PUTTING SUSTAINABILITY INTO PERSPECTIVE FOR STUDENTS: A BIODIGESTER INSTALLATION IN COSTA RICA

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Environmental sustainability is the focus of an increasing number of college and university courses offered across the United States. In an attempt to underscore the dire environmental situation we face on this planet, as well as educate students about the perils of global climate change, 10 students from Rivier University and one student from Syracuse University traveled to San Luis de Monteverde, Costa Rica, March 8-15, 2014. The course was open to students of all majors, and the experiences in Costa Rica were designed to provide the students with a variety of perspectives on topics such as sustainability, biodiversity and ecotourism. Whether spending time in the classroom identifying native plants, or collecting pictures of moths at 3 am, students seized the opportunities to broaden their understanding of the natural world. Furthermore, the students identified the experience of installing a biodigester for a Costa Rican farmer as the most transformative experience of the trip, as they were able to create positive change in the lives of Costa Ricans through their hard work.



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The biodigester we installed is a system in which water and organic waste materials (e.g. animal manure) are introduced to anaerobic conditions in a large polyethylene bag. This allows microbes to digest the material, producing cleaner effluent water and methane gas. The methane gas is captured and sent via pipes to the kitchen of the home, where it is used as a replacement for liquid propane in cooking. Before the group left the United States, the students raised funds through a variety of means to pay for the materials and technician required to properly build the biodigester. Once in Costa Rica, the group travelled to the farm and completed the entire biodigester installation.

The following video is a testament to the experiences of the students. Utilizing photographs, videos and interviews taken throughout our trip, the students showcase the beauty of Costa Rica as a symbol of why our planet is worth saving. In addition, the video chronicles the installation of the biodigester with an interview from the farmer, Rafael Mendez. Finally, the students describe how this experience transformed their understanding of why and how the environment should be protected. The opportunity to participate in a meaningful service project that not only improved the life of a rural farmer but also had a positive effects on the environment, demonstrated to us that even changes on a small scale can have profound impacts on our planet.