



“Love is something you do®...”

SERIOUSLY SUSTAINABLE

Sustainability Projects of Love A Child

Summer 2017

ATC: Sharing Our Knowledge thru Extension Program

During July 2-21, Love A Child’s Agricultural Training Center (ATC) conducted a new three week residential training program on sustainable agriculture. Seven villagers received sponsorships to come live on-site for three weeks to learn about sustainable gardening methods. The plan is that they would then take knowledge of the new techniques back to their villages, benefiting other neighboring families.

This tuition-based program (\$725/ student) allowed the sponsored

students to gain knowledge and hands-on experience as they lived and worked together at the new bunkhouse in the ATC. The bunkhouse has two bedrooms (up to four students in each room) and a center common area/ kitchen for eating and fellowship. There is also a bathroom in each dorm room with an indoor shower, sink and compost toilet.

Training topics for the extension course included: soil science, preparing soil, making planting beds and even creating “tire gardens.” They also



ATC Extension students assemble Chapin drip irrigation kits.

learned about sustainable irrigation systems, using organic compost and mulches, making and using natural organic fertilizers and insecticides, and saving seeds from season to season.

Hope Seeds donated garden seeds for the training and additional seeds for the students to back to their villages. Each student also returned home with five Chapin drip irrigation kits that the Chapin Living Waters organization provided. They also received basic garden tools, compli-

Each student returned home with seeds, drip irrigation kits & garden tools.

ments of Z23 Super Hoe garden tools.

Your support of this important new training program will extend the benefits of the sustainable agricultural training to many other villages and areas of Haiti. Thank you for helping us help many Haitian families regain food security for self-reliance.



Learning to re-purpose old tires for raised gardens at the ATC.

Appropriate Technologies + Reforestation = ARBORLOO

The luxuries of indoor toilets and plentiful shade and fruit trees are scarce in Haiti. This led LAC staff to consider alternative methods of how to provide both benefits to the communities Love A Child serves.

With two parts of LAC's sustainability initiative focused on appropriate technologies and reforestation, the best choice for our development efforts is the "arborloo."

An arborloo is a communal compost toilet that is re-locatable.

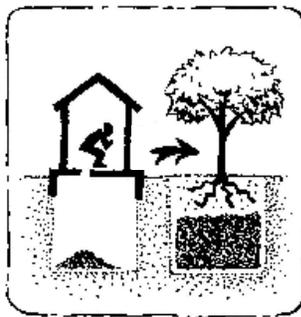


Image credit: Joe Turner, akwopedia.org

Think of a movable outhouse. A shallow pit, about 1m deep, is dug over which a superstructure (or outhouse) is placed. After each use, a cover material, such as sawdust, leaves or any organic material (carbon), is added to the waste. This is the "flushing," keeping it odor and insect-free. Adding the cover material helps with decomposition.

As the pit nears capacity, another pit is dug and the structure is moved to the new pit. The final layer of the old pit is covered with soil into which a tree is planted. In the natural fertilizer, the tree will automatically flourish.

The advantage to this type of compost toilet is its simple technique. That's what "appropriate technologies" are all about. It is low cost in a third world country. There is low risk of transmitting disease since there is no moving the waste; in-



Arborloo is a communal compost toilet.

stead, it is left where it was deposited. Finally, as the tree grows, there's potential for food or income if it is a variety that bears fruit.

There is also the need to replenish trees that have been cut down for cooking fuel. With seedlings always growing in the ATC, the arborloo is a win-win for Haiti!

Solar Lanterns Answer to Electricity Unpredictability

Seven years after the 2010 earthquake that devastated Haiti, the country's electric utility remains the same: it is mostly inconsistent and unavailable. Only about 25% of the 11 million residents have access. Of



Solar lanterns can last 8-12 hrs.

these consumers, nearly half are illegally connected to the grid.

In an effort to combat the unpredictable utility, Love A Child recently added to its wish list solar-powered lanterns to help students study at night and provide important social time. There are great sociological benefits to having even a few hours of light in the dark nighttime.

Current technology of the lanterns allows them to provide 400 lumens, which is the bright-

ness equivalent to a 40-watt light bulb. The basic rechargeable lantern is designed to last 8-12 hours.

The lanterns, which are made of high impact plastic, would also help eliminate the need for nighttime charcoal fires, which have been known to cause injury to both children and adults.

The Haitian people don't want a hand out, as much as a **hand up**.

Using Worms to Improve Soil for Gardening

In a country like Haiti, good agricultural resources are very hard or expensive to come by. This is certainly the case for soil amendments and fertilizers, and both are badly needed.

That is why Love A Child teaches the simple method of worm farming (vermicompost) to remedy soil nutrition while making our own “home-made fertilizers.”

At the Agricultural Training Center, we use the African red wiggler, *Eisenia fetida*, as it is almost certainly the most widely known and used composting worm.



Worm farming helps depleted soil.

We re-purpose old tires for our simple “worm farms” and add manures and any green organic material. The worms convert it

all into the best worm casting compost or “fertilizer.” It takes about 45-90 days for the red worms to completely convert the manure and organic material into an amazing 100% organic fertilizer.

The benefits of vermicompost are many. The “castings” provide a complete fertilizer with the added benefit of enzymes and microbes, which the growing plants absorb more easily. Even if the plant doesn’t use all the “fertilizer” we provide, it benefits the soil through improved soil structure and additional microbes. It’s a simple way to help the Haitians help themselves.

Rocket Stove Provides Quick, Economical Cooking



Rocket stoves improve cooking time.

“Appropriate technologies” amount to devising helpful ways of improving everyday chores that are simple and economical. With appropriate technologies as one of the six key components of Love A Child’s Sustainability Plan, improving how

Haitians cook is an opportunity to implement beneficial change.

We have designed our own rocket stove that begins with a five gallon bucket that becomes a mold for concrete. With an interior vertical chimney, the heat is directed straight up to the cook pot. In trial tests in India, the rocket stove used 39-47 percent less fuel than the three-stone fire that is typically used in Haiti and burns cleaner, thereby making it much healthier.



Reduces the need for charcoal.

For a cost of \$25, each rocket stove is low cost to produce, and it is also efficient and hot burning which means quicker cook times. Because the stoves use alternative fuels, they don’t require as much charcoal.



Further Sustainability Growth Needs Sponsors



Classroom learning at the ATC.

Listed at right are several beneficial sustainability projects Love A Child has mapped out for the future. If you have a heart for sustainability, take your time to prayerfully consider how you want to help educate the Haitian people.

Should you have questions, feel free to contact Assistant Executive Director Rad Hazelip by email at rad@lachaiti.org or Development and Sustainability Coordinator Mike Sullivan at Mike@lachaiti.org. Either can be reached by phone at 239-210-6107.

- \$ 5,000** towards improving the tilapia fish farm at Love A Child Village
- \$ 4,000** towards establishing an egg laying business
- \$ 1,500** provides beneficial tree varieties
- \$ 300** provides special seeds from Hope Seeds & ECHO
- \$ 250** provides a village with an “arborloo,” a community compost toilet
- \$ 125** provides tools for village gardens
- \$ 75** provides five Chapin drip irrigation kits to help a village
- \$ 35** provides a solar lantern that supplies light for 8-12 hours

How Love A Child Approaches Sustainability

The **Agricultural Training Center**, with the **chicken co-op** and the **Marketplace**, work together to provide a comprehensive approach to developing self-sustainability.



Agricultural Training Center

The more comprehensive the approach, the greater likelihood of success, because the benefits and achievements of each area support

and benefit the other areas. This comprehensive approach is yielding long-term changes for thankful Haitians. Know that we appreciate your support of Love A Child’s sustainability projects.



Miracle Marketplace



Poul Mirak Chicken Co-op

THANK YOU for supporting Love A Child’s Sustainability Projects

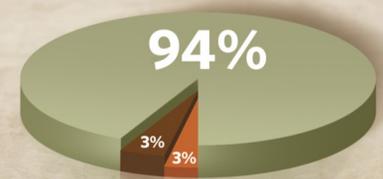


Enhancing Trust



SN17B

Love A Child is a member of the Evangelical Council for Financial Accountability (ECFA), which requires the highest standards of accountability for non-profits. Love A Child has also earned the Independent Charities of America “Best in America” Seal of Excellence, as well as 4 stars from Charity Navigator indicating an “exceptional” classification.



94% of total expenses go directly to support our Program Services

3% Fundraising **3%** Administration