

**Member-to-Member Cooperation and Learning Exchange Visit in Taiwan
May 3-8, 2015**



Participants

1. Ms Nelia Fontecilla – Chairperson, CASEMCO, Mindoro (Member of PAKISAMA)
2. Ireneo Cerilla – Chairperson, PAKISAMA
3. Juana Zamar – BDS Manager, PAKISAMA, Translator
4. Erkinbek – President, Union Water Users Association
5. Bakytbek –Translator, UWUA
6. Vicky Serrato – Enterprise Development and Marketing Officer

Highlights of the Member to Member Cooperation and Learning Exchange Visits in Taiwan

(1) Meet with TDFA member Mr. Daniel Huang (dairy farm)



Meeting with Mr. Daniel Huang, a dairy farmer member of the Taiwan Dairy Farmers Association (TDFA). He has been farming for 20 years, currently he has 210 cows employing 2 persons plus his members of the family working in the farm from 3:30 am til 6:30 evening. For dairy farming, he said that the income of dairy farmer with at least 3 heads of

milking cow is much higher that the income received by an employed



teacher.



Farmer can start milking his cow after 1.5 years of age and still productive until 7 years. On average, 10-25 liters per day of milk per cow depending on the feeding supply. Of the total produce, 3 liters for supplemental feeding and 22 liters allotted for sale in the market.

On marketing, dairy farmers are organized into cluster (adjacent farmer) as a mechanism for collection/consolidation of milk. While farmer-members focused on producing milk, the role of TDFA focused more on facilitating and negotiating for proper price with the company as well as accessing technical support from the government and academe to help farmers on the technical aspects on dairy production and management. TDFA represent in behalf of dairy farmers to bring issues into discussion and negotiate for support.



(2) Wusanto Reservoir and Irrigation Association – an integrated irrigation design that includes water

irrigation, water management and efficient use of water for farm, household use and leisure farm.

Ms Jane Zamar said that "The reservoir's structural design is amazing as well as the efficient and effective maintenance provided by Taiwan government. Even if the system is already eighty five (85) years old and farmers do not pay irrigation fees it is still fully functioning. The Taiwanese also demonstrated their



gratefulness for the Japanese engineer who designed and supervised the construction of the facility (when they talk about him, he appeared to be a hero for them and memorabilia of his life are also displayed). They told us that the Japanese engineer died with his son in a ship (fired by the Americans) on his way to the Philippines to build the same kind of irrigation system (sayang talaga!).



The Farmer and Water Net can visit this irrigation system to learn how the Taiwanese are able to maximize the use of water in a productive way. FWN has irrigation system by gravity where supply of water are enough to support the whole-year round of rice farming activity of members in Cambodia. Seu Rany, Chairperson of Cambodia told the leaders of FWN to adopt diversified farming (not only rice-rice farming) since they have good source of water for their farming.



3) Leisure farm cum retirement house of aged buffalo-In this area where aged buffalo is housed for the rest of their life. This is how the Taiwanese farmers have greater love and gratefulness for working



cows /buffalo where they established facility for "Old buffalo/ Cows that worked in the farms can rest and are taken cared of until they die. The facility looked like a park where people visit and volunteers work for taking cared of the cows / buffalo



(4) Kaohsiung District Agricultural Research and Extension Station, Council of Agriculture (KDARES) - KDARES conducted extensive researches on agriculture production technology, processing, handling and marketing of specific product.

Specialized Training of the Farmers Academy offers various training program for professional farmers, new farmers, village women and youth farmers, potential entrepreneurs and staff

for production and marketing to increase competitiveness of agriculture industry.

Training, research and extension works in harmony of the agriculture the agriculture industry.



Ms Jane Zamar, Manager of PAKISAMA Business Development Service, with Dra. Wenchi, Professor of the NPUST University. According to Ms Zamar





(5) Visit new TWADA Chair Mr. Chi-Liang Huang's farm. Similar to Dairy farms, economic activities are done at individual farmer level. advanced farmers consolidate the products in the locality and market directly to local e.g. specialty shops, etc as well as export market. They are doing mix-marketing strategy. The are selling export as well as domestic, such as direct supplying at the household level (door-to-door), through market channel , etc, Since wax apple is seasonal, the former AFA Chairperson, Mr. Tsai is looking for a possibility to establish a year-round supply of wax apple. In coordination with the academe, he is planning to look for production areas in the highlands of Taiwan.



(6) Visit vegetable seedling production and marketing team

Meeting with the owner of the seed production and marketing business. Similar to other seed growers, this enterprise produces seedling materials for sale to farmers which is the recent trend to buy planting materials instead of seeds. This will reduce the risk of low percent germination rate and time to grow seedlings. A new enterprise that AFA members' organization or individual enterprising farmers can replicate in their respective areas where he/she can sell seedlings to members and other farmers in the neighboring communities.



Technical knowledge on growing seedlings e.g. plant propagation such as budding, grafting etc. is needed to ensure that they produced quality seedling materials to help farmers increase yield or productivity. In addition, potting media can be a different enterprise opportunity for farmers specifically coconut farmers where they can produced coco coir

dust, a major source of potting media. According to Ms. Nelia Fontecilla, chairperson of CASEMPCO coco dust can be added in the list of coco products being produced by the cooperative.



(7) **International paddy festival site** – integrating art and entertainment in agriculture specifically in the rice paddies. The objective of the festival is to entice young people to farm and build awareness of the public on the different types with varying colors of paddy rice.



Taiwanese are really into integrating Farming and entertainment. George gave another example “Rock-in-roll music festival” - integrating culture and farming: The Banana auction ---people dress made of banana leaves with mask to showcase banana products. Another was,

they organized an event to plant banana and then those who involved in planting will go back in time for harvesting

(8) Visit NPUST extension unit



Green house owned by the university utilized for students research activity using hydroponic technology. **Hydroponics** is a subset of hydroculture and is a method of growing plants using mineral nutrient solutions, in water, without soil. This system is an efficient way of applying fertilizers and chemical sprays by simply mixing in the water solution. However, there are existing innovations that they use soil media and hydroponic as water management system.



Evaluation of 3days learning exchange visits

Name	Reflections
1) Ireneo Cerilla, president of PAKISAMA	1) Proper care and maintenance - There should be proper shelter, for them to manage the relative humidity of air, sanitation of surroundings, time management and feeding system of milking cows.. it also helps farmer for their total quality management.. as a farmer. 2) i also learned some organization strategies on how to deal with the market: due discipline, product accountability; and how to engage with the local cow

	<p>food producers; at the local government, local official who sit some local policies pertains to cattle farming</p> <p>3) .The openness of TDFA to have training of dairy farmers will help us as AFA member to learn more about d business. It may encourage young generation to get involve n agribusiness especially dairy farming.</p> <p>4) i will ask our pksm leader and staff to facilitate exchange learning mechanism and possibilities for pksm members be having a training n taiwan.</p> <p>On Irrigation system of taiwan</p> <p>5) The idea come from them may also helps pksm to use as bases of our engagement with NIA and beneficiaries of the water from them.</p> <ul style="list-style-type: none"> a. Holistic approach and comprehensive area development planning helps in integrated diversified farming b. Government Subsidy in the irrigators assn. should also be implemented in the Philippines <p>TWADA</p> <p>6) Exchange visit also possible with PAKISAMA members. The partnership between government, academe and farmers as observed in Taiwan is good.</p> <p>Better if this kind of engagement would also be possible 7) I learned a lot from Dra.. Wenche's orientation n the university.</p> <p>8) hydroponics may also be done in our country to encourage the young generation of farmers. But it shoud be organic of course.</p> <p>9) The concern is how we can work with the government</p> <p>Generally, the activity is good and it really helps PAKISAMA specifically in the business that we are planning.</p>
<p>2) Ms Nelia Fontecilla, CASEMCO chairperson</p>	
	<p><i>What struck or inspired you most during the activity</i></p>

and why?

1) In Mr. Daniel Huang's dairy farm, I was struck by how each farmer is managing the volume of milking cows (more than 200 heads per farmer) with all the technology gadgets to ensure that they are comfortable especially this summer. However, there are some bizarre practices (very different from the Philippines) which I noticed such as: a) unequal treatment for cows that give more milk than cows producing less milk; b) baby cows are provided powdered milk because it's cheaper than the mothers' milk (will the cows fed with powdered milk be producing the same quality and quantity of milk when they became milking cows?) and, c) the Taiwanese farmers have greater love and gratefulness for working cows / carabaos (not the milking cows) because they even established "**Old Carabaos / Cows Caring Facility**" where old cows that worked in the farms can rest and are taken cared of until they die. The facility looked like a park where people visit and volunteers work for the cows / carabaos.

2) The Wusato Reservoir and Irrigation Association

The reservoir's structural design is amazing as well as the efficient and effective maintenance provided by Taiwan government. Even if the system is already eighty five (85) years old and farmers do not pay irrigation fees it is still fully functioning. The Taiwanese also demonstrated their gratefulness for the Japanese engineer who designed and supervised the construction of the facility (when they talk about him, he appeared to be a hero for them and memorabilia of his life are also displayed). They told us that the Japanese engineer died with his son in a ship (fired by the Americans) on his way to the Philippines to build the same kind of irrigation system (sayang talaga!).

3) Kaohsiung District Agricultural Research and Extension

The agricultural research and extension facility is a huge structure. Researchers are continuously done focused

on: a) agronomic crops such as rice, vegetable soybean and adzuki beans (legumes); b) tropical fruits such as wax apple, jujube, litchi, mango, papaya, and guava; c) floriculture such as zingiberacea, phaleonopsis, dendrobium, oncidium, renanthera, anthurium, canna, and heliconia; d) food processing focuses on development of food processing technology and the production of health foods using special crops, citrus, legumes and tropical fruits as raw materials; e) plant protection to develop pest management techniques to ensure the production of safe and healthy products , to reduce the use of chemicals with emphasis on the development on non-pesticide and biological control techniques / materials; and f) soil and fertilizer with sustainable soil management as the over-all objective and focuses on facilitating rational fertilization on the basis of crop nutrient diagnosis, application of organic fertilizer, grass cultivation, bio-fertilizers, and agricultural waste materials.

Extension work for farmers' education is very alive. Food sufficiency is the direct result of the success of the institute. Standard curriculum is in place from those who are not yet farming (motivational module), those who are beginners in farming until they become full fledged farmers.

The institute is offering scholarship for agriculture not only for Taiwanese but also for other Asian countries and farmers and government consultations on taking on-the-job agricultural trainees from other countries are on-going.

4) Taiwan Wax Apple Development Association (TWADA)

It's heart warming that two presidents of the association (the old and the new) welcomed the learning visitors team. Despite the fact that both of them do not know how to speak English they tried to say hello and answer the visitors' questions regarding their wax apple

agri-business. The packaging facility of the old president's farm was visited. They demonstrated how they pack the wax apples in the box for selling. They showed the refrigeration facility where they store boxes of apples for delivery. For me their house-to-house delivery of wax apples and consignment selling to all the groceries and stores are good distribution strategies. It is also good that they shared that consignment arrangement in marketing is now being fully studied so that fair trade for both the farmers and the stores is present.

5) Production and Marketing Team – the Seedling Team

The grafting technology amazed me. This technology shortens the production period of the crops and the farmers' work becomes easier. We found out that the soil imported from Germany by Taiwan has coco dust in it and we deduced that this comes from the Philippines. As per realization of Ms. Nelia Fontecilla, chairperson of CASEMPCO coco dust can be added in the list of coco products being produced by the cooperative.

6) The Paddy Rice Festival

What was beautiful in this festival was the integration of art in the rice paddies and the objective of the festival to entice young people to farm and build awareness of the public on the different types of paddy rice.

Learning from the Visit

As BDS Manager of PAKISAMA my assumption that continuous research and extension work is crucial to farmer organizations' development particularly in enterprise building was again confirmed. Kaohsiung Agricultural Research Institute really served the needs of the farmers. Farmers' education is very alive in Taiwan and continuous researches on agricultural products (food sufficiency) had really great impact on Taiwan's agricultural production.

- A standard curriculum on agri-enterprise development

program has to be formulated including an orientation advocacy on farming for non-farmers to new farmers skills training until they become full-pledged farmers.

- It is a good practice that individual farmers create small offices in their houses (a table and chair with filing of documents of their farming transactions) as semblance that business is really on-going.
- It became clear that Taiwan is opening to Asian counterparts scholarships for agricultural programs and “on-the-job” training of young farmers on agricultural jobs with individual farmers.

Application of the Learning

- The BDS Unit has to coordinate with the state’s agricultural schools for researchers that are needed by the farmers particularly researches that will take longer time and are more technical in nature;
- The agri-business development framework and capability building program (training and education modules) of PAKISAMA Farmers Development Academy need to be consolidated, updated and fully tested for mainstreaming to all the members of the confederation with business enterprises
- Continuous advocacy for government support and for the prioritization of agri-business development of the farmers. BDS Unit will coordinate with the Undersecretary for Operations of the Department of Agriculture (DA) – Agribusiness and Marketing Unit and determine how the two groups can work together.
- PAKISAMA should take the opportunities being offered by Taiwan (scholarships and on the on-the job training on agricultural jobs) and assist member-organizations to

	access the opportunities being offered.
Erkibek and Bakytbek/ UWUA, Kyrgyzstan	<p>What did you learned from the visits?</p> <ul style="list-style-type: none"> • The peculiarities of the Taiwanese practice of irrigation systems management • Taiwan WUA practice of hydraulic-based irrigation systems management • Experience of Kaosing district agricultural research and extension station - integration of science and production <p>How you can apply the lessons you have acquired here?</p> <ul style="list-style-type: none"> • They will be integrated into the process of transition to the hydrographic-based irrigation systems management currently promoted in Kyrgyzstan, too. <p>What struck or inspired you during this activity?</p> <ul style="list-style-type: none"> • Basin-based approach to irrigation systems management applied by Taiwanese WUAs • State subsidies to incentivize WUAs' appropriate operations; • The recreation areas established within irrigation system <p>When are you going to implement?</p> <ul style="list-style-type: none"> • As soon as corresponding enabling framework will be put in place • In the next 5 years we are going to pilot the principle of hydrographic-based irrigation management in Kyrgyzstan

Annex 1. Itinerary - Member-to-Member Exchange May 5- 9, 2015

Date	Agenda	Accompany Person	Note
May 5 (Tue)	Arrival	Ya-huei	
May 6 (Wed)	8:30 Departure from Hotel 9:00~10:20 (9) Kaohsiung District Agricultural Research and Extension Station, Council of Agriculture (KDARES) 11:00~12:00 (10) Visit new TWADA Chair Mr. Chi-Liang Huang's farm	Miss Ya-huei Huang And Mr. George Lin	Pingtung area

	<p>Lunch break (passing by international paddy festival site)</p> <p>13:30~17:00</p> <p>(11) Visit former TWADA Chair Mr. Tsai's farm and facility for processing/logistics</p> <p>(12) Visit vegetable seedling production and marketing team</p>		
May 7 (Thu)	<p>8:30 Departure from Hotel</p> <p>Morning</p> <p>(13) Meet with TDFA member Mr. Daniel Huang (dairy farm)</p> <p>(14) Livestock Research Institute</p> <p>Afternoon</p> <p>(15) Wusato Reservoir and Irrigation Association</p>	<p>Dr. Wen-Chi Huang</p> <p>Dr. Sheng-Feng Kuo</p>	<p>Tainan City</p>
May 8 (Fri)	<p>Morning</p> <p>(16) NPUST extension unit</p> <p>Afternoon</p> <p>(17) Evaluation Meeting</p>		<p>Neipu</p>
May 9 (Sat)	<p>Departure</p>		

Hotel: Fu Kuang Hotel (Pingtung City)

Annex 2. Re-entry Plans

2.1 Philippines

2.1.1 Nelia Fontecilla - CASEMCO

2.1.2 Juana Zamar/Ireneo Cerilla - PAKISAMA

2.2 Kyrgyzstan

2.2.1 Erkinbek Koshoev - UWUA