

# 1988 Annual Report



## Visayas State College of Agriculture

Baybay, Leyte



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# FOREWORD

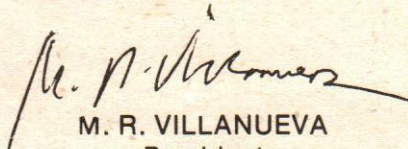
With reflection of effectiveness and relevance, ViSCA continued to show its capability to share with the country's development efforts and in addressing the national priorities of the government. The sincere efforts of ViSCA to uphold its mandate as it relates to the country's needs has always been a major factor in gauging ViSCA's contribution to the national program.

Adopting the philosophy of relevance, quality and effectiveness, efforts are always exerted to update the programs in instruction, research and extension. Consequently, in spite of many limitations, ViSCA was able to realize respectable accomplishments in 1988. New major fields of specialization were added in the existing programs of the College while at the same time gaining additional strength in its faculty through a sound staff development program. The strong faculty remains to be the major asset of the institution that provides a strong base from which the overall capability for development of the College shall always emanate and grow.

The quality of work of the faculty is not only reflected by the student graduates produced but also by the awards received by both the faculty and students in national and international venues. Nevertheless, behind these glories, there are still many aspects of the institution's manpower and physical resources and programs that need further improvement. Meanwhile, the need for greater involvement in national undertakings continue to grow making the challenges for greater participation unlimited.

So long as opportunities are given to the institution to share with these challenges, ViSCA is prepared to do its part as one of the leading agricultural institutions in the country today. Apart from its instructional program, ViSCA shall continue to strive making significant contributions to the national development programs of the government through its mandate in research and development. Focusing on the needs of resource-poor farmers, particularly in the uplands, its research and development programs shall concentrate on low-input strategies.

The accomplishments of ViSCA for 1988 are highlighted in this report. Needless to say, these were made possible only with the effort of its dedicated staff and with corresponding support from the government and from other donor and collaborating agencies. To all of them our heartfelt thanks. May their trust in us remain in the years to come.

  
M. R. VILLANUEVA  
President

# HIGHLIGHTS

## New major fields in the Master's degree program

Horticulture and Soil Science as new major fields of study in the Master of Science degree were offered starting the first semester of SY 1988-1989.

## Substitution of Spanish Courses

Social science, language, and technical courses had replaced the four Spanish courses in ViSCA's undergraduate curricula in compliance with the Department of Education, Culture and Sports (DECS) Order No. 46, s. 1987.

## Rise in Enrolment

For the first semester of SY 1988-1989 an increase of 2.21% in student enrolment was achieved. Although numerically small, it was considered an important achievement considering the trend in enrolment in agriculture nationwide.

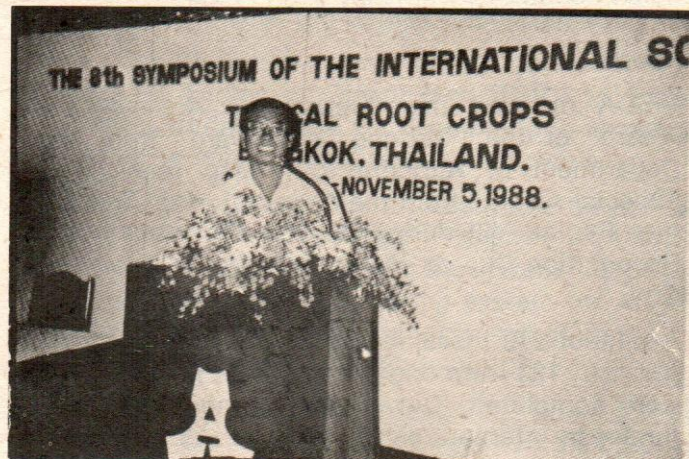
## Faculty Profile

For SY 1988-89, faculty members were composed of 58 Ph.D. degree holders, 132 Master's degree holders and 60 Baccalaureate degree holders.

## International, National and Regional Outstanding Awardees

- \* Dr. Troung Van Den, a Professor of the Department of Agricultural Chemistry and Food Science, won the Best Paper Award entitled: "Formulation; Consumer Acceptability and Nutrient Content of Non-Alcoholic Beverages from Sweet Potato" during the 8th International Society for Tropical Root Crops Symposium in Bangkok, Thailand.
- \* Cindy Villanueva, a fourth year high school student, got the second place in the search for the Ten Outstanding Young Scientists (TOYS) of the Philippines for SY 1988-1989.
- \* Five science projects conducted by 13 students of the Experimental Rural High School of ViSCA got the first five places in the Regional Science Fair and Math Olympiad held at the Divine Word University in Tacloban City on December 6-7, 1988. The winners in the Science fair Category were:

First Place — **Arrowroot as a Material Source in Paper Making** of Cindy Villanueva, Junavie Subere and Marshal Villalino.



*Dr. Truong Van Den got the Best Paper Award during the International Root Crops Symposium in Thailand.*

- Second Place — **Urea-Molasses-Mineral Block (UMMB) with Cassava Starch as Binder** of Rosalyn Pascual, Rizalina Alao, and Elnora de la Rosa.
- Third Place — **Golden Snail - The New Rice Menace - Its Control Using Indigenous Materials** of Lezyl Ponce and Froilan Joseph Milan.
- Fourth Place — **The Possibility of Using Indigenous Materials as Adiabatic Walling Compartment** of Victor Quintana, Reynante Uy, and Marlon Pala.
- Fifth Place — **Kangkong as Feed Supplement in Broiler Production** of Mary Joy Abit and Sergio Abit Jr.

In the Math Olympiad Level 3 Category (Individual Competition), the winner was:

- First Place — Binh Ly, a third year high school student.

### Board Exam Performance

- \* Eleven or 44% of the 25 ViSCA Forestry graduates passed the Forestry Licensure Examination given by the Professional Regulation Commission on June 18-19, 1988 in Manila. Forester Rolando N. Luego copped the 2nd place.

### Best Paper Awards

- \* Two entries (poster making and undergraduate research) of the Department of Plant Protection came out winners during the "19th Pest Control Council of the Philippines Annual Convention" held in Cebu City from May 3 to 7, 1988.

### Research

- \* ViSCA received the "Meritorious Achievement Award" or the "Gintong Ani Award" from the Department of Agriculture. It also received a "Special Award" from the Department of Agriculture Region VIII during its 8th Anniversary and Recognition Day on March 24, 1988 in Tacloban City.
- \* A total of 272 researches were conducted during the year, 123 were ongoing, 40 were new and 109 were completed. Out of this number, 28 were funded by international agencies.

### New ViSCA Root Crop Varieties

- \* A new sweet potato variety, VSP-6, developed by the Department of Plant Breeding and Agricultural Botany, was approved and recommended by the Philippine Seedboard for release to farmers.
- \* A new high yielding cassava variety, VC-2, was also recommended by the Philippine Seedboard.

### Developed Root Crop-based Food Products

- \* Root crop-based food products developed during the year included the following: chiffon cake, loaf bread, pan de sal, jam, catsup, sweet potato beverage, seasoning and dehydrated cubes for "guinataan".

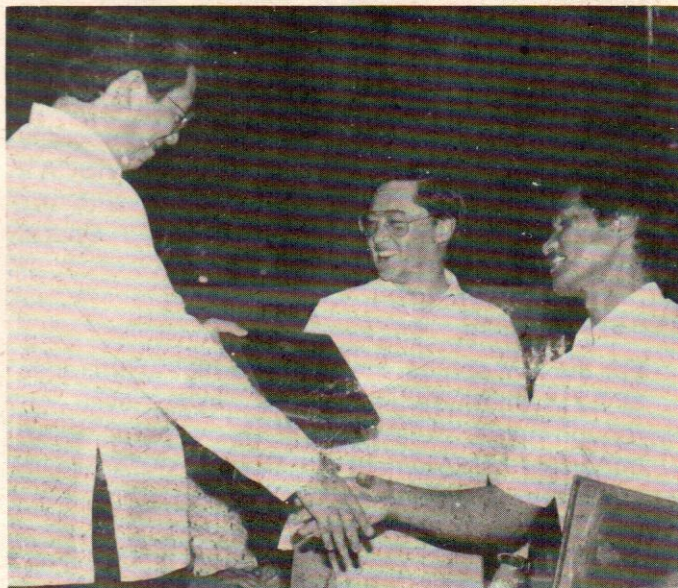
### New Machine Developed for Noodle Production

- \* A simple extruder for root crop noodle production was developed by the Philippine Root Crop Research and Training Center.

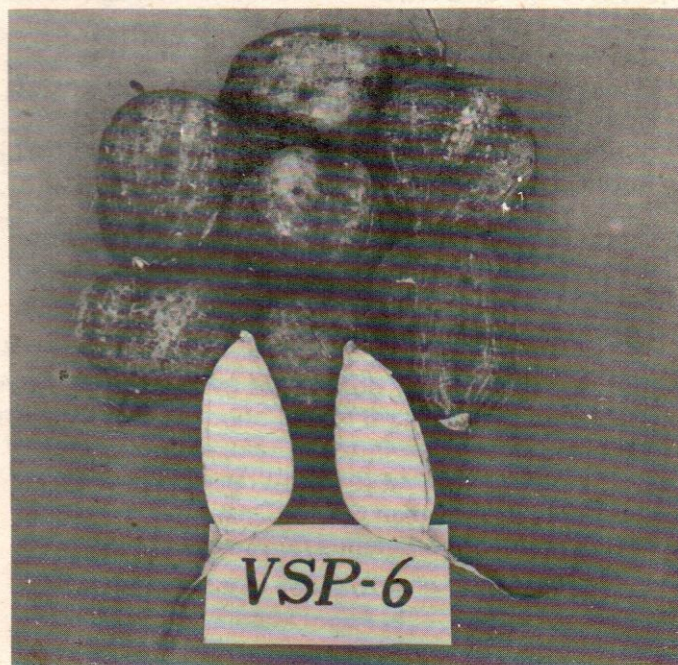
### New Project Funded by PCARRD AND USAID

- \* The three-year project entitled "Strengthening Regional Applied Communication for Region VIII as a Tool for Technology Transfer" under the leadership of Dr. Wolfreda T. Alesna, Coordinator of the Regional Applied Communication Office

(RACO) was approved for implementation. This project was supported by the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development - Rainfed Resources Development Project (PCARRD-RRDP) and the United States Agency for International Development (USAID).



*Sen. Butz Aquino, assisted by Secretary Dominguez, gave the "Gintong Ani Award" to ViSCA through the ViSCA President.*



*VSP-6, the new ViSCA sweet potato variety.*



*Ms. Helga Haas made a symbolic turnover of the donations from German government to the typhoon victims of Leyte.*

### Information Dissemination

- \* The Office of the Director of Research and Extension coordinated an information drive entitled: "Mga Teknolohiya sa Pagpanguma" on August 27, 1988 with the Samahang Nayon members of Inopacan, Leyte as the target clientele.
- \* PRCTRC conducted a series of trainings on sweet potato and cassava technology for farmers from depressed towns in Southern Leyte.
- \* The Philippine Root Crop Research and Training Center (PRCRTC) through its PARRS project in cooperation with two ViSCA departments, Department of Animal Science and Veterinary Medicine (DASVM) and the Department of Agricultural Chemistry and Food Science (DAC-FS) conducted a seminar-workshop on "Root Crop Utilization" at the Bohol Agricultural Promotion Center (APC) on April 13-14, 1988.

### Technical Assistance

- \* Some forty (40) barangay residents of Borongan, Eastern Samar received training in ViSCA on Coconut Oil Processing and By-Products Utilization from March 7 to 11, 1988. This training was made possible through ODREX in cooperation with the Department of Agricultural Chemistry and Food Science.

### Institution of "Tabo" in ViSCA Market

- \* The "Tabo" or market day in ViSCA was launched on July 28, 1988. Scheduled every Thursday of the week, this activity was made possible through the Director of Business Affairs, in cooperation with the Manager of the Income Generating Projects

Office of ViSCA and the Sangguniang Bayan of Baybay.

### ViSCA Linkages

- \* The ViSCA President presented a paper entitled: "Redressal of Poverty in the Visayas: The ViSCA Approach" during the 7th Biennial Conference of the Asian Association of Agricultural Colleges and Universities (AAACU) at the Universiti Pertanian Malaysia, Selangor, Malaysia on October 17-24, 1988.
- \* The ViSCA President attended 2 international conferences and visited 2 American Universities during his 4-week trip to the United States.
- \* Mr. Claude Daniel of the Institut de Recherches pour les Huiles et Oleagineux (IRHO) in Paris, France, visited ViSCA for possible long-term collaborative research and development work.
- \* The Project Coordinator of Australian Center for International Agricultural Research (ACIAR) assisted ViSCA in finalizing the installation of the computerized data monitoring system for ACIAR Project, entitled: "The Management of Soil Erosion for Sustained Crop Production."
- \* The College Infirmary, through its Clinic Physician, Dr. Carmiano Miranda, received \$500.00 for the free clinic services program to the rural poor in remote barangays of Leyte.
- \* The German government, represented by Ms. Helga Haas, donated ₱230,000.00 worth of medicines, fertilizers, seeds and construction materials for the typhoon victims of Baybay and San Isidro, Leyte.
- \* ViSCA's strong external linkages brought in more resources to supplement local funds. Among ViSCA's programs that have gained external support are the Extramural Program for Rural Development (EPRD) funded by the New Zealand Government, the Farming Systems Development Project (FSDP) with support from USAID, root crop research supported by the International Development Research Center of Canada (IDRC), and research projects funded by the Australian Center for International Agricultural Research (ACIAR), International Foundation for Science (IFS) and other external agencies.

### New Acquisitions

- \* The college received 3 passenger vehicles donated by the Australian and New Zealand Governments.
- \* The College Library acquired books worth ₱35,000 which was donated by the New Zealand Government through the Extramural Program.



# **HISTORICAL BACKGROUND**

The Visayas State College of Agriculture (ViSCA) started as a provincial agricultural school on June 19, 1924 with 3 staff and 46 students. In 1939, it was called the Baybay National Agricultural School (BNAS). Teacher-education courses leading to a Bachelor's degree in Agricultural Education and Agricultural Homemaking were introduced in 1952. The institution's identity was changed to Visayas Agricultural College (VAC) in 1960. With the promulgation of Presidential Decree No. 470 on May 24, 1974, the institution became the Visayas State College of Agriculture with Dr. Fernando A. Bernardo as its first president. In the same year, the Educational Development Project Implementing Task Force (EDPITAF) selected ViSCA as the Regional Agricultural College (RAC) for the whole Visayas.

ViSCA occupies 1,099.46 hectares of land which extend from the seashore to the top of Mt. Pangasugan. This area is distributed, as follows: 61.5 hectares of grounds and campus, 143.8 hectares of cropping area, 6.5 hectares of animal project, 140.0 hectares of pasture, 594.0 hectares of forest reservation, and 109.46 hectares for other uses (including quagmire).

ViSCA's agricultural complex is composed of 14 college departments, namely: Agricultural Chemistry and Food Science, Agricultural Education and Extension, Agricultural Economics and Agribusiness, Agricultural Engineering and Applied Mathematics, Agronomy and Soil Science, Animal Science and Veterinary Medicine, Arts and Letters, Development Communication, Forestry, Home Science, Horticulture, Physical Education, Plant Breeding and Agricultural Botany, and Plant Protection; 6 research and training centers, namely: Philippine Root Crop Research and Training Center (PRCRTC), National Abaca Research Center (NARC), Regional Coconut Research Center (RCRC), Center for Social Research (CSR), Farm and Resource Management Institute (FARMI) and Agricultural Training Institute; Center for Extramural Studies (CES) and Experimental Rural High School (ERHS).



*ViSCA's main entrance with the two obelisks and the huge Mt. Pangasugan overlooking the campus.*



# INSTRUCTION

ViSCA's instructional thrusts continued to evolve relevant curricular programs attuned to the manpower demands of the region, with emphasis on the needs of the small farmers and the rural poor.

Curricular programs were revised to pave the way for the implementation of programs where regional demands exist for well-trained manpower as required by specific action programs in food production, agrarian reform, and rural development.

ViSCA has likewise developed a crop of faculty members dedicated to the promotion of agricultural and rural development.

## OBJECTIVES

### Graduate Program:

1. To offer graduate-level instruction to teachers, researchers, extension workers, and administrators in the Visayas involved in agriculture and rural development.
2. To train and guide graduate students in conducting productive and independent research problems relevant to agricultural and rural development.
3. To develop among the graduate students leadership, management, and other professional competencies in order to make them more effective in their chosen line of work.

### Undergraduate Program:

1. To provide students with more comprehensive knowledge and skills in technical agriculture and related fields to serve the needs of the region.
2. To produce graduates with leadership and managerial competencies in small-scale agro-based industries and other agricultural and rural development programs in the region.
3. To produce teachers, researchers, and extension workers as may be required by specific government action programs in food production, agrarian reform and rural development.



*HE students learning cooking skills.*

### Secondary Education:

1. To develop among the youth the saleable skills, understanding, and attitudes to make them intelligent and productive participants in socio-economic undertakings.
2. To make the youth understand the methods of science as a foundation for agricultural and rural development, its influence on human life, and the main scientific facts surrounding nature and man.
3. To provide an environment that gives students the opportunity to explore various disciplines and develop their mental capabilities.
4. To equip the students with agricultural and vocational knowledge and skills to serve the advancing needs of the society.

# **CURRICULAR OFFERINGS**

## **A. Graduate Courses:**

1. Master of Agricultural Development (M.Ag. Dev.) with majors in: Agricultural Education, Agricultural Extension, Agronomy, Plant Pathology, Agricultural Economics, Language Teaching, Animal Production, Horticulture, Soil Science
2. Master of Science (M.S.) with majors in: Agricultural Education, Agricultural Extension, Plant Pathology, Plant Protection, Entomology, Soil Science, Animal Science, Horticulture and Agronomy.

## **B. Undergraduate Courses:**

### **1. Degree Programs:**

- BS in Agriculture (BSA) with majors in: Agronomy, Soil Science, Horticulture, Agricultural Economics, Agricultural Botany, Plant Breeding and Plant Protection.
- BS in Agricultural Education (BSAgEd) with majors in: Animal Production, Crop Production, Teaching Agriculture in the Elementary Schools
- BS in Home Economics (BSHE) with majors in: Elementary Education, Secondary Education and Extension
- BS in Agricultural Engineering (BSAE)
- BS in Agribusiness (BSAB)
- BS in Forestry (BSF)
- Bachelor of Animal Science (BAS) with majors in: Animal Health, Animal Production
- BS in Statistics (BSS)
- BS in Agricultural Chemistry (BSAC)
- BS in Food Technology (BSFT)
- BS in Development Communication (BSDC)

### **2. Non-Degree Programs:**

- Forest Ranger Certificate (FRC)
- Home Economics Technician (HET)

## **C. Extramural Program:**

- Master of Agricultural Development (M.Ag. Dev.) with majors in: Agricultural Education, Agricultural Extension, Agronomy, Agricultural Economics, Language Teaching for Agro-Technical Schools, Animal Production and Development Communication

## **D. Secondary Education:**

- Agricultural Science Curriculum

## CURRICULAR CHANGES

- \* Horticulture as a major field of specialization in the MS degree program of the College was implemented during the first semester of SY 1988-1989.
- \* Soil Science as a new major field of study under the Master of Science degree program was offered during the second semester of SY 1988-1989.
- \* Sixteen extramural study guides, in various disciplines, were developed by the faculty members of the extramural program. Of these, 6 were in Agricultural Extension/Education, 3 in Agronomy, 2 in Development Communication, 2 in Language Teaching, 1 in Animal Science, 1 in Agricultural Economics and 1 in Social Science Statistics.
- \* The proposal to offer M.S. in Animal Science was approved by the curriculum committee and will be offered in the first semester of SY 1989-1990.
- \* In line with DECS Order No. 46 S. 1987 to offer Spanish as an optional course at the collegiate level, all curricular offerings of the college were re-aligned to strengthen its curricular programs.
- \* Under the BSHE degree program, the four Spanish courses were replaced with Philosophy, Advanced Grammar and Composition, Introduction to Literature, and Ecology.
- \* The BS in Development Communication curriculum was re-aligned and some subjects were substituted with development communication-related courses in order to improve the skills of students.
- \* Additional units in English, Mathematics, Philosophy and Chemistry replaced the Spanish courses of the BS in Agricultural Chemistry curriculum.
- \* The BS in Agricultural Engineering curriculum was enriched by adding Advanced Grammar and Composition, Contemporary Philosophical Thoughts, Operations Research and Fundamentals of Farming Systems. Special Topics/Special Problem, with 1-3 credit units, was also instituted in the curriculum to overcome unit deficiency of the students.
- \* In addition to English, Contemporary Thoughts, and Fundamentals of Farming Systems, Experimental Design II was instituted to replace the fourth Spanish subject of the BS in Statistics curriculum.
- \* The Department of Arts and Letters enriched its undergraduate courses through the development of instructional materials, regular updating of its library references and the maintenance of its mini-museum for visitors and students. Literary-musical as well as fine arts competitions were held to enhance student learning.
- \* Additional units in English, Differential Equations, Philosophy and Chemistry replaced the Spanish courses of the BS in Agricultural Chemistry Curriculum.
- \* In the Bachelor of Animal Science curriculum, one Spanish course was retained, and the 3 Spanish courses were substituted with Introduction to Logic, Advanced Grammar and Composition and a new course on Animal Health for majors in Animal Production, and Veterinary Embryology for majors in Animal Health.
- \* The Department of Plant Protection proposed curricular changes for some of its courses. Some new courses were added and changes were made in course titles/descriptions/prerequisites, fusion, abolition, revision and reclassification of other courses from undergraduate to graduate level and vice versa. Some courses were also renumbered. Courses affected were in the fields of zoology, plant pathology, weed science, entomology, microbiology, and plant protection.
- \* Curricular offerings under the Department of Agricultural Economics and Agribusiness have not undergone major revisions this year. However, the Department has instituted the revisions of its Bachelor of Science in Agribusiness curriculum as approved in 1986.
- \* Under the Master of Agricultural Development degree program major in Agricultural Economics, all students were required to take 6 units of core courses and also were required to take micro and macro theory, statistics and mathematical methods.
- \* For nine years, the Experimental Rural High School has continuously adopted the science curriculum. It has also implemented the Free Secondary Education as mandated by the government.

## ENROLMENT TRENDS

Enrolment for the first semester of SY 1988-1989 was 1,848, a 2.21% increase from the previous first semester enrolment of 1,808 students (Table 1). This was composed of 168 (9.0%) graduate students, 1,494 (80.0%) undergraduate students, 171 (9.3%) non-degree students and 15 (0.9%) unclassified and special students. However, this did not include the 561 high school students. Only 1 foreign student enrolled this school year under the Masteral program of the College.

Total enrolment for the second semester of SY 1988-1989 was 1,593, a 2.8% decrease from the same semester's enrolment of the previous school year which stood at 1,639. This was composed of 95 graduate students, 1,362 undergraduate students, 118 non-degree students and 18 unclassified and special students.

ERHS enrolment for SY 1988-1989 increased by 5.4% and the dropout rate was only 3.9%.

For the 1st semester of school year 1988-1989, 69% of the graduate students came from Eastern Visayas. Other graduate students came from Central Visayas, 13%; Mindanao, 11.9%; and Luzon, 3%. Only 0.6% came from a foreign country (Table 2).

Out of the 16 undergraduate curricular offerings, the Bachelor of Science in Agriculture registered the highest number of enrollees. Majority of the undergraduate students came from Eastern Visayas, 80.3%; 10.6% from Central Visayas; 6.8% from Mindanao and 1.5% from West Visayas and 0.8% from Luzon (Table 3).

Table 1. Comparison of Enrolment, First Semester 1987-88 and First Semester 1988-89.

DEGREE PROGRAM	First Semester		Difference
	1987-88	1988-89	
1. Graduate Program			
M. Ag. Dev.	52	96	+ 44
M. S.	67	71	+ 4
Special Student	1	1	0
Sub-Total	120	168	+ 48
2. Undergraduate Degree Program			
B.S. Agriculture	341	312	-29
B.S. Agric'l Dev. Educ.	36	12	-24
B.S. Home Economics	187	215	+28
B.S. Agribusiness	143	133	-10
B.S. Agric'l Engineering	119	116	- 3
Bachelor of An. Science	133	129	- 4
B.S. Forestry	149	155	+ 6
B.S. Exp'tl. Statistics	2	1	- 1
B.S. Agric'l Chemistry	41	38	- 5
B.S. Agric'l Education	254	224	-30
B.S. Food Technology	34	41	+ 7
B.S. Dev't. Communication	39	54	+15
B.S. Statistics	53	48	- 5
B.S. Agric'l Development	7	18	+11
Sub-Total	1,538	1,494	-44
3. Non-Degree Program			
Forest Ranger Certificate	74	98	+ 24
Home Economics Technician	60	73	+13
Others	16	15	- 1
Sub-Total	150	186	+36
4. Secondary Education Program			
First Year	233	194	-39
Second Year	143	169	+26
Third Year	101	103	+ 2
Fourth Year	110	95	-15
Sub-Total	587	561	-26
GRAND TOTAL	2,395	2,409	+14

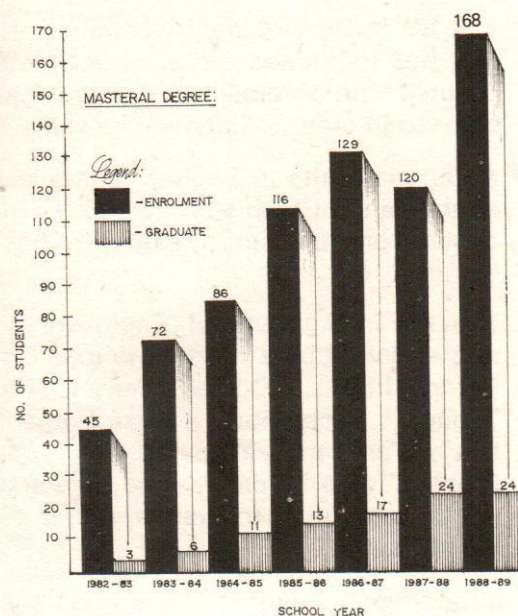


Fig. 1a. Comparative Enrolment Data from SY 1982-83 to SY 1988-89.

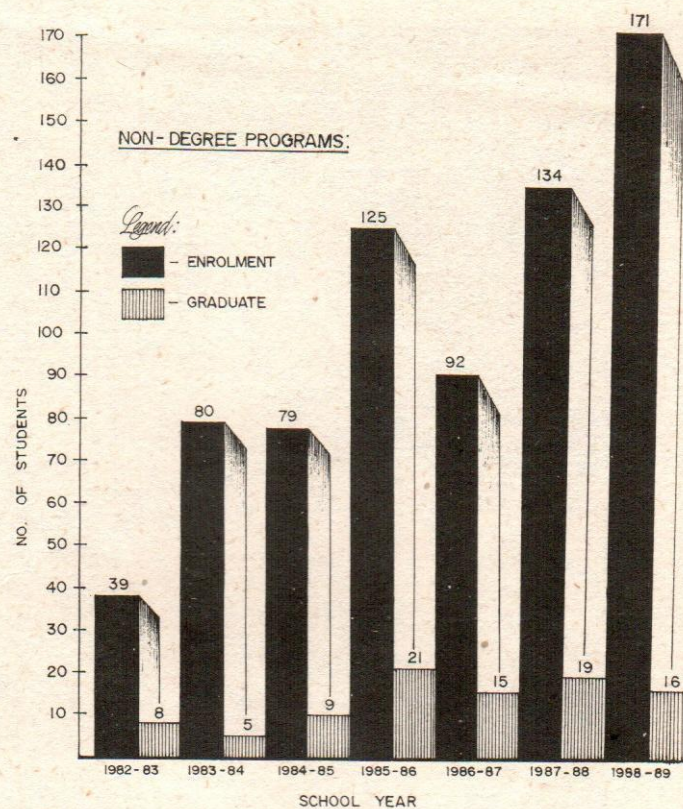
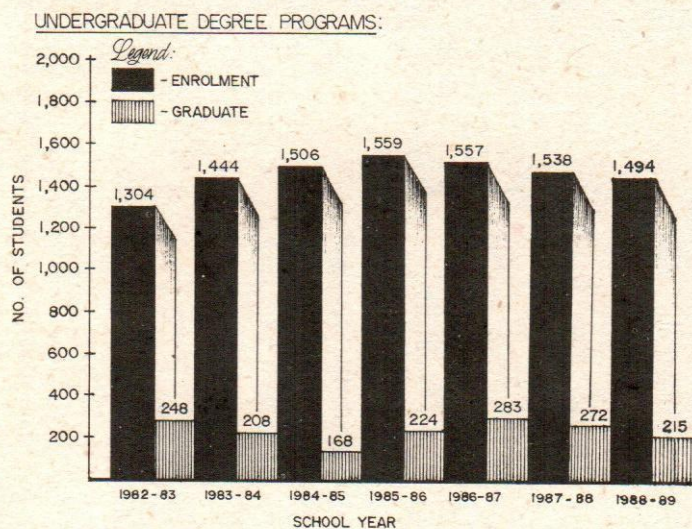


Fig. 1b. Comparative Enrolment Data from SY 1982-83 to SY 1988-89.

Table 2. Geographic Distribution of Graduate Students by Type of Program, Course and Year, First Semester 1988-1989.

Geographic Area	TYPE OF PROGRAM						Special	TOTAL	Percent of Total
	On Campus				Extramural				
	M.Ag.Dev.		M.S.		M.Ag.Dev.				
	I	II	I	II	I	II			
Luzon	1	1	1	0	0	2	0	5	3.0
Mindanao	0	1	1	4	1	13	0	20	11.9
C. Visayas	0	2	3	7	0	10	0	22	13.1
W. Visayas	0	0	1	2	0	1	0	4	2.4
E. Visayas									
Leyte	10	14	24	24	2	23	1	108	64.2
Samar	0	2	3	0	0	3	0	8	4.8
Foreign	0	0	0	1	0	0	0	1	0.6
TOTAL	11	20	34	37	3	62	1	168	100
% of Total	6.5	11.9	20.2	22.1	1.8	36.9	0.6		100

Table 3. Geographic Distribution of Undergraduate Students by Course and Year, First Semester 1988-1989.

Degree Course	Year Level	G E O G R A P H I C				A R E A		TOTAL
		Luzon	Mindanao	Central Visayas	Western Visayas	Eastern Visayas		
						Leyte	Samar	
BAS	I	0	6	1	1	41	2	51
	II	2	5	0	1	21	0	29
	III	0	2	2	0	23	3	30
	IV	0	3	3	0	13	0	19
BSA	I	0	10	9	0	62	7	88
	II	0	6	7	6	51	2	72
	III	1	9	5	0	44	0	59
	IV	2	1	16	1	70	3	93
BSAB	I	0	2	6	1	34	1	44
	II	1	1	0	0	19	1	22
	III	0	3	1	0	28	0	32
	IV	0	0	6	0	28	1	35
BSAC	I	0	2	2	0	8	0	12
	II	0	0	3	0	12	0	15
	III	0	1	1	0	3	0	5
	IV	0	0	2	0	2	0	4
BSADE	I	0	0	0	0	0	0	0
	II	0	0	0	0	0	0	0
	III	0	0	0	0	1	0	1
	IV	0	0	1	0	10	0	11
BSAE	I	1	7	8	0	34	3	53
	II	1	4	3	0	12	1	21
	III	1	1	2	0	12	1	17
	IV	0	1	2	0	8	0	11
	V	0	0	1	0	12	1	14
BS.Ag.Ed.	I	1	1	4	0	55	5	66
	II	0	0	4	0	35	0	39
	III	0	0	8	0	43	0	51
	IV	1	0	5	0	59	3	68
BSES	IV	0	1	0	0	0	0	1
BSFT	I	0	4	0	0	12	1	17
	II	0	0	1	0	13	0	14
	III	0	0	1	0	5	0	6
	IV	0	1	1	0	2	0	4
BSHE	I	0	3	4	1	54	2	64
	II	0	0	7	3	43	1	54
	III	1	4	3	1	44	1	54
	IV	0	1	8	0	34	0	43
BSAg.Dev.	I	0	0	0	0	3	1	4
	II	0	1	0	0	5	0	6
	III	0	0	1	0	3	1	5
	IV	0	0	0	0	3	0	3
BSS	I	0	1	3	0	9	0	13
	II	0	4	1	1	12	1	19
	III	0	0	3	0	9	1	13
	IV	0	0	0	0	3	0	3
BSDC	I	0	3	3	0	19	4	29
	II	0	1	1	0	11	0	13
	III	0	0	1	1	2	0	4
	IV	0	0	2	1	4	1	8
BSF	I	0	3	2	1	41	3	50
	II	0	5	6	1	25	0	37
	III	0	1	6	1	24	1	33
	IV	0	4	2	1	26	2	35
Total		12	102	158	22	1,146	54	1,494
% of Total		0.8	6.8	10.6	1.5	76.7	3.6	100

**Table 4. Geographic Distribution of Students taking Non-Degree and Other Courses by Year, First Semester 1988-1989.**

NON-DEGREE COURSES/ OTHERS	Year Level	G E O G R A P H I C     A R E A						TOTAL
		Luzon	Mindanao	Central Visayas	Western Visayas	Eastern Visayas		
						Leyte	Samar	
FRC	I	0	1	8	2	48	1	60
	II	1	3	6	1	27	0	38
HET	I	1	3	4	1	45	1	55
	II	0	2	0	1	15	0	18
Sub-total		2	9	18	5	135	2	171
% of Sub-Total		1.2	5.2	10.5	2.9	79.0	1.2	100
Others		2	2	5	0	5	1	15
Total		4	11	23	5	140	3	186
% of Total		13.3	13.3	33.3	0	33.3	6.7	100

**Table 5a. Comparative Enrolment of High School Students for SY 1987-88 and SY 1988-89.**

Year Level	No. of Enrollees		Increase (Decrease)	No. of Dropouts	
	SY 1987-88	SY 1988-89		SY 1987-88	SY 1988-89
First Year	182	194	10	30	12
Second Year	124	169	44	12	6
Third Year	116	103	(13)	3	0
Fourth Year	103	95	( 8)	6	2
Total	525	561	33	51	20
% of Total			5.9%		

**Table 5b. Geographic Distribution of High School Students by Year, SY 1988-1989.**

Year level	G E O G R A P H I C     A R E A						TOTAL
	Luzon	Mindanao	Central Visayas	Western Visayas	Eastern Visayas		
					Leyte	Samar	
I	0	0	1	0	192	1	194
II	0	0	3	0	165	1	169
III	0	0	4	0	98	1	103
IV	0	1	4	0	90	0	95
Total	0	1	12	0	545	3	561
% of Total	0	0.2	2.1	0	97.2	0.5	100

## GRADUATION TRENDS

For SY 1988-1989, the College produced 255 graduates of which 11 finished the Master of Science degree program, 13 for the Master of Agricultural Development, 215 for undergraduate degree programs and 16 for certificate courses. For this school year, there were 26 honor students, 2 with *Magna Cum laude* honors, 22 with *Cum laude* honors and 2 *With Honors*. Among the graduates, 57 finished the Bachelor of Science in Agricultural Education and 40 graduated under the Bachelor of Science in Agriculture degree program (Table 6). Although the BSA program had the highest enrolment, some graduating students failed to graduate due to deficiencies in course requirements.

The Experimental Rural High School had 92 graduates this year.

**Table 6. Number of Graduates for SY 1988-1989.**

Degree	Number
<b>Graduate Courses:</b>	
Master of Science	11
Master in Ag. Dev.	13
Sub-Total	24
<b>Undergraduate Courses:</b>	
BS in Ag. Engineering	11
BS in Expt'l. Statistics	1
BS in Statistics	2
Bachelor of Animal Science	13
BS in Agriculture	40
BS in Agribusiness	23
BS in Ag. Chemistry	3
BS in Food Technology	4
BS in Ag. Dev. Education	8
BS in Ag. Development	1
BS in Ag. Education	57
BS in Dev. Communication	7
BS in Home Economics	28
BS in Forestry	17
Sub-Total	215
<b>Certificate Courses:</b>	
Forest Ranger Course	2
Home Econ. Technician	14
Sub-total	16
TOTAL	255
<b>High School:</b>	
Ag. Science Curriculum	92
GRAND TOTAL	347

## STUDENT PERFORMANCE

### College Level:

The **Best Undergraduate Thesis Award** was won by Miss Luz Montesclaros, a Plant Protection major student, during the annual convention of the Pest Control Council of the Philippines on May 3-7, 1988 in Cebu City.

Five of ViSCA's new Agricultural Engineering graduates passed the Board Examination for Agricultural Engineers with Mr. Arthur It. Tambong capturing the 16th place. Eleven Forestry graduates also passed the Board Examinations for Foresters with Rolando N. Luego copping the 2nd place.

Of the total undergraduate student population for the first semester of SY 1988-89, 28.1% (519) were scholars. There were 248 delinquent students for this semester broken down as follows: 118 or 7.02% in the warning list, 45 or 2.68% on probation and 85 or 5.06% dismissed.

### Graduate Level:

A number of ViSCA's graduates were employed in the Department of Agriculture, Department of Agrarian Reform, Department of Education, Culture and Sports, National Irrigation Administration, State Colleges and Universities, Center for Social Research, Philippine Root Crop Research and Training Center and Regional Coconut Research Center. They were also employed in some private companies which include the following: Philippine Packing Corporation, Guthrie Company, Ayala Corporation, and Victorias Milling Corporation. Others were engaged in private business.



Mr. Arthur It. Tambong, 16th placer in the 1988 Board examination for Agricultural Engineers.

## Secondary Level:

For SY 1988-89, 116 or 21% of high school students enjoyed scholarship grants.

Exemplary performance in the field of education has been proven among ERHS students. Among the excellent records that the students got during the year included the following: Cinderella Villanueva and Jude Nonie Sales — Recipients of the Ten Outstanding Young Scientists Award (TOYS) coping second and third places of the National and Regional levels, respectively; Three Science Club members were elected officers of PSYSC Region VIII in the Regional Science Camp at Isabel, Leyte; ERHS

topped the first five awards in the fair category during the Regional Science Fair and Math Olympiad at Tacloban City.

In the Philippine Math Olympiad Individual Category, Binh Ly, a Junior high school student, won First Place. This also made ERHS the winner institution. The adviser and the contestant each received a plaque of recognition.

In the Regional Secondary School Press Conference, the maiden tabloid issue of the "Tiller Bulletin", was awarded one of the Ten Best School Organs in the Region. Marites Sales, the editor, got the 4th place in copy reading and headline writing

### Awardees during the Regional Science Fair.

Rank	Titles	Presentors
First	Arrow Root as a Source of Materials for Paper Making	Cinderella Villanueva, Junavie Subere, and Marshal Villalino
Second	UMMB with Cassava Starch as Binder	Elnora de la Rosa, Rosalyn Pascual, and Riza Lina Alao
Third	Golden Snail, The New Rice Menace	Lezyl Ponce and Froilan Joseph Milan
Fourth	Indigenous Materials for Adiabatic Walling Compartment	Victor Quintana, Marlon Pala and Reynante Uy
Fifth	Kangkong as Feed Supplement for Broiler Production	Mary Joy Abit and Sergio Abit, Jr.



*Miss Cinderella Villanueva receiving a national award as one of the Ten Outstanding Young Scientists of the country.*



*Representatives of the five (5) groups of ERHS delegates received the medals for winning five (5) science research projects in the Regional Science Fair.*

## FACULTY DEVELOPMENT

As of December 31, 1988, ViSCA had a total teaching force of 250 faculty members (college and high school) (Table 7). This included, 58 faculty with Ph.D degrees, 132 with M.S./M.A. degrees, and 60 with B.S. degree (Table 8). Of this number, 20% were on study leave and only 1% was on leave of absence.

Faculty members of ViSCA were active not only in the classroom, but also in research and extension work, administration, and related campus activities.

A total of 48 scholars were sent for advanced studies: 21 were pursuing Doctoral degrees while 27 were pursuing Masteral degrees. Aside from the ViSCA scholarship/fellowship grants, some of the scholars were supported by other sponsors namely: International Development Research Center of Canada, Farming Systems Development Project, Colombo Plan, Winrock International, Asian Institute of Technology, Department of Science and Technology, Rotary Club, Universiti Pertanian Malaysia, Mambusho, Australian Center for International Agricultural Research, and Centro Internacional de Agricultura Tropical.

During the year, faculty members of ViSCA participated in various local, regional, national and international trainings and seminars to update their knowledge and competencies in their fields of specialization (Table 9).



*Participation in trainings and seminar-workshops updated much of the faculty's knowledge in their fields of specialization.*

**Table 7. Number of Faculty Members by Department, July 1987 and June 1988.**

DEPARTMENT/UNIT	YEAR		Difference
	1987	1988	
1. Academic Departments			
Ag. Chem. & Food Science	14	16	+2
Ag. Education & Extension	14	12	-2
Development Communication	7	7	0
Ag. Economics & Agribusiness	17	17	0
Ag. Eng'g. & Applied Math.	25	24	-1
Agronomy & Soil Science	20	19	-1
An. Science & Vet. Medicine	16	16	0
Arts & Letters	15	15	0
Forestry	10	9	-1
Home Science	10	11	+1
Horticulture	10	10	0
Physical Education	6	6	0
Plant Breeding & Agric. Botany	11	11	0
Plant Protection	23	23	0
Experimental Rural High School	33	29	-4
Sub-total	231	225	-6
2. Research Centers and Other Units			
OSA	2	2	0
PRCRTC	7	12	+5
RCRC	2	1	-1
CSR	6	7	+1
OCS	1	0	-1
Library	1	1	0
FARMI	0	2	+2
IGPO	1	0	-1
Sub-total	-20	25	+5
GRAND TOTAL	251	250	-1

**Table 8. Distribution of Faculty Members by Department and by Highest Degree Earned.**

DEPARTMENT	HIGHEST DEGREE EARNED			TOTAL
	Baccalaureate	Masteral	Doctoral	
1. Academic Departments:				
Ag. Chem. & Food Sci.	3	10	3	16
Ag. Educ. & Extension	0	4	8	12
Dev. Communication	2	2	3	7
Ag. Econ. & Agribus.	7	8	2	17
Ag. Eng'g. & Applied Math.	10	11	3	24
Agron. & Soil Science	4	12	3	19
An. Science & Vet. Med.	4*	6	6	16
Arts & Letters	6	4	5	15
Forestry	1	7	1	9
Home Science	3	6	2	11
Horticulture	1	7	2	10
Physical Education	2	4	0	6
Plt. Brdg. & Ag. Botany	3	4	4	11
Plt. Protection	4	13	6	23
Exper'tl. Rural High School	10	19	0	29
Sub-total	60	117	48	225
2. Research Centers and Other Units:				
OSA	0	2	0	2
PRCRTC	0	7	5	12
RCRC	0	0	1	1
CSR	0	4	3	7
Library	0	1	0	1
FARMI	0	1	1	2
Sub-total	0	15	10	25
GRAND TOTAL	60	132	58	250

\*Including DVM

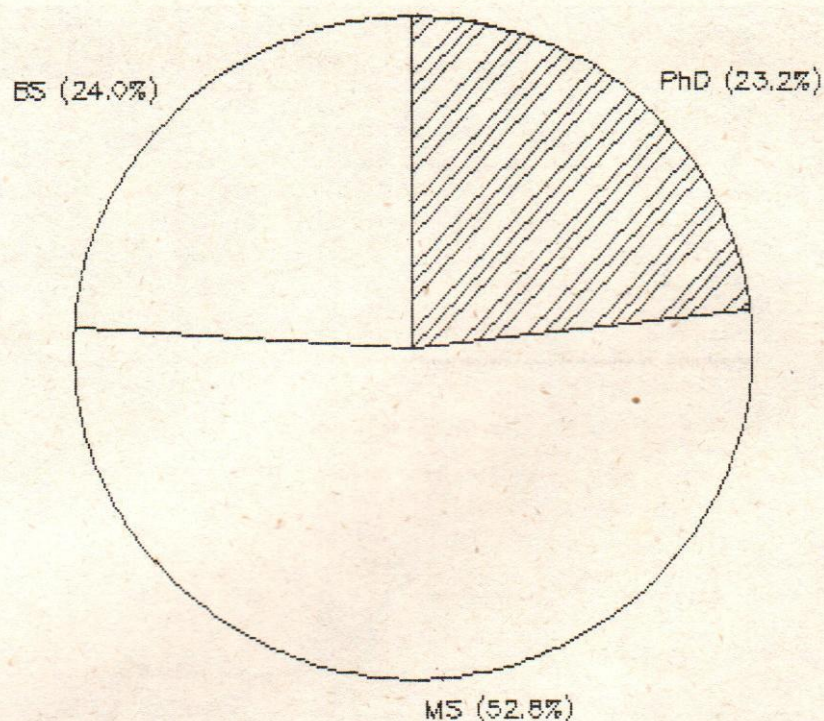


Fig. 2. Distribution of Faculty Members by Degree Earned.

Table 9. In-service trainings/conferences attended by the staff as of December 31, 1988.

Department/Center	TRAINING CATEGORY							
	International		National		Regional		Local	
	Number of Trainings Attended	Staff Who Attended	Number of Trainings Attended	Staff Who Attended	Number of Trainings Attended	Staff Who Attended	Number of Trainings Attended	Staff Who Attended
<b>Academic Departments:</b>								
Ag. Chem. & Food Science	5	7	1	3	0	0	0	0
Ag. Econ. & Agribusiness	3	3	2	12	0	0	4	32
Ag. Eng'g. & App. Math.	2	2	5	14	3	20	13	35
Agronomy & Soil Science	2	8	4	6	3	21	0	0
Animal Science & Vet. Med.	2	2	3	4	2	2	1	2
Arts & Letters	0	0	3	4	0	0	0	0
Development Communication	4	4	11	11	2	5	2	2
Forestry	3	4	1	2	1	2	1	2
Home Science	2	2	5	8	2	2	2	2
Horticulture	0	0	1	1	1	1	1	1
Plant Breeding & Ag. Botany	2	3	3	7	3	6	0	0
Plant Protection	9	9	15	35	8	9	6	4
Physical Education	0	0	1	1	0	0	0	0
ERHS	2	2	5	6	4	6	4	4
<b>Research Centers and Other Offices (Detailed):</b>								
Center for Social Research	2	2	8	11	2	2	4	11
Farm & Resource Mgt. Institute	0	0	1	5	2	2	3	21
National Abaca Research Center	1	2	3	4	2	1	4	3
Phil. Root Crop Res. & Train'g. Center	5	8	4	6	0	0	2	2
Regional Coconut Research Center	0	0	3	5	4	4	0	0
College Library	1	2	0	0	0	0	0	0

# RESEARCH

## OBJECTIVES

1. To generate production and processing technologies on major crops and domestic animals considering existing conditions and resources of farmers.
2. To develop appropriate technologies for the conservation and utilization of natural resources.
3. To identify social, economic, and political factors influencing agricultural and rural development.
4. To package improved technologies in cooperation with extension personnel of the institution on production, processing, utilization, marketing plant and animal products, conservation and utilization of natural resources, and socio-economics.
5. To continue providing the necessary leadership in organizing and implementing integrated research on food, agriculture and rural development.

VISCA has concomitantly broadened the area of its research thrusts inasmuch as it is a national multicommodity research center in the country. It has given full attention to the strengthening and upliftment of the rural and agricultural sectors. Its research areas have been focused mainly on priority problems in the Visayas region with emphasis on the major or promising food and industrial crops that have been neglected or given little attention. It has also focused its research undertakings on the development of low risk, low input technologies to enhance the chances of the small Visayan farm families to improve crop and livestock productivity and profits.

Research was organized along disciplinary or commodity lines through the 6 research centers and 13 technical departments of VISCA. For the calendar year 1988, VISCA research areas were focused on the following priority areas/commodities: root crops, coconut, abaca, livestock and poultry, rice and other cereals, socioeconomics, forage, and pasture and grasslands, agricultural engineering, agroforestry and forest plantation, applied rural sociology, corn and sorghum, farming systems, fisheries, legumes soil resources and vegetables.

*Various food products from root crops.*

## RESEARCH ACCOMPLISHMENTS

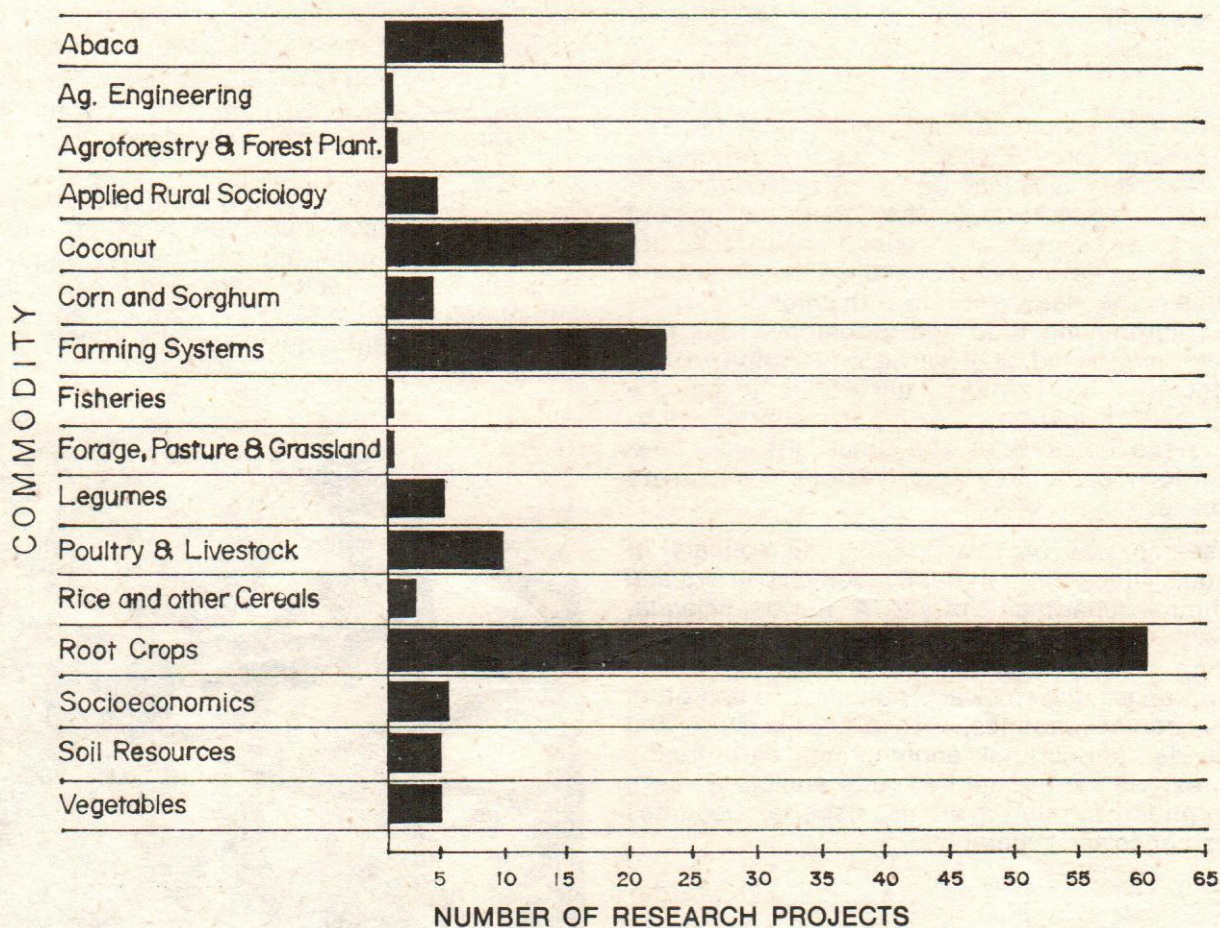
A total of 272 research projects/studies were conducted during the year. Of these, 123 were ongoing and 40 were new. There were 109 completed projects/studies in various commodities. Of the total 272 research projects implemented, 244 projects were ViSCA supported and 28 with foreign funding. External support amounted to ₱13,778,997.86 with 72% coming from International Development Research Center of Canada (IDRC). Other international funding agencies included the following: Australian Centre for Agricultural Research (ACIAR), Forestry/Fuelwood Research and Development (F/FRED), Technical Advisory Group for Self Help Projects (TAGSHEP), South Carolina State College (SCSC), International Foundation for Science (IFS), WINROCK and Agricultural Support Services Project of the Department of Agriculture (ASSP-DA), Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) and United States Agency for International Development (USAID).

The number of research projects/studies conducted by ViSCA employed a good number of research staff paid out of project funds. As of December 31, 1988 there were 461 research personnel, of which 52 or 11.3% were regular, 209 or 45.3% were contractual and 200 or 43.4% were casual employees.



**Table 13. Number of Ongoing and New Projects, CY 1988.**

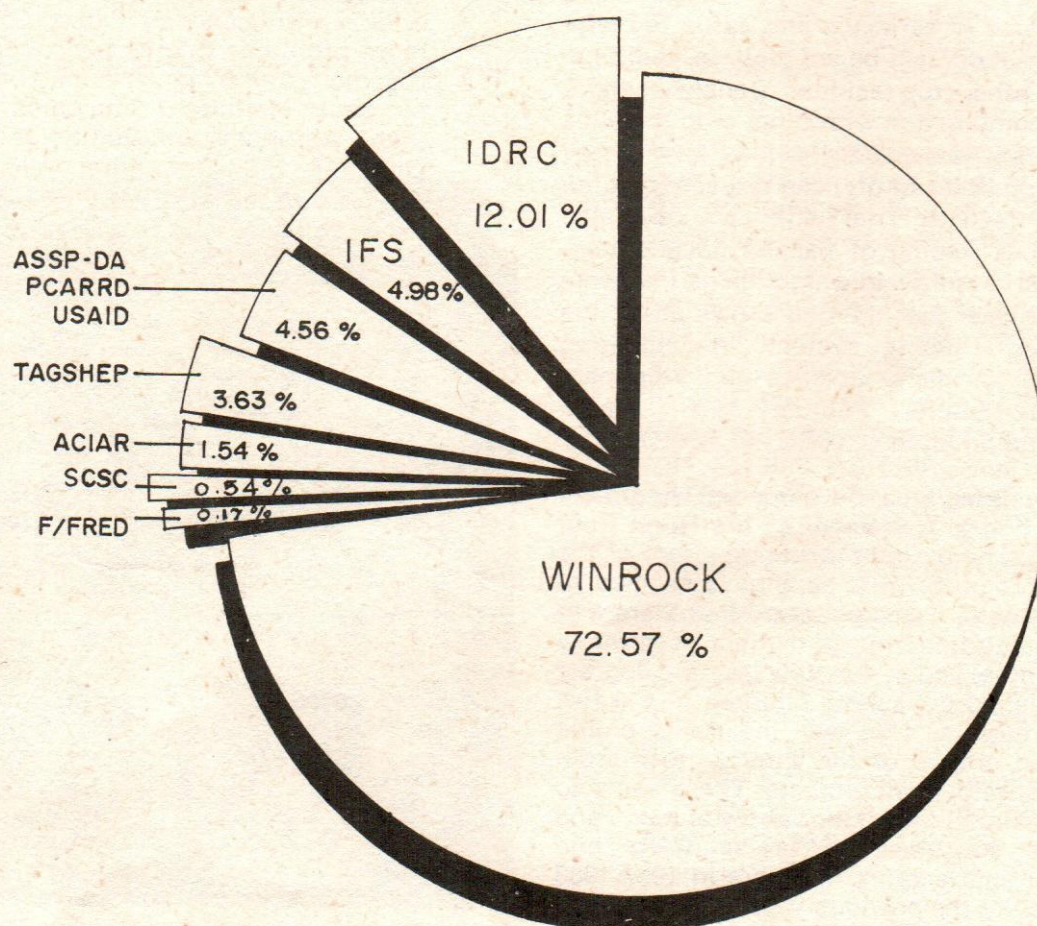
Commodity	Number of Researches		Total
	Ongoing	New	
Abaca	6	4	10
Agricultural Engineering	1	0	1
Agroforestry and Forest Plantation	1	1	2
Applied Rural Sociology	4	1	5
Coconut	19	2	21
Corn and Sorghum	4	0	4
Farming Systems	8	15	23
Fisheries	1	0	1
Forage, Pastures and Grasslands	0	1	1
Legumes	5	1	6
Poultry and Livestock	6	4	10
Rice and Other Cereals	3	0	3
Root Crops	52	10	62
Socioeconomics	5	1	6
Soil Resources	4	1	5
Vegetables	4	1	5
<b>TOTALS</b>	<b>123</b>	<b>40</b>	<b>163</b>



**Fig. 3. Number of Ongoing Research Projects for CY 1988.**

**Table 14. Number of Foreign Assisted Projects by Sources of Funds, CY 1988.**

Source of Funds	No. of Projects	Total Budget
IDRC	3	₱ 1,655,311.50
ACIAR	1	211,815.11
F/FRED	1	23,518.95
TAGSHEP	1	500,000.00
SCSC	1	73,888.00
IFS	6	685,627.00
WINROCK	1	10,000,000.00
ASSP-DA-PCARRD-USAID	14	628,837.30
<b>TOTAL</b>	<b>28</b>	<b>₱13,778,997.86</b>



**Fig. 4. Foreign Funding for Research, CY 1988.**

# RESEARCH BREAKTHROUGHS

## NUTRITION

1. **Utilization of Lambayong (*Ipomea pes caprae*) and Pagaypay (*Canavalia lineata*) leaf meals in poultry feeding.** Lambayong or pagaypay leaf meals may be used up to 10% level in the ration of layers based on the highest return above feed cost. Implementing Department: Animal Science and Veterinary Medicine. Duration: May 1986-June 1988. Funding Agency: ViSCA.
2. **Suitability of Cowpea (*Vigna unguiculata*) as protein source in commercial hog ration.** Cowpea may be used successfully up to 20% of hog grower rations. However, in view of the scarcity of its supply, it is still an expensive source of protein. Implementing Department: Animal Science and Veterinary Medicine. Duration: January 1987-June 1988. Funding Agency: ViSCA.
3. **Performance of carabaos and cattle fed with banana pseudostem-based diets in combination with other crop residues.** Banana pseudostem in combination with other crop residues such as; sweet potato vine hay, peanut hay and ipil-ipil (fresh or dry) can be used to fatten cattle in feedlot. Trial with caracows also proved that feeding of banana pseudostem-based diets resulted in weight gains that were significantly higher than caracows under the traditional tethering system. Implementing Department: Animal Science and Veterinary Medicine. Duration: February 1986 - March 1988. Funding Agency: IDRC - PCARRD.
4. **Barangay Integrated Development Approach for Nutrition Improvement of the Rural Poor (BIDANI).** The overall nutritional effect of the BIDANI program in the barangays seemed to be remarkable. It was observed that there was a decreasing trend in the number of severely (third degree) and moderately (second degree) malnourished pre-school children in the five pilot barangays. This was the result of the combined effects of the interventions from various development projects. There was also an increasing trend on the variety of foods and nutrients consumed by pre-schoolers and pregnant and lactating mothers in 1987-1988 compared to the previous years of the project life. Implementing Department: Home Science. Duration: January 1, 1986-December 31, 1988. Funding Agency: PCARRD.

## SOIL RESOURCES

1. **Cultural management to recondition marginal hilly areas for cereal production.** Application of 90 kg/ha. of phosphorous increased the growth and yield of corn. Likewise, growth and yield of rice were increased with the application of phosphorous regardless of sources. Implementing Department: Agronomy and Soil Science. Duration: May 1985-December 1988. Funding Agency: ViSCA.

## FERTILIZER MANAGEMENT

1. **Effects of Algafer LPF Plus and its combination with inorganic fertilizer on field legumes.** Application of 1/3 and 2/3 of algafer in combination with 2/3 and 1/3 inorganic fertilizer in mungbean increased its herbage and seed yields during wet season. Implementing Department: Agronomy and Soil Science. Duration: October 1987-December 1988. Funding Agency: Dating Bayan Agro-Industrial Corp.
2. **Efficacy of Algafer LPF Plus on corn and its economic implications.** Algafer LPF Plus is comparable with inorganic fertilizer which is effective in increasing the yield of corn and is more profitable (higher net income) than inorganic fertilizer, either applied alone or with inorganic fertilizer. Implementing Department: Agronomy and Soil Science. Duration: October 1987-December 1988. Funding Agency: Dating Bayan Agro-Industrial Corp.



*Pagaypay as new source for poultry leaf meal.*

## AGROFORESTRY

1. **Verification trial on the utilization of FGNFT (Fast Growing Nitrogen Fixing Trees) as strip crop, soil conditioner and source of organic fertilizer for corn production in hilly areas.** FGNFT strips were established along the contours in hillyland in Maasin clay soil. Incorporation and supplementation of foliage with inorganic phosphorous and potassium increased corn yield which was comparable to those applied with 60-60-60 inorganic fertilizer. In Lugo clay soil, utilizing any of the FGNFT's increased corn stover production after 4 incorporations of foliage. These trees were also effective in controlling erosion in hilly areas. Implementing Department: Agronomy and Soil Science. Duration: July 1986 - December 1988. Funding Source: National Academy of Science (NAS).

## TISSUE CULTURE

1. **Embryo and tissue culture of coconut.** A complete process of somatic embryogenesis through a callus phase was initiated from zygotic embryo culture of coconut. Regeneration of shoots, polarized structures with



*Haploidy as a tool for coconut improvement.*

shoot and root ends, and complete plantlets were obtained 10-15 months after inoculation. Implementing Department: Horticulture. Duration: January 1984 - December 1989. Funding Agency: ViSCA.

2. **Development of disease resistant abaca lines/ varieties.** By *in vitro* culture, callus initiation from tissue culture of abaca was attempted with the ultimate aim of regenerating plants. The procedure of callus formation and plantlet regeneration would pave the way for *in vitro* selection for disease-resistant abaca plants. So far, the rapid browning of abaca tissue after inoculation has prevented further development of the callus. Implementing Department: Horticulture. Duration: July 1985-June 1990. Funding Agency: PCARRD.
3. **Tissue culture of tropical root crops.** Micropropagation of taro and yam was undertaken this year. Evaluation of the performance of cultured meristems of different varieties of the two crops was conducted. Varietal differences were observed in the frequency of cultures producing plantlets and the multiplication rate of *in vitro* plantlets. Implementing Department: Horticulture. Duration: February 1984-December 1989. Funding Agency: PRCRTC.
4. **Development of regeneration and selection techniques for stress tolerant rice and corn in the Philippines.** Somaclonal variation has been regenerated from callus cultures of rice and corn under different treatments. The variation induced in culture was reflected in the various growth parameters such as; early maturity, tillering capacity, grain production for rice and kernel production for corn. The regenerants have been tested under acidic soil (pH 4-5) and the evaluation for their growth and yield is ongoing. Implementing Department: Horticulture. Duration: January 1986 - December 1989. Funding Agency: CSU-USAID.
5. **Haploidy as a tool in coconut improvement.** This study aimed to optimize the factors related to haploid induction and plant regeneration from coconut microspores and to explore the possibilities of utilizing diploidized haploids in coconut improvement. Implementing Department: Horticulture. Duration: February 1984 - December 1988. Funding Agency: ViSCA.

## VARIETAL IMPROVEMENT

1. **Sweet potato improvement.** The sweet potato breeding line, ViSCA 20-209 was approved and recommended by the Philippine Seedboard for release to farmers and consumers and renamed VSP-6. Implementing Department: Plant Breeding and Agricultural Botany. Duration: 1983-1988. Funding Agency: PCARRD-IDRC.
2. **Varietal improvement of *Gliricidia sepium*.** Sixty promising accessions of *Gliricidia sepium* were evaluated for growth and stand performance. The accessions from South America and Nicaragua showed superior performance over the rest of the accessions. However, among the local accessions, *G. sepium* collected from Maasin, Southern Leyte produced the best growth and stand performance. Implementing Department: Plant Breeding and Agricultural Botany. Duration: 1985-1988. Funding Agency: National Academy of Science.
3. **Collection and evaluation of arrowroot and yambean.** Characterization and yield evaluation of 32 arrowroot and 26 yambean accessions were done. Twelve arrowroot accessions (PRM#1,2,8,9,11,12,19,23,24,25,28,30) showed high rhizome yield. Experiment on timing of harvesting arrowroot showed that the yield obtained at 8 months after planting (MAP) was higher than at 7MAP. Moreover, rhizomes, when used as planting materials gave higher yield than suckers. On the ability of yambean to nodulate, it was found out that yambean produced nodules at 30 days after planting (DAP). Furthermore, more nodules were obtained when yambean was fertilized with inorganic nitrogen. Implementing Center: PRCRTC. Duration: January 1984-December 1988. Funding Agency: PRCRTC.

## MULTI-PURPOSE TREE SPECIES

1. **Germplasm collection of *Gliricidia sepium*.** In terms of plant growth, the different accessions collected showed very promising result. Of those propagated through seeds, accession GS#15 grew the tallest (4.55m) and developed the biggest diameter increment (3.08 cm) on the first year of growth. Accession GS#6 was found to be the tallest (6.73 m) and has the biggest diameter increment (4.75 cm) on the second year and on the succeeding third, the fourth, and the fifth year of growth. Of those accessions propagated through cuttings, GC#4 was found to be the tallest



A Kakawate variety.

- (4.26 m) and had the biggest diameter increment (2.83 cm) on the first year of growth. On the second year, it was outyielded by GC#2 which became the tallest (6.11 m) among all accessions and had a bigger diameter (4.50 cm). This was true for the third, the fourth and the fifth year of growth. Implementing Department: Forestry. Duration: January 1983 - December 1988. Funding Agency: National Academy of Science.
2. **Survey of households current use of Multi-Purpose Tree Species (MPTS) on small upland farms in Eastern Visayas.** This study was conducted to determine the socio-demographic profile of small upland farmers and the current small-farm uses of multi-purpose tree species in selected critically and partially denuded sites in Leyte. Results of the survey showed that farmers from critically denuded sites relied heavily on very few locally available tree species, mostly ipil-ipil, madre de cacao, and acasia (*Samanea saman*). Farmers from partially denuded areas utilized a wider range of tree species, many of which were collected from the forest. It was observed that even with the growing awareness of the problem of fuelwood in the region, tree growing seems to be not a major concern unlike food production. Implementing Center/Department: Center for Social Research/Home Science. Duration: November 1, 1987 - July 31, 1988. Funding Agency: WINROCK International.



*Arrowroot plants and their harvested tubers.*

## POSTHARVEST TECHNOLOGY/PROCESSING

1. **Development of a simple extruder for root crop noodle production.** The moisture content of the dough affected the capability of the machine. The capacity increases when the moisture content is high and vice versa. Good quality noodles were produced with a moisture content of about 31%. Implementing Center: PRCRTC. Duration: April 1987 - June 1988. Funding Agency: PRCRTC
2. **Development of a drying technology applicable to village level.** Drying of abaca fibers with supplemental heating decreases the drying time of abaca fibers with densities of 1 kg/m, 3 kg/m, 5 kg/m and 7 kg/m. Likewise, the amount of charcoal used in the heater increased with drying densities. Implementing Center: National Abaca Research Center. Duration: April 1987-December 1988. Funding Agency: VISCA/PCARRD.
3. **Postharvest technology development for yam and taro in the Philippines.** Taro corms stored in clamp method had consistently lower weight loss, incidence and severity of decay than those stored in hut (control). Corms packed either in moist sand or rice hull ash had lower weight loss, incidence and severity of decay than the unpacked corms. Retaining approximately one foot of leaf stalk further

improved the shelf-life of the taro corms in both clamp and hut storage. Implementing Center: PRCRTC. Duration: February 1985-December 1988. Funding Agency: PRCRTC.

## APPLIED COMMUNICATION

1. **Field evaluation and monitoring of the Philippine Crop Protection Programme radio-based communication campaign on Integrated Pest Management (IPM).** A survey of technicians and a mini-listening experiment were conducted to determine the effects of the Philippine-German Crop Protection Programme's (PGCPP) radio-based communication campaign on changes in rice farmers' knowledge, attitudes and practices on integrated pest management (IPM). The survey suggested that there was a relationship that existed among the respondents between their exposure to the radio campaign and knowledge on IPM. In view of the limited exposure of the IPM campaign materials, mini-drama experiments were conducted which demonstrated significant results that IPM mini-dramas can indeed be used as a learning medium for farmers. Implementing Department: Development Communication. Duration: June 1986-April 1988. Funding Agency: German Foundation.

## CULTURAL MANAGEMENT

1. **Effects of organic and inorganic nitrogen on the productivity of coconut grown on three important soil types in Leyte.** This study was conducted in nitrogen-deficient areas of Sogod, Burauen and Hilongos possessing the following soil types: Maasin clay, Palo clay loam and Mandaue clay, respectively. Cost and return analysis showed that the application of organic fertilizers could give better income to the coconut farms especially in nitrogen-deficient areas. Highest net profit could be obtained with the application of 2 kg. KCL plus 2 kg. of Ammonium Sulfate per palm per year. Implementing Center: RCRC. Duration: July 1981-December 1988. Funding Agency: PCARRD.

## ENTOMOLOGY

1. **Varietal screening for resistance to insect pests of taro** It was found out that high mortality rate of immature hornworms occurred on those reared on 6 taro accessions, namely: PR-6 142,101,120,298,290 and 650. Implementing Center: PRCRTC. Duration: June 1984-March 1988. Funding Agency: PRCRTC.

## SOCIO-ECONOMIC

1. **Technology Assessment for Farming Systems in Eastern Visayas (coconut-based).** Mixed cropping, a traditional system in the area, was practiced by the majority of farmers planting perennial crops like coconut and banana. High adoption rates on improved/recommended cultivars, straight row planting, fertilizer application were observed only on pineapple, cacao and a few annual crops. Adoption constraints to the multi-storey cropping system included the following: unsuitability of the farm due to soil and other environmental factors, existence of perennial crops planted under coconut, and the availability of needed planting materials. Higher productivity and profitability was found in multi-storey dominant farms compared to mixed-cropping and the intercropping dominant farms. Successful adopters of the technology were farmers with financial capability to sustain the capital and input requirements of the farm, owner-cultivators of a relatively larger farm area, highly innovative and hardworking farmers, those who have good leadership qualities, and those who possessed related farming skills and high commitment to farming. Despite the existence of instituted diffusion channels, technology adoption was slow due to farmers' seemingly lack of awareness, interest and involvement. Implementing Department: Agricultural Economics and Agribusiness. Duration: January 1987-December 1988. Funding Agency: PCARRD/IDRC.

## PLANT PATHOLOGY

1. **Screening of taro varieties in Leyte for resistance to plant diseases.** Results of the study revealed that the *Phytophthora* leaf blight significantly reduced the yield of Kalpao taro variety from 9.44% to 35.50% reduction rate. The mechanisms of resistance involved in taro against *Phytophthora* leaf blight could be a combination of morpho-anatomical structures and biochemical factors. Implementing Center: PRCRTC. Duration: July 1984-March 1988. Funding Agency: PRCRTC.

*Taro (gabi) experimental site.*



*Intercropping coconuts with pineapple provided additional income to farmers.*



# EXTENSION

## OBJECTIVES

1. To package and disseminate useful information from research findings for application by the end-users or clientele through print, radio broadcast, and other communication media.
2. To undertake action research projects at the village level using new approaches, methods or techniques in accelerating rural development.
3. To improve and upgrade the capability, efficiency, and effectiveness of the ultimate users of new knowledge or technology by conducting training and related activities through non-formal education.
4. To provide technical assistance to different government agencies, development workers, teachers, and rural organizations on technical and specialized subject matter areas in agriculture and rural development.
5. To verify different technologies developed by the college and determine their appropriateness under varying socioeconomic and physical conditions.
6. To maximize the use of limited resources and increasing the effectiveness of government programs for rural development by strengthening the linkages among the different agencies in the region.

## INFORMATION DISSEMINATION

- \* Display of exhibits during the Farmer's Field Day of ViSCA's new and highly recommended sweet potato varieties, the best white corn accessions and some "tikog" varieties.
- \* Technology dissemination was carried out through radio programs at DYAC, specifically "Takna sa Pananum" at 6:15-6:45 in the evening from Monday to Saturday, "Takna sa Panghayupan" and "Bantay Uma". In addition, early warning tips of pest outbreaks were also aired through the radio.
- \* Establishment and maintenance of demonstration farms on abaca-based cropping system and coconut-based intercropping in ViSCA by National Abaca Research Center and Regional Coconut Research Center, respectively.
- \* Faculty and staff of various technical departments served as resource persons and consultants on the different extension activities, seminars and trainings conducted by ViSCA during the year.
- \* Distribution of farm bulletins and technoguides to farmers, researchers, technicians of other government agencies.



*Dr. Manuel K. Palomar as resource person in one of the trainings held for farmers.*

*ViSCA Radio Station DYAC, an active medium for information dissemination.*



## TECHNICAL ASSISTANCE

- \* Identification of various plant species was done by the Department of Plant Breeding and Agricultural Botany through its herbarium. It also sold sweet potato planting materials and high yielding corn accessions at cost to small farmers and other clientele.
- \* Services to smallholder livestock producers were served through the Mobile Clinic of the Department of Animal Science and Veterinary Medicine. Services given included the following: spaying of dogs, hog cholera immunization and veterinary consultation of various livestock species.
- \* Artificial insemination in carabaos and cattle was made available at the Department of Animal Science and Veterinary Medicine. Buffalo and Brahman semen were secured from PCRDC-UPLB and from the Department of Agriculture in Region VIII. Likewise, the establishment of about 3 hectares of improved grasses was made during the year. Pasture grasses which were established included *Panicum maximum* (Guinea) and *Pennisetum purpureum* (Napier).
- \* Diagnosis of pest problems and its control measures were undertaken by the Department of Plant Protection through its Plant Pest Clinic. In this connection, it has re-organized the Barangay Rat and Pest Patrol of Barangay Biasong, Baybay, Leyte. Likewise, it has established Rice Pest Monitoring Stations for surveillance of any pest outbreak in the following barangays: Biasong, Hilapnitan and Sta. Cruz, Baybay, Leyte.
- \* The Department of Plant Protection has effectively maintained its Biological Museum which served the needs and inquiries of various clientele from the region and other parts of the country. More than 2,000 people had visited the museum this year.
- \* The Center for Social Research has established a databank to provide ViSCA and other institutions with readily available and up-to-date information on participatory research on small farmer development. It has also maintained its VAX 11 supermini computer with video terminals and printers, and a number of IBM PC compatible microcomputers and provided statistical analysis, data base management, systems development and word processing services to the ViSCA community.



*Distribution of sweet potato planting materials to farmers' wives.*

## PUBLICATIONS

### Regional Coconut Research Center:

1. A Simple Way of Making Charcoal From "Binuongan".
2. Dryer Fueled By Charcoal From Coconut By Products.
3. Pineapple Growing Under Coconut.
4. Abonohi An Iyo Kalubian Yana.
5. An Tanom Nga Lubi - An Iya Purma Ngan Mga Parte.
6. Paghimo Hin Imo Kalugaringon Nga Luonan Hin Lubi.
7. Paghimo Kita Hin Maupay Nga Kopra.
8. 8 Nga Mga Sekreto Hin Pagplano Han Bunga Hin Lubi.
9. 7 Ka Paagi Hin Pagpatubo Hin Lubi.
10. Pagtikang Han Paglubihan.

### Department of Plant Protection:

1. Ang Hustong Pama-agi sa Paggamit ug Medisina.
2. Plant Pest Clinic Advisory Bulletins.
3. Systematic Studies of Philippine Cheyletid mites (Acarina) IV. The Genus *Cheyletus* Latreille.
4. Systematic Studies of Philippine Cheyletidae (Acarina) V. New Species and New Records, With a Note on the Synonym of *Tutacheyla Corpus Raros*.
5. A Review of Philippine Tuckerellidae (Acarina).
6. A Preliminary Assessment of Biosystematic Resources and Services in Entomology in the Oriental Region.



Various PRIS publications have been supported by IDRC for ViSCA's extension program.

7. A New Species of *Podapolidus* and A New Species of *Eutarsopolipus* (Acari: Podapolipidae) from the Philippines.
8. Infectivity and *in vitro* Production of Sweet Potato Scab Fungus (*Sphaceloma batatas* Saw.) Inoculum.
9. Philippine Phytosiridae (Acari).
10. Population Trend of *Heteropsylla Cubana* Crawford in Baybay and Villaba, Leyte, Philippines.

**Department of Animal Science and Veterinary Medicine:**

1. "An-Sci" Notes
2. "Unsaon Pagpamuhi ug Pag-atiman sa Baboy"
3. Unsaon Pag-ila, Paglikay o Pagsumpo sa Sakit sa Baboy.

**Farm and Resource Management Institute:**

1. FARMI Information Service (FARMIIS) Newsletter.
2. Database Management System for FSR/E and Related Literature.
3. Training Manual Used for FSR/E Short Course in September.

**Philippine Root Crop Research and Training Center:**

1. Radix
2. Technoguide
3. PRCRTC Annual Report

**Department of Plant Breeding and Agricultural Botany:**

1. Somatic Chromosome Numbers in *Ipomoea* Species from the Philippines and Japan.
2. Genotype Environment Interaction for Yield in Sweet Potato.
3. A Preliminary Study on Inducing Root Flesh Color Mutation in Sweet Potato Using Ethyl Methane Sulfonate and Adventitious and Technique.

**Office of the Director of Research and Extension:**

1. Development Forum.
2. VICARP News.
3. Annals of Tropical Research.
4. "Pagdaghan sa Abot sa Mani".
5. "Paghimo ug Maayong Listahan sa Uma".
6. "Production of Solanaceous Vegetables".
7. "Utilization of Root Crops for Animal Feeds".

**Philippine Root Crops Information Service:**

1. State of the Art and Abstract Bibliography, Cassava Research
2. State of the Art and Abstract Bibliography, Sweet Potato Research
3. PRIS Leaflet Series (English version)
4. Directory of Root Crop Researches/Professionals in the Philippines
5. PRIS Extension Bulletin
6. Technoguide
7. Sweet Potato Pest and Diseases
8. PRIS Leaflet Series (Tagalog version) Nos. 1-11
9. Root Crops Digest
  - a) Vol. 3 # 1 - Recommended Varieties of Cassava
  - b) Vol. 3 # 4 - Recommended Varieties of Yam

**Information and Community Relations Office:**

1. ViSCA ViSTA
2. ViSCA Newsletter

**Planning and Development Office:**

1. ViSCA Annual Report
2. ViSCA Student Profile
3. ViSCA Faculty Profile
4. ViSCA Facts and Figures
5. ViSCA Annual Development Plan

**Registrar's Office:**

1. ViSCA Information Bulletin

## ACTION RESEARCH PROJECTS

### San Isidro Rural Systems Development Project

The various activities of the San Isidro Project on crop production and hillyland development sprang from the Project's desire to generate and demonstrate appropriate agricultural technologies as well as to provide technical assistance to the farmers and personnel of the different agencies involved in the Project. This year's activities were supported by the New Zealand Government.

Testing and demonstration of appropriate technologies to the community of San Isidro were done. The 2.8-hectare demonstration and experimental farm of the San Isidro Project served to propagate new varieties of crops and provided the community with a source of planting materials. Likewise, a 45-square meter plant nursery was constructed at the demonstration farm area to provide a permanent place for raising seedlings and planting materials. The nursery was already 95% completed.

The Farm and Home Advisers (FHAs), which served as effective agents of change among the rural households, provided the project with continuing education and training. During the year, a total of 6 trainings on crop production were conducted. Six training guides or primers in Cebuano were reproduced and distributed to the FHAs and other farmers for guidance and references. In addition, 5 sectoral meetings and 6 general assembly meetings were held to evaluate the performance of the FHAs as well as to review individual plans of activities and targets for the year. An educational field trip to ViSCA was made to complement the FHAs practical experiences in the field.

The conduct of demonstration trials at the farmers fields had gained a positive response from an increasing number of farmers. A total of 72 farmers who were given technical assistance were now adopting improved technologies.

Demonstration projects and on-farm research were likewise set up in strategic areas of the FHAs fields emphasizing on farm verification of improved production technologies. Fourteen (14) field trials had been conducted on appropriate cropping and land use patterns. Results of some trials showed that corn planted as a second crop to watermelon gave the highest yield with an average of 25.99 cavans per hectare.

To increase family income, 11 FHAs were engaged in backyard vegetable production. Vegetable seeds that were distributed included ampalaya, eggplant, squash, beans, pechay, okra, and cabbage. Composting and utilization of animal manures were recommended in lieu of expensive inorganic fertilizers.

The irrigation problem of rainfed lowland rice farmers had been partly solved through the small-scale irrigation project of the Daja Daku Farmers Association which was made possible through grants from the German Embassy (P155,831) and German Agro-Action (P207,000). The ninety-percent (90%) complete irrigation system started to supply water to 13 hectares of ricefields owned by 15 farmers of Daja Daku, San Isidro, Leyte. The construction of the irrigation system was started in April 1988 by farmers who have been affected by irrigation problem.

### Integrated Community Development Through Self-Help

The Integrated Community Development Through Self-Help project was implemented to improve the levels of living of the residents of Brgys. Patag, Guadalupe, Pangasugan, and Marcos in Baybay, Leyte. To achieve its goals, the project implemented the following activities: Organization of Farm and Home Clusters and Selection of Farmer Leaders, and the Implementation and Monitoring of Community Projects.

### Farm and Home Advisers Programme

The Farm and Home Advisers Programme (FHAP) attempted to help develop selected upland barangays in Baybay, Leyte into economically and socially self-reliant communities. During the year, identification and selection of FHAs were undertaken, thus, a total of 15 farm and home clusters were organized and leadership development trainings were conducted to them. A seminar-workshop on organizational operations which led to the organization of Nagkahi-usang Mag-uuma sa San Juan (NAGMASAJAN) and reorganization of Kansungka Farmers Association (KFA) and two educational trips were held. Another activity was the Educational Outreach to Farm Productivity wherein the construction of 2 barangay nurseries was made for propagation and storage of planting materials and other inputs. Demonstration farms on corn production, rice production, mungbean production, peanut production, cassava production, sweet potato production, pineapple production and contour farming were set-up in the farmers field.

## **Educational Outreach on Home Productivity Program**

The Educational Outreach on Home Productivity program was able to establish the following income-generating projects: flower production, vegetable seed production, watermelon production, handicrafts production, onion production, native chicken improvement, and swine production in the neighboring barangays of ViSCA.

## **SHORT-TERM TRAINING COURSES AND SEMINAR WORKSHOPS CONDUCTED IN 1988**

### **Farm and Resource Management Institute:**

1. Rapid Rural Appraisal, February 9-13 and April 18-23, Liloan, So. Leyte; Wright Samar; San Jose de Buan, Samar.
2. Mobile Training, March 21-25; May 10-14; July 25-28; August 23-Sept. 2, 1988.
3. Training of Trainers, August 22-26, 1988.
4. FSR/Training Course March 23-25, 1988.
5. Workshop on Technology Profile Development, April 25-29, 1988.
6. Training-Workshop on Philippine Upland Research and Extension, June 19-24, 1988.
7. Training Need Survey for the "Whole Farm Analysis" Training, August 12-20, 1988.
8. Farming Systems Research and Extension (FSR/E) Short Course, September 5-28, 1988.
9. Research Review and Planning Workshop, December 5-9, 1988.

### **Philippine Root Crop Research and Training Center:**

1. Sweet Potato Technology Training Course, Jan. 11-14 and 25-28, 1988.
2. Sweet Potato and Cassava Technology Training Course, April 18-22, 1988.
3. Sweet Potato Production, May 3, 1988.
4. Ubi Production Technology Training Course, June 7-9, 1988.
5. Orientation Seminar on Processing of Sweet Potato Catsup and Jam, June 1, 1988.
6. Pagbansaybansay Alang sa Teknolohiya sa Kamote ug Balanghoy, July 17-23, 1988.
7. Pagbansaybansay Alang sa Teknolohiya sa Kamote ug Balanghoy, August 14-20, 1988.



*Rural women taking their time to learn the skill on handicraft-making.*

8. Production and Breeding in Sweet Potato Training Course, September 5-16, 1988.
9. Sweet Potato and Cassava Food Processing Seminar-Workshop, September 13-14, 16-17, 19-20, 1988.
10. Pagbansaybansay ug Demonstrasyon sa mga Teknolohiya sa Lagutmon ug Lubi, October 17-20, 1988.
11. Pagbansaybansay Alang sa Teknolohiya sa Kamote ug Balanghoy, October 19-20, 1988.
12. Advanced Sweet Potato Processing Technology Training Course, Nov. 15-18, 1988.
19. Ubi Production Technology Orientation Seminar, November 20-21, 1988.
20. Cassava Technology Training Course, Nov. 28-Dec. 2, 1988

### **National Abaca Research Center:**

1. Orientation Seminar-Workshop on Research and Extension, October 25-27, 1988.
2. Seminar-Workshop on Secondary Processing of Abaca, July 21-30, 1988.

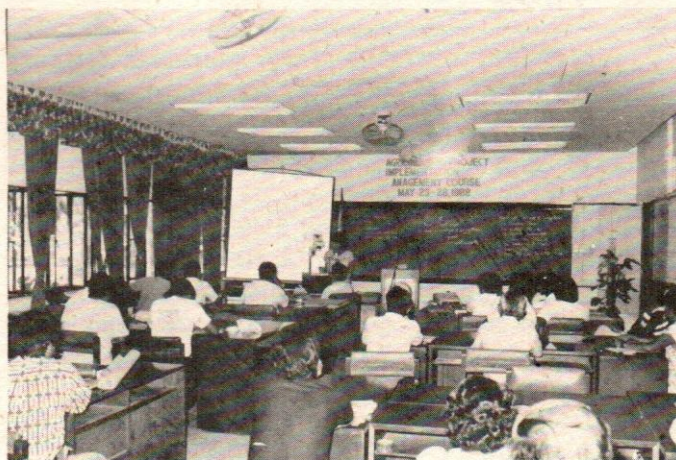
### **Center For Social Research:**

1. Rice, Corn and Mungbean Production Training, May 23, 1988.
2. Rootcrops Production and Contour Farming, June 20, 1988.
3. Black Pepper and Swine Production, September 19, 1988.
4. Garlic and Bulb Onion Production, November 24, 1988.
5. Melon and Squash Production, December 2, 5, 6, 1988.

6. Trainors Training on Melon and Management, December 14, 1988.
7. Vegetable Production, December 15, 1988.
8. Vegetable Seed Production and Storage, March 14-19, 1988.
9. Swine Production, February 11, 1988.
10. Watermelon Production, January 19, 1988.
11. Multi-storey Cropping and Coconut By-Products Processing and Utilization, March 21-25, 1988.
12. Organizational Operations, April 4, 1988.
13. Basic Computer Concepts to Programming, May 9-21, 1988.
14. Programming with Microsoft Basic. May 30-June 10, 1988.
15. Data Analysis with Microsoft, July 9 and September 10, 1988.
16. Training no "Doing Scientific Research", December 11-20, 1988.
17. Vegetable Seed Production, March 14-19, 1988.
18. Multi-Storey Cropping/Based Farming, March 21-25, 1988.
19. Coconut By-Product Processing.
13. APTECH on Cooperatives and Farm Management, October 21-23, 1988.
14. Regional Consultative Planning Conference Workshop, December 3-5, 1988.
15. Training Management Enhancement Course, December 6-16, 1988.
16. Training on Doing Scientific Research, December 11-20, 1988.
17. Subject Matter Specialist Planning Workshop, March 2, 1988.
18. Training on Coconut Cooking Oil Processing and By-Product Utilization, March 7-11, 1988.
19. Training on Integrated Pest Management, March 10-11, 1988.
20. Training on Coconut-based Farming and Coconut By-Product Utilization, March 21-26, 1988.
21. Training on Cassava Processing and Its Utilization, April 28-May 1, 1988.
22. Training on Food Products Processing from Root Crops, Sept. 5-7, 1988.

#### **Agricultural Training Institute:**

1. Self and Relationship Enhancement Seminar, February 25-27, 1988.
2. Subject Matter Specialists Planning Workshop, March 2, 1988.
3. APTECH on Seed Production, March 14-19, 1988.
4. APTECH on Coco By-Products and Multi-Storey Cropping, March 21-26, 1988.
5. Farming Systems Research and Extension Consultative Conference for School Administrators, March 28-29, 1988.
6. Agricultural Program Implementation Management Course, May 23-28, 1988.
7. Seminar Workshop on Writing Research Proposals in the Social Sciences, March 23-28, 1988.
8. Seminar Workshop on Video Production, June 6-11, 1988.
9. APTECH on Vegetable and Swine Production, June 13-16, 1988.
10. Secondary Abaca Processing, July 26-30, 1988.
11. Agricultural Monitoring and Evaluation, August 8-12, 1988.
12. Department of Agriculture CARP Training, August 15-24, and September 1-10, November 23-28, December 11-16, 1988.



*A brief talk given by one of the training participants of Agricultural Project Implementation Management course.*



*One of the practical activities of the ATI trainees.*

### **Agricultural Chemistry and Food Science:**

1. Training Courses on Cassava and Sweet Potato to Processing and Utilization.
2. Investment Opportunities Seminar (Coconut and Root Crops) for the Business Communities in different locations of the Country.
3. Training Courses on Root Crops Production, Processing and Utilization.
4. Training Course on Production and Breeding on Sweet Potato.

### **Agricultural Economics & Agribusiness:**

1. Mga Yanong Pamaagi sa Paghipos ug Listahan. March, October and November, 1988.
2. Pamaligya sa Lagutmon, November, 1988.
3. Feasibility Study. November, 1988.
4. Historical Roots of Agrarian Problems in the Philippines, December, 1988.
5. Cooperative Education, August, 1988.



*Rural women enthusiastically accompanied DAC-FS training staff to the training site.*



*A group of rural women attentively listened to the lectures given by the training staff of ViSCA in one of the barangays in Gandara, Samar.*

### **Plant Protection:**

1. Integrated Pest Management in Rice, Corn, Vegetables and Coconut, March 10-11, 1988.
3. Identification and Control of Insect Pests and Diseases of Vegetables and Root Crops, February 15-16, 1988.
3. Identification of Common Insect Pests and Diseases of Vegetables. Training on Vegetable Seed Production, March 19, 1988.
4. Seminar-Workshop on ViSCA's Research and Development, August 27, 1988.
5. Safe Use of Pesticides. Food Handlers and Homemakers' Class for Rural Women of Barangays Biasong and Mahayahay. Sept. 20, 1988.
6. Farm Safety, Environmental Sanitation, Pollution and Control, August 21-Sept. 8, 1988.
7. Integrated Pest Management in Rice. Seminar-Workshop on "Mapuslanong Teknolohiya sa Panguma" for Samahang Nayon Members of Barangay Gabas, October 24-26, 1988.
8. Integrated Pest Management in Rice, Corn, Vegetables and Coconut, March 10-11, 1988.

### **Physical Education:**

1. Lecture-Demonstration on Individual Sports and Team Sports.
2. Lecture-Demonstration on Game Officiating and Team Sports.
3. Practicum on Actual Playing and Game Officiating.
4. Inter-Barangay Sportsfest.

### **Horticulture:**

1. FFP-FAHP-FFPCC Regional Convention, February 14, 1988.
2. Seminar-Workshop for Vegetable Growers, March 14, 1988.
3. Training of Applicable Technology on Swine and Vegetables, June 13-16, 1988.
4. Vegetable Seed Production, March 14-19, 1988.
5. Ornamental Production, May 26, 1988 and November 9, 1988.
6. Hindang Socio-economic Seminar-Workshop, September 17, 1988.
7. Vegetable Production and Propagation and Care of Ornamentals, December 22-23, 1988.



*Dr. Marianito R. Villanueva, ViSCA President (second from left) together with Indonesian representative (extreme left); Dr. Lynn Pesson, Director of the Board for International Food and Agricultural Development; a Brazilian representative, and Dr. W. Haven North of the USAID Center for Development, Information and Evaluation during the President's official visit to USA and Malaysia to promote further international linkages with other agencies and universities.*

# LINKAGES

One of the major key factors contributing to the relatively strong program of ViSCA is its linkage with various international, national and regional agencies. Through such linkage, ViSCA is able to develop more relevant programs, attract working collaboration with scientists from other agencies, develop its manpower and improve on its facilities. Many of ViSCA's projects in instruction, research and extension are getting support from sources external to the usual appropriation received by the College from the national government.

Among the linkages established by ViSCA included the following:

## A. Local development-oriented agencies:

1. Department of Agriculture (DA)
2. National Economic and Development Authority (NEDA)
3. Department of Science and Technology (DOST)
4. Department of Environment and Natural Resources (DENR)
5. Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD)
6. Land Bank of the Philippines (LBP)
7. PhilRice
8. Department of Agrarian Reform (DAR)
9. Department of Social Welfare and Development (DSWD)
10. Fiber Development Authority (FIDA)
11. Dating-Bayan Agro-Industrial Corp.
12. National Irrigation Administration (NIA)
13. Department of Health (DOH)
14. Department of Public Works and Highways (DPWH)
15. National Academy of Science (NAS)
16. LABRADOR (a non-government organization)

## B. International Agencies:

1. International Development Research Centre (IDRC)
2. International Foundation for Science (IFS)
3. Centro Internacional de Agricultura Tropical (CIAT)
4. Centro Internacional de la Papa (CIP)
5. United States Agency for International Development (USAID)
6. Cornell University (CU)
7. German Foundation for International Development (GFID)
8. Massey University (MU)
9. Australian Centre for International Agricultural Research (ACIAR)
10. Southeast Asian Program for Potato Research and Development (SAPPRAD)
11. Colorado State University (CSU)
12. University of Idaho (UI)
13. Winrock International
14. South Carolina State College (SCSC)
15. Technical Advisory Group for Self Help Projects (TAGSHEP)
16. Forestry/Fuelwood Research and Development (F/FRED)



*President MR Villanueva briefed PCA officials regarding ViSCA's research undertaking.*

*Library Services . . .*



*Guidance and Counseling Services . . .*



*Recreational Facilities . . .*



# AUXILIARY SERVICES

## LIBRARY SERVICES

In the past, the library was very active in providing bibliographic assistance to both students and researchers. It made available 73,578 books to borrowers and acquired 673 new books, of which 245 were received as gifts and exchanges. It also subscribed to 466 periodical titles, both foreign and local, and received 103 titles as gifts and exchanges. As of December 31, 1988 it had a total collection of 39,363 volumes of books. This reflected a 3.7% increase in the number of books collected by the library (last year's figure was 37,899 volumes only).

During the year, the library resumed its Scientific Literature Service (SLS) with an expanded target clientele to include not only researchers in the ViSCA community but also those from other institutions of Leyte and Samar, alerting them to current literature in their respective fields of interest through photocopies of Table of Contents of important journals available at the ViSCA library. Likewise, a readers' adviser desk was made available to help the readers interpret the information found in various reference materials which were not provided at the Reserve/Reference section of the library. It also established a user profile as part of the public relations program of the library. In another development, a new collection was added to the library. The Visayas Coordinated Agricultural Research Program (VICARP) library collection was incorporated into the main library collection which consisted mostly of research materials from PCARRD, terminal reports of locally funded researches, some proceedings of seminar-workshops/conferences and other non-conventional sources.

New books valued at ₱35,000 was acquired by the library through the support of the Extramural Program for Rural Development in the form of Time-Life series books.

The ViSCA library has established more linkages with other institutions and agencies, local and foreign, by securing more gifts, exchanges and donations to build up the library collection. A noteworthy donor was the Australian Center for Publication Acquired for Development (ACPAD). Likewise, the Albert R. Mann Library of Cornell University has indicated its willingness to provide ViSCA with photocopies of articles from their

collection for one year free of charge. This undertaking would provide additional research materials for the College.

A part of the library's services is the availability of the Philippine Root Crops Information Service which served as a specialized information analysis center. A total of 5,379 bibliographic materials and 1,289 documents had been collected and stored at PRIS headquarters. It maintained six data bases, namely: sweet potato, cassava, yam, gabi, minor rootcrops, and directory of root crop professional and researchers. Its data base to date holds about 929 bibliographic records.

## STUDENT WELFARE SERVICES

As of the first semester of SY 1988-1989, there were 519 undergraduate scholars, 15 graduate scholars and 116 high school scholars. Among the undergraduate scholars and grantees, 70.5% of them received their scholarships and financial assistance from ViSCA, while 29.5% of them received their support from various agencies and private organizations.

The undergraduate scholarships and grants-in-aid were as follows:

	No. of Recipients
1. ViSCA Funded Scholarships and Grants-in-Aid	
a. Entrance Full Scholarship	1
b. Entrance Partial Scholarship	11
c. ViSCA Full Scholarship	10
d. ViSCA Partial Scholarship	85
e. Honorific Scholarship	45
f. Advanced Credit for Exceptional Student (ACES) Scholarship	0
g. Academic A Grants-in-Aid	63
h. Academic B Grants-in-Aid	4
i. College Dance Troupe	32
j. Citizen's Military Training	11
k. Varsity Scholarship	88
l. Income Grant A	11
m. Income Grant B	5
n. ViSCA Chorale	0
Total	366

## 2. Other agencies and private organizations

a. Weed Science Society of the Philippines	1
b. Department of Science and Technology - SEI	4
c. Yoshida	2
d. Sangguniang Bayan	134
e. State	7
f. Study-Now-Pay-Later	3
g. Knights of Columbus	1
h. Veterans	1
<b>Total</b>	<b>153</b>

Graduate scholarships were supported by the following agencies:

	No. of Recipients
a. Farming Systems Dev. Project - Eastern Visayas	7
b. Department of Agriculture — ASSP	1
c. Department of Education, Culture and Sports-VISCA	4
d. Deutsche Stiftung for Internationale Entwicklung (German Foundation)	3
<b>Total</b>	<b>15</b>

High school scholarships were supported by the following:

	No. of Recipients
<b>1. VISCA Funded Scholarships</b>	
a. Honorific Scholarship	16
b. Academic Full Scholarship	12
c. Academic Partial Scholarship	84
<b>2. Other Private Agencies</b>	
a. LEYECO	2
b. Lions	2
<b>Total</b>	<b>116</b>

## Entrance Scholarship

The Annual Entrance Scholarship test was conducted by the Office of Student Affairs in various testing centers in Central Visayas, Eastern Visayas and Mindanao from November 5 to 26, 1988. The top 40 examinees automatically qualify for the Entrance Scholarship for school year 1989-1990. The top ten will be considered Full Scholars while the rest will be considered Partial Scholars.

## Student Assistantship

Student Assistantship is another form of financial assistance extended to students who wish to work on part time basis while studying. These students were paid at ₱2.50/hr. not to exceed 100 hours per month. A total of 688 student assistants were paid which amounted to ₱187,957.95 for the whole year.

Students encountering difficulty in receiving their allowances on time were allowed to apply for loan at a maximum amount of ₱150.00 through the VISCA Emergency Loan Fund (VISCASELF) within one month with 1% interest.



*Sen. Edgardo Angara inspired the awardees and honor students to continue their endeavors in the field of agricultural education.*



*Miss Carla F. Colis, a consistent scholar of the College, received the highest scholastic award.*

**Table 15. Number of Examinees in Various Testing Centers.**

Testing Centers	Address	No. of Examinees
Visayas State College of Agriculture	Baybay, Leyte	149
Badian Nat'l. High School	Badian, Cebu	None*
Cebu Roosevelt Mem'l. College	Bogo, Cebu	46
Abellana Nat'l. High School	Cebu City	52
Holy Child Academy	Ubay, Bohol	22
Central Visayan Institute	Jagna, Bohol	24
Bohol Nat'l. High School	Tagbilaran City	76
Samar Nat'l. High School	Catbalogan, Samar	21
Eastern Samar Nat'l. High School	Borongan, E. Samar	79
Leyte Nat'l. High School	Tacloban City	119
St. Joseph College	Maasin, So., Leyte	2
St. Thomas Aquinas Academy	Sogod, So., Leyte	8
San Juan Polytechnic College	San Juan, So., Leyte	19
Agusan Nat'l. High School	Butuan City	
Surigao Nat'l. High School	Surigao City	

\* No test was conducted in Badian due to unpassable road caused by 2 typhoons.

**Table 16. Number of Student Assistants and Amount Paid for Calendar 1988.**

Month	No. of Student Assistants	No. of Hours Worked	Amount Paid (P)
January	81	6,640.25	15,003.60
February	84	6,398.00	14,207.02
March	66	6,004.25	12,957.39
April	36	2,926.50	6,366.45
May	33	2,642.50	5,719.80
June	61	4,903.50	9,926.85
July	74	5,100.02	11,356.68
August	66	5,103.00	11,928.66
September	98	5,958.54	11,675.75
October	59	35,382.50	79,610.25
November	40	3,234.00	7,162.52
December	10	926.00	2,042.98
<b>TOTAL</b>	<b>688</b>		<b>P187,957.95</b>

### Counseling and Testing Services

A total of 4,992 (ViSCA students and employees) availed of the services of the counseling and testing division of the Office of Student Affairs. Services rendered included counseling of various types of problems, psychological tests, job placement and promotional tests, and senior high school vocational tests.

### Housing and Accommodation

There are 17 student college dormitories and cottages located inside the campus with a maximum capacity of 1,462 students. In 1988, about 61% of the total student populace were accommodated in these dormitories. Dormitory lodging ranges from ₱15.00/month to ₱45.00/month.

High school students are provided with 2 student dormitories with a rate of ₱100/school year.

### Student organization and activities

A total of 39 campus student organizations were screened and accredited in 1988. Out of this total, 16 were course-related organizations, 4 religious organizations and 1 student council organization.

There were 1,695 student activities undertaken by the students which included the following: symposia, seminars, dialogues, campaign, student election, recruitment, initiations, cultural shows, beauty contests, socials, meetings, field trips, athletic meets, community services and fund raising activities.

### Recreational Facilities

The ViSCA recreation center has served constituents and visitors with a monthly average of 954 bowling games, 238 hours in billiard, 369 hours in table tennis, 16 hours in chess and 21 hours in dart. The center has also allowed the Physical Education Department and Experimental Rural High School to use the available facilities for instructional purposes.



*The ViSCA Student Choral Group in one of its performances at the Social Hall.*



*Some of the student activities during the College intramurals.*



# MISCELLANEOUS



*Senator Butz Aquino took an appreciative look at the food products derived from root crops.*



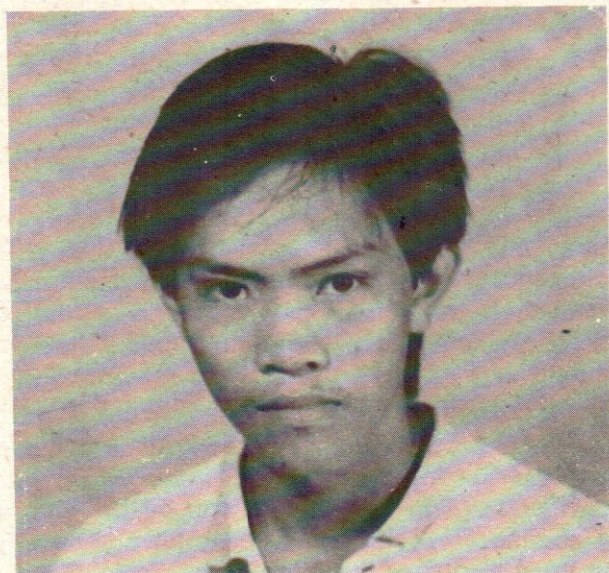
*Rural folks received training from ViSCA on the utilization of by-products from coconuts.*

- \* During the year, ViSCA received the "Meritorious Achievement Award" or the "Gintong Ani Award" from the Department of Agriculture for undertaking research and extension programs relevant to the needs of the small farmers in its locality and the successful transfer of such technologies to other institutions and concerned farmers.
- \* Some forty (40) barangay residents of Borongan, Eastern Samar received training in ViSCA on Coconut Oil Processing and By-Products Utilization from March 7 to 11, 1988. This training was made possible through ODEX in cooperation with the Department of Chemistry and Food Science. Forty participants attended the training although only 27 of them were considered official trainees. These trainees were eager to learn the technology on coconut oil production through wet process.
- \* ViSCA received a "Special Award" from the Department of Agriculture in Region VIII during its 8th Anniversary and Recognition Day on March 24, 1988 in Tacloban City in recognition and profound appreciation for ViSCA's sincere commitments and dynamic leadership in strengthening research and extension linkages.
- \* The Philippine Root Crop Research and Training Center (PRCRTC) through its PARRS project in cooperation with two ViSCA departments, Department of Animal Science and Veterinary Medicine (DASVM) and the Department of Agricultural Chemistry and Food Science (DAC-FS) conducted a seminar-workshop on "Root Crop Utilization" at the Bohol Agricultural Promotion Center (APC) on April 13-14, 1988. Co-sponsoring the activity were the Department of Agriculture (Region VII), the Department of Trade and Industry (Region VII), and the Bohol Agricultural Promotion Center. The seminar-workshop was participated in by 23 selected root crop farmers, growers, businessmen, agricultural farm technicians, and instructors representing the different municipalities of Bohol.
- \* The Best Poster Award entitled, "Natural Control of *Heteropsylla cubana* Crawford (Psyllidae, Homoptera) Infecting *Leucaena leucocephala* (Lam.) de Wit in Leyte" was won by Dr. Lina T. Villacarlos, Reynaldo and Nilda Robin and Rowena Paglinawan during the "19th Pest Control Council of the Philippines Annual Convention" held in Cebu City from May 3 to 7, 1988.

\* Dr. Troung Van Den, a Professor of the Department of Agricultural Chemistry and Food Science, won the Best Paper Award during the 8th International Society for Tropical Root Crops Symposium held in Bangkok, Thailand from October 30 to November 5, 1988. The award carried with it a cash prize of \$100 and a plaque of appreciation. The affair was participated in by 183 scientists from 33 countries. His winning paper was entitled, "Formulation, Consumer Acceptability and Nutrient Content of Non-Alcoholic Beverages from Sweet Potato".

\* Eleven or 44% of the 25 ViSCA Forestry graduates passed the Forestry Licensure Examination given by the Professional Regulation Commission on June 18-19, 1988 in Manila. Forester Rolando N. Luego copped the 2nd place in that examination. The other new ViSCA foresters are: Sabina Alberca, Theodore Bacalso, Crisostomo Badeo, Ernesto Duran, Eduardo Estanilla, Ma. Andonie Fernandez, Noel Fornolles, Teofredo Olaso, Nelson Palo and Endrico Sarong.

\* The three-year project entitled, "Strengthening Regional Applied Communication for Region VIII as a Tool for Technology Transfer" under the leadership of Dr. Wolfreda T. Alesna, Coordinator of the Regional Applied Communication Office (RACO) was approved for implementation. Funding agencies were the Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development - Rainfed Resources Development Project (PCARRD-RRDP) and from the



*Mr. Rolando Luego, 2nd placer of the 1988 Forestry Licensure Examination.*



*Secretary Lourdes Quisumbing continued to sip the sweet potato beverage as Dr. Truong Van Den explained its nutrient content.*

United States Agency for International Development (USAID), with the support of the Philippine Government. The general aim of the program is to develop effective technology-transfer strategies that could enable the farmers to adopt improved technologies to increase their profitability. RACO coordinator and project leader reported that PCARRD released ₱404,536.00 for the first and second quarters of the first year of implementation of the said project.

\* As part of the information dissemination campaign, the Office of the Director of Research and Extension coordinated an information drive entitled: "Mga Teknolohiya sa Pagpanguma" on August 27, 1988 with the Samahang Nayon members of Inopacan, Leyte as the target clientele. During the activity, designated technical experts of some department/centers of ViSCA conducted a series of lectures on various aspects of agricultural production, processing and utilization. Lecture series included the following: Root Crop Production, Cultural Management, Postharvest and Primary Processing, Multi-Storey Cropping Under Coconut, Root Crops and Coconut Products and By-Product Utilization, Swine/Goat/Quail Production and Management, Abaca Handicraft-Making and Integrated Plant Pest Management. The Katipunan ng Samahang Nayon of Region VIII, together with the Katipunan ng Samahang Nayon, Inopacan Chapter and the Office of the Municipal Mayor of Inopacan co-sponsored the activity.

- \* PRCRTC conducted a series of trainings on sweet potato and cassava technology for farmers from depressed towns in Southern Leyte. The training course covered topics on sweet potato and cassava production, processing and utilization. Root crop researchers from the center and other academic departments acted as resource persons.
- \* The ViSCA President emphasized ViSCA's commitment to the government for the upliftment of the rural poor, particularly in the Visayas. This was manifested when he presented a paper entitled: "Redressal of Poverty in the Visayas: The ViSCA Approach" during the 7th Biennial Conference of the Asian Association of Agricultural Colleges and Universities (AAACU) at the University Pertanian Malaysia, Selangor, Malaysia on October 17-24, 1988.
- \* ViSCA may establish a long-term collaboration with American universities. This was the message of the ViSCA President who went on a 4-week trip to the United States from September 26 to October 16, 1988. During his stay, he visited Cornell University and Texas A & M University. Likewise, he attended 2 international conferences, International Conference for Higher Education in Washington, D.C. and the Farming System's Symposium in Fayetteville, Arkansas. The ViSCA President looked into the possibility of establishing institutional collaboration with the 2 American universities. On his visit to the Asian Library of Cornell University he was able to persuade Cornell University to supply ViSCA with photo copies of journal articles needed by ViSCA staff for instruction and research activities free of charge for one (1) year.



- \* Mr. Claude Daniel, an Agronomist of the Institut de Recherches pour les Huiles et Oleagineux (IRHO) in Paris, France, was on a French mission to ViSCA, particularly at the Regional Coconut Research Center (RCRC) from July 17 to 20, 1988. Mr. Daniel's visit was in connection with a possible long-term collaborative research and development work with IRHO and PCARRD, together with the Department of Agriculture, UPLB, ViSCA and PCA, specifically on the intercropping of coconuts.
- \* During the 64th ViSCA Anniversary, on July 30-31, 1988, the quest for "Miss ViSCA" was held. Miss Jelinda Rosillo, who represented the Department of Agricultural Chemistry and Food Science, was crowned "Miss ViSCA". Other winners included the following: Dolorosa Nalda of the Sunflower Dormitory, 1st runner-up; Ma. Lanie Sanchez of the Animal Science Society, 2nd runner-up; Ma. Vinerva Villamor of the Society of Agricultural Engineers-ViSCA Chapter, 3rd runner-up; and Sarah Gayrama of the Society of Agribusiness Students, 4th runner-up.
- \* The Department of Animal Science and Veterinary Medicine sponsored "Rodeo 88" as one of the highlights during the ViSCA's Anniversary celebration.

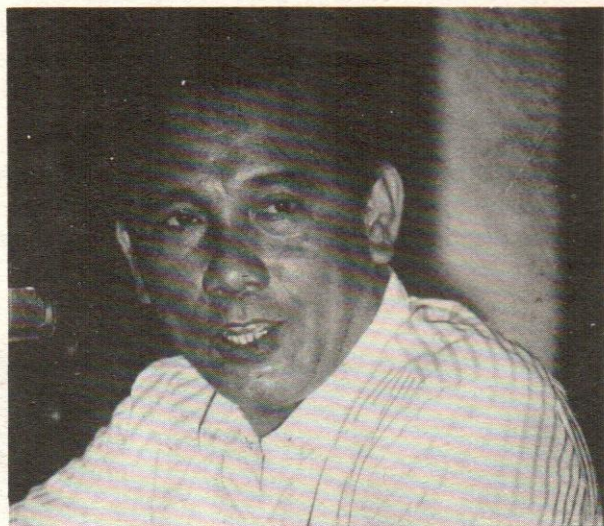


*Jelinda Rosillo (Miss ViSCA '88) and her court.*

*Calf-wrestling by a group of Animal Science students during the "Rodeo 88."*



*Hon. Philip Juico distributed emancipation patents to farmers.*



*Sen. Ernesto F. Herrera*

- \* The Honorable Secretary of Agrarian Reform Philip Ella Juico was the guest speaker during the 64th ViSCA Anniversary. On the same day, the DAR Secretary distributed 4,014 emancipation patents to 2,438 farmers from Eastern Visayas region.

- \* The Project Coordinator of Australian Center for International Agricultural Research (ACIAR) who is also a Soil Conservationist in Australia assisted ViSCA in finalizing the installation of the computerized data monitoring system for ACIAR Project entitled: "The Management of Soil Erosion for Sustained Crop Production." Likewise, a seminar on the "Australian Experiences in Soil Conservation" was held at the ODTREX last September 13, 1988 through the collaborative efforts of DAEAM and ODTREX staff.

- \* The College Infirmary, through its Clinic Physician, Dr. Carmiano Miranda, received an American Express Money Order amounting to \$500.00 for the free clinic services program to the rural poor in remote barangays. This amount will be used to rehabilitate a vehicle intended for the project's use. This support came from the Heidelberg Filipino-German Association in West Germany.

- \* Senator Ernesto F. Herrera, Chairman of the Senate Committee on Labor and also Committee member on Public Information was the guest speaker during the 6th Anniversary of ViSCA's radio station DYAC and the 7th Anniversary of the Center for Social Research on September 9, 1988.

- \* The Office of Student Affairs sponsored the First Regional Philippine Association of Campus Student Advisers (PACSA) Seminar-Workshop from September 29 to October 1, 1988 at ViSCA, with Dr. Rolinda S. Papa, the National President of the association as the lecturer.

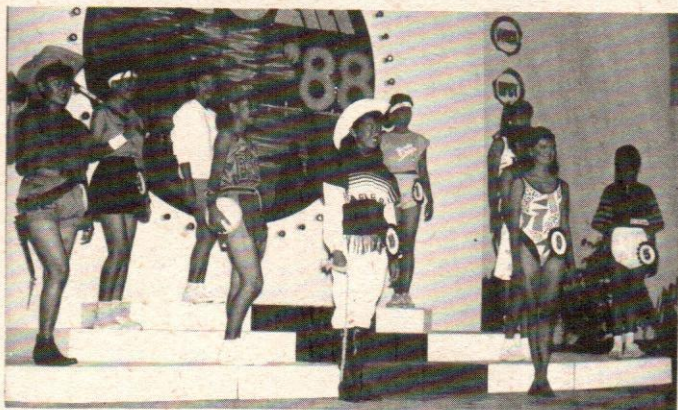
- \* The members of the Cabinet Action Committee for Implementation Assistance (CACIA) headed by Secretary Jose de Jesus visited ViSCA on September 24, 1988 as part of their monitoring tour of the various government projects of the country.



*Hon. Jose "Ping" de Jesus took a sip of ViSCA's nutritious sweet potato beverage.*

\* Dr. Marcelino V. Dalmacio, Executive Director of the Department of Environment and Natural Resources (DENR), Region VIII and the Program Coordinator of PCARRD-RRDP agroforestry program in the region, visited ViSCA's agroforestry project last September 25, 1988. He was greatly impressed of the project's improvement.

\* ViSCA hosted the 5th Region VIII State Colleges and Universities Athletic Association (SCUAA) Meet on October 24-28, 1988. During this athletic meet, ViSCA got the championship trophy over the nine (9) participating schools, namely: Eastern Samar State College (ESSC), Leyte Institute of Technology (LIT), Leyte State College (LSC), Naval Institute of Technology (NIT), Palompon Institute of Technology (PIT), Samar State Polytechnic College (SSPC), Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST), University of Eastern Philippines (UEP), and University of the Philippines-College Tacloban (UPCT). As one of the highlights of the activity, the search for "Miss SCUAA '88" was held. Miss Carla F. Colis of ViSCA won the crown.



*Contestant No. 10, Miss Carla Colis of ViSCA, won the crown of Miss SCUAA '88.*

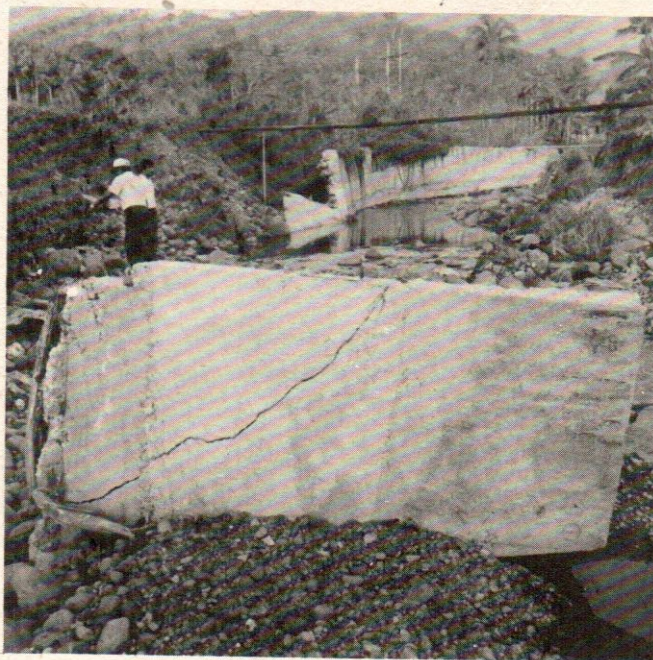


*A championship match between ViSCA and UPCT athletes during the SCUAA meet.*

\* ViSCA made representations with other government agencies in looking for assistance to the typhoon victims of Leyte. The first to respond was the Federal Government of Germany. The German government donated medicines, fertilizers, seeds and construction materials worth ₱230,000.00 for farmers of Baybay and San Isidro, Leyte. Ms. Helga Haas, representative of the German Embassy in Manila, made a symbolic turnover of the donation through the ViSCA President on December 5, 1988 at the Office of the Director of Research and Extension.

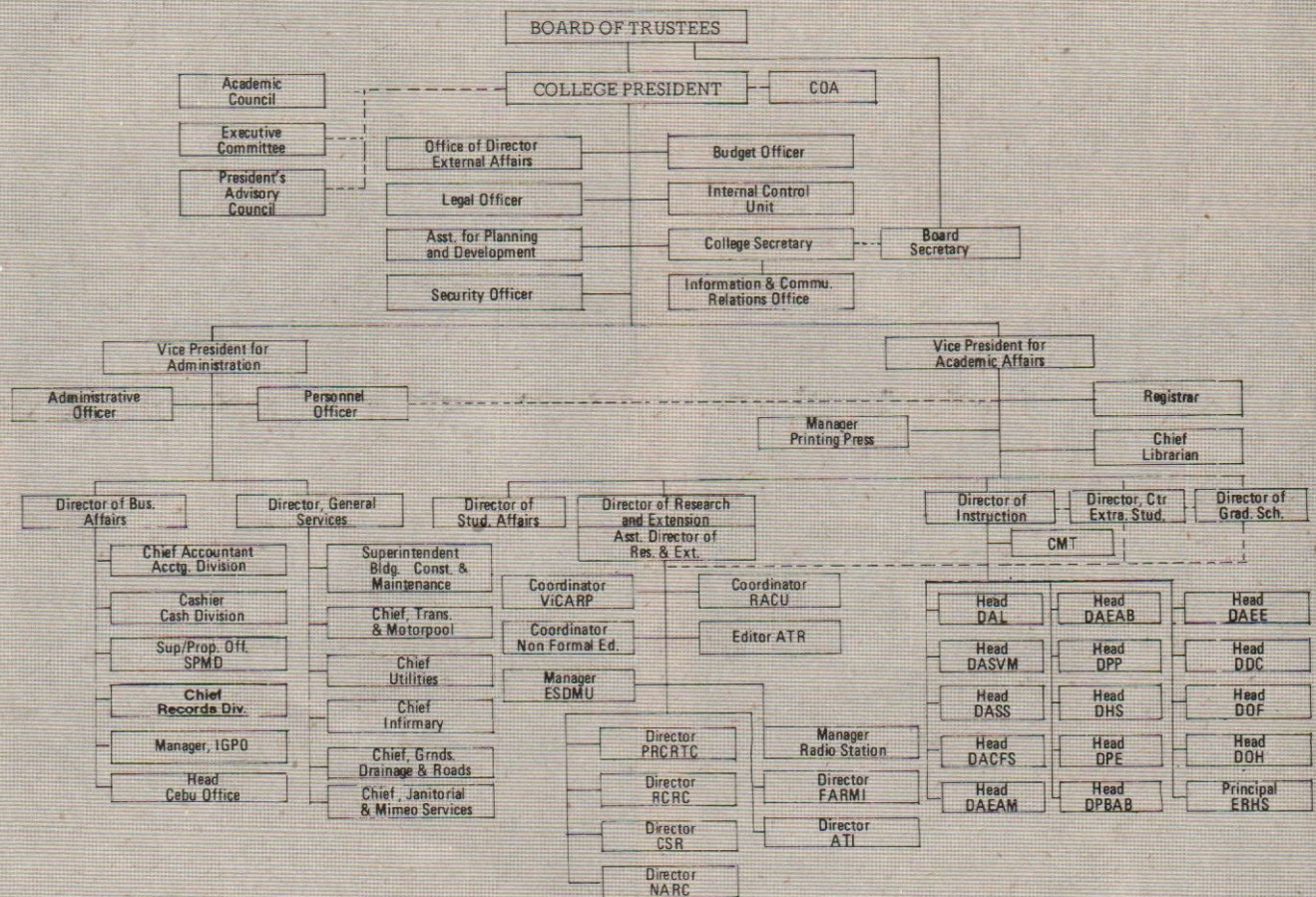


*Ms. Helga Haas of the German Embassy spoke in front of the typhoon victims.*



*One of the damages brought by typhoon "Yoning."*

ORGANIZATIONAL CHART OF THE VISAYAS STATE COLLEGE OF AGRICULTURE, BAYBAY, LEYTE - 1988-89



# GENERAL ADMINISTRATION

General Administration is the component of the College that performs administrative support services. It includes the Offices of the President, Vice President for Administration, and Vice President for Academic Affairs, together with other offices under its area of supervision.

Its general function is to provide direction and coordination in the implementation and evaluation of programs or projects designed to provide administrative support to the different units of the College.

Offices under the General Administration and Support Services:

1. Office of the President
  - a. External Affairs Office
  - b. Legal Office
  - c. Planning and Development Office
  - d. Security Office
  - e. Budget Office
  - f. Internal Control Unit
  - g. Office of the Secretary
  - h. Information and Community Relations Office
2. Vice President for Administration
  - a. Administrative Office
  - b. Personnel Office
  - c. Office of Business Affairs
    - a) Accounting Division
    - b) Cash Division
    - c) Supply and Property Management Division
    - d) Records Division
    - e) Income Generating Projects Office
    - f) Cebu Office
  - d. General Services Office
    - a) Building Construction and Maintenance
    - b) Transportation and Motorpool
    - c) Utilities
    - d) Infirmary
    - e) Grounds, Drainage and Roads
    - f) Janitorial and Mimeo Services

ViSCA is governed by a Board of Trustees as constituted by P.D. No. 470. The administration of the college and the exercise of the general powers as



*Secretary Lourdes R.  
Quisumbing, Chairman,  
ViSCA Board of Trustees.*

set forth in Act. No. 1459 are vested in the Board of Trustees and the College President as authorized by the Board.

The Board of Trustees is composed of the Secretary of the Department of Education, Culture and Sports as chairman, the ViSCA President as vice chairman and the Regional Director of the NEDA, Region VIII as member.

Fruitful achievements have marked the year 1988. Construction projects were undertaken and acquisition of several equipment were done through the financial support of the Philippine Government, the New Zealand Government, and the United States Agency for International Development.

## Staff Strength

The bulk of ViSCA's administrative functions required a number of personnel. As of December 31, 1988, there were 199 regular administrative staff that facilitated ViSCA's management and operation. Of this number, 149 or 75% had permanent status while 50 or 25% were having temporary status. In addition to the regular personnel, 429 casuals were employed.

## ViSCA EXECUTIVE COMMITTEE

DR. MARIANITO R. VILLANUEVA  
Chairman

— ViSCA President

Members:

DR. SAMUEL S. GO

— Vice President for Administration

DR. VICENTE A. QUITON

— Vice President for Academic Affairs

DR. MARGARITO C. ESCALANTE

— Director, General Services

DR. TUNG LY

— Program Coordinator, FARM I

DR. LELITA R. GONZAL

— Acting Director, NARC

DR. PACIENCIA P. MILAN

— Director, Instruction

DR. REMIGIO P. MOLLANEDA

— Director, Graduate School

DR. MANUEL K. PALOMAR

— Director, PRCRTC

DR. ELISEO R. PONCE

— Director, CSR and OIC, ODREx

DR. NERELITO P. PASCUAL

— Acting Director, RCRC

PROF. CAMILO D. VILLANUEVA

— Director, Business Affairs

PROF. PHOEBE B. VILLANUEVA

— Director, Student Affairs

DR. FEDERICO R. FLORES

— Head, Dept. of Agricultural Education & Extension

DR. RODOLFO G. ESCALADA

— Head, Dept. of Agronomy & Soil Science

DR. LUCELYN B. PONCE

— Head, Dept. of Home Science

MR. JACOB GLENN F. JANSALIN

— Head, Dept. of Agricultural Chemistry & Food Science

DR. OSCAR B. POSAS

— Head, Dept. of Animal Science & Veterinary Medicine

DR. GREGORIO G. GALINATO, JR.

— Acting Head, Dept. of Ag. Eng'g. & Applied Mathematics

PROF. EDILBERTO E. NASAYAO

— Head, Dept. of Forestry

DR. OTHELLO B. CAPUNO

— Acting Head, Dept. of Plant Breeding & Ag. Botany

DR. REBECCO M. SANTIAGO

— Head, Dept. of Horticulture

DR. RUBEN M. GAPASIN

— Acting Head, Dept. of Plant Protection

DR. MONINA M. ESCALADA

— Acting Head, Dept. of Development Communication

DR. PERLA M. TAN

— Head, Dept. of Arts and Letters

PROF. REMEDIOS R. RUSSEL

— Head, Dept. of Physical Education

DR. JOSE M. ALKUINO, JR.

— Acting Head, Dept. of Ag. Economics & Agribusiness

DR. VITA S. POLO

— OIC Principal, Experimental Rural High School

MS. LINDA N. MARISCAL

— College Registrar

PROF. LINDA K. MIRANDA

— College Librarian

DR. ISABEL P. BERTULFO

— Head, Infirmary

MR. WILFREDO C. VALENZONA

— Administrative Officer

DR. JOSE SAL TAN

— College/Board Secretary

# PHYSICAL RESOURCES

During the year, several infrastructure projects were completed, namely: Pilot Processing Plant; general repair of Plant Protection and Arts and Letters buildings; deepening of river and flood control at Calbiga-a River; rehabilitation of two cottages; and the partitioning of basement of the International Guest House. The final completion of the ViSCA gymnasium was negotiated with the contractor. Preparation for the construction of the Food Technology and FARMI buildings were also initiated later in the year and are expected to be completed at the end of the first half of 1989. In addition, the contractors of the ViSCA gymnasium, Phase II-B and the Pilot Processing Plant were finally paid through revalidation of the Cash Disbursement Ceiling (CDC).

In another development, the ViSCA Cebu Office was improved. Construction of a new dining room and a dirty kitchen was made for the convenience of ViSCA staff and guests.

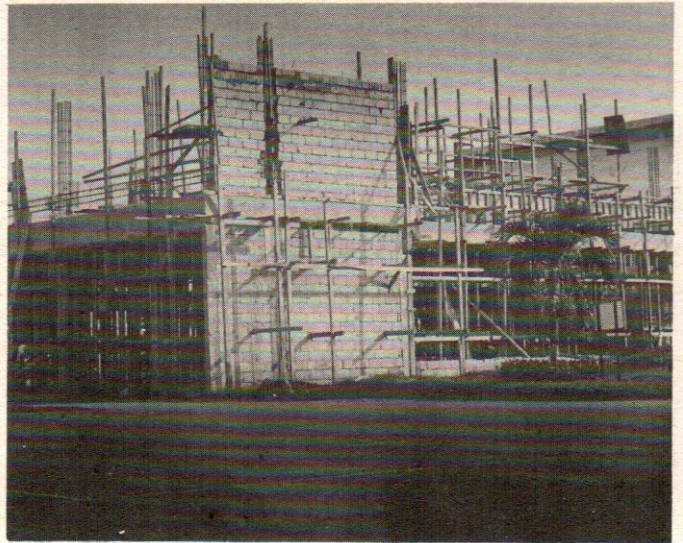
New vehicle acquisitions received by ViSCA included three (3) passenger units which were donated by the ACIAR Project of Australia and by the New Zealand Government.

ViSCA maintained in good running condition, 8 units of Nissan Patrol jeeps, 3 buses, 2 Toyota Hi-Ace mini-buses, 5 heavy-duty dump trucks, a bulldozer, a payloader, a road grader, a road roller, and electricity generating set. Reconditioning of jeeps by modification process such as changing of engine and body repair were also undertaken. About 5 reconditioned jeeps had been put into operation and about 3 were being rebuilt. The "Skylab" bus was made operational during the year.

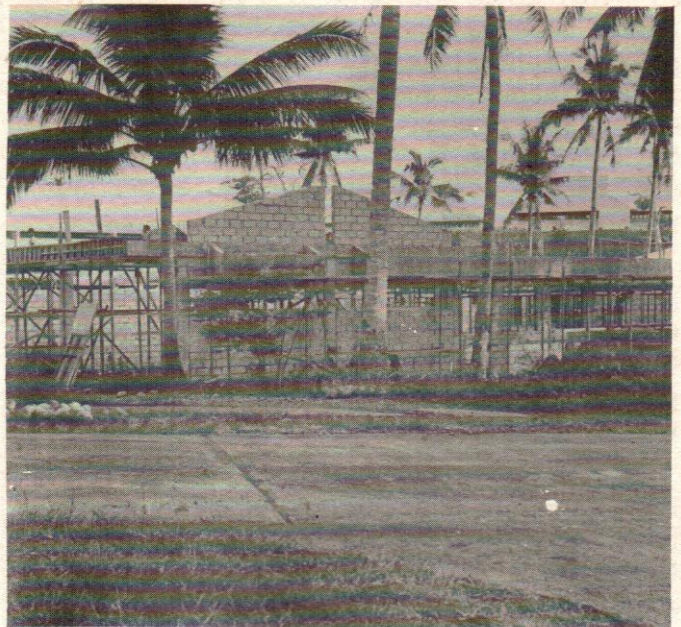
Transportation and electrical services were very much improved in spite of some problems encountered. Electricity has been made available 24 hours daily by the Leyte Electric Cooperative (LEYECO) with back-up power from the ViSCA power plant.

The landscape of the ViSCA campus was maintained during the year. Furthermore, 150 meters of campus roads were concreted.

Infrastructure projects for CY 1988 amounted to ₱3,023,106.20.



*FARMI building under construction.*



*Food Technology building under construction.*

**Table 17. Infrastructure Projects For CY 1988.**

Projects	Contractor	Amount
1. Renovation of Governor's Cottage	MAC Builders	₱ 38,652.05
2. Rehabilitation of Lopez Cottage	MANCAO Const.	138,000.00
3. Repair of Dumaluan Cottage	MAC Builders	84,328.00
4. Partitioning of IH Basement	MAC Builders	156,500.00
5. Repair of Plant Protection Bldg.	MANCAO Const.	242,455.65
6. Repair of Arts and Letters Bldg.	MANCAO Const.	395,970.50
7. Construction of Pilot Processing Plant	MANCAO Const.	1,967,200.00
TOTAL		₱3,023,106.20

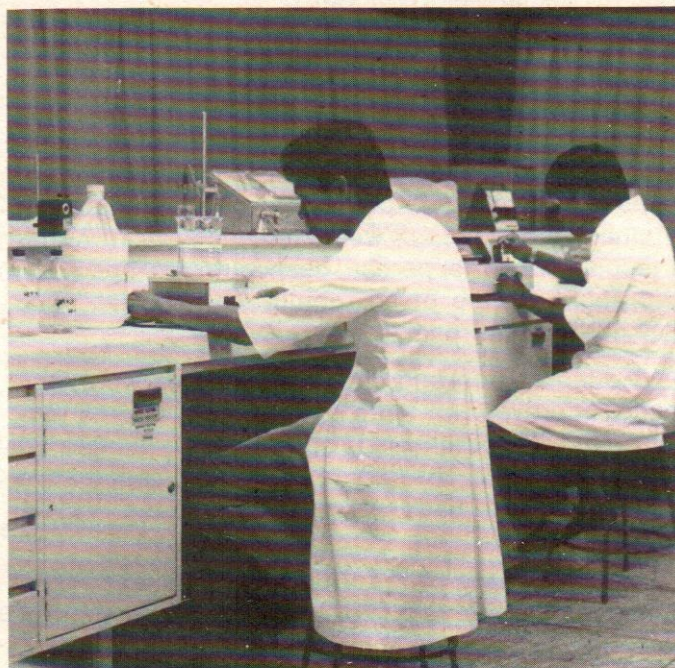
The sheep/goat house of the Department of Animal Science and Veterinary Medicine was completed. This newly completed structure could accommodate about 300 heads of sheep and goats. Likewise, its Artificial Breeding Center was improved.

The Center for Extramural Studies (CES) was relocated from the ADE building to the ground floor of the ViSCA library building. The new air-conditioned EPRD office with a floor area of 120 square meters provided ample space for its staff, computers, equipment and display area of its study guides. There was also an acquisition of the 3 IBM-Compatible computers with accessories which facilitated the word processing of extramural study materials. Essential office equipment and furnitures were also acquired.

The Department of Horticulture erected a new shed house for its Pomology project. A new faculty room was added to the department building. Expansion of the area of the cacao project was done. Likewise, a number of concrete propagation bins were constructed.

The Regional Coconut Research Center was able to construct its Agricultural Engineering Workshop building and developed its Biochemistry Laboratory. Development grants from the ViSCA Foundation for Agricultural and Rural Development (VIFARD) amounting to ₱16,000 for the Biochemistry Laboratory, and another ₱10,000 for the workshop helped very much in the construction and development of these facilities.

Equipment acquisition included the purchase of a 50-cc motorcycle, sling psychrometer, 3 bicycles, top loading balance, 2 office tables, slide projector, printer and a transfer of 1 microcomputer unit from the Center for Social Research (CSR) to RCRC. The fencing of about 5 hectares of the coconut hybridization area and expansion of about 4 hectares of the coconut genebank area were also accomplished during the year.



*The newly developed Biochemistry Laboratory of RCRC.*

# FISCAL RESOURCES

Among the programs of the College, Instruction got the largest bulk of the budgetary allotment amounting to ₱17,148,000 or 25.7%. Higher education received the biggest share among the three programs of instruction which amounted to ₱12,461,000.00 or 18.7%. Foreign Assisted Projects allotment amounted to ₱2,860,112.00, coming mainly from the United States Agency for International Development (USAID) grant to Farming Systems Development Projects (FSDP). Capital Outlay allotment amounted to ₱8,095,076 of which ₱5,500,000.00 was released from the Philippine Government to finance unfinished construction projects and major repair of some buildings of the College. An additional amount of ₱2,595,076.00 for the Capital Outlay was also given by USAID.

A total allotment of ₱20,114,052.00 was given for General Administration and Supportive Services but only ₱20,069,625.59 was spent for the whole year, thereby returning the amount of more than ₱44,000 to the National Treasury. Personnel benefits included among others, salary adjustments, bonuses and retirement gratuity for faculty and staff of VisCA.

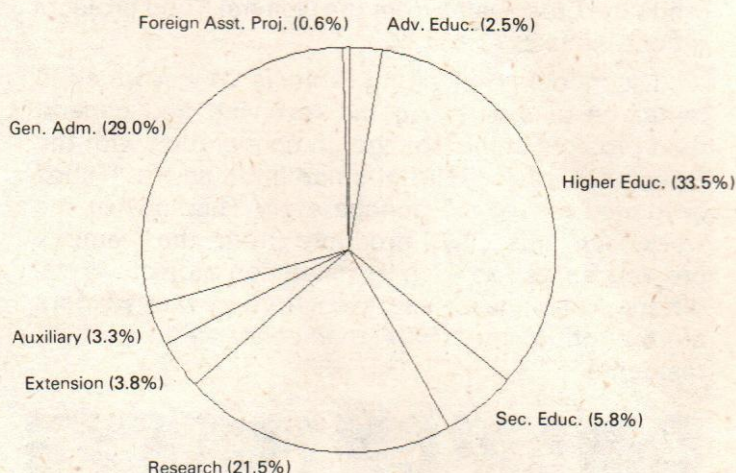


Fig. 5. Expenditures for Personal Services, CY 1988.

## STATEMENT OF ALLOTMENTS, EXPENDITURES AND BALANCES Calendar Year 1988

Programs/Projects	Personal Services		Maint. & Optg. Exp.		Capital Outlay		BALANCES			
	Allotment	Expenditure	Allotment	Expenditure	Allotment	Expenditure	PS	MOE	CO	TOTAL
Advanced Education	773,000.00	773,000.00	1,651,000.00	1,651,000.00	—	—	0.00	0.00	0.00	0.00
Higher Education	10,360,000	10,360,000.00	2,101,000.00	2,101,000.00	—	—	0.00	0.00	0.00	0.00
Secondary Education	1,787,000.00	1,787,000.00	476,000.00	476,000.00	—	—	0.00	0.00	0.00	0.00
Research Services	6,638,000.00	6,638,000.00	8,044,349.00	8,044,349.00	—	—	0.00	0.00	0.00	0.00
Extension Services	1,187,000.00	1,187,000.00	544,000.00	544,000.00	—	—	0.00	0.00	0.00	0.00
Auxiliary Services	1,018,000.00	1,018,000.00	456,000.00	456,000.00	—	—	0.00	0.00	0.00	0.00
Gen. Adm. & Supp. Serv.	8,952,052.00	8,952,052.00	5,662,000.00	5,631,144.24	5,500,000.00	5,486,429.35	0.00	30,855.76	13,570.65	44,426.41
Foreign Assisted Projects	170,070.00	170,070.00	2,690,042.00	2,595,076.00	2,595,076.00	2,595,076.00	0.00	354.25	0.00	354.25
Add: Personnel Benefits	6,019,200.00	6,019,200.00	—	—	—	—	—	—	—	—
Sub-total	₱ 36,904,322.00	36,904,322.00	21,624,319.00	21,498,569.24	8,095,076.00	8,081,505.35	0.00	31,210.01	13,570.65	44,780.66
TOTAL	ALLOTMENT: ₱66,623,789.00		EXPENDITURE: ₱66,579,008.34		UNEXPENDED BALANCE: ₱44,780.66					

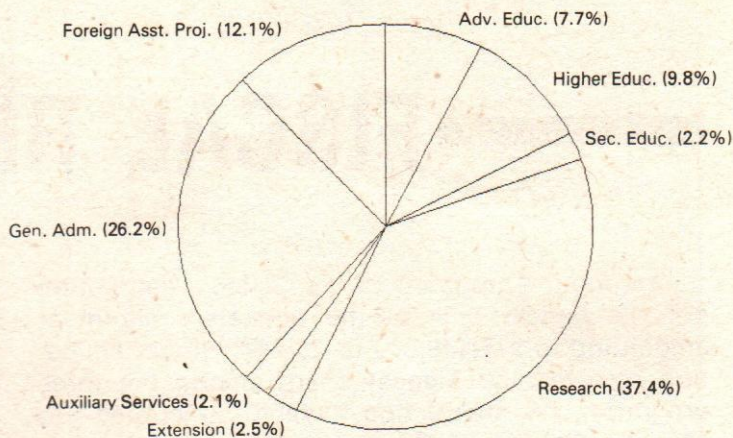
As of December 31, 1988, the statement of allotments, expenditures, and balances reflected a total allotment received for the whole year of ₱66,623,789.00 while total expenditures amounted only to ₱66,579,008.34, thus, having unexpended balance of ₱44,780.66.

During the year, ViSCA realized a total gross sales of ₱653,341.40 from the income generating projects of the different technical departments of the college. Revolving Fund project sales amounted to ₱399,922.50 which was derived from the rice farm, pineapple, piggery, seedbanks and poultry projects while the gross sales from the General Fund projects amounted to ₱213,884.55.

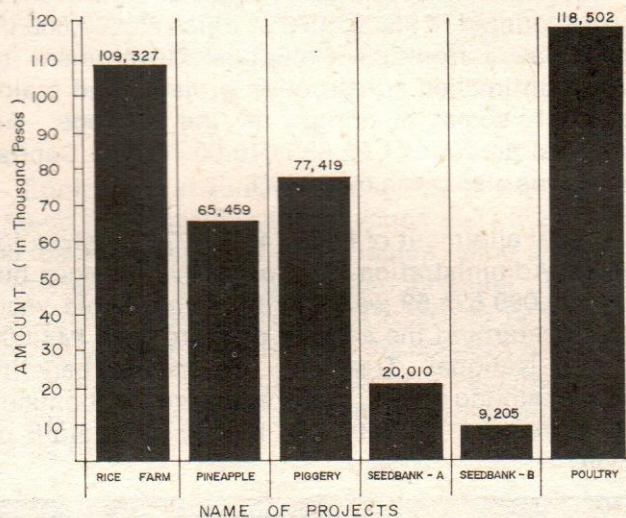
The Income Generating Projects Office, which is in-charge of monitoring the revolving and general fund projects of the College, in cooperation with the Director of Business Affairs had initiated the "Tabo" or market day of the College every Thursday of the week. On this day, products from the campus projects as well as from its extension projects in the different barangays, and even from private vendors are brought to the ViSCA market for sale to ViSCA residents.



*Prof. Camilo D. Villanueva, Director of Business Affairs, gave an inspiring talk during the Opening of "Tabo" in ViSCA.*



**Fig. 6. Expenditures for MOE, CY 1988.**



**Fig. 7. Sales of Revolving Fund Projects, CY 1988.**

**Table 18. Revolving Fund Projects: Gross Sales from January to December 31, 1988.**

Project	Total Sales
Rice Farm	₱109,327.00
Pineapple	65,459.13
Piggery	77,419.00
Seedbank - A	20,010.25
Seedbank - B	9,205.10
Poultry	118,502.15
<b>TOTAL</b>	<b>₱399,922.50</b>

**Table 19. General Fund Projects: Gross Sales from January to December 31, 1988.**

Department/Center	Name of Project	Gross Sales from Jan. to Dec.
An. Sci. & Vet. Med.	Dairy Goat/Sheep	₱ 9,281.00
	Beef/Carabeef	38,918.25
	Duck	5,543.45
	Rabbit	1,395.75
Horticulture	Pomology	1,202.00
	Abaca	3,607.50
	Vegetables & Floriculture	4,245.40
Guest House	Lodging	9,785.00
Library	Fines (high school & college)	7,099.55
PRCRTC	Root Crops	11,422.60
Fruit Trees	Fruits	54,174.45
IGPO	ViSCA Market & Other Facilities	77,508.90
Forestry	Forest Product	1,123.30
TOTAL		₱213,884.55

*Flowering plants grown at the Floriculture Project area of the Department of Horticulture.*



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*"Let search for truth prevail as a dominant activity of university life. For truth is the guiding light in our paramount mission: the pursuit of excellence."*

