In 2016, HELVETAS Swiss Intercooperation and the United Nations Children’s Fund (UNICEF) established a consortium aimed at laying the foundations for a comprehensive intervention that would contribute to reducing the incidence of diarrhea in children under five years of age, through the improvement of the conditions of water, sanitation and hygiene services in the departments of Huehuetenango, San Marcos, Quiché, Alta Verapaz and Chiquimula, giving rise to the Total Sustainable Sanitation and Hygiene (SAHTOSO) methodology adapted from the Total Sanitation approach Led by the Community (SANTOLIC) and focused on the elimination of human fecal contamination in the environment by covering the systematic use and maintenance of latrines, wastewater management and the proper handling of disposable diapers, among other practices that ensure the hygienic separation of feces from human contact.

By the end of 2022, 822 communities in the coverage municipalities have been certified and 322,793 people have benefited, of which 71,714 are boys and 78,003 are girls. Within the Community Action Plans, initiatives for self-construction and improvement of the sanitation infrastructure have been developed. For example, 10,724 families have built their latrine with local materials under the principles of privacy, security, dignity and sustainability.

SAHTOSO, unlike other methodologies, focuses on people's emotions, causing changes in health behavior and is based on zero subsidies in the construction of toilets. Facilitators are reinforced which then awakens the need for changes in health standards and practices in all families in the communities. They focus on benefiting the health and chronic malnutrition of the entire community by achieving individual behaviors in each of the families. Thus, they induce families and communities to decide how they are going to create a clean, hygienic environment free of fecal contamination (ECOFAM Status: Elimination of Environmental Fecal Contamination) that benefits everyone.

The methodology focuses on the self-construction, use, and maintenance of toilets by families, the practice of washing hands with soap and water or ash, the management of safe water in the home; and the management of disposable diapers. The methodology focuses on the self-construction, use, and maintenance of toilets by families, the practice of washing hands with soap and water or ash, the management of safe water in the home; and the management of disposable diapers. Thanks to its zero-subsidy approach, SAHTOSO offers good sanitation at a lower cost per family, a higher ratio of communities adopting correct behaviors, and a higher sustainability rate. Currently, it costs an average of $30 for a family to get out of Defecation Outdoors, which represents a climb up the sanitation ladder. 90% of activated communities achieve total sanitation and the elimination of fecal contamination in an average of 3 to 4 months.

SAHTOSO's sustainability strategy must consider multilevel and multi-stakeholder actions and mechanisms that ensure the monitoring of changes and results obtained at the community level, continuity in the scaling process in the implementation of the methodology; and the incorporation of actions so that instances at the municipal and national level take ownership of the promotion, implementation, and monitoring of the methodology and its results.

These experiences show that the methodology is valid in any rural context in the country, as well as in emergency contexts due to natural disasters and COVID-19; but there are still challenges to taking it to scale and to sustain the changes caused. The project managed to have a positive influence at the municipal level on the replication of the SAHTOSO methodology and its adoption as part of the municipal responsibilities through the Municipal Water and Sanitation Offices (OMAS), who are interested in following up on the communities that, according to the intervention model, are not part of the project coverage.
PRINCIPLES OF THE METHODOLOGY
The SAHTOSO methodology is based on the following principles for its proper implementation:

Regarding the community role

DECISION AND COLLECTIVE WORK: All individuals, families, and community actors must participate in and motivate community work, which requires a voluntary organization.

COMMUNITY LEADERSHIP: The analysis of the problem of water, sanitation, and hygiene in the community and the decision to take action in this regard (or not to do so) is the responsibility of all the inhabitants of the community. The facilitator only accompanies the process and the leaders to achieve their goal.

PRIDE AND DIGNITY: The community is activated from emotions of disgust and shame due to the situation of fecal contamination in which they live and the absence of hygiene habits, so that they act and achieve results that make them feel proud and worthy of a space to live clean and healthy.

EMPOWERMENT: The community assumes the role of active leader and strengthens their participation, responsibility, and commitment to improving water, sanitation, and hygiene conditions, which makes them feel capable of leading other development actions in their community.

Regarding the technical process,

ZERO SUBSIDY: Internal solutions are promoted by families for self-construction, and management to benefit the poorest and people with disabilities.

ANALYSIS ACCORDING TO NEEDS: Specific technical solutions are not imposed on the type of toilets and hand hygiene points to be built. Only technical criteria are provided to find adequate solutions for the conditions of each family and its environment. If these are not met, they manage to find a solution on their own or with the help of the community.

A CHANGE OF HABITS: A change in behavior and social norms related to hygiene habits is promoted. Adequate intervention does not focus on the number of toilets and handwashing points built, but on the change of individual and family behavior and social norms within the community in relation to hygiene and the health conditions of families.

Regarding expected results,

TOTAL SANITATION: All people in the community decide and change their hygienic habits related to human fecal contamination, through the use and maintenance of toilets, proper disposal of diapers, and management of black water from toilets. There is even talk of total sanitation SAHTOSO encompasses sanitation + handwashing (hygiene) + treatment and safe storage of water in the home.

SAFE MANAGEMENT AND SUSTAINABILITY: All actions focus on achieving access and total coverage with equity to sanitation and hygiene services between the basic and safely managed levels, paying special attention to the needs of women and girls and people in situations of vulnerability as dictated by the SDGs, thus ensuring that all people have a decent place with use and maintenance at the end of the intervention.

PROJECT OBJECTIVES
1. Promote the elimination of fecal contamination and good hygiene and sanitation practices at the family level, in the prioritized municipalities.
2. Promote that families of the communities of the covered municipalities know and use hygiene and sanitation products and services appropriate to the plans for the elimination of fecal contamination.
3. Promote the replication and institutionalization of the SAHTOSO methodology in the covered municipalities and institutions of the water and sanitation sector in Guatemala.

TOWARDS REPLICATION AND SCALING
The methodology has been accepted at the institutional level, achieving that in several municipalities it is declared a Municipal Policy, reaching specific budgets to replicate the methodology. Recently, the Ministry of Public Health and Social Assistance has agreed to adapt the methodology for its implementation at the national level, through a ministerial agreement.

Likewise, the interest of relevant entities at the national level has been aroused, such as the Secretariat of Food and Nutritional Security (SESAN) as an entity of coordination and institutional articulation to implement the National Strategy “Great Crusade for Nutrition”, which is a priority of the current government and has asked the different organizations to join the initiative, with water and sanitation being one of the main lines of action.

EXPECTED IMPACT
The project hopes to contribute to Sustainable Development Goal 6, especially goal 6.2, by achieving adequate and equitable access to sanitation and hygiene, thereby contributing to the reduction of chronic malnutrition and the incidence of diarrhea in the most vulnerable population in Guatemala.
THE OPPORTUNITIES
Given the experience gained in the implementation of the methodology, the good results obtained and the interest aroused in government institutions and other entities, the opportunities that arise are:

- Scaling up the methodology, reaching a greater number of communities and municipalities, relying on the component institutions.
- Strategic positioning in the area of sanitation in the country, with the possibility of assuming an advisory role in order to expand coverage.
- Export the methodology to the Latin American region. Currently, there is the possibility of advising UNICEF programs in Colombia and Nicaragua.
- Activate the private sector to improve access to supply of sanitation products and services and financing.
- Potential of SAHTOSO in humanitarian response, given that a successful trial has been carried out in response to the impact of storms Eta and Iota at the end of 2020 in the northeast of the country.

SUSTAINABILITY
During the implementation of the project, the cost and time to implement the SAHTOSO have been measured, obtaining successful results that are interesting and attractive for its adoption by any entity, either from the public sector or international cooperation.

Families, apart from leaving defecation in the open air, also establish other barriers to the fecal-oral contamination route, thus obtaining the opportunity to continue climbing the sanitation ladder, given the empowerment of the process and the creation of a culture in which households take control of their sanitation solutions and invest in self-construction of sanitation and hygiene facilities. In 2019, a study was carried out that reveals that 90% of communities continue to be free of environmental fecal contamination one year after being certified as ECOFAM: Elimination of Environmental Fecal Contamination. But there are still challenges, since families at the beginning do not have a clear understanding of the benefits of sanitation and hygiene for the community, which makes people not motivated if there is no subsidy involved.

To achieve sustainability in the processes, SAHTOSO seeks the commitment of national and municipal authorities. This is essential to continue with the actions developed to date in those communities that are already in the Elimination of Environmental Fecal Contamination “ECOFAM” step but also to manage SAHTOSO in all the communities of the rest of the territory to achieve and maintain the “ECOFAM” Certification at the Municipal Level.

The multiethnic and multicultural context has not been shown to be a factor that affects or limits the results in the certification. It has even been developed in emergency contexts and the scope of goals is maintained. Of course, it depends on maintaining the principles and approach of facilitation and no training that takes place at the community level. However, at the institutional level, sanitation is still not prioritized as it should be since it is understood mainly from an infrastructure construction perspective but without accompanying social processes.

Currently, efforts are being made so that municipal governments integrate the implementation of SAHTOSO into their activities. Strengthening municipal institutions, training volunteer leaders, and fostering reflection and feedback at all points in the project process strengthen institutional sustainability and build leadership capacities in local government, thereby enabling communities and municipalities to take charge of their sustainable development in the future.

The SAHTOSO has worked better in communities where there are OMAS since they consider it to be an innovative approach and that it can lay the foundations for substantial and tangible changes in sanitation, for which it is expected to link to national efforts for the institutionalization of these municipal dependencies, since currently only a third of the country has these offices, although it also coordinates with other actors who are currently in charge of creating and/or strengthening the OMAS.

Contributing to environmental sustainability, increasing the use of improved sanitation systems and reducing open defecation reduce pollution in the natural environment, which improves human health and helps natural ecosystems grow and prosper.
FAST FACTS

Geographic location:
- Department of Quiché: in the municipalities of Chajul, Nebaj, and San Juan Cotzal.
- Department of Alta Verapaz: in the municipalities of Cobán, San Juan Chamelco, San Cristóbal Verapaz, Santa Cruz Verapaz, Tamahú and Tactic.
- Department of Chiquimula: in the municipalities of Jocotán, Camotán, Olopa, San Juan Ermita and Chiquimula.

Phases:
1st. Phase: August 2016 to December 2018
2nd. Phase: January 2019 to March 31, 2020
3rd. Phase: March to December 31, 2020
4th. Phase: October to December 2021
5th. Phase: February 2022 to January 2023

Start date: August 2016
Finish date: January 2023

Budget for the 5th Phases: Q 14,924,398.14

Partners and Strategic Actors:
- Local organizations with the role of strengthening other strategic actors: Association for Integral Development Cooperation of Huehuetenango - ACODIHUE, Association for Integral Rural Development - ADRI, and Chortí Regional Peasant Association - ASORECH in Chiquimula,
- 22 Municipalities of the geographical coverage with their Municipal Water and Sanitation Offices (OMAS), Municipal Directorate for Women (DMM) and Municipal Development Councils (COMUDE’s).
- 22 Environmental Sanitation Inspectors and 22 Rural Health Technicians from the Ministry of Public Health and Social Assistance (MSPAS).
- Suppliers of sanitation products and services -hardware stores and construction companies-.
- Micro financial institutions such as cooperatives and micro-credit entities
- State coordination organizations and NGOs (Ministry of Education - MINEDUC, Ministry of Public Health and Social Assistance -MSPAS, Secretariat of Food and Nutritional Security - SESAN, Ministry of Agriculture, Livestock and Food - MAGA, Presidential Commission for Municipal Affairs – COPRESAM); and water and sanitation networks: Water and Sanitation Network of Guatemala - RASGUA and RASK’ICHE’
- Communities (families, natural leaders, Auxiliary Municipalities, Community Development Councils (COCODE's), SAHTOSO Committee, Community Water and Sanitation Commissions (CAS).

Donors:
- HELVETAS Swiss Intercooperation
- United Nations Children’s Fund (UNICEF)
- Hope Foundation

More information in:
HELVETAS Swiss Intercooperation Guatemala
4th. street 29-50, zone 7
Quetzaltenango City, Quetzaltenango
helvetas.guatemala@helvetas.org www.guatemala.helvetas.org