Comprenhensive and Participatory Habitat Reconstruction in Acapulco

Submitted By: Cooperación Comunitaria AC



Organization Profile

Organization Name: Cooperación Comunitaria AC

Organization Type: Civil society

Website: www.cooperacioncomunitaria.org

Practice Details

Country(ies): Mexico

City(ies): Guerrero, Acapulco

Start Year: 2023 **Ongoing:** Yes **End Year:** N/A

Main Adequate Housing Components:



Housing Thematic Areas:

- Communal & Self-Build Housing
- Housing Rights & Social Inclusion
- Housing & Climate Adaptation
- Housing, Land & Spatial Planning

Relevant SDGs:



UN-HABITAT

Problem & Context

In Mexico, one of the challenges is ensuring access to adequate housing in rural areas. For decades, a developmentalist vision has promoted the replacement of traditional building systems with urban models.This shift has led to the erosion of local knowledge, the abandonment of natural resources, and the imposition of prototypes unsuitable for cultural and environmental conditions.The lack of regulations recognizing traditional housing leaves these practices in legal ambiguity and fosters their devaluation.Rural communities, historically marginalized, face a double vulnerability: socioeconomic lag and climate change, with increasingly frequent natural occurrences that threaten housing security. Hurricane Otis in 2023 exposed this crisis: in 24 rural communities of Acapulco, 98% of metal sheet roofs were blown off, revealing pre-existing structural weaknesses, also the total loss of crops, informal jobs, community markets and the rising cost of the basic food basket.

Solution Developed

Since 2023, Cooperación Comunitaria has implemented in Acapulco a comprehensive housing reconstruction process that combines traditional knowledge with technical innovations to address seismic and climatic risks.The project takes place in Nahua and Afro-descendant communities of Cacahuatepec, integrating their culture, productive practices, and environment into the design of solutions. Technologically, adobe formulas have been optimized for greater resistance, reinforced structure to prevent cracks, and roofs designed to withstand strong winds.Socially, the approach is participatory: families also gain technical and productive skills to maintain and improve their homes and ensure food security, becoming agents of change.Institutionally, the initiative addresses the absence of regulations that recognize traditional housing, generating technical evidence to influence public policies.In terms of innovation, the model goes beyond commercial or assisted self-construction by integrating risk management, community resilience, and co-design with residents.This ensures not only cost reduction and cultural relevance but also the long-term sustainability and resistance of rural habitat.

Implementation

Our organization applies a participatory methodology based on Social Production and Management of Habitat, structured in stages of diagnosis, design, planning, implementation, and evaluation in constant dialogue with communities. After Hurricane Otis in 2023, we began with a participatory diagnosis in which 280 people identified housing damages, socio-environmental risks, water access, sanitation systems, and construction materials. In the participatory design stage, families defined housing typologies suited to their land and ways of living, combining traditional knowledge with technical input to strengthen local systems. Implementation takes place through self-construction,supported by architects and technicians from Cooperación Comunitaria, with practical workshops on earthen construction and house

reinforcement. So far, 184 people have been trained in constructive practices, 55 in ecotechnologies, 150 producers have restored agroecological milpa farming, and 23 families are building reinforced adobe houses. The process is organized through community committees, with women and youth in leading roles, while reviving traditional collective work practices. Regarding financing, Cooperación Comunitaria provides technical assistance, industrialized materials,and tools, while communities contribute local resources, labor, transportation, and food. This shared scheme strengthens self-management, community resilience, and social fabric, ensuring sustainable and culturally relevant housing solutions.

Enablers & Obstacles

The communities of Acapulco possess strong capacities for reconstruction based on local knowledge.Traditional techniques with earth have proven resistant to the regional climate, while long-standing community organization and experience facing natural occurrences have fostered resilience.The availability of local materials reduces costs and dependence on external inputs.A key enabler has been the participatory process, which revalued traditional systems through technical innovations that improve structural safety and environmental sustainability through agroforestry and ecotechnologies.Also strengthened the local economy and promoted traditional trades such as masonry,carpentry, and crafts, creating intergenerational knowledge transfer.However, significant obstacles persist: the lack of public policies for rural housing,absence of infrastructure for water and safe roads, limited health services, and scarce economic opportunities that drive migration, particularly among youth.

Results & Impact

This project contributes to the fulfillment of the right to adequate housing, while strengthening community identity and territorial belonging through the construction of traditional, safe, and culturally appropriate homes. Through the exchange of technical and local knowledge, communities have recognized the value of traditional building systems and their ability to adapt to seismic and climate risks. Socially, the project has strengthened the capacities of 450 people through participatory training that promotes intergenerational knowledge transfer, the revaluation of local trades, and the leadership of women and youth, reinforcing community cohesion. Environmentally, adobe housing significantly reduces the carbon footprint by using local and biodegradable materials, minimizing waste, and improving energy efficiency and indoor air quality. Calculations show a reduction of 51.6 tons of CO_2 in the construction of six traditional homes. Structural reinforcements co-designed with communities increase durability, safety, and resilience against extreme coastal events in Guerrero. Economically, the use of local resources lowered costs and strengthened community markets, while participatory construction revitalized traditional trades such as masonry, carpentry, and tile production. This process enhances economic and productive autonomy, reduces dependence on external inputs, and fosters long-term resilience.

Replication & Scale Up

Our methodology has been successfully implemented in other regions, such as the Montaña of Guerrero and Oaxaca. A key factor for replication has been building upon the communities own organizational structures.By creating spaces where families contribute according to their capacities and resources, participation becomes more active and meaningful.Above all, reinforcing community ties and valuing local knowledge has proven essential: when people recognize their own practices in the process, they engage with greater commitment, ensuring both the long-term impact of the initiatives.

Sustainable self-production of housing and ecotechnologies with local materials, within the framework of Social Production and Management of Habitat, highlights the importance of training and raising awareness among diverse communities as agents of change. This ensures sustainability beyond the organization's presence, as community members become promoters and implementers of the model in their own territories, with the potential to work professionally, generate income through technical support, and safeguard traditional cultures and building systems.

Policy Uptake

This housing practice is a new or innovative practice that is not yet adequately or fully integrated into formal policy frameworks.

Establishing regulatory recognition of traditional and earthen construction systems through technical standards. Creating incentives for the use of local materials that reduce carbon emissions and costs.

Integrating the Social Production and Management of Habitat (SPMH) methodology into rural housing programs. Supporting community training and certification schemes so local builders can be formally recognized as technical agents. Scaling pilot projects into state and federal housing strategies with allocated budgets.

Lessons & Takeaways

In hindsight, we would strengthen early coordination with government institutions to align timelines and avoid duplications, and develop clearer mechanisms for financial sustainability from the outset. We also identified the need to systematize and publish technical evidence sooner, to accelerate policy uptake and replication.