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Tel/Fax No. (053) 335-2615
e-mail address:vicarp_lsu@yahoo.com
Website: http://vicarp.lsu-visca.edu.ph/

ViCARP HIGHLIGHTS

What's Inside...

K-AgriNet Reaches Eastern Visayas

Accessing information and technology services has become easier and faster for Eastern Visayan farmers, fisherfolks and entrepreneurs.

This is because the e-Consortia and e-Farm components of the **K-AgriNet** or Knowledge Networking Towards Enterprising Agricultural Communities Program are now in full implementation in the region.

Started in January 2006, **K-AgriNet** is an e-government funded program aimed at improving access to information, modern technologies and indigenous knowledge by farmers, fisher folks and agribusiness entrepreneurs through information communication technology or ICT.

Among the program's components are the **e-Consortia and e-Farm** which are led by the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD). *to page 5*

It was a hi-tech start for the implementation of a technology laden program as PCARRD Executive Director Patricio S. Faylon and PCARRD-Technology Outreach and Promotion Division (TOPD) Director Bessie M. Burgos welcomed the participants to the K-AgriNet Consultation and Operational Planning Workshop through video conferencing.

Techno Gabay Centers Turn Hi-Tech

With the provision of Information and Communication Technology (ICT) equipment to five of the region's Techno Gabay (TG) Centers through the K-AgriNet Program, information and technology services are now a click and text away for Techno Gabay clients.

On March 16, 2006, managers and staff of the five TG Centers identified as K-AgriNet recipients gathered at the Leyte State University (LSU) for the turning over of ICT hardware that were earlier delivered by the Development Academy of the Philippines (DAP)-K-AgriNet Project Management Office to ViCARP.

The ICT equipment deployed include computers, softwares, and audio/visual equipment. Each of the TG Centers in Baybay and Calbayog received two desktop computers, one digital camera, one web camera, one printer, two cellular phones and one USB flash drive. On the other hand, the TG centers in Capoocan, Liloan and Borongan, received one digital camera and two cellular phones. They will have the other equipment on the second half of the year. The cellular phones distributed are for the TG managers and farmer-scientists.

Aside from the five TG Centers, ViCARP also received various equipment in line with K-AgriNet's e-Consortia program. ViCARP received one desktop computer, one laptop computer, one cellular phone, one digital camera, one video camera, one web camera, two LCD projectors, one printer, one scanner, and a USB flash drive.

To maximize the use of the equipment, ViCARP conducted an orientation and hands-on training on how to operate the different equipment on the day they were turned over.

Hands criss-crossed as soon as ViCARP -RRDCC Chair Paciencia P. Milan and ViCARP Director Jose L. Bacusmo turned over the ICT equipment to Baybay TG through Vice Mayor Florante M. Cayunda and Municipal Agriculturist Elena P. Siddiqui.

TG staff from Calbayog and Baybay amuse themselves by testing the newly turned-over ICT equipment

Left. *The ViCARP staff led by Dr. Jose L. Bacusmo pose with the ICT equipment delivered by DAP*.

Above. *Only a few of the ICT equipment that ViCARP and five of its TG Centers availed of through the K-AgriNet program.*

ViCARP, RRDEN and LSU Train Region 8's Development Workers on PDR

A total of 45 development workers in Region 8 gained the knowledge and skills on process documentation research (PDR) in a three-phased-training conducted by the Visayas Consortium for Agriculture and Resources Program (ViCARP) in collaboration with the Regional Research and Development/ Extension Network (RRDEN) and Leyte State University (LSU).

The participants learned the theories and practices of PDR during the first phase of the training conducted on February 15-17, 2006 at the Center for Continuing Education (CCE), LSU, Visca, Baybay, Leyte. The second phase was the field practicum on February 20 to March 20, 2006 held in the participants' respective areas of assignment. Then, on April 24-25, 2006, the participants gathered again at LSU for the presentation, critiquing and improvement of their field work output. The third phase of the training also provided a venue for the participants to share their experiences including the difficulties and problems they encountered during the conduct of their field work.

Process documentation is a learning tool designed to provide detailed, systematic and timely data on the manner in which field-level project implementation activities are undertaken. The failure to adequately document the whole process of implementing projects oftentimes causes development workers to lose the opportunities for learning from their efforts at improving the social and economic conditions of the people they are serving. To help avoid this situation, ViCARP, RRDEN and LSU conducted the training on PDR.

During the training, the participants were also introduced to the Most Significant Change (MSC) Technique, a form of participatory monitoring and evaluation that involves the collection of significant change stories emanating from the field level and the systematic selection of the most significant of these stories by panels of designated stakeholders and staff.

Staff of the Community Participatory Action Research (CPAR), Techno Gabay (TG), Agricultural Training Institute-8, Department of Agriculture-8, Office of the Provincial Agriculturist in provinces with TG and CPAR, ViCARP and the Continuous Improvement and Innovation (CI&I) project came to participate in the training.

RACO Coordinator Wolfreda T. Alesna shares some tips on report writing during the first phase of the training

Mr. Eduardo Y. Zabala of OPA-Leyte presents his process documentation report on the third-phase of the training.

Techno Gabay Goes to Southern Leyte

The first two months of 2006 witnessed the launching of Southern Leyte's pioneering Techno Gabay (TG) Centers.

The municipality of Bontoc launched Southern Leyte's first TG Center on January 13, 2006. The municipality of Liloan, on the other hand, launched its TG Center on February 10, 2006 bringing to 11 the total number of TG Centers in Region 8.

The Bontoc TG launching was graced by Southern Leyte's top officials and Atty. Victor B. Endriga, treasurer of Quezon City and president of the Philippine Association of Local Treasurers and Assessors (PHALTRA).

In his message, Atty. Endriga commended the local government of Bontoc for being the first municipality in Southern Leyte to launch TG. Atty. Endriga, a native of Bontoc who transformed Quezon City into the country's richest and best financially managed city, served as the guest speaker of the launching.

Southern Leyte Governor Rosette Y. Lerias, in her inspirational talk, also lauded the municipality of Bontoc and Southern Leyte State University (SLSU)-Bontoc Campus for taking the lead in implementing the program. She expressed her appreciation towards the program's concept and objectives and even made mention of the importance of technology commercialization, one feature of TG, that ViCARP is strongly pushing.

Congressman Roger C. Mercado of the Lone District of Southern Leyte also complimented LGU-Bontoc and the other agencies involved in the establishment of the program. In his message, he encouraged everyone to make use of the services offered by the newly established center. He lauded the implementation of the project being in line with President GMA's program in beating the odds and combating poverty. He also said that containing billions of technological know-how, the program is instrumental in educating its clientele.

The launching of the program was made possible through the initiative of SLSU-Bontoc Campus headed by its College Administrator, Dr. Lamberto N. Badeo. After inquiring from ViCARP the proper procedure in putting up the center, Dr. Badeo introduced the program to Bontoc Mayor Pedro V. Fustanes, Jr. who immediately approved its establishment and designated a space for TG in the municipal market.

Seated around the table (left to right) are SLSU-Bontoc Campus Administrator Lamberto N. Badeo, Southern Leyte Lone District Congressman Roger C. Mercado, Southern Leyte Governor Rosette Y. Lerias, Bontoc Mayor Pedro V. Fustanes, SLSU-Main Campus President Leonardo L. Manalo and ViCARP Director Jose L. Bacusmo for the signing of the Memorandum of Agreement on TG implementation in Bontoc, Southern Leyte.

Quezon City Treasurer Endriga talks before the witnesses of the launching of Southern Leyte's first-ever TG center.

The Liloan TG launching, on the other hand, was graced by Southern Leyte Provincial Administrator (PA) Genis Morallos who came in behalf of Southern Leyte's provincial officials. In his message, PA Morallos appreciated the concept of the TG Program and even encouraged the Liloanons who came to witness the launching to make use of the center's services and apply the technologies that the center promotes. He also commended the market support component of TG.

Since the launching of TG in Liloan was scheduled the day after the conduct of the K-AgriNet Consultation and Operational Planning Workshop, some PCARDD staff who facilitated the workshop opted to stay and graced the launching. In his message, Dr. Richard M. Juanillo, OIC, Office of the Deputy Executive Director for Institution

Mr. Richard M. Juanillo (left), OIC, Office of the Deputy Executive Director for Institution Development and Resource Management and Mayor Marlo P. Maamo, of Liloan, Sothern Leyte cut the ribbon to signify the launching of the TG Center in Liloan.

Development and Resource Management congratulated the municipality of Liloan not just for the successful launching but also for making it to the five TG centers in the region that were chosen as recipients of the K-AgriNet program.

Dr. Erlinda B. Aromin, the program manager of the Knowledge Networking Towards Enterprising Agricultural Communities or K-AgriNet gave a presentation on the project. She explained that K-AgriNet is PCARRD's approach to modernize agriculture and natural resources sectors through utilizing information communication technology or ICT.

In his message, ViCARP Director Jose L. Bacusmo explained that ViCARP pushed the implementation of TG in Liloan because of the municipality's strategic location. Being Mindanao's gateway to Region 8, Liloan is an ideal place to put up a TG center where information on various technologies can be accessed by visitors. The leadership and capabilities of the municipal mayor plus the entrepreneurial spirit of the Liloanons had also encouraged ViCARP to strongly promote the establishment of TG in the municipality and to identify it as one of the recipients of K-AgriNet even before the launching of TG.

The newly established centers serve as a venue where farmers, processors, entrepreneurs and other TG clients could access information on agriculture, forestry and natural resources. The centers also showcase the different products of the two municipalities and also of the other municipalities in Southern Leyte.

K-AgriNet Reaches...continued from page 1

E-Consortia aims to sustain R&D information and technology delivery through ICT-enabled Regional R&D Information Service while **e-Farm** will provide electronic access to information, technology, and other services of the 80 Farmers Information and Technology Services (FITS) centers and their *Magsasaka-siyentista* or farmer-scientists.

The other components of the program are the **Open Academy for Philippine Agriculture** (OPAPA) lead by DA-PHILRICE and **e-AGRIKultura** lead by the Department of Agrarian Reform (DAR) and Development Academy of the Philippines (DAP) in coordination with the Philippines-Australia Technical Support for Agrarian Reform and Rural Development (PATSARRD).

To spread the K-AgriNet beneficiaries in the region, ViCARP identified the TG centers in Baybay and Capoocan in Leyte; Liloan, Southern Leyte; Calbayog City in Samar; and Borongan in Eastern Samar as K-AgriNet sites. These centers were also chosen base on their readiness for interconnectivity. Also, the centers that were recipients of ICT equipment in the past were not anymore considered as recipients of the project.

To ensure a smooth implementation of the project, PCARRD conducted a series of consultation and planning workshops for project implementers in the entire country. ViCARP had its workshop with local stakeholders on February 8-9, 2006.

The workshop served as a venue to orient and update regional and local K-AgriNet program implementers, identify commodity focus, information/technology needs and outcomes, prepare operational plans including work and financial plans for the different project components, develop implementation guidelines and procedures and identify and formulate recommendations on issues/ concerns pertaining to the regional/ local implementation of the program.

The workshop was attended by the consortium director, consortium coordinators (RTPC, RACO and RMIS), TG staff such as the site managers, information service specialists and technology service specialists and farmer-scientists.

ViCARP, RRDEN Strengthen Efforts to Integrate Development Programs

Implementers of TG, CPAR, CATP and RLPESI brainstorm on the areas where the four programs could complement.

To explore possibilities for convergence and complementation among the region's major development programs, the Visayas Consortium for Agriculture and Resources Program (ViCARP) and Regional Research and Development/Extension Network (RRDEN) conducted on February 2, 2006 the Techno Gabay (TG), Community –based Participatory Action Research (CPAR), Community Agricultural Technology Program (CATP) and Regional Livestock Production Environment System Improvement (RLPESI) Convergence Planning Workshop at the ODREX AV Room, LSU.

The workshop, participated in by project leaders and implementers of TG, CPAR, CATP and RLPESI, is in line with the convergence initiatives by ViCARP and RRDEN that was started in 2003. Finding some similarities in the goals and objectives of the four programs, ViCARP and RRDEN decided to conduct a workshop that would help identify possible areas in which the four programs could complement and converge.

The one-day workshop started off with an orientation of the four programs. The presentations highlighted the goals, purposes, expected outputs, strengths and weaknesses of the four programs. Then, the similarities among these programs were looked into. Afterwhich, the workshop participants brainstormed on the areas where the four programs can complement.

Aside from being community- oriented and having shared the common goal of fastracking the dissemination and adoption of technologies, TG, CPAR, CATP and RLPESI also involve the participation of local government units and farmers as well as other stakeholders such as non-government organization and state colleges and universities. The four programs are also market-oriented and have more or less similar tools and processes on participatory approaches.

Among the areas that were identified by the workshop participants, where the four programs could possibly converge are project site selection, commodity focus, project advocacy, consultation meetings, coordination with the PLGU-PRECS in conducting downstream/type/development projects, establishment and operation of a Barangay Technology Information Center (BTIC) to reflect and strengthen TG in the project site, identification and utilization of *Magsasaka-Siyentista* as model farmer-partners-technology demonstrators and innovators, use of simpler and more systematic and relevant tools and processes in participatory approaches, process documentation and project monitoring.

Techno Pinoy Goes Online

What came in compact discs before can now be accessed online as the ViCARP-Regional Management Information Services (RMIS) group developed a web service that displays the content of the Techno Pinoy CD in the ViCARP website.

Called Techno Pinoy Online, this web service was developed to make information on S&T- based technologies more accessible for ViCARP members and Techno Gabay clients. The service is password protected and limited only to ViCARP members and Techno Gabay clients to avoid duplication of the system.

The Techno Pinoy CD is one of the major outputs of the Regional Management Information Services (RMIS) group of ViCARP. It contains popular information on abaca, coconut, rootcrops and other technologies developed by the ViCARP member agencies as well as the information contributed by ViCARP member-agencies/institutions. It also includes information on fruits and nuts taken with permission from publications of the Plant Resources of Southeast Asia (PROSEA).

This online service is a product of the strong collaboration between the Region Eight Applied Communication Task Force (REACTF) and the RMIS Core Group members. The REACTF members took charge of the collection of available information materials and translation of these materials into Cebuano and Waray languages. The RMIS and Regional Communication and Training Unit (RCTU), on the other hand, put the information together.

Since its creation in 1999, the Techno Pinoy CD had served thousands of ViCARP clients and visitors. The consortium also generated income from the sale of the CD.

ViCARP RMIS Develops Message Board

ViCARP website visitors can now post messages online.

In addition to the online services developed by the ViCARP-Research Management Information Services (RMIS) group is a message board, a virtual bulletin board that allows visitors to post messages for others to read.

The ViCARP message board was created to facilitate interaction between member-agencies online. Although message boards are accessible and hosted by commercial companies, the ViCARP-RMIS still found it important to develop its own message board that hopefully will be utilized by its members frequently.

Through the message board, visitors of the ViCARP website can post their announcements, whereabouts and queries. They are also welcome to post their comments to further improve the web services of the consortium.

In 2005, the group had also come up with the commodity price monitoring system to provide advisory on the recent buying prices of commodities to farmers and other interested individuals. In 2004, the ViCARP-RMIS had automated the updating of news and activities which enabled ViCARP members who have no knowledge on web scripting and programming languages to post updates of their agencies' activities and news online.

LSU Presents the Most Number of Researches in 2006 In-house Review

Dr. Othello B. Capuno, Director for Research and Extension of LSU speaks before the participants of the LSU 2006 R & D In-house Review.

For the nth time, the Leyte State University (LSU) emerged with the most number of ongoing and completed researches during the separate ViCARP and RRDEN coordinated agency in-house reviews (AIHRs) conducted from June 6 to June 28, 2006.

Of the 62 papers actually presented by LSU researchers, 55 were on-going while seven were already completed.

The Eastern Samar State University (ESSU), on the other hand, hosted the Joint Provincial Technical Institute for Agriculture (PTIA) - Provincial/ Local Government Units (PLGUs) R &D in-house review for agriculture and fisheries on June 8-9, 2006 where 26 researches were presented. Of this number, 23 were on-going while 3 were completed. Participating in the in-house reviews were five PTIAs (ESSU, Biliran National Agricultural College-Naval Institute of Technology or BNAC-NIT, Southern Leyte State University or SLSU, Samar State College of Agriculture and Fisheries or SSCAF and University of Eastern Philippines or UEP) and four PLGUs (Leyte, Southern Leyte, Biliran, and Eastern Samar) and one city-LGU (Ormoc City). Two out of the three completed researches were presented by ESSU while one was presented by SLSU.

The Department of Agriculture-8 (DA-8) agencies presented a total number of 20 researches with 19 on-going and one completed during the in-house review conducted on June 19-20, 2006 at the Main Regional Integrated Agricultural Research Center (RIARC) in Babatngon, Leyte.

The in-house review hosted by the Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST) and participated in by the Eastern Visayas State University (EVSU) and Samar State University (SSU) yielded a total number of 17 actually presented papers. Eleven (11) of these were on-going while six were already completed.

DENR had presented a total of 13 on-going researches during the in-house review conducted on June 6-7, 2006 at the DENR Regional Office 8.

Table 1. Summary of member-agencies' on-going and completed researches

Agency	On-going	Completed	Total
LSU	55	7	62
DA	19	1	20
PTIAs/PLGUs/CLGU	23	3	26
EVSU/SSU/TTMIST	11	6	17
DENR	13		13
TOTAL	121	17	138

RRDEN Awards LSU's Best Researchers

To recognize the contribution of LSU researchers to the agricultural development of Region 8, the Regional Research and Development/ Extension Network (RRDEN) gave awards and cash prizes to the institution's best researchers during the in-house review conducted on June 28, 2006.

LSU is just one of the recipients of this new initiative of RRDEN. RRDEN also gave awards and prizes to the best researchers identified during the conduct of the other RRDEN-led in house reviews. The better news is, this initiative will continue in the coming years.

The winning LSU papers and their respective authors are the following:

Best Basic Research

1st prize - *Differential display of protein of some common production and postproduction problems in rootcrops*/ Edgardo Y. Tulin and Ms. Zenaida T. Ecleo

2nd prize- *Reaction of hybrid rice and component lines to important disease and insect pests*/ Lucia M. Borines, Reny G. Gerona, Ma. Dinah M. Reformina, Maricel M. Gasco, Winnie Tagle, Virgilio Guitierrez, Brian Sinangote and Ma. Gina M. Babb

3rd prize-*Establishment of micropropagation systems for sustained production of disease-free rootcrop planting materials*/ Villaluz Z. Acedo

Best Applied Research

1st prize- *Development of sulfite-free dehydrated sweetened jackfruit/* Lemuel M. Diamante

2nd prize-*Tools, indicators and integrating framework for sustainable utilization and management of commercially important invertebrates in Eastern Visayas*/ Bernadita P. Germano, Senona A. Cesar, Analyn M. Mazo and Julissah C. Evangelio

Best Development Research

1st prize-*Management of abaca diseases in Leyte through inter-agency and multi-sectoral cooperation: Kontra Alcoheris* / Lelita R. Gonzal, Gavino N. Bastasa, Patricia P. Santiago and Bimbo T. Mandras

2nd prize-*Reaching out rootcrop farmers through the development of multimedia materials*/ Alan B. Loreto, Ma. Cristina A. Gabrillo, Ma. Elsa Umpad, Dale P. Loreto and William A. Hubahib.

Photo above shows (from left to right) LSU R&E Director, Dr. Othello B. Capuno; ViCARP Director, Dr. Jose L. Bacusmo; the awardee, Dr. Edgardo Y. Tulin; and DA-EVIARC Manager, Dr. Elvira Torres.

Dr. Lemuel M. Diamante receives his award from the LSU, ViCARP and DA-RRDEN officials.

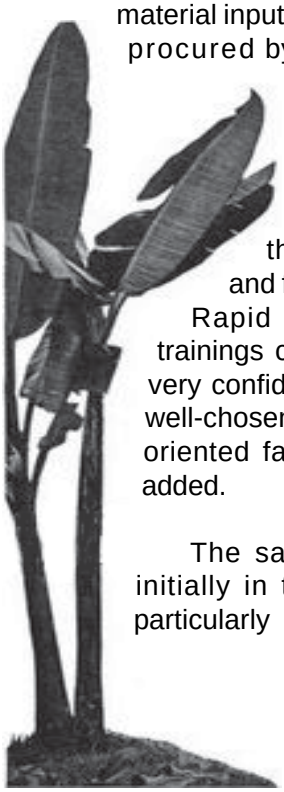
NARC Director, Dr. Lelita R. Gonzal accepts her award from the review organizers.

Leyte First District Representative Launches Abaca-based Agribusiness Project in San Miguel

Amid the all-out-drive to avert the abaca bunchy top and mosaic disease infestation, hope springs eternal for the abaca industry in the region. The province of Leyte for one launched an Abaca-based Agribusiness Project in San Miguel, Leyte in January 2006.

A brainchild of the Honorable Congresswoman Remedios L. Petilla, this project is funded by her Priority Development Assistance Fund (PDAF) in coordination with the Department of Agriculture and other cooperating agencies.

DA-VIII's Regional Executive Director Leo P. Cañeda said, "No less than Secretary Domingo F. Panganiban lauds Congresswoman Petilla for initiating this project in support of the implementation of DA's Goal I program. He said, this project is a milestone as far as operationalizing our bid to develop new lands for agribusiness promotion and job creation purposes. Last year, around 20 thousand hectares were programmed for agribusiness development in Region-VIII.



Under this project, abaca seedlings and other material inputs such as fertilizers and pesticides procured by the Congressional District Office would be distributed through a Plant Now, Pay Later scheme to the different farmer-cooperators. These farmer-recipients were carefully chosen on the basis of their demonstrated determination and farming capability found during the Rapid Rural Appraisal and series of trainings conducted last year. " So, we are very confident that we are dealing here with well-chosen, well-trained and very progress-oriented farmers," Congresswoman Petilla added.

The said project will be implemented initially in the municipality of San Miguel particularly in Barangays Santol and Caray-caray with a start-up area of 75 hectares involving 150 farmers. Over time, it shall be expanded to cover the municipalities of Babatngon (Barangays Taguite and Planza), Palo (Barangays Libertad and Cahindoc and the City of Tacloban (Barangays Sta. Elena and Tapuro). Nevertheless, its expansion will be subject to availability of funds and the recommendation of the Project Coordinating Office.

Meantime, RED Cañeda stressed that the present supply level of good quality fiber in Region-VIII needs to cope with the increasing demand both in the local and international markets. In fact, with the full-swing operation of the pulping plant in Albuera, Leyte and in Brgy. Hilapnitan, Baybay, Leyte (soon to operate) which has an absorptive capacity of 7,000mt and 7,200mt per year, respectively, the demand for the abaca fibers will be increasingly felt. In addition, abaca traders from as far as Bicol region and Luzon frequent Region 8 for their handicraft and pulping needs. Last year, the total abaca fiber produced in the region reached about 24 thousand mt. At present, abaca fiber is priced at about P52.00 per kilo.

Upon full operation, the project in San Miguel aims to substantially increase fiber output by both opening up new production areas as well as increasing productivity per hectare. It will help maximize the potentials of abaca production both as a source of income and employment. Likewise, it is deemed to boost the position of Leyte as a leading abaca exporter. Moreover, it will strengthen the capability of the local government units and farmer cooperators as development partners.

DA-8 Urges LGUs to Help Keep Vigilance Against Bird Flu

Christine F. Colasito, Staff, DA-RAFID 9

The Department of Agriculture-VIII intensifies its bird flu preparedness campaign and exhorts all stakeholders especially the local government units to be vigilant against the dreaded disease."We cannot afford to be sidetracked by any disease that will affect our livestock and poultry industry" DA-VIII's Regional Executive Director Leo P. Cañeda said.

Director Cañeda said DA-VIII is on its way towards fully operationalizing the different Avian Influenza Task Forces around the region. It is spearheading a series of briefings on avian influenza especially in areas frequently visited by migratory birds.

DA-VIII is also conducting related activities such as the upgrading of the Regional Animal Disease diagnostic Laboratory (DA-VIII RADDL), holding of capability-building training courses for veterinarians, strict implementation of quarantine regulations and maintenance of footbaths at all entry ports of the region.

Other preventive measures being recommended are observance of biosecurity measures such as proper farm sanitation, rest period and disinfection between flocks, proper disposal of mortalities, no mixing of poultry and swine in the same holding facility and recording all movements to and from the facility of visitors, vehicles, deliveries and the like. Likewise, the presence of domestic and free-range poultry in migratory bird areas especially in wetlands is discouraged.

Meanwhile, RED Cañeda belied the circulating text message that the Avian Influenza virus has already entered the country. He said, "This nuisance text message should not be believed and must cease from circulating. It is a false alarm as there is no reported or confirmed case of bird flu in the Philippines."

Related to this, he mentioned that the possibility of the bird flu ever reaching the country is remote. This can, among others, be attributed to the fact that the Philippines is remote and surrounded by big bodies of water. In the meantime, the Department of Environment and Natural Resources (DENR) has also beefed up its monitoring and surveillance of migratory birds especially waterfowls.

Along this line, RED Cañeda disclosed that Eastern Visayas is at a greater advantage because the region has no bird sanctuaries, though it has "migratory bird sites". These are found in Brgys. Baras, Barbo and Campoyong intertidal mudslats, Guiuan, Eastern Samar, Brgy. Naungan, Ormoc City, Carigara Bay wetlands covering the municipalities of Carigara and Barugo, in Leyte and in Brgy. Lagbangan, San Antonio, Northern Samar.

Bird flu or Avian Influenza is a contagious disease caused by viruses that normally infect only birds and less commonly pigs. While all bird species are thought to be susceptible to infection, domestic poultry flocks such as turkeys, chickens, ducks and wild birds are especially vulnerable that can rapidly reach epidemic proportions.

To date, the Philippines implements an import ban on all poultry and poultry products originating from the following bird flu affected countries of China, Vietnam, Indonesia, Hongkong, Thailand, Cambodia, Korea, Laos, Pakistan and South Africa.

Manobos in Bagacay, Tacloban City Say Hello to Vermicomposting Technology

Marulen A. Zara, SRA I, DENR-8

Necessity, as the mother of invention, is a cause for searching for alternatives. To the Manobos who have settled in Brgy. Bagacay, Tacloban City whose primary occupation is the raising of high value vegetable crops, necessity had compelled them to look for sustainable and more economical way to fertilize their crops without spending big money for commercial fertilizers. The tribe has always shown a preference for organic farming methods so it was a short step for them to adopt vermicomposting technology in fertilizing their crops as an alternative to the easy but costly use of inorganic fertilizers.

In November 2005, Divina Padecio, the President and Tribal Chieftain of the Integrated Manobo Tribal Association, met with the researchers in the Ecosystems Research and Development Service of the DENR in Region 8 and aired the perennial problem faced by her tribe in procuring fertilizers for their vegetable raising activities. She said that they usually utilize chicken dung and inorganic fertilizers to fatten their plants, but they were presently confronted with no supply of chicken dung and high prices of the inorganic fertilizers. Procured at P7.00 per kilo, the chicken dung was no longer available from their supplier and the prices of inorganic fertilizer had climbed to new heights, making its purchase a heavy drain on the Manobo farmers' limited resources. Mana Divina thought that it was high time that they switched to more affordable alternatives and immediately thought about the DENR's vermicomposting technology as a possible answer to her people's quandary.

Vermicomposting technology uses a special kind of worm called the African night crawler to produce an organic and environment-friendly fertilizer from the wastes which the worms excrete as fecal matter. These worms thrive in a substrate, composed of dried forest wastes (leaves, branches, twigs) and dried animal manure (except chicken dung) at a ratio of 3 parts forest wastes to 1 part dried manure. The worms feed on this mixture which is kept in a chamber and moistened at 80% level. The more that the worms eat the mixture of forest wastes and manure, the more that they excrete castings which serve as organic fertilizers or soil conditioners/ameliorants that can replace inorganic fertilizers for fattening the farmers' crops.

A Manobo farmer carefully harvests castings from the communal vermicomposting chamber where African night crawler worms produce wastes which serve as soil conditioners/ameliorants.

Production of the castings take from 30-45 days for one cycle during which time the worms reproduce themselves. From the moment the worms excrete their wastes, castings are produce but harvesting the castings by volume would take a minimum of 30-45 days. The worms burrow under the substrate to feed but curiously enough, they excrete their wastes on top of the substrate thereby making the harvesting of the fertilizer very easy. The castings are fine in texture and black in color and serve the purpose of enriching the nutrients in the soil to produce healthy crops for the farmers.

A Dozen Worms

The Manobos started their vermicomposting experience with a dozen full-grown African night crawler worms which the staff of the Technology Transfer Division (TTD) of the ERDS brought to Brgy, Bagacay in December 2005. Nursery Farm supervisor Angelito Zorilla of the TTD demonstrated to a group of 15 Manobo farmers how to prepare the vermicomposting substrate. The farmers had sundried leaves, branches and twigs from the nearby stand of trees and manure from carabaos. The farmers watched as Mr. Zorilla mixed the leaves, branches, twigs and animal manure at a ratio of 3:1 and moistened at at 80% level. The mixture was placed in a wooden box which served as

vermicomposting chamber and the dozen full-grown worms which served as the starter set were carefully placed into the substrate. Mr. Zorilla told the farmers that the worms would eat the substrate and excrete castings which they could harvest in 30-45 days. During this time, too, the worms would reproduce themselves.

Monitoring the Project

In April 2006 or after nearly four months of tending the vermicomposting box where a dozen of adult African night crawler worms were placed amidst the substrate made from forest wastes and animal manure, the Manobo farmers reported that they have been able to harvest some castings. They were happy to report that they used the castings to fertilize the grafted jackfruit and lanzones seedlings. From only a dozen worms in the beginning, they now had about a kilo of adult and juvenile worms in their vermicomposting box after about four months.

Roger Timkang, the Manobo farmer who oversees the vermicomposting box told the TTD staff who monitor the progress of the adoption of the technology by the Manobo tribe that they are happy with the results of the technology shared to them by the DENR.

To further improve the Manobos' production of castings, they were advised by Mr. Zorilla to segregate the adult worms from the juveniles. It was observed that the quality of the castings could be further improved. The monitoring conducted revealed that the substrate lacked animal manure. Added to the forest wastes were rotten peppers and cucumbers from the Manobos' vegetable harvest. Mano Roger confided that he had observed that the worms were voracious eaters of rotten vegetable. Mr. Zorilla said that adding of dry animal manure to the substrate would increase the nutrient content of the castings and thereby improve its quality as a fertilizer.

The color and the texture of the harvested castings from the Manobo farmers' vermicomposting box were like garden soil and unlike the fine black particles of first class castings. The Manobo farmers are trying to improve on the quality of the castings produced by the worms. Hopefully, with the addition of dry animal manure to the substrate the resulting castings would be better in quality.

When the Manobo farmers become big-time producers of organic fertilizers from the castings of the African night crawler worms, they will be leaving their problem about expensive fertilizers behind. To a certain extent the vermicomposting technology has met the Manobo farmers' fertilizer requirement though they still have to supplement it with inorganic fertilizer. With enough castings produced and finer ones at that, vermicomposting technology will make the problem about fertilizers more manageable and the Manobos will have to say goodbye to inorganic fertilizer.

Healthy tomato germinants are produced with the application of castings as fertilizers in the vegetable gardens of the Integrated Manobo Tribal Association in Brgy. Bagacay, Tacloban City.

Ampalaya fruits wrapped in plastic bags dangle from the vines which thrive from the regular application of organic fertilizer (castings) produced by the African night crawler worms using the vermicomposting technology adopted by the Manobo tribe in November 2005.

Timing: the name of the game in successful farming

Farmers especially in typhoon-prong areas are often worried about seasonal variability or sudden changes in the weather that lead to big losses in farm production. As a result, many enterprising farmers are hesitant to put more investment on expansion of farm production areas to try on new high valued crops.

Seasonal Climate Forecasts (SCF) would be a very good solution to this problem according to Dr. Canesio D. Predo of Leyte State University in Baybay, Leyte. Dr. Predo conducted a study on "Bridging the Gap Between Seasonal Climate Forecasts and Decision Makers in Agriculture," with support from the Australian Center for International Agricultural Research (ACIAR) and in collaboration with researchers from the Philippine Institute of Development Studies (PIDS) and the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) in the Philippines and a team of Australian researchers from South Australian Research and Development Institute (SARDI), New South Wales DPI and University of Sydney.

The researcher, who is an economist, revealed that, with SCF, production risks could be avoided because farmers would be guided on what crop to grow on a specific period. SCF could help farmers develop an appropriate cropping calendar to maximize profit.

The study used corn as a sample commodity to study using SCF. This is because corn needs exact timing. Too much rain or too much sun could lead to corn production failure and consequently investment losses.

Using a computer program especially developed for a more precise SCF, the researcher collected climatic data of Leyte, Cebu, Bukidnon and Isabela and closely worked with the PAGASA.

Dr. Predo also tried to test the effectiveness of SCF data by working with corn farmers in Barangays Union (Mahaplag, Leyte); San Salvador, Esperanza, Templanza and president Garcia (Matalom, Leyte); Tabayag (Argao, Cebu); and Magsaysay and Upper Pulangi (Malaybalay, Bukidnon). It was expected that after a successful trial, farmers would gain practical appreciation of the SCF.

The researcher also pointed out that the project intends to develop an approach to valuing the contribution of SCF to decision making under climate uncertainty based on insights from economics and psychology.

The project will wind up in 2008. The researcher hopes that with corn farmers using the SCF as one of their decision making tools, their farm productivity would increase that would eventually boost the corn economy.

Since timing is the name of the game in successful farming, farmers should not think twice using the data from Seasonal Climate Forecasts (SCF).

Development workers, on the other hand, should not fail to get access to SCF data for sharing to their farmer-clientele. (*WTAlesna)*

Turning Spears into Plow Shears

Hazel Grace T. Taganas

Educated on it or not, Retired Colonel Esteban M. Conchas has for sure a green thumb that makes him stand out!

I first met him when we launched the Techno Gabay (TG) center in Calbayog City. He did not get my attention until we were introduced. What is a retired military man doing here? He is farming? Amused of the encounter, I remembered a passage in the Scripture that says, "…and He turned the spears into plow shears".

Think of the impossibilities. Who would have thought of a man inspecting battalions but now the lined up fruit trees, marching in the infantry now trudging the farm, aiming for enemies now for pests, carrying arms and ammunitions now farm tools and fertilizers. But Manong Steve, as he is fondly called by his allies in agriculture, is no ordinary military man turned farmer.

His 5.8 hectares farm in Brgy. Dagum, Calbayog City is something to behold. He has 2 hectares jackfruit trees that is still on vegetative stage, 1.8 hectares rice field and 2 hectares vegetable plots.

His production yields him a net income of P82, 000 per cropping and his vegetables, P30, 000 per cropping. He attended trainings on jackfruit, rice and vegetable production conducted by ATI, DA-RFU-8 or the City Agriculture. He visited the vegetable highland in Cebu to fine-tune the craft. He frequently visits the TG center to gain more information on farming and to interact with the technology specialists.

Barely six years in farming, Manong Steve had already made bulls eye. His dedication to farming and commitment to make a difference in the lives of fellow farmers tossed him to become the chairperson of the City Agriculture and Fishery Council (CAFC) of Calbayog City. As chairperson, he mobilized the council and earned the Gawad Saka award both in the provincial and regional levels in 2005. "When I was nominated, many were excited for me to win, but I was excited of our 2010 vision", Manong Steve said. Their vision is to make the city sufficient in rice by 2010. Sufficiency for them is an additional 20% more for export. *to page 16*

Manong Steve presides a farmers' meeting.

Manong Steve talks with a fellow farmer.