# Peak Macaya Cooperative - Health and Sanitation Project, 2022 Peak Macaya, Haiti



Working in the coffee field, surrounded by small mango trees and pineapple plants.

Photo credit: Pievy Polyte

**Project Description:** To this day, families living on Peak Macaya currently have no sanitation system or indoor plumbing. This lack of access to proper sanitation systems creates an increased potential for spreading illness and disease.

Peak Macaya Cooperative is seeking funding for Phase One (training, construction, installation, monitoring) which would build 10 composting toilet facilities for 9 small communities, plus 1 for the school. Phase Two, another 10 composting toilets, would involve more communities in the composting process and increase its beneficial ecological, health and social impacts.

This project involves construction of the facilities themselves, and education, instruction and supervision on use and maintenance. Once up and running, the composting toilets provide health and sanitation benefits to the people and a source of fertilizer for land degraded by deforestation.

Project Implementing Organization: Peak Macaya Cooperative, Peak Macaya, Haiti

Website: https://peakmacayacoffee.com/

Project Organizer: Pierrevy "Pievy" Polyte, Burlington, Vermont USA

E-mail: <a href="mailto:peakmacayacoop@gmail.com">peakmacayacoop@gmail.com</a>

### **Project Components:**

#### Phase One

10 community toilets (for 9 different household neighborhoods, plus 1 for the school)

Training, all materials and transport, building, inspections, installation, monitoring, and administration

<u>Time-frame</u>, start to finish: two months (mid-April- mid-June, 2022)

Budget: \$13,866 USD

#### Phase Two

Another 10 community toilets (for an additional 10 different household neighborhoods)

Time-frame, start to finish: two months

Budget: \$13,866 USD

Time-frame for entire project: four months (in two separate phases)

Total Requested from Donors: \$27,732

#### **Background Information:**



Map source: https://ipv6.worldometers.info/img/maps/haiti physical map.gif

Peak Macaya ("Morne Macaya" on this map), elevation 2347 meters, is in the Southwestern section of Haiti; the nearest large city is the port city of Les Cayes.

### 1) About Peak Macaya:

- Peak Macaya is the second largest mountain (7,700 feet) in Haiti and was designated as a National Park in 1983. It is the location of the last virgin cloud forest in Haiti and where many species exist distinct from anywhere else in the world. For more information on the unique species and ecosystem of the region, see the website of the Haiti National Trust: https://www.haititrust.org/macaya
- The high mountain area of Peak Macaya is home to nearly 20,000 people, many of whom are farmers, and who live in small communities of about 10 households each.
- The mountain waters are the source of fresh water for approximately 250,000 people living downstream.

#### 2) About Peak Macaya Cooperative:

Peak Macaya Cooperative is run by and for the benefit of the Haitian communities living in the high elevation region of the mountain of Peak Macaya. Founded in June 12, 2005, it now has 800 members and is governed by an elected board of 30 members. The Coop sustainably grows and harvests cocoa and organic coffee for sale; grows a variety of food crops that support local families, has built and operates a school and a mobile clinic that operates every month; provides steady employment for community members.



We are capturing the water from the river to irrigate the plantations and we are eating our lunch during a break. Photo credit: Pievy Polyte

Peak Macaya Cooperative's mission is to protect the Peak Macaya region, its diversity, and its inhabitants through environmental sustainability, medicine, education, and nutrition.



Cooperative members are filling up bags with compost, which will then be used for starting seeds in the nursery. Photo credit: Pievy Polyte

Some surrounding private land-owners have agreements with the Cooperative to provide additional acreage for other agricultural projects, such as growing bamboo under a sustainable harvest and plant scheme. The 500-acre bamboo project is significant because bamboo provides an affordable and more ecologically-friendly alternative building material than cutting trees for timber – a practice that over the years has contributed to deforestation and soil erosion.

Peak Macaya Cooperative has the capacity to carry out the composting toilet project. The detailed budget includes a "matching funds" column for the Cooperative's own contribution to the project – in form of goods and services provided by the Cooperative staff and resource base. The missing ingredient is the cash with which to purchase the necessary supplies, materials, services and expertise to implement the project.



Peak Macaya Coop organizes a monthly mobile clinic for the people of Peak Macaya, because it's hard and expensive for them to get doctors' assistance.

With the composting toilets project we will get fewer people sick in the mountain communities. - Photo and explanation courtesy of Pievy Polyte

The Peak Macaya Cooperative leaders and project organizer Pievy Polyte have the motivation to see the composting toilet project become a reality, because of the urgent need for improved sanitation.

# 3) Benefits of composting toilets for people, their community and their ecosystem

<u>Environment</u>: By keeping human wastes out of rivers, river ecosystem health is improved. Additionally, composting toilets, when properly managed, create a source of organic fertilizer for agriculture and reforestation.

<u>Health</u>: Reducing open defecation near water sources reduces the risks of contamination of drinking water. This reduces the risk of community members becoming sickened by drinking contaminated water. Each composting toilet facility

includes a hand-washing station; keeping the water and the soap dispensers filled is part of the community maintenance responsibility.

<u>Economy</u>: Organic fertilizer increases crop yields; healthier people experience a better and more active quality of life, have reduced medical costs and lose less time off from work.

<u>Aesthetics</u>: Composting toilets help to keep the Peak Macaya community beautiful, free of odors and waste.

Project Budget - Narrative Summary (itemized budget is available upon request)

Budget is calculated in Haitian Gourdes (HTG) as all the materials and labor will be purchased in Haiti, supplied by local people and businesses.

### I. Training Session, 15 days - 280,000 HTG (\$2715 USD)

The 15-day training session will involve nine members from the participating communities, plus three trainers:

Pierre Damier, the President of the Coop board, who will be supervising the project throughout;

Israel Chevvooy, the Agronomist of the Coop

Pievy Polyte, project organizer, already trained in construction and maintenance of composting toilets by SOIL Haiti <a href="https://www.oursoil.org/">https://www.oursoil.org/</a>

#### Topics include:

- importance of composting toilets,
- · connection with clean water and the ecosystem,
- benefits of producing their own compost for land regeneration and soil fertility;
- maintenance, cleanliness and hand-washing;
- construction of 10 composting toilets, from materials previously purchased and transported - one toilet for the school, the other nine toilets for nine different household communities (each household community includes about ten families).
- explanation of the monitoring system once each community has their new facility in place: un-announced, surprise inspections by Coop board members. A community will lose their toilet if it is not maintained properly, and it will be given to another community instead.

Refer to the budget's "Self-Match" column to see that the work of the trainers and the cooks for this project is being supported by the cooperative.

# II. Construction Materials for 10 Community Toilets - 852,750 HTG (\$8266 USD)

The group will be building their toilets themselves, using purchased materials such as concrete mix, metal sheets, 100-gallon tanks, and donated materials such as the

bamboo for walls and the aerating pipe system. This will be done under supervision of trainers with experience in building composting toilets, with the support of visiting inspectors – experts based in Port-au-Prince working for SOIL Haiti, a manufacturer of these toilets and an advocate for this form of public sanitation.

# III. Transportation of Materials from Les Cayes City – 169,600 HTG (\$1645 USD)

The nearest city, Les Cayes, where construction materials can be purchased is 6 hours drive each way; transportation covers the cost of gasoline and two drivers – who also do the loading and unloading at each end of the journey. The truck is owned by the Peak Macaya Cooperative. Four separate round trips are needed for all the necessary materials, the bulkiest of which is the holding tanks for collecting the waste.

#### IV. Project Administration – 60,020 HTG (\$585 USD)

Funds requested to help cover the costs of administration include full-time work for three supervisors in the construction and installation phases, plus covering the costs of bringing in the outside inspectors to check the work as it progresses. This is critical, not only because of the need for attention to detail to get the work done properly, but also because of the need to reinforce to the community members the importance of all of these steps. Personal attention every step of the way will increase the likelihood that each community will maintain its new composting toilet well.

Video and photo documenting of the project, and the financial accounting involved with the money management and disbursement, will be handled by Cooperative staff and officers, as part of their regular duties (self-match contribution).

An ongoing system of unannounced inspection by Coop board members will clearly signal to each community the importance of their composting toilet. Coop workers will take responsibility for gathering and using the composting material. Since there is already a waiting list for community toilets, any community not taking adequate care of their toilet will have it removed, and given to another community.

# V. ECOLOGIA/Virtual Foundation fiduciary agent (fiscal sponsor) administrative fee 5% - 68,118 HTG (\$660 USD)

Total for Phase One: 1,430,488 Haitian Gourdes = \$13,866 USD

#### Comments:

- 1) The Cooperative and Pievy Polyte are prepared to proceed with Phase One, once they have the funding in place.
- 2) The composting toilet project will become an integral part of the existing community and Cooperative structure, which already carries out diverse agricultural enterprises and community services such as the school and the mobile health clinic.

### **Background Information on Project Organizer Pierrevy "Pievy" Polyte**

Pievy Polyte was born into a plantation-owning family in the region, and grew up in a mountain community about 3 hours walk from the Peak Macaya settlement. He purchased land of his own in the Peak Macaya region, established his own coffee plantation, and has been working with the community for the past two decades.

With the establishment of the Peak Macaya Cooperative in 2005, these activities have grown to include diversified agriculture – organic coffee and cocoa grown for export, and many food crops grown for local consumption. The Cooperative also operates public services such as the school and the mobile health clinic.

Pievy, an artist, has been living and working in Burlington Vermont, earning money both from his artwork and from the retail sales of Peak Macaya Haitian Blue Mountain organic coffee, which is imported from Haiti, roasted in Burlington, and packed/shipped to purchasers by Pievy.





Pierrevy grew up around coffee. Having learned the trade and growing techniques from his father, he and his brother Otheniel expanded the family coffee production into a model that supports and involves their community. In Peak Macaya, land is an invaluable asset passed down through generations that is a common and accessible resource. It can be traded for more space to grow coffee in mutually beneficial transactions. Pierrevy has created opportunities for his community by utilizing the land to create small-scale trades between neighbors. As the volume of coffee and profit grew, Pierrevy was able to invest even more into his community. This investment was in education. In 2005, he founded a school that started with just 25 students that teaches

relevant subjects like environmental education. Today that school is home to more than 500 students.

Throughout my conversation with Pierrevy, there was a clear emphasis on the importance of sharing. Seeds of fruitful coffee plants are shared with neighbors so they can start their own crops, alleviating poverty in the area. 30 of the farmers of Peak Macaya coffee now sit on the board of the cooperative, overseeing its 800 members and others who are employed indirectly. In the extremely rural area of Peak Macaya, small-scale industries have a difficult time making entry into the global market. With a business model that centers neighbors and community, Pierrevy has been able to share and distribute the collective success of his shade-grown coffee.

https://peakmacayacoffee.com/index.php/about-us/
Interview (2018) by Alex Rose, Peace and Justice Center, Burlington Vermont