

“Building Walls and Breaking Barriers”, The Container School Project in Manila.

Introduction – Smokey Mountain Community and the Container School

Smokey Mountain is a 2,000,000-ton garbage heap in Tondo, Philippines. For over 40 years, it has attracted a huge squatter community who scavenge for their livelihood. Glass, metal, and plastic are collected on a daily basis by both adult and child scavengers who sell these items to middle men, who in turn sell them at a higher price to recycling factories. Families come to depend on the additional income generated from their children’s scavenging, subsequently denying many children the opportunity to attend school. Stark violation of human dignity and security that exists in Smokey Mountain highlights the tension between the extremely destitute scavengers and a stratified society that is almost completely unaware of Smokey’s people. In turn, this tension creates a parasitic relationship in that the scavengers find ways to survive by living off of another’s garbage, yet they cannot make a truly healthy and self-sustaining livelihood for themselves because of the structural neglect which they face.

Located a mile away from the dumpsite lies a place where hope beckons to the community of Smokey Mountain. The Container School in Tondo, which is made of stacked recycled shipping containers, helps address Smokey’s destitution by offering free education to 1000 students from the Smokey Mountain area. The school provides students with free lunch, school supplies, uniforms and shoes, while also giving them opportunity to earn food credits which win them canned goods to take home each week in order to make up for the income they lose by coming to school.

Our project aims (1) to create a healthier, more positive learning environment, (2) to grow vegetables and herbs that will allow the Container School to become more self-sustaining and lower its costs, (3) to collect and store enough water to maintain the garden, (4) and to introduce and instill the concept of a sustainable livelihood in an impoverished, urban community.

Project Description:

Our Peace Project will install a rainwater collection system, compost bin and herb and vegetable green wall at the Container School in Tondo, Manila, Philippines. The rainwater collection system consists of a downspout attached to the façade of the school and a cistern, which has a faucet installed on it two inches from the ground. The collection system will be used to maintain the plants that we bring to the school. The cistern will be able to store 37, 700 L of water (1m³ = 1000L). If the cistern is at full capacity at the start of the dry season, then it can provide the school about 180L of water per day for 200 days.

Near the cistern, we will install an edible green wall that has a vertical width of ~1.5m and a horizontal length of ~3m with plots that are no more than ~15cm in depth. It will be placed on the concrete wall and will face the façade of the school in order to protect the soil and the plants from the typhoon. Our green wall design was created under the guidance of the Asia CEO of Green Living Technologies, Suneel Bhatnagar. Imagine the plots made of waterproof plywood, and looking like vertically stacked shoe boxes that contain soil in which plants grow horizontally. The reason for this is mainly to conserve space. The plants on the wall will produce some vegetables (onions, chili, cabbage, etc.) and herbs (oregano, basil, thyme, etc.) that will be used in the school’s kitchen. Some of the plots will also include plants that act as mosquito repellents (rosemary, marigolds, etc.).

A compost bin will be placed near the green wall and will be used as fertilizer for the soil. It is a 3-bin system; once the first bin is filled, it will age while the second bin is being filled, and while the third bin is being filled, the first bin is being used/refilled. The compost will be made from kitchen waste and other organic material. Periodically, the soil will be infused with compost from the bin.

To ensure the integration of the project in the community, we are creating a curriculum that will educate the students and teachers on the care and maintenance of the rainwater collection system, proper agricultural practices, and the process of effective composting. The curriculum will also include lessons and reflections on the project in relation to the students’ lives. We will conduct a series of seminars with the curriculum once the compost bin, the rainwater collection system, and the green wall are built. The curriculum will be passed on to the director of the school so that the seminars can be conducted each school year. Before the curriculum is developed, we will first educate ourselves on the disciplines and lessons that are vital to this project such as agriculture, ecology, and environmental science. We will seek the expertise of our professors and read relevant literature in order to prepare ourselves further and ensure the successful implementation of the project.

What is Peace? Why this Project Fulfills Our Vision?

Peace, at its core, is the existence of a harmonious relationship between individuals, society, and ecology. With respect to Smokey Mountain, we believe that peace can be attained when we relieve the tension between the scavengers and society by breaking the parasitic cycle of dependence thereby transforming and empowering the citizens of Smokey Mountain.

The project achieves our vision of peace in three ways. First, we are motivated by the idea that our project will enable the school to become increasingly self-sustaining, thus improving its ability to serve the students. Second, we believe that a healthy physical environment is a prerequisite for a full educational experience, and our project aims to create an ambiance of life and growth that is largely absent in Tondo. Most importantly, we hope to empower and transform the Smokey Mountain youth by developing their ability to see beyond the immediate. Through students’ interaction with the project, we hope that they would become cognizant of processes and relationships required to maintain and nurture the vegetables on the green wall. Once students see the fruits of their labor, we hope that they will translate this interaction into their own lives and discover the skills necessary to break the cycle that keeps them destitute. In the context of the larger Filipino and global community, our choice to work in Smokey Mountain symbolizes the idea that everyday people can take action to overcome structural violence and create a more peaceful world.

Time frame:

Completion of the new school building is expected in May. We will oversee the installation of our project in May, ahead of the typhoon season. Should the rains come early, construction can be done indoors and installation completed when the rain subsides. We will hold our curriculum seminars in June when classes start. We will present our project to international schools in the Philippines May, as well as to Macalester in early Fall 2010.

In addition, we will follow-up on the project through WE International Philippines three months after the project (09/10), then six months (12/10), and finally, one year later (06/11).

Past Experience:

Michael Manansala was born in the Philippines and moved to the United States in December 1999. In high school, Michael spearheaded a campaign that resulted in the founding of Kim Dau Nursery School in Vietnam. He is the Congress Representative for the Bonner Community Scholars Program at Macalester, where he is currently piloting a mentorship program for AVID, a college-access program in St. Paul. Michael is also the co-founder and chair of the Macalester Development Group, a student organization that exposes and involves students in the practice and discourse of global development. He will be attending the prestigious Public Policy and Leadership Conference at the Harvard Kennedy School in February.

Cecilia Martinez-Miranda was born and raised in the Philippines. Before moving to America, she worked on several local community service projects, including co-founding the NGO, WE International Philippines which continues to cultivate a movement to reverse the cycle of poverty in the Philippines. She has presented her work at the Global Citizenship Summit in Bali, Indonesia. At Macalester she is a member of one of the Lilly's Project for Vocation and Ethical Leadership Programs, Lives of Commitment, which allows her to combine service with intentional reflection to answer questions about the purpose and meaning of service. She is also part of the Macalester Development Group.

Community Partners:

Through her involvement with WE International Philippines, Cecilia has worked with the Smokey Mountain community. For this project, we will be partnering with the Philippine Christian Foundation (PCF) and their Container School. We chose this particular site because the students who attend the school already have their basic needs met by PCF and other NGOs, and further, they come from the same community that WE International Philippines is working to empower. We have been in contact with Jane Walker, the founder of the school, since November of 2009. Along with her desire to install a compost bin, Jane communicated the school's need for herbs, vegetables, and plants that repel mosquitoes. Beyond providing the needed vegetation, we decided to also focus on installing a rainwater collection system so that the school would not have to rely on outside sources and pay additional costs to maintain the garden. We are also in contact with horticulturists, architects and engineers in Manila who have agreed to help us out with the planning and implementation of the project. Michael has enlisted the help of Suneel Bhatnagar, the Asia Division CEO of Green Living Technologies (GLT), which specializes in green roofs and green walls with projects in various parts of the world. Suneel's expertise ensures that the structure of our green wall is stable and will successfully nurture the plants that we would grow on the wall.

Expected Outcomes and Prospects for Future Impact:

After our project is complete, we will periodically follow up on its progress and measure how much students understand the processes of green wall maintenance. We will ask the students to submit reflections on how much they have learned from this project and if it has made an impact in their lives. We also expect the school's expenditure on food to decrease due to the kitchen's utilization of the green wall's vegetation.

In addition to having an impact within the Container School, we hope that our presentation to international schoolchildren will raise awareness of structural violence and inspire them to take action.

If our vision for the Container School is successful, we will examine possible extensions of this program at other schools that serve impoverished youth in the Philippines as well as explore possibilities for the larger Smokey Mountain community.

Awareness of Our Project at Macalester

In order to spread awareness of our cause, we plan to incorporate a blog that will be updated every two days from the time of our arrival to the Philippines to the completion of our project. We will take pictures and record videos documenting our progress.

We will also present our project to the Macalester Development Group's organizational meeting. Our professors have invited us to use their classes as platforms for raising awareness and motivate our peers to engage in similar initiatives. In addition, we will work with Macalester's Communications Office to create visual materials that can be presented to Macalester parents, alumni, and prospective students.