YEAR

2020

NGO ASOCIACION AMIGOS DESILVA WAS DECLARED OF PUBLIC UTILITY BY THE SPANISH GOVERNMENT IN 2009

Annual Report

AMIGOS DE SILVA



Changing two worlds









Ethiopia

Ministry of Justice

Charities and Societies Agency nº 0148.

Spain

National Register of Associations with nº 586.328.

Registered in the Spanish Agency of International Cooperation on November 28, 2006.

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2020 Annual Report

Projects in 2020

- *Elimination of Fluoride from drinking Waters using technology based on natural zeolites"*
- *Stronghealth Project, health NTD Project for 4 years duration in partner with the FMoH , Mundo Sano, and WHO.*
- *Córdoba Ayuda, Fast Covid Emergency Respond Project in Oromia Region.*

Amigos de Silva in Ethiopia

Dear friends

The last year 2020 it was the year of the covid 19 pandemic all over the world. This pandemic has affected all our work in Ethiopia and delayed all the new projects proposed, except the emergency project to prevent and reduce the impact of the covid 19 in our working areas in Oromia Region.



Our commitment with Ethiopia and with the Federal Ministry of Health is not affected for the pandemic situation and we signed the last December a new agreement related to a NTD Disease to continue to identify and eradicate the oil transmitted helminthiases (STH) and schistosomiasis with the finality of improve the nutrition especially of the children.

Our projects are focus in different regions, as Oromia, Benishangul Gumuz and Southern Regions, according to the necessities of the FMoH and the others our partners as the Federal Ministry of Water, Irrigation and Energy involved with ADS in a project to eliminate the fluoride from the water.

All the efforts of ADS will be continuing this year as the previous years and we will continue to expand our working areas with new projects related to food security in order to reduce the impact of the covid 19 in the small communities in the Muketuri area.

We hope that the new vaccines and the prevention measures implementing by the FMoH with all the NGO organization like us, will be effective in order to eliminate the virus and continue the proper development of the future of Ethiopia.



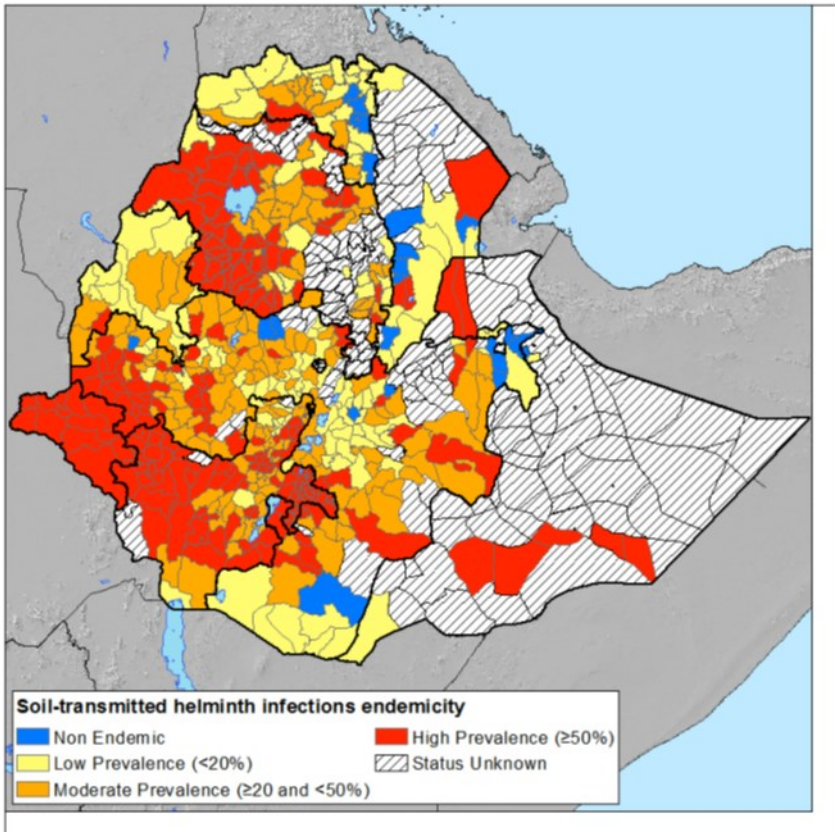
I invite to all of yours to continue to be sharp in the use of the prevention methods to avoid any transmission of the covid 19 and be patients in this worldwide effort.

Dr. Francisco Asis Moreno (Phd)

Country Manager

STRONGHEALTH PROJECT.

Ethiopia is one of the Sub-Saharan countries with the largest burden of Soil transmitted helminthiases (STH) and schistosomiasis, being almost all the country suitable for transmission of STH (1). A nationwide mapping survey for STH and schistosomiasis carried out in 2015, showed that STH (*Ascaris lumbricoides*, *Trichuris trichiura* and the hookworms, *Necator americanus* and *Ancylostoma duodenale*) are widespread across all mapped regions of Ethiopia. The number of people living in STH endemic areas is estimated at 79 million Moreover, 37.3 million people are estimated to be living in schistosomiasis endemic areas, being *Schistosoma mansoni* (intestinal schistosomiasis) widely distributed; two thirds of them require treatment against STH based on the World Health Organization (WHO) guidelines. Furthermore, one third requires treatment twice a year. The National Master Plan for Neglected Tropical Diseases (NTDs) (2016-2020) of the Federal Ministry of Health (FMoH), prioritizes interventions for STH and schistosomiasis control, among others. Since the launching of the plan, in 2013, STH and schistosomiasis control programs have achieved several progresses, even though the approach is still complex and in need of further strengthening.



AdS started in 2020 the implementation of this project with the FMoH to prevent this NTD desease in the Amhara and Benishangul Gumuz regions and conduct the project in collaboration with WHO.

The Helminthiases: Helminths are among the most widespread infectious agents of human populations. STH and schistosomiasis affect more than 2 billion people world-wide, of whom more than 300 million suffer from associated severe morbidity, and are the most prevalent NTDs in sub-Saharan Africa (SSA). Ascariasis, trichuriasis, and hookworms, are the main intestinal helminth infections in humans. While *A. lumbricoides and T. trichiura* are irregularly distributed in urban areas, hookworms are widely distributed in both rural and urban areas. Several global efforts have been made to address the health effects of human parasitism by helminths. Preventive chemotherapy (PC), through regular mass drug administration (MDA) is the key strategy for controlling their impact as a public health problem, in endemic countries. The aim of those interventions is to reduce the morbidity associated to the infection. WHO recommends regular MDA targeted at pre-school-aged and school-aged children (pre-SAC, SAC) and women on reproductive age, in areas where the prevalence exceeds 20%

On the other side, the Strongyloidiasis: caused by *S. stercoralis*, is known to be endemic in tropical and subtropical areas worldwide, affecting up to 100 million people . However, epidemiological data suggest that it is highly underreported, mainly because of diagnostic challenges: traditional identification of eggs in stool has nil sensitivity for *S. stercoralis*, and a high number of infections thus go undetected. Because specific laboratory methods are used for proper diagnosis and a different class of drug is needed for its treatment (IVR, rather than ALB/MBZ), for a long time it has not being included in the STH group although in recent years there is a growing awareness on the actual global burden of *S. stercoralis* and, although it is still underestimated,

STRONGHEALTH PROJECT. (Continue...)

Geographical Coverage

Numerous studies have been carried out in Ethiopia for assessing the prevalence of STH and schistosomiasis, but there is a need to support new approaches, for supporting policymakers, mainly related to program integration. For that, an accurate diagnosis capacity will be crucial. To begin with, there are no studies with specific diagnosis protocol for *S. stercoralis* in the country . We detected, in Amhara region, a prevalence of 21% in SAC and more than 55% at the community level, the highest prevalence noticed in Africa until now. Environmental and other factors related to the infection were collected. Next steps should be to scale up the model to other points in the region, as well as to other regions, comparing epidemiological situation and related epidemiological factors.

Two areas had been selected for coming steps in the project:

Amhara region: The activities put in place in the previous four years in Bahir Dar special zone need to be strengthened in order to achieve consolidation. On the other hand, new activities linked to the SO2 will be implemented in the region (see activity description), since logistics are established and the capacity of laboratories to support these activities are already known by the project.

Benishangul-Gumuz region, has been chosen as second region for implementation of activities due to: 1) the need of surveys in this region highlighted since there are no data available for STH and schistosomiasis prevalence in the past 20 years (29) and 2) the proximity of the region to Amhara will facilitate the logistics and communication of the project. Furthermore, AdS has previously collaborated with the Comboni missionaries (Metekel zone, Mandura woreda), which will allow to establish an initial point for follow up and impact evaluation.

A diagnosis protocol for STH, including a specific diagnosis for S. stercoralis, established, through SOPs/guidelines in the laboratory of health facilities and other institutions (e.g. research and reference laboratories).

No.	Risks	Management/ Actions to be taken	Risk Rating	Impact
1	Regional laboratories not able to process the protocol	Keep the protocol as simple and effective as possible	Low	Medium

Table 9. Result 5.2: Education on basic concepts on infection prevention and WAHS given in the health centre.

No.	Risks	Management/ Actions to be taken	Risk Rating	Impact
1	Poor involvement of the community in the activities of the project.	Involving other essential community representatives, (religious leaders, kebele leaders, teachers, patients already treated).	Medium	High

Table 10. Result 6: A PhD Program for a medical/sciences student in Ethiopia provided.

No.	Risks	Management/	Risk Rating	Impact
1	Turnover of local staff	Close supervision and motivation	Medium	Medium



Photo: Water reservoirs with the chemical product inside.

Elimination of fluoride from Drinking waters using technology based on natural Zeolites

The collaboration between Dr. Isabel Diaz (CSIC) and Dr. Yonas Chebude (AAU) was initiated in 2010 and it has been very fruitful until now (www.icp.csic.es/gtm/Eth/). The aim was to evaluate potential markets for the application of zeolites in Ethiopia. Zeolites are a class of industrial minerals that have all the required properties to be used as adsorbents. Indeed, they are world-wide used as cation-exchangers. Zeolites are a vast natural resource in Ethiopia that remains unexploited due to lack of scientific knowledge and available manpower with a geology background and means to initiate the systematic exploitation of this resource. Some of the most well-known applications of zeolites in this area include the selective treatment of sewage waters, extraction of ammonia, and heavy metal extraction from nuclear, mining and industrial waste. In this direction, our results have shown that zeolites can be effectively used for the removal of fluoride, subjected to suitable pretreatments, resulting in high-fluoride removal capacities.

We have recently developed a zeolite technology, patented in February 2013 that could be scaled up in sanitation plants. This technology was licensed to a Spanish company on April 2014, who is now in manufacturing stage. This has been the first case of a productive AAU Technology Transfer, in which a scientific development yields in a profitable commercial product.



This Project it is now real. ADS built in 2019 the 2 treatments plants in Obe and Dida, both are working and provide clean wáter for these communities. the overall objective of the project is to improve the living conditions of the population at risk of suffering from Fluorosis in the populations of Dida and Obe, in the Ethiopian Rift Valley.

The specific objective of the project is to provide safe water to the population using the new technology of the zeolites to remove the fluoride from the water through of the construction of two water treatment plants. These water treatment plants have been installed in the localities of Dida and Obe, in the Ethiopian Rift Valley according to the project signed with the FMoWIE

After one year with many difficulties for the security situation we had prove that this technology is working properly according to our expectations and we are following up the fluoride concentration in the water to maintain the quality of the treated water for the population.

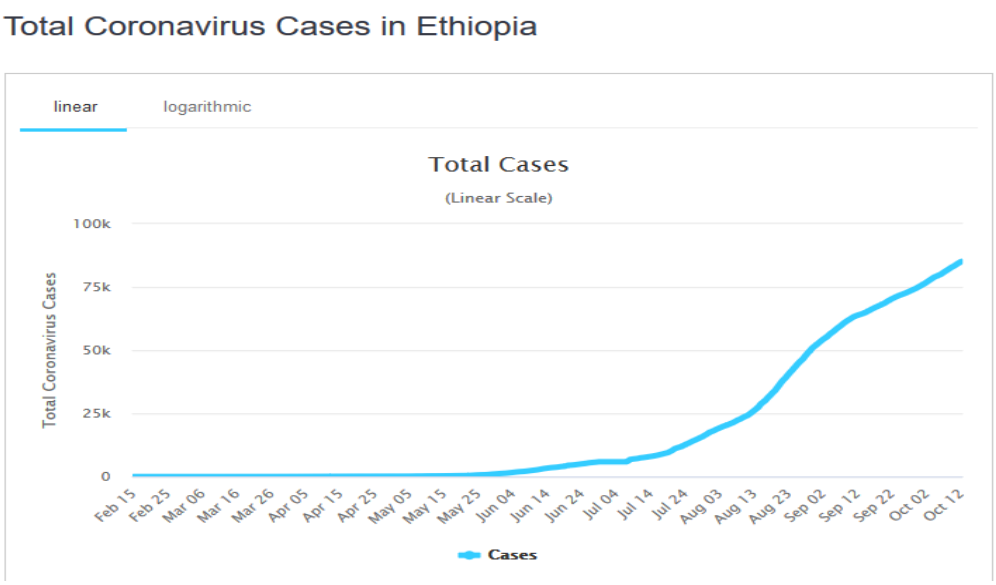
However, we couldn't implement the second fase of the project related to make the studies of the used zeolites with the Haramaya University to use this product to fertilize the soil to achieve the objective of zero waste material. This part of the project will be implemented with the FMowie in this year 2020-2021 according with the new parameters of the project.



Photo: Water reservoirs with the chemical product inside.

Córdoba Ayuda. Basic Food Security and Hygiene Emergency Program in Ethiopia in Times of COVID-19; Oromiya Region, N/Shewa Zone, Wuchale Woreda.

Alike other countries of Africa, the situations derived from the COVID-19 crisis are remarkably delicate in Ethiopia. Although it is critical in relation to the awareness level of the population and the capacity of health infrastructures of the Country, a combination of driving factors may explain the relatively slow spread of Coronavirus since the first case on March 13/2020. (*Ethiopia lies 49th in the total population of Coronavirus cases worldwide hitting 85,136; and the number of deaths from COVID-19 surpasses 1,300 as depicted in the table below*):



People believed that the impact of Coronavirus is limited in Ethiopia due to: Climate factors- such as high altitude, wide temperature fluctuations, strong ultraviolet light, warm weather; Demography factors- e.g. youthful population; Serendipitous timing- like later introduction, prior to the rainy season conducive to flues, after the tourist and diaspora holiday season with less visitors due to insecurity; Health-seeking behavior- such as limited health facilities where the virus could spread faster; Transport and communications- such as screening at airport, limited cross border train and road transport (*borders closed from March 23/2020*); and Global learning and early reaction as the later onset provided a chance for the government and people to know more about the pandemic and react appropriately. There are also medical reasons explaining low fatality and high asymptomatic cases such as different virus strain, vaccines, resistance due to COVID-like earlier flu strains, genetics and immune systems.



Photo: Water reservoirs with the chemical product inside.

Córdoba Ayuda. Basic Food Security and Hygiene Emergency Program in Ethiopia in Times of COVID-19; Oromiya Region, N/Shewa Zone, Wuchale Woreda. (Continue...)

Therefore, according to these contexts, the proposed project is significant in that it will:

Enhance the quality of life of families by providing basic sanitation and hygiene kits, accompanied by awareness creation activities on how to use the sanitary and hygiene packages properly.

Enhance the food security of people in need, particularly infants and children, affected by malnutrition from the impacts of COVID-19 in this period of public health emergency.

Reduce the impacts of malnutrition at family levels, especially among infants, children, pregnant women, and elderly people.

Improve the peoples' access to social services such as health, education, and basic foods that they lost during the confinement that has meant families lack their income.

Support households to strengthen their family economy to meet their basic food needs, mainly through provision of seeds to plant in family gardens.

Help people to reinstate into their income earning activities so that enhance the monetary inputs received by their families.

Increase the awareness level of the wider public towards prevention of Coronavirus.

Long term effect:

The quality of life of families affected by the different impacts of COVID-19 in Wuchale Woreda, N/Shewa zone, Oromiya regional state will be enhanced through food security, basic sanitation and hygiene services that are accompanied by awareness creation education.



Short term results:

The food security of 1,750 women will be enhanced due to the improvements in their access to diversified agriculture products and income generation alternatives that were once affected by the impacts of COVID-19 crisis.

The sanitary and hygiene conditions of 486 families will be increased due to the provision of sanitary and hygienic packages that are complemented by awareness creation education and promotion to safe water consumption.

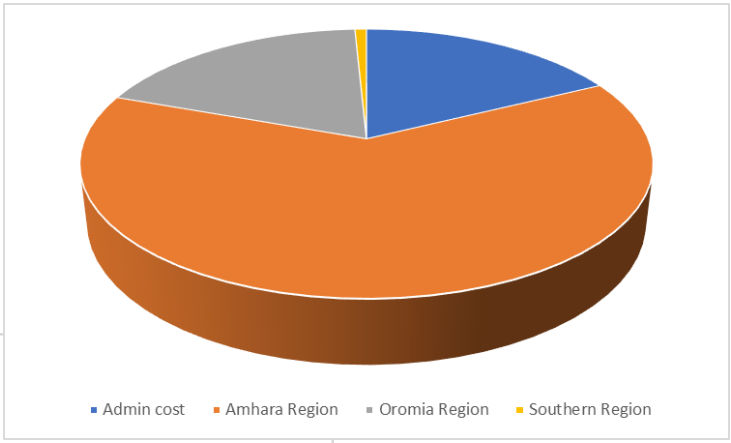
The nutritional status of 200 households will be enhanced due to the provision of enriched supplementary foods. Special attention will be paid to children, pregnant mothers, and the elderly in addressing this need in the intervention.

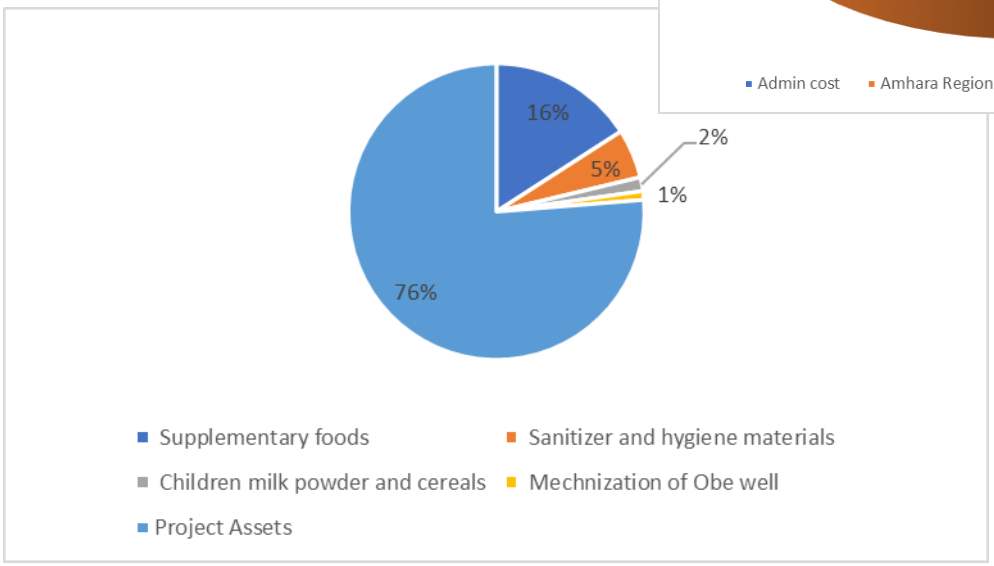
Ethiopia Economic Report

In 2020, Amigos de Silva have received for projects in Ethiopia the amount of **2,847,033 ETB ,** (contributions in cash and in kind) for the Health & Water Projects than the NGO are development in Ethiopia, This year the impact of the Corona Virus in our donors and the implementation of the Project have reduced considerably the incomes and the quantities of our volumen of projects.

The national and international restrictions related to the movement of the aid workes supposed in many cases the delay in the implementation, however these delays were authorized by the Federal Authorities for the pandemic situation reasons

The total Admin cost of the 2020 **427,147.49 ETB, equivalent to the 15%,** under the percentage authorized by the regulations





AMHARA REGION	**76%**
OROMIA REGION	**23%**
SOUTHERN REGION	**1%**

(All the regions have the included the percentage related to the admin cost.)



Photo: During 2020 AdS will continue to collect water sample from the water treatment plants to follow the quality of the water.

2021 Development Projects

During 2021, AdS have the next projects:

1. Elimination of fluoride from drinking Waters using technology based on natural zeolites.
2. Stronghealth Project. 4 years with the FMoH
3. Córdoba Ayuda. Reduce the impact of the Covid 19.
4. Food Security Project support by AECID, Spanish Cooperation Agency

Collaborations with other Public and Private Organizations during 2020

ASOCIACION AMIGOS DE SILVA is development their projects in collaboration with:

WHO. Supports the MoH in VL Control.

MUNDO SANO . NTD Partner

AECID . SPANISH COOPERATION AGENCY

HARAMAYA UNIVERSITY.

We have active our Project proposals with:

1. FMoH

2. FMWIE

3. Oromia Región, Fiche Zone

ONGD AMIGOS DE SILVA

Thanks to your contribution there is hope.

www.amigosdesilva.org



Thanks

AMIGOS DE SILVA wants to sincerely thank all those individuals, businesses and government in one way or another have worked and continue to work so we can improve the lives of people living in the Afar Region, Ethiopia. The implementation of health projects, nutrition and improving access to drinking water, mean a considerable improvement of living standards of the population, reducing disease and deaths especially among children.

For this reason we will continue working in the poorest region of Ethiopia with the help of all partners, collaborators, funders and volunteers continue to improve the living conditions of the Ethiopian population. Join in and collaborate.

THANK YOU FOR YOUR COOPERATION.