

Field Report

## ESSI Thailand RTC Summer 2005 News (Rural Training Center)

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84 Moo 2 Ban Na Fa, Jompra, Thawangpha City, Nan Province, Thailand 55410 Phone: (66) 054 705404 www.earthsystemsscience.org E-mail: earthsystemsscience@yahoo.com

Community-based Environmental Education for Families and Sustainable Neighborhoods

# ESSI - Ban Na Fa Elementary REEEPP Concludes First Year

It was a year ago that ESSI conceived REEEPP (the Rural Environmental Education Enhancement Pilot Project. On July 20, 2005, Ban Na Fa Elementary School students, faculty, staff, and Ban Na Fa host families, village and education officials celebrated the successful conclusion of the ESSI REEEPP Summer 2005 Volunteer program.

Na Fa Elementary School hosted the closing banquet. Students put their fruit carving lessons and skills to practice



ESSI Volunteers, Na Fa Elementary School faculty and staff, and some host families at the closing banquet.

creating floral arrangements of folded banana leaves and flowers carved from various fruits and vegetables. Some students provided fruit carving demonstrations during the banquet. Other students performed Lana Thai dances. The Na Fa Elementary School faculty and staff prepared the food.



Mr. Samai Thanasri, Deputy Director of Educational Area Office 2 of Nan, spoke to the gathering and presented ESSI Certificates of Appreciation to Mr. Jamnian Suttisan, Ban Na Fa Village Headman for facilitating the ESSI REEEPP; ESSI Certificates of Achievement to the Ban Na Fa Elementary School Faculty for their accomplishments with REEEPP; ESSI Certificates of Appreciation to Ban Na Fa Elementary School Staff for their support of REEEPP; ESSI

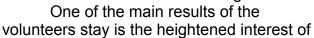
Certificates of Appreciation to the host families of the volunteers; ESSI Certifications of Appreciation to the ESSI Volunteers for their efforts; and to the ESSI Rural Training Center (RTC) Volunteer Staff for their support of the project.



ESSI formally presented the books purchased with the funds ESSI raised through its fruit tree sales effort at Wat Thai – Los Angeles (in early spring 2005). One of the focal points of the summer 2005 effort was to help improve the library at Na Fa Elementary School. Volunteers also added books to the effort. The faculty selected the

books purchased with the funds to assure the books fit the school's teaching program and teachers' needs.

In sincere appreciation for the good will of the volunteers, the village holy man, Mr. Suan Suttisan performed a traditional spirit ceremony. This traditional northern Thai cultural practice bestowed the villagers' wishes long life and good fortune and safety to the ESSI volunteers. During the week, the students made the center piece for the ceremony using folded banana leaves and flowers carved from fruits and vegetables.





people to learn English. The faculty was extremely excited to improve their own English ability as well as having the opportunity for the volunteers to visit their classrooms and interact with the students. •

### **REEEPP Training High Points**

Summer 2005 was a milestone effort for ESSI. This was the first time ESSI combined its community-based environmental education methods with three additional components: a rural school, home stays, and sustainable agricultural practices (e.g. composting and non-toxic pest controls).

The overall program plan called for ESSI volunteers to work on two fronts simultaneously: Na Fa Elementary School (supporting the Green School, Habitat, and NASA CERES S'COOL projects) and training their host families in sustainable agricultural practices. These simultaneous efforts were to converge at the school with the host families teaching back sustainable agricultural practices to the faculty and students. This teach back would create an opportunity for community interaction with the school in the area of environmental education.

However, the best made plans often go awry. Host families were engaged in putting in their crops. This work began later this year than in the past due to variations in water availability. So plans were altered to conduct the sustainable agricultural practices training at the school under the Green School and Habitat projects as direct student lessons. Host family members who could attend were encouraged to do so. (Luckily, for the 2 days of training, most host families were able to send at least one family member to the training sessions.)



handles some major village concerns.

#### **COMPOST TRAINING**

Connie Beck Crusha took the lead and conducted a day of compost training. Host families contributed the materials for composting (cut plant materials, manure). Mr. Somchai Suyata constructed the bamboo compost bins, a bamboo balance, and provided the watering cans. The composting training started with the ESSI volunteers leading the way. It soon became participatory as the students, teachers / staff, and host family members got engaged and everyone pitched in to help.

The teachers were favorably impressed with the active learning methods used in the training. The students were curious and engaged and eager to learn by doing --- and practicing English while having fun, too!. The school cooks expressed their support by committing to put all vegetable cuttings from the kitchen into the school compost pile.

The school will use the compost in its own gardens. They grow vegetables, herbs, and fruit to supplement the food prepared in the school cafeteria. The gardens also supply the flowers, fruit and other plant materials for the art classes.

The compost training increased awareness to reducing trash and air pollution (many people burn trash), improving soil, reducing the use of chemical fertilizers, herbicides, and pesticides, and improving village sanitation. Many people are concerned by the smell and flies associated with garbage waiting for pick up trash bins). Compost training at the school diffuses to the community as the students taking the lessons home. Now, with the host families in the training, there is another conduit to the community. Composting effectively

The high clay content of the local soils with high traffic results in highly compacted surfaces. Saifon Lee conducted the sheet compost training as a method to break up hardpan areas and restore them for agricultural use. (In an earlier project in northern Thailand, this method successfully reclaimed hardpan areas for cropland in less than 6 months.) Students and host families were actively engaged and participated fully.

#### NON-TOXIC PEST CONTROL

The reduction of synthetic chemicals is an important aspect of sustainable agricultural practices. In addition to composting, ESSI encourages people to use non-toxic pest control methods. Greg Lee demonstrated basic methods to control two critical pests in the Na Fa area: flies and rats.

People were trained to make a fly repellant using common household items: vinegar, pine cleaner, and water. This mixture helps repel flies around the home and farm without introducing toxicity to the soil or farm animals. Repelling flies from around the home improves sanitation and health.

A pyramid fly trap was made using empty plastic beverage bottles. Flies caught in the trap die from heat or starvation. No poisons are used. The flies can be fed to fish and frogs. This method helps recycle discarded plastic bottles, reduces use of pesticides, and provides a free source of food for raising frogs and fish.

ESSI introduced a non-toxic rat bait. It is safe to use around farm animals and young children.

After the demonstrations, students, teachers, and host family members took turns teaching back and make each of the non-toxic pest controls.



### **Gift Exchanges**

. In addition to the library donations, here were other opportunities for gift exchanges. National Wildlife Federation donated NWF Logo T-shirts to the Na Fa Elementary teachers and staff and green Wildlife bracelets to the students. ESSI delivered donated books it received from a book drive conducted in Los Angeles for the Na Fa Elementary School Library effort. Na Fa Elementary School presented the volunteers with items of clothing decorated with traditional Lana Thai designs and writing to remember the project.









### The Candle Ceremony

Na Fa Elementary School invited the ESSI volunteers to participate in annual candle donation ceremony at the village temple. This event is often referred to as Buddhist Lent when monks return to their temples for 3 months of meditation. Candles were the traditional source of light for the monks to study. So the students and teachers decorated a large candle for the presentation.









### **Fond Farewells**

For many, the week of ESSI volunteer training went too fast. It was surprising to see the deep bonding that took place in such a short time, especially among the host families to the volunteers. Genuine tears of sorrow welled up in the eyes of many host families as the volunteers departed.





The host families expressed regrets the project did not last longer. They are all eager to host future ESSI volunteers. For the normally conservative northern Thais, the opening of their homes and lives to foreigners was unprecedented. Ban Na Fa villagers and the ESSI volunteers were able to experience a genuine cultural exchange. ©

### **REEEPP Follow-On Training**

Four volunteers, Erik Rodriguez, Andy Arboleda, Robert Rodriguez, and Dominic Varona extended their stay and joined Greg and Saifon Lee to continue REEEPP training at Na Fa Elementary School.

#### **GEOGRAPHIC SYSTEMS MODEL GAME**





Erika Rodriguez (ESSI Senior Team Leader and Certified NWF Habitat Steward) and Andy Arboleda trained teachers on the Geographic Systems Model Game. The Geographic Systems Model is a core concept in all ESSI environmental education. It also includes integrating geography, math, science, and ethnography with critical thinking skills, classification / reclassification. The game consists of a wall

poster showing the 4 environmental sphere (Air, Land, Water, and Living Things) and pictures of various objects (e.g. green trees, mountains, rivers, birds, etc.).

Erika reported the teachers learned quickly and asked very good questions in anticipation of their students questioning and understanding the game. The morning training was followed by a chance for the teachers to take the Geographic Systems Model game to their classroom for a trial run with Erika on hand to coach.

Once again, the teachers and students proved themselves to be very apt, eager, and fast learners. Students and teachers spoke English more and more with each passing day. The ESSI interactive training methods were proving effective.

Dominic Varona and Robert Rodriguez took the lead to train the teachers on the Recycling Game. The object of the lesson is to teach students to accurately recognize the primary recycling items for the Trash Bank: plastic bottles, glass bottles, and paper / cardboard---using both written and spoken English--while getting outdoors and having fun. Students helped prepare the

#### **RECYCLING GAME**





materials for the game. At the start of the Trash Bank program, some students had trouble sorting the materials in English. Older students helped younger students. But the Recycling Game makes it more fun. The overall reaction of the teachers and students --- success in every way. The students seemed to automatically gravitate to the ESSI outdoor interactive learning while having fun method. ©

#### **NASA CERES S'COOL**





Greg Lee undertook the task of training the Na Fa NASA CERES S'COOL project team (Mr. Wittaya Mahanil, Project Leader; Mrs. Karuna Takaew and Mr. Tanawat Supha. Project Team Leaders; Mr. Somchai Suyata, Technical Support). A series of PowerPoint shows were developed as a ready reference for the teachers. Student versions were created to

separately explain and illustrate the 4 basic observations: Cloud Height and Type, Visual Opacity, Cloud Cover, and Surface Cover. After the teachers were trained, they conducted a teach back to a 12-student "test" group. More work remains to be done, but they are up to the effort. The fall back plan is to focus on developing skills in the optional surface weather observations that supplement the basic S'COOL observations. This would give students and teachers more time to practice cloud identification skills.

Thai Mother's Day Celebration

On 11 Aug 2005, Na Fa Elementary School invited the staybehind ESSI volunteers to attend the Mother's Day celebration. For 2 days, students made the decorations for the event. Teachers set up displays showing the students' work

Students and their mothers attended an assembly to celebrate the event. Each mother got a small white flower corsage. Mothers and students exchanged blessings.

Students then performed for the assembly. The Kindergarten classes sang English songs. The older students performed traditional northern Thai dances.

Some students got certificates for their academic work and performance in competitions.





ESSI volunteers Gregory and Saifon Lee, Erika Rodriguez, Robert Rodriguez, and Andrew Arobleda, and Dominic Varona, got traditional mo hom shirts embroidered with the school logo for their additional work at the school. Their extra efforts have further enriched the lives of the teachers, students, and families of Ban Na Fa. The teachers are looking forward to future volunteer visits.