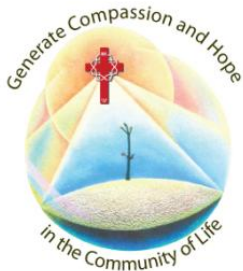


...with Alexander S. Baena, BSME

RECYCLE, REDUCE, AND RE-INVENT



“For me, the greatest effect on our students is their learning the value of conservation, protection, and preservation of our natural resources. They are taught good stewardship of God’s creation in their religion classes and come to appreciate the beauty of nature around them.” - [Alexander S. Baena]



Franciscan Sisters of the Poor
2008 General Chapter Direction Statement

community of life.”

This article by Alexander S. Baena, BSME, focuses on the practical aspects of environmental education and its implications for ecological and social justice locally and globally. Mr. Baena shares several concrete examples of how recycling can bring about justice, build community, and contribute to protecting and healing our earth.

Alexander Baena is the Chair of Research and Innovation of the Eco-SWARM Program and the Coordinator of the SPUD Science Laboratories. He holds a BS in Mechanical Engineering, an MS in Science Teaching, and is an MA Teaching Candidate. He is enthusiastically committed to the Eco-Swarm Program (Solid Water Reduction and Management) at St. Paul University in Dumaguete City in the Philippines. This program is very successful and other universities are adapting this innovative model.

This issue of *Conversations* invites us to a positive reflection on the good news of this intergenerational environmental project in the Philippines. May it also serve as a call to action to bring about more compassion and hope in the community of life. We hope that you visit our website frequently and we invite you to join us in our mission!

Sister Tiziana Merletti, sfp
Congregational Minister
and Council

*“We can be awake and watchful for resurrections,
for the creative ways that new life
streams into our lives even in the midst of death.” [Judy Cannato]*

Dear Friends,

Peace and all good to you!

We continue our series of conversations, exploring the deeper meaning of our General Chapter direction: **“Generate compassion and hope in the**



Alexander S. Baena, BSME

THE ECO-SWARM PROGRAM OF SAINT PAUL UNIVERSITY- DUMAGUETE, PHILIPPINES

Could you describe something about this lab and its functions?

As a background, the St. Paul University Dumaguete's Eco-SWARM project (an innovative solid wastes management model) was developed after the passage of a Philippine law, Republic Act 9003, in 2001. The law, known as the Waste Management Act, provides a practical guide to local government units (towns, cities, and provinces) and private institutions in managing their waste products.

The University took seriously this government mandate by developing the Ecological Solid Wastes Reduction and Management (Eco-SWARM) project with three goals in mind:

- 1. Preserve and protect the environment by minimizing the use of products that create wastes.**
- 2. To serve as a model institution on increasing the awareness of the school community and its environs about the effects of proper waste disposal. The Eco-SWARM project has been a showcase where students, government officials, church groups, and environmentalists visit our facility and observe how some waste products can be turned into something useful.**
- 3. To promote social justice by using the proceeds from selling recyclable products to**



A Visitor Workshop: recycling plastic bags into ropes

help poor families who earn a living as scavengers. The school has set up a scholarship fund for their children to obtain a good education and believes that it is only through education that these children will have a better future.

How do you see this lab promoting the community of life – locally and globally – today and into the future?

Aside from the innovative means of waste management, *I see the Eco-SWARM program as providing job or livelihood opportunities for people in the community.* As part of our social outreach to the community, the University teaches people how to transform common wastes by processing them to make goods and crafts that can be sold in the market.

For example, we teach people how to recycle papers and make them into art paper and stationeries. The best example I can give is the recycling of plastic shopping bags. We all know that plastics become toxic when they are burned and are not bio-degradable. The program provides for segregating these plastic bags, cleaning and

making them into ropes through the use of a rope-making machine. We also recycle glass bottles by shredding and making them 'glassphalts,' which are used for walking paths and roads.

For city dwellers who would like to have plants, but do not own a piece of land to grow them, plastic soda bottles can be used for planting vegetables by suspending plants where there is exposure to sunlight.



Student volunteers provide environmental activities: telling stories about the importance

From your experience in the lab, can you share a story of how this lab affects your students?

St. Paul University in Dumaguete City can be generally described as an environment-friendly institution. This is experienced by students and visitors when they enter the school campus. Our students are immersed in the different Eco-SWARM projects throughout their stay, starting from the elementary to the college level, doing various activities from tree planting to waste segregation.

For me, the greatest effect on our students is their learning about the value of conservation, protection, and preservation of our natural resources. They are taught good stewardship of God's creation in their religion classes and come to appreciate the beauty of nature around them.

How do your personal values/hopes shape the work that you do?



Students' immersion: segregation of waste on and off the campus

As a Program Chair of the Eco-SWARM, one of my tasks is to give an orientation on our waste management facility to students and visitors. *I find delight when after each tour and orientation, the people leave the place with*

such awe and inspiration that they would like to have something like it in their own institutions or say that they have learned something valuable that they could do when they go home.



The beautiful campus with magnificent scenery after implementation of the environmental management program.

curriculum approach is in line with our advocacy on environmental protection and preservation.

The Eco-SWARM program evolved from a government mandate and continues consistently to educate our students and visitors on the importance of waste reduction and management. *I have the hope that all people, especially Filipinos, will eventually learn to recycle, reduce, and re-invent wastes into reusable materials.*

Are there hopes or dreams about the lab (its goals, future, etc.) that you would like to tell us about?

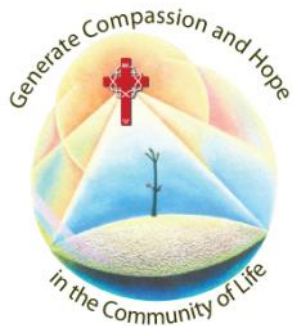
Beginning in July, the university has started short-term courses that will offer certificates on environmental management. Our latest

Questions for Reflection:

Eco-Swarm emphasizes recycling, reducing, and re-inventing. From a theological perspective, how do you see this project as promoting the sacredness of the community of life? Can you give some personal examples?

How does this project advance/promote the building of intergenerational communities?

Does your local community/town have any innovative methods of waste management? If so, can you tell us more about them and whether they promote the dignity of creation?



Cover Art: Tween Mandala, Virginia Fleck. Made from recycled plastic bags and tape. www.virginiafleck.com

. . . CONVERSATIONS