

Annual Report 2006





Vision

LSU as center of excellence in education and research in agriculture and allied fields in the Visayas.

PANGLANTAW

Ang LSU mao ang sentro sa kahanas sa edukasyon ug pagpanukiduki bahin sa agrikultura ug sa ubang susamang pagtuon dinhi sa Kabisayaan.

Mission

Attainment of the highest quality of human capital and scientific knowledge for the sustained growth and development of agriculture, fisheries, forestry, and agro-industries.

KATUYOAN

Pagkab-ot sa pinakataas nga kalidad sa pagpalambo sa kahibalo ug kasinatian sa siyensiya alang sa tunhay nga pag-ugmad sa agrikultura, pangisda, kalasangan, ug mga industriyang pang-agrikultura.

Goals

- 1. Produce high and middle-level quality manpower in agriculture and allied fields to serve the development needs of the region.*
- 2. Generate agricultural production and processing technologies and technology dissemination strategies adaptable to small farms.*
- 3. Advocate effective policy formulation and management of rural development programs.*
- 4. Improve the productivity, profitability, equity, and well-being of the Visayan farmers and their household members through ecologically sound natural resources management.*
- 5. Promote effectiveness, efficiency, and productivity in the operation of the university system.*

Objectives

- 1. To strive for excellence in agriculture education for regional and rural development.*
- 2. To sharpen its focus on impact programs and projects in instruction, research, and the application of new knowledge for the well-being of the small Visayan farmers and rural families.*
- 3. To build enduring linkages with national and regional institutions and agencies for the promotion of relevant instruction, meaningful research, and effective transmission of useful knowledge in the rural communities in the Visayas.*

Leyte State University

6521 Visca, Baybay, Leyte, Philippines



Office of the President

21 May 2007

Her Excellency

President Gloria Macapagal-Arroyo

Republic of the Philippines

Malacañan, Manila

Through: **Dr. Nona S. Ricafort**
Chairman, Board of Regents
Leyte State University

Madam:

May I have the honor to submit the Annual Report of the Leyte State University (LSU) for CY 2006.

This report summarizes the University's achievements in line with its thrust for countryside development and reflects the unity and dynamism of its constituency in realizing institutional goals and objectives.

Let me convey my profound gratitude for your generous and continuing support for LSU's growth and enabling the institution to carry out its role in support of national development.

Very truly yours,


PACIENCIA P. MILAN
President

Foreword

Responding to the technological and manpower needs of the country remained as the main focus of programs and initiatives of the Leyte State University (LSU) in 2006. Despite various challenges and limitations, LSU provided top-quality services and program outputs, thereby gaining greater recognition and appreciation as a government arm for national development.



During the year, LSU manifested its continuing drive to revitalize its instruction, research and extension programs to meet the growing needs of the country as well as the global community. In instruction, it optimized the development of students' skills and competence for employment and entrepreneurship. In R&D, the University likewise generated technologies and strategies for countryside development and environmental conservation. While intensifying linkages, collaboration, and partnership with local as well as international agencies and institutions, it enhanced revenue generation from its various projects, resources, and services to buttress its declining subsidy from the government. Furthermore, it institutionalized reforms and strategies to make the University more beautiful, orderly and peaceful.

As a result of its dynamism and enthusiasm, LSU was accorded Level III (Reaccredited) Status by the Accrediting Agency of Chartered Colleges and Universities in the Philippines, Inc. (AACCUP). It likewise obtained greater optimism when the bill for the change of its name to Visayas State University was approved by the House of Representatives and indorsed for deliberation and approval by the Senate and the President of the Republic of the Philippines.

For all its achievements and accomplishments, LSU acknowledges the unrelenting assistance of its program sponsors and benefactors; the hard work and creativity of its faculty, staff, and students; and the support of the government and civil society in realizing its goals. In the years ahead, LSU shall further prove its worth as the premiere university and the pillar of academic excellence in the Visayas.


PACIENCIA P. MILAN
President

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HIGHLIGHTS



The approval of the bill for the change of LSU's name to Visayas State University (VSU) by Congress on May 26, 2006 has further inspired the University to vigorously push for the final approval of the bill by Senate and the President of the Republic of the Philippines.

After obtaining a **"very good"** descriptive rating in the Second Survey Visit of the Accrediting Agency of Chartered Colleges and Universities in the Philippines, Inc. (AACCUP) on December 8-10, 2005, LSU was accorded **Level III (Re-accredited) Status** by AACCUP effective December 16, 2006 until December 15, 2010. Survey results of the five programs evaluated yielded a grand mean rating of 4.18 for Agriculture; 4.18 - Graduate (Master's: Agriculture); 4.15 - Graduate (Master's: Education); 4.22 - Elementary Teacher Education; and 4.24 - Secondary Teacher Education, while the minimum grand mean or minimum area mean required to pass the aforesaid level is 4.0

LSU ranked 11th among 43 universities and colleges of the country offering the BS Chemistry/BS Agricultural Chemistry program based on the performance of its graduates in the 2006 Chemist Licensure Examination. It also maintained its rank as one of the five best forestry schools and one of the Centers of Excellence in Forestry Education in the country.

In its desire for continuous institutional improvement, LSU subjected itself to an **external program and management review (EPMR)** by a team of renowned experts in education, agricultural

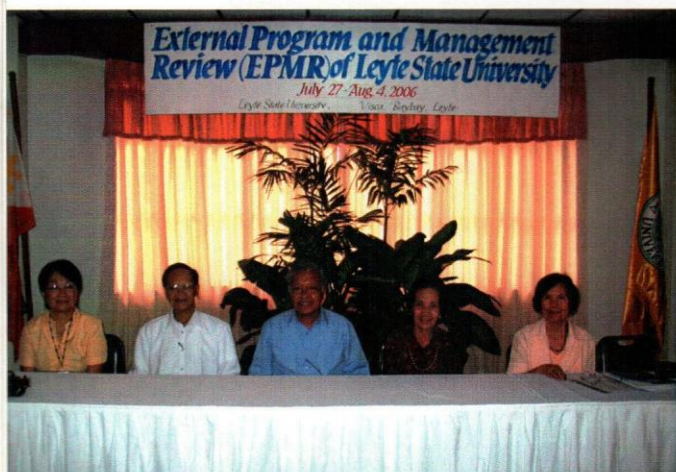
research and extension, and institutional management on July 27-August 4, 2006. The review experts helped the University assess the relevance and effectiveness of its programs and determine institutional needs.

The **Plant Oil Stove Project**, a collaborative undertaking of the Bosch & Siemens Hausgerate (BSH), German Development Foundation (DEG), and LSU was launched on April 5-9, 2006. The affair kicked off the promotion of the stove as an alternative cooking equipment using the common coconut oil as fuel to buffer the skyrocketing prices of liquefied petroleum gas and mitigate the problem of cutting of trees as fuel for cooking. Aside from its environmental benefits, the Plant Oil Stove Technology is expected to open greater opportunities for the Philippine coconut industry, provide farmers additional income from the increased demand of coconut oil, and give local manufacturing industries added economic opportunities from fabrication and market of the Plant Oil Stove.

The **LSU Reserve Officer Training Corps (ROTC) Unit** under Lt. Col. Ricardo M. Colina, Commandant, retained its title as Best ROTC Unit of Region 8 after obtaining the highest total points of 92.92% during the Regional Annual Administrative/Tactical Performance Evaluation (RAAPE) for school year 2005-2006.

LSU President **Paciencia P. Milan** received a **Pantas Award** for Most Outstanding Research Administrator from the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) of DOST during the 34th PCARRD Anniversary Celebration on November 10, 2006 at Dusit Hotel Nikko, Makati City.

The LSU-led **Visayas Consortium for Agriculture and Resources Program (ViCARP)** earned recognition as one of the three finalists to the 2006 Ugnay Award during the 34th PCARRD Anniversary Celebration on November 10, 2006 at Dusit Hotel, Makati City.



LSU Pres. Paciencia P. Milan (leftmost) ensures a successful assessment of LSU's programs by External Program and Management Review (EPMR) experts led by Dr. Fernando A. Bernardo, former president of ViSCA (now LSU) (2nd from left).



LSU President Paciencia P. Milan (2nd from right), pose with (L-R): PCARRD Exec. Dir. Patricio S. Faylon, DOST Secretary Estrella F. Alabastro, and Senator Ramon B. Magsaysay, Jr. after receiving the Pantas Award from PCARRD.

INSTRUCTION

Two LSU graduates, namely: Jehru C. Magahud and Ryan T. Sarimong, copped 5th and 9th places, respectively, in the Licensure Examination for Agriculturists.

The **Bachelor of Science in Economics** (BSEcon) and **Bachelor of Science in Development Education** (BSDE), formerly the BS in Agricultural Development (BSAgDev), were offered in the LSU Main Campus effective 1st semester of SY 2006-2007. Meanwhile, the LSU Board of Regents approved for implementation the following proposals: a) **Bachelor of Science in Biotechnology** and b) institution of Chemistry courses and modification of the prerequisite of some Chemistry courses

in support of the revision of the Bachelor of Secondary Education and the offering of the BS in Biotechnology.

The Commission on Higher Education (CHED) awarded LSU two slots for the training of its instructors to handle the **Medical Transcription Course** to be offered in the following year.

Table 1. Passing rate and number of topnotchers in professional licensure examinations.

EXAMINATION	DATE OF EXAMINATION	TOP 10 RANK	INSTITUTIONAL PASSING PERCENTAGE	NATIONAL PASSING PERCENTAGE
Agricultural Engineers			57.00	44.50
Agriculturist	July 10-12, 2006	5 th , 9 th	44.94	29.92
Foresters	June 6-8, 2006		42.11	40.60
Veterinarians	August 1-3, 2006		38.09	37.80
Chemists	Sept. 7-8, 2006		55.00	49.00
Teachers	August 27, 2006			
Elementary			52.25	29.23
Secondary			70.15	32.44



Mr. Erik-Ray S. Palomar, *summa cum laude*, together with his parents, Dr. Manuel K. Palomar & Dr. Lutgarda S. Palomar, receives his certificate from LSU President Paciencia P. Milan.

Student Awards

Latin Honors. Twenty-nine (29) graduates of the LSU Main Campus earned Latin honors, as follows: *summa cum laude* - 1, *magna cum laude* - 2, and *cum laude* - 26.

National Awards. A college student won 2nd place in the classic guitar instrumental solo contest during the National PASUC Cultural-Literary Festival.

Regional Awards. Eighteen (18) students of the LSU Laboratory High School (LSULHS) and 27 college students brought honor to the University by winning awards from POSTE - 6 (Science Olympiad), Regional Intel Philippines - 12 (*Individual and Group Category*), PASUC 8 - 26 (*Choral Singing, Vocal Duet, Guitar Solo, Dance Sport, Quiz, and Charcoal Rendering*), and Philippine Statistics Quiz - 1 (*Quiz - Championship*).

Provincial Awards. A college student won 1st place in the 15th Philippine Statistics Quiz (PSQ) Regional Championship and another college student ranked 2nd place in the PSQ Provincial Level.

Institutional Awards. Twenty-four (24) college students of the LSU Main and

Satellite Campuses and 19 high school students obtained awards from USSO - 8 (*Leadership and Endeavor Awards*), Phi Delta, the Honor Society of Science - 4 (*Outstanding Undergraduate Thesis Award*), LSULHS Math/Science Fair - 19 (*Individual and Group Research Categories*), Baybay Municipal Solid Waste Management Council - 8 (*High School - poster making and jingle singing; College Level - oration, poster making, slogan making, jingle singing*), and USSC - 3 (*Singing Idol - Best Ballader, Best Alternative Rock Performer, Best RNB, Best in Production*).

LSU's Policies and Guidelines for Foreign Students

The following policies and guidelines for foreign students, as approved by the LSU Board of Regents, were implemented effective March 2006:

1. All requests for field practice/practicum/research at LSU shall be channeled to the University President through the Vice President for Academic Affairs (VPAA) indicating the nature and duration of the said undertaking. The VPAA shall refer the matter to the department/center/institution concerned, and the latter shall inform the Office of the President (OP) if the request is accommodated and a letter of approval shall be issued by OP to the requesting institution or person concerned.
2. Similar to LSU regular students, foreign students shall follow the same registration procedure, and report to the University Student Services Office (USSO) for orientation.
3. The instructor/research staff supervising the foreign student and responsible in the issuance of certificate of completion shall be compensated through a token honorarium based on the degree of supervision.



LSU executive officials: (L-R) Dr. Jose L. Bacusmo, Vice President for Academic Affairs; Dr. Manuel K. Palomar, Vice President for Development & External Affairs; Dr. Jose M. Alkuino, Jr., Vice President for Administration & Finance; and Dr. Paciencia P. Milan, LSU President during their visit to the Zhejiang University in China.

RESEARCH & DEVELOPMENT

LSU implemented a total of 111 research projects during the year, of which 28 were completed, 48-ongoing, and 35-new. These included 31 research projects on root crops, 14 on rice, 10 on abaca, 9 on coconut, 8 on livestock and poultry, 7 on rural sociology/socioeconomics, 6 on higher education, 5 on marine/tropical ecology, 4 in agricultural engineering, 3 on vegetable, 3 on corn, 3 on R & D investment, 3 on fruit, 2 on agroforestry, 2 on pest management, and 1 on fish product development.

Technology for Protection

- ♦ Plant oil stove
- ♦ High yielding makapuno hybrids
- ♦ Makapuno-based products and by-products
- ♦ Dehydrated jackfruit
- ♦ Micropropagation protocol for cassava and sweetpotato
- ♦ Optimized *in vitro* and *ex vitro* propagation protocols for purple yam
- ♦ Cassava grates-based food products
- ♦ PRP 1 and PRP 2
- ♦ Cassava grates dryer (the design and machine)
- ♦ Bacteriocin purification

New Root Crop Varieties

The new varieties of sweetpotato (NSIC Sp 32) and cassava (NSIC Cv29) developed by PhilRootcrops were approved by the National Seed Industry Council of the Philippines.

Promising Rice and Corn Hybrids

Arabon, Baysilanon, Kalinayan, Magaya and Pulahan were considered promising aromatic rice genotypes in terms of aroma, eating quality, and yield.

The corn hybrids identified as most promising and their respective yields were NP (7.72 t/ha.), TC 8112 (8.67 t/ha), DAS 2W 034 (7.22 t/ha), and ZF 11 (6.28 t/ha).

Faculty/Staff Awards and Recognition

Some LSU staff and researchers made waves in their fields of endeavor and drew recognition or commendation from various international, national, regional and local agencies/institutions.

International Awards. Four (4) faculty members and one researcher received awards for their significant contributions to the agricultural industry and for serving as teaching assistants to Chinese students on conversational English.

Professorial Chair. A faculty member of the Department of Agronomy and Soil Science (DASS) was granted a professorial chair by the Philippine Agriculture and Resources Research Foundation, Inc. (PARRFI).

National Awards. Sixteen (16) faculty members and researchers received 13 awards from national agencies/organizations: 1 - *Pantas Award* from PCARRD; 1 - *National Gawad Saka (Finalist)* from DA; 5 - *Outstanding R & D Project* from DA-BAR and PCARRD; 8 - *Best Paper Award* from PSAE, FIMFS, CSSP, and NARRDS-PCAMRD; and 1 - *Best Poster Award* from FIMFS.

Regional Awards. Eighteen (18) faculty members and researchers obtained awards from DA Region 8-ViCARP; 1 - *Regional Gawad Saka Award* and 4 - *Best Paper* from DA Region 8; and 2 - *Outstanding Research* (2nd place) from PCIERD-DOST.

Institutional Awards. Six (6) faculty and staff members of the Main Campus earned recognition for their exemplary work performances during LSU's founding anniversary. Other awards were likewise given by USSO - 5 (*Keeper of Service Award*); CA-CHED-COE - 4 (*Outstanding Teacher Award, Outstanding Researcher Award, Professorial Chair Award, CHED-COE Publication Award*); LSU-DA8-RRDEN - 6 (*Best Paper Award* - 1st, 2nd, 3rd places); and LSU - 6 (*Outstanding Academician, Outstanding Teacher, Outstanding Researcher, Outstanding Extensionist, Exemplary Unit Head, Model Clerk*).

EXTENSION

Commercialized Technology. PhilRootcrops has commercialized the following technologies: **Pinoy Fries** (sweetpotato-based fries, prepared either as ready-to-fry or ready-to-eat pack); **cassava-based feeds** (for hogs and carabaos); **cassava grates and processing machines for cassava grates production**; and **planting materials** of various root crop varieties (sweetpotato, cassava, gabi, and ubi).

Other extension services provided by LSU were as follows:

Technical assistance to farmers - in the preparation of report for submission to DA-BAR; Brgy. *Guadalupe LGU* - implementation of Community-Based Monitoring Systems (CBMS) and conduct of training for the interviewers, and recruitment of learners for the Alternative Learning System Accreditation and Equivalency System (ALS A&E); *LGUs* - establishment of municipal and provincial fruit tree and ornamental nurseries; *private livestock entrepreneurs* in the municipalities and nearby barangays of LSU Main Campus - technical expertise in livestock; *POs and NGOs* - soil fertility; *Liloan LGU* - gabi chips processing; *Tunga LGU* - bio-fertilizer production; *Tudela Camotes*

LGU - feed mill operation; *Hilongos and Bato LGUs* - establishment of a cassava technology village; *Lanao del Sur LGU* - cassava production and varieties; *private individuals* - commercialization of Pinoy fries; *Naval Institute of Technology (NIT)* - commercialization of some root crop-based food products; *DTI-Provincial Office of Maasin City* - gabi chips product packaging, promotion, marketing, and design of labels of chips; *ALSON's Group of Companies* - use of cassava for ethanol production; *San Miguel Corp.* - cassava production and provision of foundation seeds for start-up nurseries; *Triple A Plantech Enterprises* - ubi tissue culture technology; *HortoNet* - propagation of dwarf *spathiphyllum*; *Philippine Rural Reconstruction Movement* - cassava production technology; *Liloanon's*



LSU President Paciencia P. Milan signing a memorandum of agreement with Dr. Bao-Ji Chen of the College of Bioresources and Agriculture, National Taiwan University.

Specialties - product development and packaging, design of the processing plant and cooking stove, and training on chips processing; *Merro's Enterprises* - machine design and efficiency and acceptance of machine orders; *MEDVIL farms* - appropriate cassava variety for animal feeds; *MINLAND Inc.* - application of root crop technologies; *Sto. Rosario Farms* - assistance and provision of cuttings of sweetpotato for planting materials; *farmers, LGUs and POs* - soil fertility, environmental protection, and characterization of landfill site.

Other forms of technical support were likewise provided such as trainings, briefings, lectures, seminars, workshops; distribution of reading materials like leaflets, brochures, pamphlets, technoguides; providing planting materials on abaca, coconut, root crops, fruit trees, rice, corn and vegetable for free or at minimal cost; showcase of technologies through demofarms, nurseries, and exhibits at the Main Campus and off-campus agri-industrial fairs, exhibits, and garden shows; and fabrication and distribution of processing machines.

ALUMNI SUPPORT

The LSU Alumni Association, Inc. (LSUAI) continued to generate funds for its scholarship project to support the poor but deserving college students of LSU. The ANZ ViSCA-LSU Alumni Associations based in Australia and New Zealand donated funds for the repainting of the frog fountain landmark of the LSU Main Campus and its stainless steel marker.

COLLABORATION

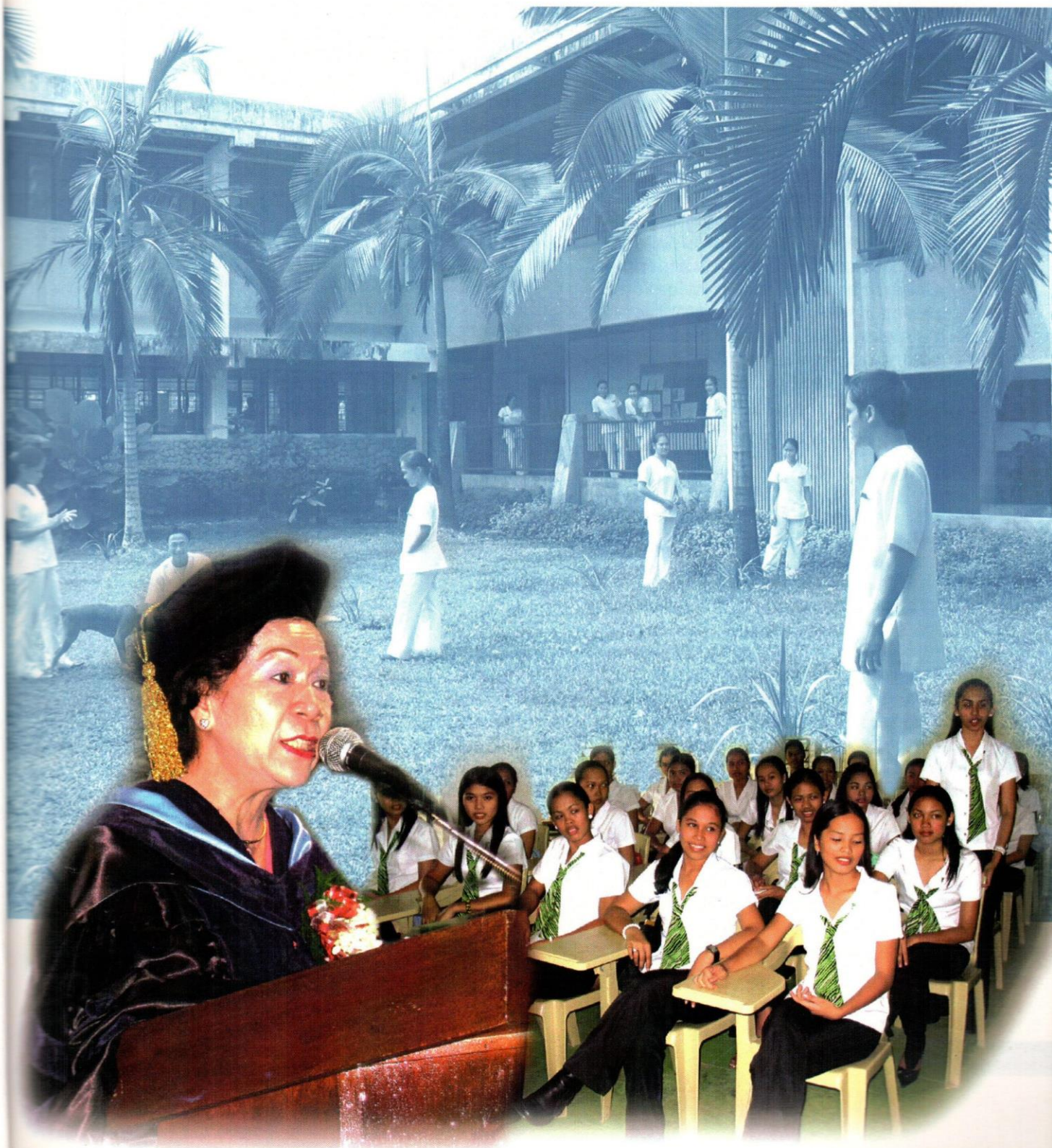
While further strengthening financial management to address the declining government subsidy for its operation, LSU continued to augment its budget by drumming up support from international/national institutions and agencies for its research and development projects, faculty and staff development, and improvement/acquisition of facilities and equipment.

During the year, the University forged agreements/partnerships with the following agencies: *National Transmission Corporation (TRANSCO)* and Department

of Environment and Natural Resources (DENR-Region 8) - for the replanting of trees cut due to the installation of the 138kv steel tower transmission line for the Leyte-Bohol Interconnection Project (LBIP)- Stage 2; College of Bioresources and Agriculture of National Taiwan University - exchange of materials in education and research, exchange of faculty members and research scholars in approved programs, exchange of students in comparable or similar degree programs, and joint research activities and meetings for education and research which are agreeable to both parties following standard protocol that would promote international academic cooperation; Zhejiang Gongshang University of China - exchange of faculty members and students, joint research projects, academic and cultural programs, conferences and cultural trips and exchange of journals; Dr. Fernando A. Bernardo and Dr. Emiliana N. Bernardo - scholarship for poor but deserving LSU students in an effort to maintain high standard of academic performance especially in the field of agriculture; United Coconut Planters Bank (UCPB)-CIIF Foundation,

Inc. (COCOFOUNDATION) - scholarship of LSU freshmen students who have the commitment, determination and potentials to pursue higher education in college or vocational levels; Manuel-Cresencia Loreto Clan Scholarship - student scholarship; Tokyo University of Agriculture and Technology (TUAT) of Koganei, Tokyo, Japan - collaborative research on the projects, "Nutrient and Water Balance for Sago (*Metroxylon sagu*) Intercropped with Taro" and "Inventory and Starch Profiling of Sago in Region VIII"; Saitama Medical School (SMS) Research Center for Genomic Medicine in Hadakashi, Saitama, Japan - joint research on "Identification and Characterization of Protein Mimetics Derived from Yam as a Physiologically Active Substance Having Beneficial Effects on Hypertension and Metabolic Syndrome"; University of Hohenheim (UH) - for the Phase 2 of the PPP-ABACA (Public-Private Partnership-Alliance for Biodiversity, Agroforestry and Community-based Activities) on Natural Fibers-Utilization in Automotive Industry dubbed "Sustainable Production of Abaca Plant Fiber-Philippines."

INSTRUCTION



CURRICULAR OFFERINGS

Undergraduate Courses

- Two new courses, namely: the **Bachelor of Science in Economics (BSEcon)** and **Bachelor of Science in Development Education (BSDE)**, formerly the Bachelor of Science in Agricultural Development (BSAgDev), were offered; and the newly revised Bachelor of Science in Agricultural Engineering (BSAE) and Bachelor of Animal Science curricula and change in name of FOR 154 from Parks and Wildlife to Principles of Wildlife Management were implemented in the Main Campus effective 1st semester of SY 2006-2007.
- The following proposals of the Main Campus were approved by the BOR for implementation in the next school year: a) **Bachelor of Science in Biotechnology** and b) institution of Chemistry courses and modification of prerequisite of some Chemistry courses in support of the revision of the Bachelor of Secondary Education and the offering of the BS in Biotechnology.

CURRICULUM DEVELOPMENT

Graduate Courses

- The following proposals passed through careful scrutiny of concerned committees: change of program title of the **MS Rural Sociology** to **MS in Development Sociology** and corresponding change of its course nomenclatures - reviewed by the Graduate School Council; **Master of Education** with majors in Chemistry, Biology, English, and Physical Education, Health, Music and Arts - reviewed by the Graduate School Curriculum Committee; and **Master of Management** with majors in Agribusiness Management and Business Management - reviewed by the Graduate School Curriculum Committee.

Undergraduate Courses

- The following proposals were submitted to the University Curriculum Committee for review: 1) LSU-Main - offering of the **Bachelor of Science in Environmental Management (BSEM)**; revision of the Bachelor of Elementary Education (BEED) and Bachelor of Secondary Education (BSED) pursuant to CHED Memo Order No. 30 series of 2004; institution of Biology courses in consonance with the revision of the Bachelor of Secondary Education (BSEd) curriculum; removal of Biology 11 as a prerequisite to Botany 21 and Zoology 21; and offering of a No-Prerequisite 2-unit Botany course for the Doctor of Veterinary Medicine curriculum; and 2) Isabel Campus - revision of the Associate in Computer Technology (ACT) and conversion of the Trade Technical Education (TTE) to Associate in Industrial Technology (AIT).
- The LSU Main Campus prepared a proposal to offer a ladderized program on **Bachelor of Nursing**, with certificates in **Nursing Aide** and **Practical Nursing** to be given after completing the first and second year, respectively.
- The following departments proposed the offering of new courses or revision of courses: *Department of Liberal Arts and Behavioral Sciences (DLABS)* - for the offering of **English/Filipino** and *Department of Biological Sciences (DBS)* - for the offering of **Biological Sciences** as major fields under the revised Bachelor of Secondary Education (BSEd) curriculum; and *DBS* - revision of existing BS Biology curriculum to comply with CHED Memo No. 24 series 2005 and BS in Biology (Pre-Medicine).
- The Institute of Human Kinetics conducted a series of clinic in sports (basketball, volleyball, tennis, and *sepak takraw*) and dance (folk dance) to BSEd Physical Education, Health, and Music (PEHM) major students to further enrich their knowledge and skills, instill positive values, and develop their competence in teaching the sports/dance.

ENROLMENT PROFILE

Student enrollment of the LSU Main Campus in the 1st semester, school year 2006-2007, totaled to 3,646, composed of 143 graduate students (11 Ph.D., 132 MS/MAGDev/MEd); and 3,503 undergraduate students. There was no enrollee in the non-degree program (Table 2). The LSU Laboratory High School (LSULHS) at the Main Campus had a total enrolment of 497 students, composed of 201 boys and 296 girls.

The LSU satellite campuses had the following student enrollment: Alangalang Campus - 417; Isabel Campus - 1,571; and Villaba Campus -273.

GRADUATES

The LSU Main Campus presented 583 graduates during its 53rd Collegiate Commencement Exercises, which include 24 graduates in the graduate program (2 PhD, 9 MS, and 13 MAGDev); 554 in the undergraduate program (87 BEEd, 43 BSEd, 4 BSAGEd, 59 BAS, 72 BSA, 58 BSAB, 34 BSHE, 24 BSF, 19 DVM, 32 BSFT, 40 BSBio, 8 BSS, 11 BSCS, 27 BSDC, 1 BSAC, 9 BS Chem, 7 BSAE, and 19 BSAGDev)); and 5 in the non-degree program. Thirty-three (33) obtained academic honors: 1 *Summa Cum Laude*, 2 *Magna Cum Laude* and 30 *Cum Laude*.

Of the 113 high school graduates who received their diplomas during the LSULHS 76th Commencement Exercises, 37 earned the following distinction: 1 - "With Highest Honors", 6 - "With High Honors," and 30 - "With Honors."

LSU's satellite campuses had the following number of graduates: 105 - Alangalang Campus (39 BEEd, 5 BSEd, 19 BAT, 42 DAT); 179 - Isabel Campus (11 BSEd, 44 BEEd, 2 BSAB, 18 BSIT, 8 BSIE, 38 ACT, 58 TTE); 23 - Tolosa Campus (16 BSF, 5 BSEd, 2 BEEd); and 65 - Villaba Campus (43 BEEd, 20 BSA, 2 BSEd).

PERFORMANCE OF STUDENTS

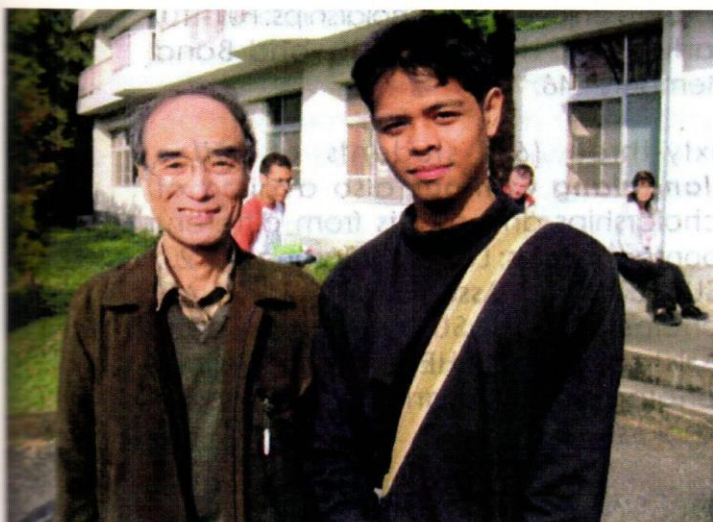
Honors and Awards

During the 53rd Collegiate Commencement Exercises of the LSU Main Campus on April 1, 2006, the following graduates were accorded Civil Service Eligibility by the Civil Service Commission and medals and cash for their special awards:

- Erik-Ray Matthew S. Palomar, BS Development Communication (Educational Communication Technology), *summa cum laude* - President Gloria Macapagal-Arroyo Academic Excellence and Leadership Awards, LSU Presidential Award of Academic Excellence, Manuel V. Villar, Jr. Academic Excellence Award in the College of Agriculture, Congresswoman Carmen L. Cari Academic Excellence Award, Gov. Carlos Jericho L. Petilla Award for Most Outstanding Student, Loyola Plans Consolidated Inc. Medal of Excellence, Phi Delta Outstanding Undergraduate Thesis Award-Social Science Category.
- Ev A. Parac, BS Development Communication (Educational Communication Technology), *magna cum laude* - Vice President Noli De Castro Academic Excellence Award
- Jedess Miladel C. Nuñez, BS Development Communication (Development Journalism), *magna cum laude*
- Renato M. Gofredo, Jr., BS Chemistry, *cum laude* - Sen. Pia S. Cayetano Award of Excellence in the College of Arts and Sciences and DOST Award for Academic Excellence in Science
- Marilou B. Libres, Bachelor of Elementary Education, *cum laude* - Sen. Pia S. Cayetano Award of Excellence in the College of Education

Table 2. LSU Main Campus student enrolment by degree, First Semester, SY 2005-2006 and SY 2006-2007

COURSE	1 st Semester 2005-2006	1 st Semester 2006-2007
GRADUATE		
Ph.D.	13	11
M.S.	82	92
M. Ag. Dev.*	75	40
M.Ed.	2	0
SUB-TOTAL	172	143
UNDERGRADUATE		
Doctor of Veterinary Medicine (DVM)	295	236
BS in Agricultural Engineering (BSAE)	85	75
BS in Geodetic & Geomatics Engineering (BSGGE)	71	72
Bachelor of Animal Science (BAS)	236	245
BS in Agriculture (BSA)	383	311
BS in Agribusiness (BSAB)	439	373
BS in Agricultural Chemistry (BSAC)	7	4
BS in Chemistry (BSC)	77	84
BS in Agricultural Development (BSAgDev)	61	33
BS in Agricultural Education (BSAgEd)	5	1
BS in Development Communication (BSDC)	138	123
BS in Food Technology (BSFT)	174	185
BS in Forestry (BSF)	101	71
BS in Home Economics (BSHE)	106	65
BS in Statistics (BSS)	67	58
BS in Biology (BS Bio)	176	121
BS in Computer Science (BSCS)	169	162
Bachelor of Secondary Education (BSEd)	195	186
Bachelor of Elementary Education (BEEd)	545	521
BS in Hotel, Restaurant & Tourism Management (BSHRTM)	360	538
BS in Development Education (BSDE)	0	27
BS in Economics (BSEcon)	0	12
SUB-TOTAL	3,690	3,503
NON-DEGREE		
Home Economics Technician (HET)	5	0
SECONDARY	497	497
GRAND TOTAL	4,364	4,143



LSU BS Chemistry student, Val Borines, together with Prof. Hiroshi Hara of Tokyo University of Agriculture and Technology, Japan.

- Jubella D. Gerilla, BS Agribusiness, *cum laude* - Philippine Senate Gold Medal for Academic Excellence in the College of Engineering and Agri-Industries
- Ricavir F. Medina, BS Chemistry; Jecyl Louis C. Balotite, BS Chemistry; Fiel C. Casinillo, BS Computer Science - all *cum laude* and each received the DOST Award for Academic Excellence in Science
- Roy C. Limpangog, Bachelor of Animal Science (Animal Production); Anny Ruth P. Pame, BS Agriculture (Plant Breeding); Amel Kareen G. Filipino, BS Agriculture (Ag. Economics) - all *cum laude* and each received the Breeders Award of Excellence
- Lilibeth C. Paraboles, BS in Forestry, *cum laude* - Sen. Jamby A. Madrigal Award of Excellence in the College of Forestry
- Marck Anthony M. Suyom, BSEd-Bio-Chem; Janet B. Bacus, BEEd; Brian Kristofer A. Ternura, BSDC-ECT; Quenstein D. Lauzon, BS Bio-Marine Bio; Nemia D. Mendoza, BS Bio-Marine Bio; Shanice A. Odias, BEEd; Shiela L. Tirol BSEd-Bio-Chem, Art Russel R. Flandez, BS Bio-Marine Bio; Lovie E. Borinaga, BS Bio-Marine Bio; Kristine I. Nejudne, BEEd; Ricci E. Donayre, BEEd; Malou B. Sumbrado, BEEd; Nichell M.

Villarta, BS Bio-Botany; Richelen C. Arpon, BSEd-Bio-Chem; Marianne Gay L. Arpilleda, BS Bio-Marine Bio; Vilma C. Necio, BS Agribusiness; Joy A. Bellen, BSEd-Bio-Chem; Jenny-Ann P. Ramos, BSEd-Bio-Chem; Ria Grace A. Edillo, BEEd; and Leny M. Goyo, BEEd - all *cum laude*

Students' Achievements

- Mr. Val Anthony M. Borines, 4th year BS Chemistry student, was the lone Filipino student accepted to the Short-Term Exchange Program on Science and Engineering (STEP) in Tokyo University of Agriculture and Technology, Tokyo, Japan from October 1, 2006 to September 2007.
- LSU's Varsity Tae Kwon Do Team won the following medals in the 1st Maasin Tae Kwondo Regional Open Tournament held on August 6, 2006: 2 gold (Bantam and Flyweight); 2 silver (Flyweight and Featherweight); and 6 bronze (2 Bantam, 2 Finweight, 1 Flyweight, 1 Featherweight).
- LSU's delegates to the 22nd State Colleges and Universities Athletic Association (SCUAA) Regional Meet 2006 held in Naval Institute of Technology (NIT), Naval, Biliran on October 22-27, 2006 won 2 gold medals in lawn tennis men and women's tae kwondo bantamweight



Fritzie Gucela (right) unleashing her best kick for the gold in women's taekwondo featherweight division.

division; 2 silver medals in *sepak takraw* and chess (women); and 7 bronze medals in basketball (men and women), lawn tennis (women), badminton (men), shot put (women), triple jump (men), and *tae kwondo* flyweight (women) division.

The LSU Varsity Volleyball Men Team won 2nd place in the 4th Inter-Collegiate Volleyball Tournament sponsored by the BRONCHO Blazers Cup in Ormoc City on November 28-30, 2006.

One hundred seventy-six (176) high school students enjoyed LSU scholarships: Full - 10, Partial - 90, Honorific - 30, and Band Members - 46.

Sixty-three (63) students of **LSU - Alangalang Campus** also availed of scholarships and grants from different sponsors/donors: LGU - 34, Barangay - 20, LSU-AC Alumni Association - 4, LSU-AC scholarship - 2, LSU Staff Dependent Assistance - 1, CHED Congressional Scholarship - 1, and Fil-Canadian Scholarship - 1.

STUDENT WELFARE AND DEVELOPMENT

Scholarships and Financial Assistance

LSU Main Campus - 11 graduate students enjoyed scholarship grants from SPREAD - 3, CHED-HEDP-FDP - 1, LSU Staff Development Program - 3; SSCAF Staff Development Program - 1; ESSU Staff Development Program - 1; NSCA Staff Development Program - 1; Seventh Day Adventist (Bursary) - 1; and Research/Teaching Assistantships - 13 (GTA - 11 and GRA - 2).

A total of 587 undergraduate students benefited from scholarships/grants: 216 - LSU scholarships and 371 - LSU grants-in-aid, and 201 funded by other agencies: (Pagkaon - 55, CSSGPCD - 40, DOST-SEI - 25, City Government of Ormoc - 10, German Priests - 8, AVE - 6, UCPB-CIIF - 6, 5 each from Panasonic, LSU Alumni, PDMASP, and LSUCDC; 4 each from CHED-SSP and PARRFI; 3 each from Cong. Carmen L. Cari and San Isidro Labrador; 2 each from ATI-MPC, PCAFD, Dr. & Mrs. Fernando A. Bernardo, Manuel-Cresencia Loreto Clan, CHED-SSP-BSE-SSUC, TWU (PNOC), and WSSP; and 1 each from Municipality of Baybay, SIFI and VGAA). Four hundred eighteen (418) student assistants were hired to work in different dormitories/departments/colleges during the year and 18 students availed themselves of ViSCASELF loans.

Guidance and Counseling Services

The Guidance Section of the University Student Services Office (USSO) conducted a "Counselors' and Peer Educators' Training and Counseling" for faculty and peer volunteers and a joint "Career Guidance Seminar" for both college freshmen and high school graduating students; administered and interpreted psychological tests of students and prospective employees for purposes of counseling, vocational guidance, admission, research, employment and readmission; conducted guidance and counseling to college and high school students; revived the Campus Ministry Program with 12 ministers, pastors, priests from different denominations serving the spiritual needs of students; appointed 21 faculty members as Department-Based Guidance Facilitators (DBGF) to serve as extension arms of USSO in the delivery of guidance services to the students; administered psychological tests to freshmen high school students; and conducted a series of values education activities as well as information and personality development seminars to LSU high school students.

Student Housing

The 21 student dormitories of the LSU Main Campus accommodated 1,628 students during the 1st semester and 1,505 students in the 2nd semester of SY 2006-2007.

The Main Campus dormitories also accommodated visitors during semestral and summer breaks, which included Veterinary Medicine student-interns from Southwestern University in Cebu City, youth members of the Church of Jesus Christ of the Latter-Day Saints, and members of the Focolare Movement.

Repair and maintenance of the different dormitories were undertaken for the welfare and well-being of student occupants.

Student Organization

During the year, a total of 71 student organizations in the Main campus were recognized, which consisted of 2 university student councils, 6 college supreme student councils, 22 course-related organizations, 11 service/Greek-lettered organizations, 10 religious organizations, 7 regional/cultural groups, 7 interest groups, and 6 high school organizations.

The following student organizations received awards during the 3rd Awards Night on February 21, 2006: **Best Organization** - *Information Technology Club* (LSU-Isabel Campus), *College Supreme Student Council* (LSU-Villaba Campus), and *Aqua-Fish Technology and Future Educators* (LSU-Tolosa Campus); **Course-Related Organization** (all awardees came from the LSU-Main Campus) - *Chemical Society* (1st place), *Philippine Association of Food Technologists-Kappa Student Chapter* (2nd place), and *Development Communicators' Society* (3rd place); **Service Organization Award** (LSU-Main Campus) - *Tau Gamma Phi Triskelion Grand Fraternity and Sorority* (1st place), *Theta Psi Lambda Fraternity and Sorority* (2nd place) and *Zeta Beta Rho Fraternity/Mussaenda Honor Society* (3rd place).

The **University-Inter-Dorm Student Body** (UISB) spearheaded the following activities to further enliven the Christmas Festival 2006 on December 8-14, 2006: Dormitory Open-House, quiz show, Christmas symbols contest, Christmas dance contest, caroling contest, and the Search for Christmas Perfect Model.



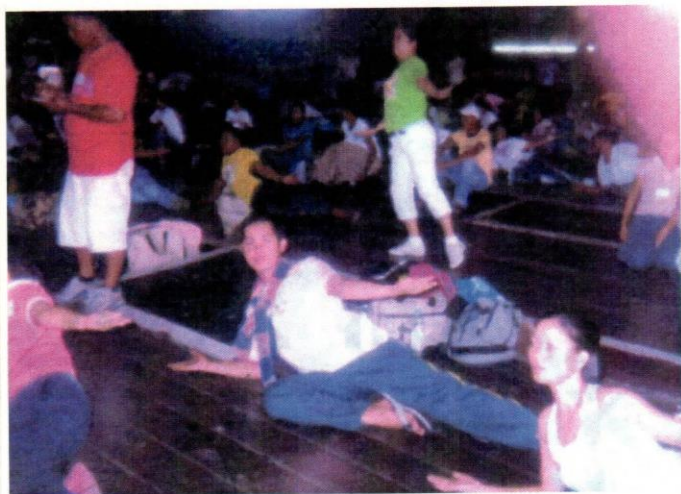
Mr. Rane Nuevo, GAM of the College of Agriculture, raising the Perpetual Trophy earned by his team as overall champion in the 2006 University Intramural Games. The trophy was presented by Prof. Manolo B. Loreto, Dean of Students, and Prof. Aleli A. Villocino, Director of IHK.

Student Activities

Graduate students in the Main Campus participated in a series of seminars on an array of topics sponsored by the Office of the Director for Research and Extension (ODREx) including the thesis/dissertation preparation seminar and summer consultation dialogue for distance education students. Student leaders enriched their knowledge and skills by participating in leadership trainings and seminars.

During the University Intramural Games 2006 held on September 13-16, 2006, the College of Agriculture obtained the **Perpetual Trophy** as overall champion, followed by the College of Engineering and Agri-Industries - 1st runner-up; College of Veterinary Medicine - 2nd runner-up; College of Education - 3rd runner-up; and College of Arts and Sciences and College of Forestry and Natural Resources - 4th runner-up.

Students of the Department of Liberal Arts & Behavioral Sciences (DLABS) held culmination programs to showcase (for entertainment or evaluation purposes) the knowledge and skills they learned from their courses.



Mr. Jovel Aberilla (center) in one of the practical exercises of the Folk Dance Workshop sessions.

Jovel M. Aberilla, 4th year BSEd major in PHEM, participated in the 26th National Folk Dance Workshop at the Folk Arts Theater, CCP Complex on May 15-19, 2006.

The different student organizations of the LSU System carried out various activities that: 1) promote community welfare and development, such as helping the LSU Administration conduct road safety and courtesy campaign to students/drivers/ residents of barangays along the national highway going to Baybay town, providing assistance in traffic management and security during LSU anniversary celebration, anti-rabies vaccination campaign, catching stray dogs, giving of gifts to the needy, food product demonstration, fund raising for legitimate/noble purposes, and assistance to some food processors; 2) enhance student competence and potentials, which include tutorial sessions, conduct of chicken recipe festival, youth camp, animal/dog show, table skirting/table setting/dining hall set-up/food service, quiz show, plant identification contest, film showing, educational trip, sports fest, orientation of freshmen and transferees, acquaintance and Christmas parties, induction of officers, JS Prom, giving tribute to senior students and their parents, attending/co-sponsoring seminars/workshops/trainings, participation in the *kaugmaran* festival and street dancing;

sponsoring activities of the *Buwan ng Wika*, Science Month, English Month, Nutrition Month, National Week for the Gifted, and Education Week celebrations; and 3) support further development of LSU by donating journals, books and other educational resources to the University Library, maintaining the LSU Nature Park and Eco Park, tree planting, *alay linis*, campus/dormitory general cleaning, participating in University activities and celebrations by putting up booths, putting up of campus directory at the campus entrance, and providing assistance in the registration of farmers during the LSU anniversary, composting, and bulletin board making (Table 3).

ALUMNI

Forty-five former varsity athletes attended the 3rd Varsity Alumni Homecoming organized by the Varsity Alumni on August 7, 2006 and expressed their concern and support to the Varsity Sports Program of the University.

Awards

During the 52nd Collegiate Commencement Exercises of the LSU Main Campus on April 1, 2006, alumni topnotchers in the 2005 PRC board examinations were given medals and cash awards as follows:

- Licensure Examination for Agricultural Engineers - **Alvin C. Alvarado**, 1st place - LSU medal, cash award from Congressman Jesus Jurdin M. Romualdo and medal from Congressman Eufrocinio M. Codilla; **Jose Mari C. Cabahug**, 5th place - LSU medal and medal from Congressman Eufrocinio M. Codilla; and **Lyman Dennis O. Moreno**, 7th place - LSU medal and medal from Congressman Eufrocinio M. Codilla
- Licensure Examination for Foresters - **Angelica P. Pame**, 1st place - LSU medal and cash award from Congressman Jesus Jurdin M. Romualdo and **Ma. Cristina A. Bandalan**, 2nd place - LSU medal

Table 3. Activities of the different student organizations, SY 2006-2007.

ORGANIZATION	ACTIVITIES UNDERTAKEN	AWARD RECEIVED
Visca Chemical Society (ViChemSo)	Annual Chemistry Week celebration, orientation program, acquaintance party and induction of officers, alay linis, tutorial sessions, Grand Chemistry Alumni Homecoming, Niponggo lessons, attended seminar on Progressive Entrepreneurship, attended national mid-year conference and youth camp	1 st place, Course-Related Organization
Phil. Association of Food Technologists - Kappa Student Chapter (PAFT-KSC)	Election of officers, freshmen orientation, general assembly meeting, acquaintance & Christmas party, intra-departmental quiz show, alay linis, sponsored the gender sensitivity and sexuality training, promotion and selling of DFST products at Ormoc City Plaza, Heritage Hotel, and in China; fund raising during LSU Anniversary and Halloween; assistance to selected food processors of Brgy. Guadalupe, Baybay, Leyte and during the Farmer's Field Day; food product demonstration in Abuyog, Leyte; donation of food technology journals to LSU Library; Search for Mr. & Ms. Food Tech 2006; Food Tech sportsfest; Chicken recipe festival	2 nd place, Course-Related Organization
Development Communication Students Society (DECSO)	Quiz bee, poster making contest, essay writing and extemporaneous speaking contests in Inopacan, Leyte; helped in the road safety and courtesy campaign for LSU students, drivers and residents of Brgys. Guadalupe, Gabas, Kilim, Sta. Cruz, and Candadam; sponsored the seminars on anti-smoking, anti-alcoholism and anti-drug addiction.	3 rd place, Course-Related Organization
Ag. Economics Majors Student Society (D'AGEMSS)	Monthly alay linis, beautification of the department by planting ornamental plants, assisted in the registration of farmers during the Farmers' Field Day, entrepreneurial activities during the LSU anniversary	
Society of Agri-business Students (SABS)	Freshmen orientation program, SAVALEX fund raising, alay linis, acquaintance/Christmas party, tribute/get-together, booth making, tutorial service, peer facilitators' meeting, quiz show, election of officers, meetings, tribute to graduating BSAB students, strategic planning seminar, SABS business in Christmas, giving of bundles of goodies to barangay folks	
Veterinary Student Society (VSS)	Dog Show, Rodeo, Phil-Veterinary Week, anti-rabies vaccination campaign, alay linis, catching of stray dogs in LSU campus	
PSAE-Student Chapter	Tutorial classes in Physics and Mathematics	
Computer Science Students' Society (CS ³)	Election of officers and meetings	
Home Economics Society (HES) and HRTM	Alay linis; dining hall set-up, table setting and food service during 2006 Alumni Homecoming, assisted during the LSU fashion show and dinner-for-a-cause dubbed "Alta Moda" and LSU anniversary lunch for visitors; table skirting, food preparation and service; organized a "lantern-making contest"; posted environment-friendly reminders at DFCS Building; educational tours in Bohol and Samar-Leyte; attended seminars; provided assistance in seminar-workshops; donated skirting cloth to the DFCS	
Society of Animal Science Students (SASS)	Co-sponsored with AREV the 2006 Rodeo Exhibition during the LSU 82 nd anniversary	

ORGANIZATION	ACTIVITIES UNDERTAKEN	AWARD RECEIVED
Student Union of Agronomy & Soil Science Majors (SUASSM)	Sponsored the SUASSM Week celebration with the following activities: film showing, quiz show, giving gifts to the needy; acquaintance party; alay linis; assisted in selling seeds, rice, etc., distribution of leaflets and documentation of the Farmers' Field Day during the LSU anniversary; film showing and corn production as fund raising activities; co-sponsored a seminar-workshop	
Association of Rodeo Enthusiasts in ViSCA (AREV)	Participated in the National Rodeo Competition in Masbate City and in the Buglasan National Rodeo Competition in Dumaguete City	
Visca Horticultural Society (ViHOS)	Co-sponsored the flower and garden show, celebrated the Horticulture Week with film showing and quiz show, regular schedule of general meeting, welcome party and induction of officers, orientation of junior majors, income generating project on corsage and bouquet making, joined landscaping contest, sweet corn planting, bulletin board making, assisted co-majors in conducting their thesis; regular schedule of general cleaning in the department, installation of a badminton court, attended seminar-workshop on "Bio-organic Fertilizer Making and Indigenous Microorganism Production"; Christmas party and gift-giving, sponsored one mass during the Misa de Gallo; purchased one unit computer	
Plant Protection Major Association (PPMA)	Welcome party for new majors, clean-up of DPM area, selling of Ms. LSU tickets, booth making; fund raising activities like paper bag making and composting; constructed directory at DPM; quiz show, film showing; distributing gifts to neighboring barangays; attended seminar	
Asso. of Pant Brdg. Majors (APBM)	Film showing, tree planting, quiz show, alay linis, assisted in the distribution of seeds to the farmers during the LSU Farmers' Field Day	
Mentors' Guild and College of Education Supreme Student Council (CE-SSC)	Acquaintance party & orientation to new freshmen; alay linis; distributed "bundles of joy" to indigent families; tribute party for the seniors and their parents; sponsored participants to the national convention, singing idol contest, and MS LSU 2006 pageant ; participated in sports fest; served as judges in English Month celebration contests in Brgy. Guadalupe Elementary School; assisted in booth making; joined in LSU anniversary parade	
Organization of Biology Students (OBioS)	Biology Week Celebration, plant identification contest, animal show, search for Mr. & Ms. OBIOS 2006, re-bottling of specimens, alay linis; freshmen orientation; facilitation of activities during the 2006 Farmers' Field Day; booth construction and putting up of exhibits; and first-aid seminar	
Forestry Students Society (FSS)	Orientation and acquaintance party, participation in National Forestry Olympiad and National Convention, alay linis; tree planting, paligsahan sa gubat; participated in University intramurals and anniversary, forestry student meetings, co-sponsored seminars	

ORGANIZATION	ACTIVITIES UNDERTAKEN	AWARD RECEIVED
CWTS-LTS and ROTC	Provided traffic management and security augmentation during LSU Anniversary activities; initiated the blood letting activity in coordination with the Philippine National Red Cross, Ormoc City Chapter; tree planting; alay lakad; alay linis; maintained the LSU Nature's Park; cleaned the LSU Eco Park; presentation of sponsors	
Student Body Organization (SBO-LSU-LHS)	Election of section, class and SBO officers; induction program; worked for the cleanliness and sanitation of the whole high school campus including the beach area; Christmas program and party; presentation of sponsors and escorts; JS Prom, honors' program, parents-seniors night; sponsored the following: Buwan ng Wika, Science Month, Intramurals, Research Congress, and English Month	
LSU-Alangalang Campus	Carried out "Clean and Green" activities, attended First Friday masses, attended seminars/symposium/film showing; JS Prom; Recognition Day; general orientation; Acquaintance/Christmas parties; induction of officers; celebrated the Buwan ng Wika; student intramurals; meetings	
LSU-Isabel Campus	Acquaintance/valentines parties, oath taking, campus politics, election of officers, campus cleaning, intramurals, educational tour, attended seminar/workshop/symposium	
LSU-Villaba Campus	Orientation program; election of officers; acquaintance party and oath taking; commemorated the Buwan ng Wika, Nutrition Month, National Week for the Gifted, and Education Week; sportsfest; Christmas party; Honors' Convocation	

- Licensure Examination for Veterinarians
- **Naomi Ruth D. Quero**, 3rd place and **Dandy Lou A. Moquia**, 7th place - both received LSU medals and cash plus Mayor Jose Carlos L. Cari Award of Excellence
- Licensure Examination for Agriculturists
- **Anthony Rey D. Cojuanco**, 9th place - LSU medal and cash and Congresswoman Remedios L. Petilla Award of Excellence; **Roland V. Rallos**, 13th place - LSU medal and Congresswoman Remedios L. Petilla Award of Excellence; **Pastor A. Garcia, Jr.**, 16th place - LSU medal and Congresswoman Remedios L. Petilla Award of Excellence; and **Jayfred Gaham V. Godoy**, 20th place - LSU medal and Congresswoman Remedios L. Petilla Award of Excellence

Alumni Donation

The ANZ ViSCA-LSU Alumni Associations based in Australia and New Zealand donated funds for the repainting of the frog fountain landmark and stainless steel marker.

LIBRARY SERVICES

The University Library continued to implement the 60-hour-per-week library services to fully maximize the use of library resources. It improved the library web page, converted the old CDS-ISIS "CATALO" library database into My SQL, and installed/configured the library Web-Server in preparation for the uploading of the Library System to the Internet in URL: <http://library.lsu-visca>.

edu.ph. It continued to publish the "New Acquisitions" brochure to update library users of the newly acquired materials.

Acquisitions

The University Library acquired additional publications/learning resources; thus, its accessioned volumes as of Dec 30, 2006 reached a total of 61,768 volumes.

It acquired through purchase, donation or exchange 1,305 books, 94 serials, 7 newspapers, 34 CD-ROMs, 3 VCD, and 391 theses/dissertations/case studies/special problems.

During the year, the University Library installed and customized the Sci-Net Integrated Library Management System (SILMS) which was developed by DOST for adoption in the libraries of Region 8 tailored to best meet the needs of its clientele.

Libraries of satellite campuses also acquired books during the year: LSU-Alangalang Campus - 12 textbooks; LSU-Isabel Campus - various books; and LSU-Villaba Campus - 136 copies of books.

Donations

The University Library received 516 titles of books donated by the National Statistics Office, Tacloban City (28 titles), and Commission for Filipinos Overseas in Manila (488 titles).

FACULTY

Scholarships

Twenty-nine (29) faculty members of the LSU Main Campus pursued advanced studies in different fields of specialization (18 for PhD and 11 for MS) with scholarship grants from the LSU-Fellowship, College of Agriculture Center of Excellence (CA-COE), CHED, PCARRD, ACIAR, EURONATURE, DAAD-PPP, International Doctorate in Agrobiodiversity, DA-BAR, Fulbright, and Monbusho.

Faculty Strength

A total of 257 faculty members (94 PhD, 107 MS/MA and 56 BS) supported the instruction, research, extension and production functions of the LSU Main Campus. Forty-six (46) were detailed in research centers (24 PhD, 18 MS/MA and 4 BS), 3 were on sabbatical leave, and one on secondment to the International Rice Research Institute (IRRI).

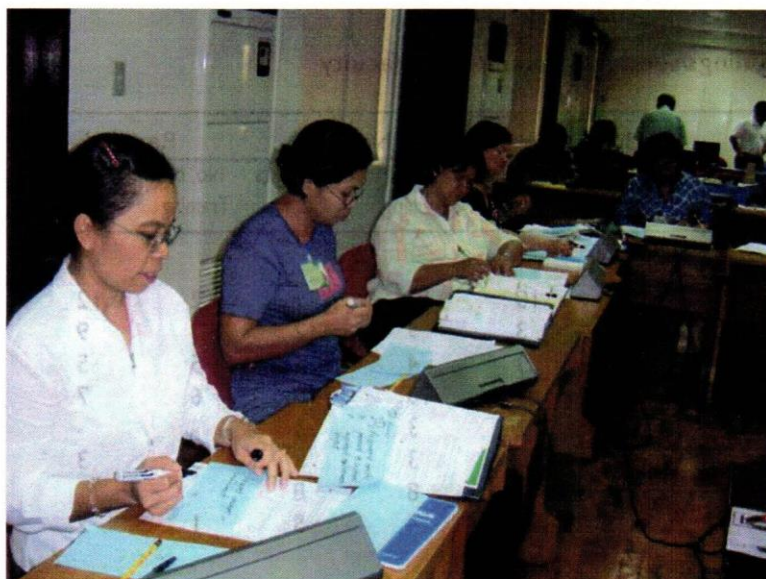
One hundred seven (107) faculty members backstopped the various programs of the satellite campuses: 26 in Alangalang Campus (5 PhD, 6 MS, 15 BS); 33 in Isabel Campus (1 PhD, 8 MS, 24 BS); 22 in Tolosa Campus (2 PhD, 14 MS, 6 BS); and 26 in Villaba Campus (2 PhD, 16 MS, 8 BS).

Publication

Sixty-three (63) members of the LSU Main Campus faculty authored/co-authored publications which were published in national and international journals.

Faculty Development/Achievements

- Dr. Antonio L. Acedo, Jr. accepted a consultancy job at the Asian Vegetable Research Center (AVRDC) as postharvest technology adviser of the technical assistance program on "Improving Rural Livelihoods through Development of Vegetable-based Postharvest Technologies" in Cambodia, Lao PDR, and Vietnam.
- Dr. Maria Juliet D. Ceniza attended the Executive Training Course on Natural Resource Management in a Globalizing Asia as a scholar of the Regional Center for Graduate Study and Research in Agriculture (SEARCA) in Los Baños, Laguna on May 8-12, 2006.
- Dr. Victor B. Asio has served as editorial board member of the International Journal of Ecology and Development based in India and member of the National Research Council of the Philippines (NRCP).



Dr. Maria Juliet C. Ceniza (leftmost) and other participants scribbling their expectations from the Executive Training Course.

- Dr. Wolfreda T. Alesna got appointed by CHED Commissioner Carlito S. Puno as member of the CHED Technical Committee for Communication.
- Mr. Ernesto F. Bulayog attended a seminar workshop in Bangkok, Thailand through the IDRC-Rockefeller Foundation travel grant.
- Dr. Edgardo E. Tulin had a two-week stint as visiting scientist at RIKEN Genomic Science Center, Yokohama, Japan from February 2-19, 2006.

Most of the University faculty performed added tasks as advisers/trainers; reviewers for licensure examinations for agriculturists, foresters and teachers; judges in contests; and coaches.

Seminars/Workshops/ Trainings Attended

A total of 941 academic staff of the LSU System attended 498 trainings/seminars/workshops/conferences during the year, which included 54 international, 143 national, 101 regional, and 200 local trainings (Table 4).

Table 4. Trainings/seminars attended by faculty

Dept/College/Center	International		National		Regional		Local	
	No. of Training	Participants	No. of Training	Participants	No. of Training	Participants	No. of Training	Participants
College of Agriculture								
DPM	8	10	17	19	12	12	24	50
DAS	3	3	9	12	3	9	8	17
DOH	3	3	4	5	5	5	10	17
DDC	3	3	10	10	6	7	7	15
DASS	6	12	3	3	-	-	-	-
DPBG	-	-	3	3	3	3	5	6
DOE	5	5	8	8	-	-	8	8
ISRDS	4	4	4	5	1	2	4	9
College of Engineering & Agri-Industries								
DAE								
DBM	-	-	4	4	1	1	6	12
DCST	-	-	6	6	4	4	3	6
DFST	3	3	4	4	6	7	6	8
College of Arts & Sciences								
DBS	3	7	7	12	7	10	11	33
DLABS	-	-	3	3	4	6	1	1
DoPAC	-	-	8	9	1	3	7	10
DMPS								
College of Education								
DSE	1	1	5	5	2	5	6	12
DCDE	-	-	-	-	1	1	5	6
DFCS	-	-	1	1	4	6	5	8
LSULHS	-	-	1	1	3	3	4	11
IHK	-	-	1	1	2	2	-	-
NSTP	-	-	-	-	-	-	1	1
College of Forestry								
DAF	1	1	4	5	2	3	9	9
DFWMC	1	1	3	4	-	-	1	2
ITE	9	22	8	16	6	14	17	29
SUB-TOTAL	50	75	113	136	73	103	148	270
Research Centers								
FARMI	1	1	3	3	1	1	1	1
NARC	1	1	8	9	2	3	14	27
NCRC-V	-	-	3	7	1	4	3	11
PhilRootcrops	-	-	5	5	-	-	-	-
SUB-TOTAL	2	2	19	24	4	8	18	39
Satellite Campuses								
Alangalang Campus	1	1	4	4	7	16	14	72
Isabel Campus	1	1	6	7	8	11	14	107
Villaba Campus	-	-	1	1	9	9	6	55
SUB-TOTAL	2	2	11	12	24	36	34	234
GRAND TOTAL	54	79	143	172	101	147	200	543

RESEARCH & DEVELOPMENT



During the year, LSU conducted a total of 111 research projects, of which 26 were completed, 50 - ongoing, and 35 were new projects. These projects focused on the following commodities: rootcrops - 31, rice - 14, abaca - 10, coconut - 9, livestock and poultry - 8, rural sociology/socioeconomics - 7, marine/tropical ecology - 5, vegetable - 3, corn - 3, fruits - 3, agroforestry - 2, fish - 1, and others - 15 (Table 5). Most of the research funds came from national agencies in the Philippines (10.08 M), LSU (direct cost) (9.22 M), and international agencies (7.14 M) (Table 6 and Fig 1).

TECHNOLOGY FOR PROTECTION

The following technologies were patented or recommended for protection.

- Plant oil stove
- High yielding makapuno hybrids
- Makapuno-based products and by-products
- Dehydrated jackfruit
- Micropropagation protocol for cassava and sweetpotato
- Optimized *in vitro* and *ex vitro* propagation protocols for purple yam
- Cassava grates-based food products
- PRP 1 and PRP 2
- Cassava grates dryer (the design and machine)
- Bacteriocin purification

TECHNOLOGY FOR DISSEMINATION

The following mature technologies were recommended for dissemination/promotion to intended users:

Protos

The Plant Oil Stove or *Protos* is a novel invention that operates using oil extracted from any oilseed plant (e.g. coconut). It is advantageous to use because of its high power but very minimal CO₂ emission, clean and safe to use, and has a renewable source of fuel - the plant oil. *Protos* is competitive with existing stoves (e.g. woodfire, charcoal, gas stove,

kerosene wick stove, kerosene pressure stove) in the Philippines in terms of daily usage cost. The cooking time of *Protos* is comparable to that of LPG stove (which is mostly used in urban areas) and very much lower than the other stoves used.

Processing of Plant Oil at the Village Level

A village-level coconut oil processing center was established at Barangay Ciabu through the Ciabu Primary Multipurpose Cooperative in collaboration with the Municipality of Baybay to effectively promote the plant oil stove in rural and semi-urban areas. A processing building was built with a dimension of 8m x 11m providing space for an office, copra storage area, copra cake storage area, kitchen, CR, and a processing area, where the hammer mill with a capacity of 140 kg/hr, Simplextractor with a capacity of 300 kg copra/hr, setting tank, filtering tank, two storage tanks, and a Guartech copra dryer with a capacity of 3,000 nuts per batch, are located. The processing center has started producing filtered coconut oil as fuel for the plant oil stove.



The Plant Oil Stove (*Protos*)

Makapuno Hybrids, VMAC 1 and 2

NCRC-V developed the first two dwarf Makapuno hybrids - VMAC 1 (Coconiño x UPLB Makapuno) and VMAC 2 (Malayan Red Dwarf x UPLB Makapuno). The earliest that flowered among VMAC 1 palms was at 26 months from planting while that of VMAC 2 was at 25 months from planting. In 2005, more than 4,832 makapuno nuts were harvested from VMAC 1 palms and 1,162 nuts from VMAC 2, or a yield of 99.4% and 95.8% of pure makapuno nuts, respectively.

NSIC Cv 29

The newly developed cassava variety, CG 95-02-04, was recommended by the National Seed Industry Council (NSIC) and officially named as NSIC Cv 29. It has an average root yield of 27.7 t/ha and resistant to scale insects, mites and brown leaf spot and cassava bacterial blight. Its white flesh root contains 25.1% starch.

NSIC Sp 32

NSIC Sp 32, newly developed sweetpotato variety, has light red skin and yellow flesh and a root yield comparable to the three check varieties but higher in acceptability taste, dry matter, sugar and starch contents. It is also resistant to scab and weevil.



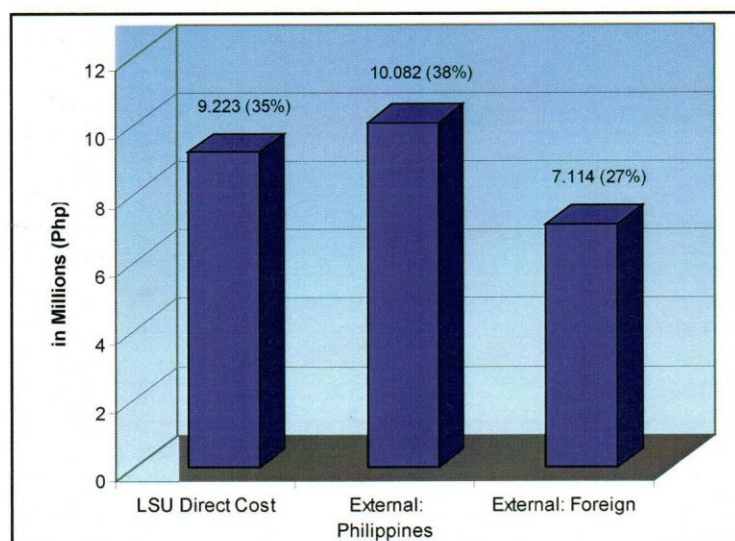
NSIC Sp 32

Table 5. Number of R and D projects/studies by commodity, CY 2006

COMMODITY	NEW	ONGOING	COMPLETED	TOTAL
Abaca	1	8	1	10
Agroforestry	1	1	-	2
Coconut	3	5	1	9
Corn	-	2	1	3
Fish	1	-	-	1
Fruits	-	3	-	3
Poultry and Livestock	8	-	-	8
Marine/Tropical Ecology	2	3	-	5
Rice	2	3	9	14
Rootcrops	7	18	6	31
Rural Sociology/Socioeconomics	3	1	3	7
Vegetable	-	3	-	3
Others	7	3	5	15
TOTAL	35	50	26	111

Table 6. Research funds by source, CY 2006

FUND SOURCE	AMOUNT
LSU 9,223,886.00	
Local/National	
CHED	3,963,322.00
DA-BAR	2,744,000.00
DA-CPAR	200,000.00
DA-PIU-Biotech	461,000.00
Department of Energy	1,504,214.00
FPE	233,000.00
LGU, Bato, Leyte	35,000.00
LSU-DA-RFU 8	170,000.00
PCARRD	403,997.00
PhilDRAA	42,500.00
PhilRice	150,000.00
PHNSUP	125,000.00
VICARP-PCARRD	50,000.00
SUB-TOTAL	10,082,033.00
International	
ACIAR	1,850,373.83
ALO-CIIFAD	28,500.00
BSH Bosch und Siemens Hausgeraete GmbH	3,150,000.00
BSH Bosch und Siemens Hausgeraete GmbH & German Development and Investment Company	716,380.00
DaimlerChrysler & German Development Agency	1,080,988.38
EURONATUR	158,000.00
ISAAA-PCARRD	94,850.00
TUAT	35,000.00
SUB-TOTAL	7,114,092.21
GRAND TOTAL	26,420,011.21

Figure 1. Research Fund Distribution by Source, CY 2006

Grafted Tomato-Eggplant (Kamlong)

Under protected cultivation, tomato grafted to eggplant (variety Mestisa) had 100% survival after 5-day simulated waterlogging stress while the non-grafted plants had only 53% survival. Under waterlogged condition, marketable fruits of tomato plants were higher in grafted plants (209 g/plant), more than double that of non-grafted plants (88 g/plant). Waterlogging stress caused higher stomatal resistance and leaf transpiration rates. These physiological parameters promptly returned to normal in the grafted plants after resumption of aerobic soil condition, but not in non-grafted plants.

Characteristics of Selected Abaca Varieties

Seven promising abaca varieties, namely: Bulao-luno, Sarnina, UP-USP-CAP5#2, Laguis # 13, Layahon#3, Laguis #15 and Calbayognon, were identified as suited for pulp and paper industry. These accessions have 0.0848 to 0.1726 Runkel ratio, 85.65 to 91.67 flexibility ratio, and 13.88 to 158.67 slender ratio.

Promising Corn Hybrids

Three sets of trials with a total of 43 entries were evaluated during the 2005 wet season trial. In Set A, almost all entries produced yields higher than the check cultivars (DK 818). The most promising entry was NP 6204 that yielded 7.72 t/ha. Among the six promising corn hybrids identified in Set B, TC 8112 produced the highest grain yield of 8.67 t/ha. Among the white corn entries evaluated in Set C, two promising entries, namely: DAS 2W 034 and ZF 11 with yields of 7.22 t/ha and 6.28 t/ha, respectively, were observed.



Grafted tomato-eggplant

White Corn Resistant to Asian Corn Borer and Stalk Rot

Twelve white corn lines were screened for resistance to Asian corn borer (ACB) and bacterial stalk rot, which are the major and most destructive pest and disease of corn. Among the corn lines screened, USM var. 2 and USM var. 10 were found resistant to stalk rot during wet- and dry-season planting. USM var. 10, USM var. 12, CMU var. 10 and VM-2 were moderately resistant to Asian corn borer under wet- and dry-season planting.

Morpho-agronomic Traits of Promising Upland Rice Varieties

Arabon, Baysilanon, Kalinayan, Magaya and Pulahan were considered promising aromatic rice genotypes in terms of aroma, eating quality, and yield. Kalinayan took the lead in terms of eating quality, as observed by agricultural workers in the province of Leyte and Samar. Arabon, Pulahan and Magaya were known for their therapeutic properties - used by local people as infant food (as porridge) and in treating convalescing patients.

Novelty Items from Abaca

Lampshades, greeting and invitation cards, stationeries, photo albums, frames for certificates and pictures, are some of the products produced from machines fabricated at the National Abaca Research Center (NARC). These machines are the abaca pulper, paper dryer, heated roller, excess water expeller, and calendaring machine.

Application of Abaca Fiber in the Automotive Industry

Based on the investigations made by a German institution, abaca fiber is the strongest among natural fibers. Its strong and long fibers could potentially substitute fiberglass in the manufacture of plastic composites for the automotive industry. These plastic composites are used for the production of interior and exterior parts of luxury cars and automobiles. Substitution of fiberglass with abaca fibers is expected to offer tremendous advantages to the technology, as it reduces the weight of cars and improves the stiffness and damping characteristics of the car parts.

Primer on Tree Registration, Harvesting, Transport and Marketing Policies in Private Lands

Smallholder tree farmers should have good access to market of their tree farm products to obtain improved financial returns from their tree farms. Registration of their trees is required so that they can harvest and transport their tree products to their desired market outlets. The development of the primer and its dissemination is a mechanism adopted by the new ACIAR-funded project on Smallholder Tree Farmer to facilitate a smooth flow of information on tree registration and harvesting policies, as well as transport and marketing regulations in private lands among concerned DENR personnel, Local Government

Units, tree farmers in communities, and other stakeholders. The primer has been produced in English, Cebuano and Waray-waray versions and is scheduled for dissemination using several methods to determine the strategy by which flow of information can be best achieved among the stakeholders.

AWARD-WINNING RESEARCHES

Development of Sulfite-Free Dehydrated Sweetened Jackfruit

Sulfite is used as preservative to maintain the color of processed fruits like dehydrated jackfruit. However, processed products containing sulfite is banned in countries like Japan, USA and European Union as they are believed to cause health problems especially to asthmatics. This study sought to find alternative preservative in making dehydrated sweetened jackfruit without compromising the sensory qualities of the product. Sugar and a combination of ascorbic and citric acid, as substitute to sodium metabisulfite, was effective in preserving jackfruit pulp with no significant changes in its sensory qualities. Storing the pulp at chilled and frozen condition and at higher drying temperature speeded up drying with generally acceptable sensory qualities of the dehydrated sweetened jackfruit.



Tools, Indicators and Integrating Framework for Sustainable Utilization and Management of Commercially Important Invertebrates in Eastern Visayas

This on-going research aims to provide tools, indicators and an integrating framework for the sustainable utilization of commercially important invertebrates in Eastern Visayas, especially for prioritized species - the blue crab *Portunus pelagicus*, the ear abalone *Haliotis asinina*, the nylon shell *Paphia textile*, and the spider conch *Lambis lambis*.

The methodology consists of market surveys, fishery-dependent and fishery-independent field surveys in fishing grounds, laboratory and field-rearing experiments, analysis of gut and gonad samples, length-frequency analysis using FISAT II, and GIS mapping and modeling using Vensim software. The management tools generated in this study include GIS maps of invertebrate resources information, invertebrate information by fishing ground, and an identification guide to commercially important invertebrates. The resource information provides data on fishing grounds, number of species found in the different fishing grounds, estimated volume of catch, as well as local and export commercial values of each species. Sustained utilization indicators developed for prioritized species include estimates of growth parameters (asymptotic length, growth constant and growth performance index), estimates of mortality parameters (natural, fishing and total mortality), exploitation rates (E , E_{10} , E_{50} and E_{max}), length at sexual maturity, length at massive maturity, length at first capture, exploitation status, maximum sustainable effort (MSE), maximum sustainable catch per unit effort (MSCPUE), effort reduction needed based on E_{10} and E_{max} , spawning months, and recruitment peaks. These could provide useful options for implementing effective management practices for the sustainability of these highly priced resources. An integrating framework was developed showing the interconnections among the biophysical

and socio-economic indicators obtained with some governance and other socio-economic indicators to provide a practical baseline framework on which to build future actions for sustainable exploitation of the region's invertebrate resources as well as a useful reminder to managers and stakeholders of the "big picture" and how everything is interconnected. Some strategies for implementation are discussed. Effort reduction and catch quotas are ultimately suggested as bioeconomic theory and practical fisheries management experience indicate that, without limits on total removals and total fishing effort, expected increases in average levels cannot be achieved and sustained.

Differential Display Protein of Some Common Production and Postproduction Problems in Rootcrops

Protein expression profiling, a powerful tool in knowing the overall on-off pattern of gene activity in a sample, is useful in determining which particular genes turn on and off in response to some stimuli. The pattern serves as shorthand "signature" reflecting the biochemical state of a sample under some specific condition. Such "signature" proteins are useful for diagnostic purposes and in applying appropriate interventions through controlled expression in solving production and postproduction problems of root crops. To obtain fundamental knowledge on the biochemical events underlying the causes of existing production and postproduction problems in root crops, sodium dodecylsulfate polycrylamide gel electrophoresis (SDS-PAGE) of samples was employed to establish protein expression profiles on major disorders and organoleptic constraints. Seven expression profiles were established to address the following concerns: acrid and non-acrid taro corms, anthracnose-infected and non-infected yam, spider mites and scale insects-infested and non-infested cassava, fresh and stored



cassava roots, different varieties of blight-infested taro, sweetpotato infected with scab and feathery mottle virus, and four varieties of yam tuber (2 purple and 2 white). Differences in protein bonding patterns extracted from different samples were compared and analyzed for over expression and non-expression of specific proteins. Several differentially expressed specific proteins were identified as markers for diagnostic purposes and target biomolecules for designing appropriate control measures.

Phase I. Management of Pests Attacking Jackfruit in Eastern Visayas with Emphasis on Fruit Fly (*Bactrocera umbrosa* Fabr.; Tephritidae; Diptera) and Fruit Borers (Curculionidae, Coleoptera and Crambidae; Lepidoptera)

Phase I of the project generally aimed at supplying some basic information needed to develop a sound and sustainable jackfruit pest management system in Eastern Visayas. The 24-month population fluctuations of jackfruit fruit fly significantly vary, with general population peaks observed in the months of May-August, coinciding with the jackfruit major fruiting season and availability of physiologically mature fruits. The different parasitoids discovered to attack the insect were: *Dirhinus* sp. (Family Chalcididae), *Spilomicrus* sp. (Family Diapriidae), and orange braconid (Family Braconidae). The fruit fly-pathogenic entomophatogens include: *Metarhizium anisopliae* SPW isolate, *Beauveria bassiana* Coleop. Co. Co.# 69 isolate, *Paecilomyces* sp., and an unidentified fungus. Red ants and earwigs were also found as predators of the immature fruit fly. Rainfall and number of rainy days were indirectly correlated with fruit fly population while the reverse was true for a number of sunny days, based on the condition of the experiment.

Reaction of Hybrid Rice and Component Lines to Important Disease and Insect Pests

Susceptibility of hybrid rice component lines to diseases and insect pests has been a limiting factor in high yield rice production and commercialization. Knowledge on the reaction of hybrid rice and component lines to important pests is a good benchmark information for breeders in the development of locally adapted and high-yielding hybrids that are resistant to important diseases and insect pests. In this study, the reactions of hybrid rice component lines to *Rhizoctonia solani* isolate, rice tungro virus, rice black bug (RBB), and brown planthopper (BPH) were determined. Eighty hybrid rice and component lines were evaluated against ten Philippine *Xanthomonas oryzae* (PXO) races. Five lines (BB-2, BB-3, PR3B, PR6B, and PR11B) showed resistance to all PXO races. Only one line showed resistance, and 10 lines showed moderate resistance to sheath blight (GU133). R2-6 was highly resistant to rice black bug while PR4B and IR60819R were resistant to tungro. Three lines (AR-3219-3-36, 28B and IR68997B) were found resistant to BPH while eight lines were moderately resistant. The lines that showed resistance to the diseases and insect pests varied but a few lines showed resistance to more than one of them.



Rice black bug and its eggs

Establishment of Micropropagation Systems for Sustained Production of Disease-free Root Crop Planting Materials

Sweetpotato and cassava are commonly propagated by stem cuttings. This method of propagation transmits disease-causing microorganisms from one generation to the next contributing to reduction in yield. Establishing an *in vitro* micropropagation system is an effective tool in producing clean planting materials in a short time. In this study, responses of the different accessions of sweetpotato and cassava to meristem and micropropagation protocol were compared. Production of callus, shoot development from meristem tip, and micropropagation rate were some of the *in vitro* factors considered. Virus indexing of meristem-derived plantlets was done. Performance of meristem-derived plantlets was compared with field-sourced cuttings.

Development of Bacterial Blight-Resistant Hybrid Rice Parental Lines Through Bi-directional Marker-Aided Selection

Although widely adopted in China, hybrid rice (*Oryza sativa* L.) technology is relatively new in tropical Asia. Bacterial blight (BB), caused by *Xanthomonas oryzae* pv. *oryzae* (Xoo), poses serious threats to the success of hybrid rice seed cultivation in the Philippines, Vietnam, India, and other Asian countries. To improve the level of resistance, bacterial resistance from donor lines carrying *Xa4*, *Xa7*, and *Xa21* genes was introgressed into IR58025B, IR62829B, LianB, and BoB maintainer rice lines. Phenotypic analysis of plants with gene pyramids showed that these lines provide broad-spectrum resistance to Xoo. Bi-directional molecular marker-aided selection (MAS) was used to refine the selection process for the advanced (BC F₁) IR58025 progenies, which carry the target bacterial blight resistance genes singly or in combination,

and these progenies were further selected for the absence of restorer genes using two *Rf* markers. DNA fingerprintings were generated to determine the level of parental genotype recovery among the progeny lines. The results indicate that a high level of similarity with the original parental genotypes was achieved in the advanced lines using the technique. The selected lines, IR58025B-BB and IR58025A-BB, have improved bacterial blight resistance and will be used in the future to produce a BB-resistant line similar to *Mestizo*, the most widely used hybrid in the Philippine hybrid rice commercialization program. Moreover, IR58025A is the female parent of the majority of hybrids that were recently released in Asia. Both lines are now available as a resource for bacterial resistance for hybrid rice production programs.

Enterprise Development for PhilRootcrops Food Products

This research-cum-extension project was conducted in order to refine food product technologies generated at the Philippine Root Crop Research and Training Center (PhilRootcrops) in terms of product, process, equipment, and cost optimization, and to establish an integrated system that will ensure the sustained production of products and profitability at appropriate levels, either for small- or medium-scale enterprising. Identified for commercialization based



Hybrid rice infected with bacterial blight

Germplasm Characterization

Abaca

Fifty-five (55) additional abaca accessions were characterized for vegetative morphology, 33 for inflorescence, and 36 for fruit and seed parameters; making a total of 487 accessions already characterized for vegetative traits, 399 for inflorescence, and 311 for fruit and seed parameters. So far, 233 accessions have been completely characterized. Twenty-one (21) abaca accessions were described as to fiber qualities, chemical properties and fiber cell morphology; making a total of 293 accessions so far characterized for fiber qualities, 243 for chemical properties, 283 for fiber physical properties, and 265 for fiber cell morphology.

Rootcrops

The present set of ubi variety trials is made up of ten purple and partially purple genotypes and aims to select varieties for the growing demand for purple ubi. Genotypes LA-532, LA-535, LA-539 and LA-573 outyielded the two check varieties, PSB VU-2 and NSIC Ubi 6.

Cultural Management

Screening of Rice Selections for Resistance to Insect Pests and Diseases. Of the 229 rice selections screened, 110 were screened during the dry season and 119 during the wet season. Results of the two screening seasons show that majority of the selections exhibited resistance to stemborer as shown by low deadheart and whitehead percentages. However, different selections had varied responses to diseases. Most of the selections showed high susceptibility to blast, tungro, leaf blight, and sheath blight.

Pest Management

Performance Evaluation of Promising Abaca Accessions. A total of 212 abaca accessions were screened for resistance to bunchy-top disease under natural field inoculation of the disease. Twenty-seven (27) accessions were unaffected as of the last quarter of 2006 as evidenced by their normal growth with no visible symptoms of the disease, while 185 accessions showed varying levels of susceptibility.

Ecotypic Variation of the Asian Corn Borer, *Ostrinia furnacalis* (Guene'e), Populations in the Philippines. A white corn line was identified to have some degree of resistance to Asian corn borer and is thus used as parent in the white corn improvement program of LSU.

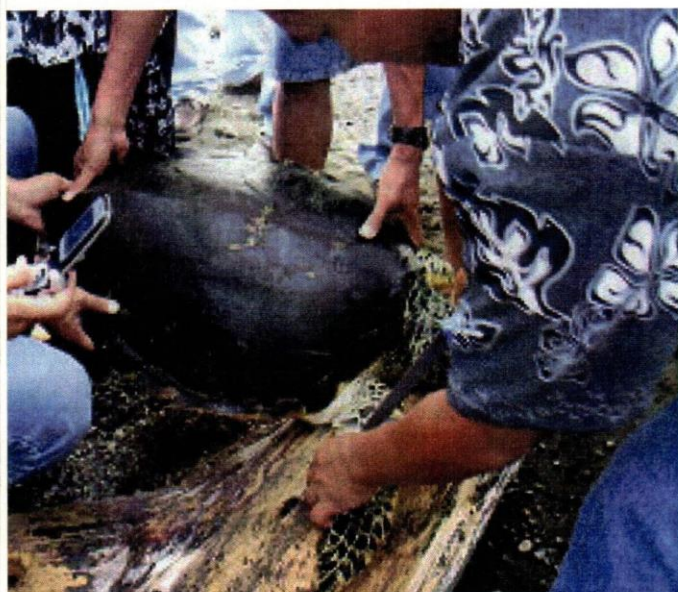
Characterization of Local and Introduced Coconut Cultivars/Hybrids. Among the newly bearing dwarf coconut accessions, Sogod Dwarf (SOD) produced the biggest nut with an average of 22.1 cm polar and 17.7 cm equatorial diameter while Pilipog (PIL) had the smallest nut with an average of 16.0 cm polar and 13.6 cm equatorial diameter. Among the newly bearing tall coconut accessions characterized, the local tall CHT had the highest copra yield per nut of close to 300 g. Among the dwarf accessions, the



Sogod dwarf

Buenavista Dwarf (BNV) had the highest copra yield per nut of about 245.6 g which is comparable to the copra yield of the other tall accessions. Clarin Dwarf (CRN) had the highest fruit quality value of 0.52 and the thickest meat of about 13.10 mm among the dwarf coconut accessions while Salawad Tall (SWT) had the thickest meat of about 15.68 mm among the tall accessions. Other dwarf accessions like Buenavista Dwarf (BNV), Ubay Bohol Dwarf (UBO), and Camotes Dwarf (CAM) had an average meat thickness of more than 12 mm and found to be good materials for coconut crisp production. Oil content of the dried meat of the tall coconut accessions ranged from 50.18% to 67.99%, with Conalum Inopacan Tall (CIT) having the highest (67.99%) and Agta (AGT) the lowest (50.18%) oil content. Among the dwarf accessions, Pilipog (PIL) had the highest oil content of 68.17% while Malayan Red Dwarf (MRD) had the lowest with 57.84%.

Field Testing of LSU-Developed Makapuno Hybrids. All palms are now bearing and a total of 1,229 nuts from VMAC 1 and 483 nuts from VMAC 2 were harvested from January to November. The mean makapuno yields of VMAC 1 and VMAC 2 were 99.7% and 96.8%, respectively. The harvested nuts were used as source of embryos for the production of makapuno planting materials.



A marine turtle (pawikan) being examined in one of the nesting sites.

Development of Portable Engine-Powered Coconut Husk Fiber Extractor.

The mechanism of the machine was described and appropriate sizes of its cylinder and pulley combination were determined. Testing of its performance suggested that the shaft size and number of groove on pulley as well as the number of belt should be computed. Fabrication of new cylinder with 25 mm-diameter shaft with two belts was done.

Utilization of Abaca Stripping Wastes and Reject Fibers for Handmade Paper Processing.

Initial findings on the Abaca-Chitosan paper blend experiment showed that a mixture of abaca pulp and Chitosan solution in the ratio of 1:2 improved significantly the binding characteristics and surface quality of abaca paper. The blotting resistance of abaca paper was also improved through the application of hot gelatin sizing such that a droplet of water or ink takes longer time to be absorbed onto the paper giving it enough time to dry on the surface thereby minimizing blotting. A pulp blender was designed and fabricated to be used in homogenizing the pulp slurry before making them into paper. The simple design utilized a ½ HP electric motor connected by a rubber belt to the round bar containing the blades. Homogenization takes place when the blades immersed inside a basin of abaca pulp rotate at approximately 2000 rpm.

Save Pawikan Campaign in Cuatro Islas and the Visayan Sea.

The project is an initiative towards the conservation of the threatened and endangered marine turtles or pawikan by advocacy and conservation management of their nesting habitats. Visits to reported nesting sites were conducted to document their current status. Sixteen barangays were confirmed as nesting sites but only Hilabaa Turtle Sanctuary in Borongan, Eastern Samar had a flagship program for marine turtle conservation. Results of interviews reveal three limiting factors in pawikan conservation, namely: loss of nesting sites due to increase of human encroachment, low priority in conservation campaigns, and poaching. Better compliance to the conservation of turtle was observed among respondents



The jatropa nursery

exposed to environmental awareness campaign. Materials used in the advocacy included brochures, bookmarks, and t-shirts with messages promoting the Save Pawikan Campaign of DENR. Billboards were also put up in some nesting sites. Eco-volunteers conducted advocacy campaigns and a video documentary was produced and shown in some communities. Participatory discussions with coastal residents in the nesting areas were conducted to increase their awareness as well as draw their cooperation in the conservation effort. For massive information campaign, all conservation activities and vital information about the pawikan were published in a newsletter which was disseminated to various stakeholders.

***Jatropha* Enterprise Development and Integrated R & D Project for Biodiesel Production: Nursery and Plantation Establishment.** The project's general objective is to establish an economically viable *Jatropha* nursery and plantation technologies in degraded, marginal, and idle lands in Region 8. The nursery, temporarily located at the LSU Social Garden, has a dimension of 10x18 meters which can accommodate 21,000 *jatropha* seedlings per production cycle. Seeds collected from Cotabato through the Philippine Forest Corporation (PFC) were sown on November 21, 2006 and these produced a total of 679 disease-free

seedlings ready for planting.

Development of a Web-Based Agricultural Statistics Database. The project established the database design for application to MySQL, an advanced database management program. It also developed a front-end for data management and dynamic web pages (PHP) for tabulation, graphing, and thematic maps generation.

Bridging the Gap Between Seasonal Climate Forecasts and Decision Making in Agriculture. Using Rainman Software package, an analysis/evaluation was conducted for the Leyte and Bukidnon sites on the relationship between ENSO and rainfall patterns using the sea surface temperature (SST) forecast phase system (the Pacific effects). An analysis of the historical data (1919 to 2004) in Malaybalay, Bukidnon showed that there is a 70% chance or probability of having the rains exceed the median rainfall during a cooler Pacific Ocean from September to February while there is lower chance, at 20-30%, of getting a median rainfall during a hotter Pacific Ocean from September to March. For Leyte (using Tacloban historical climate data), results showed that for a constant lead time (0 month) before a three-month rainfall period, there is 60-80% chance of exceeding the median rainfall starting from the month of November up to March during a cooler Pacific Ocean.

During phases 3, 6, 9 of the hotter Pacific Ocean pattern, the chance of getting above median rainfall decreases from 40 to 20% for the period September to March. The seasonal forecast skill in Malaybalay and Tacloban is found to be statistically significant starting from the month of October up to March, which means that the impact of ENSO in the Philippines varies with season and location. The results also indicate that during the onset of El Niño and La Niña (hotter Pacific Ocean and cooler Pacific Ocean occurrences, respectively), the trend established the chances of getting lesser (for El Niño period) or more (for La Niña period) amounts of rain than the median rainfall. However, there are also neutral conditions when there is equal chance of getting above or below normal rainfall in the country because during this period, the forecast skill is not statistically significant and decision makers need to use the long-term climate record. Preliminary

results showed that the statistical tests undertaken on the relationship between forecasts and rainfall and yield confirmed statistical significance for two forecasts under the 'Average SOI' system, one under the 'SOI Phase' system and two forecasts under the 'Pacific SST Phase' system. The forecasts that were statistically significant for rainfall were also statistically significant for corn yield. Translating this in economic terms, the study showed that average returns for particular forecast types were much higher when averaged over the years that forecast would have been issued rather than the entire climatological record which suggests that corn growers can gain useful value from climate forecasts at particular times if they had sufficient skills to apply the information to their decision making.

SIGNIFICANT RESULTS OF COMPLETED RESEARCHES

Inventory of Commercially Important Invertebrates in Leyte and Samar

The study documented 157 species of commercially important invertebrates from 15 fishing grounds in Eastern Visayas, 29 of which need further species identification/validation. Local commercial value of the different species has increased like the blue crab which distinctly increased from PhP90.00/kg in 2001 to PhP160/kg in 2005 due to export demand.

The top most commercially important invertebrates in Leyte and Samar are *Portunus pelagicus* (blue crab "lambay"), *Haliotis asinina* (abalone "kapinan"), *Panulirus* sp. (lobster "banagan"), *Sepia* sp. (squid "nokus"), *Holothuria* spp and *Stichopus horrens* (sea cucumber "bat"), *Trochus* spp (top shell "samong"), *Pinna*

sp ("sarad"), *Paphia textile* (nylon shell "barinday") and *Lambis lambis* (spider conch "saang/ganga"). Four species, namely: *P. pelagicus*, *H. asinina*, *P. textile* and *L. lambis*, were investigated in detail to get their profile and other fisheries information because they generate revenue both from local and export markets. Information about the commercially utilized invertebrates is very important for its management. The knowledge product outputs of the project include tools for management in the form of posters of the different species with their scientific names, common names, English names, and the different local/dialect names. GIS-generated maps containing information on distribution, volume, and value were produced for easy reference by resource managers, traders and other stakeholders.

Population, Reproductive and Fishery Biology of the Nylon Shell, *Paphia textile* (Gmelin 1791) in Leyte, Leyte

The population, reproductive and fishery biology of *Paphia textile* was investigated to determine the status of the nylon shell fisheries in Leyte, Leyte and provide sustainable exploitation and management indicators. Two fishing grounds, namely: Brgy. Tinukdugan and Brgy. Kawayan, Leyte, Leyte were established as field sampling and monitoring sites. *Paphia textile* is valued for its meat and shell which command a price in local and export markets. In the region alone, its meat has fetched an income of P1,185,600-P7,972,800 annually. Nylon shell is a major source of livelihood of communities around Biliran Strait as well as in other regions of the country and in South East Asia. Based on external morphology, it is confused with *Paphia undulata* (Born 1778), a better investigated species. Fishery parameters were estimated from at least 300 specimens within one year monitoring of *P. textile* fishers in Brgys. Kawayan and Tinukdugan, Leyte, Leyte. The FISAT II (FAO-ICLARM Stock Assessment Tools version 1.1.0) software (Gayanilo et al. 2002) was used to analyze the length frequency data. To facilitate better data analyses, the length frequency data were further separated into subsets based on modal length progression. Results of length-frequency analysis were further validated through scatterplots of daily effort against catch per unit effort (CPUE) fitted with a second-order polynomial. The apparent maximum sustainable effort (MSE) and maximum sustainable CPUE (MSCPUE) were determined from the resulting trendlines. The use of values from the subset analyses appeared robust as supported by the higher number of cohorts as seen from the daily catch, higher R_n values, and results of gonadal analyses. Total mortality (Z), natural mortality (M), fishing mortality (F) and exploitation rate (E) were higher in Kawayan. Results showed recruitment overfishing for both sites and unsustainably high effort for



Nylon shell

Kawayan. More realistic estimates of fishery parameters were obtained with the use of the routines to supplement the routines in FISAT as applied to the fishery analyses for *Haliotis asinina* and *Portunus pelagicus*.

Population, Reproductive and Fishery Biology of the Spider Conch *Lambis lambis* in Leyte and Samar

The growth, mortality, recruitment and other fishery parameters of the commercially important spider conch, *Lambis lambis* from Guiuan, Eastern Samar and Maasin, Southern Leyte were determined to assess the effects of exploitation on the dynamics of the various populations and provide sustainable exploitation indicators for the said resource. The method includes the use of FISAT II software to analyze length-frequency data gathered monthly from February 2002 to June 2003. Validation of exploitation parameters was done using plots of $E/CPUE$ (effort vs. catch per unit effort) fitted with a second-order polynomial, and corroboration with primary reproductive information. Values obtained for L_{∞} and K were higher



Spider conch

in Maasin ($L_{\infty}=110.25$; $K=0.755$), where the biggest shell length was also noted, compared to those in Guiuan ($L_{\infty}=107.63$; $K=0.59$). Total mortality (Z) obtained in Maasin (2.39 yr^{-1}) with natural mortality (M) of 1.05 yr^{-1} and fishing mortality (F) of 1.34 yr^{-1} were also higher compared to the results obtained in Guiuan ($Z=1.87 \text{ yr}^{-1}$; $M=0.90 \text{ yr}^{-1}$; $F=0.97 \text{ yr}^{-1}$). Exploitation rate ($E=F/Z$) of 0.52 yr^{-1} for Guiuan and 0.54 yr^{-1} for Maasin indicate that the conch fishery in both areas had already reached optimum exploitation of $E=0.5$ based on Gulland (1971). Determination of exploitation status based on E_{max} indicates that the conch fishery in Guiuan is underexploited while it is almost fully exploited in Maasin. However, based on E_{10} (recommended by FAO Code of Conduct for Responsible Fisheries), conch fishery in both areas is

already overexploited (1.04 for Guiuan and 1.07 for Maasin). Lengths at first capture for Guiuan ($L=50.04 \text{ mm}$) and Maasin ($L_c=47.04 \text{ mm}$) were also found to be lower than the conservative estimate of length at massive maturity L_{mass} of 70 mm suggesting that some conchs were already harvested prior to reproduction. Recruitment patterns in both study areas show a bimodal pattern with a strong peak in May and a weak peak in August indicating recruitment of at least 2 cohorts per year. Initial recommendations for sustainable management are also discussed.

EXTENSION



FARMERS AND FISHERFOLKS' DAY

August 10, 2006

Theme: "Agriculture & Fisheries: Powering the Future"

Guest Speaker: Engr. OSCAR G. GARIN



LSU research-derived knowledge and technologies are interpreted in simple terms so that individuals from the different communities could use the information to benefit themselves, their families, and community. As part of LSU's mechanism to ensure relevance of its extension projects, Extension In-House Reviews are held annually. The delivery system of LSU's extension programs has been made more effective with the help and support of government agencies, non-profit organizations, local government units (LGUs) at the provincial, municipal and barangay level, and people's organizations. Extension pursuits came in the form of technical assistance to the rural clientele, promotion/commercialization of technologies, distribution of planting materials and publications, etc.

TECHNICAL ASSISTANCE

Technical support services were given by the following offices to their clientele:

NARC - to abaca farmers, housewives, agricultural technicians, LGU officials, businessmen, etc. on abaca production and management, handicraft and handmade paper making, operation and maintenance of stripping machine; **NCRC-V** - to *farmers and entrepreneurs* on the different aspects of coconut production such as selection of makapuno hybrids for planting and their management, watermelon production under coconut, copra processing, charcoal making, fiber extraction, vinegar production from coconut water, and on the status of coconut palms particularly in Barangays Mailhi and Villa of Baybay, Leyte which showed infection by fungal pathogen *P. palmarum*; **ISRDS** - to LGUs in the implementation of Community-Based Monitoring Systems (CBMS) and conduct of training for the interviewers; and in the recruitment of learners for the Alternative Learning System Accreditation and Equivalency System (ALS A&E); **DOH** - to LGUs in the establishment of municipal and provincial fruit tree and ornamental nurseries; **DAS** - to *private livestock entrepreneurs* in municipalities and nearby barangays of LSU Main Campus - on livestock raising; **DAF** - various forms of technical support to POs and NGOs; **DFWMC** - collaborative development work with the *municipal government of Tampakan, So. Cotabato* for resource assessment and development activities for the municipalities' Ecological Belt Project; **PhilRootcrops** - to *Liloan LGU* for technical support to gabi chips processors, *Tunga LGU* on bio-fertilizer production, *Tudela Camotes LGU* for their feed mill

operation, *Hilongos and Bato LGUs* for technical assistance to establish a cassava technology village, *Lanao de Sur LGU* - on cassava production and varieties; *private individuals* for the commercialization of *Pinoy fries*, *Naval Institute of Technology (NIT)* - for the commercialization of some root-crop-based food products, *DTI-Provincial Office of Maasin City* - on gabi chips product packaging, promotion, marketing, and design of labels of chips; *ALSON's Group of Companies* - on the use of cassava for ethanol production; *San Miguel Corp.* - on cassava production and provision of foundation seeds as start-up nurseries, *Triple A Plantech Enterprises* - on ubi tissue culture technology, *HortoNet* - on propagation of dwarf spathiphyllum, and *Philippine Rural Reconstruction Movement* - on cassava production technology; *Liloanon's Specialties* - product development and packaging, design of the processing plant and cooking stove, chips processing with good manufacturing process; *Merro's Enterprises* - on machine design and efficiency and acceptance of machine orders; *MEDVIL farms* - on cassava variety for animal feeds; *MINLAND Inc.* - on application of rootcrop technologies; *Sto. Rosario Farms* - technical assistance and availment of cuttings of sweetpotato for planting materials; **DASS** - *farmers, LGUs and POs* - on soil fertility, environmental protection, and characterization of landfill site; **DCST** - *ISRDS* - on the development of the Pangasugan, Guadalupe and Patag (PanGuaPa) Information System; **DOE** - preparation of project feasibility studies; **LSU-Villaba Campus** - to *hog raisers* - on immunization, castration, deworming, and cutting of umbilical cord and teeth of piglets.

COMMERCIALIZED TECHNOLOGY

PhilRootcrops demonstrated the commercialization of some of its new technologies by making a small-scale business out of **Pinoy Fries** (sweetpotato-based fries, prepared either as ready-to-fry or ready-to-eat pack); **cassava-based feeds** (for hogs and carabaos); **cassava grates and related processing machines** (processing machines for cassava grates production); and **rootcrop planting materials** (sweetpotato, cassava, gabi, and ubi)



Pinoy Fries

TECHNOLOGY PROMOTION

Agri-Trade Fairs/Exhibits

Aside from maintaining a permanent showcase of their technologies at the Office of the Director of Research and Extension, PhilRootcrops and NCRC-V participated in exhibits in Pasay City; Tacloban City; and Tudela, Camotes, Cebu; and in the towns of Alangalang and Baybay in Leyte.

LSU spearheaded the "2006 Baybay Agro-Industrial Trade and Chicken Festival" as an important feature of the Baybay fiesta celebration. The affair highlighted chicken as a progressive industry in the municipality.

Techno Demofarm

The **Department of Animal Science (DAS)** identified an area for the organic production of chicken and small ruminants in the Main Campus. Brushing and construction of enclosures where small ruminants shall be allowed to graze were completed and a vacant shed house was renovated to house the chicken. Fabrication of nests and procurement of

stocks were also started.

The **Farm and Resource Management Institute (FARMI)** established the System of Rice Intensification (SRI) Learning Field in LSU Main Campus to demonstrate the applicability of the methodology in increasing rice productivity with less seed requirement, less water use, and zero application of synthetic fertilizers and pesticides. It also served as a show window to students, farmers, agricultural technicians and other visitors on the potential of SRI over the best conventional rice culture in increasing rice yield.

The **National Abaca Research Center (NARC)** managed its own nursery as well as assisted and strengthened three farmer-managed abaca nurseries (2 in Albura, Leyte and 1 in Ormoc City) by supplying abaca planting materials from the Center.

The **National Coconut Research Center-Visayas (NCRC-V)** maintained a coconut-based intercropping demo farm using annual crops like squash and ginger as well as perennial crops specifically lanzones, coffee, blackpepper, and pineapple as intercrops. It also maintained a showcase of a semi-direct type copra dryer and charcoaling pit.



Tree farm and agroforestry demo area at Tigbawan, Leyte.

The College of Forestry (COF) established forest nursery, tree farm, and agroforestry demonstration site in Tigbawan, Leyte, Leyte.

LSU Herbarium

The Department of Biological Sciences (DBS) maintained the Herbarium where plant collections are being preserved for study.

Fabrication of Processing Machines

NARC fabricated 9 units of portable stripping machines and distributed them to farmer cooperatives, abaca farmers, and businessmen.

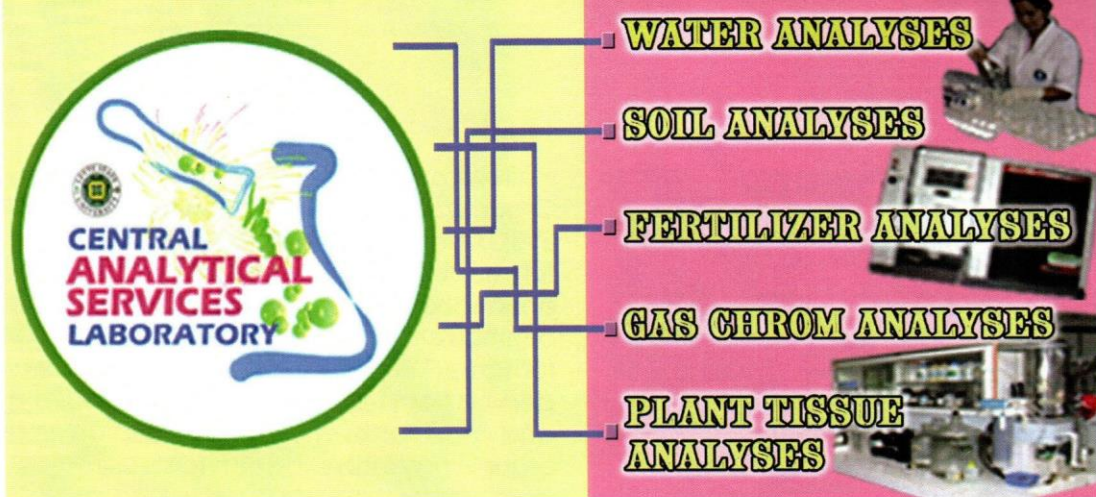
Distribution of Planting Materials

The following units of the LSU Main Campus produced and distributed planting materials such as seeds, cuttings, seedlings, etc. for free or at minimal cost to various clientele: **NARC** - 894 pcs tissue-cultured abaca plantlets and 2,068 abaca seedpieces to farmer cooperatives;

NCRC-V - 6,000 seednuts of promising coconuts and rooted blackpepper; **DOH** - 2.27kg various kinds of vegetable seeds; 337 pomelo, 823 mango, 797 durian, 460 lanzones, 953 rambutan, 194 mangosteen, 558 lemonsito, and 210 jackfruit seedlings; and **DASS** - 1,600 kg rice, 180 kg corn, 100 kg upland rice, 30 kg peanut, 25 kg mungbean, and 7 kg sweetcorn seeds.

Distribution of Communication/Reading Materials

Publications of different kinds were produced and distributed to farmers, development workers, students, entrepreneurs, private individuals, and other clientele for free or at cost by the following offices/centers of the University: **FARMI** - 1,000 brochures on mango and lanzones production; **NARC** - 102 CDs on *Disease Management* (in local dialect) and 464 abaca reading materials, of which 394 were flyers on *Abaca Bunchy-Top Virus Disease and Its Control*, 60 brochures on *Abaca Technologies, Utilization of Abaca Stripping Wastes into Handmade Papers, Hustong Pag-abakahan, and Pagkigi sa Abaka*, and 10 leaflets on NARC RD&E; **NCRC-V** - 285 copies of reading materials on coconut technologies including leaflets on *Steps in Planting Makapuno, Coconut Shell Charcoal Production Using the Pit Method, Pagpananom og Pinya Ilawom sa Kalubihan, Produce Good Quality Copra Using the Semi-Direct Type Dryer*; and a technical bulletin on cattle fattening under coconut; **COF** - *Primer on Tree Registration, Harvesting, Transport and Marketing Policies in Private Lands, Tamdanan sa Pagparehistro, Pagputol, Paghakot ug Pagbaligya sa Kahoy sa mga Pribadong Yuta, Giya han Pagparehistro, Panmulod, Pagbiyahe ngan an mga Palisiya han Pamaligya han mga Kahoy dida ha mga Pribado nga Tuna, Primer on Tree Registration, Harvesting, Transport and Marketing in Private Lands*; and **DASS** - leaflets/pamphlets on *How to Grow/Produce Corn/Upland Rice*, etc. and *Proper Sampling Procedures*.



Laboratory Analysis of Soil, Plant and Animal Tissues, Water and Organic Samples and Diagnosis of Plant Diseases

The **Central Analytical Services Laboratory** based at the PhilRootcrops has served as a service laboratory for testing and analyzing food, feeds, soil, and plant samples and provided assistance in response to the chemical analysis needs of various research projects of LSU. During the year, the laboratory performed a total of 2,580 analyses consisting of: 179 water analyses, 823 tissue analyses, 1,460 soil analyses, and 118 non-soil analyses requested by researchers, students, farmers, and businessmen.

The **Plant Diseases Diagnostic Laboratory (PDDL)** based at the Department of Pest Management (DPM) provided the following services: accurate diagnosis of plant disease problems of farmers and other clientele in the region; early detection of diseases of crops with emphasis on abaca virus diseases; and support to other researchers in the different research centers and students doing research for the use of some equipment for a fee. Furthermore, PDDL staff indexed tissue-cultured abaca samples from NARC for bunchy-top virus; tested abaca mosaic virus antisera from BIOTECH; searched for diagnostic protocols for other viruses; and promoted PDDL services using posters and brochures.

HIGHLIGHTS OF EXTENSION PROJECTS

Business and Economics

Opening Door for College Students to Harness their Entrepreneurial Skills. The Small Enterprise Technology Upgrading Program-DOST-Academe Technology-Based Enterprise Development (SETUP-DATBED) Program, which ODTREX through its Extension Unit is coordinating, has accepted proposals for small-scale businesses from LSU college students since 2004. During the year, the proposal of the Department of Food Science and Technology (DFST) on Pilot Production of Casspy was given funding in the amount of Php34,584.00 and a Memorandum

of Agreement (MOA) was subsequently instituted. The SETUP-DATBED Program is intended to provide college students an opportunity to venture into small enterprise thereby harnessing their entrepreneurial skills.

E-calculator for Easy Cost-and-Return Calculations. Using the HTML format, PhilRootcrops developed a cost-and-return calculator for rootcrops production. This calculator was evaluated by the PhilRootcrops Extension Project Team and improvements were made based on the comments and suggestions of the evaluators. Fourteen (14) technicians



Botanical Garden at LSU Nature Park, Molave Hill.

from Samar tried using the e-calculator and found it useful for quick estimates as well as rough analysis to point out factors in rootcrops production that need further attention. The calculator is easy to use and can be translated into a desired dialect.

Environment

Going Organic with EVSOANet. The Farm and Resource Management Institute (FARMI) led the establishment of the Eastern Visayas Sustainable Organic Agriculture Network (EVSOANet), a network of NGOs, GOs, academic, researchers, farmers and other stakeholders of ecological (organic/biological) agriculture. EVSOANet was formed to provide a venue for discussion of ideas, interactions, cooperation, and identification of potential collaborators, to foster, guide and conserve the organic method of agriculture. Through FARMI's assistance, EVSOANet has spearheaded conferences, workshops and seminars, research, production and distribution of organic agriculture literatures, and promotion and marketing of farmers' organic farm produce. Network membership has also grown to 25 member organizations, including two academic

institutions. In addition, FARMI's Sustainable Organic Agriculture (SOA) Program and EVSOANet started the advocacy project for reduced pesticide residues in food, enhanced animal welfare, and support of biodiversity through the use of organic fertilizers like indigenous micro-organisms derived from fermented fruits, vegetables and food leftovers. Standardization of organic products is the network's ultimate goal.

Maintaining the LSU Nature Park. The Molave Hill, one of the popular nature and adventure destinations of LSU, has attracted visitors who love bird watching to marvel at the large boles of native tree species and the distant vista of the Camotes Sea. Thus, regular cleaning and maintenance of the area were done. The LSU Botanical Garden, which showcases native herbal and medicinal species collected from the neighboring barangays of LSU, was also maintained. The Botanical Garden is intended to maintain a bank of herbs and medicinal plants and provide alternative cure for simple diseases. A functional water system was constructed to channel potable water to Molave Hill. Meanwhile, the Butterfly House located at the Molave Hill was completed and some butterfly species were cultured or kept. To support the high cost of maintaining the nature park, fees are collected from campers, outdoor trekkers, and other groups who visit or use the park.

Capability Building

Building Barangay LGUs' Capacity for Development Planning. The Barangay Integrated Approach for Nutrition Improvement (BIDANI) coordinated the conduct of seminar-workshop in Albura, Leyte to reinforce the capacity of its barangay officials in development planning. This was done in light of the guidelines stipulated in the DILG-DBM joint memo-circular on the utilization of the 20% development fund in the annual budget for each barangay to facilitate the identification of local programs, projects and activities funded out of the said development fund.

Harnessing Agricultural and Rural Development in Barangays.

Some barangays, with the assistance of the Institute of Social Research and Development Studies (ISRDS), have now utilized their Community-based Monitoring System (CBMS) data in their development planning activities. CBMS data constitute a set of indicators to be used in local development decisions and in monitoring the impacts of programs. Students, researchers, LGU, and the civil society use the same data as basis for their programs. Efforts have likewise been done to harmonize the implementation of poverty reduction and food security programs in the region with strong participation of government agencies, NGOs, academe and people's organizations (POs).

Coming up with a Tool for Governance - Building a CBMS Data for Guadalupe.

Barangay Guadalupe, which is located near LSU, is now building its CBMS data with the help of extension experts from ISRDS working under the PANGUAPA special project. Residents of the barangay were trained to gather some information and encode them in the computer using the MS Access program. The data include a master list of Guadalupe residents, undernourished children, out-of-school-youth, availability/non-availability of toilets and electricity per household, and other demographic information. These were presented in a general assembly and used as basis for a digitized map of Guadalupe developed through the GIS technology.

Facilitating Clients' Adoption of Abaca Technologies. During the year, twelve (12) portable abaca spindle stripping machines, eight (8) units of chairs embellished with abaca twine, and one (1) unit yarning machine were sold to NARC clients. The increase in sale of portable machines reflects the increased adoption of the machine for the production of abaca fiber and the enhanced efficiency and productivity in abaca fiber production. NARC also taught abaca farmers other technologies to boost crop production like detection of abaca bunchy-top virus (ABTV) which led to familiarization of ABTV symptoms, early application of control measures,

and timely rouging. In effect, abaca farms whose owners or caretakers had been trained by the Center experienced less crop loss.

Adopt-a-School Project: Building Capabilities for Effective Learning and Better Future.

To help sustain effective learning environment for schoolchildren, the College of Education (CE) of LSU adopted the following schools in Baybay, Leyte: Pangasugan Elementary School, Guadalupe Elementary School, and Caridad National High School. CE assisted five activities initiated by these schools, which included the celebration of Buwan ng Wika, Nutrition, Science and English Months, and Math Wizard contest. These activities were supplemented with lectures and field trips to the Natural History Museum of LSU. Financial assistance was extended to selected indigent pupils and students to enable them to pay their school fees for the current year. The Adopt-a-School Project donated some solicited reference books, dictionary, and globe and gave out trash cans and wall clock to the aforementioned schools. Pharmacological gardens planted with indigenous medicinal plants were also established for instructional and first-aid purposes. All plant collections were labeled. The Tree Garden and Orchidarium in one of the recipient schools were maintained as well.

Enhancing Management Effectiveness of MPAs.

Provincial and municipal extension staff of Southern Leyte were trained on how to manage marine protected areas (MPA) in their province. Thus, they now have the capability to train and provide community management committees and technical services for evaluating MPA management effectiveness. Community volunteers working in these protected areas (SouLMAET) are now capable of performing monitoring and evaluation of MPAs using an evaluation system that is clearly nested in the community. At present, four (4) community-based MPA management committees are monitoring and evaluating their MPAs using biophysical, socioeconomics and governance indicators. They have also identified specific service needs from their provincial government. The community



Open forum during the Farmers & Fisherfolks' Day.

management committees analyzed and articulated the changes, actions and recommendations needed to effectively manage these MPAs. All the efforts done at building the extension workers and communities' capability to manage marine sanctuaries developed a sense of ownership among the communities.

Farmers' Field Day (FFD) '06: Putting Farmers First. A total of 1,739 farmers and fisherfolks attended the annual Farmers and Fisherfolks Day (FFD) on August 10, 2006 aside from an estimated 1,000 participants who did not register. Sixty percent (60%) of these were members of farmer associations and cooperatives. The Farmers and Fisherfolks Forum gathered the participants and experts from the University and other agencies to discuss problems and issues related to farming and their appropriate solutions. The Extension Unit of ODREX gave recognition to small farmers practicing appropriate, environment friendly and sustainable technologies.

Prohort Project. The Department of Horticulture (DOH) established a 'PROHORT' Project to cater to the requests of public and private entities on the production and commercialization of horticultural crops.

Pest Clinic. The clinic is one of the projects of the Department of Pest Management which has been frequented by clients with problems on pests. The number of clients who availed of its services has,

however, decreased during the year compared to the first two years of its operation. Farmers may have already gained enough knowledge from previous consultations with the Pest Clinic staff or from their attendance in various pest management trainings conducted by the local government units in cooperation with LSU. During the year, 20 students, farmers and professionals brought their samples for analysis. Some of the problems were caused by arthropod pests and pathogens and some clients sought assistance on the proper application of pesticides. The Pest Clinic staff together with the staff from DASS and ODREX of LSU and DA Region 8 assessed the conditions of a jackfruit plantation in Calbayog, Samar to improve plant growth and productivity. The Pest Clinic staff also briefed 70 students and pupils and 5 teachers on the prospect of arthropod culture as a business enterprise and collection and preservation of arthropods; college students of LSU-Villaba Campus on the culture of insects such as butterflies, honeybees, silkworm and some natural enemies for business; and students and pupils of Brgys. Caridad, Pangasugan and Guadalupe in Baybay, Leyte on the collection and preservation of arthropods. The students were also taught on the role of the arthropods in the environment and were encouraged to help prevent the extinction of these organisms.

Contra Alkoheres. The project was conceptualized to save the abaca industry by mobilizing and getting the strong

support of stakeholders in eradicating the abaca bunchy-top disease (ABTD). Thus, Abaca Disease Management and Rehabilitation Teams (ADMART) from the district down to the barangay levels were organized and coordinators were appointed in each abaca-growing municipalities in the 5th district of Leyte. Municipal ordinances on the mandatory eradication of infected plants and a moratorium on "umbac" gathering and transport were enforced in each of the abaca-producing municipalities. Likewise, a provincial ordinance regulating the establishment and operation of abaca plantations, harvest and transport of abaca plant and parts thereof, planting, and movement of alternate hosts of abaca insect vector within the province of Leyte was approved by the Governor. As of December 2006, 25.42% or 1,164 abaca farmers in the disease-affected areas in the 5th district of Leyte have started their eradication efforts. Some of the positive results of the implementation of the program include: change of the value system of the farmers, change of the "wait-and-see" attitude to "believe, cooperate and see" attitude, empowerment of LGUs and ATs, establishment of functional organization to facilitate the implementation of the eradication activities, more people's participation in the undertakings, stronger collaboration and cooperation among agencies, and resource-sharing and unity for a common cause.

Control of Brontispa and Other Pests of Coconut. Control of coconut pests and culture of the entomopathogen such as *Beauveria* sp. and *Metarhizium anisopliae* were done in the laboratory.

Pesticidal and Medicinal Garden: A Showcase. Plants with pesticidal and medicinal properties were grown and maintained at the Pesticidal and Medicinal Garden of the Department of Pest Management (DPM) and new species of plants were added to the collection every quarter. A display of pesticidal and medicinal plants was put up during the 2006 LSU Anniversary to create public awareness on the importance of these plants.

Natural History Museum. A total of 3,689 visitors composed mostly of students from public and private schools in Region 8 viewed the museum displays consisting of a plethora of preserved specimens of the flora and fauna of Mt. Pangasugan. To further enrich the museum, live specimens of birds, fishes and different species of butterflies were also maintained.

Establishment of Cold Storage Facility for High-Value Horticultural Crops in Leyte. The project designed an efficient evaporative cooling and modified atmosphere (MA) storage techniques for fresh fruits and vegetables. It also established modified atmosphere (MA) packs for pineapple slices, durian fruit capsule, and potato shreds. Heat-and-calcium treatment has reduced the microbial population of minimally processed fruits while the simple heat system has controlled the ripening and postharvest disorders of bananas and mangoes.

Ornamental and Cutoffler Industry Development Project. This project has developed a protocol for the micropropagation of orchids, anthurium, and other ornamental plants and has likewise identified appropriate potting media for micropropagated plantlets. It has regulated the flowering of the plants using PGR's and photoperiod manipulation and prolonged the vase life of cut flowers and cut foliage by postharvest treatment. Furthermore, it collected and evaluated different varieties of *Chrysanthemum* "mums" for a year-round production as well as indigenous fern as cut foliage and potted plant.

GIS as a Tool to Prioritize Tropical Fruits Research and Development (GIS Phase II). The project conducted consultation meetings with different agencies concerning multivariate analysis procedures for geo-referenced data as well as with EVIARC staff regarding GIS applications for R&D of other regional priority crops with focus on typhoon-frequented areas.

Crops and Livestock

Producing, Distributing and Monitoring Varieties of Must-Have Crops.

Abaca, coconut, and rootcrop farming have been an important feature in the Visayan culture. These crops have been cultivated in the archipelago for centuries to support daily sustenance and provide income for the family. Thus, the National Abaca Research Center (NARC), National Coconut Research Center (NCRC), and PhilRootcrops sustained their efforts for continuous production and monitoring of abaca, coconut, and rootcrops, respectively.

PhilRootcrops planted and maintained sweetpotato, cassava and yam varieties as source of planting materials of farmers, agri-businessmen, and other clients. In the same manner, NCRC provided some farmers coconut seedlings and seednuts, as well as black pepper cuttings for intercropping with coconuts. Many clients also availed of makapuno seedlings. Aside from supplying abaca planting materials to its four nurseries, NARC also provided planting materials to some accredited nurseries owned by farmers/clients.

Going Organic in the Production of Chicken and Small Ruminants.

An area was identified for the organic production of chicken and small ruminants within the LSU Main Campus. Brushing and construction of enclosures where small ruminants shall be allowed to graze were completed. A vacant shed at the Department of Animal Science (DAS) was renovated to house the chicken. Fabrication of nests for chickens and procurement of stocks have been started.

Communicating Knowledge

Targeting Rootcrop Clientele with Multi-Media.

PhilRootcrops developed an interactive multi-media CD on rootcrop technologies in order to improve the capability of technicians in disseminating technologies to rootcrop growers and other clientele. The CD's audio is in English but it is provided with a Cebuano subtitle. After it has been pretested by an expert,

the CD was refined by improving its background color, synchronization, format, layout, audio, narration and graphics. Results of a non-formal user's evaluation demonstrated that the CD has elicited a positive response from technicians, farmers and students, and was found to be more helpful to agricultural technicians. In addition, PhilRootcrops produced five video productions showcasing different rootcrop technologies from micro-propagation of yam to rootcrop-based food products. These videos were produced for the Center's clients and prospective technology adopters. To supplement the information contained in the interactive CD and videos, brochures and flyers on other rootcrop technologies like SP Pickles and Pinoy Fries were also produced and made available to the public.

Teaching Abaca Disease Management through Video and Print Media.

NARC also made use of multi-media in the dissemination of technologies. The video CD on abaca bunchy-top management has drawn positive feedback from farmers and induced change in farmers' perceptions on abaca disease eradication. Print materials on abaca technologies and problems were also produced and given to clients who prefer to get information from print media.

Promoting Environmental Protection through Varied Educational Tools.

The Institute of Tropical Ecology (ITE) embarked on an environmental education project using various information, education and communication (IEC) materials that it produced. The project has released a new Cebuano edition of Rainforestation Farming (RF) Guide for farmers and maiden issues of two environmental newsletters, KALIKUPAN and PAWIKAN, focusing on natural biodiversity conservation and efforts to conserve endangered sea turtles, respectively. Aside from these materials, ITE also initiated learning-by-doing activities in environmental education as well as environmental fora, nature treks and camps, and RF orientation and cross-visits to cater to client's varied learning needs. A civic-oriented student organization in LSU called TARSIER (Tarsier and Aquatic

Restoration by Students Immersed in Environmental Reform) facilitated the said activities.

Disseminating Knowledge through Trainings/Seminars/Workshops. Trainings, seminars, workshops were widely used in LSU's extension programs. During the year, a number of these activities were conducted by the different research centers, departments, colleges, and institutes (Table 7).

Information Caravan: Putting a New Face to Info Dissemination. LSU, through the Office of the Director of Research and Extension (ODREX), Department of Food Science and Technology (DFST), and PhilRootcrops, took part in the information caravan program of Sen. Manny Villar dubbed Lakkay Kaalaman, which provided livelihood training opportunities to people across the country. The Information Caravan started in Abuyog, Leyte on September 21, 2006 and was attended by 547 participants from the different barangays of the municipality with Prof. Milagros C. Bales from the Extension Training and Monitoring Unit of ODREX as facilitator and Dr. Lutgarda S. Palomar of DFST providing the expertise in food processing. Dr. Palomar demonstrated food processing technologies on rootcrops, poultry, and



Dr. Lutgarda S. Palomar (right) and Prof. Lorina A. Galvez (left) of the DFST demonstrating the process of making catsup.

other meat products as prospective livelihood ventures. On October 10, 2006, livelihood training was held in Ormoc City Superdome with 769 participants. LSU's DFST demonstrated the preparation of sweetpotato catsup and pork ham and PhilRootcrops showed the preparation of sweetpotato fries called Pinoy Fries (an alternative to the commercial French Fries); and sweetpotato soy sauce called Root Soy Sauce.

Table 7. Trainings conducted/services rendered by departments/centers in CY 2006.

DEPT/ CENTER	TITLE OF TRAINING/SERVICES RENDERED	TYPE OF CLIENTELE	NUMBER OF PARTICIPANTS
PhilRootcrops	Standardization of Morphological Descriptors for Sweet Potato Germplasm in the Philippines; Collection, Culture, Production and Application of Beneficial Indigenous Microorganisms; Quick Composting Technology; Bio-fertilizer production; Cassava Grates Products Processing and Rootcrop Fried Chips; Investment Forum on Selected Rootcrop Technologies; Processing and Utilization; Chips Processing with GMP; Production and Postharvest Training on Cassava and Soybean	Farmers, germplasm curators, database managers, OSY, researchers, housewives, LGU officials & brgy. captains, students, teachers/instructors, POs, NGOs, gov't. employees, DA-BAR officials, SCU officials, entrepreneurs	1,404
National Abaca Research Center	Abaca Production and Management; Pest Management; Operation and Maintenance of Portable Abaca Spindle Stripping Machine; Handmade Paper Making Utilizing Abaca Waste Materials; Training Demo on the Operations and Maintenance of Portable Abaca Spindle Stripping Machine; Handycraft Making Using Abaka "Umbak"; technical briefings	Abaca farmers, LGU officials, students, teachers, coop members, housewives, NGOs, agricultural technicians, businessmen	1,394
National Coconut Research Center – Visayas	Makapuno Embryo Culture; Makapuno Balls Processing; Coco-based Cropping System; briefings to different visitors	Farmers, students/pupils, instructors/teachers, parents, evaluators, entrepreneurs, extension/development workers, LGU officials, gov't. employees, private individuals	722
Farm and Resource Management Institute	Marine Protected Area Management Effectiveness; SRI Hands-On Training; Forage Seed Production; Care and Management of Murrah Buffaloes; Sustainable Organic Agriculture; PRA Training; On-Farm Experimentation; SRI Farmer's Field Day; Agriculture & SOA; Project Proposal Making; SRI Orientation; SRI Seminar; Solid Waste Management	So. Leyte provincial & municipal CRM staff, farmers, agricultural technicians, LGU staff, students, researchers, barangay officials, farmer leaders	1,163

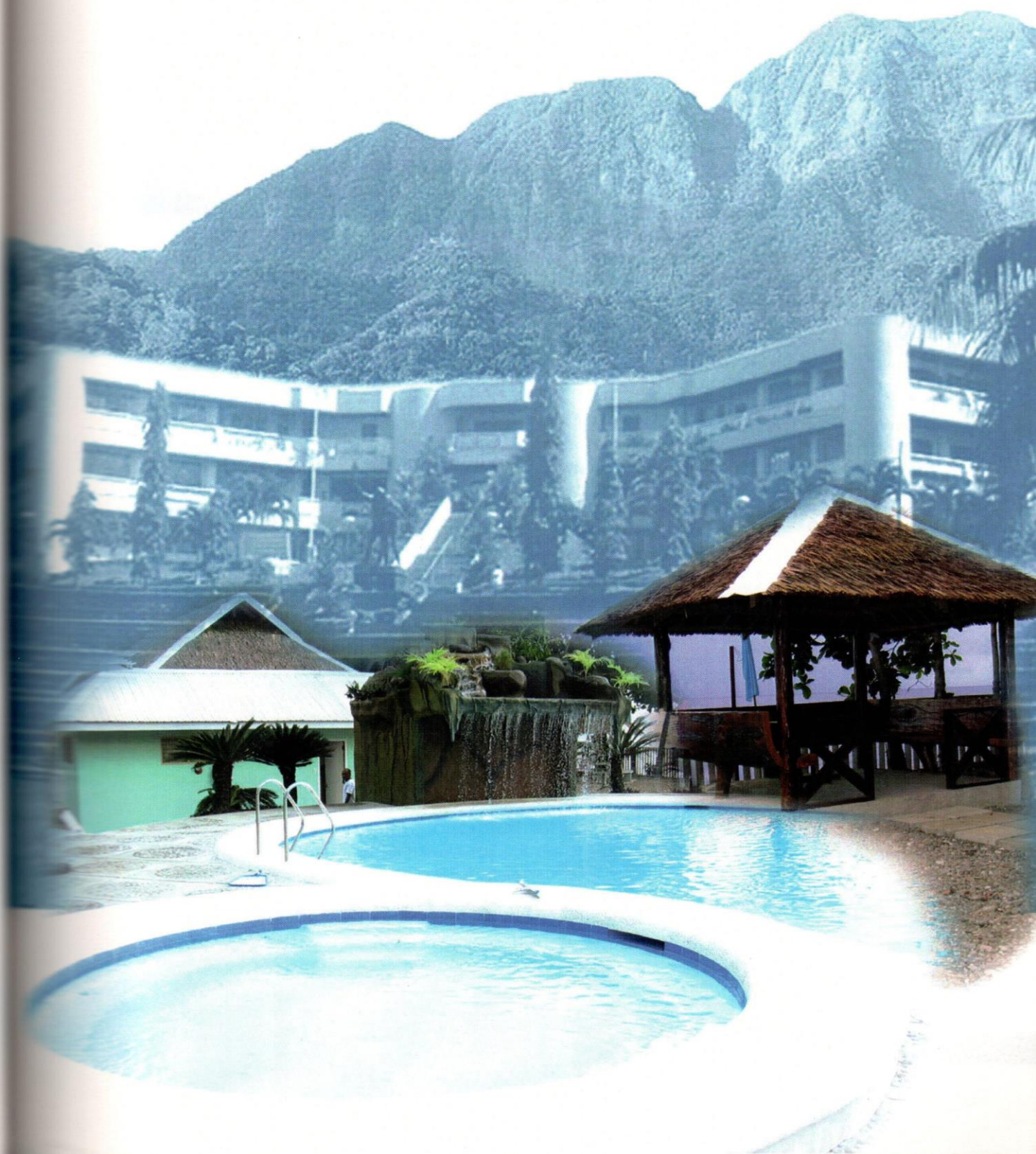
DEPT/ CENTER	TITLE OF TRAINING/SERVICES RENDERED	TYPE OF CLIENTELE	NUMBER OF PARTICIPANTS
Institute of Tropical Ecology	Environment Forum on Mining: Coastal and Marine Resources Vulnerable to Mining Activities; Biodiversity Training for IMFARMC; Consultative Forum; Training of Trainers' Workshop Enhancing Management and Effectiveness of MPAs; Regional Capability Building in Indonesia and the Philippines; IMFARMC Environmental Forum and Press Conference on Coastal Resources and the Threats of Mining in Western Leyte; Orientation-Seminar Workshop on Coastal Area with Focus on Mangroves Assessment and Foreshore for IMFARMC of the 5 th District of Leyte; RA 8550 Fisheries Code of 1998 and FAO 196 (FARMCs); Rainforestation Farming and Cross Visits; Seedling Production and Nursery Establishment and Management; Project Learning Tree (PLT) and Water Education for Teachers Educators and Facilitators; Environmental Education/Camp; Environmental Team Building and Nature Trekking	Municipal and barangay officials, POs, fish wardens, personnel of DENR/ DA/BFAR/MAO, provincial staff, community volunteers of So. Leyte, LCE, fisherfolks, OSY, FARMCs, govt employees, LSU-TARSIER members, FCIC college students, staff and members of the Diocesan Social Action Center of Maasin, grade school pupils	1,083
Institute for Strategic Research and Development Studies	Regional Strategic Planning Workshop on Poverty Reduction & Food Security; Trainers' Training on Gender, Sexuality and Reproductive Health; Orientation, Data Gathering, Encoding and Digital Report for Community-Based Monitoring System (CBMS); Trainors' Training on Barangay Development Planning through Participatory Resource Appraisal; Basic Water Rights; Skills for Life Training; Geographic Information Systems (GIS) for Social Sciences; Project Proposal Making; Project Management; Community-Based Participatory Extension Management; Reflexology & Therapeutic Massage with Acupressure; Barangay Development Planning Workshop	Teachers, students, house-wives, OSY, barangay officials, LGU/ NGO/PO/GOCC rep., enumerators, municipal agriculturists, technicians, dorm officers, barangay development council members, officers of Federation of Irrigators, SCU representatives in Region 8, barangay residents	842
Institute of Human Kinetics	Basketball Officiating and Sports Management; Coach and Trainor of the Baybay Tennis Club; Basic Ballroom Dancing; Hataw Bayan Fitness Activities; coordinator in the Baybay Sports Fiesta activities; assisted in organizing the Dance Sports and Ms. Leyte Pageant during the Provincial Athletic Meet	Baybay LGU, Baybay Tennis Club, officiating officials, students, OSY, teachers of MSU, children, public school teachers, Baybay tennisters	127
Multi-Media Development Center	Microsoft Excel for Grade Computations and PowerPoint Presentations; Orientation on Learning and Technology; Educator's Workshop on Project Water Education for Teachers and Project Learning Tree;	LSU faculty/ staff, high school principal, teachers and trainers from Leyte and Bohol	69

DEPT/ CENTER	TITLE OF TRAINING/SERVICES RENDERED	TYPE OF CLIENTELE	NUMBER OF PARTICIPANTS
Dept of Agron. & Soil Science	Soil Examination and Fertility Evaluation; Chemical Safety in the Laboratory	Students, researchers, instructors, agricultural technicians	61
Dept. of Animal Science	Castration and Disinfection of animals; Hog Raising; Sow/Piglet/Weanling Management and Medication; Piglet Castration and Sow Medication; Deworming and Medication of Hogs; Artificial Insemination	Farmers, DA technicians, teachers, students/pupils, farm caretakers, barangay officials, businessmen	1,247
Dept. of Development Communication	Process Documentation Research (Phase I-III); Campus Journalism; Instructional Materials Development; NonLinear Video Production; Qualitative Research Methods/Analysis; Orientation/ Reorientation Seminar; Most Significant Change; Federalism; Strengthening Relationships Between the Administration and Student Publication; facilitator/ coordinator/resource persons	Academicians, researchers, development workers, pupils, students (college, HS & elementary); faculty	811
College of Education (DSE, DCDE, LSULHS)	In-service training for New Elem & Secondary School Teachers in Math, Science and English; Orientation-Conference on Deployment of Student Teachers; Pre-Service Training for Student Teachers; Preparing a Table of Specification; Annual LSULHS Career Guidance Day; Review Class for the Licensure Exam for Teachers	DepEd elem. & secondary school teachers, principals, BSEd, BEED graduates, student teachers, graduating students, LSU	679
Department of Family and Consumer Sciences/BIDANI	Seminar on International Practicum Training Program: USA Promotion; Chocolate Moulding, Meat Processing & Wine Mixing; Barangay Development Planning through Participatory Resource Appraisal; Strategic Planning for Collaboration of Extension Project Implementation of the Adopt-A-School and PANGUAPA/BDP/PRA Projects; BDP Workshop; Refresher & Team Building Training of BDC & Sectoral functional Committee; BIDANI Concepts & Its Operationalization; Advocacy/Orientation/ Briefing/Linkaging/Groundworking on the BIDANI Strategy and its Operationalization; liasing barangay water system project to NGO; technical backstopping in the operationalization of the BIDANI strategy to satellite SUCs, municipal/city and barangay LGUs; BMIS Training/ Coaching on Data Updating; Reinforcement Training on Participatory Domiciliary Nutrition Rehabilitation; Launching of Nutrition Month Celebration & Supplementary Feeding Program; facilitated the production and marketing of NUTRIPAK and SEC registration of NUTRIPAK Association; PDNR monitoring and lectures	Municipal LGUs, Barangay LGUs, Provincial Nutrition Committee, Regional Tech Working Group, NGO, RHU personnel/mid- wives, BDC committee, Isabel Campus staff, extension staff, BHWs/ BNS/BSPOS, LSU faculty/ staff, mothers, Regional & National Evaluation Team, CNPC, CPDO, DepEd, Ormoc City Central School teachers and children, CNC members	5,058

DEPT/ CENTER	TITLE OF TRAINING/SERVICES RENDERED	TYPE OF CLIENTELE	NUMBER OF PARTICIPANTS
Department of Plant Breeding and Genetics	Farm scientist program, trainors' training, farmers' field school, CPAR farmer's field day in Dumaguete	Farmers, agricultural technician	240
Department of Horticulture	Cultural Practices of Ornamentals; Organic Vegetable Production, Post-harvest and Marketing; Collection, Culture, Production & Application of Beneficial Indigenous Microorganism; Hands-on Training on Bio-organic Fertilizer Preparation; Compost Making; High Value Commercial Crops; Vegetable & Ornamental Production and Management	DA staff, farmers, LGU employees, students, ornamental growers, agricultural production technicians, rural women, out-of-school youths	378
Dept. of Pest Management	Management of the Abaca Bunchy-top Disease and Training on Banana Production	Farmers	50
Department of Business Management	Recording and Economics of Swine Production; Computer-Assisted Workshop on Project Feasibility Study Preparation; Trainors' Training on Marketing of Products and Technology	Agricultural technicians, deployed barangay animal health aides	121
Department of Economics	Project Feasibility Preparation, GTS Data Analysis, Application of DSSAT and SIMETETAR for Valuing Seasonal Climate Forecasts	Faculty, researchers	10
Department of Computer Science and Technology	Application of Excel Program for Grade Computation and Audiovisual Aids Preparation, Excel and Power Point Programs	Faculty members, clerks and other LSU personnel	90
Department of Food Science & Technology	Milk Processing; Pineapple Jam and Marmalade Processing; Squash Processing; Meat Product and Banana Ketchup Processing; Food Handlers and Operators Seminar; Rootcrop Production, Post-harvest Handling and Marketing; Standardization of Tuub-Taab Processing at Adoptor's Site;	Farmers, parents, DAR beneficiaries, entrepreneurs	281
Dept. of Agroforestry	ACIAR-IUFRO Planning Workshop; Forest Hydrology, Effects of Biodiversity, Climate Variability and Land Use; ACIAR Farmers' Bus Tour and Field Demonstration	Students, researchers, teachers, farmers	
Dept of Biological Sciences	Depression of Spawning Potential in High Density Populations of Quahogs, Safety in the Laboratory, Syllabus Making and Test Construction	Undergraduate students, faculty	45
DYAC	Writing & Presenting for Radio for OSY, Campus Internship for DEVCOM Broadcasting Majors, Kiddy Workshop on Program Production, Leyte Youth Conservation Corps-Residential Training, Refresher Course for News Production Staff, First-Aid Training for Dormitory Advisers and Assistant Advisers	OSY, DevCom broadcasting major students, alumni communicators, kids, youth, dormitory advisers	55

DEPT/ CENTER	TITLE OF TRAINING/SERVICES RENDERED	TYPE OF CLIENTELE	NUMBER OF PARTICIPANTS
Alangalang Campus	Conducted vaccination of animals in the barangays; clean and green project; basic literacy classes	Farmers, housewives	
Isabel Campus	Meat Processing, Stuff Toy Making; PDNR Enrolment for BNL & BNVL Children, escorted the youth in taking the A&E examination; LIFE for Youth	Out-of-school youth, house-wives, employees, BNS & BHW scholars, BSPO	263
Villaba Campus	Vegetable Raising; Cooking; assistance to hog raisers	Farmers, housewives, men and women	99

GENERAL ADMINISTRATION



OFFICE OF THE PRESIDENT

The **Office of the President (OP)** inspired dynamism, complementation, resource-sharing, team work, and solidarity among the University constituency to optimize its capacity and capability for excellence in its programs and services amid the prevailing socio-economic setbacks. While instituting austerity measures in the University, it exhausted means and mechanisms to augment its resources by intensifying, among others, income generation and drumming up support for its programs from agencies here and abroad.

1. The **Anti-Sexual Harassment Unit (ASHU)** conducted information campaign on LSU's Implementing Rules and Regulations (IRR) of the Anti-Sexual Harassment Act of 1995 to college and high school freshmen of the Main Campus and the Isabel and Villaba campuses; received complaints of sexual harassment and counseled complainants; resolved two (2) administrative cases and started investigating another case; and assisted complainants in the preparation of written complaints.
2. The **Internal Audit Service Office (IASO)** conducted audit review of record of supplies and materials kept by the Supply and Property Management Office, cross-checked them with the record of the Accounting Office, and advised the concerned offices on the causes of unreconciled figures between inventory account and physical inventory; evaluated the operating procedures of the LSU Printing Press and prepared a workflow chart as well as the logbook format to be adopted by the project; prepared a working paper on the status of the funds of LSU Hostel from June 2002 to February 2006 and the payment of the accountability of the previous project-in-charge; prepared a summary of collections and remittances of the Cebu Lodging House from November

2003 to June 2006 and submitted the result to the project in-charge for reconciliation; gathered data in connection with the audit of the operation of the LSU Fuel Station; witnessed the harvesting of rice of the Seed Net project in the lower campus to determine the yield in that particular area; attended meetings of the Bids & Awards Committee to discuss the request for computer licenses for some units of the university, procurement of supplies and materials for the swimming pool, installation and training fees for the LSU Garden Beach Resort, and the total station requested by the College of Engineering and Agri-Industries; attended meetings with the Disposal Committee to discuss the inspection and appraisal of the unserviceable properties of the university based on the list prepared by the Property Office; conducted interviews and physical inventory to determine the extent of losses of waste materials, unserviceable properties and equipment at the SPMO storeroom and bodega and submitted committee report to the Office of the President; attended the opening of bid proposals for the supplies and materials for the construction of the swimming pool and the purchase of computers; and conducted regular audit activities.

OFFICE OF THE VICE PRESIDENT FOR ACADEMIC AFFAIRS

The **Office of the Vice President for Academic Affairs (OVPA)** initiated the following activities: Strategic Planning Workshop for Instruction, Orientation-Seminar on Information Drive with the University Supreme Student Council (USSC), and a Deans' Workshop to empower the Office of the Deans; spearheaded the conduct of the annual academic convocation as well as the evaluation of graduating students with Latin Honors and the selection of Most Outstanding Student; planned and developed scheme for the improvement of the LSU Web Page; conducted consultations with the University Supreme Student Council (USSC) officers; helped expedite the evaluation visit of CHED-

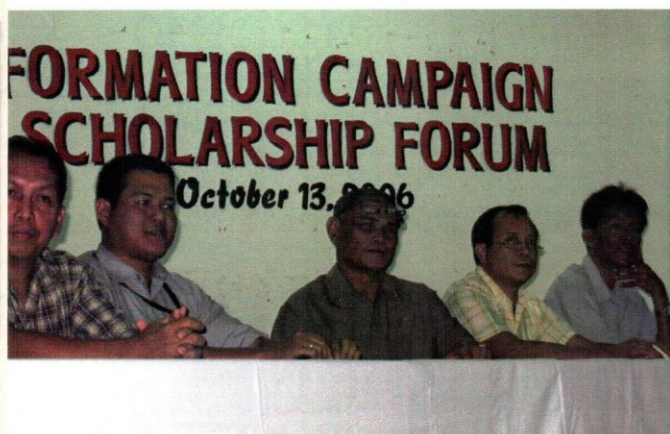
COE-Agriculture, External Program and Management Review (EPMR), and AACCCUP Second Survey Visit to assess the Graduate School, College of Agriculture, and College of Education degree programs; addressed academic issues/problems/concerns such as late submission of grades of some faculty, enrolment procedures, faculty workload and evaluation, honorarium for designated positions, and course requirement of Vet Med students; held consultation meetings on software application and usage with the different units, improvement of instructional facilities, and initial plans for a ladderized nursing curriculum.

1. The **Graduate School** conducted a seminar-workshop on *Thesis/Dissertation Outline and Manuscript Preparation for Graduate Students* and a *Training Workshop on Outline Learning and Teaching for Graduate Faculty*; organized the summer consultation dialogue for distance education students and their professors; prepared and gathered documents for its reassessment for Level III-Phase 2 AACCCUP accreditation; had its Master's degree program for Agriculture and Education reassessed; produced and distributed Science and Humanities Journal, Volume 4, and Graduate Research Abstracts, Volume 5; and revised, reproduced and bound 69 copies of 21 titles of study guides.
2. The **Office of Curriculum and Instruction (OCI)** conducted the 2nd batch seminar on "Briefing and Orientation of Part-timers, GTA's and New Instructors"; facilitated the conduct of teaching performance evaluation by students in all units of the university and encoded, computed, and summarized evaluation results; provided documents required for Level III AACCCUP accreditation of the College of Agriculture (CA) and College of Education (CE) and circulated relevant memoranda to expedite the requirements of AACCCUP; presented instruction report during the External Program and Management Review (EPMR); conducted information drive and LSU entrance scholarship examinations in Regions 6, 7, 8 and CARAGA regions; coordinated with all academic units of the university in the preparation of instructional materials; initiated the development of multimedia packages for every course offered at LSU; devised guidelines in the issuance

of permit to give examinations/move classes outside of regular schedule; reviewed and recommended staff development programs and the renewal, hiring, change of tenure, leave status, distribution of individual faculty workload and projected workload of the departments; endorsed to the President through the Vice President for Academic Affairs the proposal of the Institute for Strategic Research and Development Studies (ISRDS) entitled "Evaluation of Sociology 11: Teacher Performance, Course Content, Teaching Methods, Materials, Equipment, and Facilities"; reviewed results of evaluation of all faculty members including those in the external campuses; acted on the requests of students for the offering of unscheduled subject, overloading and change of curriculum; prepared a list of academic staff and their corresponding full time workload equivalent (FTE); assessed the instructional programs of the six colleges of the Main Campus



Graduate students during the lecture/presentation of Dr. Antonia Cecilia Y. Sandoval on thesis/dissertation outline and manuscript preparation.



(L-R) Prof. Manolo B. Loreto, Jr., Dean of Students; Engr. Glenn G. Ocaña of DOST-8; Dr. Jose M. Alkuino, Jr., VP for Administration and Finance; Mr. Ciriaco A. Sabino, Jr. of CHED-8; and Dr. Edgardo E. Tulin, Director of Curriculum & Instruction answering queries of students during the Scholarship Forum.

following the AACCUP guidelines; prepared and printed 10,000 copies of University brochure, 100 posters, and 5 pcs. tarpaulin needed for the information drive and promotion of LSU's curricular programs; exercised general supervision over course scheduling and enrolment of the Registrar's Office; issued memoranda to college deans and department heads in the LSU System; and assisted the College of Education (CE) in the conduct of a 1-day seminar on "How to Prepare a Table of Specification."

3. The **Office of the University Registrar** improved the computerization of student records using the program designed by Prof. Winston M. Tabada, head of the Department of Computer Science and Technology; monitored/ followed-up 2,230 incomplete grades of students; attended to 10,229 requests of students for verification of records, deficiencies, and record evaluation; evaluated/updated 12,586 records/ checklist of students; assisted the different colleges/departments of LSU in the enrolment of students; hosted the National Convention of Registrars with 143 participants from all over the country; and generated a gross income of P728,583.00 from its different services rendered.

4. The **University Library** continued to improve the library web page; converted the old CDS-ISIS "CATALO" library database into My SQL; installed and configured the library web server in preparation for the uploading of the Library System to the Internet with URL: <http://library.lsu-visca.edu.ph>; continued implementing the 60-hour-per-week library services for the users to fully maximize the use of library resources, as well as the encoding of accessions into the "CATALO" database and the publication of New Acquisitions to update library users on the newly acquired materials; processed 1,834 library materials (both print and non-print) and included them in the database; extended its services to private and state colleges and universities in Regions 7 and 8, faculty and students of LSU satellite campuses and from other schools doing literature research; and maintained strong linkage with international and national centers, research institutes, state colleges and universities, private universities, foundations, local government units, and non-government agencies.
5. The **University Student Services Office (USSO)** conducted the following: Exit Survey - to graduating students to determine the relevance of the programs and services of USSO for the welfare and total development of students; Career Guidance Seminar - both for college freshmen and high school graduating students; National Statistics Awareness Forum - to facilitate awareness among students on the requirements of NSO in relation to civil registration; Team Building Workshop for Dormitory Advisers and Assistant Advisers - to foster closer relationship among advisers and USSO staff; Basic First Aid Training for dormitory advisers to enhance their capability in responding to emergency and health needs of the dormitory occupants; Seminar-Workshop on Campus Advising and Student Leadership; Seminar on Guidelines in the Operation of

Student Organization's Finances - College Level; Information Campaign and Scholarship Forum in coordination with the DOST and CHED Region 8; Forum on Substance Use and Abuse; Summer Youth Camp; and job-seeking seminars for graduating college students. Moreover, USSO launched the Reproductive Health Youth-Based (RHUB) Center on January 31, 2006; facilitated the insurance claims of students and the delivery of financial assistance through scholarships/grants, student assistantships, and student loans; launched the logo, slogan and poster-making contests

for the RHUB Center; organized the 3rd Annual Awards Night on February 21, 2006;

- a. The **Admissions Office** processed the admission of 1,081 freshmen, 62 transferees and 3 returning students for the 1st semester of SY 2006-2007; and 34 freshmen, 9 transferees, 57 returning and second courser students for the 2nd semester; and coordinated and conducted information campaigns and entrance scholarship examinations in 42 testing centers with a total of 1,693 examinees.

OFFICE OF THE VICE PRESIDENT FOR DEVELOPMENT AND EXTERNAL AFFAIRS

The activities of the **Office of the Vice President for Development and External Affairs (OVPDEA)** were anchored on **PPM**, which are Promotion, Packaging, and Material-Sourcing.

Promotion of LSU's programs were carried out through the following activities: Coordinated visits of officials and guests to LSU; institutionalized group visits to LSU by establishing tour packages with corresponding fees; facilitated the tour of 5248 visitors from various schools, government agencies, NGOs, etc. from the Visayas and Mindanao through the ACRO; strengthened licensure examination reviews for agriculturists, veterinarians, foresters and teachers; published articles in national magazines to promote LSU's technologies and academic programs; advertised LSU programs and activities in local and regional newspapers; aired development plugs and spots about LSU in radio station DYAC; as part of its public relations role, led the Educators Group in putting up candidate for the Ms Baybay Contest during the Baybay town fiesta and the candidate won the contest; and coordinated with CAC especially with the dance troupe and the choral group for presentation during university and Baybay social/official functions and activities to showcase LSU talents.

Packaging of LSU's programs, activities, and achievements were done through the following approaches: prepared and

printed revised brochures and pamphlets for local and international circulation; prepared materials for the inclusion of OVPDEA in the LSU webpage; edited the LSU OBELISK, 2006 LSU Book of Facts and Figures, Science and Humanities Journal, and the Annual Report 2006; consolidated the 5-Year Strategic and Development Plan of the various colleges and centers/institutes of the university; assisted in the preparation of documents for the recognition of DYAC at the National Telecommunications Council and the bill for the change in name of Leyte State University to Visayas State University; facilitated the preparation of necessary documents of the Graduate School, College of Agriculture and the College of Education for the Level III Revisit by AACUP in December 2006; encouraged and helped the 4 satellite campuses (Alangalang, Isabel, Tolosa and Villaba) to each put up a Planning and Development Office and to create a Fund Raising Committee; and complied and submitted academic, physical and other data updates to CHED, DBM, TESDA, etc. upon request as part of its MIS function.

Material-Sourcing was devised as a



LSU participants in the Spoken English Promotion Project (SEPP) together with Mr. Joseph Xu, International Admissions Officer of ZJGSU and Prof. Wang Guo-An, Vice Director of International Affairs Office, (1st and 2nd from right, back row).

scheme to help the University gain support for its programs through **a) Linkages** - established linkage with Zhejiang Gongshang University in Hangzhou, P.R. China that resulted in the visit of Pres. Paciencia P. Milan and the 3 Vice Presidents: Dr. Jose L. Bacusmo, Dr. Jose M. Alkuino and Dr. Manuel K. Palomar to ZGU on Sept. 19-23, 2006 to sign a memorandum of agreement for the Spoken English Promotion Program (SEPP); coordinated and facilitated the visit of 8 students and 5 faculty and staff to ZGU on October 14-31, 2006 wherein 6 participants were evaluated outstanding in the SEPP and 1 PhD in Food Science, 1 PhD in International Trade, 1 MS in Food Science and 1 MS in Tourism from among the participants were considered for scholarship/assistantship at ZGU; initiated linkage with the Korea International Cooperation Agency (KOICA) through the PHILKOFA for possible funding of a television station at LSU; started preliminary talks with Nakita Recruitment Agency of Singapore and Ojastro Agency of the Philippines for the practicum of LSU students in Singapore especially in business management; visited the embassies of Cuba, Chile (June 6, 2006), Qatar, Switzerland (June 7, 2006), Sri Lanka (June 8, 2006), Cambodia, Czech Republic (June 21, 2006), Panama, Myanmar (June 22, 2006), Japan and New Guinea (June 23, 2006), Russian Federation and Israel (September 18, 2006), Indonesia (September 25, 2006), USA (October 26, 2006), Singapore (November 27,

2006), Mexico (November 28, 2006) and Brazil and Italy (November 29, 2006) for possible linkages in scholarships and training. With the assistance of OVPA, established linkages with the Short-Term Exchange Program at Tokyo University of Agriculture and Technology (STEP@TUAT) and facilitated the screening of participants for the program; facilitated collaborative linkage with Dr. Paul Llado of Orlando, Florida on the prospect of LSU practicum students under the International Practicum Training Program (IPTP) as well as collaborative research on biotechnology with the University of San Carlos in Cebu City. **b) Income Generation** - sent 2 faculty and staff for training in Medical Transcription at the Total Transcriptions Solutions, Inc., Quezon City in August-October 2006 with funding coming from CHED in order to start the course at LSU; sent some faculty members for orientation on Call Center Service in Tacloban City for possible offering of such course at LSU; prepared MOAs with private groups for use of LSU facilities and services thereby generating income for the university (P661,570.00 in 2006).

1. The **LSU Manila Office (LSU-MO)**

continued to assist LSU staff in processing and documentation of travel papers with the Department of Foreign Affairs and other embassies as well as in flight reservations and ticketing for their travel abroad; processed scholarships, trainings, seminar-workshop; represented the University President in meetings and conferences; facilitated the request of LSU's Supply and Property Office in the canvassing and procurement of computer parts; facilitated the signing of memorandum of agreement (MOA) and the release of funds for the books, Jatropha nursery, food security, training for medical transcription, and intellectual property management training; facilitated the release of funds for the Induction Training of Science, Math and English Teachers; completed the renovation of toilet and bath of the President's quarter as well as glass partition with metal frame at the office; partially renovated the toilet and bath in the second floor; extended assistance in the issuance

of official certification from PRC on the institutional passing percentage of LSU licensure examinees for agricultural engineers, teachers, agriculturists, foresters, and veterinarians; facilitated the registration of the university vehicle; received and delivered 153 parcels and letters from LSU in Baybay, Leyte to the different agencies/offices in Manila and nearby cities and municipalities and received and delivered 328 letters/faxes and parcels to the addressees in LSU, Baybay, Leyte.

2. The **Information Office** continued to serve as information arm of the University by promoting LSU's programs and contributions to agricultural and countryside development through publications and press releases. The following articles were published in the *Agriculture Magazine*: "Vetiver Recommended for Upland Soil Conservation" (March 2006, p.58); "Improved Makapuno Hybrids Developed by Leyte State University" (March 2006, p. 24); "Ornamental Business Blooming in Leyte" (May 2006, p. 54); "Eradicating Abaca Industry's Nagging Threat" (June 2006, p. 12); and "Field Day for Farmers and Fisherfolk - a Viable Agricultural Development Resource" (December 2006, p. 14). The office documented important University activities and published them in the weekly issues of the LSU Obelisk, revised and mass produced the LSU leaflet as material for local and international promotion of LSU's programs, edited LSU publications like the 2005 Annual Report, 2006 Book of Facts and Figures, and development plans; updated regularly and enriched the contents of the Information Bulletin Board at the Administration building; and prepared and sent advertisements of LSU's academic programs to soliciting agencies; and promptly carried out writing tasks assigned by the Office of the University President.
3. The **Alumni and Community Relations Office** (ACRO) conducted a two-day training on Feature Production for Radio at DYAC for the alumni



2006 Alumni King and Queen

communicators; assisted the LSU Alumni Association, Inc. in facilitating the activities of the 2006 general alumni homecoming; facilitated the repainting of the frog fountain landmark and the installation of stainless steel marker; facilitated the field visits of farmers during the Farmers and Fisherfolks Day as one of the major events of the LSU Anniversary; attended to the tours/visits of more than 5,248 visitors on campus and coordinated the conduct of lectures in the different departments, centers, offices, units of LSU; organized the alumni in Bacolod City and established the LSU Alumni Association Chapter in Negros Occidental; published and posted in the alumni website two (2) issues of the Alumni Notes (July-December 2005 and January-June 2006); updated the alumni section of the LSU webpage; and documented various alumni-related activities and posted them in the LSU webpage and the LSU alumni discussion groups.

4. The **University Review Center** (URC) conducted evaluation on the performance of reviewers and reviewees; acquired 11 review materials from different review centers; published/announced review schedules in newspapers as well as radio stations not only at LSU Radio DYAC but also in Tagbilaran, Bohol; produced brochures on

- review offerings and schedule and distributed them to the different schools and during conferences in Davao City, Ormoc City, and Iloilo City; and generated a gross income of P818,000.00 from its services.
5. The **Office for Auxiliary Services (OAS) and Income Generating Project Office (IGPO)** monitored the LSU Main Campus income generating projects consisting of seven (7) projects earning revenues for the Revolving Fund (RF) and 31 projects generating revenues for the Non-Revolving Fund. It recorded a total income of P13,128,606.01 during the year, which included P9,974,816.93 from the RF projects and P 3,153,789.08 from non-RF projects, posting a 2.42 % increase over the CY 2005 income (Table 8).
 6. The **Evaluation and Development Office (EDO)** conducted seminar-workshop on the New Program Performance Profile and Teaching Methodologies to the faculty of the LSU Main and the four satellite campuses.
 7. The **LSU Radio DYAC** installed the folded unipole antenna and the new beamed satellite dish to re-broadcast DW-Germany programs at the station and replaced the busted transformer; brought back on air an old program for the kids dubbed as "Happy Kiddy Goody" and aired new programs handled by the DevCom students, namely: "Hads Pads" and "Campus Konek"; served as laboratory station for DevCom broadcasting subjects and catered to the recording needs of the University and the neighboring schools; co-sponsored the First-Aid Training for selected dormitory advisers and assistant advisers in the Main Campus; strengthened linkages with DA-RAFID in Region 8 and forged new linkage with ACIAR-Forestry and DOST Manila; conducted the School-on-the-Air (SOA) on Adolescent Reproductive Health from February to April 2006 to 68 LSU students to promote a healthy sexual and reproductive life among the youth.

OFFICE OF THE VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

The **Office of the Vice President for Administration and Finance (OVPAF)** supervised and coordinated activities and programs relative to the management, maintenance, development and utilization of the human, physical and financial resources of the University both in the main and satellite campuses. In 2006, the office facilitated the repair of housing units through the adoption of the approved guidelines in the repair and maintenance of University staff housing units; reviewed and straightened out records of housing-related bills, electricity bills of the dormitory occupants, and adopted scheme for effective collection of payments; facilitated survey of trees in the university and monitored utilization of lumber by different departments, centers and offices; initiated security measures in the campus through construction of steel gates at the university main entrance; facilitated the repair of University buildings and other facilities; reviewed and monitored income generating projects of the University; initiated the development and conversion of the university beach area into a resort with swimming pool as possible source of university income and implemented the approved guidelines and rental rates and its other charges (BOR Resolution No. 75, s. 2005; monitored/evaluated the administrative unit performance and adopted some measures to minimize tardiness among employees; facilitated the issuance of 2006 Community Tax Certificate by the Municipal Treasurer's Office to the University employees; disseminated management, administrative and financial-related information from the Civil Service Commission and Department of Budget and Management; facilitated the conduct of information updates on retirement benefits, insurance and housing loan programs by the Government

Table 8. Income of projects monitored by the IGP Office (2005-2006)

PROJECTS		2005	2006
A.1	RF-IGP		
	Pavilion	4,860,098.24	5,240,679.82
	Hostel	2,103,927.81	1,844,641.90
	Coconut Non-Food	2,069,356.70	1,805,565.10
	Printing Press	446,451.04	388,622.10
	Rice	356,634.02	216,896.33
	Coco seedlings	-	70,365.00
	Fuel Station	375,294.44	408,046.68
	SUB-TOTAL	10,211,762.25	9,974,816.93
A.2	Non-RF IGP		
	Feedmill	365,815.32	512,690.44
	LSU Market	394,294.00	431,468.70
	Makapuno	-	402,342.00
	Rootcrops	412,204.32	266,933.35
	Manila Lodging	178,770.00	198,205.00
	DASS (Soil Lab.)	97,716.81	183,836.87
	Cebu Lodging	150,000.00	181,530.00
	Bindery	112,902.21	142,459.50
	Convention Center	123,523.00	128,401.00
	Ornamentals	159,075.00	127,909.00
	SDMU	145,799.20	123,997.60
	Infirmery	111,576.50	95,121.45
	PPO Shops	55,271.00	53,074.60
	Horti Nursery	40,790.00	41,250.00
	Sustained Yield	1,150.00	38,425.00
	Corn Seeds	66,329.00	32,987.75
	Recreation Center	44,750.89	31,221.16
	Beef/Carabeef	18,000.00	30,280.00
	College Library Fines	27,997.00	25,560.00
	Goat/Sheep	24,945.00	23,930.00
	Locally Grown Production	28,794.13	22,318.73
	Techno-guide Training	-	11,849.00
	Xerox/Handbooks	9,533.00	11,325.00
	PUV Fees	12,950.00	10,400.00
	High School Fines	9,238.00	8,260.00
	Coco Intercrop	-	6,295.00
	Nursery I	-	3,627.00
	FARMI Demo Farm/Seed Bank	5,341.50	2,926.93
	Seed Bank B	-	1,985.00
	Garden Memoir	2,458.00	1,304.00
	Duck/Poultry	2,900.00	1,200.00
	Coco Food	-	675.00
	Layer	4,993.20	-
	SUB-TOTAL	2,982,411.52	3,153,789.08
	GRAND TOTAL	12,818,879.33	13,128,606.01

Service Insurance System personnel to the faculty and staff of the University; improved administrative and financial management through the development of administrative staff by sending them to seminar-workshops in their related field of work; and enforced energy conservation measures through the adoption of motorless/carless day inside the campus and centralized monitoring of travels of staff using university vehicles.

1. The **Office of the Director for Administration (ODA)** and **Legal Office (LO)** completed the personnel audit of the Printing Press; facilitated the preparation and signing of an Agreement between LSU and 3 squatters residing in Lot Nos. 7226, 7224 and 1058 for them to vacate the lots once LSU needs them; drafted citations and finalized the plaques of all awardees during the 2006 Anniversary Convocation Program; conducted a pre-retirement seminar among LSU retirable staff; initiated the dialogue/open forum with Atty. Teresita Rojas, GSIS Manager; prepared LSU's comments to the request of the Department of Education (DepEd) before the Office of the Solicitor General for arbitration regarding the DepEd and LSU conflict arising from the MOA executed by the two offices; facilitated the follow-up of the case of non-returning scholars with the Office of Solicitor General in Manila; represented LSU during hearings at the Regional Trial Court, Baybay, Leyte in civil case filed by a former staff against the University;

prosecuted two administrative cases investigated by the LSU Formal Investigation Committee; submitted investigation report and drafted resolution on an administrative case against one faculty, vehicular accident resulting in the death of one LSU student, and investigated and recommended for Simple Misconduct one administrative staff; conducted preliminary investigations of different administrative complaints of LSU personnel; prepared the Decision and Formal Charge of an administrative case against an administrative staff; drafted resolution on the Motion for Reconsideration filed by one staff of LSU Tolosa Campus regarding penalty of the offense of Violation of Office Rules, Policies and Regulations; assisted LSU-Villaba Campus in settling the case as a result of a vehicular accident causing the death of the victim and likewise assisted in justifying financial assistance as humanitarian aid to the victim's family; drafted resolution on the sexual harassment case against two (2) LSULHS students; prepared the Compromise Agreement on the boxing incident of three college students; and facilitated the signing of a promissory note of a former LSU staff to pay her accountability to the University.

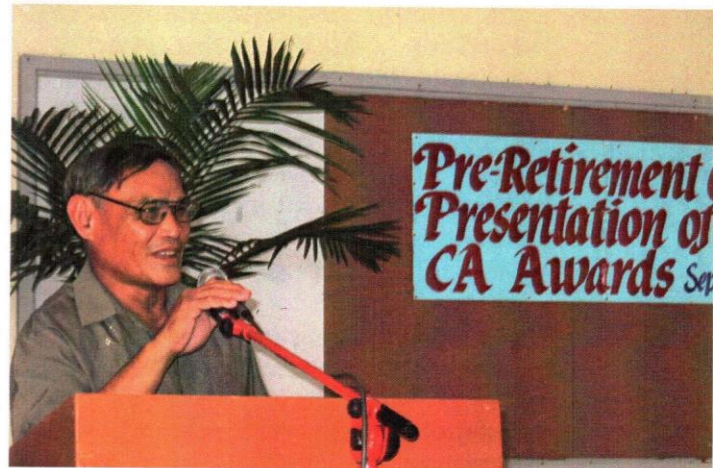
- a. The **Human Resource Management and Development Office (HRMDO)** facilitated the change of status of nine (9) personnel from temporary to permanent or lump sum to plantilla item, promotion of 6 personnel, and renewal of appointments of 289 personnel; coordinated with other offices the conduct of seminars on Pre-retirement Orientation and the Use of Internet; assisted in the PASUC 3rd cycle evaluation; and conducted an Echo Seminar on



Parade during the Culmination Program of the Civil Service month.

Mandarin Language to some LSU Officers for six sessions at 1 hour per session.

- b. The **Supply-Property Management Office (SPMO)** prepared and maintained record of the following documents: Acknowledgement Receipt of Equipment (ARE), Invoice Receipt of Property (IRP), Memorandum Receipt of Semi-Expendable and Expendable Properties (MR), Inventory Custodianship (ICS) of all properties acquired by the University as well as the Waste Material Reports and Inspection and Inventory Reports (WMR and I & I) of all unserviceable equipment and defective spare parts; conducted physical inventory of supplies and materials acquired either through DBM, PIU or Bidding and other properties; improved the storage of waste materials by conducting a general clearing of the storage building and re-arrangement of returned waste materials; renewed the registration of LSU vehicles and licenses of firearms; conducted inventory of accountabilities of staff and donated properties; facilitated the dropping from the Book of Accounts one (1) unit residential cottage; facilitated and assisted in the Relocation Survey of LSU landholdings, recording and filing of land maps and land titles, and description and other documents related to LSU landholdings; reconciled the Property Inventory Records of the LSU Main and satellite campuses with the Book of Accounts at the Accounting Division; inspected live farm animals for disposal and dead animals for disposal of records; compiled the Inventory Reports of Equipment and Facilities acquired through the Center of Excellence (COE) program of CHED; facilitated the procurement of requested items in 841 purchase requests of the different units of the University; prepared Inspection Reports and Stock Position Sheets



Dr. Jose M. Alkuino, Jr., VP for Administration and Finance, giving a message during the Pre-Retirement Orientation for retireable LSU employees.

of delivered supplies/materials/equipment (S/M/E); improved the system of withdrawal of S/M/E following the procedure suggested by COA; facilitated the payments of S/M/E to the different suppliers; conducted at least 2 biddings for the University needs; and sent 79 transmittals to Cebu as of November 22, 2006.

- c. The **Records Office (RO)** conducted inventory of records to determine their retention period based on the retention schedule of the DECS Department Order 13-A; submitted a Request of Authority to Dispose of Records to the Records Management and Archives Office (RMAO); disposed voluminous records by burying them in the presence of RMAO and COA representatives; bound memoranda, administrative orders, and memo circulars and systematically arranged them at the open shelf; delivered 8,640 documents and other messages from the Office of the President to the different units of the university; mailed 14,268 official mails and spent P194,724.00 for stamps; filed 14,976 documents/records to their respective folders; maintained the archives section; and monitored the attendance/punctuality of administrative staff of the university.

2. The **Office of the Director for General Services (ODGS)** constructed the following: Phase I of the IT building, columns and roof beams of the Souvenir Shop at the Molave Hill, beach resort pavilion and comfort rooms, birth room in the Infirmary, new access pathway from the LSU Market to the upper campus, ramps of four buildings for use by disabled persons, two comfort rooms for the Amphitheater, parking area of the Administration Building, and perimeter fence at the campus main entrance; concreted pathway to the Infirmary; repaired and repainted the Gymnasium and roof and ceiling of DLABS; roofing of Horticulture and High School buildings, ceilings and partition of Forestry buildings, DASS and AgChem buildings, staff cottages and apartments, ceiling frames and board and exterior walls of the Administration Building, Convention Center, and Oval Amphitheater, railings/doors and cabinets of DOF, and nursery of the College of Forestry; renovated the audio visual and seminar rooms and faculty office of DASVM; fabricated steel gate and railings of DOF and repaired various furniture; reconditioned Isuzu school bus and Elf 250, overhauled the engine of Toyota 33, and carried out minor repairs and maintenance of LSU motorized vehicles; maintained the water and electric power supply inside

the campus; repaired and maintained the overhead primary and secondary lines of the upper and lower campus, street/security lights of the upper and lower campus, lighting fixture outlets of 10 LSU buildings; attended to different job requests: 30 electrical and laboratory electronic equipment troubleshooting, 40 aircon and refrigerator repairs, 60 sound system and lettering services, 185 plumbing services, and 606 heavy equipment field operation and other services like lawn mowing, land excavation, hauling, and land preparation for research and production; maintained the cleanliness and beautification of campus grounds and roads; converted the waste disposal area from open to controlled dump site and continued to segregate the recyclable waste materials at the Materials Recovery Facility as well as the biodegradable and non-biodegradable wastes at the dumpsite; and repaired and maintained heavy equipment for farm and site developments.

The **LSU-Alangalang Campus** facilitated the processing of appointments of temporary and permanent faculty, retirement of one faculty member, and contracts of five part-time Instructors; installed electrical wirings for the New Library Building; repainted the Administration Building, New Library, Academic Building, and College Main Building; put up complete hollow blocks (CHB) fence adjacent to the main gate; renovated the restrooms in the Administration Building; partially constructed restrooms of the New Library Building and dirty kitchen of the Home-Technology Building; dismantled dilapidated ceiling of the High School Building; repaired restrooms ceiling board of the College Main Building; procured 40 items of equipment for instruction, research, extension, and general administration use.

The **LSU-Isabel Campus** facilitated the issuance of the Deed of Donation on the transfer of the 4-hectare land of the College to the Department of Education (DepEd); acquired additional computer units, laboratory apparatuses, books and



Newly established freshwater swimming pool at the LSU Garden Beach Resort.

LCD TV set; institutionalized an inventory system for college properties acquired, maintained, rehabilitated and repaired; completed the construction of 49 concrete stairs going to the Administration Building in the Upper Campus; repaired and repainted the walls, window grills, and roof of the Department of Teacher Education Building and the building that houses the Office of Student Affairs, Teacher Education Faculty Office and Dance Laboratory; continued the construction of the Guest House and comfort rooms in the upper campus; planted $\frac{1}{4}$ hectare of land with *Jatropha* for production and processing; and successfully initiated the 7th Grand Alumni Homecoming.

The **LSU Tolosa Campus** renovated/ repaired the Dean's Cottage, Medical and Dental Building, Faculty Room, Office of Student Affairs, Aqua-Fish Tech Building, First Phase of the College Students Center, and comfort rooms; improved the College water system; started the development of the proposed fishpond site at the back of the Administration Building; facilitated the turn-over ceremony and blessing of the donated two-room College Building and library books and references.

The **LSU-Villaba Campus** continuously enriched its educational resources following the suggestions of the External Program Management Review (EPMR) team; hosted the meeting of the Council of College Deans; repaired and renovated the college building, library, guest house, student center, nursery, motor pool, laboratory room and stock room for agricultural products; acquired instructional facilities, IT equipment and library facilities; and put up poultry and piggery projects.

MANPOWER RESOURCES

The LSU System had a total of 360 regular administrative personnel as of December 31, 2006, consisting of 292 regular personnel in the LSU Main (3 PhD, 20 MS, 125 BS, and 144 Undergraduate); 16 in LSU-Alangalang (1 PhD, 1 MS, 7 BS and 7 Undergraduate); 18 in LSU-Isabel (2 MS, 8

BS, and 8 Undergraduate); 18 in LSU-Tolosa (1 MS, 12 BS and 5 Undergraduate); and 16 in LSU-Villaba (1 PhD, 4 MS, 2 BS, and 9 Undergraduate). LSU Main Campus had a total of 174 casual/contractual employees.

TRAININGS

A total of 186 administrative staff attended 136 trainings (6 international, 29 national, 51 regional, and 50 local) on different areas of concern: banking industry, cancer awareness: cause and prevention, pre-retirement orientation, generic procurement manual of RA 9184, supply and property management; curriculum development for ladderized programs, from classroom to workplace; bridging the education and industry gap, orientation on the national scholarship qualifying examination and updates of various student financial assistance programs; server installation and maintenance and user operation of Sci-Net Integrated Library Management Systems; anti-sexual harassment E-CODI, reproductive health management, counseling approaches for lesbians/gays/bisexuals and transgender, assessing conduct disorders and related interventions, counseling, basic first aid; GSIS seminar-workshop, revised policies on personnel inspection and audit, CSC agency accreditation program; Mandarin Language teachers in the higher education level; preparation of agency remittances, mediation conference, call center operation, and cash management and control (Table 9).

DONATIONS

LSU-Tolosa Campus received donations from the Tacloban Filipino-Chinese Chamber of Commerce, Inc. for the construction of a two-room College Building and library books and references from Dr. Paciente A. Cordero, retired Executive Director of the NRCP and the Philippine Asia Foundation.

Table 9. Trainings, seminars, workshops, conventions attended by administrative staff in 2006

OFFICE/UNIT	International		National		Regional		Local	
	No. of Training	Participants	No. of Training	Participants	No. of Training	Participants	No. of Training	Participants
Office of the President								
ASHU	-	-	-	-	1	3	-	-
IASO	-	-	1	1	2	2	4	4
SUB-TOTAL	-	-	1	1	3	5	4	4
Office of the Vice President for Academic Affairs								
Graduate School	1	1	-	-	4	8	1	6
Registrar	-	-	2	6	-	-	2	3
USSO	1	1	5	5	5	6	3	4
ODREx	-	-	2	2	1	1	21	23
SUB-TOTAL	2	2	9	13	10	15	27	36
Office of the Vice President for External & Development Affairs								
ACRO	1	1	1	1	2	2	6	6
Manila Office	-	-	1	1	-	-	-	-
Hostel	-	-	-	-	-	-	4	4
DYAC	3	3	2	3	3	3	2	2
SUB-TOTAL	4	4	4	5	5	5	12	12
Office of the Vice President for Administration and Finance								
ODA	-	-	1	1	1	1	-	-
HRMDO -	-	1	1	5	5	1	2	
SPMO	-	-	1	1	4	4	-	-
Satellite Campuses								
LSU-Alangalang Campus -	-	-	4	6	7	15	2	4
LSU-Isabel Campus	-	-	4	6	2	2	-	-
LSU-Tolosa Campus	-	-	1	1	12	13	1	1
LSU-Villaba Campus	-	-	3	7	2	5	3	4
SUB-TOTAL	-	-	15	28	33	45	7	11
GRAND TOTAL	6	6	29	47	51	70	50	63

SIGNIFICANT EVENTS

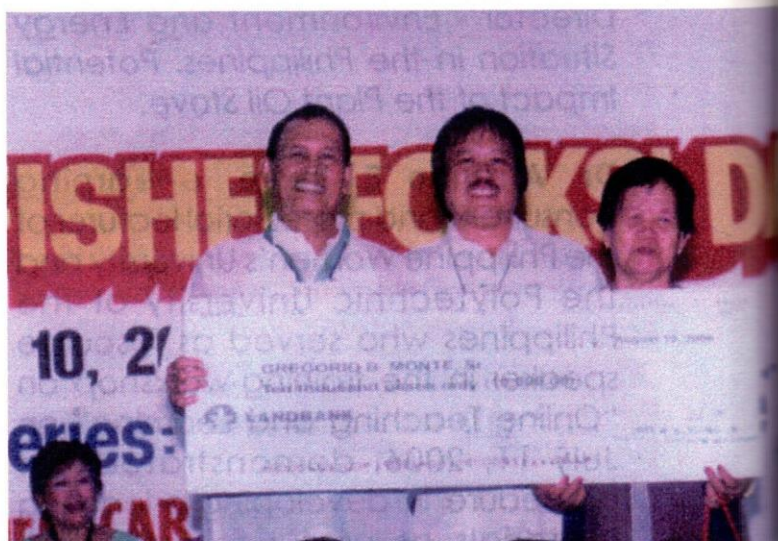


Prevention Campaign. Initiated by LSU President Dr. Paciencia P. Milan, the show featured the artistic designs of Mr. Janjoe Vega, a designer from Baybay, Leyte who is now based in Davao City.

- **Shiela T. Labana**, a BS in Hotel, Restaurant, and Tourism Management (BSHRTM) sophomore, was crowned as **Miss LSU 2006**. The other winners were: Charlane D. Cacho - 1st runner up, Anil Retse G. Hortelano - 2nd runner up, Charyl Q. Miramonte - 3rd runner up, and Sherma G. Mindajao - 4th runner up.
- The **Farmers and Fisherfolks' Day** which was held on August 10, 2006 drew the participation of 2,200 rural clientele who exchanged experiences and consulted with the agricultural scientists and experts their farming and fishing problems and concerns.
- **Hon. Oscar G. Garin**, Philippine Coconut Authority (PCA) Administrator and guest speaker for the LSU Farmers and Fisherfolks' Day, was represented by Mr. Edilberto V. Nierva, Region 8 PCA Manager. In his message which was read by Mr. Nierva, he revealed PCA's thrust to increase coconut production and profitability under the coconut comprehensive program "May Bilog sa Niyog: There is Money in Coconut". He acknowledged LSU's efforts in support of the coconut industry and considered the University a strong ally in PCA's crusade for the industry's advancement.
- **Congresswoman Carmen L. Cari** of the 5th District of Leyte presented to LSU through President Paciencia P. Milan checks worth P100,000 for the purchase of chemicals for abaca and banana bunchy-top disease detection; P20,000 in support of LSU's cancer awareness and prevention campaign; and P10,000 financial assistance for the Farmers and Fisherfolks' Day.
- **Mr. Gregorio B. Monte** of Doña Felisa Mejia, Ormoc City was awarded

as the **2006 Outstanding Farmer-Entrepreneur** with a cash prize of P10,000.00 and a plaque from Leyte Governor Jericho L. Petilla.

- **Senator Francis N. Pangilinan** was represented by Leyte Board Member, Atty. Carlo P. Loreto, as keynote speaker during the 82nd Anniversary Convocation on August 11, 2006. In his message read by Atty Loreto, the senator commended LSU "for promoting quality education despite the trying times". He emphasized that "education is indeed a potent tool in addressing the various challenges besetting the nation".
- The 82nd LSU Anniversary Friendship Games in basketball, volleyball and tennis elicited strong participation of LGUs of Ormoc City and Baybay, Leyte; PNOC-EDC; Mike L. Cari Basketball Team; OCCI Baybay; LSU Alumni; Western Leyte College; and Palermo Hotel. Moreover, 20 teams from the students participated in the Trail Running Competition with the Turbo Runners, Survivors Extreme and the Kamagong Racers as the first finishers.
- LSU accorded awards to the following institutions and individuals during its 82nd Founding Anniversary Convocation Program on August 11, 2006:



Mr. Gregorio B. Monte, 2006 Outstanding Farmer-Entrepreneur (left) and his wife, together with Dr. Edwin A. Balbarino of LSU, hold the symbolic check of his prize from Leyte Governor Jericho L. Petilla.

- ⇒ **Pagkaon Scholarship Program** of the Province of Negros Occidental through Gov. Joseph C. Marañon - *Sandigan Award*
- ⇒ **Dr. Ruben M. Gapasin** - *Outstanding Academician*
- ⇒ **Dr. Beatriz S. Belonias** - *Outstanding Teacher*
- ⇒ **Engr. Feliciano G. Sinon** - *Outstanding Researcher*
- ⇒ **Dr. Roberta D. Lauzon** - *Outstanding Extensionist*
- ⇒ **Dr. Lualhati M. Noriel** - *Exemplary Unit Head*
- ⇒ **Ms. Reminita J. Solis** - *Model Clerk*
- ⇒ **Mr. & Mrs. Romeo Capon** - *Family of the Year Award*
- ⇒ **Mr. Loreto Yu** - *Alumnus of the Year Award*
- ⇒ **LSU Credit and Development Cooperative** - *Special Award*
- ⇒ **Dr. Isabel P. Bertulfo, Dr. Perfecto U. Bartolini, Dr. Basilio A. Dabuet, and Dr. Lucelyn B. Ponce** - *Mt. Pangasugan Award*
- ⇒ **Mr. Pedro C. Bagarinao, Prof. Leonardo P. Canono, Prof. Jovita V. Dabuet, Mr. Mario C. Gamotin, Mr. Jesus S. Pabroquez, Mr. Manuelito C. Pala, Mr. Luis A. Sanchez, Prof. Josefina Q. Subere, Mr. Raul G. Tizon, Ms. Eufemia H. Alcober (LSU-Alangalang), Ms. Virginia D. Subere (LSU-Isabel), Ms. Erlinda A. Calignawan (LSU-Tolosa), and Ms. Salud A. Laurente (LSU-Villaba)** - *Service Award*

The **3rd Kaugmaran Festival** held in the morning of August 11, 2006 at the LSU Oval Grounds provided an exciting and colorful salvo to the anniversary day of LSU. Eight major groupings of the LSU System took turns to present their artistic interpretation of "labor" through dance during the showdown



Outstanding Teacher awardee, Dr. Beatriz S. Belonias, (top) and Outstanding Researcher awardee, Engr. Feliciano G. Sinon, (bottom) pose with LSU Pres. Paciencia P. Milan, Congresswoman Carmen L. Cari and Leyte Board Member, Atty. Carlo P. Loreto, during the awarding ceremonies.

and street dance parade. The LSU-Isabel Campus stood out as the best-performing group.

The winners in the different contest categories during the 2006 Flower and Garden Show were: **Best Landscape** - *Highway Gardens* (Mario E. Baliad) - 1st place; *Ormoc Petals* (Magdalena de los Santos-Larrazabal) - 2nd place; *Rimil's Evergreen* (Milagros C. Bales) - 3rd place; **Best Vanda & Best Dendrobium** - *Cheli's Garden* (Araceli G. Larrazabal) - 1st, 2nd & 3rd places; **Best Aroid "A"** - Noel Pantoja - 1st place; *Highway Gardens* (Mario E. Baliad) - 2nd place; *Villas Garden* (Sheila A. Villas) - 3rd place; **Best Aroid "C"** - *Highway Gardens* (Mario E. Baliad) - 1st place; *Chuana's Garden* (Chuana L. Pagador) - 2nd place; Noel Pantoja - 3rd place; **Best Flowering Pot Plant** - *Villas Garden* (Sheila A. Villas) - 1st and 2nd places; *Mitz Garden*



Winning entries (orchid category) during the LSU Flower and Garden Show.

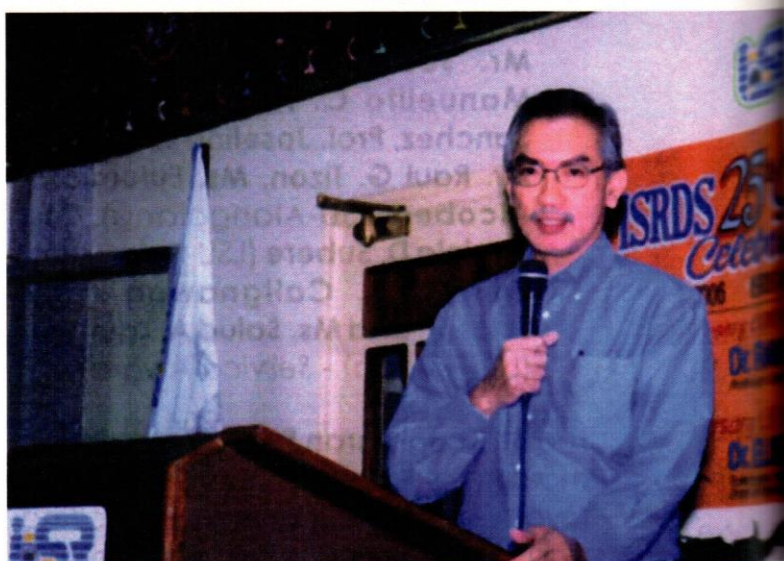
(Amelia A. Delalamon) - 3rd place; and **Best Booth** - K & K Garden Supply (Marcelita A. Valde) - 1st place; 3J Blooms and Greens (Villaluz Z. Acedo) - 2nd place; Highway Gardens (Mario E. Baliad) - 3rd place.

The winners in the different categories of the 2006 Anniversary Booth Competition were: **a) BOOTH OF THE YEAR** - College of Education; **b) COLLEGES:** 1st place, Most Symbolic and Environment-Friendly - College of Education; 2nd place and Most Artistic - College of Engineering and Agri-Industries; 3rd place - College of Agriculture; **c) RESEARCH CENTERS:** 1st place, Most Symbolic and Environment-Friendly - Philippine Root Crop Research & Training Center; 1st place and Most Artistic - National Coconut Research Center-Visayas; 2nd place - National Abaca Research Center; **d) STUDENT ORGANIZATIONS:** 1st place, Most Symbolic, Most Artistic & Environment-Friendly - LSU Laboratory High School Student Body Organization; 2nd place - VISCA Foundation Elementary School; 3rd place - College of Agriculture;

and **e) GOVERNMENT AND PRIVATE AGENCIES:** 1st place and Most Symbolic - **Department of Agriculture** (Municipal, Provincial and Regional Offices); 2nd place and Most Environment-Friendly - **Philippine Coconut Authority**; 3rd place and Most Artistic - **Philippine National Oil Company-Energy Development Corporation**.

Dr. Guo-An Wang, Foreign Assistant to the President and Director of International e-Trade Training Center of Zhejiang Gongshang University in Hangzhou, People's Republic of China, visited LSU on August 15-17, 2006 to initiate possible collaboration of LSU and his university especially on faculty, staff and students exchange.

Dr. Randolph C. David, sociology professor of the University of the Philippines in Diliman, Quezon City and renowned newspaper columnist, keynoted the 25th anniversary of the Institute for Strategic Research and Development Studies (ISRDS) on September 5, 2006. He talked on "The Future of Philippine Democracy" and emphasized that good governance means having a modern institutional system and public officials who abide by the rules and service ethics.



Dr. Randolph C. David, keynote speaker during the 25th anniversary of the Institute for Strategic Research and Development Studies.



LSU President Paciencia P. Milan, Leyte Board Member Carlo Loreto, and SSC President Dominador Cabangan (3rd, 4th and 5th from left, respectively) pose with NARSUC officials led by Prof. Ma. June Carlos (extreme right) during the 3rd National Convention of NARSUC.

- **The LSU Choral Ensemble** held a concert dubbed "Musical Kaleidoscope" on October 5, 2006 at the LSU Convention Center. It entertained the LSU community with a variety of music from romantic to ethnic, folk, popular, secular, and children's songs sang mostly in a capella.
- **Mr. Rey Evangelista**, LSU alumnus and former ViSCA Basketball Varsity member who is now a professional Philippine Basketball Association (PBA) player under the Purefoods Chunky Giants, donated three pairs of snap-back automatic basketball goal rings (official size) to the Institute of Human Kinetics (IHK) on August 8, 2006 after conducting a basketball clinic for the LSU Basketball Varsity members.
- LSU hosted the following workshops, conventions, and fora during the year:
 - ✓ **Regional Strategic Planning Workshop on Poverty Reduction and Food Security** on April 18-20, 2006 - to strengthen NGO-GO-academe partnership, support participatory local governance, and establish a database and monitoring system on poverty and food security. The activity was organized by LSU through the Institute for Strategic Research and Development Studies (ISRDS) in cooperation with the Friedrich Ebert Stiftung (FES)-Philippines and Kaisampalad, Inc.
 - ✓ **3rd National Convention of the National Association of Registrars of State Universities and Colleges (NARSUC)** on April 26-28, 2006 with the theme "SUC Registrars: Adapting to an Ever-changing Educational Landscape". The convention was designed to spur dynamism among registrars of state universities and colleges in meeting the growing challenges of their profession especially with the advent of globalization.
 - ✓ **National Statistics Office (NSO-Region 8) Awareness Forum** on July 14, 2006 - to create awareness among LSU constituents on the functions and activities of NSO and the latest data/statistics. NSO representatives led the discussions on issues related to the civil registration system of the country as part of NSO's continuing education program for the implementers of Civil Registration Laws/Rules/Regulations.
 - ✓ **International Training on Soil Examination and Fertility Evaluation** on August 16-18, 2006

- to orient professors/teachers and graduate students in soil, crop, forestry, and environmental sciences new methods of soil examination and handling. The activity was co-sponsored by LSU's Department of Agronomy and Soil Science (DASS) and Institute of Tropical Ecology (ITE) and the Institute of Soil Science and Plant Nutrition (ISSPN) of Martin Luther University in Halle, Germany. It was participated in by 21 teachers from the different universities in the Philippines and graduate students taking forestry and agro-ecology from the University of Goettingen and University of Hohenheim, both in Germany.

- ✓ **11th Tropical Ecology Seminar-Workshop** on August 20-25, 2006, which focused on the structure, function and man's impact on Southeast Asian Ecosystems and aimed to provide the participants more insights into

the processes forming tropical habitats and communities, both natural and man-made giving emphasis on diversity, dynamics and community interactions, protection of natural resources, and land use patterns. One of the highlights of the seminar-workshop was the field trip to Guinsaugon, St. Bernard, Southern Leyte, wherein the participants were tasked to investigate the barangay's fragile ecosystem and the main cause of the landslide.

- ✓ **DepEd Region 8-sponsored "In-Service Training for New Elementary and Secondary Teachers in Mathematics, Science and English** on October 23-27, 2006, to further improve teachers' competence in line with the goal to produce globally competitive Filipino citizens/workers and gathered 182 participants from the Divisions of Leyte, Southern Leyte, Ormoc City, and Maasin City.

AWARDS



AWARDS RECEIVED BY FACULTY AND RESEARCH STAFF

NAME OF AWARD	RECIPIENT	AGENCY	DATE
INTERNATIONAL LEVEL			
International Alumni Award	Dr. Eliseo R. Ponce	College of Food, Agricultural, and Environmental Sciences, Ohio State University	Feb. 25, 2006
Spoken English Promotion Project (SEPPT) Excellent Teaching Assistant Certificate	Ms. Ma. Christina A. Gabrillo Mr. Randy G. Omega, Mr. Ernesto F. Bulayog	Zhejiang Gongshang University, China	Oct. 30, 2006
NATIONAL LEVEL			
Outstanding R & D Project (Applied Research Category)	Dr. Bernardita P. Germano Ms. Senona A. Cesar Ms. Analyn M. Mazo	DA-BAR	January 2006
1 st runner up - Best Paper Award (Non-NCR Category)	Engr. Feliciano G. Sinon Engr. Alberto C. Martinez, Jr.	Phil. Council for Industry & Energy Res. & Dev't. of the Dept. of Scie & Tech (PCIERD-DOST)	Feb. 17, 2006
Best Paper Award (Agriculture Structures, Post Harvest and Management Category)	Engr. Feliciano G. Sinon Engr. Macuin F. Delantar	PSAE	April 17-21, 2006
Finalist - National Gawad Saka	Dr. Edgardo E. Tulin	Dept. of Agriculture	May 10, 2006
Best Paper Award (Upstream Research Category)	Dr. Lucia M. Borines	CSSP	May 8-12, 2006
3 rd place - Best Poster	Dr. Lutgarda S. Palomar Dr. Rotacio S. Gravoso Ms. Lorena A. Galvez B. L. Cinto, A. O. Lustre A. V. A. Resurreccion	NRCP	May 11-12, 2007
PARRFI Professorial Chair Award	Dr. Victor B. Asio	PARRFI	Sept. 2006
Best Paper Award (Professional Category)	Dr. Bernardita P. Germano Ms. Jenny Lyn F. Melgo Ms. Julissah C. Evangelio	FIMFS	Oct. 21, 2006
Best Poster Award	Mr. Art Russel Flandez	FIMFS	Oct. 21, 2006
Pantas Award	Dr. Paciencia P. Milan	PCARRD	Nov. 10, 2006
Best Paper Award (Basic Research Paper Category)	Dr. Edgardo E. Tulin Ms. Zenaida T. Ecleo	PCARRD	Nov. 10, 2006

NAME OF AWARD	RECIPIENT	AGENCY	DATE
1 st place - Best Research Paper Award	Ms. Senona A. Cesar Dr. Bernardita P. Germano Ms. Analyn M. Mazo	PCAMRD Zonal Center Visayas	Nov 14, 2006
REGIONAL LEVEL			
2006 Regional Gawad Saka Award (Outstanding Agricultural Scientist)	Dr. Edgardo E. Tulin	Dept. of Agriculture (DA) Region 8	May 26, 2006
3 rd place - Best Paper Award	Dr. Fe M. Gabunada Ms. Edna N. Yu Ms. Quirina R. Bade Ms. Clarissa E. Boysillo	DA-Region 7	July 19, 2006
1 st place - Outstanding Basic Research	Dr. Edgardo E. Tulin Mrs. Zenaida T. Ecleo	ViCARP-DA-8	Aug. 24, 2006
3 rd place - Outstanding Basic Research	Dr. Lucia M. Borines Prof. Reny G. Gerona, et. al	ViCARP-DA-8	Aug 24, 2006
Best Paper Award (Basic Research Category)	Dr. Lina T. Villacarlos Dr. Carlos S. de la Cruz	ViCARP-DA-8	Aug. 24, 2006
1 st place - Outstanding Applied Research	Dr. Bernardita P. Germano Ms. Senona A. Cesar Ms. Analyn M. Mazo Ms. Julissah C. Evangelio	ViCARP-DA-8	Aug. 24, 2006
2 nd place - Outstanding Applied Research	Dr. Lemuel M. Diamante	ViCARP-DA-8	Aug. 24, 2006
2 nd place - Outstanding Development Research	Dr. Lelita R. Gonzal Mr. Gavino N. Bastasa Ms. Patricia P. Santiago Mr. Gil A. Guadalquiver Dr. Bimbo T. Mandras	ViCARP-DA-8	Aug. 24, 2006
Best R & D Poster Award (Engineering, Energy & Industry Category)	Prof. Ramon R. Orias Prof. Julieta R. Roa Dr. Julie D. Tan Dr. Juan P. Labra Ms. Luzvisminda A. Ternura	ViCARP-DA-8	Aug. 24, 2006
Best R & D Poster Award (Agriculture Category)	Dr. Jose L. Bacusmo Mr. Ulysses A. Cagasan Mr. Federico P. Godoy, Jr. Mr. Enrique B. Abogadie	ViCARP-DA-8	Aug. 24, 2006
INSTITUTIONAL LEVEL			
Keeper of Service Award	Prof. Norma B. Mesorado Prof. Eliseo P. Pastrano Dr. Alan L. Presbitero Dr. Justino M. Quimio Dr. Salome B. Bulayog	USSO-LSU	Feb. 21, 2006

NAME OF AWARD	RECIPIENT	AGENCY	DATE
1 st place - Best Basic Research	Dr. Edgardo E. Tulin Ms. Zenaida T. Ecleo	LSU-DA8-RRDEN	June 28, 2006
2 nd place - Best Basic Research	Dr. Lucia M. Borines Prof. Reny G. Gerona	LSU-DA8-RRDEN	June 28, 2006
3 rd place - Best Basic Research	Prof. Villaluz Z. Acedo	LSU-DA8-RRDEN	June 28, 2006
1 st place - Best Applied Research	Dr. Lemuel M. Diamante	LSU-DA8-RRDEN	June 28, 2006
2 nd place - Best Applied Research	Dr. Bernardita P. Germano Ms. Senona A. Cesar Ms. Analyn M. Mazo Ms. Julissah C. Evangelio	LSU-DA8-RRDEN	June 28, 2006
1 st place - Best Development Research	Dr. Lelita R. Gonzal Mr. Gavino M. Bastasa Ms. Patricia P. Santiago Dr. Bimbo T. Mandras	LSU-DA8-RRDEN	June 28, 2006
2 nd place - Best Development Research	Prof. Alan B. Loreto Ms. Ma. Cristina A. Gabrillo Ms. Ma. Elsa Umpad Engr. Dale P. Loreto Mr. William A. Hubahib	LSU-DA8-RRDEN	June 28, 2006
Outstanding Academician	Dr. Ruben M. Gapasin	LSU	Aug. 11, 2006
Outstanding Teacher Award	Dr. Beatriz S. Belonias	LSU	Aug. 11, 2006
Outstanding Researcher	Engr. Feliciano G. Sinon	LSU	Aug. 11, 2006
Outstanding Extensionist	Dr. Roberta D. Lauzon	LSU	Aug. 11, 2006
Exemplary Unit Head	Dr. Lualhati M. Noriel	LSU	Aug. 11, 2006
Model Clerk	Ms. Reminita J. Solis	LSU	Aug. 11, 2006
CHED-COE Professorial Chair Award	Dr. Victor B. Asio	CA-CHED-COE	Sept. 29, 2006
CHED-COE Outstanding Researcher	Dr. Antonio L. Acedo, Jr.	CA-CHED-COE	Sept. 29, 2006
CHED-COE Outstanding Teacher Award	Dr. Ma. Juliet C. Ceniza	CA-CHED-COE	Sept. 29, 2006
CHED-COE Publication Award	Dr. Victor B. Asio	LSU-CA-CHED-COE	Nov. 2006
Special Service Award	Prof. Vicente B. Antipaso	Municipality of Baybay, Leyte	

AWARDS RECEIVED BY STUDENTS

NAME OF AWARD	RECIPIENT	AGENCY	DATE
INTERNATIONAL LEVEL			
Spoken English Promotion Project (SEPP) Excellent Teaching Assistant Certificate	Ms. Cherrie D. Atilano Mr. Jonap J. Borlado Mr. Joseph Gil A. Enriquez	Zhejiang Gongshang University, China	Oct. 30, 2006
NATIONAL LEVEL			
2 nd place (Classic Guitar Instrumental Solo)	Rejie Tuyor	3 rd National PASUC Cultural-Literary Festival	July 4, 2006
REGIONAL LEVEL			
1 st place in Intel Phil. - Individual Category	Hannah Pamela D. Tan	Regional INTEL Philippines	Jan. 7-8, 2006
1 st place in Intel Phil - Group Category	Eula Marie C. Mangaoang Justine Jane S. Lasquites Yzamer Pet M. Maratas	Regional INTEL Philippines	Jan. 7-8, 2006
2 nd place in Intel Phil - Group Category	Joseph Niel V. Abapo Renelle Joy A. Tabinas Praissie Jo Anne N. Valencia	Regional INTEL Philippines	Jan. 7-8, 2006
1 st place- Guitar Solo	Rejie Tuyor	3 rd PASUC-8 Cultural-Literary Festival	June 23, 2006
1 st place - Vocal Duet	Marife Lagumbay Reginald Detabali	3 rd PASUC-8 Cultural-Literary Festival	June 23, 2006
1 st place - Choral Singing	Joris Alesna Wilfredo Andrade, Jr. Buen Josef Andrade Jerwin Capuyan Reginald Detabali April Anne Diamante Krisma Erika Flores Elealeh Ruth Gruta Marife Lagumbay Christine Muertigue Jonalyn Malasaga Angelo Jay Noriel Liza Lagumbay Efren Pelen Elto Pilo Michael Poliquit II	3 rd PASUC-8 Cultural-Literary Festival	June 23, 2006
2 nd place - Dance Sport	Jovel Aberilla Charmaine Lee Calingacion	3 rd PASUC-8 Cultural-Literary Festival	June 23, 2006

NAME OF AWARD	RECIPIENT	AGENCY	DATE
1 st place - Jingle Singing (College Level)	Neil Anthony Rusia Marlon Prado Jerwin Capuyan	Baybay Municipal Solid Waste Mgt. Council	Sept 4-5, 2006
2006 LSU Singing Idol, Best Alternative Rock Performer, Best in Production	Doreen Alba	USSC	Nov. 17, 2006
1 st runner up - LSU Singing Idol, Best Ballader, Best RNB Performer	Lemuel Espinazo	USSC	Nov. 17, 2006
2 nd runner up - LSU Singing Idol	Vanessa Astillero	USSC	Nov. 17, 2006

PUBLICATIONS



*Small-scale Forest Economic
Management and Policy*

Vol. 4 • No. 7

**Rainforests
Sites Project**



**SCIENCE &
HUMANITIES
JOURNAL**
VOL. 5, 2005



**ACIAR SMALL
FORESTRY PROJECT**



**ASEM/2000/
Redevelopment of the
Timber Industry for
Extensive Land Conversion**



**Proceedings from the
End-of-Project Workshop
Held in Ormoc City,
The Philippines
19-21 August 2004**



Edited by
Steve Harrison, John Herbohn,
Jungho Suh, Eduardo Mangaoang
and Jerry Vancley

July 2005



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Philippines

PUBLICATIONS AUTHORED BY FACULTY MEMBERS AND RESEARCHERS

AUTHOR	TITLE	WHERE PUBLISHED
Alfante, N. P. and T. A. Patindol. 2005	Physical and Chemical Characteristics of Two Wetlands in Lake Danao Natural Park, Ormoc City	Annals of Tropical Research, 27 (2); 53-68 (released in 2006)
Asio, V. B., C. C. Cabuños and Z. S. Chen. 2006	Morphology, Physicochemical Characteristics, and Fertility Status of Soils from Quaternary Limestone in Leyte, Philippines	Soil Science (USA), 171(8):648-661
Balbarino, B. C. and Ma. J. C. Ceniza. 2005	Biology of <i>Coccinella transversalis</i> Muls. (Coleoptera: Coccinellidae)	Annals of Tropical Research, 27 (2); 43-52 (released in 2006)
Balbarino, E. A. et al. 2006	Tamdanan sa Pagparehistro, Pagputol, Paghakot, ug Pagbaligya sa Kahoy sa Mga Pribadong Yuta	ACIAR Smallholder Tree Farmer Project, ISBN 978-971-592-122-3
Capuno, R. F. et al. 2006	Potential for Crop Diversification in Rice Producing Provinces: The Case of Leyte 2006	Why does the Philippines Import Rice? Meeting the Challenges of the Liberalization. IRRI, PhilRice
Cedamon, E. D., J. Baynes and S. Bernaldez. 2006	Trials and Tribulations in Locating Tree Farmers and Sites for Research and Extension Activities	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Cedamon, E. D., E. O. Mangaoang, N. O. Gregorio, A. E. Pasa, and J. L. Herbohn . 2005	Nursery Management in Relation to Root Deformation, Sowing and Shading	Annals of Tropical Research, 27 (1); 1-10 "Special Issue on Socio-Economic Research in Small-holder Forestry" (released in 2006)
Cedamon, E. D., N. Emtage, J. Suh, J. L. Herbohn, S. Harrison	Present Tree Planting and Management Activities in Four Rural Communities in Leyte Province, the Philippines	Annals of Tropical Research, 27 (1); 19-34. "Special Issue on Socio-Economic Research in Small-holder Forestry" (released in 2006)
Cedamon, E. D., N. F. Emtage, J. Suh, J. L. Herbohn, S. R. Harrison, and E. O. Mangaoang. 2005	Present Tree Planting and Management Activities in Four Rural Communities in Leyte Province, The Philippines	Annals of Tropical Research, 27 (1); 19-34 (released in 2006)
Dejaño, B. J. and R. R. Javier. 2005	Performance of Ratoon Rice Under Different Stubble Cuttings and Fertilizer Management	Sci. & Hum. Jour. (5):42-54(released in 2006)

AUTHOR	TITLE	WHERE PUBLISHED
Diputado, M. T., Jr., M. B. Loreto and J. I. Mangmang. 2005	Evaluation of a Simple Re-Circulating Hydroponic System for Sweet Pepper (<i>Capsicum annum</i> L.) and Pechay (<i>Brassica napus</i> L.)	Annals of Tropical Research, 27 (2); 18-30 (released in 2006)
Escalada, R. G. and L. M. Noriel. 2006.	General Weed Science: An Instructional Module in Weed Science	Multi-Media Dev't. Center. ISBN No. 9780592-123-0. 171 pp.
Evangelio, J. C. and B. P. Germano. 2006	Screening of Blue Crab (<i>Portunus pelagicus</i> L.) Eyestalk Extracts for Growth Inhibition of <i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> (Hauber et al. 1998) (<i>Erwinia carotovora</i>) Jones (Holland) and <i>Ralstonia solanacearum</i> (Yabuuchi et al. 1995) (<i>Pseudomonas solanacearum</i>) E. F. Smith	Annals of Tropical Research, 28 (2); 92-110
Gabunada, F. M and A. C. Rola. 2005	Farmers' Knowledge and Adoption of Sustainable Land-Use Management Systems in Matalom, Leyte, Philippines	Annals of Tropical Research, 27 (2); 1-17 (released in 2006)
Galvez, F. C. F., L. S. Palomar, M. L. dL. Francisco, A. O. Lustre, and A. V. A. Resurreccion. 2006	Filipino Consumer Preferences for Peanut Butter	Annals of Tropical Research, 28 (1); 58-69
Gregorio, N., J. L. Herbohn, and S. R. Harrison. 2005	The Potential Role of Nurseries in Improving Access to High Quality Planting Stock and Promote Appropriate Silvicultural Systems to Improve the Productivity of Smallholder Tree Farms in Leyte, Philippines	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Jahn, R., H. P. Blume, V. B. Asio, O. Spaargaren, and P. Schad. 2006	Guidelines for Soil Description (4 th edition)	Food & Agric. Org. (FAO) of the United Nations, Rome. 97pp
Labrador, M. B. and T. A. Patindol. 2006	Distribution and Abundance of Avifauna on the Foothills of Mt. Pangasugan, Baybay, Leyte, Philippines	Annals of Tropical Research, 28 (2); 111-128
Lee, C. H., M. Y. Wu, V. B. Asio, and Z. S. Chen. 2006	Using a Soil Quality Index to Assess the Effects of Applying Swine Manure Compost on Soil Quality Under Crop Rotation System in Taiwan	Soil Science (USA), 171 (3): 210-222
Loreto, A.B., M. A. Quevedo, A. M. Mariscal, M. Okazaki, and K. Toyota. 2006	Improvement of the Traditional Sago Starch Processing in the Philippines	Sago Palm Journal, 14 (1)
Mangaoang, E. O, E. D. Cedamon, and A. E. Pasa	Cost-Effective Systems for Seedling Production and Tree Farm Establishment	Annals of Tropical Research, 27 (1); 11-18. "Special Issue on Socio-Economic Research in Small-holder Forestry" (released in 2006)

AUTHOR	TITLE	WHERE PUBLISHED
Mangaoang, E. O. et al. 2006	Primer on Tree Registration, Harvesting, Transport and Marketing Policies in Private Lands	ACIAR Smallholder Tree Farmer Project, ISBN 971-592-120-9
Mangaoang, E. O. et al. 2006	Giya han Pagpa-rehistro, Panmulod, Pagbiyahe ngan an mga Palisiya han Pamaligya han mga Kahoy dida ha mga Pribado nga Tuna	ACIAR Smallholder Tree Farmer Project, ISBN 978-592-121-6
Mangaoang, E. O., J. L. Herbohn, S. R. Harrison, and E. D. Cedamon. 2005	Overcoming Problems With Tree Registration and Log Transport Permits for Smallholder Tree Farmers in Leyte	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Mazo, A. M., B. P. Germano, J. L. F. Melgo, J. C. Evangelio. 2006	Growth, Mortality, Recruitment and other Fishery Parameters of the Spider Conch, Lambis lambis (Linn.1758) in Guiuan, Eastern Samar and Maasin, Southern Leyte, Philippines	Journal of Aquatic Resources, 3: 56-65
Harrison, S. R., T. J. Venn, R. Sales, E. O. Mangaoang, and J. L. Herbohn. 2005	Estimated Financial Performance of Exotic and Indigenous Tree Species in Smallholder Plantations in Leyte Province	Annals of Tropical Research, 27 (1); 67-80. "Special Issue on Socio- Economic Research in Small-holder Forestry" (released in 2006)
Harrison, S. R., E. Germano, E. O. Mangaoang, E. E. Nasayao. 2005	Collaboration Between University Researchers and the Department of Environment and Natural Resources to Improve the Approval Framework for Tree Registration	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005 The University of Queensland, Australia
Harrison, S. R., J. L. Herbohn, and E. O. Mangaoang. 2005	Developing Leyte Forest Policies Based on Project Findings and Carrying Out Technology Transfer Activities.	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Harrison, S. L., J. Baynes, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay. 2005	Researching Incomplete Markets: A Strategy for Timber Market Research in Leyte	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia

AUTHOR	TITLE	WHERE PUBLISHED
Harrison, S. L., J. Suh, E. O. Mangaoang, S. Bulayog, and J. L. Herbohn. 2005	Modelling Timber Supply and Demand Associated With Existing Tree Farms Within Leyte Including External Markets	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Harrison, S. L., J. L. Herbohn, and E. O. Mangaoang. 2005	Creating a Market for Small-holder Timber in Leyte Province: A Mechanism for Bringing Timber Buyers and Sellers Together	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005, The University of Queensland, Australia
Loreto, A. B., M. A. Quevedo, A. M. Mariscal, M. Okazaki, and K. Toyota. 2006	Improvement of the Traditional Sago Starch Processing in the Philippines	Sago Palm Journal, Vol. 14, No. 1
Montilla, N.A., L.C. Bestil and S.C. Bantugan. 2006	Performance of Broilers Fed with Low Proetin Diets with Lysin and Methionine Supplements	Sci. & Hum. Jour. (6): 47-59
Palomar, E. R. M. S. and R. S. Gravoso. 2006	Effects of Video-Mediated Student-Centered Learning Environment on Students' Understanding of Plant Pathology Principles	Annals of Tropical Research, 28 (2); 32-52
Patindol, T. A. and E.P. Pacardo. 2006	Tree Utilization Patterns in Selected Protected Areas in the Visayas	Sci. & Hum. Jour. (6):
Peque, D. P. 2005	Impediments to Microfinancing of Smallholder Forestry on Leyte Island, the Philippines	Annals of Tropical Research, 27 (1); 81-90. "Special Issue on Socio-Economic Research in Small-holder Forestry" (released in 2006)
Perez, R. H. and J. D. Tan. 2006	Production of Acidophilus Milk Enriched with Purees from Colored Sweetpotato (<i>Ipomoea batatas</i> Linn) Varieties	Annals of Tropical Research, 28 (1); 70-85
Polinar, A. N. 2006	Tree Species Diversity in Leyte State University Forest Reservation, Philippines.	Sci. & Hum. Jour. (6):
Predo, C. D. and H. A. Francisco. 2006	Understanding Tree-Growing Decisions of Smallholder Farmers in Claveria, Northern Mindanao, The Philippines.	Philippine Journal of Crop Science (PJCS), 31 (3):3-20
Predo, C. D., D. James. 2006	A User Manual for Benefit Cost Analysis Using Microsoft Excel	Economy and Environment Program for Southeast Asia, (DRC, Singapore) URL: http://www.idrc.ca/uploads/user-S/11595133421/Excel_Guidebook_V7.pdf

AUTHOR	TITLE	WHERE PUBLISHED
Quimio, J. M. 2006	Abundance Status of Flora in Mananga-Kotkot-Lusaran Watersheds, Cebu, Philippines	Annals of Tropical Research, 28 (2); 53-75
Russel, I. E. O. Mangaoang, S. R. Harrison, J. L. Herbohn, and J. Baynes. 2005	An Approach to Improving the Flow of Information for Forestry Regulation in the Philippines: Trees for Life and Livelihood	Proceedings of the Project Planning Workshop (Suh, J., S. R. Harrison, J. L. Herbohn, E. O. Mangaoang, and J. K. Vanclay (eds), Feb. 15-17, 2005, Ormoc City, Phil., copyright 2005 The University of Queensland, Australia
Ramirez, L. V. and E. G. Cagasan. 2005	Citation Analysis of R & D Articles of VICARP Researches	Sci. & Hum. Jour. (5):55-69(released in 2006)
Ratilla, B. C. and R. G. Escalada. 2006	Time of Incorporation of Field Legume Herbage and Its Influence on the Growth and Yield of Upland Rice	Annals of Tropical Research, 28 (2); 12-31
Rosillo, A.P. and M.M. Belarmino. 2006	Production of Plantlets from Crown Explants of Pineapple Variety "Queen"	Sci. & Hum. Jour. (6): 60-74
Sabijon, M.T. and M.J.C. Ceniza. 2006	Natural Enemies of <i>Micraspis crocea</i> Mulsant (Coleoptera: Coccinellidae)	Sci. & Hum. Jour. (6): 18-30
Shrestha, A., K. Toyota, Y. Nakano, M. Okazaki, A. B. Loreto, M. A. Quevedo, A. M. Mariscal. 2006	Nitrogen fixing activity in various parts of sago palm (<i>Metroxylon sagu</i>) and characterization of aerobic-nitrogen fixing bacteria in sago palm	Sago Palm Journal, 14 (1)
Sinon, F. G. and A. C. Martinez, Jr. 2006	Development of a Village-Level Abaca Twisting Machine	Phil. Journal of Crop Sci. 31 (2); 3-14
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Susaya, J. P. and V. B. Asio. 2005	Status of Phosphorus in the Rain Forest Ecosystem of Mt. Pangasugan, Leyte, Philippines	Annals of Tropical Research, 27 (2); 69-80 (released in 2006)
Teves, K. L. Y. and A. C. Y. Sandoval. 2005	Credit Cooperatives and the Socio-economic Development of the Community	Sci. & Hum. Jour. (5):70-80 (released in 2006)
Tulin, A. B. 2005	Characteristics of Interlayer Materials in Non-Allophanic Volcanic Ash and Red Yellow Soils from Japan	Sci. & Hum. Jour. (5):1-23 (released in 2006)
Tulin, A. B. and S. Kawai. 2005	Phosphorus Content of an Acid Soil and Sweetpotato Uptake as Affected by Nitrogen Application	Sci. & Hum. Jour. (5):24-41 (released in 2006)
Varela, R. P. and L. T. Villacarlos. 2006	Community Structure of Arthropods in Agusan del Norte Lowland Ricefields	Annals of Tropical Research, 28 (1); 36-47

COLLABORATION

LSU entered into memoranda of agreement/understanding with the following institutions/agencies/persons: *College of Bioresources and Agriculture of National Taiwan University* - exchange of materials in education and research, publications and academic information, exchange of faculty members and research scholars in approved programs, exchange of students in comparable or similar degree programs, and joint research activities and meetings for education and research which are agreeable to both parties following standard protocol that would promote international academic cooperation; *Zhejiang Gongshang University of China* - exchange of faculty members and students, joint research projects, academic and cultural programs, conferences and cultural trips and exchange of journals; *Tokyo University of Agriculture and Technology (TUAT)* of Koganei, Tokyo, Japan - collaborative research on the projects, "Nutrient and Water Balance for Sago (*Metroxylon sago*) Intercropped with Taro" and "Inventory and Starch Profiling of Sago in Region VIII"; *Saitama Medical School (SMS) Research Center for Genomic Medicine* in Hadakashi, Saitama, Japan - joint research on "Identification and Characterization of Protein Mimetics Derived from Yam

as a Physiologically Active Substance Having Beneficial Effects on Hypertension and Metabolic Syndrome"; *University of Hohenheim (UH)* - research and development contract for the Phase 2 of the PPP-ABACA (Public-Private Partnership-Alliance for Biodiversity, Agroforestry and Community-based Activities on Natural Fibers-Utilization in Automotive Industry dubbed "Sustainable Production of Abaca Plant Fiber-Philippines," focusing, among others, on the cultivation and processing of abaca fibers to be used as raw materials for the production of composites for various parts of DaimlerChrysler automobiles; *Dr. Fernando A. Bernardo and Dr. Emilian N. Bernardo* - scholarship of LSU students who are poor but deserving in support of the thrust to maintain high standard of academic performance especially in the field of agriculture; *United Coconut Planters Bank (UCPB)-CIIF Foundation, Inc. (COCOFOUNDATION)* - scholarship of LSU freshmen students who have the commitment, determination and potentials to pursue higher education in college or vocational levels; and *Manuel-Cresencia Loreto Clan Scholarship* - student scholarship.



Signing of the Memorandum of Agreement between LSU (Dr. Paciencia P. Milan) and Zhejiang Gongshang University of China (Prof. Gou-An Wang) on the exchange of faculty members and students and joint research projects (left photo); and signing of the Collaborative Research Agreement by (R-L) Dr. Tulin and Dr. Schonbach, project's principal investigators, together with LSU President Paciencia P. Milan and VP for Development and External Affairs Manuel K. Palomar (right photo).

ACQUISITIONS/FACILITY DEVELOPMENT

SU's academic departments/institutes/colleges, research centers, and offices/units acquired the following equipment and other resources through purchase, donation, construction or repair:

Departments of the College of Agriculture

- 1 unit each of air conditioner, computer monitor, 54" projection tv set, big television projector, DVD player, portable wireless amplifier, digital microscope, stereo microscope with video cam, pipetor (0.5-2.0 ml), triple beam balance, pH meter, and immersion heater; 2 units each of digital pH meter, scanner, refrigerator and documentary video tapes; 2 heads junior bulls, fabricated 2 units steel gates and iron fence; 3 units each of pH meter, printer and UPS; 11 units computers; upgraded a computer for the GIS for Social Science Decision Support Laboratory; upgraded 2 overhead projectors; established/constructed a Nursery Shed House; repaired the Rodeo Arena, buildings, and laboratories; tiled the lavatory of the Animal Meat Processing Laboratory and training room of ISRDS; renovated staff room; put up a ramp for the disabled clients; enhanced the DDC Digital Studio with file server, UPS, office stations with USB drive plus flat monitors with speakers, web camera and headphones, and Voice over IP headphones and other gadgets.

Departments of the College of Arts and Sciences

- 1 unit each of Haemocytometer, Electrophoresis, UV Spectrophotometer, water dispenser, stainless laboratory sink, storage cabinet for AV equipment, Bench pH/Conductivity Meter, and an 8-Port 10/100 Switch; 2 units each of pH electrode and adjustable micropipettors with 1 pack pipette tips, videocontroller card, portable overhead projectors, blood clotting pipettes, storage boxes for overhead projectors; 3 units each of Triple Beam Balance and stethoscope; 4 sphygmomanometer; 6 Nikon 10x microscope objectives; 8 Nikon 40x microscope objectives; 10 dropping bottles; 24 units ceiling fans; assorted prepared slides and chemicals; repaired/aligned/cleaned 12 old microscopes; converted 1 small room into a 16-seat laboratory room for small class; repaired and repainted fume hoods and blackboards; installed water tank

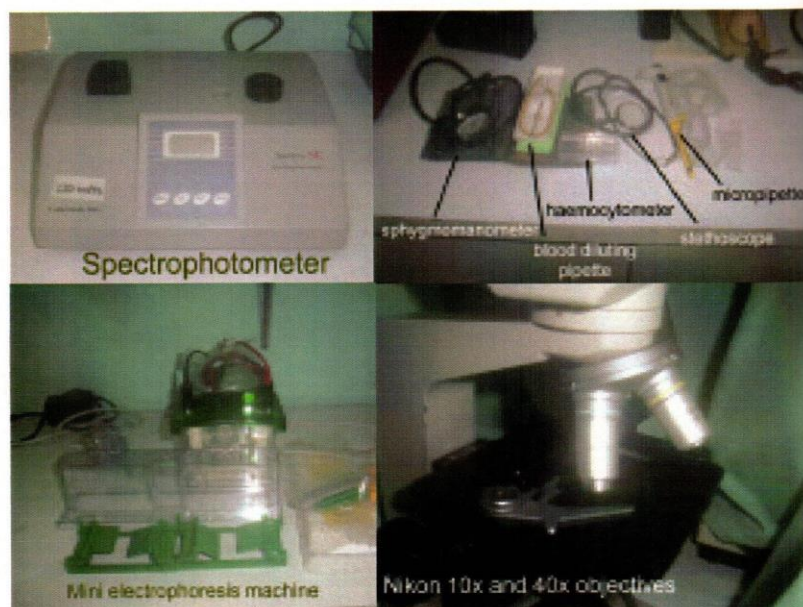
for laboratory use; repainted rooftops of DoPAC building, and replaced some 40w fluorescent lamps with 18w Philip bulbs.

Departments of the College of Engineering and Agri-Industries

- 1 unit each of digital photocopying machine, 29" flat screen colored tv set, laptop computer, LCD projector, USB with voice recorder, ice cream maker, vacuum fryer, computer, and microscope.

Departments of the College of Education

- 1 unit each of tv set, VCD, karaoke, megaphone, duplicating machine, calculator, flash drive, demonstration table with overhead mirror, 4-drawer steel cabinet, wooden cabinet, pigeon hole, display board, USB flash drive, guitar, hotcake molder, hotdog waffle molder; 2 service tables; 3 units each of computer, computer table and ceiling fans; 4 units printers; 13 pieces computer chair; 2 sets dinner plates; wine glasses, skirting cloth, cassette tapes, sports equipment for instruction and varsity use; and repaired 10 sewing machine cabinets.



Some of the equipment acquired by the Dept. of Biological Sciences (DBS) during the year (counterclockwise) Spectrophotometer, Mini electrophoresis machine, Nikon 10x and 40x objectives microscopes, and assorted equipment.

FARMI - 1 unit CPU and 4 units USB

NARC - repairs of 2 units aircon and generator; expansion of Tissue Culture Laboratory, repair of Analytical Laboratory and the vehicle

NCRC - 1 unit each laminar flowhood, digital camera and weighing balance; 5 laboratory carts; makapuno screenhouse

USSO - 1 unit each of LCD projector and printer; 11 units fire extinguisher; 50 pcs. monoblock chairs with back rest.

OCI - 1 unit each of computer and printer

Graduate School - 1 unit each of laser printer, desktop author software, and CPU Pentium 4

GSO - 1 unit each of bagger concrete mixer and concrete vibrator

Registrar - 1 unit each of scanner, laser printer, wooden chair, wooden sofa; 2 units each of corner stand and steel filing cabinets; 3 ceiling fans; 24 pcs loose cushion

Library - 1 unit each of water dispenser and heavy duty stapler; 10 units ceiling fans

ACRO - 1 unit each of junior executive table, steel filing cabinet, and wooden cabinet

Manila Office - 1 unit each of fax machine and vacuum cleaner

Hostel - 1 unit each of computer, printer, telephone connection, lawn mower, front desk counter, key rack; 6 units each colored TV sets, matrimonial size bed, personal refrigerator; 2 units each of UPS and AVR; 2 dozens each of cups, saucers and glasses; 4 pairs pillow case; 20 pcs pillows with fiber fill stuffing; 48 pcs

draperies and valance set; 12 sets bed linens; 10 pcs bed sheets; and 24 pcs chair covers

URC - DLP and computer parts

ASHU - eight-seater conference table, office table, metal cabinet with safe, and ceiling fan; 3 chairs

DYAC - 3 units computer

LSU-Alangalang Campus - 1 unit each of printer, LCD projector, laptop computer, UPS, HUB port, speaker, stand fan, desk fan, DVCD player, pipe wrench, socket, tools comb wrench, projector screen, AVR, grass cutter, electric water pump; 2 units each of typewriter, 4-drawer steel cabinet, ceiling fan, jetmatic pump, water dispenser, monoblock table, mirror; 4 units flash drive; 5 pieces magnet U-shape; 6 pieces monoblock chairs and 2-drawer steel cabinets; 9 units computer; 10 pieces each of table balance and iron stand and ring; 12 copies of textbooks; 15 pieces Bunsen burner & wire gauge and dissecting set; 200 units wooden arm chairs

LSU-Isabel Campus - 1 unit each of box fan, lawn mower, stand fan, and rechargeable flashlight, softball/baseball gloves set, LCD TV, food miller, vat, screed dryer, plastic sealer; 2 pairs baseball knee pad; 2 pieces Superstack 3 Baseline 10/1, and weighing scale; 4 units each of computer table, UPS, office station/Nstation L110, and stopwatch; 5 units teacher table; 6 units each of computer and printer; 12 pieces steel tables; 17 units office station/Nstation L100; and 21 sets input/output consoles

LSU-Villaba Campus - 1 unit each of printer, computer table, computer chair, data copier, rice thresher, rice cooker, Honda engine (HP), water dispenser; 2 units computer Intel Pentium 4; and 4 units DVD player.

CONDENSED BALANCE SHEET

As of December 31, 2006

ASSETS

CURRENT ASSETS

Cash	P 51,843,087.05
Receivables - Net	36,384,959.66
Inventories	703,760.07
Prepaid Expenses	58,990.46
Other Current Assets	68,563.00
	<hr/>
Total Current Assets	P 89,059,360.24

PROPERTY, PLANT & EQUIPMENT

Property Plant & Equipment	P 386,803,643.80
Less: Accum Depreciation	<u>241,605,195.78</u>
	145,198,448.02

TOTAL ASSETS

P 234,257,808.26

LIABILITIES AND EQUITY

LIABILITIES

Current Liabilities	P 38,624,114.28
Other Liabilities	<u>29,099,619.59</u>
	P 67,723,733.87

EQUITY

Government Equity	P 166,534,074.39
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TOTAL LIABILITIES & EQUITY

P 234,257,808.26

CONDENSED STATEMENT OF INCOME AND EXPENSES

For the Fiscal Year Ended December 31, 2006

INCOME	P 290,742,696.39
LESS: Expenses	
Personal Services	P 208,116,938.17
Maintenance and Other Operating Expenses	86,006,042.13
Financial Expenses	
Total Expenses	P 294,122,980.30
EXCESS OF INCOME OVER EXPENSES	P (3,380,283.91)
Add/Deduct Loss of Assets	(848.22)
NET	P (3,381,132.13)

Officers of the LSU System

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(As of December 31, 2006)

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