Haiti Health Initiative
PARTNERS PROMOTING HEALTH ONE COMMUNITY AT A TIME

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October 2011 Mission to Timo, Haiti

Agriculture Report

INTRODUCTION

Haiti Health Initiative (HHI) invited Dawn Gatherum, professor of botany at Weber State University, to accompany them to Timo in October 2011 and address some of the unique agricultural issues the people of Timo face. While there, HHI planned to help the community set up drip irrigation systems, which would enable families to produce small amounts of fruits and vegetables during the dry season, increasing food production over the entire year instead of limiting it to the rainy season, as it was currently. In addition, the team hoped to introduce new, better quality seed varieties and demonstrate the art of composting. Dr. Gatherum also wanted to explore the possibility of solar cooking, which would help reduce the use of wood and charcoal as the people's main source of cooking materials, and would help combat the dangers involved with breathing the fumes from cooking fires. There is also extensive inbreeding among the livestock in Timo, to the point that little production of milk takes place among the population. The team have also explored possible solutions for this problem that will likely be implemented during later trips.

REVIEW OF ACTIVITIES/RESULTS

The team is preparing the ground before setting up a demonstration garden with a drip irrigation system.

We sent a total of seven drip irrigation systems to Haiti. Three of these were installed in locations that would act as demonstration gardens, and we taught three prominent locals how to set the systems up so that they could help others in the community implement the systems. We encouraged the people to keep the weeds out of the garden plots, and Rémy Charles, president of the local organization (Fond Paysans Fond'Oies) suggested

we fence the area so that free-ranging livestock and chickens would not destroy the plots. After some discussion, we agreed to supply funds for the cost of fencing and inorganic fertilizer in hopes that the people would have a good harvest.

However, it was clear that the compost pit they had prepared was way too large and deep to do what needed to be done. Dr. Gatherum suggested building a smaller pit or one above ground that they would more easily be able to get in and turn the compost on a periodic basic to hasten its decomposition. Additionally, he discussed implementing a system of layering compost and soil, which would provide the innoculum for the bacteria and fungi that would do the decomposing.

Dr. Gatherum also showed some of the citizens how to set up a solar cooking system, and on the two days, the second meal turned out very well. A number of youth were interested, and after teaching the group how to set up the system and watching them demonstrate back to him what they learned, he distributed nine cooking systems. One of the systems went to a student in the local school, who said he would teach his classmates how to use the system, too. HHI left a number of materials in Haiti so that the group could make more systems as needed.

FURTHER NEEDS

As previously stated, the livestock in Timo are all inbred to the point that little production takes place. Every male animal was considered a breeding animal, a problem that needs to be addressed should we hope to help increase milk production in the community. Additionally, the livestock feed among the hillsides, which has become highly deforested, which will cause severe erosion and possible mudslides. Finally, Dr. Gatherum noticed that much of the corn in the community is planted too far away from other corn plants that proper pollination could not occur. In his words, “If the corn is being used only as fodder for their livestock, then that is fine; but if the community is looking for corn ear production, a change will need to be made to plant corn much closer together so proper and full pollination of the corn can take place.”

RECOMMENDATIONS FOR SOLUTIONS

To address the livestock problem, Dr. Gatherum suggested that some system be worked out to bring new breeding stock into the community. After some discussion, the idea of a micro-loan was presented, which would be made available to a member of the community with livestock experience. This micro-loan would be used to purchase new breeding stock that could be used throughout the community to increase the success of their livestock. A small fee might be charged for each service in hopes that the money would be used in the future to pay for more breeding stock. This introduction of new stock would greatly increase the genetic variability of the livestock population in Timo, thereby increasing the livestock’s overall health and productivity.

Additionally, HHI hopes to set up a plant nursery in Timo, whose stock could be used to reforest the hillsides around the areas where the livestock feed. This would help retain moisture and prevent erosion. And orchards could be developed from this stock with various domesticated plants that the people of Timo use as food sources, like avocado, mango, banana, breadfruit, oranges, grapefruit, and others.

PERSONAL REFLECTIONS
Dawn Gatherum, Ph.D:

Corn is growing in Timo during the dry season.

"There were a number of great experiences I had in Haiti… like seeing the children dressed so well and happy. The coming together of everyone for a common purpose, and seeing the needs of the people and knowing that we can and did make a difference in their lives was fantastic. The acceptance and implementation of drip irrigation systems and the excitement resulting from the demonstration of solar cooking was rewarding. I thoroughly enjoyed my time in Timo. I appreciate the fact that I was well accepted by the medical group. I feel that my time was well spent and hope that what I did will make a difference in the lives of these good people… I am grateful to have been part of the team."

Dawn Gatherum, PhD, is a professor of Botany at Weber State University. He has served on the Faculty Senate and Executive committees, the Scholarship Department and College of Science committees, and the Chair College of Science Graduation committee, all at Weber State. He has also served as WSU Community Horticulture consultant, and the Chairman of the Weber County Weed Board and Weber River Cooperative Weed Management Area.

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