



March 2009



Building a bigger mud crab industry

In the Laoang project site, the active members are the women of the Bayog Valley Farmers' Multi-purpose Cooperative—the kids share their mothers' enthusiasm for learning and in welcoming guests to their community.

The coastal mangroves of Northern Samar serve as a natural habitat to one of the best tasting crab species, *Scylla serrata*. Unfortunately, the uncontrolled harvest and trade of wild fly-size crablets from the area not only prevent the province from competing in the bigger market, the insufficient and inconsistent supply of quality stocking material also threatens the future of the few local mud crab producers.

The provincial office of the Bureau of Fisheries and Aquatic Resources (BFAR) estimates that 150,000 to 250,000 pieces of post larval crabs are smuggled out of island every week. The catching method is environmentally destructive as the collectors, usually children aged 7 to 15 years old, use small mesh-size nets, *sid-sid*, to scrape the substrate often damaging if not killing other organisms. This scenario pushed the provincial government, BFAR, the Non-Government Organisations (NGOs), and donor agencies to develop a local mud crab fattening industry that would open up livelihood opportunities in support of the government's environ-

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Mud crab consultation workshop held in Northern Samar

Northern Samar has been identified as one of the poorest provinces in the Philippines in 2006 according to the National Statistical Coordination Board (NSCB) which based its findings on the National Statistics Office's 2006 Family Income and Expenditure Survey Results.

ACIAR has been doing work in the province since 2007 through the project "Enhancing Adoption of Mud Crab Production Technologies in Northern Samar" under the Community Agricultural Technology Program (CATP). Through the collaborative efforts of ACIAR, the International Institute of Rural Reconstruction (IIRR), the Southeast Asian Fisheries Development Center (SEAFDEC),



Prior to the consultation workshop, the team from ACIAR, National Marine Science Centre, SEAFDEC and the Worldfish Center, visited the Rosario project site which is overseen by SPPI.

BFAR in Northern Samar, and the local NGOs, farmer communities are provided with technologies on mud crab nursery, grow out, fattening and nutrition that would hopefully increase both farmers' income as well as the available seed stock in the area.

As a continuing effort, a consultation with selected mud crab growers and traders in Northern Samar was held last 5 February 2009 in Catarman, Northern Samar to fully understand the industry and identify potential areas for R&D intervention. The activity was attended by Mr Barney Smith, ACIAR's Research Program Manager for Fisheries, Prof Alistair McIlgorm, Director of the Na-



ACE Board Member, Mr Noli Narca, emphasized the need for cooperation among the different sectors for the strict enforcement of ordinances prohibiting the transport of less than matchbox-sized crabs outside the province.



Worldfish Center Regional Director for East and South East Asia, Dr Maripaz Perez, effectively facilitated the discussion, zeroing in on the needs of growers and traders.

tional Marine Science Centre (University of New England and Southern Cross University), Dr Maripaz Perez, Worldfish Center's Regional Director for East and South East Asia, Dr Juan Albaladejo, BFAR 8 Regional Director, SEAFDEC experts including Dr Emilia Qunitio, Mr Renato Agbayani and Ms Didi Baticados. Also in attendance were CATP Manager Sheilah Vergara and ACIAR's NGO partners in the area, the Action for Community Empowerment (ACE), Inc and Sentro ha Pagpauwag ha Panginabuhi, Inc (Center for Local Economy Development or SPPI).

Dr Perez expertly facilitated the discussion such that a wealth of information was obtained from the willing and eager growers and traders in attendance. The participants shared that the industry faces technical, management/human resource, market, and environmental problems with the rapid depletion of seed stock in the province as one of the biggest issues. While there are local ordinances prohibiting the transport of less than matchbox-sized crabs, the continuous smuggling of which to other provinces still exists as Northern Samar crablets are offered a premium price in the market. Unfortunately, the local farmers' limited capital negates this competitive advantage they have in natural resource.

From the consultation, it also appeared that there is still a great need for the dissemination of technical and marketing information to farmers and for the development of deeper community awareness on resource conservation. The output from the consultation is currently being reviewed by the technical participants of the activity for consideration under the ACIAR mariculture project being developed in the Philippines. ♦



ACIAR Research Program Manager for Fisheries, Mr Barney Smith, and CATP Manager, Ms Sheilah Vergara, acknowledged the time and effort given by mud crab growers and traders in Northern Samar like Mr Melvin Lucban and Mr Reynaldo Añonuevo.

Master class on impact assessment at ICRISAT

The Australian Centre for International Agricultural Research, the Crawford Fund, and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) are organizing a Master Class on *Concepts and Tools for Agricultural Research Evaluation and Impact Assessment*. It will be held at the ICRISAT's campus in Patancheru, Andhra Pradesh, India on 18–27 March 2009.

The primary focus of the Master Class is to provide participants with the knowledge and skills necessary to undertake robust *ex ante* and *ex post* economic impact assessments of agricultural R&D and to make them aware of methodological advances in impact assessment and pathway analysis.

Participation is by invitation only and will be selected on the basis of their on-going involvement in impact assessment and proven skills in this area. Participants are

expected to be drawn from NARES in Bangladesh, Cambodia, China, India, Indonesia, Laos, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam.

Three Filipinos invited to participate include Ms Ma Salome Bulayog from the Visayas State University (VSU), Dr Roehlano Briones from the Philippine Institute for Development Studies (PIDS) and Dr Sergio Francisco from the Philippine Rice Research Institute (PhilRice).

The main presenters of the Master Class are Dr Debbie Templeton, Program Manager-Impact Assessment (ACIAR) and Dr Cynthia Bantilan, Global Theme Leader, Global Theme on Institutions, Markets, Policy and Impacts and Principal Scientist, (ICRISAT) with support from several specialized resource persons. ◆

Drs Bulayog and Briones are involved in the ACIAR projects HORT/2007/066 and HORT/2007/067 or the vegetables and fruits programs. Dr Francisco co headed the team that evaluated the impact of the ACIAR-funded project on pesticide use and grain storage in the Philippines.

Building a bigger *continued from page 1*

mental protection and conservation activities.

ACIAR through its Community Agricultural Technology Program (CATP) came into the province in 2007 to address the immediate technological problems encountered in the mud crab sites supported under AusAID's Philippines – Australia Community Assistance Program (PACAP). Just like other CATP initiatives, the project makes use of ACIAR-funded and completed research; in this case, the mud crab technologies developed by the Southeast Asian Fisheries Development Center (SEAFDEC). The said project, now running on its second year, is focused on transferring nursery phase, growout management, fattening, and nutrition technologies to fisher's organisations with the help of several NGOs led by the Action for Community Empowerment Association Inc (ACE). Other research activities such as stock assessment and monitoring of environmental parameters are

also being undertaken by SEAFDEC experts in the hope that the derived information will be used to improve policies for the management of mud crab resources in Northern Samar.

Supervision of ACIAR's mud crab project in Northern Samar has been transferred from ACIAR's Agriculture Systems

Management Program Manager Caroline Lemerle to Mr Barney Smith, ACIAR's Research Program Manager for Fisheries. He visited the project sites and met with the local partners last October 2008 and February 2009. While delivery of ACIAR technology is currently limited to few fishing communities, Mr Smith believes that there is a great potential to further develop/expand the project in the province. ◆



CATP Manager Sheilah Vergara checks out the mud crabs harvested in the Laoang, Northern Samar project site.



Crablets in the Pambujan, Northern Samar nursery project site are fed with trash fish and cracked corn.

IN THE NEWS



SEAFDEC's Igang Marine Station (IMS) in Nueva Valencia, Guimaras Island is a demonstration and training facility that promotes sustainable cage farming technology for marginal fishers.

Mr Albert Gaitan supervises IMS operations which include maintenance of the milkfish and grouper bloodstocks. Other species grown in the station are sea horses, sea cucumbers, and sea abalones.



Photo: John Oakeshott / ACIAR

Dr John Skerritt at the Samal Island mango orchard of Mr Jun Lozada (middle); joined by Mr David Hall, Mr Les Baxter and partners from the Davao del Norte Provincial Agriculturist's Office.

Dr John Skerritt, ACIAR's Deputy Chief Executive Officer, met with the different project partners and visited various project areas in the Philippines last 12 – 20 January 2009.

Apart from getting in touch with AusAID Minister Counsellor Titon Mitra, Dr Skerritt was able to finally meet Ambassador Rod Smith who took the post in Manila last March 2008. He also spent considerable time in Los Baños to visit ACIAR's Policy Advisory Committee members, Dr Arsenio Balisacan and Dr Patricio Faylon, as well as senior officials and research scientists of the International Rice Research Institute (IRRI) headed by Director General Robert Zeigler. Discussions focused on the current and future directions of ACIAR in the Philippines and the ACIAR projects in Cambodia, respectively.

During this trip, Dr Skerritt was also able to revisit the Tigbauan Main and Igang Marine Stations of the South-east Asian Fisheries Development Center (SEAFDEC).



Ms Maria Rovilla Luhan gave a tour of the impressive Algal Production Laboratory at SEAFDEC, Tigbauan, Iloilo.

ACIAR's Deputy CEO around the Philippines

SEAFDEC and the National Marine Science Centre of the University of New England and Southern Cross University are spearheading the development of a new ACIAR mariculture project in the Philippines. Exploring the possibility of involving other fisheries-oriented institutions in the said project, Dr Skerritt also met with senior officials, faculty members, and researchers of the University of the Philippines Visayas.

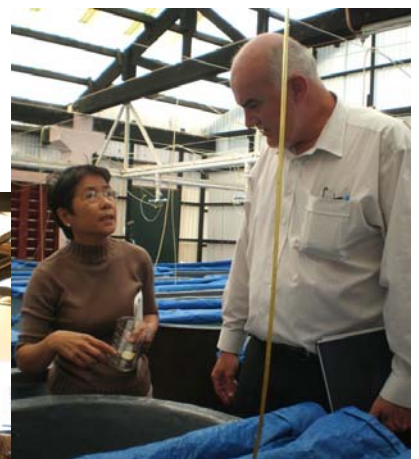
Davao was the last stop for the Deputy Chief where he met up with ACIAR Research Program Manager for Horticulture, Mr Les Baxter, and ACIAR Philippines Horticulture Manager, Mr John Oakeshott. The team, joined by local partners, visited the mariculture park and mango farms in Samal Island.

They were also able to catch up with key officials of the Department of Trade and Industry (DTI), Department of Agriculture (DA) - RFU X, Bureau of Plant Industry (BPI) and other private sector and donor partners. Dr Skerritt also met with the regional officers of the Bureau of Fisheries and Aquatic Resources (BFAR) before he returned to Canberra. ◆

Dr Emilia Quintio, SEAFDEC specialist on mud crab and shrimp domestication, showed Dr John Skerritt the mud crab broodstock and larvae that are similar to the ones used in the nursery project sites in Northern Samar.



Mr Nestor Bayona of the SEAFDEC Abalone Hatchery facility, held out a handful of *Gracilaria* which abalones feed on.



IN THE NEWS

Photos: Merlina Andalecio / UP Visayas



Dr John Skerritt briefly presented ACIAR's initiatives in the fisheries sector during the meeting with the UP Visayas CFOS faculty. Some of them also shared projects they hope to develop and implement.



Mr Allan Failaman and Ms Ernestina Peralta, both of UP Visayas in Miagao, Iloilo, shared that mud crab research in the University is often done during summer.

ACIAR execs visit UPV

Dr John Skerritt, Deputy CEO and Dr Barney Smith, Fisheries Program Manager, ACIAR, visited the University of the Philippines Visayas (UPV) on January 16 and February 3, 2009, respectively. Their separate visits were in relation to the final phase of an ACIAR-funded scoping study, FIS/22007/045: *Evaluation of production technology, product quality and market potential for the development of bivalve mollusc in the Philippines*. The project which commenced in August 2007 is a joint undertaking of the University of The Sunshine Coast (USC) and UPV. It is headed by Dr Peter Duncan, Project Leader, USC and Dr Merlina Andalecio, Partner Country Project Coordinator, College of Fisheries and Ocean Science (CFOS). The UPV project team is composed of Ms Ernestina Peralta, Dr Liberato Laureta, Dr Aklani-Rose Hidalgo, and Ms Ruby Napata.

The project examined the status of bivalve aquaculture (i.e. oyster and mussel culture) in the Philippines. Initial information on production technology, product quality, safety and postharvest aspects of bivalve production were collected from major farming centers in Visayas (Hinigaran, Himamaylan, Dumangas, Roxas City, Batan) and Luzon (Bacoor, Malolos, Bolinao, Anda). Analysis of the domestic and international markets as well as the legal and policy framework for aquaculture management was also done to determine compliance and regulatory influence on regional production and competitiveness. Results of the scoping study will be used to develop a research plan for a second-phase project intended to quantitatively assess critical factors affecting the quantity, quality and value of bivalve aquaculture.

Dr Skerritt and Ms Mara Faylon (ACIAR Assistant Manager- Philippines) met with UPV project team and some CFOS faculty and researchers in Miagao on January 16 and discussed the R & D programs and thrusts of ACIAR

in the Philippines. Dr Skerritt also mentioned a project proposal, ACIAR-Philippines Mariculture Enterprise Development Project, which is now being developed. Dr Andalecio presented the status of the current project, highlights of the results and potential topics for the long-term project. Some CFOS faculty and researchers had the opportunity to share their research interests and research proposals for ACIAR consideration. Dr Skerritt and Ms Faylon also visited the laboratory facilities of CFOS and met with Chancellor Minda Formacion and other University officials.

The progress of the current scoping study on bivalve aquaculture was further discussed during the visit of Dr Barney Smith and Prof Alistair McIlgorm of the National Marine Science Centre (NMSC) last February 3, 2009. Dr Andalecio presented preliminary results of the project where oyster and mussel farming have been identified as a family-based industry supplemental to fishing. Culture methods in the Visayas are more variable (combination of methods) than in Luzon. Most project sites face environmental problems (e.g. siltation, poor water quality, diseases) because of the current production technology and placement of structures (e.g. mostly are situated within the rivers). Marketing and harvesting of oyster and mussel products are mostly demand-driven. A research plan is still being developed for the long term project and this may include establishment of pilot sites. These results were identified and discussed during the writeshop meeting of Dr Duncan and the UPV project team last November 10-14, 2008 at UP Visayas, Miagao, Iloilo. ◆



Dr Merlina Andalecio
College of Fisheries and Ocean Sciences
University of the Philippines Visayas

IN THE NEWS

ACIAR Tree Farmer Project

End of Project Workshop



Source: Eduardo Mangaoang / VSU

The ACIAR-funded project on “Improving Financial Returns to Smallholder Tree Farmers in the Philippines (ASEM/2003/052)”, better known as the ACIAR Tree Farmer Project held its End-of-Project Workshop on 11-12 February 2009 at the Sabin Resort Hotel, Ormoc City, Leyte, the Philippines. The 3-year project (2004-2007, with 1 year extension) is a collaborative undertaking of the University of Queensland (UQ) and Southern Cross University in Australia, Visayas State University (VSU) and the Department of Environment and Natural Resources (DENR) in the Philippines. Dr John Herbohn (UQ) served as the overall project leader, Dr Steve Harrision (UQ) as collaborating principal research fellow, and Dr Eduardo Mangaoang (VSU) and DENR-8 Regional Technical Director for Research Edilberto Nasayao as the main Filipino counterparts. The project’s goal is to improve financial returns to existing smallholder tree farmers and intending tree farmers on Leyte Island via the following objectives: 1) assist DENR to overcome policy implementation constraints to tree registration and log transport currently restricting access to markets; 2) assist smallholder tree growers to satisfy market requirements and improve productivity; and 3) identify and promote livelihood systems and policies which incorporate forestry and which recognize the socio-economic circumstances of smallholders.

The end-of-project workshop has been a great opportunity for the project to share among its partners and major tree farming stakeholders, particularly the DENR, its research results, practical impacts, experiences and lessons learned in the various aspects of smallholder tree farming in Leyte island. In particular, the workshop highlighted the project’s research cum extension work in the fields of tree inventory and yield modeling, tree farm field trials, socio-economic survey, timber enterprise survey and market modeling, tree registration, harvest and transport approval, and forestry extension and policy. Twenty-six paper presentations had been made in the various fields of smallholder tree farming as mentioned above. A total of 44 participants coming from DENR-Ecosystems Research and Development Bureau, ACIAR-Philippines, DENR Region 8, Local Government Unit, Private Corporation, DENR Region 10, World Agroforestry Centre-Claveria, Misamis Oriental, Visayas State University, and the Australian project team joined this momentous event in the field of smallholder forestry in Leyte Island. ◆



Dr Eduardo Mangaoang
College of Forestry and Natural Resources
Visayas State University

Q-seedling *continued from page 7*

dora, respectively.

Papers related to nursery best practices and certification activities done under the project were also showcased. Dr Rotacio Gravoso, professor at the Department of Development Communication (DDC), VSU, updated the participants on the activities done in partnering with local government units and other stakeholders to support production of high quality seedlings. Miss Maria Ana-

belle Gerona, also an instructor of DDC, presented an update on the activities done so far in developing IEC materials on Best Management Practices in Seedling Production. Dr Eduardo Mangaoang presented the last paper which was a review of the existing nursery accreditation/certification system for fruit trees in Leyte and Northern Mindanao. ◆



Ms Annabelle Gerona / Visayas State University
Q-Seedling Newsletter Vol. 2 No.1
(January – March 2009)

IN THE NEWS

As a midterm review of its activities, the Q-Seedling Project (ASEM/2006/091) team conducted a *Research Team Workshop* on 13 February 2009 at the Eco-FARMI Training Room, Visayas State University (VSU).

Dr Steve Harrison, Principal Research Fellow at the University of Queensland (UQ) and collaborating scientist to the ACIAR Smallholder Forestry Project, said the meeting aimed to update the team on the project's progress. This is in view of the numerous project activities conducted at the Visayas State University (VSU) such as the Q-Seedling Series publication, training workshops, publication of the Best Management Practices Manual, production of various communication materials, and the field trials/modeling. Dr Harrison emphasized the importance of communication within the team to keep everyone on track of the project's objectives.

While the workshop was mainly intended for the core project research team members from VSU, the Department of Environment and Natural Resources (DENR) Regional Offices 8 and 10, and UQ, a number of representatives from various stakeholders also attended the workshop including nursery operators, tree farmers, wood processors, industries (Philippine National Oil Company and Leyte Industrial Development Estate) and the academe. Dr Rafael Cadiz of the Ecosystems Research and Development Bureau (ERDB) presented some insights on the national forest nursery accreditation proposal, which the on-going initiative of the Q-seedling project on forest nursery accreditation will complement. Ms Cecilia Honrado, ACIAR Country Manager (Philippines) and Ms Faustina Baradas from the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) were also in attendance.

To set the mood for the day's activities, Dr John Herbohn, Main Project Leader, presented the objectives and scope of the Q-Seedling Project. Prof Jerry Vanclay of the Southern Cross University discussed his and Dr Herbohn's work entitled *Target Characteristics for Seedlings Based Nursery and Outplanting Trials: Experimental Design, Initial Results from Field Trials and Future Research*. Dr Harrison shared his observations on the seedling production systems in Thailand and Vietnam while Dr Agustin Mercado, Jr of the World Agroforestry Centre (ICRAF) presented *The Seedling Nursery Survey in Leyte and Northern Mindanao*, a paper he co-authored with Dr Nestor Gregorio of VSU who also serves as the Filipino Project Leader of the Q-Seedling Project.

Eight (8) other papers that focused on the project's research activities were presented. Dr Gregorio and Dr Carl Smith of UQ explained their work on *Identifying Leverage Points for Policy Reform in Forestry Seedling Production in Leyte*. Ms Josiefer Jesusco shared her initial findings on the *Assessment of the Effectiveness of Government Extension Methods for Tree Seedling Production in Leyte Island, Philippines*. Meanwhile, Dr Harrison reported his work with Ms Wendy Wilson on *Financial Modelling of Smallholder Seedling Production*.

DENR representatives also presented their activities on seedling research and extension. Research Technical Director (RTD) Edilberto Nasayao of DENR-Region 8 discussed the *Assessment of the Tree Seedling Distribution Program of DENR* while RTD Danilo Cacanindin of DENR-Region 10 reported on *DENR's Policies for the Production of High Quality Planting Materials*. ERDB's RDE Strategies for the Production of Quality Planting Materials and the Inventory of the Mother Trees on Leyte Island were presented by Dr Cadiz and Dr Urbano Doy-

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Source: Nestor Gregorio / VSU

IN THE NEWS

The Community Agricultural Technology Program (CATP) spearheaded a four-day writeshop in Cebu Grand Hotel, Cebu City, last January 26-29, 2009. Ms Cecilia Honrado, ACIAR Country Manager, graced the affair and gave the welcome remarks and brief overview of ACIAR's mission and projects in the Philippines. The directors and staff of Mag-uugmad Foundation, Inc. (MFI), Soil and Water Conservation Foundation, Inc. (SWCFI), Participatory Research Organization of Communities and Education towards Struggle for Self-Reliance (PROCESS) and Landcare Foundation of the Philippines, Inc. (LFPI) were present and served as writers of the case studies. The four non-government organizations (NGOs) are CATP's partners in the field.

The writeshop aimed to document non-government organizations' and local government units' experiences on selected ACIAR researches and technologies in the field and provide an analysis on successes and failures, lessons learned and recommendations to move such projects forward. A book, which is a compilation of all the case studies produced in the writeshop, will be published and released before June 2009.

The International Institute of Rural Reconstruction (IIRR), helped organize and facilitate the writeshop. Ms Sheilah Vergara, CATP Manager, served as workshop coordinator while Ms Emily Oro, IIRR's Health and Training Specialist, acted as moderator. Ms Dianne Cunanan,

CATP holds a 4-day writeshop in Cebu



Source: Sheilah Vergara / IIRR

Also present were representatives from Bohol's Office of the Provincial Veterinarian and Office of the Municipal Agriculturist of Claveria, Misamis Oriental, who also wrote their individual case studies. Dr Julian Gonsalves, former IIRR Vice-President, acted as technical coordinator while three Visayas State University professors namely Dr Angela Ferraren, Prof Francisco Gabunada and Dr Alberto Taveros, served as technical panellists.

CATP Assistant, Ms Annie Secretario, IIRR administrative staff and Ms Lilibeth Vilela, IIRR publication associate, provided the much needed documentation and logistics support. ◆



Ms Sheilah Vergara
CATP - ACIAR / International Institute of Rural Reconstruction

Project collaborator: R&D achiever

Dr Louella Rowena de Jesus - Lorenzana of the Department of Agriculture Regional Field Unit (RFU) IV-B and former collaborator in HORT/2003/071 – *Integrated pest management and supply chain improvement for mangoes in the Philippines and Australia* is 2008's GAWAD SAKA Outstanding Agricultural Scientist, a recognition given out by the Bureau of Agricultural Research (BAR) of the Department of Agriculture to scientists and researchers with outstanding accomplishments in agriculture and fishery researches.

Dr De Jesus pioneered on the biology, behaviour, ecol-

ogy, and control of the mango pulp weevil (*Sternochetus frigidus*).

She is currently the Regional Integrated Agricultural Research Center (RIARC) Manager for Region IV-B and one of the collaborators in the mango component of HORT/2007/067 - *Improved domestic profitability and export competitiveness of selected fruit value chains in the southern Philippines*.



PROJECT UPDATES



Growing groupers in Misamis Occidental

The project *Enhancing adoption of improved grouper production technologies in Misamis Occidental* is being implemented under the Community Agricultural Technology Program (CATP) of the Australian Centre for International Agricultural Research (ACIAR). This initiative is the result of a consultative meeting among Misamis Occidental Governor Loreto Leo Ocampos and representatives of CATP/ ACIAR, the Philippines – Australia Community Assistance Program (PACAP) of AusAID, the Aquaculture Department of the Southeast Asian Fisheries Development Center (SEAFDEC), and Gata Daku Multi-purpose Cooperative.

The two-year project, which was formally launched in May 2008, aims to improve the livelihood of Iligan Bay fisher folks through the introduction of grouper culture using technologies developed from past ACIAR projects. This initiative supports Governor Ocampos' program of developing the mariculture industry in the province and ACIAR's objective of enhancing rural household incomes through the accelerated adoption of past ACIAR-generated research results by farming communities in

The group, headed by Mr Agustin Puntalan (right) of SEAFDEC, conducts regular sampling to classify fingerling size and place them in the appropriate compartments. Fisher folks observe and actively participate in the different project activities.



Photos: Sheilah Vergara / IIRR

the Philippines.

ACIAR has provided a total funding of Php 4.3 million for the project for the establishment of nursery and grow-out fish cages at the Misamis Occidental Aquamarine Park (MOAP) in Sinacaban as well as provision of grouper technology, fingerlings, and feeds to Gata Daku and their fisher folk beneficiaries. A season long training course on grouper cage culture was conducted by SEAFDEC's staff last year for the group. Moreover, SEAFDEC has assigned one of its staff, Mr Agustin Puntalan, to stay on site and personally supervise project implementation. The presence of an experienced technician enables the fish farmers to immediately address – in the most practical way - the different problems encountered in the nurseries and grow out areas such as irregular feed supply and cost, cannibalism, and unpredictable weather and environment conditions. Gata Daku has also hired three other staff to manage and organize the beneficiaries, facilitate trainings and on site demonstrations, and handle fingerling and feed supply as well as marketing activities.

Gata Daku and their fisher folk beneficiaries are expecting their first harvest this April. ◆

Early this year, the marine fish hatchery at MOAP was inaugurated by President Gloria Macapagal-Arroyo and Australian Ambassador to the Philippines Rod Smith. The multi-species hatchery facility, jointly funded by the provincial government and the Philippines - Australia Local Sustainability (PALS) Program, aims to supply the fingerling demands of private investors in Misamis Occidental. The technology and technical support requirements of the project are being provided by SEAFDEC.



There are other infrastructures planned to be put up at MOAP including an office, laboratory, technician's quarters and eventually, a feed mill which is expected to significantly reduce the feed costs involved in grouper production.

PROJECT UPDATES

Successful MFI-led CATP project in Southern Cebu

The Mag-uugmad Foundation Incorporated (MFI), an NGO based in Cebu City led an ACIAR-funded Community Agricultural Technology Program (CATP) in the municipalities of Pinamungajan and Argao in Southern Cebu. MFI identified farmers from three upland barangays who needed technology intervention. Traditional subsistence farming was practised by the farmers with corn considered as the main crop. These farmers also tended cattle for fattening as they were beneficiaries of the cattle-fattening dispersion program of the government.



MFI and participating Cebuano farmers took the time to discuss their experiences under CATP. Their story will form part of the CATP book to be launched within the year.

For technology-transfer and intervention strategy, MFI adopted several farmer-centered approaches. First, MFI facilitated the linkage of people's organizations. Second, experts in corn production and soil fertility management, forage production and silage making, and cattle raising and endoparasite control for ruminants were brought in, selecting from the pool of researchers from the Visayas State University, in Baybay, Leyte who had been supported by ACIAR in the past. Thirdly, MFI-CATP then conducted modified workshops and training, focusing on farmers' learning experiences with topics ranging from corn production to household-based cattle farming. The training-workshop deviated from the normal lecture pedagogy, but immediately went into an open forum where farmers were made to suggest solutions to a problem. Then from the answers, a consensus is built on with the expert providing the scientific bases or reasons for the appropriateness of the solution.

An interesting result of the training-workshop was – the



Photos: Sheila Vergara / IIRR

The CATP experience in Cebu has been successful due to the concerted efforts of the farmers, MFI, LGU, technical experts from VSU, IIRR and ACIAR.

farmers became more interested to evaluate their traditional practice against that of the scientifically derived solutions to crop production and cattle raising. After noting the difference in what could be generated from an improved farming technology, they became convinced of adopting appropriate methods. Adopters of improved technology reported that their income increased as a result of growing corn with appropriate planting density and fertilizer management. Those engaged in cattle fattening also reported increased income. They also realized that when animals were fed adequately with nutritious forage grasses or plants, fattening period is shortened to just three months.

The success of this MFI-led CATP technology transfer project supports the paradigm that technical experts should be partners with NGO, POs and line agencies of government. ◆



Dr Angela Almendras-Ferraren
Visayas State University-Commission on Higher
Education Zonal Research Center

Filipino project leader now at SMAR

Dr Madonna Casimero, formerly Philippine Project Leader of SMCN/2003/011 – *Herbicide use strategies and weed management options in Philippine and Australian cropping* and a recipient of the John Dillon Fellowship in 2007 has moved to the International Rice Research Institute (IRRI) as a Project Scientist at the Crop and Environmental Sciences Division. She is working at the ACIAR-SMAR project on increasing rice productivity in South and Southeast Sulawesi and is based at the ACIAR office in Makassar, Indonesia.

PROJECT UPDATES

Protected Cropping

This features the work of the Component 2 Team under HORT/2007/066: Enhanced profitability of selected vegetable value chains in southern Philippines

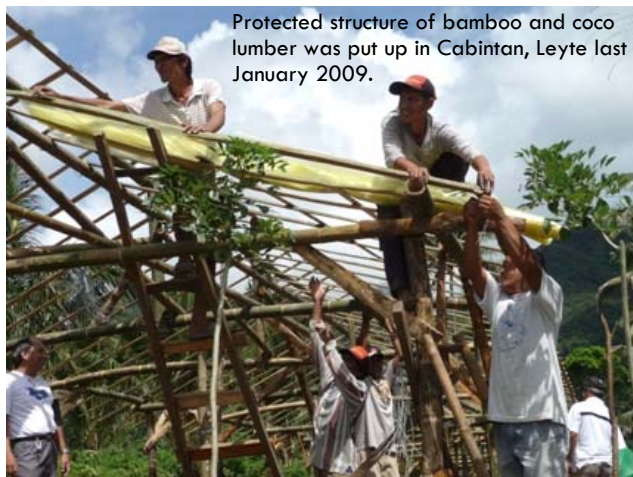
Heavy rains and strong winds can make vegetable production difficult and unprofitable in the central Philippines (Visayas) from November to February. Ironically, vegetables are expensive during this time and farmer incomes would be higher if they were able to produce vegetables successfully.

The region is subjected to numerous typhoons that can strike at any time of the year. Consequently, the eastern Visayan region of Leyte and Samar produce only 40% of their vegetable requirements. Importing vegetables from other regions is expensive because of high inter-island transport costs and poor road transport. The weather can have other significant effects on life in the Visayas. For example, heavy rains cause devastating landslides such as the one that buried the village of Guinsaun in Leyte on February 17, 2006.

This ACIAR-funded project aims to develop and evaluate low-cost protected cropping systems that allow farmers to produce high-quality vegetables despite wet windy conditions and get higher financial returns for their produce. A key challenge for this project is to develop a robust but inexpensive cropping system that can withstand these extreme conditions and provide impoverished local farmers with higher incomes and improved livelihood.

The project team decided to investigate low-cost protective cropping structures which modify the growing conditions by excluding damaging rains and winds.

Protected cropping structures at VSU, Baybay, Leyte.



Protected structure of bamboo and coco lumber was put up in Cabintan, Leyte last January 2009.

Modifying the growing environment by growing plants in an enclosed space causes a whole new set of problems to overcome; such as, how best to water the plants, what plants (and varieties) grow best, will the structure encourage new pests and diseases to flourish.

The project team need to design and test structures that can withstand these conditions and still be an economic proposition for local growers; such questions as, what design

(open, closed, row cover etc.), what building material (bamboo, lumber, steel).

Since the vegetables produced will be premium quality, the team will also look at developing market linkages to the market niche of highest returns, such as the food service sector.

Once the techniques are developed and shown to be financially viable, there will be ongoing farmer training through field days, field schools, and participatory action research.

The project team are also hoping that benefits will flow back to Australia where 1600Ha of vegetables are currently grown under protected cropping structures, and this sector of the industry is expected to treble over the next 10 years. Development of a low-cost durable structure tested in the extreme conditions of the Philippines will provide Australian vegetable growers with an option to improve their own whole of farm profitability.

This is a joint Philippines and Australian project. The Philippines team is led by Prof. Othello Capuno from Visayas State University (VSU). The Australian team is led by Dr Gordon Rogers from Applied Horticultural Research at the University of Sydney. Other key collaborators are East West Seed and NSW Department of Primary Industries. ◆



Article and photos by
Mr John Oakeshott / ACIAR



The project team must cross the river to reach the project site in Maasin, Leyte.



Out-of-season brassicas growing under a bamboo structure in Cabintan, Leyte.

Visit the Protected Cropping Component:
www.protectedcropping.com/

PROJECT UPDATES

Mr Tado and family during eggplant harvest.

Photo: Jenny Anne Perlado / BSWM



ACIAR's SMCN/2004/078 Project supports Filipino farmer cooperators

Mr Alberto Tado is a farmer cooperator in Sierra Bulones, one of the project sites of SMCN/2004/078 - *Evaluation and adoption of improved farming practices on soil and water resources, Bohol Island, the Philippines*. The municipality consists of 4,473 families with 5,029 of the residents engaged in farming. Based on the agro-socio economic interview conducted before project implementation, Mr Tado earned about Php16,000 from the rice, eggplant, squash, pole sitao, and melon he grew in 0.525 hectares of land. Their income is supplemented by the Php1,500 the family gets from their ice cream and ice candy production.

The project officially started in June 2007 headed by Dr John Bavor of the University of Western Sydney and Dr Gina Nilo of the Bureau of Soils and Water Management (BSWM) under the Department of Agriculture. Mr Tado's farm was selected as one of the technology demonstration sites and in the hope of a better life, he cooperated and worked with the project team. At the moment, he is managing an "improved site" for the project that involves the adoption of the best farming practices for crop, soil, and water management technologies. Technical assistance like on-site trainings on various soil and water conservation technologies, STK analysis, farm journal and farm record keeping, vegetable production, and livelihood activities using indigenous products were

provided by the BSWM in collaboration with the World Agroforestry Centre (ICRAF) and the Local Government Units (LGUs). On-farm livelihood opportunities offered included food processing, vermicomposting, and vermiculture. The need for these activities was identified through the series of consultation meetings with the local community. Active participation of local farmers was greatly encouraged especially in the establishment of their respective 5-year cropping pattern.

Mr Tado preferred to plant eggplant, squash, sweet pepper, mungbean, and pole sitao in his farm during the first cropping season of January to August 2008. After harvest, Mr Tado was very grateful that he gave his commitment to the project. His total revenue for this season reached Php31,000 which is from the 1,487 sq m eggplant plantation alone. Overall, he was able to earn enough to recover his coconut plantation that was in debt for years.

The other plants grown as alley crops during the same period included squash, sweet pepper, and mungbean. The combined application of inorganic and organic fertilizer favoured the production of eggplant and squash. On the other hand, sweet pepper was applied with organic fertilizer only.

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ACIAR NOTES

ACIAR branding guidelines

This collection of guidelines is aimed at anyone involved in the preparation of ACIAR material, both printed and electronic, scientific and corporate. This includes ACIAR staff members (in Canberra and country offices), researchers, journalists, editors, designers and printers.

Branding is an integral part of ACIAR's identity and recognition. It consists of the official Australian Government logo (made up of the Coat of Arms, 'Australian Government' and ACIAR's name spelt out in full), and four secondary design elements (hexagon, ACIAR acronym, the byline "Research that works for developing countries and Australia", and the ACIAR website). The logos and design elements may be reproduced in either black or 'ACIAR green' (PMS 370C) and, alone or in combination, are unique to ACIAR.

ACIAR branding should only be used with authorisation from ACIAR.

For a more detailed information on ACIAR's branding guidelines as well as logo downloads, please visit

www.aciar.gov.au/corporate_style ◆

Branding queries? Kindly address them to Ms Georgina Hickey / ACIAR Publications Manager:

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Search is on...

2009 Derek Tribe Award

The Derek Tribe Award is made biennially to a citizen of a developing country in recognition of their distinguished contributions to the application of research in agriculture or natural resource management in a developing country or countries.

The recipient will attend a seminar, or other public event, nominated by The Crawford Fund, to receive the award and to deliver "The Crawford Fund Derek Tribe Award Address". A media effort is associated with the visit.

In addition, the recipient will undertake a visit of about two weeks to agricultural centres in Australia with the intention of enhancing networking and linkages between the recipient's home institution and country with similar bodies and individuals in Australia.

Nominations close on 1 May. Further information and nomination forms may be downloaded from <http://www.crawfordfund.org/awards/dtaward.htm>

Derek Tribe queries? Kindly address them to Dr Eric Craswell / Director (General Training), The Crawford Fund:

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ACIAR's SMCN/2004/078 *continued from page 12*

Mr Tado is expected to enjoy additional income from pineapples planted in 505 sq m hedgerow that will be harvested in two years time. He received assistance from the LGU that provided 900 pineapple suckers. The project, on the other hand, provided seeds of mungbean, squash and eggplant including 46-0-0. In addition, the vermicomposting training enabled Mr Tado to produce *vermicast*, which he applied to squash. His commitment to the project delivered benefits that not only met his personal needs but that of the local community's as well. ◆

 Dr Gina Nilo and Ms Jenny Anne Perlado
DA - Bureau of Soils and Water Management

www.aciar.gov.au

Photos: Mauro Dela Cruz/ BSWM



Sierra Bullones in Bohol is one of the sites under SMCN/2004/078, the project that Mr Tado is involved in. Part of the project area is planted with eggplants.

ACIAR BOOKSHELF



Two-stage grain drying in the Philippines

Author(s): Chupungco A., Dumayas E. and Mullen J.

ISBN: 978 1 921531 31 6 (print) 978 1 921531 32 3 (online) ISSN 1832-1879

Publication Code: IAS59



The John Allwright Fellowship scheme: survey report 2008

Author(s): Muller F. and Morton J.

ISBN: 978 1 921531 49 1 (print) 978 1 921531 50 7 (online)

Publication Code: CP18

Summary: Grain drying is a major issue in all grain-producing countries and presents particular problems in humid, tropical climates. ACIAR and PCARRD, in association with other Philippine research organisations, have supported a major effort in this area. The review indicated that the technologies developed in these projects had not been adopted and that little use was being made of them in the Philippines, however the same technologies had been adopted in other collaborating countries in the Asian region and in Australia. Therefore it was decided that the assessment resources should be used to look in detail at the reasons for this lack of adoption and impact. This report presents the results of this assessment study. It found that the structure of the grain industry in the Philippines, and the policy and institutional environment there, are such that the grain-trading industry remains dominated by small-scale operators. As a consequence, economies of scale do not exist in grain trading, and the grain-drying technologies developed are therefore currently not profitable.

The study provides some very useful lessons for guiding future investments in research, in particular the need to take local industry and policy conditions into account when developing research activities.

Summary: Capacity-building activities are widely acknowledged for their contribution to economic and social development. The John Allwright Fellowship (JAF) scheme, which aims to provide enhancement of the research capabilities of partner-country institutions through postgraduate training of partner-country scientists, is one of ACIAR's key capacity building activities. During 2007–08 A\$5.3 million, including co-investment from AusAID, was expended on the JAF scheme, representing 8% of ACIAR's total budget. To ensure the effectiveness of the current scheme and determine program strengths and weaknesses, a survey was carried out of those fellows who have successfully completed their postgraduate qualifications and returned to their home countries. The results of the current survey are presented in this report. The JAF scheme continues to be at the core of ACIAR's operations, and the results from this survey will be used to ensure its ongoing improvement.



Guidelines for assessing the impacts of ACIAR's research activities

Author(s): Davis J., Gordon J., Pearce D. and Templeton D.

ISBN: 978 1 921531 28 6 (print) 978 1 921531 29 3 (online) ISSN 1832-1879

Publication Code: IAS58

Summary: Three years ago ACIAR commissioned reviews of the impact assessment studies. These summarised the overall return of ACIAR's research and development (R&D) investments and also assessed the consistency of the studies. A range of independent consultants are commissioned to undertake these assessments so it was not surprising that the reviewers found that there was variability in the detail, rigour and presentation of the results. Therefore we decided to develop a set of guidelines for all independent consultants to use as a basis for future assessments. The aim of the guidelines is to ensure consistency in the methodological approaches used, the treatment of information collected and presentation of the results.

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Landcare in the Philippines. A practical guide to getting it started and keeping it going.

The Community Agricultural Technology Program: Experiences in Technology Transfer and Adoption in the Philippines

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FEEDBACK
CONTRIBUTIONS