

# Eco-Waste Management in Lushoto District: Biogas and Compost Pilot Project for Health and Sanitation

# **Problem Statement:**

The Lushoto District is located in the Eastern Arc Mountains of Tanzania, in the northeastern corner of the nation. The District is primarily rural with 96% of the population surviving as subsistence or small-scale farmers, despite decreasing land productivity due to overuse of land. Lushoto Town is the primary selling point for the products of the district farms and primary source of food for local families. Waste collects there daily, alongside fruit and vegetable sellers, contaminating the population's food and spreading communicable diseases such as cholera and dysentery.

### Addressing the problem:

New solutions are necessary to remove the waste and use it profitably, to both decrease rates of diarrhea and other food-contamination-based diseases and to increase employment opportunities in Lushoto, which has one of the highest population growth rates in Tanzania. By installing a compost and biogas facility on-site at the Lushoto market, waste can be dealt with daily. The products of these two facilities will also be able to improve local livelihoods by providing an affordable, organic fertilizer for use on the exhausted soils, through compost production, and a reliable energy source, from the biogas facility, for neighboring homes and nighttime lighting for the market.

EcoVentures International has worked closely with the Lushoto Health and Sanitation Officer to devise a pilot program that will provide local employment opportunities for unemployed youth through the installment and management of the compost and biogas facilities. The Lushoto District Council has provided land space near the market for such a program and will use the pilot program to start a new, sustainable waste management plan, potentially scaling up both the biogas and compost programs to serve an even larger portion of the population beyond the town center and marketplace.

The one-year pilot will fund the construction of the biogas and compost facilities and the training necessary for new sanitation workers to daily manage these new technologies. Together with EcoVentures International, the Health and Sanitation Officer will manage the facilities and run a community sensitization program to inform the local population about the use of compost and biogas and how these products can improve their livelihoods.

# **Project budget and timeline:**

The one-year pilot has a total budget of \$12000 for the installment, training, and management of the program. Following the first year, the local government will assess ongoing costs to determine how to use and integrate the solutions into their Health and Sanitation strategy.

# **Project monitoring and evaluation:**

Project success will be based on decrease in food-contamination-related diseases, overall running costs, and enterprise-building success. Due to the large numbers of people utilizing the market, there is the opportunity to positively improve the lives of up to 10,000 people through decrease in disease occurrence, the availability of nutrient-rich organic compost for increased land productivity, and safer homes due to reliable lighting sources within homes and in the local market.

For more information, please contact Megan Hill, Program Coordinator for EcoVentures International: megan@eco-ventures.org