEMOC
156	ELZABETH LÓPEZ HERNÁNDEZ	VILLAFLORES	CUAHUTEMOC
157	ELIACIN FONSECA MORENO	VILLAFLORES	CUAHUTEMOC
158	RUSBEY BELTRÁN SANDOVAL	VILLAFLORES	JESÚS MARÍA GARZA
159	OLGA LIDIA LOPEZ RUIZ	VILLAFLORES	JOSEFA ORTIZ DE DOMINGUEZ
160	ELBA ESPINOZA ALEGRÍA	VILLAFLORES	MELCHOR OCAMPO
161	MARLENE MORENO	VILLAFLORES	NUEVO MÉXICO
162	LEYDI PÉREZ HERNÁNDEZ	VILLAFLORES	TIERRA Y LIBERTAD

Information source: Prepared by the authors.

In terms of beneficiaries, the contract established with the Global Giving Foundation stipulated support for the reconstruction of 100 adequate homes that meet the habitability criteria; however, the resource was managed in such a way that it was possible to support 62 more families.

12. Photographic memory.









13. Bibliographic references

- 1. Inter-censal Population Survey, 2015, INEGI.
- 2. Miceli Maribel 2018, El negocio de la reconstrucción en Chiapas Especificar soluciones para agua, energía y sustentabilidad. Año I, Núm 7 Enero Febrero 2018.
- 3. Selenne Galeana. La Tipología de la vivienda como precedente sustentable. Arquitectura, Ciudad y Entorno. Universidad de Guadalajara. Año II, núm 6, febrero 2008.