

A Quarterly Newsletter of the College of Agriculture

July - September 2014



### Natural Farming Technique in Corn Production

The practice of industrial agriculture has surely increased crop production. However, it has also ill-effects that have led to resource depletion and climate change. Thus, a need for a more sustainable approach. Natural farming is an ecological farming approach.

Prof. Mary Ann T. Mercurio and Prof. Judith T. Pit of the Crop Science Unit under the Agricultural Sciences Department evaluated and assessed the crop yield performance, postharvest quality and cost, and return analysis of sweet corn (*Zea maize var sugar 73*), bitter gourd (*Momordica charantia*), and pechay (*Brassica napus*) using Natural Farming Techniques (NFT) and Conventional Farming System (CFS).

The study was conducted from June 2009 to December 2010 at the Manresa Experimental Station with the support and funding of Kinaadman Research Center. The study covered two cropping seasons

and it was laid out using the split plot design. This design contains two levels of experimental units. The blocks are referred to as whole plots while the divisions within these whole plots are called split plots. This design is used in agricultural experiments especially in comparing various methods or techniques to the same crops.

Among the two productions systems, NFT has increased the yield per plant, plot, and hectare of crops. The crop response to NFT showed that sweet corn produced the highest yield followed by bitter gourd and pechay.

The analysis of cost and return signified an almost the same rate of profitability during the first two cropping seasons between the two production systems. However, the farmer has always the option of producing his own input which would lead to a lesser production cost and increase in revenue.

The researchers recommend the further use of NFT in Manresa to continually evaluate and assess its effects to soil, pest, and crop yield. Also, the researchers recognize the potential of NFT as a sustainable approach for food security.



## Brewer's Spent Grain as feeds for broilers

Over the years, poultry meat has been established as a healthy and nutritional food aside from the fact that consumers find it pleasurable and tasteful to eat. This perception among consumers is greatly influenced by the result of the organoleptic or sensory characteristics of the meat. These characteristics include color, flavor, tenderness, firmness, and juiciness. All these are important factors considered by many food establishments.

Chickens such as broiler—gallinaceous domesticated fowl, bred and raised specifically for meat production—feed on fish meal, soybeans, and other commercially available feed ingredients. However, these conventional sources of poultry feeds are expensive. Thus, there is a growing interest in the use of unconventional sources of poultry feed which will enhance the sensory characteristics of poultry meat but in a more affordable rate.

Beer is the fifth most consumed beverage in the world with tons of grains spent per year. Since there is a global pressure towards natural animal farming, academic and industrial researchers are putting efforts on reducing the amount of wastes from Brewer's Spent Grain (BSG) by finding alternative uses.

Ms. Lanesa Faith Mechico A. Olais, a 2013 Aggie graduate and now a part-time faculty of the Animal Science Unit under the Agricultural Sciences Department, evaluated and determined the effects of BSG on the sensory characteristics of the broiler meat.

The study was conducted at the Broiler Poultry House in Manresa Farm from December 28, 2012 to January 25, 2013. A total of 105 broilers were slaughtered and 21 of these were used for the sensory evaluation conducted at the Food Technology Center.

The use of BSG as feeds has a significant effect on the sensory characteristics of the broiler meat. This proved that unconventional sources of poultry feeds such as wastes from BSG have similar effects like those of the conventional yet expensive feeds.

## CAERS' livelihood projects for Xavier Ecoville

by Terence Al L. Abaquita

The Center for Agri Ecological Research and Services (CAERS) initiated livelihood trainings and projects for Xavier Ecoville (XE) residents to sustain XE as an economically and ecologically self-sufficient community. Mr. Floro V. Dalapag, Crop Science Unit Head of the Agricultural Sciences Department and CAERS center head, spearheaded the project.

The center had conducted several livelihood programs for XE community which were focused mainly on vermicomposting and urban gardening. It started last January 2012 and is still ongoing at present.

Last September 13-14, 2014, the CAERS with the assistance of Philippine Association for Agriculturists (PAA) Juniors, established a material recycling facility where compost pit/bin and vermicomposting model were showcased to XE residents.

Aside from trainings, CAERS, with the help of PAA Juniors, facilitated the distribution of planting materials such as vegetable seeds from the Department of Agriculture – Regional Field Office No. 10 (DA–10) to selected households for their backyard gardening.

Also, last August 2014, CAERS helped expose volunteers from Malaysia, Japan, and Davao, through AJCU, in its student-learning activities.





## FTC assists Calaanan beneficiaries

The Land Bank Gawad Kabuhayan Project in partnership with Habitat for Humanity, Oro Integrated Cooperative and Ateneo Agro Ecological Forum's Food Technology Center graced the opening of Florida's Bakeshop at Calaanan Relocation Site last September 22.

The Food Technology Center organized a series of trainings and seminars aimed to assist the beneficiaries in the production stage of bread and marmalade. Since the 2nd week of July last year, the United Food Organization (UFO) of Calaanan Relocation Site finally opened Florida's Bakeshop for business last September 22, 2014.

Mrs. Florida Golosinda, UFO Chairperson, said, "This is a huge help to us. With the capital given to us, we were able to start the business. Our net income is approximately Php 40,000.00 from our Php 17,000.00 capital."

Mr. Drexel Luzon, Habitat for Humanity Community Development Program Officer, shared, "Our partners for this project were all very passionate. This wouldn't be as successful as what it is today if not for them."

FTC brings with them their students in all their outreach activities. Andy Dalinao, Commission on Social Outreach of PAFT-ETA, said that they were able to improve their communication skills and were able to apply what they learned in the academe through these projects.

The College of Agriculture presented this year's theme for the Manresa Days Celebration, "Agriculture at the Cent importance of agriculture to everything.

Represented by colorful rings depicting the circle of life, the logo for this year's celebration also speaks of the agriculture to various sectors, including the youth. The leaf at the heart of the logo depicts of a labyrinth - with conf center.

Manresa Days is an annual celebration of the college; a tradition opening Manresa to the public to showcase its p was held last August 20-23, 2014.

The 4-day event officially started with a noon mass at the Immaculate Conception Chapel in Xavier University follow the Manresa Cuadra in the evening. Among the highlights of this year's celebration were the 5K fun run, a race arou Race", technology demonstrations and the annual "Rodeo sa Ateneo". All Manresa farm facilities like the butterfly of the mini zoo, were open for public viewing. There were also academic competitions for high school and Aggie coll Ateneo competition also hyped up the event. The successful celebration ended with a bang with a fun closing cere















er". The theme aims to re-focus the

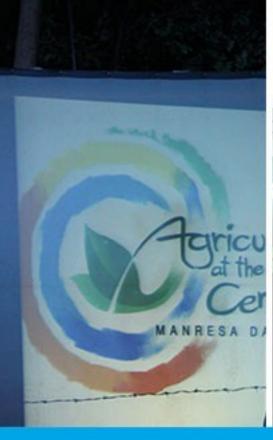
college's battlecry to mainstream using paths yet always meets at the

products, services, and programs. It

wed by a grand opening program at nd Manresa Farm called "Manrazing garden, poultry and cattle farm and ege students. Mr. and Ms. Rodeo sa emony and alumni fellowship night.











by Shiella C. Balbutin

The EMA-South East Asian Chapter held their meeting and networking event last August 16-17 at the ETO Convention Center, Kasetsart University in Bangkok, Thailand. Led by the new board, the event brought together country representatives from Cambodia, Indonesia, Malaysia, Myanmar, The Philippines, Thailand and Vietnam; and some members from The Philippines and Thailand.

During the first day, the delegates were welcomed by KU's Vice President for International Relations, Dr. Poonpipope Kasemsap and the chapter's Vice President, May Veena Cute-Ngarmpring. It was followed by the introduction of delegates and participants facilitated by Alifia Fithritama, Communications Coordinator of the chapter. The chapter President, Shiella C. Balbutin gave a presentation on the rationale of the event, the chapter's history, its accomplishments and plans, and some updates from the Steering Committee. It was followed by the country reports from the country representatives. These presentations were very interesting as it allowed for the sharing of success stories between the member countries in terms of doing activities and events related to Erasmus Mundus. The rest of the afternoon was spent on the workshop where the delegates were divided into three working groups: "Media", "Events", and "Member Care". The participants were given ample time to discuss and share their ideas relative to their assigned working groups.

Moreover, the meeting was also graced by Mr. Simon Grimley, who shared information about EURAXESS – an online resource for research and fellowship opportunities for EM members in the South East Asia

The first day ended with a short cruise on the Chao Phraya River to get to Bangkok's famed Asiatique Riverfront, where the delegates had the fellowship dinner in one of the restaurants. Later that night over ice cream, members of the SC who were meeting in Stockholm, said hello to everyone via Skype!

On the second day, the workshop outputs were presented according to the working groups. It generated interesting and exciting ideas for collaborative projects across the chapter. Some of the ideas that were put forward were on strengthening the chapter members' connection, increasing the chapter's online presence across all social media platforms, providing better activities for members, and improving promotional strategies for the scholarship, among others.

As the meeting came to a close, the chapter board presented a Certificate of Appreciation to Kasetsart University and its staff for their generous support and contribution to the said event. It was indeed a very successful and productive activity. The chapter board is looking forward to a more dynamic and active SEA chapter.

#### Rivera and Balbutin join **ADB Impact Evaluation Training**

by Trinnah Marie M. Caracho

The Ateneo Agro Ecological Forum (AAEF) Director, Dr. Ma. Theresa Rivera, and Center of Communication for Development (CC4D) Center Head, Ms. Shiella Balbutin, attended the international conference "Making Impact Evaluation Matter: Better Evidence for Effective Policies and Programmes" at the Asian Development Bank (ADB) last September 3-5, 2014.

The international conference was organized by the Asian Development Bank, International Initiative for Impact Evaluation, and the Philippine Institute for Development Studies. There were 5-6 preconference workshops and 8 parallel sessions which allowed for over 150 presentations.

The speakers for the plenary sessions included distinguished international guests in the field of impact evaluation. The invited presentation and workshop proposals included all aspects of impact evaluation from findings, methods, and translation of evidence into policy.



# College intensifies recruitment to public and private high schools

The College of Agriculture, in its efforts to increase enrollment and promote awareness about agriculture, conducted its recruitment campaign to public and private high schools in Cagayan de Oro City, Manolo Fortich, Bukidnon, and Cebu on August of 2014.

"Aside from increasing the enrollment of the college, we would like to primarily raise awareness and improve the understanding of the young generation. The youth have a different perception towards agriculture, thinking that it is a back-aching work with less opportunity career," said Dr. Maria Rosario P. Mosqueda, Dean of the College of Agriculture.

"With this year's theme, Agriculture at the Center, we would like to put emphasis on its centrality and importance in the scheme of all things. As what Fr. Masterson had always said, agriculture is not just a career but a way of life," Dr. Mosqueda continued.

The Aggie faculty and staff, loaded with commitment and love for the college, visited a total of 23 public and private high schools. The promotion is a 30-minute presentation of the 4 offered programs namely, Agricultural Sciences, Agricultural Engineering, Agribusiness, Food Technology, and Development Communication. The presenters also showed a series of 1-minute animated videos of each programs. The promotion was always completed with a question and answer portion.

Among the volunteers of the promotion is Engr. Roland J. Macana. He shared that "it was an awesome experience for me to promote our college especially mentioning my course, Agricultural Engineering. Seeing the graduating high school students become interested with the different programs made me hopeful and excited as well."

#### XUCA holds first Student Convocation, Athlete Send-off Program

by Rezza Mae B. Tolinero

The College of Agriculture (XUCA) conducted a Student Convocation at the SBM AVR 8 on September 3, 2014 in order to give acknowledgment to all of the students who volunteered during the Manresa Days and who participated in the University's 2014 intramurals.

The program encompassed the awarding of certificates to the student volunteers from the Agriculture Student Council (ASC), inspirational talks from the two alumna of the college and the introduction of the athletes who will represent XUCA in the incoming intramurals.

According to Dean Maria Rosario P. Mosqueda, XUCA dean, "We [the College of Agriculture] want to put the students at the center on everything we do. We want to encourage them to give their best in whatever they are into."

One of the alumni who gave an inspirational talk, Engr. Junel Ablanque, gave an acronym for the students to remember and stressed that they should have "PADS". It stands for Pride, Aspire, Discipline and Self-discipline or Self-esteem. "You should believe in yourself, you should believe you can do it, you should believe you can get it," he added.

The ASC Prime Minister, Christian Dave Quilang, then gave his closing message and highlighted three points: one, "choosing is not chos-ing", second, "moving beyond your knowledge into winning" and third, "knowing your cause".

#### XUCA completes 5th batch of SIH-SAT OJT

by Ivy Kristel L. Quiño

The College of Agriculture once again hosted Saint Isidore High School- School for Agricultural Training (SIHS-SAT) On the Job Training (OJT). The 5th batch training ran for 17 days from September 15 up to October 3, 2014. Twenty students taking up animal production participated in the training. The main objective of the program is to provide hands-on training to students in farm animal production and management. The experience will hopefully also help them to become productive members of the community.

The following students are the successful trainees that have submitted and completed all the needed requirements of the training.

1.AMITO, Raymund H.

2.BALILING, Guillermo Jr. B.

3.BALILING, Jeffrey B.

4.CARCALLAS, Jessie B.

5.CAÑETE, Rodulfo Jr. E.

6.CANTOMAYOR, Garry J.

7.DELOS SANTOS, Jeevee John G.

8.DEMANA, Marjorie T.

9.DIWAN, John Rhod J.

10. GALLO, Jessa M.

11. JUSTOL, Virgilio Jr. P.

12. MALIGMAT, Sheila Mae C.

13. ORTEGA, Charity Joy D.

14. PANCHO, Girline M.

15. PELOBELLO, Shirra Mae A.

16. QUIÑO, Lendo B.

17. RAMIREZ, Justin T.

18. RAMIREZ, Marlou T.

19. TICWASAN, Honey P.

20. VILLAMOR, Reymart Jhon B.

The College prepared a training module that adapted TESDA's training standards which are based on basic, common and core competencies. The student trainees were divided into four groups, each group was assigned to the different animal science projects namely the Sustainable Animal Farming Ecological System (SAFES) area, swine project, beef and dairy project and the small ruminant project. They spent several hours per day from Monday-Saturday at each project/area which starts from 6:00 am to 4:00 pm depending on the area work requirement.

The trainees were also toured at the main campus of Xavier University on October 2. They visited the Anatomy and Physiology, Proximate, and Soils Laboratories of the College of Agriculture. They finished the course with a culmination activity on October 3, 2014 at the Animal Science Laboratory in Manresa Farm.



The On the Job Trainees with AAEF Director Ma. Theresa Rivera (front row, second to the left), OJT Coordinator
Ivy Kristel Quiño (front row, rightmost), SIH-SAT President Fr. Guillrey Anthony Ernald Andal, SJ (front row, second to the right),
and former SIH-SAT President Fr. Richard Ella, SJ during the culminating activity.

## Infinity: Lansad 8 Photography Exhibition

by Jose Angelo Lorenzo S. Gomos

The 8th annual photo exhibit entitled "Lansad" by the 3rd year Develop ment Communication students opened on Monday September 22, 2014 at the Centrio Activity Center. It was in the afternoon when, under the glaring lights amidst excited spectators and esteemed guests, the black cloths draping over the steel posts were lifted, revealing the photographs captured by the students that promoted social awareness and positive change.

After Development Communication Department Head Shiella Balbutin, Kristohanong Katilingban sa Pagpakabana (KKP) formator Jannina Alfante, and Mayor Alvin Giovanni A. Labis of the Municipality of Alubijid cut the ribbon, the 2014 photography exhibition officially began.

Lansad featured stories behind photographs that aimed to spread the truth, alter the common perspective, and inspire lives. With this year's theme, Infinity, the photo exhibit entails the final requirement of Development Communication students taking up DC 89 Photography class in this semester and highlighted two issues in Northern Mindanao. Since the course consists of two majors, the Development Journalism and Educational Communication classes focused on different subjects.

Mr. Froilan Gallardo, MindaNews photojournalist and Development Communication alumnus, moderated the Development Journalism students' 42 images that wove photographic essay depicting the lives of the residents nestled along the banks of the Cagayan River. This photographic essay focused more on the issue concerning the possible relocation of numerous residents as the Mega Dike, the government's solution to prevent flooding, will emerge on the riversides in the years to come. The photos reflected the lives of the people that will be disrupted as they face another tragedy once they're forced to leave their homes.

On the other hand, Educational Communication students showcased the identity of the Municipality of Alubijid, presented the people's culture and livelihood, and promoted the products authentically made by the community. Seventy-three photos comprised moments of productivity in the agricultural practices, simplicity among the community, and happiness in the jovial smiles of the children. With verdant green mountains and vibrant blue waves as the usual background, the images gave life to the beautiful scenery that magnified the pride of Alubijid.

Lansad 8 was held at Centrio Ayala Mall on September 22-24 and at LimKetKai Center on September 25-27, 2014. Attended by countless visitors during its display, the photography exhibition exemplifies the works of budding photojournalists and the need for more positive development among pressing issues.

\*Photo by Krizia Nicole Pailagao, BSDC-3 (Lansad 8 First Placer)

