# 1 9 9 0 ANNUAL REPORT





"Moving Towards Excellence in Instruction, Research and Extension for Agricultural and Rural Development"

Baybay, Leyte 6521-A Philippines

## VISCA BOARD OF TRUSTEES

## HON. ISIDRO D. CARIÑO\*

Secretary
Department of Education, Culture and Sports
Board Chairman

### HON. MARIANITO R. VILLANUEVA

President Visayas State College of Agriculture Board Vice-Chairman

#### HON. ROMEO C. ESCANDOR

Director
National Economic and Development Authority, Region VIII
Board Member

### DR. JOSE SAL TAN

College Secretary
Visayas State College of Agriculture
Board Secretary

\* Represented by:

HON. PEDRO O. SANVICENTE Undersecretary, DECS

HON. MARCIAL A. SALVATIERRA Asst. Secretary, DECS



# **CONTENTS**

FOREWORD	ii	
HIGHLIGHTS	1	
INSTRUCTION	9	
RESEARCH	17	
EXTENSION	25	
LINKAGES	29	
AUXILIARY SERVICES	31	
MISCELLANEOUS	35	
GENERAL ADMINISTRATIO	N 39	
DIRECTORY	43	
DIRECTORY	43	

## **FOREWORD**

The Visayas State College of Agriculture (ViSCA) plays an important role in the national education system being one of the three zonal agricultural institutions in the country representing the Visayas region. Likewise, it assumes a major responsibility in science and technology as one of the four national research centers under the auspices of the Department of Science and Technology. The presence of research centers, both regional and national, on the ViSCA campus, provides a strong complement of manpower and facilities to the instructional program of the College.

As a zonal institution and a national research center, ViSCA exists as a true state institution performing the trilogy of functions instruction, research and extension. This report reflects its humble accomplishments in 1990 amidst the continuing financial constraints experienced by the country as a whole. It is very thankful for all the support extended by the national officials, its students, faculty and staff whose continuing dedication saved the College from being ruined by various adverse factors. As an instrument for development, ViSCA strives to share with the national government the responsibility of bringing improvement in the well-being of the Filipino populace.



M. R. VILLANUEVA

President

## **HIGHLIGHTS**

### **New Subjects Offered**

- English 21 (Introduction to Literature)
- English 26 (Argumentation and Debate)

### **Curriculum Development**

### Curricular proposals for implementation:

- Ph.D. in Plant Pathology (DPP)
- Doctor of Veterinary Medicine (DASVM)
- B.S. in Marine Biology (DPP)

## Curricular proposals for review by the College Curriculum Committee:

- Ph.D. in Agricultural Education (DAEE)
- M.S. in Language Teaching (DAL)
- Revision of the Bachelor of Animal Science curriculum, major in Animal Health (DASVM)

#### Curricular modification implemented:

Implementation of the modified National Secondary Education Curriculum under the Secondary Education Development Program of the Department of Education, Culture and Sports at the Experimental Rural High School.

### **Graduate Assistantship**

 Graduate research/teaching assistantships were offered to each department in ViSCA offering graduate courses effective second semester of SY 1990-91. A maximum of nine (9) units per semester must be taken by a graduate assistant.

## **Increased Rate for Student Labor**

■ The ViSCA President issued memorandum No. 195 implementing the new rate for student labor from ₱2.25 to 3.85 per hour effective January 1990 as provided under the National Compensation Circular No. 64 of the Department of Budget and Management.

#### **Student Profile**

- VisCA had attained a slight increase in its enrolment for the first semester of SY 1990-91 with a total of 1,892 students compared to the previous enrolment figure of 1,873 students only.
- The Bachelor of Science in Agriculture continued to get the highest number of enrollees.
- Freshmen enrolment for the first semester of SY 1990-91 increased by 5.8%.
- Fifty seven percent (57%) of the total undergraduate enrolment were composed of female students.
- Forty-eight percent (48%) of on campus graduate students, 22.25% of undergraduate students and 28% of high school students were scholars.
- A total of 291 graduates were produced by ViSCA for SY 1990-91. Out of this number, 18 graduates received Cum laude honors and 2 graduates from a non-degree course With Honors.

#### **Board Exam Passers**

#### **New Foresters:**

- Mr. Erwin B. Magallanes 10th placer
- Mr. Geronimo V. Wenceslao, Jr.

## New Sponsoring Agencies for Undergraduate Scholars

Twelve different government and private agenices sponsored the scholarships and grants-in-aid of ViSCA students. Three of them were new, namely: the United Coconut Planters Bank (UCPB), National Reconciliation Development Program (NRDP) and the Visayas State College of Agriculture Student Emergency Loan Fund (ViSCASELF).

## **Faculty Profile**

ViSCA's total teaching force was composed of 239 faculty members with 111 instructors, 67 assistant professors, 27 associate professors and 34 professors. Educational qualification of the faculty members had improved during the year, with a total 60 doctoral degree holders and 130 masteral degree holders.

## **Faculty Development**

- The GTZ in cooperation with its ecology program granted scholarshsips for doctoral degree program to qualified ViSCA staff on the fields of agroforestry, forest taxonomy, watershed management, sustainable farming systems, erosion control, improving kaingin systems, nature and wildlife integration and protection, upland ecology, sociology and anthropology.
- A total of 33 international trainings were attended by the faculty and staff of the different departments during the year.

## **New Research Programs**

 A new project on ecofarming systems was launched at ViSCA in cooperation with the German government.

This 3-year ecology program was headed by Dr. Josef Margraf as the GTZ-ViSCA coordinator. This program aimed at identifying possible sites for ecofarming pilot projects.

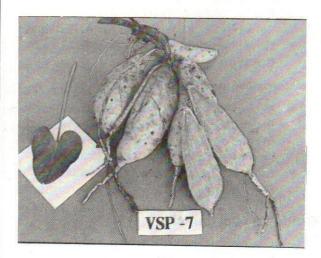
A new project of the government was launched entitled, "Mag- aaral Saka-Unlaran Program" (MSUP) which was jointly launched and spearheaded by the Visayas State College of Agriculture and the Department of Agrarian Reform in Region VIII.

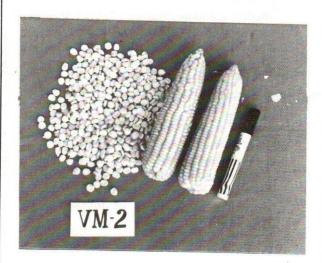
This 3-year program aimed at providing the landless and qualified agriculture graduates a 3-hectare farmlot for them to cultivate. The identified project location was at the Samar Resettlement Area in Sta. Rita, Samar.

## **New Crop Varieties Developed**

The following were the new crop varieties developed by ViSCA which were approved and recommended by the Philippine Seed-Board:

- ViSCA sweet potato variety, VSP-7 (PSB-SP1)
- ViSCA cassava variety, VC-3 (PSB-SP1)
- ViSCA white corn variety, VM-2 (PSB 90-3)





## Mature Technologies for Dissemination and Verification

#### Technologies for dissemination:

- Mushroom Culture Using Abaca Waste
- Utilization of Abaca Outer Leafsheath or "Bacbac" for Handicraft Products
- Making Charcoal from Coconut Shell Using the Pit Method and Pineapple as Intercrop with Coconut



Handicraft products from abaca are being developed by the National Abaca Research Center.

#### **Technologies for Verification:**

- Village -Level Handmade Paper Making Using Abaca Fibers and Wastes
- Utilization of Abaca Fibers and Wastes for Fiber-Wool Cement Board

## **Technology Transfer**

- Establishment of pilot projects for root crop food processing at Silago Consumers Cooperative, Silago Southern, Leyte; Jaro and Dulag, Leyte and San Pablo Choice Food Inc., San Pablo City.
- The PRCRTC Soy Sauce Technology was adapted by the Farmers Federation of Maasin (FFM), Maasin, Southern Leyte.
- Technologies on root crop utilization were adapted by barangay organizations for their livelihood projects which included the Bubon Integrated Root Crop Producers Association and Guadalupe Livelihood Association, Baybay, Leyte.

## Additional Support for ViSCA's Action Research Project

 A total of one million pesos was granted to ViSCA for the phase II implementation of the project entitled "Barangay Integrated Development Approach for Nutrition Improvement (BIDANI)."

## **Outstanding Research Papers**

### A. Indigenous Technology Category:

First Prize - Indigenous Soil and Water
Conservation Technology
in Matalom, Leyte by
Dr. Tung Ly
& Dr. Dolores Alcober

Second Prize - "Hapi-hapi" - An
Indigenous Method of
Controlling Imperata and
Restoring Soil Fertility of
Sloping Cogonal Areas
by Zosimo de la Rosa
& Ernesto M. Tabada

Third Prize - Growing Upland Rice by Dr. Dolores Alcober

#### B. Basic Research Category:

Second Prize - Pathogenic Variation in Sphaceloma batatas in the Philippines by Crisanta E. Sajise

Third Prize - Intake and Digestibility of Fresh and Dried Forage from Some Adaptable Legume Species by Lolito C. Bestil

## C. Applied Research Category:

Third Prize - Small-Scale Processing of
Cooking Oil from Coconut
by Dr. Truong Van Den
& Mr. Felix Amestoso

#### **Extension Activities**

- Non-formal education was done through the conduct of trainings and seminars on food processing and by-products utilization to farmers, rural folks, and technicians in Region VIII.
- Technical assistance was done through the animal dispersal program, artificial insemination project, consultation services, immunization and treatment of domesticated animals, the conduct of soil testing and plant tissue analysis, acarine identification services, recommendation of pest control measures, providing geographical surveys, and the production of important field crops and good quality seeds such as: rice, corn, peanut, mungbean and cowpea which were made available to farmers, students and researchers.
- Technology dissemination was periodically done through radio broadcasts and distribution of other printed publications of various crops to farmers, extensionists and other agencies.

Two of the farmers from barangays Kambonggan and Makinhas received rams from the Animal Dispersal Program of the Department of Animal Science and Veterinary Medicine.

- ViSCA's Research and Development program was showcased by the College exhibits installed at the Office of the Director of Research and Extension. Likewise, roving exhibits were also put up in the different parts of the country during important occasions.
- Other extension projects were done through the maintenance of demonstration farms, such as the: agroforestry demonstration farm, the coconut—and abaca-based demonstration farm and the BIADEP hillside development project.



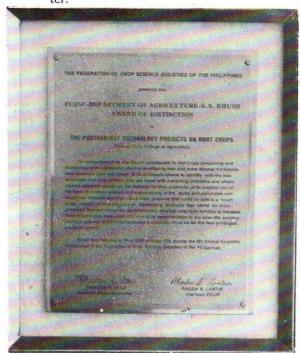
Dr. M. R. Villanueva oriented Her Excellency Pres. Corazon C. Aquino on ViSCA exhibits at the People's Center in Tacloban City during the launching of the KABISIG.

### **Developmental Songs on Cassette Tapes**

Cassette tapes on ten developmental songs produced during the "First Developmental Song Festival" sponsored by ViCARP - USAID - PCARRD - RRDP were released on September 30, 1990.

### **National Awardees**

The highest award of distinction, called the "FCSSP-Department of Agriculture - G.S. Khush Award of Distinction" was given to the Post Harvest Technology on Root Crops of the Visayas State College of Agriculture by The Federation of Crop Science Societies of the Philippines during the 6th Annual Scientific Conference of FCSSP in Naga City on May 18, 1990. The increasing popularity of root crop utilization was brought about by the research efforts of the Food Science Section of the Department of Agricultural Chemistry and Food Science, Department of Agricultural Economics and Agribusiness and the Philippine Root Crop Research and Training Center.



The Post Harvest Technology on Root Crops of ViSCA received the highest award of distinction from the Federation of Crop Science Societies of the Philippines.

- The regional "Bb. Agham'90", Miss Valerie Villanueva of the Experimental Rural High School copped the first place during the National Competition for "The Outstanding Young Scientists (TOYS)" held on February 21-23, 1990 at PNC, Manila. Her winning entry was entitled "Utilization of Asyang (Mikania micrantha) for Termite Control."
- Prof. Lolito Bestil copped the "Best Paper Award" during the 27th PSAS National Convention at the PICC, Manila on October 30-31, 1990.
- Ms. Merry Evelyn Abit, BSFT 1990 won the "Best Paper Award" in Undergraduate Thesis Competition during the 29th Annual Convention of the Philippine Association of Food Technologists in Manila on November 28-29, 1990.

### Regional Awardees

- The Experimental Rural High School (ERHS) received a "Special Award" from the Department of Science and Technology in Region VIII during the National Science and Technology Week Celebration at Catarman, Northern Samar for its exemplary performance in science in both regional and national competitions for 2 decades.
- The ERHS science project entitled, "A Comparative Study of the Efficiency of Sorosoro Stem and Neem Leaf Extracts as Larvicides Against Mosquitoes (Culex fatigans)" won first place in the Regional Science Fair held in Tacloban City from October 15 to 16, 1990.
- Dr. Tomas Fernandez and Prof. Lolito Bestil got the "Best Paper Award" in Animal Health and Animal Production categories during the 8th PSAS Visayas Chapter Scientific Convention, regional level on June 15-16, 1990.

- A junior student of ERHS, Goldameir Leovicresa N. Seroy, won a bronze medal for being the third placer in the National Oratorical Contest, regional level at the Divine Word University in Tacloban City on November 23, 1990.
- Four students of ERHS won during the Regional Secondary Schools Press Conference at Tanauan, Leyte on November 26-28, 1990.
- ViSCA's artists, Mr. Virgilio Pomida and Mr. Domingo P. Flandez won first and third places, respectively, in the Regional-On-the- Spot Painting Competition of the Civil Service Commission on August 15, 1990 with its theme "Ito ang Gobyerno".

#### ViSCA's Honorees

Dr. Ramon Valmayor, Executive Director of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) was honored at the PRCRTC on November 23, 1990 for having contributed to the development of the research capabilities of VISCA during his 17 years stint at PCARRD.



Dr. Eliseo R. Ponce, ODREX Director read the citation for Dr. Ramon Valmayor as Pres. M. R. Villanueva waited to present the Plaque of Recognition to the honoree.

- The "Sandigan Award" was given to the Australian Center for International Research (ACIAR) for being a major supporter of ViSCA's research for agricultural and rural development.
- The "Ugat Award" was awarded to Dr. Kenneth T. Mackay of the International Development Research Centre of Canada (IDRC) during the 13th PRCRTC Anniversary on March 21, 1990 for his invaluable assistance in fostering close cooperation and research linkage between PRCRTC and IDRC.
- Dr. Florencio Saladaga was awarded the first Professorial Chair of the ViSCA Foundation for Agricultural and Rural Development (ViFARD) on account of his remarkable achievements in sweet potato research.

## International Linkages

- ViSCA's Director of Research and Extension, Dr. Eliseo R. Ponce visited the Cornell University in U.S.A., the University of Wageningen and the University of Hohenheim in Netherlands and Germany, respectively, from August 23 to October 3, 1990 for possible institutional linkages in terms of student and faculty exchange and collaborative research.
- The visit of Dr. Paciencia Milan, ViSCA's Director of Instruction and Dr. Josef Margraf, a German Scientist and the Project Coordinator of the ViSCA-GTZ Ecology Program at the University of Hohenheim (UH) in Germany on October 9, 1990 signified the birth of a new form of institutional partnership between ViSCA and the aforesaid university. The partnership scheme was initially named "Biodiversity of Philippine Ecosystem and Its Implication for Genetic Resources Management" to generate basic knowledge on tropical ecology, as well as to provide sustainability to the ViSCA-UH cooperation beyond the GTZ project's existence.

- Eight officials from the Department of Agriculture and Livestock of Papua New Guinea visited ViSCA to observe its root crop-based farming systems and technology transfer program in enhancing and increasing the income and productivity of small farmers.
- ViSCA had established linkage with the Rogel Tropical Institute (RTI) at Amsterdam through its BIDANI project.

## **New Acquisitions**

- New instrument to analyze micronutrients in plant and soil samples, such as; iron, copper, zinc and manganese was acquired by the Department of Agronomy and Soil Science.
- The Labeler (SE-LIN) and Book Charger (Model C) equipment directly from Gaylord Bros. were purchased by the ViSCA Library.
- Two complete sets of computers with printers were acquired by the ViSCA Library and the Department of Agricultural Engineering and Applied Mathematics (DAEAM).
- A new grass cutter equipment was also acquired by DAEAM.
- Two (2) new Mitsubishi pick-up were granted by the International Development Research Centre of Canada (IDRC) to the BIDANI and sweet potato projects of ViSCA.
- The GTZ granted three (3) new vehicles, namely: 1 L-300 Mitsubishi coaster, 1 Toyota coaster and 1 Toyota land cruiser to the ViSCA-GTZ ecology program.
- New video equipment for training and extension activities was acquired by the Philippine Root Crop Research and Training Center through the Integrated Root Crops Program (IRCP).

## **Physical Facilities Development**

## Construction projects completed:

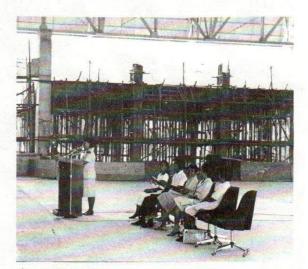
- Agritech Dormitory Phase I
- FARMI Building Phase II

## Construction projects for implementation:

- Completion of ViSCA Gymnatorium
- Repair of DAEAM, DASVM, Home Science, ADE, and Student Union Buildings
- Repair of Calbiga-a Flood Control Project



The newly completed (Phase I) construction of the agritech dormitory for graduate students.



The ViSCA gymnatorium under construction.







## **INSTRUCTION**

#### **CURRICULAR OFFERINGS**

#### I. GRADUATE PROGRAMS

#### A. On Campus Program:

Master of Science (M.S.) with majors in: Agricultural Education, Agricultural Extension, Agronomy, Animal Science, Entomology, Horticulture, Plant Pathology, Plant Protection, and Soil Science

Master of Agricultural Development (M.Ag.Dev.) with majors in: Agricultural Education, Agricultural Extension, Agricultural Economics, Agricultural Technology Education, Agronomy, Animal Production, Development Communication, Entomology, Language Teaching, Plant Pathology, and Plant Protection

Diploma in Agricultural Technology Education (DATE)

#### **B. Extramural Program:**

Master of Agricultural Development (M.Ag.Dev.) with majors in: Agricultural Education, Agronomy, Agricultural Extension, Animal Production, and Language Teaching

### II. UNDERGRADUATE PROGRAMS

#### A. Degree Courses:

B.S. in Agriculture (B.S.A.) with majors in: Agronomy, Soil Science, Horticulture, Agricultural Economics, Agricultural Botany, Plant Breeding and Plant Protection B.S. in Agricultural Development (B.S. Ag.Dev.) with major in: Agricultural Extension

B.S. in Home Economics (B.S.H.E.) with majors in: H.E. - Elementary Teaching, H.E. - Secondary Teaching and H.E.- Extension.

B.S. in Agricultural Engineering (B.S.A.E.)

B.S. in Agribusiness (B.S.Agrib.) with majors in: Business Management and Crop Enterprise Management

B.S. in Forestry (B.S.F.)

Bachelor of Animal Science (B.A.S.) with majors in: Animal Health and Animal Production

B.S. in Statistics (B.S.S.)

B.S. in Agricultural Chemistry (B.S.A.C)

B.S. in Food Technology (B.S.F.T.)

B.S. in Development Communication (B.S.D.C.)

B.S. in Agricultural Education (B.S.Ag.Ed.) with majors in: Animal Production, Crop Production, Teaching Agriculture for Elementary Schools

#### B. Non-degree courses:

Forest Ranger Certificate (F.R.C.)

Home Economics Technician (H.E.T.)

## CURRICULUM DEVELOPMENT

#### Advanced Education

- ™ Graduate research and teaching assistantships were offered to each department in ViSCA offering graduate degrees to cover 20 hours of work per week. Privileges given included a monthly stipend of ₱2,000 for master's degree with free tuition and comprehensive fees and a thesis support of not more than ₱10,000. The graduate assistant must carry a maximum load of 9 units per semester.
- An instructional model farm was established by ViSCA for the DATE-MATE students which aimed at stimulating the practice of mixed cropping and livestock systems and for them to be able to approximate the complex systems found in farmer's lands.
- The M.S. in Language Teaching for Agro-Technical Schools of the Department of Arts and Letters was approved by the Graduate School Executive Committee.
- The proposal to offer a Doctor of Veterinary Medicine degree by the Department of Animal Science and Veterinary Medicine has already passed the second reading by the members of the College Curriculum Committee.
- A benchmark survey was conducted by the Department of Agricultural Education and Extension to determine the possible fields of specialization for

## **List of Departments Offering Graduate Programs**

Department	On-Campus	Extramural
Agricultural Education and Extension	Diploma in Agriculture major in Agricultural Technology Education	
	M.Ag.Dev. major in Agricultural Education, Agricultural Extension Agricultural Technology Education	M.Ag.Dev. major in Agricultural Education and Agricultural Extenstion
	M.S. major in Agricul- tural Education and Agricultural Extension	
Agronomy and Soil Science	M.Ag. Dev. major in Agronomy	M.Ag.Dev. major in Agronomy
	M.S. major in Agronomy and Soil Science	
Animal Science and Veterinary Medicine	M.Ag.Dev. major in Animal Production	
	M.S. major in Animal Science	M.Ag.Dev. major in Animal Production
Arts and Letters	M.Ag.Dev. major in Language Teaching	M.Ag.Dev. major in Language Teaching
Development Communication	M.Ag.Dev. major in Development Communication	
Horticulture	M.S. major in Horticulture	
Plant Protection	M.Ag.Dev. major in Entomology, Plant Pathology and Plant Protection	
	M.S. major in Entomology, Plant Pathology, Plant Protection and Weed Science*	
Plant Breeding and Agricultural Botany	M.S. minor in Weed Science* Agricultural Botany and Plant Breeding	

- Weekend classes of some graduate courses were approved by the Board of Trustees. These courses were offered by the following departments: Agricultural Education and Extension, Agronomy and Soil Science, Animal Science and Veterinary Medicine, Arts and Letters, and Plant Protection. This program aimed at providing opportunity to government and private employees who wish to pursue advanced studies outside the normal school days.
- The Board of Trustees approved the increase in graduate tuition fee of \$\mathbb{P}\$50.00 per unit enrolled effective SY 1991-1992.
- The Board of Trustees proved the revision of some portions of the Graduate School Code which focused on the minimum qualification of graduate faculty; and the residency requirement and time limit of graduate students. For graduate faculty, the minimum qualification to teach for a master's program should be a master's degree holder and for doctoral program should be a doctoral degree holder except in very meritorious cases. The maximum period of complying with all graduate requirements should not be more than five years for a master's degree program and not more than seven years for doctor's degree of on-campus students and not more than seven years for a master's degree under the Extramural Program.

The offering of a doctorate in Plant Pathology was planned by the Department of Plant Protection to be offered in June 1991 or during the second semester of SY 1991-92. Requirements for this program were made to meet TPAE standards.

### **Higher Education**

- The ViSCA President issued Memorandum No. 195 increasing the rate of student labor from ₱ 2.25 to ₱ 3.85 per hour effective January 1990 in accordance with the National Compensation Circular No. 64 of the Department of Budget and Management (DBM).
- The revised curriculum of the Bachelor of Science Forestry was approved by the Board of Trustees (Board Res. No. 20, S. 1990). New special features of the revised curriculum were: the reorientation of thrust from forestry which commercial focuses on social forestry strategies and environmental concerns, and the option of the students either to conduct a thesis research or engage in investigative field practice.
- The ViSCA BOT approved 2 subjects for offering by the Department of Arts and Letters. These subjects were: English 21 (Introduction to Literature) and English 26 (Argumentation and Debate). Only English 26 was offered during the first semester.

- The proposals to offer a Bachelor of Science in Be-Science havioral Psychology, Anthropology and Sociology as major fields, a Bachelor of Science in Language Teaching were already approved by the Curriculum Committee of the Department of Arts and Letters and submitted to the College Curriculum Committee appropriate action.
- A plan to offer a Certificate in Physical Education course was conceptualized by the Department of Physical Education and is intended to be offered beginning school year 1991-1992.
- The proposal to offer B.S. Biology major in Marine Biology/Fisheries had deliberated at the Department of Plant Protection and was revised for submission to the College Curriculum Committee. This new program was envisioned to train manpower for the needs of instruction, research and extension in the development of marine resources.
- The Department of Agricultural Economics and Agribusiness had made revisions on its curricular offerings and instituted revisions of the BSAB curriculum. Courses were realigned as a consequence of the abolition of Spanish courses and the minimization of summer offerings.

- The Department of Agricultural Engineering and Applied Mathematics had realigned its course offerings to eliminate summer classes. However, model B students are required to take summer classes to catch up with the level of regular students.
- The Department of Plant Breeding and Agricultural Botany had completed its proposal to revise existing curricular offerings to implement a non-thesis scheme in addition to its existing thesis option under the Plant Breeding major curriculum.
- The Department of Home Science had re-examined its BSHE and HET curricula to make its offerings more effective and responsive to the needs of the students and the society.

#### **Secondary Education**

The Experimental Rural High School of ViSCA had implemented the modified National Secondary Education Curriculum (NSEC) under the Secondary Education Development Program (SEDP) of the Department of Education, Culture and Sports, together with its existing agricultural science curriculum. In the NSEC, the Technology and Home Economics (THE) subject with 1.5 units was split into two: Agriculture and Home Economics with each subject credited with 1.5 units. Likewise, 1.0 unit of Mathematics (Consumer Mathematics) was added to the second year to have the same number of units with the agricultural science curriculum.

#### STUDENT ENROLMENT

#### **Advanced Education**

As of SY 1990-91, there were 31 DATE-MATE students enrolled (25 DATE and 6 MATE). Most of them were resided in the newly-constructed Agritech dormitory.

#### **Higher Education**

- Freshman enrolment for the 1st semester of SY 1990-91 increased by 5.8% (637).
- The Bachelor of Science in Agriculture registered the highest student enrolment followed by the Bachelor of Science in Forestry for the 1st semester of SY 1990-91. Despite the present economic crisis, student enrolment of all courses for the first semester of school year 1990-91 increased by 1.00% (Table 1).

Table 1. Comparative Data of Student Enrolment by Course for SY 1989-90 and SY 1990-91.

Course			First S 1989-90			Semester 1990-91
A. Graduate Courses On Campus:	;					
M.S.	23	2	67	62	48	59
M.Ag.Dev.	18	28	54	33	18	36
M.A.T.E.	0	0	0	6	0	6
D.A.T.E	0	20	18	25	18	25
Extramural Prog			86	63		
Sub-total	41	50	225	189	84	126
B. Undergraduate De	egree Cours	es				
BAS	81	63	138	134	129	129
BSA	159	121	300	303	297	280
BSAB	77	58	117	118	112	113
BSAC	23	15	37	26	28	23
BSADE	3	0	3	2	2	1
BSAE	56	40	108	128	97	122
BSAgEd.	88	64	187	155	163	144
BSAgDev.	13	16	31	53	30	53
BSDC	22	10	61	53	49	48
BSF	100	95	202	277	206	268
BSFT	23	17	40	40	36	29
BSHE	141	83	214	181	196	166
BSS	19	8	47	56	47	53
Sub-total	805	590	1,485	1,526	1,392	1,429
C. Certificate Course	s (Non-Deg	ree)				
FRC	39	36	150	156	125	134
HET	20	28	83	74	53	63
Sub-total	59	64	233	230	178	197
Total	905	704	1,943	1,945	1.654	1,752

Course	Sumn	ner 1990		1st Se	em. 1990-91		2nd Sen	n. 1990-91	
	Male	Female	Total	Male	Female	Total	Male	Female	Total
BAS	36	27	63	80	54	134	76	53	129
BSA	45	76	121	122	181	303	110	170	280
BSAB	27	31	58	54	64	118	51	62	113
BSAC	7	8	15	11	15	26	10	13	23
BSADE	0	0	0	0	2	2	0	1	1
BSAE	28	12	40	91	37	128	85	37	122
BSAGDEV.	4	12	16	17	36	53	18	35	53
BSAGED	18	46	64	40	115	155	37	107	144
BSDC	4	6	10	14	39	53	12	36	48
BSF	70	25	95	195	82	277	183	85	268
BSFT	8	9	17	11	29	40	7	22	29
BSHE	1	82	83	4	177	181	4	162	166
BSS	5	3	8	32	24	56	30	23	53
Sub-total	253	337	590	671	855	1,526	623	806	1,429
Non-degree Cou	rses:								
FRC	20	16	36	79	77	156	72	62	134
HET	0	28	28	2	72	74	1	62	63
Sub-total	20	44	64	81	149	230	73	124	197
Unclassified	0	1	1	3	7	10	1	3	4
With Study Permit	1	1	2	0	* 0	0	0	0	0
Grand Total	274	383	657	755	1,011	1,766	697	933	1,630

- Out of the total number of undergraduate students enrolled, fifty seven percent (57%) of them were female.
- Transferring of students enrolled in ViSCA to another institution was monitored to be lower for SY 1990-91 (14) than that of the previous year (56).
- During the year, the average dropout rate was only 0.72% from the total enrolment figures of the first and the second semester. This was due to poor academic performance, financial difficulty, failing health, transfer of residence, accident and home sickness.
- A total of 104 students were on warning status and one student was dismissed for the first semester of SY 1990-91.

Students were given warning status if their failures ranged from 26% to 50% of their subjects and should be dismissed if failures ranged from 76% to 100% of all subjects.

#### **Secondary Education**

- In preparation for the ERHS to become a laboratory school, its enrolment had continuously declined since the previous
- years due to DECS Memorandum to limit the number of students to only 100 per year level for laboratory schools.
- A drop-out rate of 2.62% was monitored during the year due to students' inability to cope with their academic requirements, financial difficulty, home sickness and ill health.

Table 3. ERHS enrolment by sex and year level for SY 1990-91.

Year Level	Male	Female	Total	Dropouts
First Year	35	62	97	2
Second Year	55	50	105	4
Third Year	48	86	134	2
Fourth Year	54	68	122	4
Total	192	266	458	12

### SCHOLASTIC PERFORMANCE

- A senior student of the Bachelor of Science in Food Technology (BSFT), Merry Evelyn Abit won the "Best Paper Award" for Undergraduate Thesis Competition during the 29th Annual Convention of the Philippine Association of Food Technologists in Manila on November 28-29, 1990. Her paper was entitled: "Physical-Chemical Characteristics of Starches from Different Root Crops and their Effects on the Quality of Sotanghon" with Dr. Truong Van Den as the thesis adviser.
- A senior student of the Experimental Rural High School, Miss Valerie B. Villanueva was "Bb. Agham'90" crowned during the 10th Regional Youth Science Camp held in ViSCA on February 8, 1990. Ten schools in Region VIII participated in the affair. She also copped the first place during the National Competititon for Outstanding Young Scientists (TOYS)" held on February 21-23, 1990 at PNC, Manila. Her winning entry was entitled, "Utilization of Asyang (Mikamia micrantha) for Termite Control". She received a cash prize of P6,000, a trophy and the opportunity to represent the Philippines in the gathering of young scientists in Singapore. Her adviser, Dr. Lelita R. Gonzal, Director of the ViSCAbased National Abaca Research Center also received a plaque of recognition.
- A junior student of the Experimental Rural High School, Goldameir Leovicresa Seroy got the third place in the National Oratorical Contest, regional level with its theme, "Love God, Serve Man" at the Divine Word University in Tacloban City on November 23, 1990. The contest was sponsored by the Rotary Club of Manila and the College As-She was surance Plan. awarded with a bronze medal and a certificate of appreciation with \$1,000 cash prize. Her official coach, Dr. Clara F. Colis, received an incentive prize of \$500.00 from the sponsors.
- Four EHRS students won during the Regional Secondary Schools Press Conference '90 which was held at Tanauan School of Craftsmanship and Home Industries in Tanauan,

- Leyte on November 26-28, 1990. The winners in various writing contests were as follows: Feature Writing First Place, Ronnel Joey Carcallas; Editorial Cartooning (English) Sixth Place, Lueli Pet Ponce; Copy Reading and Headline Writing (English) Eight Place, Julie Clarissa Colis; and Sports Writing (English) Tenth Place, Sergio Abit, Jr.
- During the first semester of SY 1990-91, 22.25% of the total number of undergraduate students were academic scholars and 41% of on campus graduate students enjoyed scholarships/grants from various agencies.
- Twenty-eight percent (28%) among the high school students were scholars during the school year 1990-91.



Ms. Goldameir L. N. Seroy, third placer of the National Oratorical Contest together with her coach Dr. Clara Colis during the awarding ceremony.

#### **GRADUATES**

- For school year 1990-91 a total of 291 students graduated from various degrees during the 38th Collegiate Commencement Exercises of ViSCA. Among the graduates, 18 received Cum laude honors and 2 received With Honors.
- The ERHS during its 61st Commencement Exercises produced 118 graduates with Miss Kristina Yolanda Pal as the Class Valedictorian who got 10 academic awards.

#### **FACULTY DEVELOPMENT**

- As of December 31, 1990 the total teaching force of ViSCA was composed of 239 faculty members: 60 with Ph.D. degrees, 130 with M.S./M.A. degrees and 49 with B.S. degrees (Table 5). academic staff was composed of 34 professors, 27 associate professors, 67 assistant profes-111 instructors sors and (Table 5). Out of this number, 126 were temporary appointees and 110 were permanent.
- Forty nine (49) faculty members were pursuing advanced studies in the country and abroad, 34 for doctoral degree. Their scholarships were supported and some by **ViSCA** international and local agencies, such as: Australian Center for International Agricultural Research, Asian Institute of Technology, Centro Internacional Agricultura Tropical, Colombo



Mr. Rey Evangelista received a Special Award during the 38th Commencement Exercises for being a consistent Varsity player for four consecutive years.

Idaho University, Development International Research Center of Canada, Monbusho, World Bank, Department of Science and Technology, Extramural Program Development, Rural Farming Systems Development Project, National Economic Authority, Development Regional Applied Communication's Office, and Rotary Foundation.

- Inorder to update knowledge and strengthen the competencies of academic staff, attendance to workshops and trainings were encouraged. During the year, aside from the trainings available within the country, a total of 33 international trainings were attended by the ViSCA faculty from the different departments of the College (Table 7).
- Aside from the faculty's attendance to international trainings, some of them served as resource persons in international symposium and workshop abroad which included Dr. Paciencia P. Milan,

### SUMMARY OF GRADUATES FOR SY 1990-91.

#### **Graduate Courses**

M.S.	=	4
M.Ag. DEV.	=	3
DATE .	=	25
Total	=	32

## Undergraduate Courses Degree

BSAE	=	9
BSS	=	14
BAS	=	8
BSA	=	53
BSAB	=	23
BSAC	=	5
BSFT	=	4
<b>BSAGED</b>	=	29
BSAG. DEV.	=	5
BSDC	=	9
BSF	=	38
BSHE	=	33
Total	=	230

## **Non-Degree Courses**

FRC		=	1
HET		=	28
Total		=	29
Grand 7	Total	==	291

Director of Instruction and Dr. Josef Margraf, Project Coordinator of ViSCA-GTZ Ecology Program who jointly presented a paper, entitled "Agroecology and Conservation Issues in Temperate and Tropical Regions" in an International Symposium at the University of Padova in Italy on September 26-29, 1990; and Dr. Monina M. Escalada, Professor of the Department

of Development Communication served as resource person on "Knowledge, Attitude and **Practice** Survey" at the Workshop on Brown Planthopper/Ragged Stunt Virus Management in Rice at Lop Buri in Thailand on November 26-30, 1990 and was part of a 4-person FAO/Netherlands mission that formulated the plan of operations for a Regional Project on Integrated

Pest Management (IPM) for Vegetables in Southeast Asia. The proposed intercountry programme which would benefit millions of vegetable farmers in the Philippines, Thailand, Indonesia, Malaysia and Vietnam was given an initial funding of US \$5 million by the Dutch government.

			TRAINING	CATEGORY				
	Intern	ational	Nati	onal	Reg	ional	Lo	cal
Department/Center	Numt		Number of		Number of		Number of	
	Trainings Attended	Staff Who Attended						
Academic Departments:								
Ag Chem. & Food Sci.	4	5	3	12	0	0	0	0
Ag. Econ. & Agribusiness	* 0	0	3	38	1	1	9	29
Ag. Eng'g. & App. Math.	0	0	10	16	2	3	8	8
Agronomy & Soil Science	3	4	5	6	4	6	9	16
Animal Science & Vet. Med.	2	2	7	g	6	20	1	3
Arts & Letters	0	0	0	0	2	2	1	13
Development Communication	1	1	2	2	3	3	3	3
Ag. Education & Extension	3	3	1	1	3	3	,	, i
Forestry	3	3	1	1	3	3	3	3
Home Science	0	0	2	4	1	2	3	3
Horticulture	0	0	1	1	0	0	1	1
Plant Breeding & Ag. Botany	1	4	5	4	0	0	1	
Plant Protection	5	6	13	19	- 11	18	16	20
Physical Education	0	0	2	2	0	0	0	0
ERHS	0	0	14	14	16	16	2	5
Research Centers and Other Offices								
(Detailed):								
2SR	3	5	2	2	5	9	0	0
ARMI	0	0	1	1	2	3	9	17
NARC	1	1	2	5	4	7	0	0
PRCRTC	4	4	16	24	12	14	12	19
RCRC	2	2	0	. 0	0	0	12	
College Library	1	1	1	1		2	0	0

## RESEARCH

The Visayas State College of Agriculture has continuously found ways and means to assist in accelerating the country's economic recovery program through its research program. Its research efforts are concentrated on the following areas: 1) basic and applied research on agriculture and rural development in uplands, hillylands and marginal areas, and on major economic crops and high-valued nontraditional commodities; 2) development of low-risk technologies and methods in sustainable agriculture; and 3) technological and socioeconomic research on agro- based small-scale industries in the Specifically, its program focused on rural areas. finding solutions to the problems affecting the small particularly on agricultural farmers Visayan production, processing and utilization, marketing and socioeconomics.

During the year, it conducted a total of 237 research studies of which 47 were completed, 170 were ongoing and 20 were new (Table 5). Of the total number of research studies implemented, 159 were funded by local donors under the Philippine 78 were supported by Government while international institutions (Table 6). These research studies were focused on various commodities, such as; root crops and abaca as national responsibilities, and coconut, corn, rice and other cereals, legumes, vegetables, forage and pasture, soil and water resources, agroforestry and socioeconomics as regional responsibilities. Research studies on energy utilization, conservation and ecology were also started.

The total research budget in 1990 amounted to P 27.834,544.16 of which 48.86% (P 13,599,186.65) was contributed by international funding agencies Among the international funding agencies, the biggest contribution came from the International Development Research Center of Canada which amounted to ₱8,659,382.90 or 63.68% (Figure 2). Other international funding agencies included the United States Agency for International Development (USAID) through the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development -Development Rainfed Resources Project (PCARRD-RRDP), The Netherlands Government, International Foundation for Science (IFS), Centro New Zealand Internacional de la Papa (CIP), Government, Australian Center for Agricultural Research (ACIAR), Centro Internacional de Agricultura Tropical (CIAT), Winrock International, UPWARD, South Carolina State College (SCSC), and Nitrogen-Fixing Trees Association (NFTA) (Table

The Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) contributed a total amount of ₱3,600,000.00 for the ViSCA-GTZ Ecology Program as institutional capability support for 1990. Implementation of identified research and development projects under the program will commence in 1991.

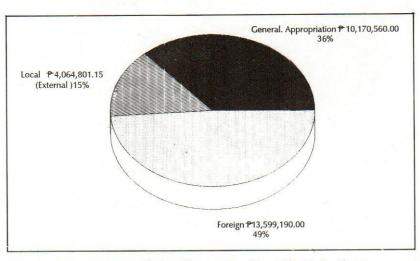


Fig 1. Research funds received by ViSCA in 1990.

Table 5. Number of Completed, Ongoing and New Research Studies Conducted in 1990 by Commodity.

Commodity		Number of Stu	dies		
li kaling kaling kaling kaling dinik dalam salah s Kaling kaling kalin	Completed	Ongoing	New	Total	
Abaca and Other Fiber Crops	1	17	0	18	
Agroforestry	4	3	0	7	
Ag. Engineering	2	0	1	3	
Applied Communication	5	0	0	5	
App. Rural Sociology	3	3	5	11	
Coconut	0	13	1000	14	
Rice, Corn and Other Cereals	3	12	2	17	
Farming Systems	0	2	ō	2	
Legumes	3	3	0	6	
Multipurpose Trees	2	4	444	$(\mathbf{r}_{\mathbf{r}}}}}}}}}}$	
Forage, pasture and Grassland	0	4	<b>,</b>	6	
Livestock, poultry, dairy and chevon	. 2	5	ō	7	
Root Crops	19	86	4	109	
Soil Resources/Water Conservation	100	2	2	5	
Energy Control of the	0	9	ō	9	
Socioeconomics	0.004.000	2	1		
Vegetables Vegetables Vegetables	1000	3	Ó	4	
Others	0	2	Ĭ	3	
Total	47	170	20	237	

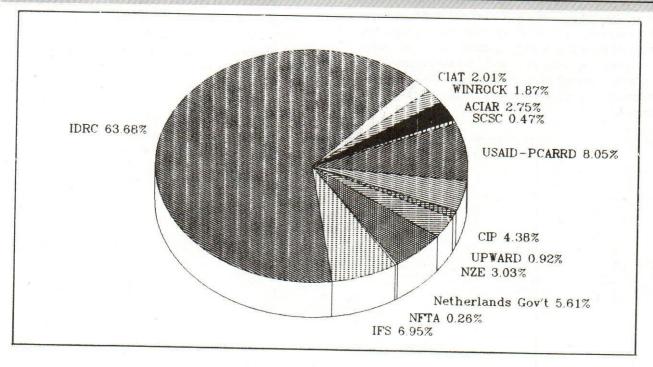


Fig 2. Research funds from foreign donors, CY 1990.

Research Funds Received by ViSCA from Local and Foreign Donors in 1990 for the Implementation of Research Studies. Table 6.

unc	ling Ag	ency	Amount (Pesos)	1	Contribution 2	(%)	Number o Studies
	Loca	ll Gov't. Agencies (GOP)					
			10 170 556 36	74.45		06.51	407
	A. I.	ViSCA	10,170,556.36	71.45		36.54	107
		Subtotal (A.1)	10,170,556.36				
	A.2.	Other Agencies					
		DAR	102 000 00	0.73		0.27	
		DENR	102,900.00 578,212.75	0.72 4.06		0.37	1
		DOST	180,652.00	1.27		2.08 0.65	2 2
		FARMI/FSDP-EV	1,612,335.02	11.33		5.79	25
		Visca/PCARRD	341,790.42	2.40		1.23	
		DA-Nat'l. Nutrition Council (DANNC)	67,569.00	0.48		0.24	5 2
		OEA-NCRD	148,800.00	1.04		0.24	9
		PNOC	813,492.96	5.71		2.92	1
		Province of Leyte	170,000.00	1.19		0.61	1
		Sub-total (A.2)	4,015,752.15	28.21		14.42	48
		Sub-total (GOP) (A)	14,186,308.51	99.66		50.97	155
	Local	Private Agency					
	Int'l.	Pharmaceutical Inc.	49,049.00	0.34		0.18	4
		Sub-total (B)	49,049.00	0.34		0.18	4
		Sub-total (A.2+B)	4,064,801.15	0.26		0.15	52
		Sub-total (A+B)	14,235,357.51	100.00		51.14	159
	Forei	gn Funding Agencies					
	ACIA	R	374,566.82		2.75	1.35	5
	CIAT		273,932.00		2.01	0.98	5
	CIP		596,176.00		4.38	2.14	1
	IDRO		8,659,382.90		63.68	31.11	37
	IFS		944,950.60		6.95	3.39	4
	NFTA		35,200.00		0.26	0.13	i
		erlands Gov't.	763,500.00		5.61	2.74	1
	NZE		412,312.83		3.03	1.48	i
	UPW	ARD	125,000.00		0.92	0.45	3
	SCSC		64,000.00		0.47	0.23	1
		D -PCARRD	1,095,361.50		8.05	3.94	16
		ROCK/F-FRED	254,800.00		1.87	0.92	3
		Sub-total (C)	13,599,186.65		100.00	48.86	78
		TOTAL (A+B+C)	27,834,544.16			100.00	237

<sup>\* 1</sup> Percent contribution from local agencies.

2 Percent contribution from foreign agencies

Percent of total contribution

\*\* Meanings of acronymns for Funding Agencies on page 29

#### RESEARCH HIGHLIGHTS

### **New Crop Varieties**

During the year, three crop varieties were released and recommended by the Philippine Seed Board: the ViSCA sweet potato variety, VSP 7 (PSB Sp -11), ViSCA cassava variety, VC 3 and the ViSCA white corn variety, VM 2 (PSB Cn-90-3).

VSP 7 has a maturity period of 115 days after planting during dry season and 120 days during wet season. It has an average yield of 16.46 tons of tubers/hectare. Its skin has an attractive peach color while its flesh is orange. This can be used in making processed food items like sweet potato jam, catsup, fruit-like dried chips, etc. This development was brought about by the efforts of Dr. Florencio Saladaga with the financial support from PRCRTC.

VC 3 was added to the 2 other cassava varieties already developed by the Philippine Root Crop Research and Training Center. It has a maturity period of 8 to 10 months after planting and has an average yield of 30.2 tons of tubers/hectare. Its white tuber flesh is good for making starch and flour. This project was jointly supported by the Centro Internacional de Agricultura Tropical (CIAT), PRCRTC and its cooperating agencies in the country with Dr. Jose Bacusmo as the Project Leader.

VM 2, the new corn variety, produces silks at 51 days from the date of planting. It has an average yield of 4.91 tons of kernel/hectare with a milling recovery of 63.50%. This project was a joint undertaking of the Department of Plant Breeding and Agricultural Botany and the Department of Plant Protection with Dr. Othello B. Capuno as the Project Leader.

## New Research Projects and Additional Support for Research

A new project on ecofarming systems was launched at ViSCA in cooperation with the German government. This 3-year ecology program was headed by Dr. Josef Margraf as the GTZ-ViSCA coordinator. This program aimed at identifying the possible sites for ecofarming pilot projects. Likewise, it also granted Ph.D. scholarships to qualified ViSCA staff in the fields of agroforestry, forest taxonomy,

watershed management, sustainable farming systems, erosion control, improving kaingin systems, nature and wildlife integration and protection, upland ecology, sociology and anthropology.

A new project of the government was launched entitled "Mag-aaral Saka-Unlaran Program" (MSUP) which was jointly spearheaded by the Visayas State College of Agriculture and the Department of Agrarian Reform in Region VIII. This program aims to provide the landless and qualified agriculture graduates a 3-hectare farmlot for them to cultivate. The Project is located at the Samar Settlement Project in Sta. Rita, Samar.

A total of one million pesos was granted to the phase II implementation of the satellite project entitled "Barangay Integrated Development Approach on Nutrition Improvement of the Rural Poor (BIDANI)" which focuses on "Strengthening the BIDANI Network' at ViSCA. During the year, it was able to extend its project to 14 other barangays in Baybay, Leyte in addition to the 5 pilot barangays that were already established with Dr. Lucylen B. Ponce as the Project Director.

#### Research Awards

The Federation of Crop Science Societies of the Philippines gave the highest award of distinction, called the "FCSSP-Department of Agriculture-G.S. Khush Award of Distinction" to the Post Harvest Technology on Root Crops of the Visayas State College of Agriculture on May 18, 1990 during the 6th Annual Scientific Conference of FCSSP in Naga City. Together with the award, a cash prize of P10,000 as courtesy of Dr. Gurdey S. Khush, principal scientist of the International Rice Research Institute and the Department of Agriculture. The success of Post Harvest Technology was attributed to the efforts made by the Food Science Section of the Department of Agricultural Chemistry and Food Science, Department of Agricultural Economics and Agribusiness and the Philippine Root Crop Research and Training Center.

The "Sandigan Award" was given to the Australian Center for International Research (ACIAR) as a major supporter of ViSCA's research for agricultural and rural development.

## **Outstanding Research Projects**

During the Regional Research and Development Symposium held from July 4 to 6 1990 at ViSCA, several research projects of ViSCA staff won the "Outstanding Research Paper Award" in various categories, namely:

## A. Indigenous Technology Category:

First Prize - Indigenous Soil and Water

Conservation Technology in Matalom, Leyte by Dr. Tung Ly, FARMI and Dr. Dolores Alcober.

DAEE

Second Prize - "Hapi-hapi" - An Indigenous

Method of Controlling Imperata and Restoring Soil Fertility of Sloping Cogonal Areas by Zosimo de la Rosa and Ernesto M.

Tabada, FARMI

Third Prize - Growing Upland Rice by

Dr. Dolores Alcober,

DAEE

## B. Basic Research Category:

Second Prize - Pathogenic Variation in

Sphaceloma batatas in the Philippines by Crisanta E. Sajise, PRCRTC

Third Prize - Intake and Digestibility of

Fresh and Dried Forage from Some Adaptable Legume Species by Lolito C. Bestil, DASVM

First Honorable Mention - Physicochemical

Properties of Yam and Taro Flour by Cynthia V. Godoy, PRCRTC

Second Honorable Mention - Factors Affecting

Preharvest Pruning of Cassava by Marcelo A. Quevedo, PRCRTC



Gliricidia sepium can be planted as contour hedgerows for upland rice.

### C. Applied Research Category:

Third Prize

 Small-Scale Processing of Cooking Oil from Coconut by Dr. Truong Van Den and Mr. Felix Amestoso, DACFS

Bronze Awards- Development of Chips

Development of Chips from Cassava by Dr. Lutgarda S. Palomar, DACFS

- Evaluation of Pesticides for Root Crops Seedpieces Treatment by Prof. Erlinda Vasquez, PRCRTC
- The Effect of Logging Ban in Region 8 by Dr. Jose M. Alkuino, Jr. and Mr. Pedro T. Armenia, DAEA

First Honorable Mention - Utilization of Stabilized Coconut Milk Emulsion on Some Existing and Newly Developed Products by Dr. Lutgarda S. Palomar, DACFS

## Research Technologies or Information for Dissemination, Piloting or Verification

The ViSCA-generated technologies and information identified as having met the qualifications set by PCARRD included the following:

## **Technologies for Dissemination:**

- A. New Cassava Varieties: VC-2 (Columbian White) and VC-3 (PRCRTC)
- B. New Yam Varieties: VU-1 (Basco), VU-2 (Zambal), and VU-3 (Leyte) (PRCRTC)
- C. Cassava Chippy (DACFS)
- Steamed Delight: "Puto" from Cassava and Sweet Potato (DACFS)
- E. Indigenous Soil and Water Conservation Technology in Matalom, Leyte (DAEE)



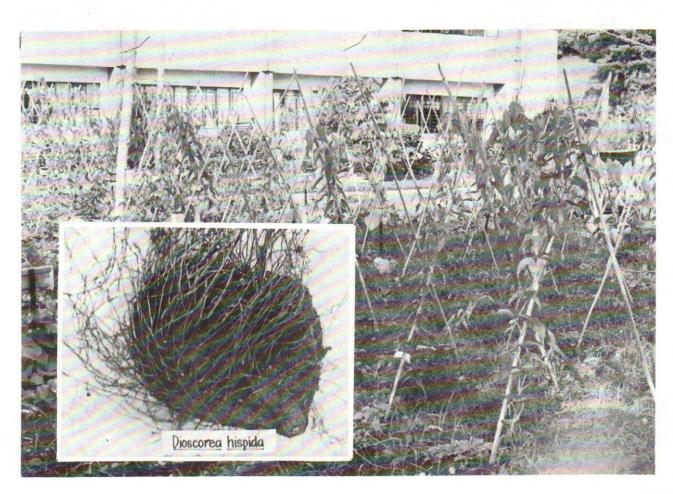


### Information for Dissemination;

- A. Use of "Kot" (Dioscorea hispida) as Insecticide to Control Scale Insect Attacking Cassava Seedpieces (PRCRTC)
- B. Chemical Composition and Feeding Value of Yautia and Cassava Silage Fed to Hogs (DASVM)
- C. Field-Level Practices in the Establishment, Maintenance, Harvesting and Utilization of Multipurpose Tree Species in Leyte (CSR-SFD)
- D. Effect of Logging Ban in Eastern Visayas (DAEA)

## **Technology for Piloting:**

A. Small-Scale Processing of Cooking Oil from Coconut (DACFS)



### **Technologies for Verification:**

- A. "Hapi-hapi": An Indigenous Method of Controlling Imperata cylindrica and Restoring Soil Fertility of Imperata-Dominated Sloping Areas (FARMI)
- B. Growing Upland Rice (DAEE)
- Effects of Legumes on the Sustainability of Cereal Crop Production on Acid Upland Cropping Systems (DASS)
- D. Integration of *Desmodium ovalifolium* and Root Crops (DOF)
- E. Microbial Pathogens of Insect Pests of Vegetables (DPP)
- F. Moisture Levels of Copra (DAEM)
- G. Physicochemical Properties of Yam and Taro Flour (PRCRTC)
- Factors Affecting Preharvest Pruning of Cassava (PRCRTC)

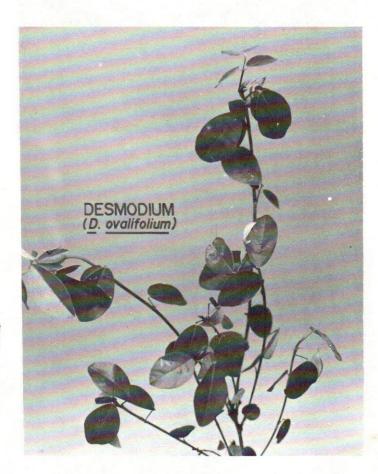
Other mature technologies developed by the National Abaca Research Center and the Regional Coconut Research Center were the following:

#### **Technologies for Dissemination:**

- \* Mushroom Culture Using Abaca Waste
- Utilization of Abaca Outer Leafsheath
   "Bacbac" for Handicraft Products
- Making Charcoal from Coconut Shell Using the Pit Method
- \* Pineapple as Intercrop with Coconut

#### **Technologies for Verification:**

- Village-Level Handmade Paper Making Using Abaca Fibers and Wastes
- Utilization of Abaca Fibers and Wastes for Fiber-Wool Cement Board



Œ

## **EXTENSION**

- The extension program of ViSCA is aimed at providing the small Visayan farm families the opportunity to acquire knowledge and skills for sustained productivity, profitability and well-being. It also aimed at upgrading extension workers' technical capability to deliver the vital services and ecologically appropriate technologies to the small farmers.
- ViSCA's extension program is closely linked with the research program of the College as it obtains information from the basic and applied research conducted by the different research and technical departments of ViSCA.
- In 1990, the extension budget amounted to 2.3 million pesos to finance the various extension projects of ViSCA's different centers and departments.

#### **Technical Assistance:**

The Department of Agronomy and Soil Science produced and distributed good quality seeds of selected crops at minimal cost. such mungbean, cowpea, soybean, peanut, corn and Distribution of seedlings of fast-growing trees for reforestation and tree planting purposes was done. Likewise, it conducted testing and analysis of soil and plant samples as requested by farmers. Rhizobium inoculation tree legumes reforestation was done for DENR and private clienteles.





One of the rural women and out-of-school youth practicing the skill of handicraft making from abaca by-product.

- The Department of Animal Science and Veterinary Medicine dispersed ewes and rams to farmers Kambonggan and Makinhas, Baybay, Leyte. Likewise, it also conducted consultation, treatment, immunization and deworming services domesticated animals of the ViSCA community and its neighboring barangays. also produced 6 caracalves artificial insemination through its Carabao Improvement Project.
- The Department of Agricultural Education and Extension conducted review classes for 398 reviewees for the Teachers Board Examination.
- The Department of Agricultural Engineering and Applied Mathematics provided technical assistance to the neighboring barangays of ViSCA by doing elevation profile survey, layout and design of the water

- distribution system to the Barangay San Agustin **Drinking Water Development** Project. It also made a plan for a dam structure to Pangasugan farmers, and had provided root crop processing equipment, extended assistance installing solar home systems in Limasawa, Island, Leyte redesigned estimated cost of renovation of the Daja Daku Irrigation diversion dam in San Isidro, Leyte.
- The Department of Horticulture continued its production and distribution of seeds minimal costs of selected vegetables, such as: bush beans, string beans, ampalaya, upo, cucumber, eggplant, tomato, okra and sweet corn. Likewise, it also collected other orchid species, such as: denrobium, chrysanthemum anthorium and varieties. More than 100 pots of marcotted rose hybrids were planted in the field.

- The Department of Plant Breeding and Agricultural Botany gave assistance to the victims of typhoon "Ruping" by distributing sweet potato cuttings and corn seeds inorder for them to replant damaged areas.
- The Plant Pest Clinic of the Department of Plant Protection continued to render its diagnostic services on pests to 231 people comprising of farmers, agricultural technicians, researchers and students and established a rice pest monitoring in Barangay Patag as part of surveillance of pest outbreaks. Aside from the diagnostic services, they assisted in implementing recommended pest control measures of structural pests in several apartments and offices in ViSCA.
- The Biological Museum of the Department of Plant Protection acquired new collection of insects, mites, myriapods, crustaceans, and spiders. Several gastropods, crustaceans, bats and snakes were collected in ViSCA, Mt. Pangasugan and in Panay Island. It conducted acarine identification to its clienteles.

## Technology and Information Showcase:

ViSCA's Research and Development program was showcased by the College exhibits installed at the Office of the Director of Research and Extension. Roving exhibits were also put up in Tacloban City for the official



ViSCA's Research and Development Program was showcased by the College exhibits installed at the Office of the Director of Research and Extension.

Excellency of Her visit Corazon C. Aquino, in Cebu City for the anniversary of Central Visayas Consortium for Integrated Regional Research and which Development (of ViSCA is an active member) and also in Dulag, Leyte during its annual town fiesta celebration.

PRCRTC also put up specialized exhibits in different parts of the country. ViSCA's efforts in response to the challenges of ecology

and sustainable agriculture were also showcased in an exhibit put up during the sustainable agriculture fair held in December at the University of the Philippines in Diliman, Quezon City.

The Farmers' Field Day and Flower Garden Show held in ViSCA last July 30 attracted hundreds of farmers from villages of Baybay and neighboring municipalities. During the Farmers' Field Day Hon. Adelina Larrazabal opened the farm products



Gov. Adelina Larrazabal and Mayor Carmen L. Cari together with ViSCA officials and visitors toured around the booths during the ViSCA Anniversary.

and technology exhibits and led the farmers to the tour of the booths put up by the different centers and departments of ViSCA, other government agencies, and private individuals from whom they received planting materials, publications, and other giveaways.

- Wisca organized the 1990 Baybay Agro-Industrial Fair which was participated in by the Department of Agriculture, Department of Trade and Industry, Department of Education, Culture and Sports, Visca and a private firm selling ornamental plants.
- The Regional Coconut Research Center maintained its coconut nursery, multiple demonstration cropping farms, and charcoaling setup visitors to observe. Likewise, several demonstration farms were also maintained by other centers departments and which included the abaca- based farm of the National Abaca Research Center, agroforestry farm of the Department of Forestry and BIADEP hillside development project of the Department of Agricultural Economics and Agribusiness.

## **Trainings:**

During the year, most of the trainings conducted by ViSCA were requested by non-government organizations, government agencies, farmers' organizations and other

agencies. A total of 75 training/ seminar-workshops/conferences/orientations conducted to a total of 1,297 participants which were composed of farmers, agricultural technicians, rural development workers, out-of-school youth and government officials from the different parts of the country (Table 10).

Table 10. Number of trainings/seminar-workshop/ conferences/orientation/programs/activities conducted by ViSCA for CY 1990.

Dept./Center/Unit					
		11	itegory III	Total	%
1. FARMI	0	9	1	10	13.33
2. NARC	6	1	0	7	9.33
3. PRCRTC	12	6	18	36	48.00
4. RCRC	1	0	0	4 1	1.33
5. CSR	2	1 1	2	5	6.67
6. Technical Depts.	14	2	0	16	21.33
Total	35	19	21	75	100.00

Note: Extension activities were categorized according to types of activity and clientele.

Category I - Training Courses for Rural Development.
Clienteles: Farmers, rural women,
out-of-school-youth, etc.

Category II - Seminar Workshop/Conferences/Consultative Meetings, Short Courses for Staff Development, Clienteles: Technical People

Category III - Orientation/Seminar-Workshops/Information.
Clienteles: Technical people, investors, planning officers, technicians, etc

## Community Development Programs:

- The PRCRTC initiated an action pilot project for root crop food processing at Silago Consumers Cooperative in Silago Southern, Leyte which served as one of the pilot sites of the Integrated Root Crops Program.
- As part of ViSCA's Technology Transfer Program, the PRCRTC Soy Sauce Technology was adopted for commercialization by the Farmers Federation of Maasin which was financed by the Southern Leyte Development Foundation.
- The technologies for root crop utilization developed by Department the of Agricultural Chemistry and Food Science were already adapted by barangay organizations as one of its livelihood projects, such as: the Bubon Integrated Root Crop Producers Association, Guadalupe Livelihood Association and other pilot barangays. They were already producing commercial quantities of root crop delicacies.
- Center for Social The through Research Integrated Community Development Through Self-Help (ICD-SH) Project continued to serve people in barangays Patag, Guadalupe, Marcos other barangays that needed its services. It facilitated the implementation monitoring of cooperators'

- agricultural projects. It also assisted in the marketing and accounting of farm products.
- The Barangay Integrated Development Project Area (BIADEP) which has been spearheaded by Department of Agricultural Economics and Agribusiness, coordinated and facilitated rural development projects in Hilapnitan, barangays Biasong and San Agustin in Baybay, Leyte. The project served as link to the different centers and departments of ViSCA for available technical farmers' assistance for the projects in the different barangays.

## Communication Materials Production:

ViSCA continued producing development communication materials for various clienteles. Among these were printed materials, soundslides and radio broadcast materials. Extension-related publications included the following:

## Department of Animal Science and Veterinary Medicine:

- Training Manual for Swine and Ruminant Production and Management
- Training Manual for Sheep Production - A Viable Alternative

#### Department of Horticulture:

- Growing Watermelon and Muskmelon
- How to Grow Coffee Seedlings

### Farm and Resource Management Institute:

- 1. FARMIIS Newsletter
- 2. On-Farm Research Notes

#### National Abaca Research Center:

- Pagpatubu og Uwaping Gikan sa Biya sa Abaka
- Pagbuhat og "Fiber Cement Board"
- Paghimo og Papel Gikan sa Abaka
- 4. Ang Hustong Pag-Abakahan

## Philippine Root Crop Research and Training Center:

- Manual for the Construction of Pedal-Operated Chipper/Grater
- 2. Pests of Sweet Potato: Insects, Mites and Diseases
- Mga Dangan sa Kamote ug mga Pamaagi sa Pagsumpo Niini
- 4. International Sweet Potato Newsletter, Vol. III Nos. 1 & 2
- 5. Radix Vol. X No.1 and 2

## Regional Coconut Research Center:

- 1. RCRC Information Bulletin
- Sayon ug Maganansiyahong Pamaagi sa Pag-uling ug Bagol
- Magbuhat Kita ug Sugnod Gikan sa Uling sa Bunot ug Binuongan
- 4. Mananom Kita ug Paminta Ilawom sa Kalubian.
- 5. Pagpauga sa Humay Ginamit ang Landahan sa Kopras
- Ang Pag-andam,
   Pagpananom ug Pag-atiman
   sa Kalubian

## **LINKAGES**

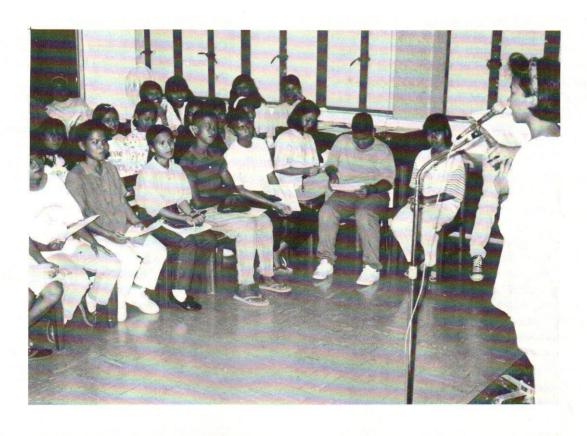
As part of ViSCA's strategies in pursuing its goals is the setting up of linkages with the national and international research institutions and funding agencies. The exchange of research and extension information enhanced research collaboration and staff development. Established institutional linkages with various agencies included the following:

## I. International agencies:

- Australian Centre for International Agricultural Research (ACIAR)
- Centro Internacional de Agricultura Tropical (CIAT)
- Centro Internacional de la Papa (CIP)
- Cornell University (CU)
- Deutsche Gessellschaft fur Technische Zusammenarbeit (GTZ)
- Food and Agriculture Organization of the United Nations (FAO)
- Forestry/Fuelwood Research and Development (F/FRED)
- International Development Research Centre of Canada (IDRC)
- International Foundation for Science (IFS)
- International Rice Research Institute (IRRI)
- International Service for National Agricultural Research (ISNAR)
- New Zealand Embassy (NZE)
- Nitrogen-Fixing Trees Association (NFTA)
- Rogel Tropical Institute (RTI), Amsterdam
- South Carolina State College (SCSC)
- Tissue Culture for Crops Project Colorado State University (TCCP-CSU)
- United States Agency for International Development (USAID)
- Winrock International (WINROCK)

## II. Local government and private agencies:

- Central Visayas Regional Project (CVRP)
- Department of Agrarian Reform (DAR)
- Department of Agriculture (DA)
- Department of Environment and Natural Resources (DENR)
- Department of Science and Technology (DOST)
- Department of Social Welfare and Development (DSWD)
- Department of Health (DOH)
- Department of Local Government (DLG)
- Department of Trade and Industry (DTI)
- Development Coordinating Council for Leyte and Samar (DCCLS)
- De La Salle University Philippine Upland Resource Center
- Fiber Development Authority (FIDA)
- International Pharmaceutical Inc. (IPI)
- Institute of Plant Breeding (IPB)
- Land Bank of the Philippines (LBP)
- National Economic and Development Authority (NEDA)
- National Irrigation Administration (NIA)
- National Nutrition Council (NNC)
- Office of Energy Affairs- Non-Conventional Research Division (OEA - NCRD)
- Philippine Coconut Authority (PCA)
- Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD)
- Philippine National Oil Company (PNOC)
- Philippine Seed Board (PSB)
- Rainfed Resource Development Project (RRDP)
- Soil and Water Conservation Foundation, Inc. (SWCFI)
- University of the Philippines at Los Baños (UPLB)





## **AUXILIARY SERVICES**

#### A. Office of Student Affairs

The Office of Student Affairs in its vital role of serving as channel of communication between the students and the administration had improved its performance in doing its primary functions, namely: the development of students to become well-rounded personalities, attainment of clientele's success in their academic pursuits, and provision of services for the welfare of the students. OSA has been divided into two major divisions; the student welfare services and the guidance and counselling services.

#### I. Student Welfare Services

The Office of Student Affairs had continued to support the students in their academic endeavors. It had been continually overseeing the students welfare through their housing needs. Students were housed in 17 dormitories on campus. Various repairs and improvements were done to some dormitories to improve their physical structure.

The Office has always recognized student potentials and capabilities, thus, it encouraged students to engage in wholesome activities through their organizations and active participation in leadership trainings for their development as responsible and useful citizens. A total of forty (40) student organizations were recognized during the year and the office had approved 355 student activities. To foster closer relationship betwen OSA and the studentry, consultations were made between the students, student-leaders, advisers and OSA personnel.

Despite budgetary constraints, OSA was able to maintain its recreational facilities and served clients to a total of 3,077 bowling games, 1,518 hours in billiard, 384 viewers of beta shows, and 2,327 hours in table tennis from January to November 1990. Its operation was hampered by the dreadful typhoon "Ruping" in November.

#### II. Guidance and Counselling Services

Another very important component of OSA is its guidance and counselling section wherein it equips the students with the basic knowledge and skills needed to help them grow and stimulate their ideas

to face the challenging realities in life and to conceptualize their future. To make the section more accessible to students, the office had provided a Reading Room where assorted educational materials were being displayed. It also put up a new office publication, "OSA Gazette" to inform the students about the availability of OSA's services.

Psychological tests were rendered through its evaluation and research section that met students' and personnel's needs for personality growth and development.

Class orientation activities, personal-social information activities were conducted through counselling and seminars by invitation in dormitories. It also conducted group and individual sessions to assist students' needs, academic progress and development. These sessions were made after mid-term examination so that their academic performance could also be evaluated.



The Planning, Placement, Follow-up, Grants/Scholarships section assisted deserving students by processing scholarships and grants-in aid which were awarded to a total of 397 recipients for the first semester and 415 recipients in the second semester of school year 1990-1991. As of the first semester, three government agencies gave additional financial support to deserving students, namely: the United Coconut Planters Bank (UCPB), National Reconciliation Development Program and the Visayas State College of Agriculture Student Emergency Loan Fund (ViSCASELF). Other funding agencies were as follows: Agricultural Technology Education Program (ATEP), Department of Agriculture (DA), Department of Education, Culture and Sports (DECS), Department of Science and Technology (DOST), Educational Development Projects Implementing Task Force (EDPITAF), Farming Systems Development Project of Eastern Visayas (FSDP-EV), Kingpaoguat Typoco Tanyu International Foundation (KTTI), Knights of Columbus Foundation, Inc., Philippine Agriculture and Resources Research Foundation Inc. (PARRFI), Philippine Veterans Scholarship, Rotary Club-Ormoc Chapter Scholarship, Shouchi Yoshida Scholarship, Student Scholarship Fund Raising Committee (SSFRC), State Scholarship Program, Study-Now-Pay-Later Plan and Tertiary Education Scholarship Program of Eastern Samar Education Foundation Inc. (TESPESEF).

The United Coconut Planters Bank (UCPB) had granted scholarships to 20 deserving children of farmers from Samar, Western, Eastern and Central Visayas to pursue their college education in ViSCA which started during the first semester of SY 1990-91. Each scholar has been entitled to free tuition and other school fees, medical insurance, transportation in going to and from ViSCA to their residences at the end of every school year, with a monthly stipend of P200, yearly clothing allowance of P1,200, monthly medical allowance of P80, and a maximum of P9,000 thesis/practicum allowance for their senior year.

To keep track of the records of ViSCA alumni, the Office had started to gather basic information of ViSCA graduates for its Alumni data bank.

Table 8. Number of Students Enjoying Scholarships and Grants for SY 1990-1991 by Program.

Type of Scholarship/Grant	First Semester		Second Semester		
	Grad- uate	Under- grad- uate	Grad- uate	Under- grad- uate	High Schoo
ViSCA Scholarships:					
Honorific		19		13	18
Entrance Full		6		0	8
Entrance Partial		3		0	13
ViSCA Full		4		6	7
ViSCA Partial	•	39		49	87
ViSCA Grants-in-Aid:					
Academic "A"		41	•	65	
Academic "B"	•	1	•	9	
Beauty Quest		•		2	
Chorale Group	_		•	12	4
Dance Troupe		15		13	
Income Grant		16		6	
Sangguniang Bayan		156		117	
SSFRC	•	15	4	25	
Varsity Team	_	34	_	41	_
VISCASELF			•	4	•
CMT				2	
Other Government as UCPB DA-ATI	nd Priva - 20	te Agenci 20	es' Schol	arships: 19	
DOST-SEI	20	1		1	
EDPITAF /ATEP	31				
FSDP-EV/DA	4				
FSDP-EV/DECS	4				
Knights of Columbu					
Foundation Inc.		2		4	
KTTI Scholarship				1	
National Reconcilia	ion			•	
Dev. Program		1		1	
Ormoc Rotary Club	-	2	-	5	
	•	5	-	4	
PARRFI		1	•	2	
PARRFI Phil. Veterans				1	•
		2			
Phil. Veterans	•	2 3	•	- 2	
Phil. Veterans Shouchi Yoshida State Study-Now-Pay-Late	- - er -		•	9	
Phil. Veterans Shouchi Yoshida	- - er - -	3	-	2 9 2	
Phil. Veterans Shouchi Yoshida State Study-Now-Pay-Late	- - - - - 2	3	- - -	9	· ·

ATEP - Agricultural Technology Education Program
DOST-SEI -Department of Science and Technology-Science
Education Institute

DA-ATI - Dept. of Agriculture - Agricultural Training Institute

DECS - Dept. of Education, Culture and Sports

EDPITAF - Educational Development Projects Implementing Task Force

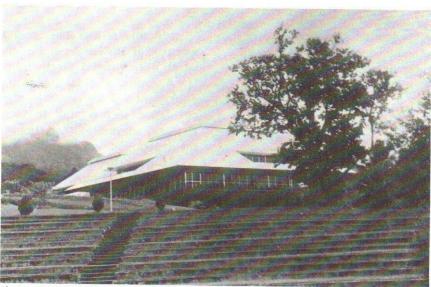
KTTI - Kingpaoguat Typoco Tanyu International Foundation FSDP-EV - Farming Systems Development Project of Eastern

PARRFI - Phil. Agriculture & Resources Research Foundation Inc. SSFRC - Student Scholarship Fund Raising

- Student Scholarship Fund Raising Committee

TESPESEF - Tertiary Education Scholarship Program of Eastern Samar Educational Foundation Inc.

UCPB - United Coconut Planters Bank ViSCASELF -ViSCA Student Emergency Loan Fund



The ViSCA Library located at the hilltop.

#### B. Library

During the year, the Library had improved its role in acquiring, processing and disseminating information and materials on agriculture and other related subjects. These efforts had greatly supported the College' functions of instruction, research and extension activities. It was also able to meet specific requests from students, faculty and researchers in providing them with references, bibliographies and photocopies of articles needed.

In 1990, a total of 97,662 library users availed its various services: 92,242 students, 4,700 faculty and staff, 720 researchers from other government agencies, schools and other State Colleges and Universities in the region.

Its library hours were further improved by extending its service hours to 6:00 p.m. to accommodate more users. Filing of book cards was streamlined, that instead of filing them with its author/title cards, the call numbers were used for easy and quick retrieval. The ViSCAiana section was able to release and distribute to the different departments of the College the compiled supplementary information on bibliographies of case studies, field practice reports, special problems, theses and dissertations. Of the total library holdings, 22% were received as gifts and 39% were purchased by the College. These gifts were donated by local and international agencies.

Through the constant support of the College administration and additional financial aids from external foundations, the total collection of the ViSCA library has more than doubled since 1979, making 42,361 volumes mark. During the year, it accessioned 1,588 volumes broken down as follows:

Item	Volumes	
Library materials and non-book materials through purchases	601 monographs 21 maps	(39%)
Gifts	342	(22%)
Bound journals	529	(33%)
Student manuscripts	95	(6%)
Total	1,588	(100%)
93		

Among the notable acquisitions in 1990 were the two publications of the Cultural Center of the Philippines Productions, namely; *Tuklas Sining* and *Focus Philippines*, both non-book materials which cost P15,535. These two titles had added to the library's meager collection in the fields of arts and humanities. Video documentaries and colored slides were included which contributed much to the classes in Humanities, Philippine History and Physical Education. Also 89 Filipiniana titles were purchased to enrich its collection.

Renewals for foreign journal subscription were not made due to the limited funds of the College. However, 95 local subscriptions and 70 journals through exchange continued to arrive.

Through the kindness of the Federal Republic of Germany (FRG) Library Grant under the ViSCA/GTZ Ecology Program, the Library was able to release 957 book orders worth \$1,000,000. As of December 31, 1990, 19% of the books ordered were received. In addition, the library continued to receive book donations/deposits from regular benefactors which included the following:

Donors	No.	of Titles
The Asia Foundation	19	
Australian Centre for Inter- national Research (ACIAR)	1	
Australian Centre for Publications Acquired for Development (ACPAD)		boxes of books journals
Asian Vegetable Research and Development Center (AVRDC)	3	
Economic and Social Commission for Asia and the Pacific (ESCAP	2) 26	
Food and Agriculture Organization of the United Nations (FAO)	20	
Food and Fertilizer Technology Center for Asian and Pacific Region (FFTC)	2	
International Board for Plant Gene Resources (IBPGR)	tic 1	
International Development Researd Centre (IDRC)	ch 3	
International Food Policy Research Institute (IFPRI)	2	
International Rice Research Institut (IRRI)	e 3	

Another remarkable acquisitions of the library were the SE-LIN labeler and a Model C Book Charger which were ordered directly from Gaylord Bros., Inc. U.S.A. with a total value of \$\frac{1}{2}43,650\$. These equipment will be used by the technical and the circulation section staff to facilitate labelling and charging activities. Other supplies and materials for the equipment were ordered through the same company worth P37,185 which included data book, ID cards, SE-LIN tape, CM ribbon, heating iron label cutter, erasable markers and teflon shields. Likewise, it also acquired a Beltron computer and a Citizen HOP-45 printer last March 20, 1990. Initially, only the correspondence, reports and payrolls were computerized using Wordstar. The library has aimed at computerizing the checkout service and records at the Circulation Section and for the entire Library inventory using the CDS/ISIS software which has already been in used by the Philippine Root Crops Information Service (PRIS).

Through the maintenance of an effective information service, the Philippine Root Crops Information Service (PRIS), the Library has strengthened the exchange and use of information particularly on root crops. With the success of PRIS in disseminating root crop information to its target clientele, the International Development Research Centre (IDRC) of Canada, fully supported the project in its phase II activities as part of an integrated root crop project. The project continued its bibliographic databases through on-line search services. At present, PRIS has databases on sweet potato, cassava, yam, gabi and minor root crops with 2,067 documents.

The PRIS had established linkages with the regional sub-centers in Luzon, Mindanao, its 14 cooperating institutions, other agencies of the country, the Cassava Information Center (CIC) at CIAT, Colombia for its cassava database and with the Centro Internacional de la Papa's (CIP) Information Center at Lima, Peru for its sweet potato database. It also trained sub-center liaison officers on the use of micro CDS/ISIS software package.

# **MISCELLANEOUS**

- The ViSCA President was tasked by the Department of Science and Technology (DOST) to act as member of the five-man committee to review the Research and Development Consortia Operations in the different regions of the country.
- Dr. Manuel K. Palomar, Officer-In-Charge of Graduate School was elected as the new Chairman of the Technical Working Group (TWG) on root crops of the Philippine Seedboard during the 14th Annual Meeting of TWG at Benguet State University in La Trinidad, Benguet.
- Eight officials from the Department of Agriculture and Livestock of Papua New Guinea visited the College to observe its root crop-based farming systems and to see how ViSCA was able to link its research and extension programs in uplifting the welfare of the small farmers particularly in enhancing and increasing their income and productivity.
- The Soil Research Testing and Plant Analysis of the Department of Agronomy and Soil Science acquired a new instrument to analyze micronutrients in plant and soil samples, such as; iron, copper, zinc, and manganese.
- Cassette tapes on ten developmental songs were produced bearing the title "Bangga Sa Awit '90" as the product of the "First Developmental Song Festival" held on January 27, 1990 at the

- ViSCA gymnatorium which aimed at reminding people's awareness conserving natural our resources through songs. The grand prize winner of song festival was the Cebuano song entitled, "Magtambayayong" which was composed and interpreted by Rev. Nazario G. Sinon and Feliciano G. Sinon. The other nine developmental songs were also composed by ViSCA staff. This activity was sponsored by VICARP-USAID-PCARRD-RRDP the tapes produced were given to the 15 members of the Regional Applied Communications Office (RACO) network of ViCARP throughout the country.
- The First Midyear Review of the Integrated Root Crop Program was held at the PRCRTC in **ViSCA** February 9-10, 1990. activity was attended by international officials, namely: Dr. Nicolas Mateo and Dr. Pedro Flores of IDRC; two scientists from Centro International de la Papa in Lima, Peru; Dr. Enrique Choujoy and Ms. Inga Verdonk. Other local participants included UPLB and Benguet State University.
- In commemoration with the EDSA Revolution, the Center for Social Research initiated the celebration of the "4th EDSA Revolution" on February 26, 1990 at the ViSCA Social Hall with its theme, "Peace, Freedom and Responsibility." Several activities were undertaken

- which included video documentary showing, essay writing contests (high school and college categories) and on-the-spot drawing contest for the ViSCA Foundation Elementary School pupils (in 3 categories).
- Dr. Kenneth T. Mackay of the International Development Research Centre of Canada was the recipient of "Ugat Award" during the 13th **PRCRTC** Anniversary on March 21, 1990 for his assistance invaluable in fostering close cooperation and research linkage between PRCRTC and IDRC.
- Dr. Marianito R. Villanueva, ViSCA President was awarded a Cup of Appreciation during the PRCRTC's 13th Anniversary as a symbol of PRCRTC's expression of gratitude for his unrelenting efforts in fostering the interest of the root crop research center.
- ViSCA hosted the 12th Philippine Physics Society and Third Physics Olympics for Teachers on April 5-8, 1990. The affair was participated in by 300 delegates nationwide.
- Dr. Justiniano L. Seroy, Officer-In-Charge the Department of Arts and Letters was elected Governor Mindanao of Philosophical Association of the Philippines (PAP) during Annual National Convention Meeting at Santa Catalina Convent in Baguio City on June 1-3, 1990.

- Two of ViSCA's faculty members received awards, to wit: Dr. Tomas B. Fernandez and Prof. Lolito C. Bestil of the Department of Animal Science and Veterinary Medicine received the "Best Paper Award", regional level in animal health and animal production categories during the 8th PSAS Scientific Convention on June 15-16, 1990. Their papers were entitled, "Local Plants as **Anthelmintic** for Farm Animals" and "Intake and Digestibility of Fresh and Dried Forage from Some Adaptable Legume Species", respectively.
- The Environmental Awareness Movement with the leadership of Dr. Paciencia P. Milan, ViSCA's Director of Instruction launched the "Greening of ViSCA" campaign on July 2, 1990. This project encompassed activities for many development of ViSCA's terrestial and marine habitations. The launching was highlighted by the ceremonial mangrove planting at the nearby river by Dr. Eliseo R. Ponce, ViSCA's Director of Research and Extension and concurrently Chairman of the Environmental Education Network of the Philippines.
- The Regional Development Assembly of government officials (RDA) in Region VIII was held at ViSCA on July 18, 1990 with Congressman Ramirez as its Chairman. During the conference, the chairman stressed the need for RDA to assist ViSCA in

- disseminating its mature technologies.
- A seminar on issues and concern about environmental conservation and agriculture

was conducted by Dr. Josef Margraf to ViSCA alumni during the Farmers' Field Day Celebration.



Dr. Josef Margraf, Coordinator of the ViSCA-GTZ Ecology Program delivered his message during the symposium for Environmental Awareness.



Development Communication Society's booth presented an urgent concern "Save the Earth."

Undersecretary Ricardo T. Gloria of the Department of Science and Technology was the convocation program guest speaker during the ViSCA's 66th Anniversary on July 31, 1990. He recognized ViSCA's potentials to help develop the rural sector and assured DOST's support to ViSCA's extension activities.



Undersecretary Ricardo T. Gloria

One of the highlights of ViSCA's 66th Anniversary was the "Search for Miss ViSCA '90" on which a senior high school student, Miss Kristina Yolanda Pal won the crown. The members of her court were: Miss Debbie Ugsang of the Department of Communication, 1st runnerup, and Miss Luz Geneston of the ViSCA Lawn Tennis Club as the 2nd runner-up.



Miss Kristina Yolanda Pal, Miss ViSCA '90, and her court during the ViSCA Anniversary parade.

ViSCA extended some donations to the July 16, 1990 earthquake victims through the efforts of the ViSCA Personnel Association which collected a total cash donation of ₱5,082.25 from the faculty, staff and students of the College.

In response to the Civil Service Commission's invitation, ViSCA sent 2 of its artists to participate in the regional on-the-spot painting competition on August 15, 1990 at the Botanical Garden of the University of the Philippines in Tacloban City with its theme "Ito Ang Gobyerno" (This is the Government). The activity was participated in by 16 artists in Region VIII in which the 2 ViSCA artists got the 1st and 3rd places, namely: Mr.

Virgilio Pomida of the Philippine Root Crop Research and Training Center and Mr. Domingo Flandez of the Planning and Development Office, respectively. In addition to their trophies, they received cash prizes of P3,000 for the 1st place and P1,500 for the 3rd place.

The Experimental Rural High School received a Special Award from the Department of Science and Technology in Region VIII during National Science and Technology Week Celebration at Catarman, Northern Samar. The award was given to ERHS due to its exemplary performance in science in both regional and national competitiions for two decades.

- The ViSCA Environmental Awareness Movement (VEAM) celebrated its first anniversary on September 17, 1990 at the ViSCA Social Hall with Hipolito Velazguez, Officer-In-Charge of DENR in Baybay, Leyte as the guest speaker. During the affair, the ViSCA President also stressed the present generation's responsibility to the succeeding generation a world in good shape.
- ViSCA's Director of Research and Extension, Dr. Eliseo R. Ponce visited the United States and Europe from August 23 to October 3, 1990 at the University of Wageningen and Hohenheim in Germany and Cornell University in New York for possible institutional linkages in terms of student and faculty exchange and collaborative research.
- The visit of Dr. Paciencia Milan, ViSCA's Director of Instruction and Dr. Josef Margraf, a German Scientist and the Project Coordinator of the ViSCA-GTZ Ecology Program at the University of Hohenheim (UH) in Germany on October 9, 1990 greatly reinforced the visit of Dr. Ponce which signified the birth of a new form of partnership institutional between ViSCA and the University of Hohenheim. The partnership scheme initially named "Biodiversity of Philippine Ecosystem and Its Implication on Genetic

- Resources Management" to generate basic knowledge on tropical ecology, as well as to provide sustainability to the ViSCA-UH cooperation beyond the GTZ project's existence.
- The Experimental Rural High School Science **Project** entitled, "A Comparative Study of the Efficiency of Soro-soro Stem and Neem Leaf Extracts as Larvicides Against Mosquitoes (Culex fatigans)" won first place in the Regional Science Fair held in Tacloban City from October 15 to 16, 1990. The winning project will represent Region VIII in the National Search for the Outstanding Young Scientists (TOYS) in January 1991 in Manila.



Dr. Miriam Defensor Santiago

- Dr. Miriam Defensor Santiago served as guest speaker during the 9th Anniversary of the Center for Social Research on October 17, 1990 with its theme "Moral Responsibility and Citizenship: Key to National Development." During her visit, she emphasized the hope of fulfillment to the seemingly hopeless mission of uplifting the country's economy and political situation.
- Prof. Lolito Bestil got another "Best Paper Award", during the 27th PSAS National Convention at PICC, Manila on October 30-31, 1990.
  - Dr. Ramon Valmayor, Executive Director of the Philippine Council for Agriculture, Forestry and Natural Resources Research Development was honored at the PRCRTC on November 23, 1990 for having contributed to the development of research capabilities of ViSCA during his 17 years stint at PCARRD. He was instrumental in getting adequate support for the research works of the College especially in the fields of root crops, abaca, agroforestry and forestry, grains, coconut, pest management, crop protection, animal science, vegetables and fruit crops.

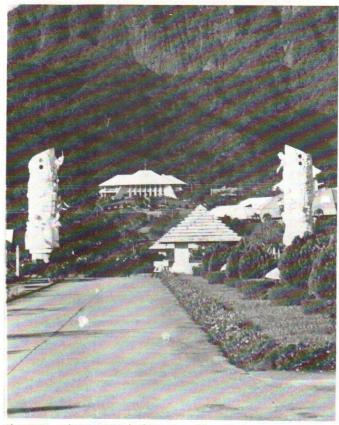
## **GENERAL ADMINISTRATION**

#### **Manpower Resources**

The year 1990 has been another challenging and fruitful year of ViSCA with Dr. Marianito R. Villanueva on his fourth year of service as the second College president. As mandated under P.D. No. 470, the administration of ViSCA is governed by a Board of Trustees. The Board is composed of the Secretary of Education, Culture and Sports as chairman, the ViSCA President as the vice chairman and the Regional Director of the National Economic Development Authority in Region VIII as member.

During the year, several staff members were designated to the following key positions:

- Dr. Rodolfo G. Escalada OIC, Vice
   President for Academic Affairs
- 2. Dr. Manuel K. Palomar OIC, Office of Graduate School
- 3. Dr. Jose L. Bacusmo OIC, PRCRTC
- 4. Miss Anecia C. Fernandez OIC, Cash Division
- Dr. Perla M. Tan
   OIC, Office of Student Affairs
- 6. Dr. Casimiro D. Carcallas Acting Head,
  Department of
  Horticulture
- 7. Engr. Justino M. Quimio OIC, Department of Forestry
- 8. Dr. Justiniano L. Seroy OIC, Department of Arts and Letters
- 9. Mr. Candelario L. Calibo Acting Head,
  Department of
  Chemistry and
  Food Science
- Dr. Angela S. Almendras OIC, Department of Agronomy and Soil Science
- 11. Prof. Sergio E. Abit OIC, Security Office



The ViSCA administration building viewed from the lower campus.

In performing ViSCA's administrative functions and improving its college-wide operation, it required a number of personnel. As of December 31, 1990, there were 196 regular administrative staff. With the existing regular staff, only 173 were permanent and 23 were having temporary status. In addition, 354 casual employees were hired to support and assist its regular staff.

In line with the new salary scheme that the government instituted, 141 personnel received the step increments based on the number of years in government service.

#### **Physical Resources Development**

Infrastructure projects completed during the year included the construction of FARMI building (Phase II) and the Agri-tech Dormitory (Phase I).

Other completed physical improvements in 1990 included the repartitioning of the administration building; construction of additional rooms, repair of facilities, improvement of structures of some college dormitories, repair of staff houses, repair of electrical transmission lines and water pipe lines; conversion of old lodging house into classrooms and widening of some campus roads. Likewise, the repair of goat-sheep, duck and poultry houses of the Department of Animal Science and Veterinary Medicine was completed. However, an additional goat-sheep shed was partly completed.

The phase I repair of laboratory facilities at the Department of Agricultural Chemistry and Food Science was already completed. Likewise, the renovation of the Department of Agricultural Engineering and Applied Mathematics' building was started.

The super typhoon "Ruping" which hit ViSCA in November had caused great damage to some of ViSCA's academic buildings, staff houses and dormitories. Repair of the damages of some buildings was included in the bidding.



The laboratory of the Department of Agricultural Chemistry and Food Science

ViSCA awarded the RONCOR Builders on November 26, 1990 the repair of its 4 academic buildings, namely: Department of Agricultural Education and Extension, Department of Home Science, Department of Animal Science and Veterinary Medicine; and Student Union in the amount of \$\mathbb{P}823,968.03\$. The RONCOR Builders was awarded by the bidding committee because it was the only contractor that offered the lowest amount for the repair of the project.

On-going infrastructure projects during the year included the completion of the gymnatorium, repair of ViSCA's 4 academic buildings, Student Union and the Calbiga-a flood control project.



One of the damages brought by typhoon "Ruping."

Aside from the improvement of ViSCA's infrastructure projects, it also acquired some new equipment and vehicles through the donation of some foreign agencies. This included the International Development Research Centre of Canada which granted 2 new Mitsubishi pick-up vehicles to ViSCA through its sweet potato research projects and 3 vehicles, namely: 1-L 300 Mitsubishi Coaster, 1 Toyota Coaster, 1 Toyota Land Cruiser were granted by the Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) to ViSCA-GTZ's ecology program.

In addition to ViSCA's computer facilities, a new complete set of 40-MB PC/AT IBM compatible computer including an Epson printer was acquired by the Department of Agricultural Engineering and Applied Mathematics, which added to its existing computers that were previously donated by the

German government through the project of Engr. Dembinski. The Department also acquired a new grass cutter equipment.

In 1990, ViSCA did not only grow in its programs and physical structures, but also in terms of its animal stock. A notable increase of 20% was attained in cattle, sheep and goat population.

#### **Fiscal Resources**

During the year, a total allotment of \$\P^74,614,191.00\$ was given to ViSCA to support its programs in instruction, research, extension and other services. The general administration received \$\P^13,176,191.00\$ of the total budgetary allotment. Personnel benefits amounted to \$\P^2,573,000\$. Due to the new salary standardization scheme which the College has adopted, it incurred a total deficit of \$P^2,357,816.18 for personal services.

Among the programs of the College, instruction got the biggest slice of its allotment amounting to ₱ 19,425,000.00 the three programs in instruction, the higher education program got the largest share of ₱13,910,000.

As reflected in the statement of allotments, expenditures and balances as of December 31, 1990, a total amount of \$\mathbb{P}66,654,710.90\$ was spent by ViSCA with \$\mathbb{P}7,959,480.10\$ as the unexpended balance.

Aside from the financial support that ViSCA received through the regular appropriations of the Philippine Government and foreign grants, it also has its own income generating projects which supported some programs of the College. The Income Generating Projects Office (IGPO), which has been in-charge of monitoring the Revolving, General, and the Trust fund projects of the College was able to monitor during the year a total sales of P 1,248,324.75 from its various projects which included the following: rice, corn, fruit trees, poultry, rabbit, dairy goat/sheep, seedbank, pineapple, sweet potato and abaca by-products, infirmary, forest products, guest house, library fines, bindery, xerox services and rental of ViSCA market facilities (Table 11). Among the income generating projects, the pavilion project registered the highest income during the year which amounted to P435,932.35.

Table 11. Gross Sales from January to December 1990 of the Different Income-Generating Projects of the College.

Dept./Center Office	Name of Projects	Gross Sales
Animal	Poultry	₱ 219,947.50
Science	Piggery	123,784.00
	Dairy Goat/Sheep	44,856.00
	Duck	3,088.10
	Rabbit	3,380.75
RCRC	Pineapple	39,036.00
High School	Seedbank - A	14,445.00
	Rice Farm	132,884.85
Guest House	Lodging	12,667.00
	Pavilion	435,932.35
Library	Fines	
•	(High School & Coll.)	10,264.90
	Bindery	37,499.00
	Xerox	3,379.65
IGPO	Fruit Trees	62,502.75
	Market & Other	
	Facilities	64,359.40
Infirmary		20,912.50
Plant Breeding	Corn-By-Products Sweet Potato	12,865.00
	By-Products	6,370.00
NARC	Abaca By-Products	150.00
Total	1	1,248,324.75

STATEMENT OF ALLOTMENTS, EXPENDITURES AND BALANCES
Calendar Year 1990

	Personal Services	services	Maint. &	Maint. & Optg. Exp.	Capita	Capital Outlay		BALANCES		TOTAL
Program	Allotment	Expenditure	Allotment	Expenditure	Allotment Expenditure	Expenditure	PS	MOE	8	
Advanced Education	1,148,000.00	1,148,000.00	1,977,000.00	1,977,000.00	1		0.00	00:00	00.00	0.00
Higher Education	11,545,000.00	11,518,262.12	2,365,000.00	2,362,977.25	,	1	26,737.88	2,022.75	0.00	28,760.63
Secondary Education	1,863,000.00	1,863,000.00	527,000.00	527,000.00	•	1	00'0	00.00	0.00	0.00
Research Services	9,889,000.00	00'000'688'6	6,863,000.00	6,863,000.00	•	1	00.00	00.00	00'0	0.00
Extension Services	1,416,000.00	1,416,000.00	957,000.00	956,984.50	•	•	00.00	15.50	00'0	15.50
Auxiliary Services	1,271,000.00	1,271,000.00	1,057,000.00	1,052,700.00		1	00'0	4,300.00	0.00	4,300.00
Gen. Adm. & Supp. Services	6,561,064.00	6,561,064.00	6,615,127.00	6,614,241.70	•	1	00:00	885.30	0.00	885.30
Personnel Benefits	2,573,000.00	2,573,000.00	1	ı	•	1	00.00	00:00	00.00	1
Salary Standardization	3,164,000.00	5,521,816.18	•	•	•	,	(2,357,816.18)	1		(2,357,816.18)
Foreign Asst. Proj. (Grant) (GOP)	724,000.00	712,551.33	1,224,000.00	1,235,270.77	• •		11,448.67	(11,270.77)		1,845,004.38
Capital Outlay		•	,	•	9,270,000.00	831,847.43	•	1	8,438,152.57	8,438,152.57
Sub-total	40,154,064.00	42,473,693.63	25,190,127.00	23,349,169.84	9,270,000.00	831,847,43	(2,319,629.63)	(2,319,629.63) 1,840,957.16 8,438,152.57	8,438,152.57	7,959,480.10
TOTAL	ALLOTMENT:	ALLOTMENT: P 74,614,191.00		EXPENDITURE	EXPENDITURE: P 66,654,710.90		UNEXPEND	UNEXPENDED BALANCE: P7,959,480.10	959,480.10	

### DIRECTORY

#### OFFICERS OF THE VISCA ADMINISTRATION

MARIANITO R. VILLANUEVA, Ph.D. President

SAMUEL S. GO, Ph.D. Vice Pres. for Administration

RODOLFO G. ESCALADA, Ph.D. Vice Pres. for Academic Affairs

PACIENCIA P. MILAN, Ph.D. Director, Instruction

MANUEL K. PALOMAR, Ph.D. OIC, Graduate School

LEONARDO L. MANALO, D. P. A. Director, External Affairs

DANIEL M. TUDTUD, JR., M. S. OIC, Planning & Development Office

CAMILO D. VILLANUEVA, M. S. Acting Director, Business Affairs

MARGARITO C. ESCALANTE, Ph.D. Acting Director, General Services

ELISEO R. PONCE, Ph.D. Director, Research & Extension

PERLA M. TAN , Ph.D. OIC, Student Affairs

WILFREDO C. VALENZONA, LL. B. Administrative Officer

NORMA V. CALA, B.S.C., C.P.A. Financial & Management Officer

MILAGROSA L. GAMOTIN, B.S.C., C.P.A. OIC, Accounting Division

TERESITA L. QUINANOLA B. S. Human Resource Management Officer

JOSE S. TAN, Ph.D. College Secretary & OIC, Printing Press

REMEDIOS M. BASCUG, B. S. Records Officer

ANECIA C. FERNANDEZ, B. S. C. OIC, Cash Division

LINDA N. MARISCAL, M. A. Registrar

LINDA K. MIRANDA, M. S. College Librarian

SERGIO E. ABIT, M.A. OIC, Security Office

ISABEL P. BERTULFO, M. D. Chief, Infirmary

ALFREDO C. ARRADAZA, JR., B. S. C., C. P. A. Supply Officer

SALVADOR PARIL, B.S.C., C.P.A. Resident Auditor

WOLFREDA T. ALESNA, Ph.D., Station Manager, DYAC

SIXTO P. SANDOVAL, M. A. Manager, Income Generating Projects

#### **HEADS OF ACADEMIC DEPARTMENTS**

CANDELARIO L. CALIBO, M.S. Agricultural Chemistry & Food Science

FEDERICO R. FLORES, Ph.D. Agricultural Education & Extension

ANGELA S. ALMENDRAS, Ph.D. Agronomy & Soil Science

GREGORIO G. GALINATO, JR., Ph.D. Agricultural Engineering & Applied Math.

OSCAR B. POSAS, Ph.D. Animal Science & Veterinary Medicine JUSTINO B. QUIMIO, M.S. Forestry

JOSE M. ALKUINO, JR., Ph.D. Agricultural Economics & Agribusiness

OTHELLO B. CAPUNO, Ph.D.
Plant Breeding & Agricultural Botany

JIMMY R. ROSILLO, Ph.D. Experimental Rural High School

ILUMINADA C. ABIHAY, M.A. Development Communication

JUSTINIANO L SEROY, Ph.D. Arts and Letters

LUCYLEN B. PONCE, Ph.D. Home Science

RUBEN M. GAPASIN, Ph.D. Plant Protection

CASIMIRO D. CARCALLAS, Ph.D. Horticulture

**REMEDIOS R. RUSSEL, M.A.**Physical Education

### HEADS/DIRECTORS OF RESEARCH AND TRAINING CENTERS/INSTITUTES

ELISEO R. PONCE, Ph.D.

Director, Research and Extension

JOSE L BACUSMO, Ph.D. OIC, Philippine Root Crop Research & Training Center

SALVADOR C. DAGOY, Ph.D.
Acting Director, Center for Social Research

NERELITO P. PASCUAL, Ph.D. Director, Regional Coconut Research Center

LEUTA R. GONZAL, Ph.D. Director, National Abaca Research Center TUNG LY, Ph.D.

Program Coordinator,
Farm & Resource Management Institute

ANTHONY V. ISRAEL, M. A. Center Superintendent, Agricultural Training Institute The 1990 ViSCA Annual Report is published by the Planning & Development Office in cooperation with the various offices, departments and research and training centers/institutes of the College.

Consultant

Marianito R. Villanueva

**Production Supervisor** 

Daniel M. Tudtud Jr.

Text Editor

Justiniano L. Seroy

Associate Editor-Layout Artist

Bonita T. Montes

**Facilitators** 

Bernardita P. Bibera Ronillo V. Cano Regina M. Canono

Photographs taken by:

Jimmy Tan Bonita Montes Reigh Monreal Zenaida Gerona

Other photos supplied by:

Department of Animal Science and Veterinary Medicine
Experimental Rural High School
National Abaca Research Center
Office of the Director of Research and Extension
Office of the President
Philippine Root Crop Research and Training Center



