

BUILDING HEALTHY HOUSING

A Case Study of Camotán Government and Sustenta Collaboration

Public-Private Partnership Case Study

Building Healthy Housing in Camotán

Sustenta, our 2024 Accelerator graduate, focuses on dry sanitation, wood-saving cookers, rainwater harvesting systems and the development of healthy housing for urban and rural areas in Guatemala.

The partnership between the Municipality of Camotán and Sustenta, supported by the Pan American Health Organization (PAHO) and in collaboration with TECHO, Instituto para el Desarrollo Económico Social de América Central (IDESAC), MejorHa, and Paz y Desarrollo, addresses critical health and sanitation challenges in rural Chiquimula. Over an 8-month collaboration, the project centered on the construction of healthy houses equipped with accessible and sustainable technologies, including water filters, fuel-efficient stoves, rainwater harvesting systems, and eco-friendly toilets.

The project addresses not only immediate health risks but also contributes to long-term environmental sustainability and economic development. This case study highlights the impact of the project on public health, sustainable development, and the potential for scalable housing solutions in underserved regions of Latin America.



At A Glance

Project Construction of Healthy Rural Housing in Camotán, Chiquimula

Public Sector Partner Municipality of Camotán

Private Sector Partner Sustenta

Partnership Period October 2023 - June 2024

Region Guatemala, Latin America

The Problem

Challenges in Rural Housing Construction in Camotán, Guatemala

Respiratory and gastrointestinal diseases remain pervasive among vulnerable populations due to unhygienic living conditions. Acute respiratory infections are the leading cause of death among children under five in Guatemala, responsible for 34% of fatalities, followed by diarrheal diseases at 18%^[1]. In rural areas, families often reside in environments that exacerbate health risks, with limited access to sustainable sanitation solutions. Despite receiving treatment at public health centers, many individuals are reinfected upon returning to homes that lack proper sanitation, clean water, and adequate ventilation. This recurring cycle not only compromises their health but also undermines their overall quality of life and perpetuates socio-economic vulnerabilities.

Rural areas face significant gaps in the availability and implementation of sustainable housing solutions. The persistent gap in accessible, affordable, and scalable housing technologies compounds these challenges.

The Solution: Healthy Houses



Access to
Basic Services



Eco-Friendly
Materials



Low-
Maintenance



Cost-effective
Model



Replicable &
Scalable

The project offers an innovative solution to the health and sanitation challenges faced by rural communities in Guatemala. It focuses on the construction of healthy homes equipped with accessible, environmentally sustainable technologies. These homes feature rainwater harvesting systems, eco-friendly toilets, fuel-efficient stoves, and water filters, all designed to improve hygiene and health outcomes.

The solution is built on the principle of affordability and scalability, providing technologies that not only address immediate health and sanitation concerns but also promote environmental sustainability. By integrating simple yet effective ecological innovations, the project provides long-term, low-maintenance solutions that significantly reduce health risks associated with lack of safe sanitation.

The modular design of the interventions allows for flexibility, enabling adaptation and expansion to reach additional underserved communities, creating a replicable model for rural housing improvement across the region.

[1] SOURCE: Guatemala's Water Supply, Sanitation, and Hygiene Poverty Diagnostic. World Bank (2018).



A Coordinated Effort for Impact



The collaboration between the Municipality of Camotán and Sustenta arises within the framework of the Pan American Health Organization's strategy, with the financial support of the Government of Sweden, to improve the health of Guatemalan families through the promotion and development of healthy housing.

The project began with Sustenta designing the plans and budget for the healthy homes, ensuring efficient, cost-effective, and locally adaptable solutions. To maintain consistency and quality across the initiative, the Pan American Health Organization conducted a technical workshop to transfer knowledge on healthy home construction, equipping stakeholders with the skills needed to execute the project effectively.

Building on this foundation, the Municipality of Camotán, Chiquimula, identified suitable locations for the homes, prioritizing the most vulnerable families. Leveraging its local knowledge, the municipality also facilitated connections with community leaders, ensuring the project was aligned with the context and fostering acceptance and engagement among residents.

The construction phase was led by the Non-Governmental Organizations TECHO, Instituto para el Desarrollo Económico Social de América Central, MejorHa, and Paz y Desarrollo, which brought their expertise in rural development to address the specific needs of each family. Throughout this phase, Sustenta actively supervised progress, ensuring adherence to the established designs and resolving challenges as they arose.



Success Factors



Government Support: The Municipality of Camotán has played a pivotal role by providing critical local data to identify vulnerable families and strategically target resources. Its logistical support has streamlined the implementation of healthy houses, ensuring sustainability and amplifying their impact on rural communities.



Innovation and Adaptability: Sustenta's healthy houses feature cost-effective, sustainable technologies such as water filters, fuel-efficient stoves, rainwater harvesting systems, and eco-friendly toilets. These tailor-made solutions not only improve health outcomes but also minimize the environmental impact.



Scalability: The design of the healthy houses offers a replicable solution for other rural areas facing similar challenges, expanding the potential for broader social impact across the Latin America region.



Cross-sectoral collaboration: The project leverages synergies between the private sector, local government, international agencies and non-governmental organisations, ensuring that resources and expertise are combined to maximise impact. This collaborative approach reinforces the long-term sustainability of the initiative.

Impact



20

Healthy Homes Built



120

People Impacted



720 L of Water Saved Daily

from Toilet Flushing In Each Household



JORGE HEINEMANN

CEO, Sustenta



"Collaboration between the private sector and government is key to addressing the needs of vulnerable populations, combining resources to create sustainable solutions that improve health, sanitation, and living conditions. Partnerships like ours demonstrate the transformative potential of teamwork in creating lasting change and fostering equitable development."

Learnings



Public-Private Collaboration

The collaboration between the public and private sector proved to be a critical success factor for the project. By combining the expertise, resources, and commitment of both parties, the partnership was able to overcome complex challenges and deliver impactful solutions.



Community-Centered Design

Understanding the unique needs of rural families was key to developing solutions that are both practical and impactful. Tailoring interventions to local contexts fosters higher adoption rates and long-term benefits.



Scalable Innovation

Investing in adaptable and cost-effective technologies was key to the project's success and its potential for replication. The approach demonstrated that scalable solutions, tailored to local needs, can be applied to other regions facing similar health and sanitation challenges, expanding its impact.



Holistic Impact

Combining health, sanitation, and environmental improvements demonstrated the value of addressing interconnected challenges. This holistic approach amplified the benefits for communities and created a stronger foundation for sustainable development.

Conclusion

The collaboration between Sustenta and the Municipality of Camotán showcases the transformative power of public-private partnerships in tackling health and sanitation challenges in rural Guatemala. Through the integration of innovative technologies and improved living conditions, this project has enhanced health outcomes while fostering community empowerment and environmental awareness.

This partnership underscores the value of teamwork, shared responsibility, and a long-term commitment to reducing extreme poverty and improving quality of life. It serves as a replicable model for other regions seeking effective, scalable solutions to similar challenges.

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