Project Update: July 2012

July 6th, 2012

We had organized three interesting activities together involving with the group of teachers and students from Kamphuan School, Rissa and her friends (Lindsey from San Francisco, and Jenna from Sydney), and the officers from the Suksamran Mangrove Forest Development and Conservation Station Unit of 42th participated in our RSG program.

Organizing the Mangrove Processing Training for students with the emphasis on the Mangrove product processing techniques.

The first activity focused on learning the production techniques of Mangrove processing product. The flowers of *Avicennia alba, Aegialitis rotundifolia* and *Avicennia officinalis* were processed as the "Mangrove Steamed Buns".

Ingredients

- One package of steamed bun flour
- One cup of sugar
- One cup of milk
- One tbsp of oil
- Mangrove paste which made by the flowers of Avicennia alba, Aegialitis rotundifolia and Avicennia officinalis.



Mangrove Steam Buns & Ruttima served as a Mangrove Steamed Buns trainer for the students.

Steps

1. Making the Mangrove paste or filling from the flower of *Avicennia* sp. (This step we had already prepared for the students.)

Place the Mangrove paste in a bowl, submerge in water, and allow it to sit overnight.

Strain the paste in the morning and put them in a pot. Pour enough water in the pot so that the water level is a few inches over the paste. Bring water to a boil, allow to simmer and cook for about an hour. Drain the remaining water and press the paste through a sieve into a bowl. Put a paste in a large heavy pan, turn the heat to a medium and cook until the paste is thick, usually 20-30 minutes. Add the sugar and pinch of salt, continuing to stir frequently.

Cook for 10 minutes and remove from pan. Store in a container and refrigerate. It will keep for up to a week.

2. Making the Buns

Reserve two tbsp of the flour mixture as this will be used later to prevent the buns from sticking to the counter when we roll them out.

Add 1C sugar to the flour mixture, stir well and then slowly pour the 1 cup of milk into the dry ingredients, alternating with mixing by hand. Continue to mix the buns, it will slowly become smooth and supply like bread dough. Add the one tbsp of oil to the dough and the kneading time is 20 minutes. Remove the dough from the bowl and simply flatten and press it firmly and then shaping it with two hands. Put a disc of dough in the palm of our hands and place some of Mangrove paste onto it and then seal the bun. Put a piece of parchment paper on the bottoms of each bun and arrange buns on a plate until we have enough to begin steaming our first batch. Arrange buns in a steamer, close lid and steam for 20 minutes. Finish and enjoy eating.

All the students were able to make the Mangrove Steamed Buns. They ate what they had done for "Eating is Believing". Rissa was really proud of every single one of the kids. Seeing them smile and enjoying our RSG hands-on training.

Organizing the Mangrove English Class



The second activity was arranged by Rissa who taught the students with the basic words in the Mangrove Habitat and how to pronounce it such as Mangrove Tree, Mangrove Fruit, Leaves, Roots, Mud, Sea Water, Shrimp, Crab, Bird, Fish and etc. She had also given the pictures of the Mangrove Intelligent Life and explained what kind of animals live in the Mangrove Habitat. (Attached file)

Organizing the activities to replant the 20 Mangrove species that are appropriate to the ecosystem for biodiversity, focusing on rehabilitation and regeneration of the existing species on the degraded area.

Integrated Activity: Replanting the Mangrove Trees and Releasing the Black CrabsThe Suksamran Mangrove Forest Development and Conservation Station Unit of 42th had supported us the black crabs "Scylla Olivacea" in order to set them free program together with our replanting activity.

During the RSG program, we provided them with food, beverage, study accessory kits and free transportation. All the participants had so much fun with our RSG activity.

The students had learned how to process the product as the Mangrove Steamed Buns and learned in the Mangrove English Class. Students learned about protecting the environment through sustainable mangrove planting, learn how to understand the sustainable harvesting for sustainable processing. They also learned about the Mangrove Intelligent Life through the experience of releasing the black crabs into the Mangrove Habitat.

July 9th-13th, 2012

Preparing the Mangrove Processing Products samples to exhibit at the Peace Corps Thailand Meeting in Suphan Buri Province on July 20th, 2012.

We had prepared the following Mangrove products for the Peace Corps Thailand meeting:

- 1. One Mangrove Fabric
- 2. Two Mangrove Tea
- 3. Three Mangrove Desserts
- 4. Four Mangrove Scent with container and
- 5. Five Mangroves Toys "R" Us (New)

These creative products that could bring some fun to our life were processed from the old fruits of <u>Cerbera odollam</u> and <u>Heritiera littoralis</u>. Most of the toys are also represented the biodiversity of animals in the Mangrove habitat such as Black Crab, Fiddler Crab, Firefly, Mud Lobster, Mudskipper, Hornbill and Sea Eagle. One trendy idea is to make our own Happy Bird and the Mangrove Birds instead of the famous Angry Bird. We made the Happy Bird and Mangrove Birds to use as a pen or pencil holder.

The Mangroves Toys "R" Us will be one of the Amazing Mangrove Products in the Peace Corps Thailand Meeting on July 20, 2012. Rissa, she will be our **"Mangrove Illuminator"** there.

July 19th, 2012

Training "Primary Good Manufacturing Practice for herbal products" to our Mangroves SME group

Ranong Provincial Agricultural Extension office supported the training on primary good practices in production of herbal products. The objective is to improve the quality assurance in manufacturing the herbal products. Our Mangroves SME is the only one enterprise in Kamphuan Community being selected to organize this workshop since our Mangrove Tea has the traditional herbal properties. Mrs Siriporn Kultawi, head of agricultural promotion and development, had advised on the product demonstration and how to use the vacuum sealing machine. Miss Araya Songsri, an expertise pharmacist, had introduced the quality control in Sanitation and Hygiene and how to apply the herbal products to the Thai FDA.



The Trainers and the Trainees & Method to seal each lid with the automatic cup sealing machine

With the constant increase in the use of herbal medicines worldwide and the rapid expansion of the global market, the safety and quality of herbal materials and finished herbal products have become a major concern for health authorities, pharmaceutical industries and the public.

The safety and efficacy of herbal medicines largely depend on their quality. Requirements and methods for quality control of finished herbal products, particularly for combining/mixing herbal products, are far more complex than for chemical drugs. The quality of finished herbal products is also influenced by the quality of the raw materials used.

This automatic cup sealer is also able to use on our Mangrove Desserts packaging which sealed its lid with many kinds of attractive cartoon designs.

The chief of Suksamran Agricultural Extension office has a plan to donate this machine to our SME group in the near future.

July 20th, 2012

Exhibiting the Mangrove "R" Us Processing Products at Peace Corps Thailand Meeting at Vasidtee Hotel, Suphanburi Province

Rissa Walters with other Volunteers and Counterparts attended the Peace Corps Thailand Meeting at Vasidtee hotel in SuphanBuri Province during July 18-27, 2012.



Mangrove Processing Products and Mangrove Posters

In this meeting, there was a Site Fair Day on the July 20th; we exhibited the following Mangrove processing products together with 50 other Peace Corps sites:

- 1. Mangrove Tie Dye Fabric such as T-Shirts, Handkerchiefs and Table Clothes.
- 2. Mangrove Toys
- 3. Mangrove Tea
- 4. Mangrove Desserts
- 5. Mangrove Scents and Containers.



Our Mangrove station was one of the top three sites that presented interesting information and participants reported a desire to learn more about the project. Also, we were one of the top three sites in which participants reported an interest in contacting for future collaboration.

Thanks to Rissa, our "Mangrove Illuminator", for her great contribution to disseminate our RSG program to all the attendants.



July 30th, 2012

Organizing PR campaign for the collaboration of people to use "Palm Bag" as the packaging instead of plastic bags

The SME group held the campaign "Mangrove Bags ... Our Bags" program to the board members of Armanah Suksamran Credit Union Cooperative Limited at our Mangrove House. We promoted to the community to use the environmental-friendly Mangrove Bags.





Armanah Suksamran Credit Union Cooperative Limited

The Armanah CULT is the first Credit Union (CULT) in Ranong. The Armanah CULT, http://www.coopthai.com/armana/, has been accepted into the Credit Union League of Thailand (CULT), (http://www.cultthai.coop/ since 2008. The CULTTHAI is the member of the World Council of Credit Unions, http://www.woccu.org/, which has 188,000,000 Members of 53,000 Credit Unions in 100 Countries worldwide.

This campaign is to raise awareness and strengthen the productive collaboration of Kamphuan Community people to use the Mangrove Bags and understand the whole content of our RSG project.

Mr. Phiraphong Phinit, the Mangrove SME chairman had given the free Bag to every of Armanah CULT board member.



สิ่งมีชีวิตในป่าชายเลน Mangrove Intelligent Life



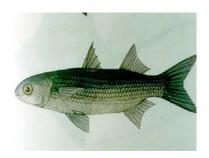
ปูก้ามดาบ Fiddler Crab



แม่หอบ Mud lobster



ปลาตีน Mudskipper



ปลากระบอก Sea Mullet Fish



หอยจุ๊บแจง Horn Snail



หึ่งห้อย Firefly



งูพังกา Mangrove Snake



ตัวแลน Water Monitor



ตัวนาก Otter



ลิงแสม Mangrove Monkey



ค้างคางหน้ายาวใหญ่ Fruit Bat



นกออก Sea Eagle









Mangroves "R" Us Toy Story



Mudskipper



Black Crab



Mud lobster



Macaw Bird



Yellow Hornbill



White Hornbill



Sea Eagle



Happy Bird



Mangrove Birds



Fiddler Crab



Firefly



Scorpion



Ant



Beetle



Spider