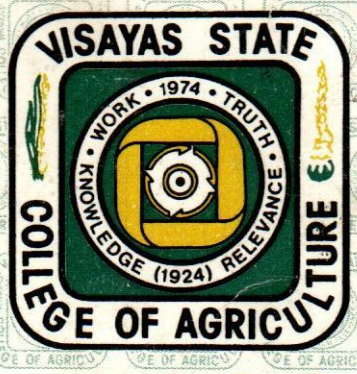


1989 ANNUAL REPORT

CONTENTS

VISAYAS STATE COLLEGE OF AGRICULTURE
Baybay, Leyte 6521-A

VSCA FILE

OFFICE OF THE PRESIDENT

August 9, 1990

Hon. Isidro D. Cariño
Secretary
Department of Education, Culture and Sports
Metro Manila

Sir:

I wish to submit to you and the members of the Board of Trustees of the Visayas State College of Agriculture the Annual Report of the College for Calendar Year 1989 in compliance with the Department Memorandum No. 14, series of 1987 of the Department of Education, Culture and Sports.

Very truly yours,

MARIANITO R. VILLANUEVA
President

FOREWORD

As a leading agricultural college in the country, the Visayas State College of Agriculture continues to perform its role in providing relevant training to students in the pursuit of excellence. Likewise, ViSCA continues to contribute towards the enrichment of science and towards the improvement of strategies for rural development through its programs in research and extension.

The overall efforts from the faculty, staff and students made positive gains for ViSCA in 1989. Although many institutions of higher learning for agriculture experienced a continuing decline in enrollment, ViSCA realized a slight increase from the previous year. Likewise, the volume of its Rural and Development programs continued with increasing trend based on actual extent of activities and growth in budget. As the staff gained maturity and experience the quality of work and confidence of the clientele and the donors obviously improved as evidenced by fresh influx of external funding.

However, the real impact of ViSCA's continuing relevance can only be measured by the extent by which its graduates are able to get gainful employment and its innovations bringing development in the countryside. It may still have some shortcomings but certainly gaining inch by inch towards that direction. With improving value system and improved dedication of its staff to achieve its goals, combined with proper support from the government, ViSCA shall continue to be a major institution of higher learning in the country focusing on the backbone of the Philippine economy - AGRICULTURE.

M. R. VILLANUEVA
President

HIGHLIGHTS

New Graduate Program Offered

* The Diploma in Agricultural Technology Education-Master of Agricultural Technology Education (DATE-MATE) curriculum program was offered starting the first semester of SY 1989-1990.

Saturday Class Implemented

* Graduate Saturday classes leading to the degree of Master of Agricultural Development (M. Ag. Dev.) for the Agricultural Production Technicians (APT's) of the Department of Agriculture under its Professional Enhancement Program (DA-PEP) were conducted in the first semester of SY 1989-1990.

Curriculum Development

* Animal Science as a new major field of the Master of Science degree program was offered starting the first semester of SY 1989-1990.

Enrolment and Scholarship

* A slight increase in student enrolment for the first semester of SY 1989-1990 was realized. In that semester, there were 532 scholars who represented 21.96% of the total enrolment.

Graduates

* For SY 1989-1990, ViSCA graduated a total of 383 students of which 25 (6.52%) were conferred with master's degree; 252 (65.80%) with baccalaureate degree; 23 (6.01%) with certificate; and 83 (21.67%) with high school diploma.

ERHS as a Laboratory School

* The ViSCA Board of Trustees approved the proposal to convert the Experimental Rural High School (ERHS) into a laboratory school.

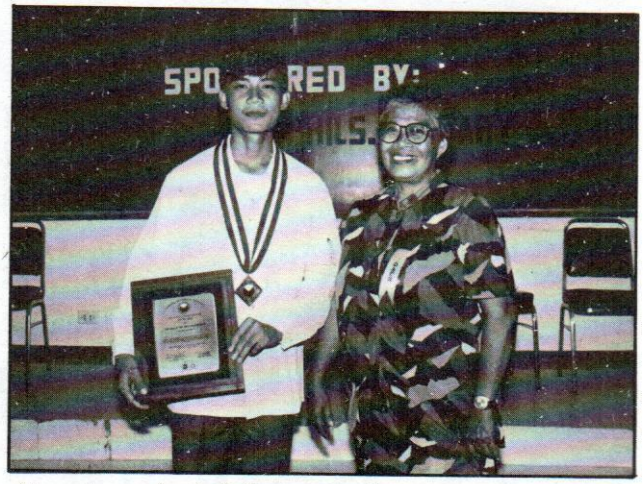
High School Students' Co-curricular Performance

* Eight students from the ViSCA ERHS won first, second and third places during the Regional Science fair held in Dulag, Leyte from October 26 to 27, 1989.

* Arnel Caliente won first place in the National Oratorical Contest held in Tacloban City on November 27, 1989.

* In the Regional Secondary Schools Press Conference held at Carigara School of Fisheries from December 6 to 8, 1989, two ERHS students were winners of the following contests: Arnel Caliente got the first place in Sports Writing (English), while Kristina Yolanda Pal got the first place in Feature Writing (English), fifth place in Sports Writing (Filipino) and sixth place in Feature Writing (Filipino).

Inter-School Science Fair and Math Olympiad held at ViSCA.



The winner, Arnel Caliente with his coach, Mrs. Tempora Pagalan, during the National Oratorical Contest sponsored by CAP and Rotary Club of Manila held in Tacloban City.

ViSCA Hosted Summer Practicum

* The Department of Agricultural Engineering and Applied Mathematics hosted a 6-week summer practicum to seventeen (17) junior Agricultural Engineering students from the Eastern Samar State College (ESSC), Borongan, Eastern Samar and four (4) senior Agricultural Engineering students from the Panay State Polytechnic College (PSPC), Ponteviedra, Capiz from April 5 to May 16, 1989. The practicum was aimed at exposing the students to the actual application of different engineering principles in the areas of crop processing, farm machinery and soil and water engineering

Outstanding Awardees

* The "Achievement Award for the Research" was given to Dr. Truong Van Den, Associate Professor of the Department of Agricultural Chemistry and Food Science, in recognition of his significant contributions to food technology research during the Annual Scientific Meeting of the Federation of Crop Science Societies of the Philippines in Iloilo City from April 26 to 28, 1989.

* Dr. Leonila C. Raros, Professor of the Department of Plant Protection, was recipient of the "L. B. Uichanco Memorial Award" for her distinguished contribution in the field of systematic acarology during the 20th Pest Control Council of the Philippines Annual Convention in Baguio City from May 9 to 12, 1989.

* The "Best Research Paper Award" was won by Dr. Nguyen Thi Thanh Tuyen of the Department of Horticulture, entitled "Embryo and Tissue Culture in Coconut", during the First Regional Symposium on R and D held in ViSCA from June 7 to 9, 1989.

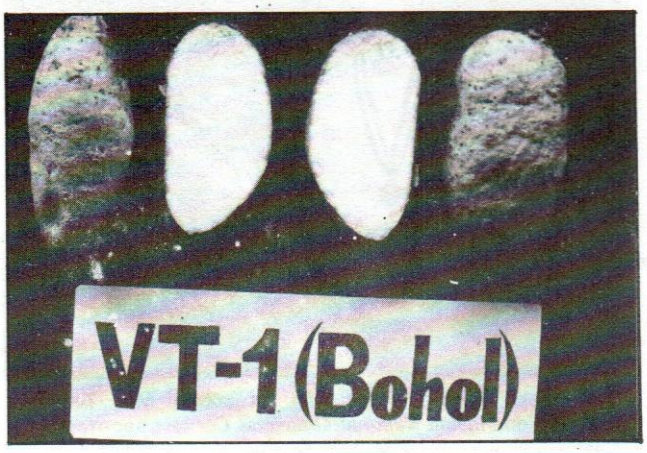
Research

* A total of 223 researches were implemented in 1989, 37 of which were completed, 136 were ongoing and 50 were new. The total budget allocated for the researches amounted to ₱ 24,000,573.57 wherein 28.01% of this budget was contributed by foreign agencies.

* The International Development Research Centre (IDRC) of Canada granted the Visayas State College of Agriculture a multimillion peso fund (₱ 23,216,006) for its root crop research project entitled "Integrated Root Crop Program (Philippines)" which covers various disciplines in root crop research, such as: crop improvement, processing and utilization, and information, communication and extension.

New Root Crop Varieties

* The Philippine Seed Board recommended two root crop varieties, namely: VT-1 (Bohol) as the new tugui variety, while ViSCA G-1 (Kalpao) as the new gabi variety.



Tubers of the new tugui variety.

Kalpao, the new gabi variety.

* There are 5 promising accessions of arrowroot in the PRCRTC germplasm bank, namely: PRM1, PRM2, PRM5, PRM9 and PRM16.

New Coconut Hybrids

* The Regional Coconut Research Center (RCRC) produced 9 coconut hybrids by crossing female dwarf cultivars with Baybay Tall as male. Each hybrid carries the acronym "RCRC" with assigned numbers from 1 to 9.

Germplasm Collection

* At present, there are 301 accessions in the abaca germplasm collection which is the largest in the country.
* A total of 82 new sweet potato and taro accessions were added to the PRCRTC germplasm collection.

Outstanding Projects in 1989

* The five Most Outstanding Research Project categories were won by ViSCA researchers, namely:

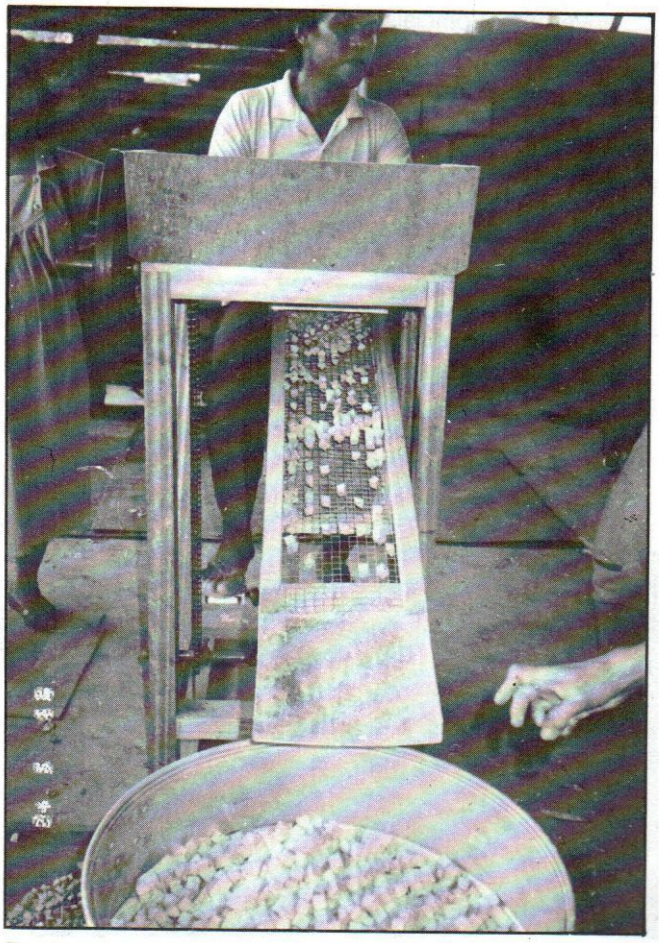
First place:	Embryo and Tissue Culture in Coconut (Dr. Nguyen Thi Thanh Tuyen)
Second place:	Botanical Pesticides for Root Crop Planting Materials (Ms. Erlinda A. Vasquez)
Third place:	Technology Assessment for Farming Systems in Eastern Visayas (Dr. Alice S. Go, et al.)
Fourth place:	Storage Technology for Yam and Taro (Mr. Marcelo A. Quevedo and Mr. Arsenio D. Ramos)
Fifth place:	Nitrogen Management in Corn-Based Cropping System in Marginal Hilly Areas (Dr. Faustino P. Villamayor and Mrs. Elizabeth C. Peque)

* Four (4) out of five Outstanding Development Projects were won by ViSCA researchers during the First Regional Symposium on R & D held in ViSCA from June 7 to 9, 1989, to wit:

First place:	Recommended High Yielding Sweet Potato Varieties (Dr. Florencio A. Saladaga)
Second place:	Identification and Culture of Important Natural Enemies of Root Crop Pests (Dr. Lina Villacarlos & Dr. Paciencia P. Milan)
Third place:	Edible Fungi in Leyte (Prof. Jesusito L. Lim)
Fourth place:	Pest Control for Crops Using Botanical Pesticides (Prof. Lorenza de Pedro)

New Low-Cost Machine Developed

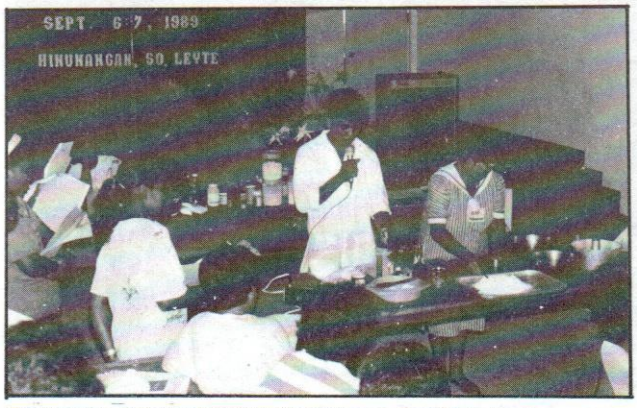
* A low-cost machine called Root Crop Cuber-Sorter, developed by the Food Technology Section of the Department of Agricultural Chemistry and Food Science (DAC-FS), can cube and sort out sweet potato tubers as much as 150 kg/hour.



The Root Crop Cuber-Sorter

Information Dissemination

* Technology dissemination was carried out through radio programs which cover a wide range of subject matter like farm productivity, homemaking, labor and entrepreneurship, personality development, values education, news and current events, child development and many others.
* Technoguides, pamphlets and leaflets were given to farmers, technicians, students and other college visitors on special occasions, like the ViSCA anniversary and graduation day.
* ViSCA's faculty and staff continued to provide technical assistance to the different clientele through lectures and direct involvement in extension activities, seminars, trainings, and workshops either conducted in or outside of the ViSCA campus.
* Coconut and abaca-based demonstration farms were maintained by the Regional Coconut Research Center and National Abaca Research Center, respectively, for viewing to farmers, rural workers, students, DA personnel and other government officials/visitors.
* Agroforestry Demonstration Farm was established and maintained by the Department of Forestry likewise, information on SALT technology was disseminated to farmers, technicians and visitors through briefing, lectures and tours in the farm. The department established the BIADEP Hillside Development as its extension project.
* Informative exhibits about varied biological fauna and flora were shown in the Biological Museum of the Department of Plant Protection to enhance the ecological awareness of the visiting administrators, scientists, teachers, students, agricultural technicians, and farmers.



Root crops training held in Hinunangan, Southern Leyte.

Technical Assistance

* Profile leveling surveys were conducted by the staff of the Department of Agricultural Engineering and Applied Mathematics at Barangays San Agustin and Biasong in Baybay, Leyte and Barangay Antipolo, Albuera, Leyte for water pipeline distribution system, feasibility of putting up an irrigation diversion structure and a proposed canal and diversion structure of the Barangay Antipolo irrigation project, respectively.
* Soil testing and plant analysis for physical and chemical properties of soil as well as plant samples submitted by farmers and researchers were conducted by the Department of Agronomy and Soil Science.
* Free forest seeds and forest seedlings were distributed to interested individuals, schools, government agencies and nearby barangays.

Technology for Piloting/Dissemination

* A cake mix of soybean meal, root crop flour, and steamed rice, the by-product of root-soy sauce production, was utilized as main ingredient in the making of food seasoning in the form of cube, powder and gravy.
* The San Miguel Corporation (SMC) signed a memorandum of agreement with ViSCA in Manila for the commercial production of sweet potato beverages and concentrates using the food processing technology developed by the Food Science Section of the Department of Agricultural Chemistry and Food Science.

The signing of the memorandum of agreement between ViSCA and San Miguel Corporation.

College Visitors

* The Italian government represented by Boerio Gillo, Berardi Marina and Berna Giovanni visited ViSCA on July 30, 1989 on a mission regarding the proposal of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) for ViSCA to be the site of a pilot plant for the commercial production of certain products from root crops and coconut.

* The Japanese delegation was composed of Dr. Ikuzo Uritani, Dr. S. Kawakishi, Dr. T. Matzuda and Dr. R. Nakamura came to ViSCA on July 30, 1989 to look at new projects that can be supported by the Japan Society for the Promotion of Science (JSPS). They also discussed the possibility for JSPS to sponsor the visit of some ViSCA staff members to Japan where they can explore with Japanese scientists' specific areas of collaboration.

ViSCA Host in National Workshop, Convention and Meeting

* ViSCA was the venue of the First Regional Symposium on Research and Development (R and D) Highlights held on June 7-9, 1989 at the PRCRTC Training Hall.

* The Philippine Society of Animal Science (PSAS) - Visayas Division held a two-day annual scientific convention at ViSCA on June 16-17, 1989 with the theme "Animal Production: A Catalyst to Countryside Development." The Secretary of Agriculture, Hon. Carlos G. Dominguez, was the guest speaker.

Sec. Carlos G. Dominguez was the guest speaker during the PSAS convention held at ViSCA.

* A one-week National Sweet Potato Seminar-Workshop was held at the Philippine Root Crop Research and Training Center Training Hall from May 29 to June 4, 1989 to identify the needs, gaps and problems of sweet potato research and extension; strengthen the sweet potato research-extension linkage in the different regions in the country as well as develop a regional workplan for sweet potato research and development. The Regional Director of The Centro Internacional de la Papa (CIP), Peter Vender Zaag, and a visiting researcher from the Netherlands were also present during the national seminar workshop.

* Thirteen program officers of the International Development Research Centre (IDRC) headed by Dr. Kenneth T. Mackay, Senior Program Officer based in Singapore and Dr. Geof Hawtin, Director of the Agriculture Division and other program officers based in Latin America, Africa, and Asia, met at ViSCA to discuss IDRC-related matters during their regular annual staff meeting of the crops and animal production systems program. The meeting was held from January 31 to February 2, 1989.

Athletic Championship

* ViSCA copped the championship trophy during the 6th Regional SCUAA (State Colleges and Universities Athletic Association) Meet held in Naval, Leyte, Biliran Sub-province on October 22-26, 1989.

The champions in track and field (top) and volleyball (bottom) during the 6th Regional SCUAA.

ViSCA included in the Directory and Resource Guide

* The Visayas State College of Agriculture (ViSCA) and the ViSCA-based Philippine Root Crop Research and Training Center (PRCRTC) were included in the book entitled "Nonformal Education Programs: A Directory and Resource Guide", published by the Inter-agency Technical Group on Nonformal Education (IATG-NFE).

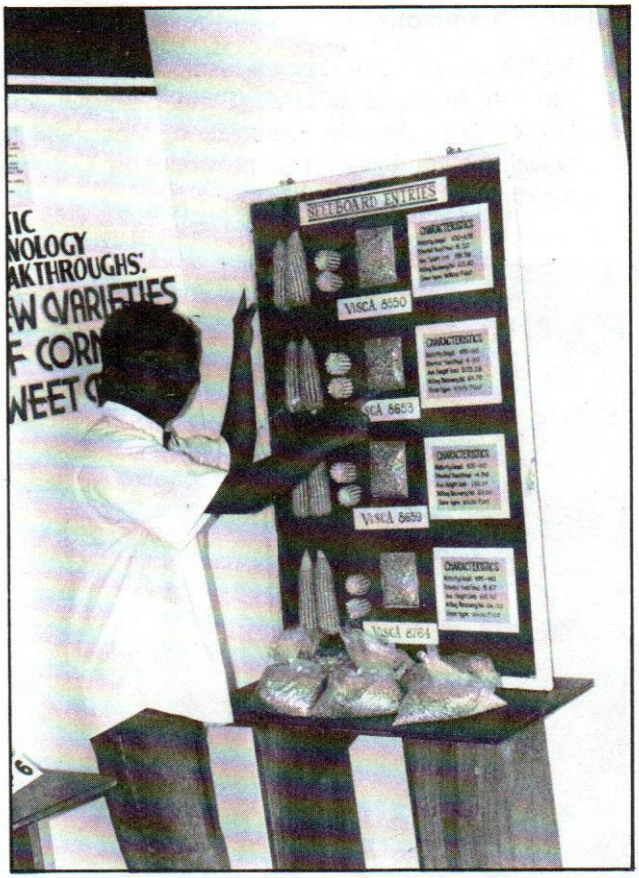
ViSCA Story in Soundslides

* A new version of the ViSCA story in slides and tape was produced and the scripts in both English and Cebuano were revised and updated.

College Exhibits

* The general facelifting of the College Exhibits located at ODREx was completed in 1989.

* Coordinated and facilitated by ODREx, a Roving College Exhibits program was started in 1989.



Mr. Reigh Monreal explains to viewers the merits of the new corn varieties developed by ViSCA .

School-on-the-Air

* DYAC launched in 1989 the first "School-on-the-Air" program in Eastern Visayas.

ViSCA Linkages

* During the 10-day trip of President Villanueva to Japan, he was able to visit three universities, namely: Tokyo University, Nagoya University and Tsukuba University where he met with the Presidents, Deans of the College of Agriculture, scientists and other officials of the three universities and discussed with them the possibility of reviving the collaboration with their universities under the Japan Society for the Promotion of Science (JSPS) program.

ViSCA's School-on-the-Air Program

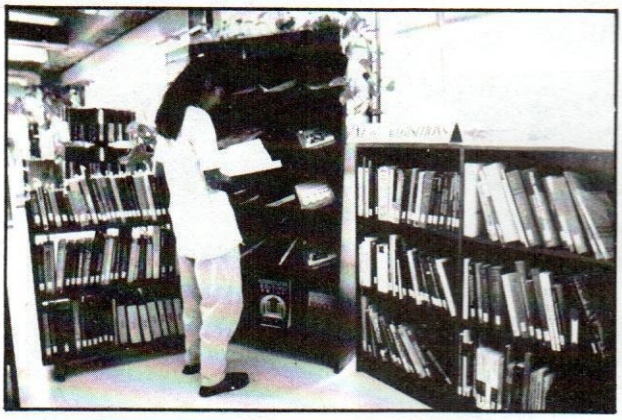
Dr. Villanueva discusses possible linkages with JSPS officials who visited ViSCA.

* ViSCA President M. R. Villanueva attended the first research coordinated meeting on "The improvement of Root and Tuber Crops in Tropical Countries of Asia by Induced Mutations" held from February 20 to 24, 1989 in Bangkok, Thailand. He was invited by Dr. N. Murata of the International Atomic Energy Agency (IAEA) based in Vienna, Austria, as one of the presentors.

New Acquisitions

* ViSCA acquired two units of Plate Filter Press and Mechanical Pulper and Finisher complete with accessories from San Miguel Corporation to boost the food products research and development in ViSCA.

* As of December 1989, the College library had acquired additional 1,410 volumes, of which 489 were received as gifts, making a total inventory of 40,773 volumes, thus, an increase of 3.58% over the 1988 count.



College Library's new acquisitions

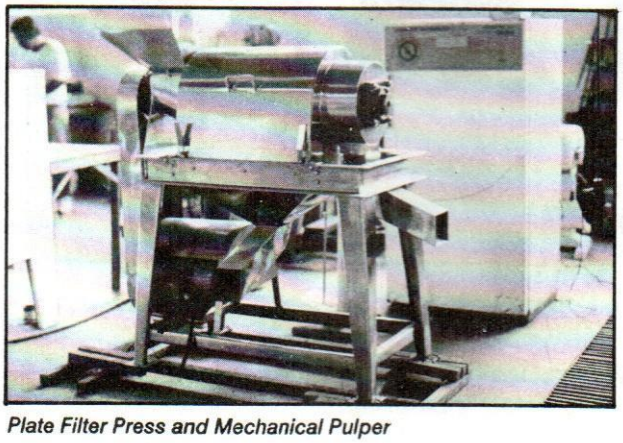
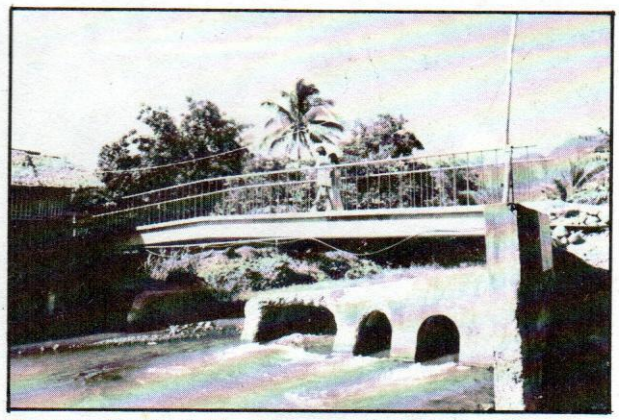


Plate Filter Press and Mechanical Pulper

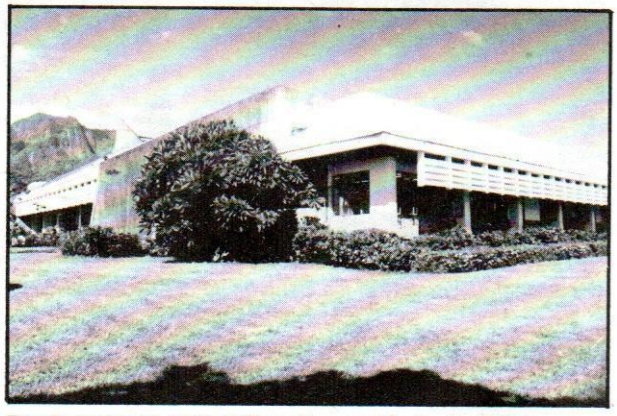
Completed Infrastructure Projects

* As of December 1989, the following construction were completed: Phase 1 of the FARMI Building, Lago-lago foot bridge, repair of three college buildings (DAC-FS, DASS and DPBAB) as well as minor repairs of nine staff houses.

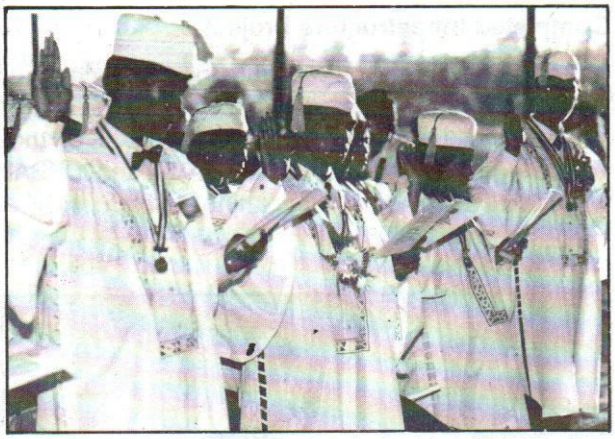
The FARMI Building



The Lago-lago footbridge that connects Brgy. Guadalupe (Lower Utod) to ViSCA



The Department of Plant Breeding and Agricultural Botany



Honor graduates as they took their Oath of Loyalty to the Alma Mater.

ERHS students during the Anniversary parade.

The Speech Laboratory of the Department of Arts and Letters.

INSTRUCTION

CURRICULAR OFFERINGS

A. Graduate Courses:

1. **On-campus Programs:**

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

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

   c. Diploma in Agricultural Technology Education-Master of Agricultural Technology Education (DATE-MATE).

2. **Extramural Program:**

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

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 and Teaching Agriculture in the Elementary Schools.

   BS in Agricultural Development (BSAgDev), with major in : Agricultural Extension.

   BS in Agricultural Development Education (BSADE).

   BS in Home Economics (BSHE), with majors in: Teaching Home Economics in the Secondary Level, Teaching Home Economics in the Elementary Level and Home Economics Extension.

   Bachelor of Animal Science (BAS), with majors in: Animal Health and Animal Production.

   BS in Development Communication (BSDC), with majors in: Development Journalism and Community Broadcasting.

   BS in Agricultural Engineering (BSAE).

   BS in Statistics (BSS).

   BS in Agribusiness (BSAB).

   BS in Agricultural Chemistry (BSAC).

   BS in Food Technology (BSFT).

   BS in Forestry (BSF).

2. **Non-degree Programs:**

   Forest Ranger Certificate (FRC).

   Home Economics Technician (HET).

C. Secondary Education:

Agricultural Science Curriculum

CURRICULUM DEVELOPMENT

Extramural Program for Rural Development

The Extramural Program for Rural Development developed three (3) additional study guides, two (2) of which were on Agricultural Education (Ag. Ed. 232 and Ag. Ed. 242) and one (1) on Animal Science (An. Sci. 141). In the previous years, 34 study guides had been developed.

Department of Agronomy and Soil Science

The Department of Agronomy and Soil Science offered a new 3-unit graduate level major course for extramural students, Agron. 241 - Advanced Cropping Systems. Study guides and some teaching materials were already sent to the students enrolled in the said course. At the undergraduate level, no major changes were made but the department had started to review, improve and revise the course outlines, laboratory exercises and syllabi of some courses offered.

Department of Animal Science and Veterinary Medicine

The Master of Science in Animal Science was approved by the Board of Trustees early in the year and was subsequently offered starting the first semester of SY 1989-1990. A proposal to offer Doctor of Veterinary Medicine (DVM) was prepared by the staff of the department and is ready for submission to the College Curriculum Committee.

Department of Plant Protection

In line with the department's thrust of giving emphasis on biological control, curricular changes were implemented during the first semester of SY 1989-1990. More courses on biological control were instituted giving emphasis on recognition not only of injurious pests but also of the more diverse beneficial enemies of pests. The instituted courses included: Taxonomy of Parasitoids and Predators (Entom 242), Genetics of Host-Parasite Interactions (Plant Path 231), Taxonomy of Nematodes (Plant Path 248) and Advances in Plant Disease Control (Plant Path 271).

Department of Forestry

The Department of Forestry continued to offer the four-year BS in Forestry and the two-year Forest Ranger Course (FRC). Under a "ladder-type scheme", the FRC students can proceed to the B. S. Forestry curriculum if they qualify for admission.

Department of Arts and Letters

In answer to the needs of the technical departments, the Department of Arts and Letters offered two new courses approved by the Board of Trustees, namely: English 21 (Introduction to Literature), and English 26 (Argumentation and Debate). The previously approved Spanish 21 (Spanish Culture in Philippine Setting) was offered in the Summer of 1989. Furthermore, the department continued to enrich its course offerings and make it more adaptive to the needs of the students through the following activities: (a) continued the writing of instructional materials in Speech 11, Spanish 21 and Philosophy; (b) revised the teaching materials in English 001 and 002; (c) tried out study guides in English 24; (d) updated references in Psychology, Philosophy and other courses; (e) put up a semi-annual publication called **Sunrays** which highlights DAL students' output in the classroom; (f) created a dramatics club called the Thespian Guild; (g) put up an art gallery exhibiting the students' art works in Humanities 11; (h) maintained the artifact mini-museum for the students' reference and viewing; and (i) invited a lecturer who shared her expertise on the art of puppetry with the prospective teachers.

Department of Home Science

The Department of Home Science continued to offer the BS in Home Economics and the two-year Home Economics Technician course. The technician course is under revision in that it hopes to have two (2) options: terminal and non-terminal. The first option is envisioned to be a one-year course which gives emphasis on the mastery of technical skills. The non-terminal option will be a two-year course which will enable the students to learn several manipulative skills which they can use for livelihood activities. It allows students to proceed to a degree course after passing the NCEE conducted by DECS and performing satisfactorily the validating tests given by the department.

Department of Agricultural Engineering and Applied Mathematics

The Department of Agricultural Engineering and Applied Mathematics continued to offer the BS in Agricultural Engineering and BS in Statistics courses with the institution of more major courses to replace the four Spanish courses in the curriculum. Likewise, plans to revise both the BSAE and BSS programs are underway to conform with the College plan to eliminate the required summer course offering.

Department of Development Communication

To strengthen the program and enrich the different course offerings of the Department of Development Communication, some resource persons were invited and team teaching was implemented to tap the expertise of staff members outside of the department. Field trips and visits to offices on-campus and out-of-campus were also undertaken to improve and develop the skills of DevCom students.

Department of Plant Breeding and Agricultural Botany

No major changes were undertaken in the curricular offerings of the Department of Plant Breeding and Agricultural Botany. However, the current curriculum is being reviewed for possible improvement.

Department of Horticulture

Although there were no major curricular changes made in the degree program offered by the Department of Horticulture, the teaching staff improved and enriched the course syllabi contents of the various subjects being offered. A proposal to institute undergraduate and graduate courses in Tissue Culture was submitted to the Curriculum Committee for appropriate action.

Department of Agricultural Economics and Agribusiness

The Department of Agricultural Economics and Agribusiness made revisions of its curricular offerings and instituted the revisions of the BSAB curriculum as approved in 1986 in response to the need of the region for well-trained manpower with management orientation and technical background in agriculture to serve in agri-based industries.

Department of Agricultural Chemistry and Food Science

The Department of Agricultural Chemistry and Food Science continued to offer the BS in Food Technology and BS in Agricultural Chemistry courses and at the same time prepared a proposal to convert the BSAC into a BS in Chemistry degree program.

Department of Agricultural Education and Extension

In 1989, two curricular offerings at the graduate level were implemented starting the first semester of SY 1989-1990 namely: Diploma in Agricultural Technology Education-Master of Agricultural Technology Education (DATE-MATE) and the Professional Enhancement Course leading to the degree of Master of Agricultural Development (M. Ag. Dev.) for the Agricultural Production Technicians (APT's) of the Department of Agriculture.

The DATE-MATE program is an answer to the manpower demand for four-year degree graduates who can effectively manage small-scale farms which entail a shift of emphasis from agricultural sciences to entrepreneurship in agriculture. On the other hand, the Department of Agriculture's APT's were trained to update their knowledge and competencies.

Secondary Education

The DECS' new Secondary Education Development Program (SEDP) was implemented in the first year level during the SY 1989-1990. Changes in the ERHS curriculum were made to accommodate the SEDP program with some modifications in order to meet the objectives of the school. The Technology and Home Economics (THE) subject with 1.5 units was split into two: Home Economics and Agriculture with each subject credited with 1.5 units. One section in the freshman year followed the modified SEDP curriculum until fourth year.

A proposal to revise the course description of the existing Math 2b from Applied Mathematics to Introductory Statistics and Experimental Design for the first semester and Basic Computer course for the second semester has been considered. Knowledge in these courses not only help students undertake investigatory projects and encourage to participate in local, regional, national and international science fairs and quizzes but also help improve their computer literacy.

ENROLMENT

During the first semester of SY 1989-1990, enrolment in the Master of Agricultural Development program (including extramural students), registered a 34.4 percent increase, while enrolment in the Master of Science program decreased by 12.7 percent (Table 1). The Diploma in Agricultural Technology Education - Master of Agricultural Technology Education (DATE-MATE) was a new program implemented during the first semester of SY 1989-1990.

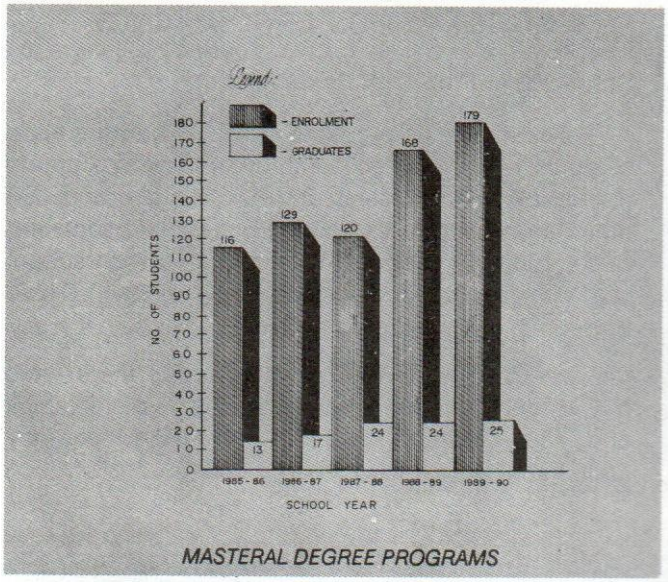
Of the total 1,481 undergraduates enroled during the first semester, BS in Agriculture had the most number of enrollees followed by BS in Home Economics.

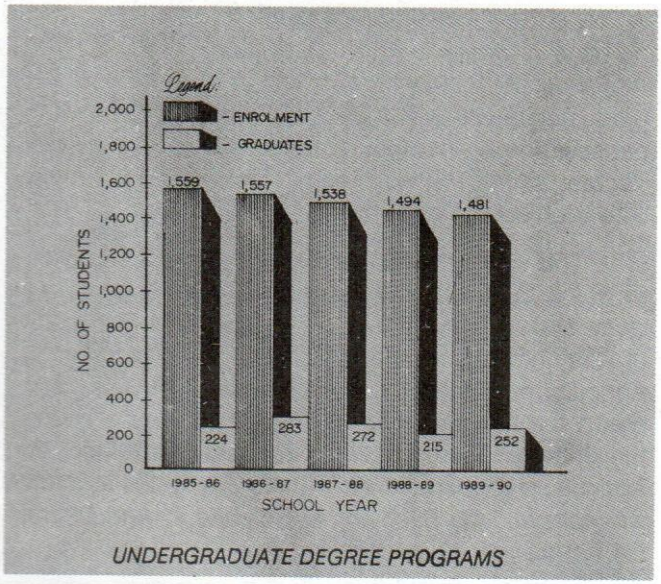
Enrolment in the Experimental Rural High School for the SY 1989-1990 decreased by 13.7 percent due to the transfer of some students to other schools and in compliance with the DECS memorandum to reduce the number of sections to two for each year level for laboratory schools. The dropout rate was only 1.34 percent compared to the previous year's 3.9 percent.

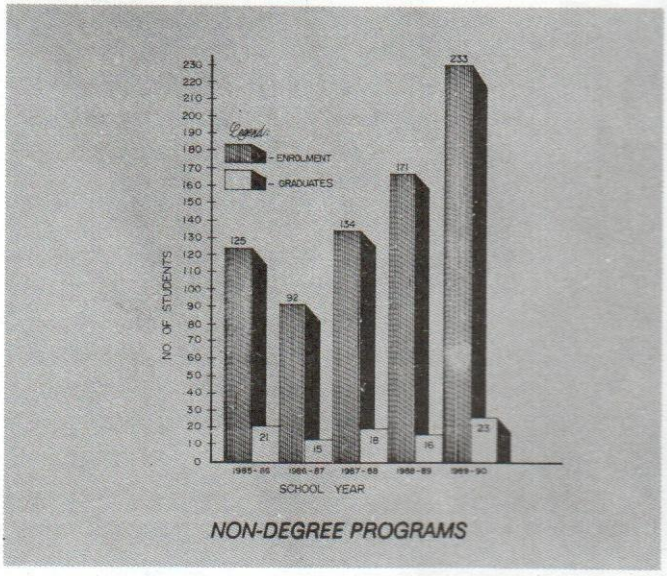
During the first semester of SY 1989-1990, majority of the students of ViSCA came from Eastern Visayas, to wit: 58.4% graduate students, 80.7% undergraduate students and 97.3% high school students. Other students came from Central Visayas, Western Visayas, Mindanao and Luzon.

Table 1. Comparison of Enrolment, First Semester 1988-89 and First Semester 1989-90.

DEGREE PROGRAM	First Semester		Difference	Percent Increase/ (Decrease)
	1988-89	1989-90		
1. Graduate Program				
Master of Science	71	62	-9	(12.7)
Master of Ag. Development	96	129	+33	34.4
Diploma in Agriculture	0	18	+18	100.0
Special Student	1	0	-1	(100.0)
Sub-Total	168	209	+41	24.4
2. Undergraduate Dgree Program				
B.S Agriculture	312	300	-12	(3.9)
B.S. Agric'l Education	224	187	-37	(16.5)
B.S. Agric'l Dev. Educ.	12	3	-9	(75.0)
B.S. Agric'l Development	18	3	-15	(83.3)
B.S. Home Economics	215	212	-3	(1.4)
B.S. Dev't. Communication	54	60	+6	11.1
B.S. Agric'l Engineering	116	108	-8	(6.9)
B.S. Agribusiness	133	117	-16	(12.0)
Bachelor of Animal Science	129	137	+8	6.2
B.S. Agric'l Chemistry	36	37	+1	2.8
B.S. Food Technology	41	40	-1	(2.4)
B.S. Exp'tl Statistics	1	0	-1	(100.0)
B.S. Statistics	48	47	-1	(2.1)
B.S. Forestry	155	202	+47	30.3
Sub-Total	1,494	1,481	-13	(0.9)
3. Non-Degree Program				
Forest Ranger Certificate	98	150	+52	53.1
Home Economics Technician	73	83	+10	13.7
Others	15	16	+1	6.7
Sub-Total	186	249	+63	33.9
4. Secondary Education Program				
First Year	194	106	-88	(45.4)
Second Year	169	153	-16	(9.5)
Third Year	103	129	+26	25.2
Fourth Year	95	96	+1	1.1
Sub-Total	561	484	-77	(13.7)
GRAND TOTAL	2,409	2,423	+14	0.6







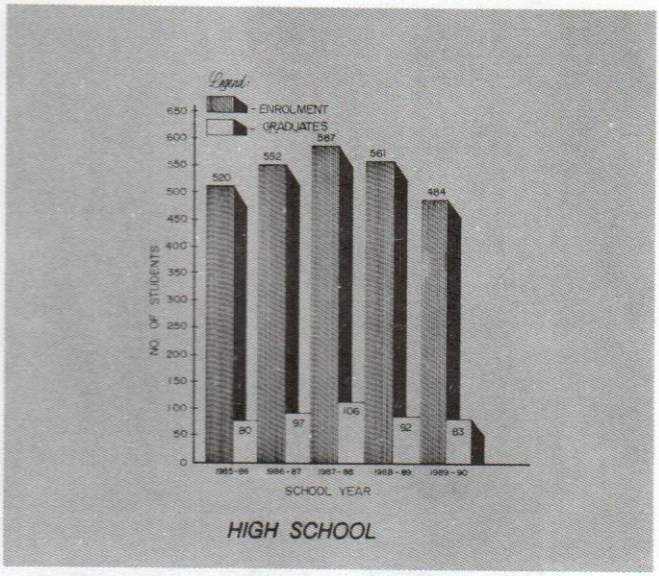


Fig. 1. Enrolment and Graduate Data by Program from SY 1985-86 to SY 1989-90.

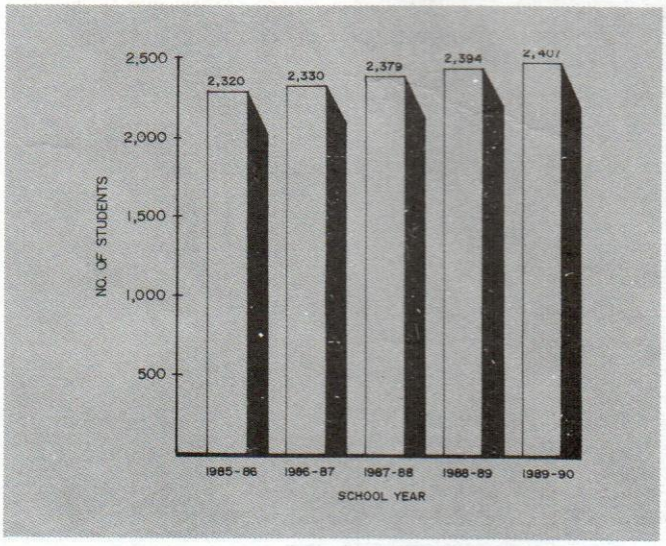


Fig. 2. Summary of Enrolment in the last 5 years.

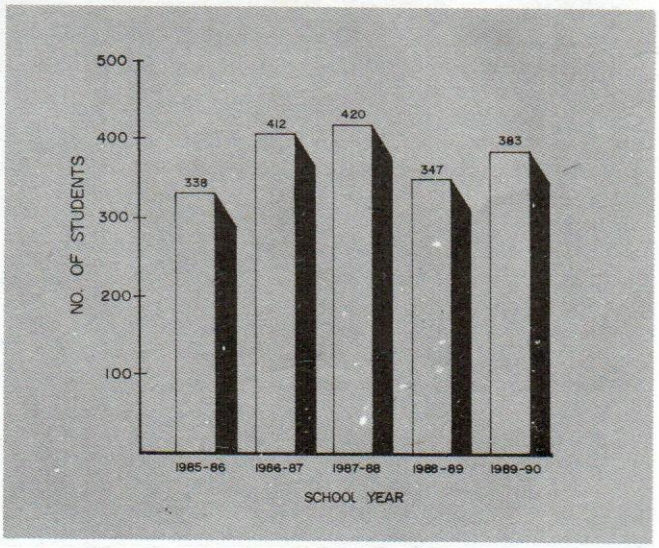


Fig. 3. Summary of Graduates in the last 5 years.

GRADUATES

For SY 1989-1990, ViSCA produced 383 graduates of which 252 (65.80%) were conferred with baccalaureate degree; 25 (6.52%) with master's degree; 23 (6.01%) with certificate; and 83 (21.67%) with high school diploma.

This school year, there were 36 honor students, of which three (3) were graduated with Magna Cum laude and 33 with Cum laude honors. The first batch of the new graduate program, the Diploma in Agriculture Technology Education (DATE) had graduated this year with 18 initial graduates. Among the undergraduate courses, Bachelor of Science in Agriculture topped the list with 45 graduates and this was followed by Bachelor of Science in Agricultural Education with 43 graduates.

SCHOLASTIC PERFORMANCE

Scholarship/Financial Assistantship

There were 51 graduate and 481 undergraduate students who were recipients of scholarships/grants during the first semester and 49 graduate and 468 undergraduate students during the second semester of SY 1989-90. On the other hand, 130 high school students enjoyed scholarships for SY 1989-90 (Table 2).

From January to December 1989, there were 519 students who availed of student assistantships and 432 ViSCASELF (ViSCA Student Emergency Loan Fund) borrowers (Tables 3 and 4).

Table 2. Number of Students Enjoying Scholarships and Grants During the School Year 1989-1990 by Program.

Type of Scholarship/Grant	First Semester		Second Semester		
	Graduate	Under-graduate	Graduate	Under-graduate	High School
FSDP-EV-DA	1	-	1	-	-
FSDP-EV	-	-	7	-	-
EDPITAF	19	-	19	-	-
ViSCA-DECS	1	-	1	-	-
DA-ATI	30	-	21	-	-
ViSCA Funded Scholarships					
Honorofic Scholarship	-	35	-	33	23
Entrance Full Scholarship	-	4	-	-	9
Entrance Partial Scholarship	-	7	-	-	11
ViSCA Full Scholarship	-	15	-	13	7
ViSCA Partial Scholarship	-	73	-	92	80
ViSCA Grants-in-Aid:					
Academic Grant "A"	-	58	-	63	-
Academic Grant "B"	-	6	-	33	-
Chorale Group Grant	-	20	-	20	-
Dance Troupe	-	18	-	18	-
ViSCA Beauty Quest	-	5	-	-	-
Varsity Team Grant	-	49	-	50	-
CMT Grant	-	11	-	11	-
Income A and B Grant	-	8	-	8	-
Sangguniang Bayan	-	146	-	111	-
Weed Science Society	-	1	-	1	-
Shouchi Yoshida Scholarship	-	2	-	2	-
DOST-SEI Scholarship	-	2	-	2	-
State Scholarship	-	4	-	5	-
Study-Now-Pay-Later	-	12	-	-	-
Phil. Veterans Scholarship	-	1	-	1	-
Eastern Samar Educ. Found.	-	4	-	-	-
PARRFI	-	-	-	3	-
SSS Educational Loan	-	-	-	1	-
Ormoc Rotary Club	-	-	-	1	-
Total	51	481	49	468	130

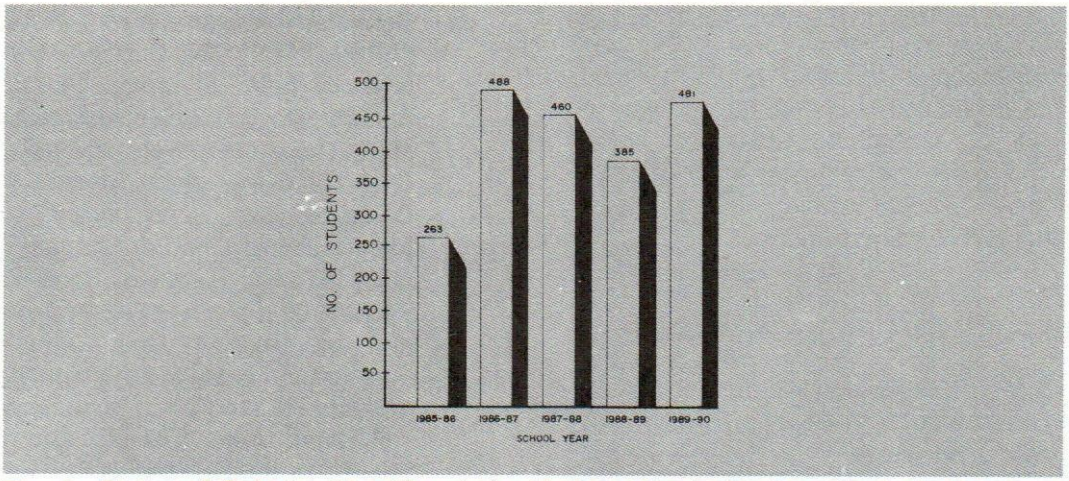


Fig. 4. Status of Scholarships/Grants for Undergraduate Students in the last 5 years.

Table 3. Total Number of Student Assistants from January to December 1989.

Month	No. of Stud. Assts.	No. of Hours Worked	Amount Paid
January	55	4,993.5	₱ 10,938.30
February	50	4,216.5	9,204.65
March	24	2,137.5	4,774.46
April	42	3,067.25	6,724.88
May	26	2,638.00	5,073.75
June	45	3,450.25	7,111.68
July	42	3,635.00	7,933.46
August	61	6,096.50	12,468.33
September	58	5,169.50	11,329.86
October	56	3,815.00	8,413.84
November	45	3,249.50	7,248.70
December	15	1,186.50	2,669.58
Total	519	43,655.00	₱ 93,891.49

Table 4. ViSCASELF borrowers for the first and second semester of SY 1989-90.

MONTH	NO. OF BORROWERS			Total Amount Assessed
	Male	Female	Total	
January	27	18	45	₱ 6,330.00
February	36	7	43	6,010.00
July	89	50	139	20,325.00
August	54	23	77	11,025.00
September	15	8	23	3,275.00
November	32	11	42	6,165.00
December	34	28	62	3,630.00
Total	287	145	432	₱ 56,760.00

Delinquency

During the second semester of SY 1988-89 there were 165 delinquent students: 60 on warning status and 105 on probation status. This figure increased to 255 in the first semester of SY 1989-90 when there were 151 on warning status, 55 on probation status and 49 were dismissed .

CO-CURRICULAR PERFORMANCE

Students of the Experimental Rural High School continued to show commendable performance in the field of education as attested by their excellent record:

1. A group of students won the first three places during the Regional Science Fair at Dulag, Leyte, which was sponsored by DOST Region VIII on October 26-27, 1989 (Table 5).
2. In the Regional Oratorical Contest on November 27, 1989 held at the Divine Word University, Tacloban City, Arnel Caliente, a senior student, copped the first place award. It was sponsored by the College Assurance Plan and the Rotary Club of Manila.
3. During the Regional Secondary Schools Press Conference held at Carigara School of Fisheries, Carigara, Leyte on December 6-8,1989, Arnel Caliente was awarded first place in Sports Writing (English version) and Kristina Yolanda Pal won three awards: first place in Feature Writing (English), fifth place in Sports Writing (Filipino), and sixth place in Feature Writing (Filipino).
4. Eight students won different awards in the FFP-FAHP-FFPCC District Work Conference held at Hilongos Vocational School, Hilongos, Leyte, on October 11-13, 1989. The winners were: Vivencio Pelesco (2nd place in Upland Straight Plowing); Dante Celaya (2nd place in Seed Identification); Pedro Pascual, Jr. (2nd place in Public Speaking - English); Gerlina Pascual (2nd place in Flower Arrangement and 1st place in Quiz Bee); Rosadey Faelnar (2nd place in Embroidery); Kristina Yolanda Pal (2nd place in Public Speaking - Filipino); Arnel Caliente (3rd place in Feasibility Study); and Joey Godoy (3rd place in Poster and Slogan Contest).

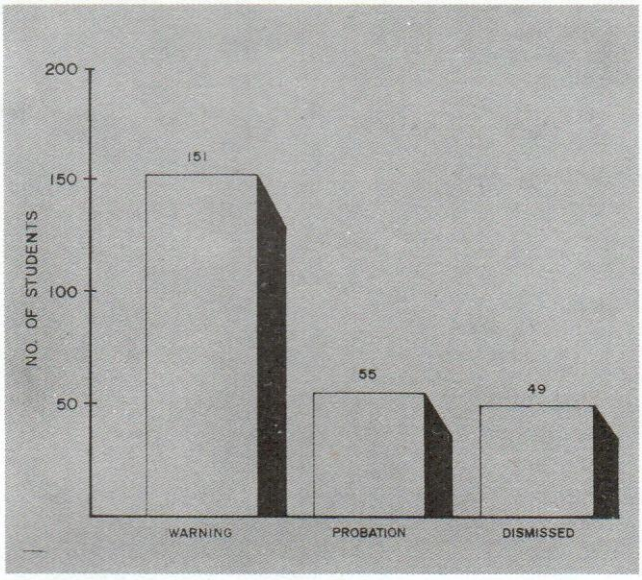


Fig. 5. Status of delinquency during the first semester of SY 1989-90.

Table 5. Awards Garnered During the 1989 Regional Science Fair.

Rank	Titles	Presentors	Advisers
First	Utilization of Asyang *(Mikamia micrantha)* for Termite Control	Valerie Villanueva Geraldine Go	Lilet Gonzal
Second	Management of *Desmodium* Live Mulch on the Growth and Yield of Corn	Arnel Caliente Binh Ly Isidro Granada	Ly Tung
Third	Indigenous Materials for the Control of the Common House Fly *(Musca domestica L.)* in Poultry Houses	Annalie Dean Ma. Theresa Gamotin Rosalea Arpilleda	R. Arpilleda

FACULTY DEVELOPMENT

As of December 1989, ViSCA's academic manpower reached to 243 (both college and high school), of which, 63 were Ph. D. degree holders, 130 Master's degree holders and 50 BS degree holders. During the year, 45 faculty members were on leave: 30 were on study leave with pay, 12 were on study leave without pay, and 3 on leave of absence. For 1989, the total number of faculty members decreased by seven (excluding substitutes), while the total number of faculty members with doctoral degrees increased by five.

As part of staff development, faculty and staff were sent to participate in various trainings and seminars, either local, regional, national or international to update their knowledge and competencies in their fields of specialization (Table 6).

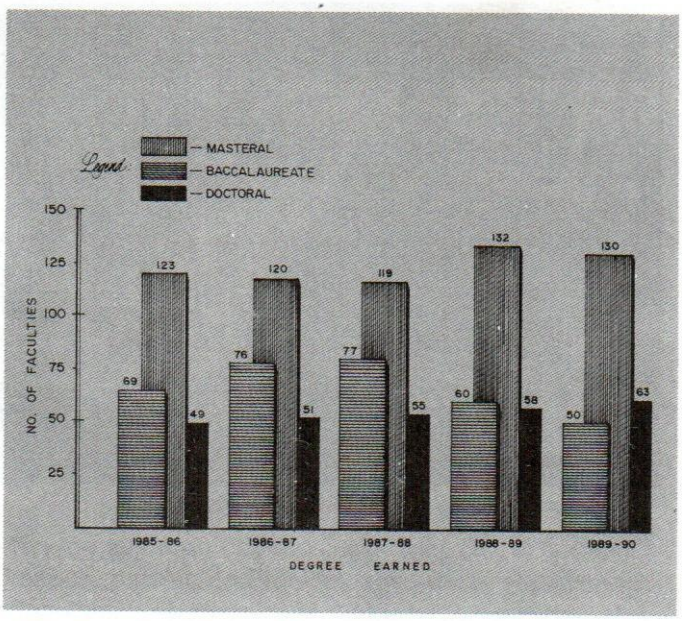
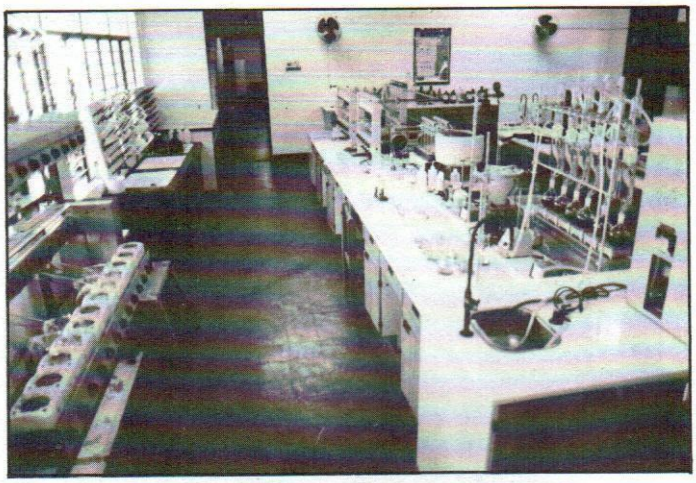


Fig. 6. Faculty profile in the last 5 years.

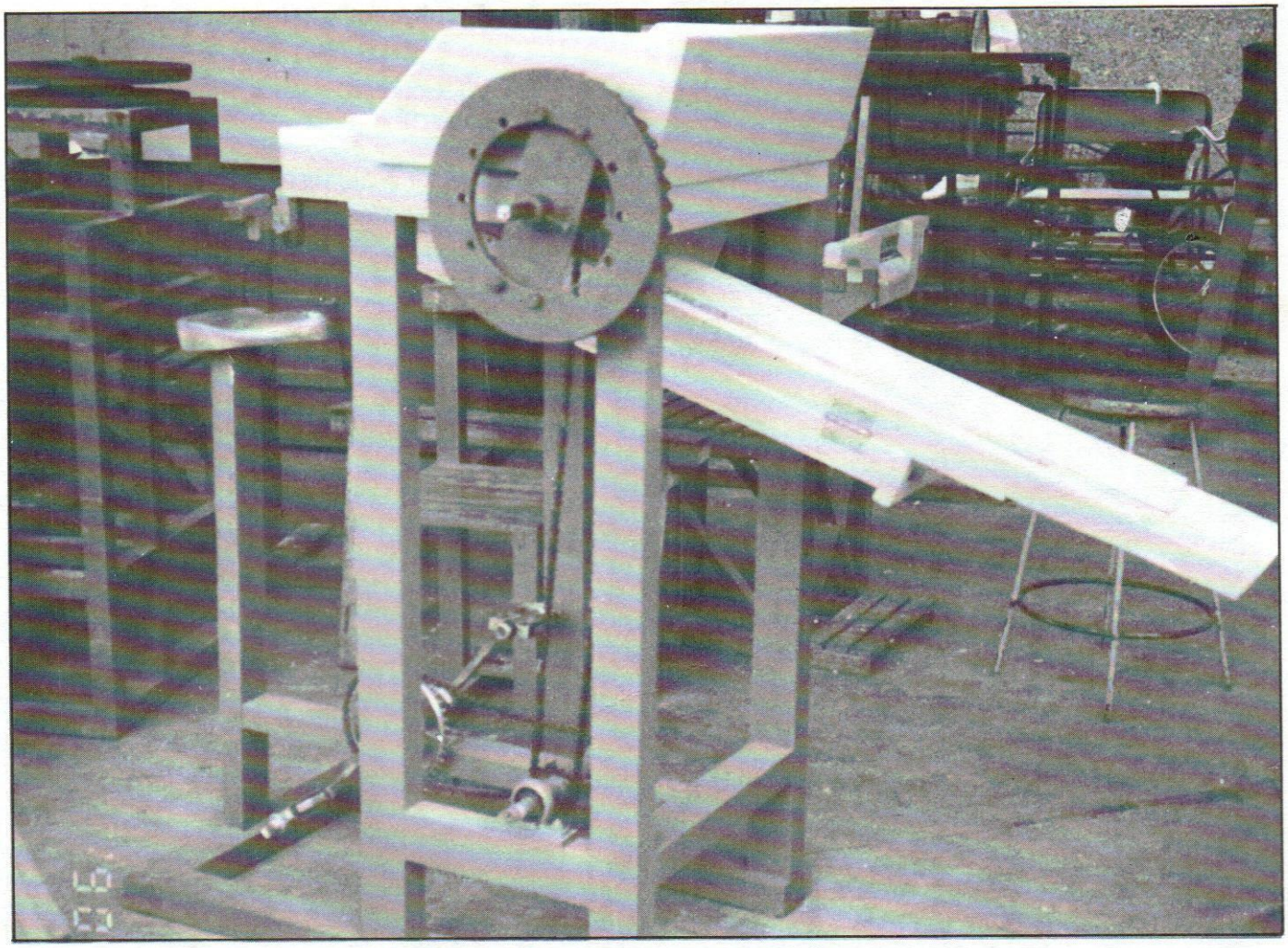
Table 6. In service trainings/conferences attended by the staff as of December 31, 1989.

TRAINING CATEGORY	International		National		Regional		Local	
Department/Center	Number of Trainings Attended	Number of Staff Who Attended	Number of Trainings Attended	Number of Staff Who Attended	Number of Trainings Attended	Number of Staff Who Attended	Number of Trainings Attended	Number of Staff Who Attended
Academic Departments:								
Ag.Chem. & Food Sci.	0	0	6	18	4	5	6	10
Ag. Econ. & Agribusiness	0	0	4	28	0	0	4	15
Ag. Eng'g. & App. Math.	2	2	14	23	16	22	10	24
Agronomy & Soil Science	4	4	1	1	5	9	6	16
Animal Science & Vet. Med.	2	3	1	1	4	20	4	15
Arts & Letters	3	3	10	10	1	2	1	12
Development Communication	0	0	0	0	0	0	4	6
Ag. Education & Extension	1	1	0	0	0	0	13	3
Forestry	2	2	2	2	1	1	0	0
Home Science	0	0	4	4	7	13	4	7
Horticulture	0	0	2	2	0	0	2	7
Plant Breeding & Ag. Bot.	3	3	1	1	1	6	1	3
Plant Protection	4	4	8	14	1	3	6	9
Physical Education	0	0	1	1	2	4	1	4
ERHS	0	0	6	8	9	13	3	9
Research Centers and Other Offices (Detailed):								
CSR	7	9	18	31	9	10	4	19
FARMI	0	0	0	0	0	0	0	0
NARC	1	1	3	10	2	5	3	5
PRCRTC	6	12	4	67	0	0	1	5
RCRC	0	0	0	0	0	0	0	0
ATI	0	0	1	1	1	15	3	17
College Library	0	0	1	2	0	0	0	0
Infirmary	0	0	3	3	1	2	2	5



The "Cold Room" of the Department of Animal Science and Veterinary Medicine.

The Soils Laboratory of the Department of Agronomy and Soil Science.



The Root Crop Cuber-Sorter can cube and sort out sweet potato tubers as much as 150 kg/hr.

RESEARCH

As of December 31, 1989, ViSCA's 13 technical departments and 5 research centers had conducted a total of 223 research studies: thirty seven (37) of which were completed, 136 were ongoing and 50 were new (Table 7). Of the total number of research studies, 153 were funded by local donors as well as the Philippine government (Table 8).

Budget

The total budget for the different research studies amounted to ₱ 24,000,573.57 of which 28.01% (₱ 6,723,574.17) was contributed by foreign agencies. The International Development Research Centre (IDRC) contributed a total support of ₱ 4,079,972. The other international funding agencies included the Australian Centre for Agricultural Research (ACIAR), United States Agency for International Development (USAID), Centro Internacional de Agricultura Tropical (CIAT), International Foundation for Science (IFS), Tissue Culture for Crops Project - Colorado State University (TCCP-CSU), Winrock International, and Nitrogen-Fixing Trees Association (NFTA).

Research Thrusts

In 1989, ViSCA's research thrusts were focused on the following commodities: root crops, coconut, abaca, pasture and forage, agricultural engineering, legumes, applied rural sociology, poultry and livestock, corn and sorghum, rice and other cereals, socioeconomics, soil and water resources, vegetables, multipurpose trees, fiber (tikog), agroforestry, and farming systems.

Table 7. Number of Completed, Ongoing and New Researches Conducted in 1989 by Commodity.

Commodity	Number of Researches			
	Completed	Ongoing	New	Total
Abaca	-	14	1	15
Agroforestry	-	1	1	2
Agricultural engineering	-	8	-	8
Applied rural sociology	-	6	-	6
Coconut	-	18	1	19
Corn and sorghum	2	6	1	9
Farming system	3	2	1	6
Fiber (Tikog)	-	3	1	3
Fishery	-	-	1	1
Legumes	4	8	-	12
Multipurpose trees	-	-	1	1
Pasture and forage	4	7	-	11
Poultry and livestock	1	3	2	6
Rice and other cereals	-	4	2	6
Root crops	19	49	36	104
Socioeconomics	3	1	1	5
Soil and water resources	-	3	1	4
vegetables	1	4	-	5
Total	37	136	50	223

Table 8. Status of Research Funds Received by ViSCA from Foreign Donors and the Philippine Government in 1989.

Funding Agency	Amount (Pesos)	Contribution (%)	Number of Studies
ViSCA (GOP)	₱ 17,276,999.40	71.99	153
IDRC	4,079,972.00	17.00	37
USAID	688,630.00	2.87	5
OEA-NCRD	644,050.00	2.68	8
ACIAR	568,715.72	2.37	6
IFS	397,166.45	1.65	4
TCCP-CSU	200,000.00	0.83	1
WINROCK	46,120.00	0.19	2
CIAT	40,000.00	0.17	1
NFTA	38,920.00	0.16	2
IPI	20,000.00	0.08	4
Total	₱ 24,000,573.57	99.99 = 100	223

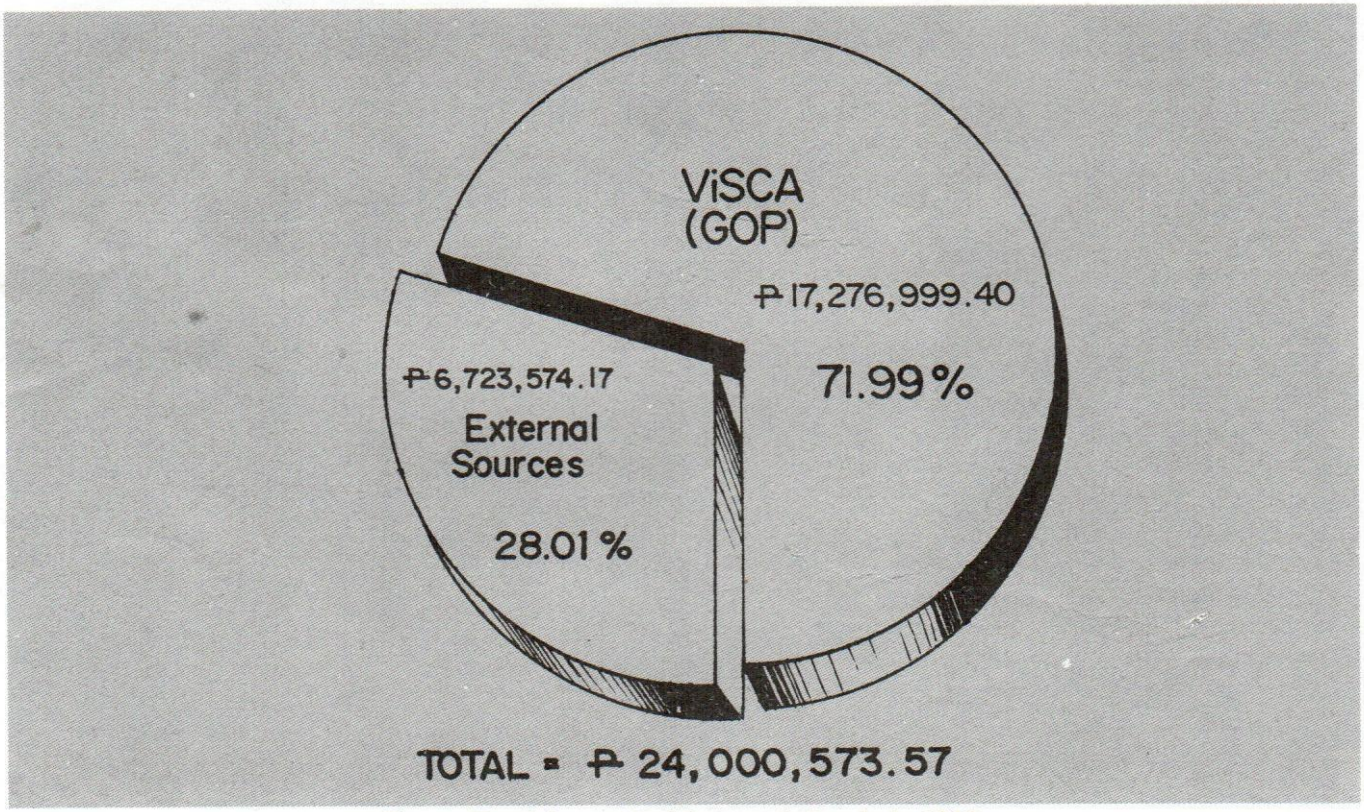


Fig. 7. Total Amount of Research Funds in 1989.

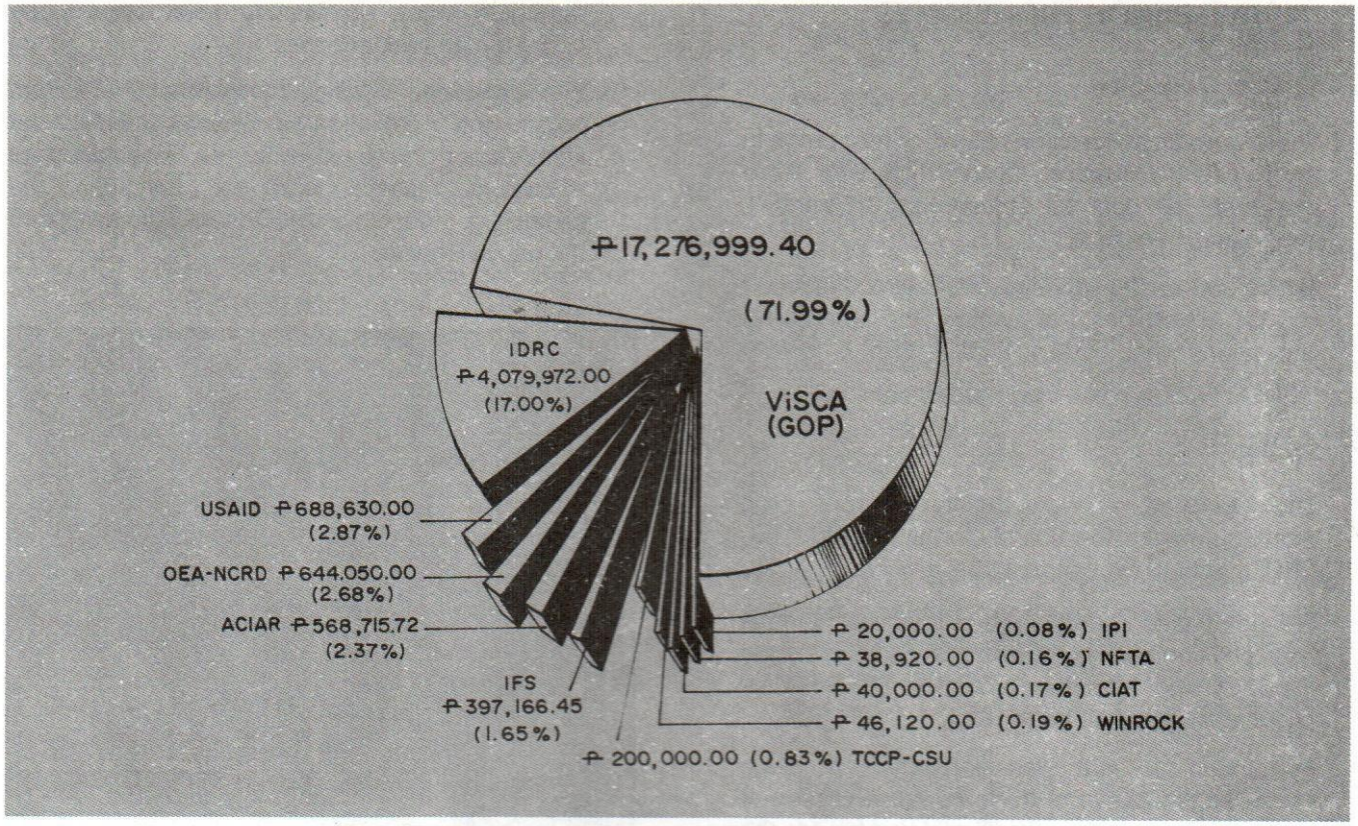


Fig. 8. Research Funds in 1989 According to Sources.

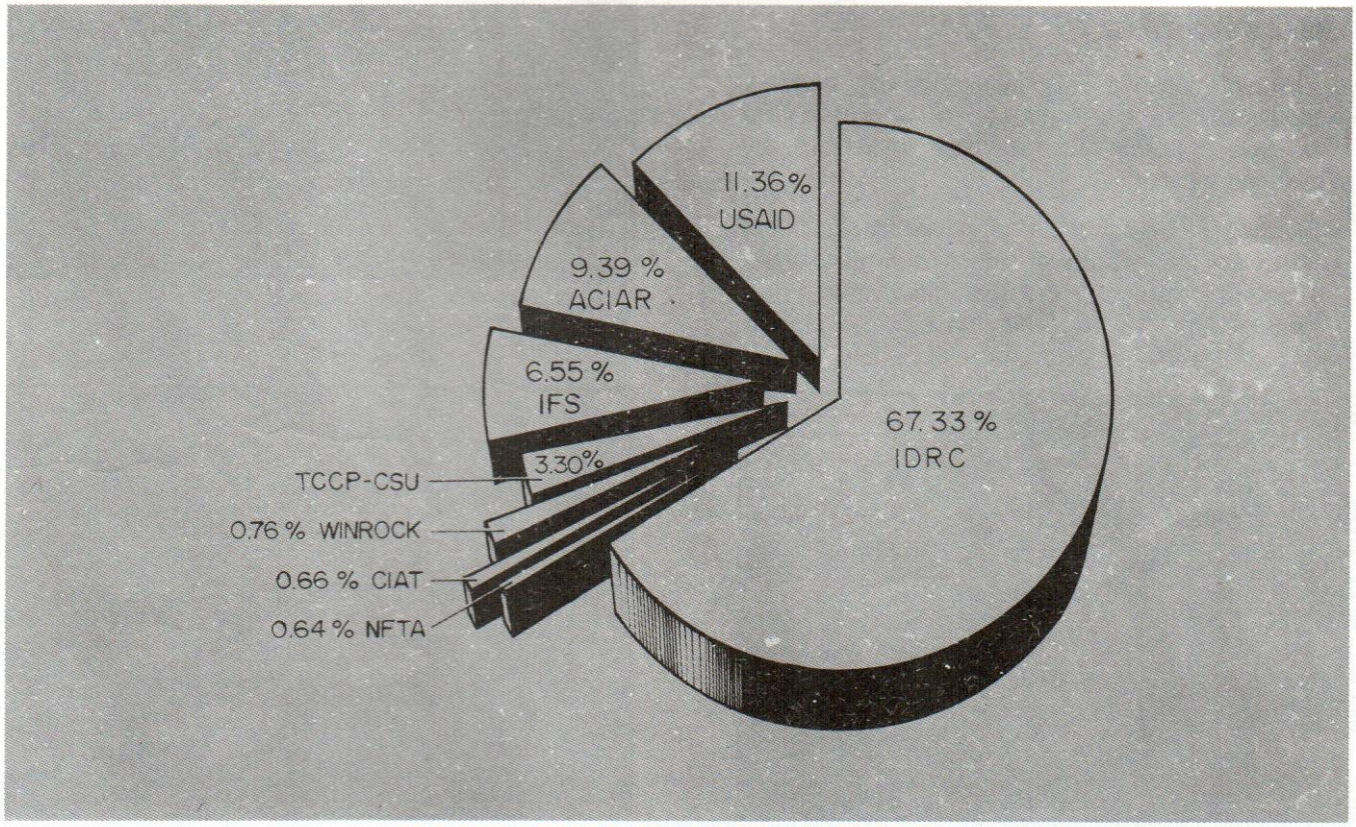


Fig. 9. Research Funds from Foreign Donors.

RESEARCH HIGHLIGHTS

Germplasm Collection

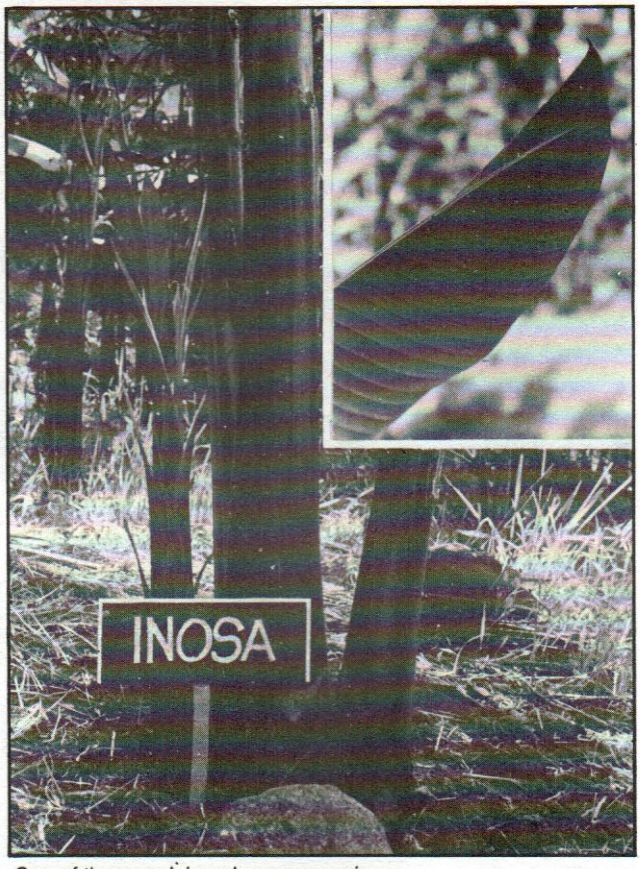
* There were 364 accessions of minor root crops in the PRCRTC collection. Of this total, 232 were yam (ubi), 76 tugui, 32 African yam, 22 nami, 1 abobo and 1 limalima.
* Native and exotic varieties of arrowroot reached to 35 accessions, of which the promising accessions were: PRM 1, PRM 2, PRM 5, PRM 9 and PRM 16.

Production

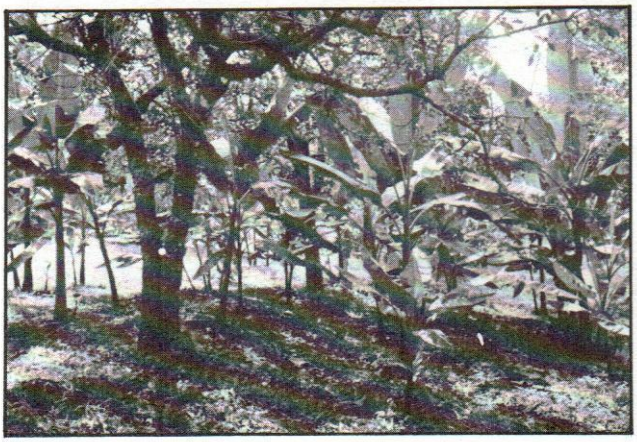
* The identified soil constraints to root crop production were: low soil pH, organic matter, LS, CEC, and high exchangeable Al and Fe.
* The germination percentage of abaca at 60 days after planting was highest in the immature/distal (66.67%) and immature/proximal (63.0%) stalk age/eyebud position treatments.
* Production of yam was enhanced by using bigger setts freshly cut from the basal portion of the tuber and by providing a cover to the seedbed.

Cultural Management

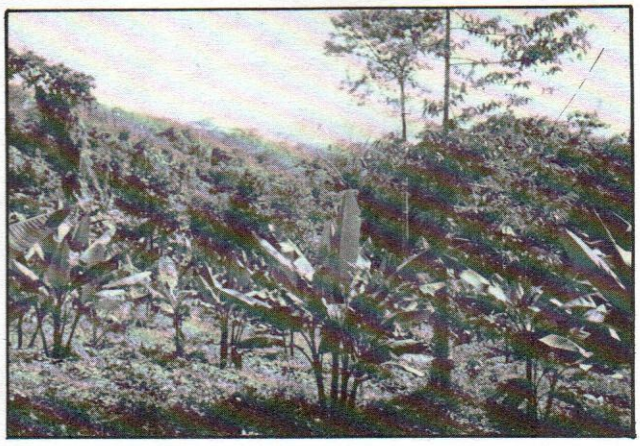
* Yield of cassava was influenced by pruning, liming and by planting location, while the yield of sweet potato was greatly influenced by planting location.
* Shading and spacing did not have any significant effect on the growth of abaca during its early vegetative stage (4-7 months after planting), but from 8 MAP to 13 MAP those grown under rambutan were significantly taller than those under durian and lanzones.
* Fertilizer alone significantly increased the stem height and nodulation of *A. auriculiformis* but was further improved with the inoculation of rhizobium. Under acid soil condition, the promising inoculants on *A. auriculiformis* were the native isolates.



One of the promising abaca accessions.



Abaca plants grown under rambutan trees.



Abaca plants grown under durian trees.

Flowering Characteristics

* Only 19 out of the 242 taro accessions of PRCRTC produced flowers. Flowering started 89 days after planting and lasted for a very short period.

Embryo and Tissue Culture

* Three months after culture, nodal segments of root crops including the Kinampay variety of yam produced micropropagable shoots. Sweet potato cuttings obtained from meristem culture-derived plants performed better than field-collected cuttings in terms of tuber yield and average size of roots.

* *In vitro* culture of *D. alata* tuber pieces using Murashige and Skoog's basal medium supplemented with NAA, kinotin and L- cysteine resulted in direct plant regeneration. However, in a meristem culture of *D. alata* using the same basal medium but containing 2,4-D and BA combinations, only callus were produced.

Pest Management

* Anthracnose was the most prevalent and destructive disease of yam in the PRCRTC germplasm from June to December 1989.

* Toxicity of the water-based crude extract from *Dioscorea hispida* was statistically comparable with malathion and dimethoate even at 5% concentration.

Albuera Dwarf flowers at 2-3 years after planting and produces 73- 106 nuts/tree/year.

* Of the 51 white corn entries evaluated for resistance to bacterial stalk rot, 16 were found moderately resistant, 32 moderately susceptible, and 3 susceptible.

Growth Parameters

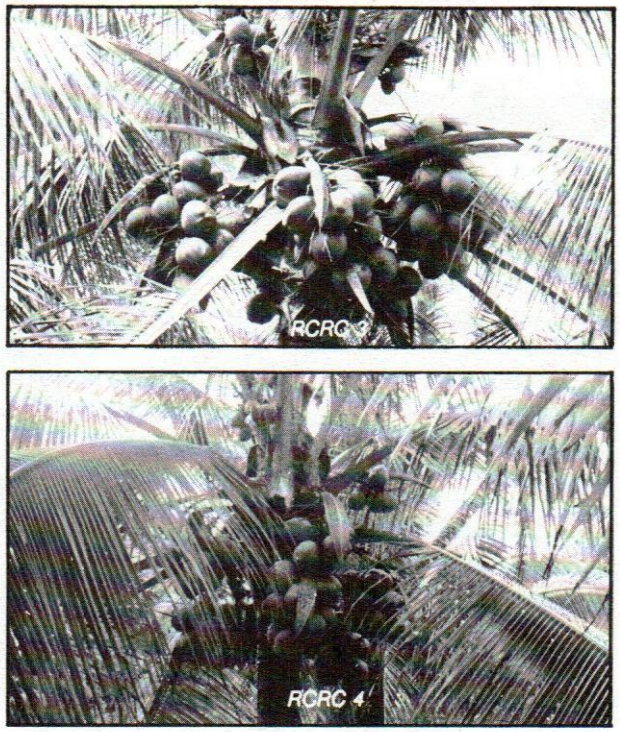
* Regardless of variety, taro produced more flowers at high concentrations of GA3. Those treated with cerone did not produce flowers.

* High gamma radiation lowered the survival rate and delayed the sprouting of yam setts. Colchicine-treated setts also had low survival rate and produced shoots with smaller stomatal openings.

Yield Parameters and Potentials

* Tacunan, a local dwarf coconut variety, produced 200 grams of copra per nut and outyielded the other varieties which included Albuera Dwarf, Camotes Dwarf, Catigan, Coconiño, Lingkuranay, and Malayan Red Dwarf.

* In the regional trial for cassava varieties, Cm 3320-11 gave a root yield of 29.2 tons per hectare which is comparable to the yield of Vassourinha, a recommended variety, which ranges from 25 to 35 tons per hectare.



New coconut hybrids developed by RCRC.

Engineering

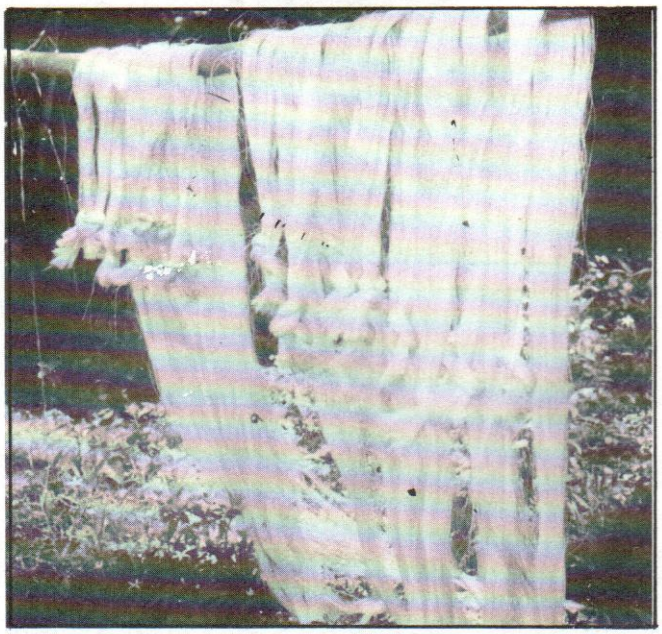
* The sweet potato sorter/grader was developed with improved hopper, feeding conveyor and inclination of the sorting machine.
* A test unit of an abrasion-type sweet potato peeler was developed with a peeling capacity of 60 kg/hr.

Processing and Utilization

* Consumer testing results showed the generally high acceptability of the food seasoning made from root soy sauce by-product.
* Chips processed using the pedal-operated chipper and dried in screens stored better than those chipped with bolos and dried on concrete floors.
* Extending the drying time of abaca fibers to 12 hours did not affect its strength although its color was affected.
* Root crop silage has a potential as animal feed.

Postharvest Handling and Storage

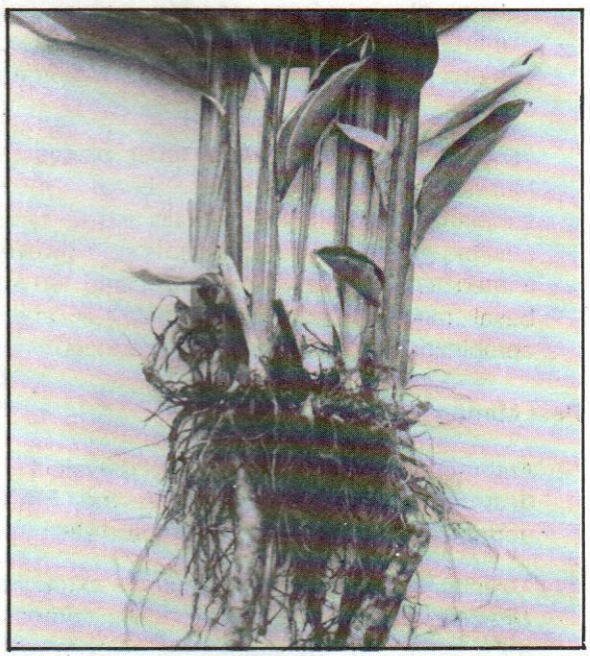
* Dried grated cassava can be stored longer in polyethylene bags and straw sacks than in straw sacks alone.
* Cassava roots from unpruned plants had high root deterioration during storage.

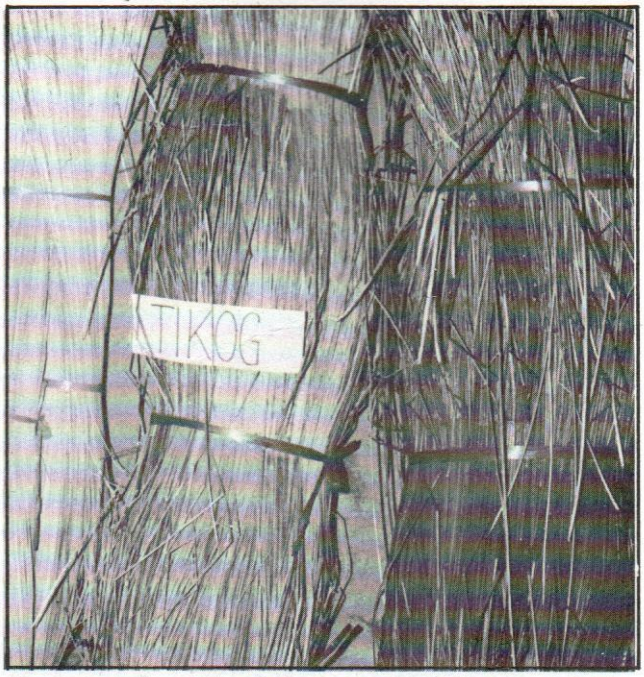


Dried abaca fibers

Socioeconomics

* Production of and net return from crops such as corn, rice, peanut, mungbean, sweet potato, and upland rice under a coconut-based farming system were higher than those of crops raised following the traditional practices of farmers.
* PRCRTC trainees expressed the need for follow-up activities and technical assistance to help them apply what they learned during the trainings.





Arrowroot (top) and tikog (bottom) are two of the non-traditional research commodities that have been included in the ViSCA's R and D.

RESEARCH ACCOMPLISHMENTS

Production

1. **Recommended High-Yielding Sweet Potato Varieties**

Six sweet potato varieties of the VSP line were recommended for general cultivation and utilization. All were found suitable for rainfed lowland, upland plain and hilly land conditions, with VSP 6 most suited to high and low elevations. Implementing Department: Plant Breeding and Agricultural Botany. Duration: August 1984-March 1989. Funding Agency: IDRC.

Cultural Management

1. **Year Round Production of Vegetables in the Visayas**

Tomatoes planted in January and February produced higher yields at 19.67 t/ha and 19.28 t/ha, respectively, than those planted in other months.

Eggplant and pepper produced good yields at 12.04 t/ha and 6.45 t/ha, respectively, when planted in June.

Pechay produced the highest yield at 18.39 t/ha when planted in January.

Cabbage yielded 8.78 t/ha when planted in February, 9.14 t/ha when planted in March and 9.18 t/ha when planted in June.

Squash produced the highest yield of 12.10 t/ha when planted in April.

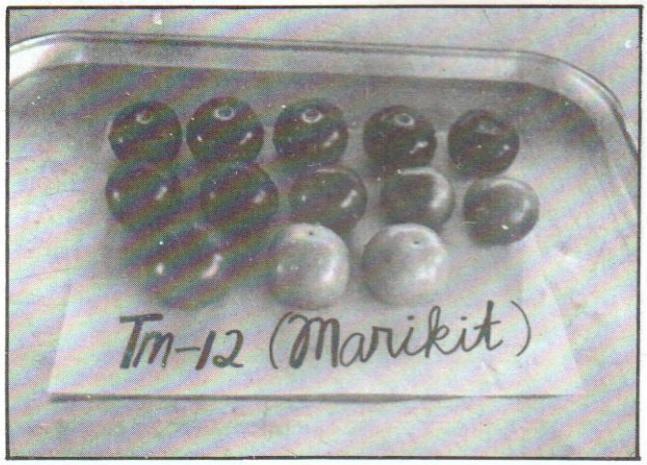
Watermelon and muskmelon in January planting produced 45.36 t/ha and 13.55 t/ha, respectively. Implementing Department: Horticulture. Duration: March 1986 - December 1989. Funding Agency: ViSCA.

2. **Verification Trials on Crop Rotation of Root Crops with Legumes as a Cultural Management System at Different Climatic Region**

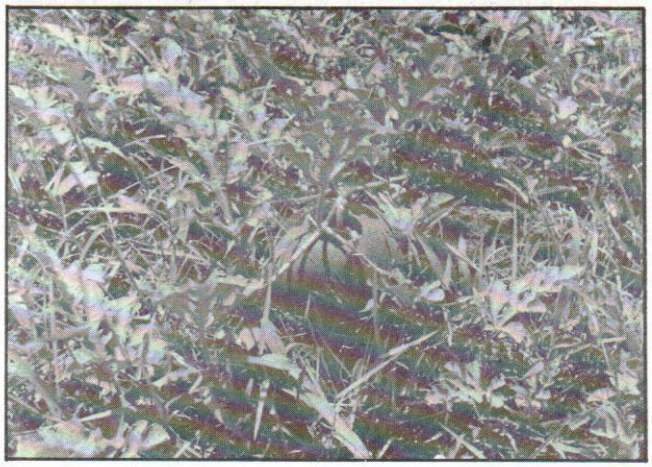
The experiments were conducted for two croppings of each root crop under rotation scheme with legumes at different locations. Sweet potato, cassava, and gabi rotated with peanut gave an average yield of 6.90, 32.78 and 5.25 (t/ha/cropping) of root/tuber/corm, respectively. These yields, together with some yield parameters, were significantly higher than those that were obtained from continuous monoculture of each root crop. Implementing Department: Agronomy and Soil Science. Duration: January 1985 - February 1989. Funding Agency: PCARRD/ViSCA.

3. **Nitrogen Management System in a Corn-based Cropping System in Marginal Hilly Areas**

A high net income can be obtained if inoculated mungbean is grown after corn. Inoculated mungbean need not be applied with fertilizer if a fertilizer level of 90-45-45 was applied on the previous corn crop. Implementing Department: Agronomy and Soil Science. Duration: June 1986- March 1989. Funding Agency: ViSCA.



Tomatoes planted in January and February produced high yields.



Water melon planted in January produced high yields at 45.36 t/ha.

4. **Effects of Legume (grain and green manure) on the Sustainability of Cereal Crop Production on Acid Upland Cropping System**

Among the legume intercrops used, lablab (*Dolichos lablab*) produced a significantly more biomass (2.3 t/ha), followed by *Pueraria* (2 t/ha), centrocema (1.5 t/ha), and peanuts (1.5 t/ha). These legumes gave high N, P, and K contents compared to other legume intercrops used in the study.

The yield of upland rice under intercropping systems with the abovementioned legume intercrops was comparable to that of monoculture upland rice although the space allotted to rice under intercropping systems was reduced to about 25 percent. Implementing Department: Agronomy and Soil Science. Duration: August 1988 - December 1989. Funding Agency: FARMI /IRRI.

Crop Protection

1. **Evaluation of Botanical Pesticides for Use in Root Crop Seedpiece Treatment.**

Among the plants tested, *Dioscorea hispida* extract was found most effective against cassava and yam scale insects at 4-5% concentration and 24-hour soaking period. Implementing Center: PRCRTC. Duration: May 1986 - December 1989. Funding Agency: PRCRTC.

2. **Pest Control for Crops Using Botanical Pesticides**

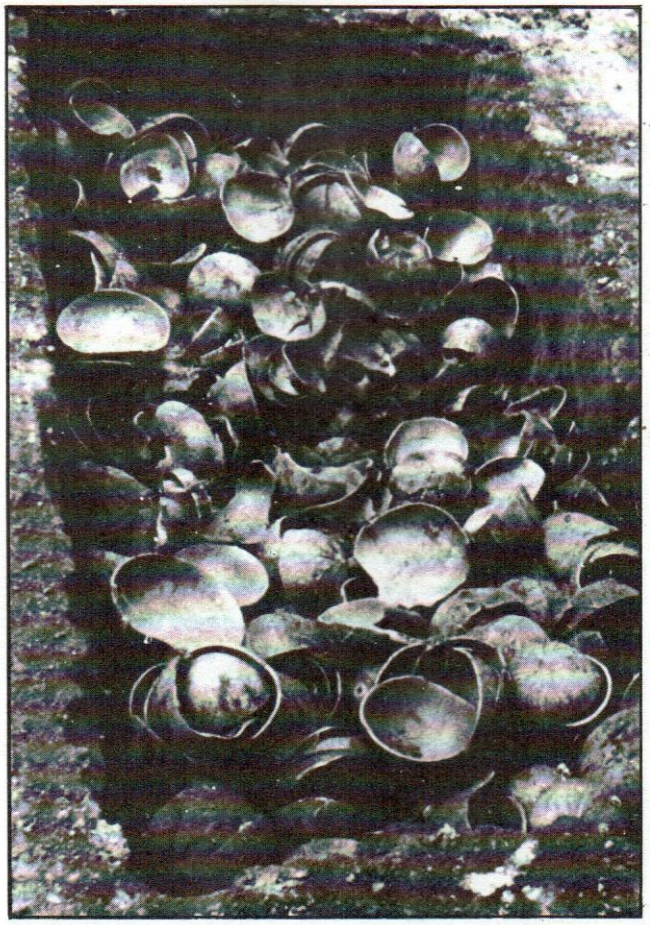
The identified pesticidal materials were seeds of lagtang (*Anamirta cocculus* L.), kasla or tuba-tuba (*Croton tiglium* L.) and hot pepper (*Capsicum* spp.); tubers of kurot or wild yam (*Dioscorea hispida*); roots of tubli (*Derris* sp.); leaves of tigaw (*Callicarpa candidans*) and vines of makabuhay or panyawan (*Tinospora numphii* Boerl). Of these, however, tubli root extract was the most potent botanical insecticide having a high killing effect on bean aphids, rice bugs, taro hornworms, diamondback moth larvae, cassava red spider mites, red ants, and stored product insect pest, particularly copra beetle.

The most potent pesticide material can be extracted from species of tubli that produced white concentrated sap. Implementing Department: Plant Protection. Duration: 1988-1989. Funding Agency: FSDP-EV/FARMI.

Processing and Utilization

1. **Making Charcoal from Coconut Shell Using the Pit Method**

A modified pit method in charcoal-making produced thick and heavier charcoal as well as high charcoal recovery (60 kg) compared to the old method wherein 222 kg of coconut shell produced only 42 kg of charcoal. The only additional cost incurred in this new method was the use of flattened drum to cover the pit. Implementing Center: RCRC. Duration: April 1988-May 1989. Funding Agency: ViSCA.



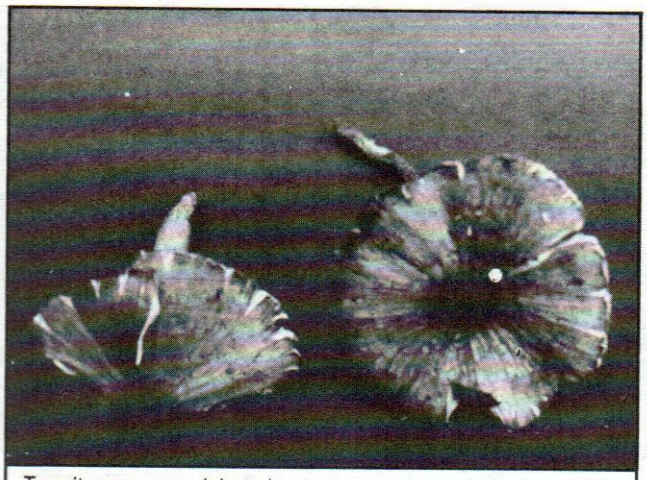
Modified pit method of charcoal-making.

Mycology

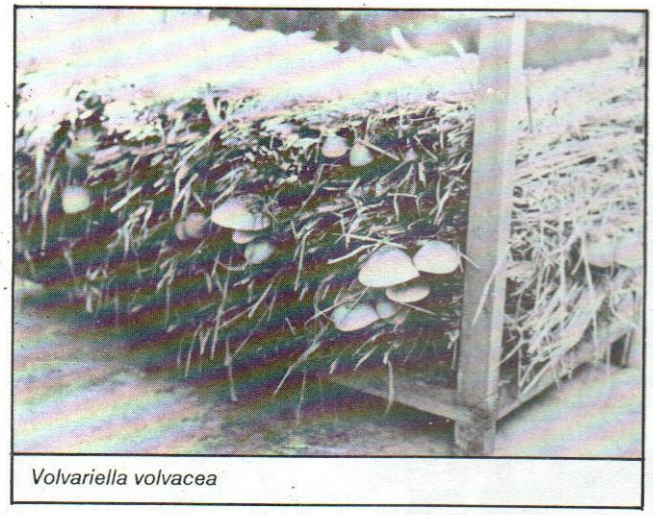
1. Survey, Identification, Testing and Cultivation of Edible Fungi for Food in Leyte

A total of 13 species of edible fungi were collected from 25 locations in Leyte.

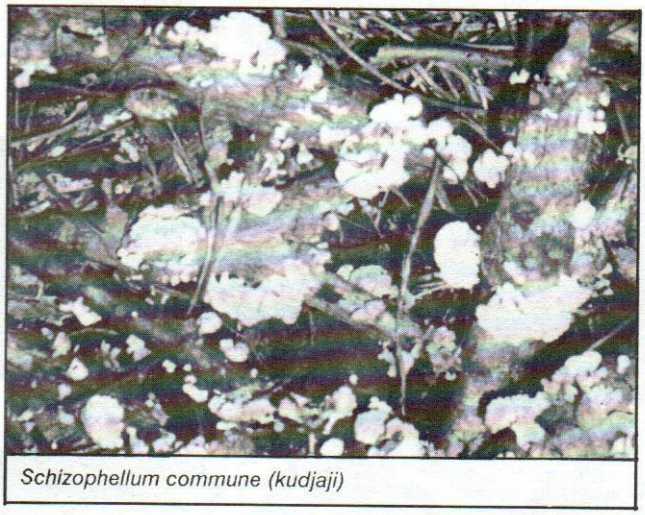
Spawn development took 3 to 4 weeks on the following media found to be appropriate for these fungi: ipil-ipil and sawdust (1:1) for *A. polytricha, A. auricula, Cantharellus* sp., *Lentinus* sp., and *S. commune*; ipil-ipil and coirdust (1:1) for the *Pleurotus* species; leaves of *Glyricidia sepium* for the *Termitomyces* species; and rice straw for the *Volvariella* species. Implementing Department: Plant Protection. Duration: January 1985 - December 1989. Funding Agency: ViSCA.



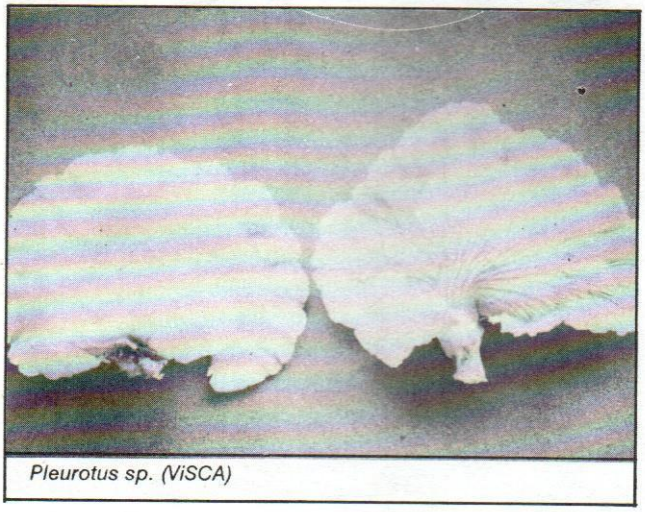
Termitomyces sp. (ohong)



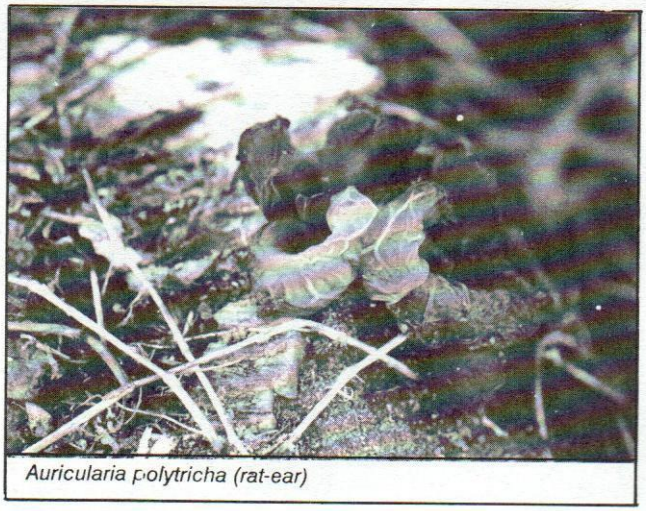
Volvariella volvacea



Schizophellum commune (kudjaji)

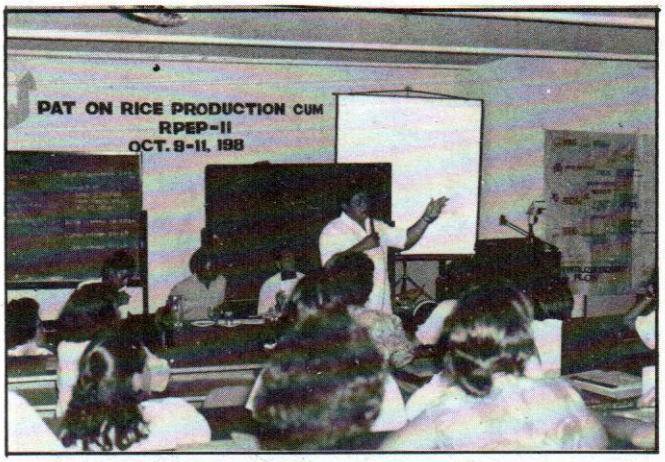


Pleurotus sp. (ViSCA)

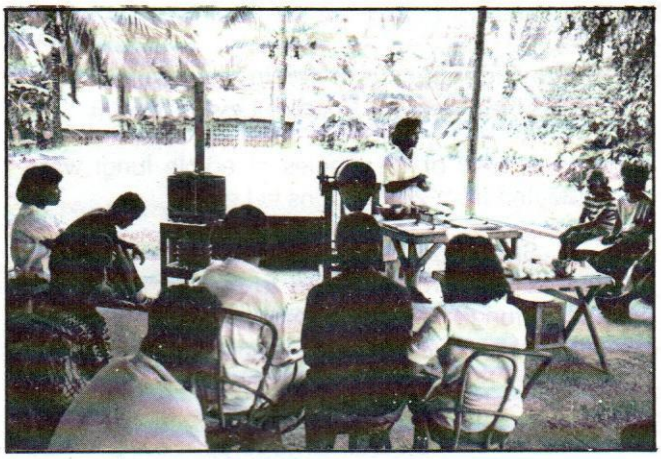


Auricularia polytricha (rat-ear)

Some of the identified edible fungi in Leyte.



Training on Rice Production held at the Agricultural Training Institute-National Training Center (ATI-NTC), ViSCA.



One of the trainings conducted in Bontoc, Southern Leyte.

The ViSCA Pilot Feed Mill using Root Crop as Energy Source.

EXTENSION

ViSCA's extension program is geared towards the development of rural areas in support of the extension activities of government line agencies and non-government offices.

Its general objective is to provide the small Visayan farmers and their families the opportunity to acquire knowledge and skills for the improvement of their productivity, efficiency and well-being. ViSCA's extension program is categorized into nonformal education, information dissemination, technical assistance and technology verification.

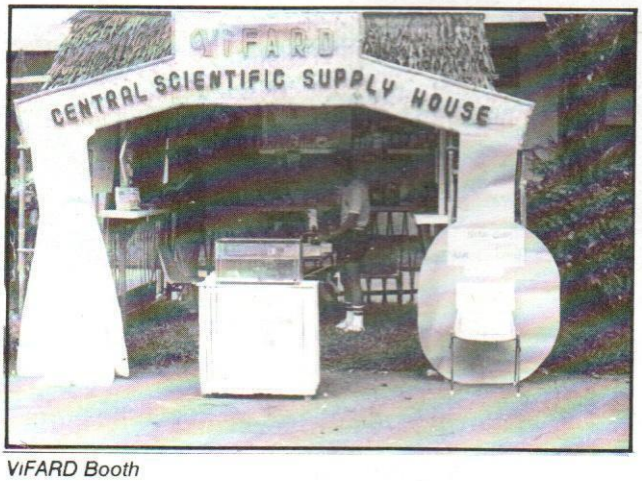
INFORMATION DISSEMINATION

* DYAC launched in 1989 the first school-on-the-air in Eastern Visayas which used the expertise of ViSCA-based scientists and researchers. The subjects discussed were coconut, sweet potato, nutrition, and swine. In 1989, more than five hundred farmers and rural women graduated from this program.

* Various exhibits were displayed in the different booths of the ViSCA-based research centers and institutes, college departments, private companies, government agencies, and student organizations during the Field Day for Farmers. For their share, the farmers also brought with them the cream of their crop for competition in the biggest coconut, the heaviest chicken, the longest string bean, and other farm products.

* The Plant Pest Clinic of the Department of Plant Protection rendered the following services: diagnosed pest problems presented by agricultural technicians, researchers, students, instructors, and farmers and made recommendations of control measures for specific pest problems; upon request, conducted specific control of household and structural pests such as termites and ants in some offices, apartments and dormitories in ViSCA and neighboring barangays; reactivated the Barangay Rat and Pest Patrol in the different barangays of Baybay, in coordination with the Department of Agriculture, Municipal Agriculture and Fishery Council and Barangay Agriculture and Fishery Council staff; and established rice pest monitoring stations in barangays Biasong, Hilapnitan, Sta. Cruz and Bunga, Baybay, Leyte. During the year, a total of 586 clientele were served by the Plant Pest Clinic.

The Plant Pest Clinic



ViFARD Booth

PRCRTC Booth during the Farmers' Field Day

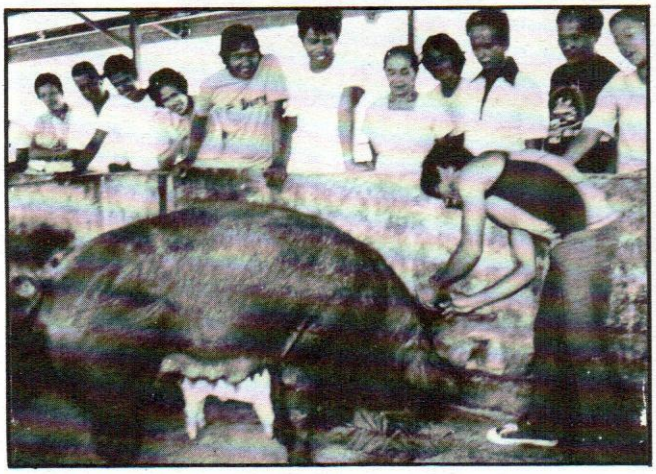
TECHNICAL ASSISTANCE

* Processing equipment like washer, chipper, grater and dryer were provided by the Department of Agricultural Engineering and Applied Mathematics to the Bubon Integrated Root Crop Farmers Cooperative, Inc. Technical assistance as well as processing equipment were also given to the Farmers' Federation of Maasin and also to the Barangay Amparo Farmers' Association in Macrohon, Southern Leyte.

* ViSCA-based Regional Coconut Research Center developed, invented and improved the following equipment/gadgets: ViSCA Copra Dryer, RCRC Oven, RCRC Indoor Dryer, Briquetting Molder, Charcoaling Pit, Charcoal/Firewood Stove, Charcoaling Drum, and Masonry Block Kiln. Fabrication of any of the aforementioned equipment at cost can be arranged with the Center.

* Seeds, planting materials and product samples were distributed to the farmers, technicians, students, parents and other college visitors during the Farmer's Field Day and graduation day. Interested individuals could avail of these materials upon request.

* Services like vaccination/immunization, spaying of dogs, artificial insemination services in both swine and large ruminants, and consultation were availed of by the clients through the Mobile Clinic of the Department of Animal Science and Veterinary Medicine.



One of the services of the Mobile Clinic.

NONFORMAL EDUCATION

Subject matter specialists of the different departments and centers of ViSCA acted as resource persons in different local, regional, national and international trainings and workshops conducted either in or outside of the ViSCA campus.

During the year, there were 113 short-term training courses and seminar-workshops conducted/ coordinated by the different centers/institutes and departments of the college (Table 9).

Table 9. Number of Trainings/Seminar-Workshops Conducted/Coordinated in 1989.

Department/ Centers/Office	Type of Clientele	Number of trainings conducted
1. Ag. Economics	farmers, technicians	5
2. Plant Protection	farmers, technicians	6
3. Horticulture	farmers, jail inmates	8
4. Forestry	farmers, technicians	1
5. Home Science	housewives, OSY	1
6. Ag. Chemistry and Food Science	farmers, housewives	2
7. Ag. Engineering & Applied Math.	farmers	2
8. Agronomy & Soil Science	farmers, technicians	5
9. Arts and Letters	instructors	1
10. Physical Education	youth, barangay folk	4
11. National Abaca Research Center	rural women, farmer leader, farmers, OSY	2
12. Farm & Resource Management Institute	technicians, farmers	6
13. Center for Social Research	farmers	13
14. Office of Director of Research and Extension	farmers	8
15. Philippine Root Crop Research & Training Center	housewives, processors, farmers, technicians	27
16. Agricultural Training Institute - National Training Center	technicians, farmers	20
17. College Library	librarians, technical staff	2
Total		113

PUBLICATIONS

Office of the Director of Research and Extension

1. R & D Update
2. Growing Sweet Pepper, Eggplant and Tomato
3. Growing Vegetables for Seed Production
4. Some Tips in Growing Ornamentals
5. Growing Vegetables for Food
6. How to Make a Good Farm Record

Regional Coconut Research Center

1. RCRC Information Bulletin
2. Coconut Cultivars and their Code Names
3. A Simple Way of Making Charcoal from "Binuongan"
4. Dryer Fueled by Charcoal from Coconut By-Products
5. Pineapple Growing Under Coconut
6. Characteristics of ViSCA Coconut Accessions
7. Growing Black Pepper Under Coconut
8. Growing Cacao Under Coconut
9. Fertilize Your Coconuts Now
10. Let's Produce Good Copra
11. Make Your Own Copra Dryer
12. The Coconut Tree - Its Parts and Structure
13. Eight Ways to Increase Copra Yield
14. Seven Steps in Raising Coconut Seedlings
15. Establishing a Coconut Plantation
16. Abstracts of Coconut Researches (1977-1988)

Philippine Root Crop Research and Training Center

1. Root Crop Digest
2. PRIS Leaflet Series (in Filipino)
3. International Sweet Potato Newsletter
4. PRCRTC Annual Report
5. Sweet Potato Pests and Diseases
6. The Radix

Department of Horticulture

1. Some Tips in Growing Ornamentals
2. Growing Vegetables for Seed Production
3. Growing Vegetables for Food
4. Growing Sweet Pepper, Eggplant and Tomato

Department of Animal Science and Veterinary Medicine

1. An. Sci. Notes

Farm and Resource Management Institute

1. FARMI Information Service (FARMIIS) Newsletter

Information and Community Relations Office

1. ViSCA ViSTA (Quarterly)
2. ViSCA Newsletter (Monthly)
3. Activity Tracer (Monthly)
4. ViSCA Newsboard
5. Press Release

Planning and Development Office

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

ACTION RESEARCH PROJECT

Barangay Integrated Development Approach to Nutrition Improvement (BIDAN)

BIDANI was implemented in selected villages in Baybay, Leyte which had the most number of malnourished children. The activities undertaken were identified under seven areas of concern, namely: food production, nutrition, health and sanitation, training and education, infrastructure, spiritual support, and institutional assistance.

Initially, it was found that only 29% of preschool children were adequately nourished, 2.7% overweight and 68.3% were malnourished. Within a span of three-years, the nutritional status of the children had improved.

Mortality rates declined in succeeding years probably due to improvement in basic nutrition and health services, immunization provision of clean water and better waste disposal facilities. The number of households with no toilets decreased gradually.

More households started to engage in the production of major crops and livestock. Increased membership and participation in local organizations and community projects were observed, as well as increased people's participation in the decision-making process.

Besides ViSCA, seven other agencies extended various forms of services to the BIDANI barangays. Such services included distribution of medicines and free medical consultation, supplementary feeding of preschoolers, introduction of improved farming technology, and construction of deep wells for drinking water.

ViSCA visitors during the Farmers' Field Day

Australian visitor and Dr. Eliseo R. Ponce examined the root crop-based food products developed by ViSCA researchers.

Pres. Marianito R. Villanueva met with the officials of the Tokyo University of Agriculture and the Japanese Society for the Promotion of Science.

LINKAGES

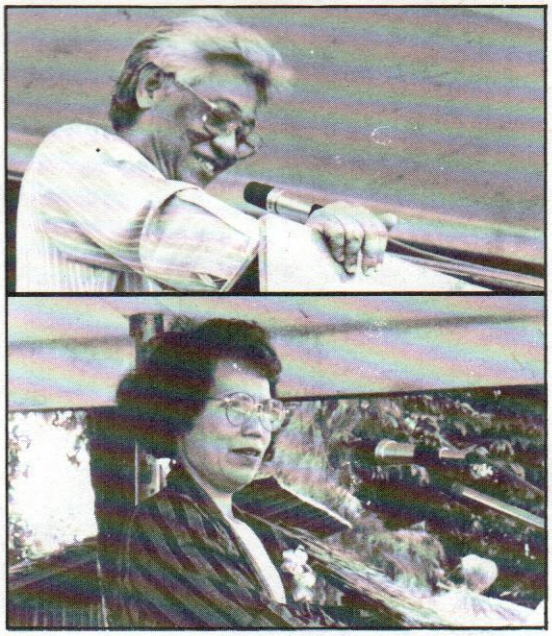
The Visayas State College of Agriculture has established strong linkages with various international agencies aside from the national, regional and local government and non-government agencies, to wit:

1. International Agencies:

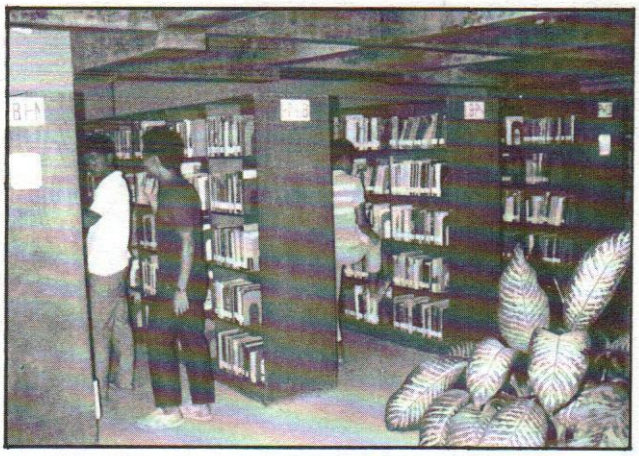
- International Development Research Centre (IDRC)
- United States Agency for International Development (USAID)
- Australian Centre for International Agricultural Research (ACIAR)
- Winrock International (WINROCK)
- International Foundation for Science (IFS)
- Colorado State University (CSU)
- Centro Internacional de Agricultura Tropical (CIAT)
- Asia Foundation
- United States Information Service (USIS)
- Australian Centre for Publications Acquired for Development (ACPAD)
- Food and Agriculture Organization (FAO)
- New Zealand Bilateral Aide Program (NZBAP)
- New Zealand Embassy (NZE)
- Forestry/Fuelwood Research and Development (F/FRED)
- Centro Internacional de la Papa (CIP)
- International Center for Living and Aquatic Resources Management (ICLARM)
- Tissue Culture for Crops Project - Colorado State University (TCCP-CSU)
- Nitrogen-Fixing Tree Association (NFTA)
- Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ)
- International Rice Research Institute (IRRI)
- International Pharmaceuticals, Inc.(IPI)

2. Local government and private agencies:

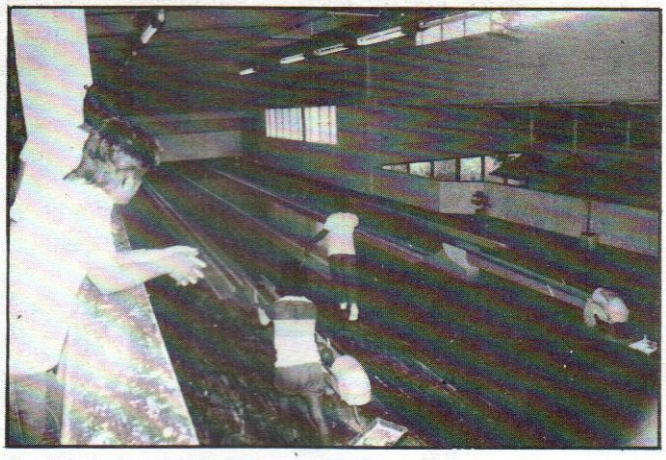
- National Economic and Development Authority (NEDA)
- Land Bank of the Philippines (LBP)
- Department of Agriculture (DA)
- Department of Agrarian Reform (DAR)
- Department of Science and Technology (DOST)
- Department of Environment and Natural Resources (DENR)
- Department of Social Welfare and Development (DSWD)
- Department of Health (DOH)
- Department of Local Government (DLG)
- Department of Public Works and Highways (DPWH)
- Bureau of Energy (BOE)
- Fiber Development Authority (FIDA)
- National Irrigation Administration (NIA)
- Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD)
- National Nutrition Council (NNC)
- Office of Energy Affairs - Non-Conventional Research Division (OEA-NCRD)
- Rainfed Resources Development Project (RRDP)
- Central Visayas Regional Project (CVRP)
- Ramon Aboitiz Foundation, Inc. (RAFI)
- Philippine Seed Board (PSB)
- Affiliated Non-conventional Energy Center at ViSCA (ANEC)
- Capiz Development Foundation (CDF)
- Soil and Water Conservation Foundation, Inc. (SWCFI)



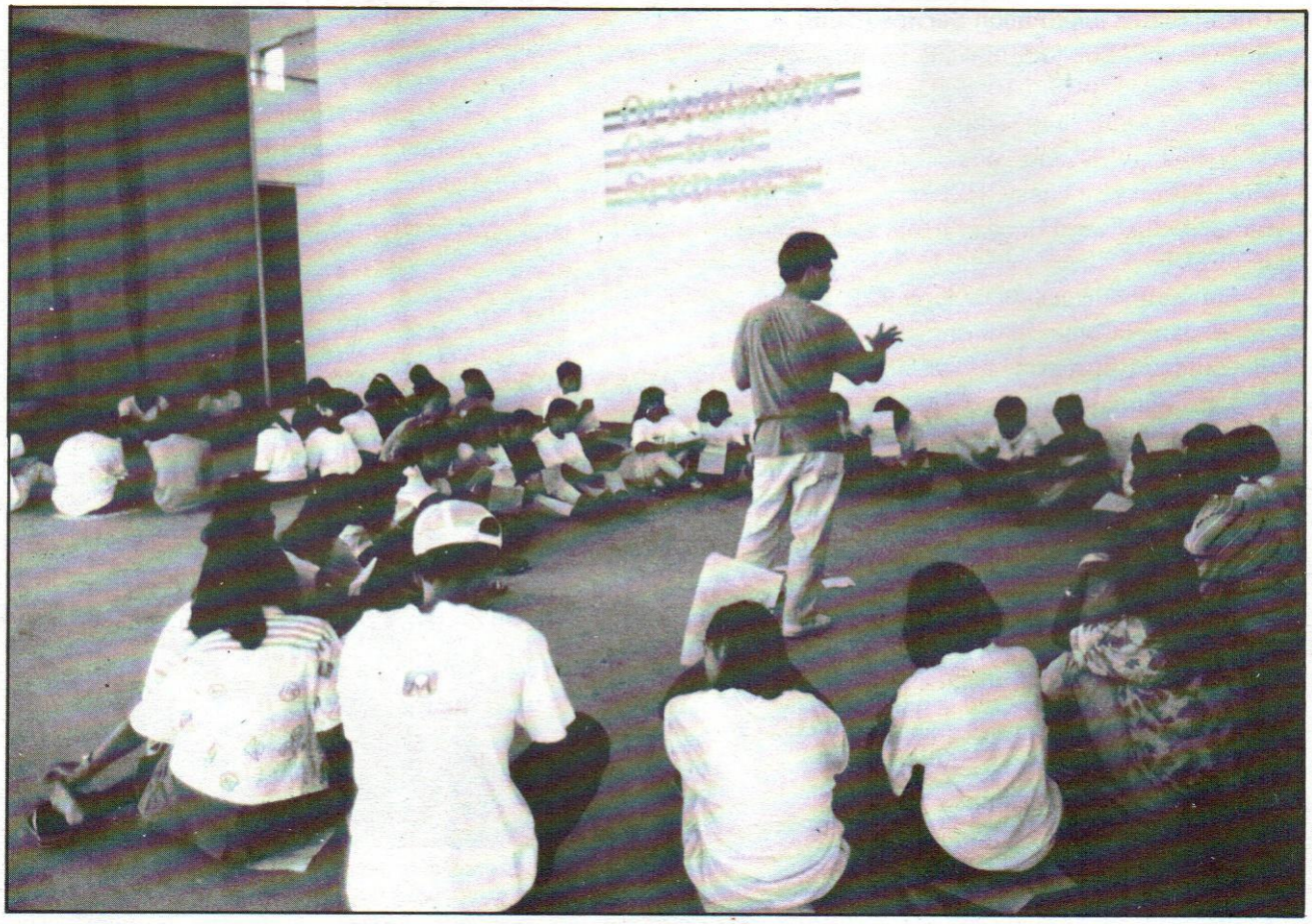
Dir. Leopoldo N. Ulanday, Region VIII DENR Director (top) & Dr. Dely P. Gapasin, Deputy Executive Director for R & D of PCARRD (bottom) discussed possible areas of collaboration between ViSCA and their respective agencies.



*A part of the **Circulation Section** of the College Library.*



Bowling hall at the ViSCA Recreation Center.



Orientation of College freshmen coordinated by the Office of Student Affairs.

AUXILIARY SERVICES

The auxiliary services of the college were provided by two offices, namely: Library and Office of Student Affairs.

LIBRARY

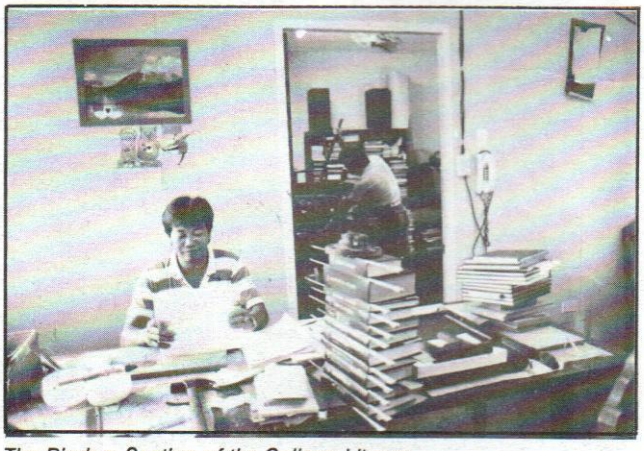
The Library has continuously pursued its service activities and commitments to provide adequate collection of resource materials to support the functions of the College in instruction, research and extension.

In 1989, the Library acquired 1,410 volumes of books, of which 489 were received as gifts, 300 were purchased, and the rest were exchange materials. Among its generous donors were: The Australian Centre for Publications Acquired for Development (ACPAD), Asia Foundation, United States Information Service (USIS), Food and Agriculture Organization (FAO), and other agencies.

The total inventory for 1989 revealed 40,773 volumes, which showed an increase of 3.58% over the 1988 count. The Extramural Program for Rural Development (EPRD) contributed 14% of the total book purchases of the College.

Bindery Section

The bindery unit of the college library produced 487 bound copies of journals and 631 repaired books, aside from its non- library binding jobs of 341 student theses, 223 terminal reports and 65 miscellaneous items.



The Bindery Section of the College Library.

Serials Section

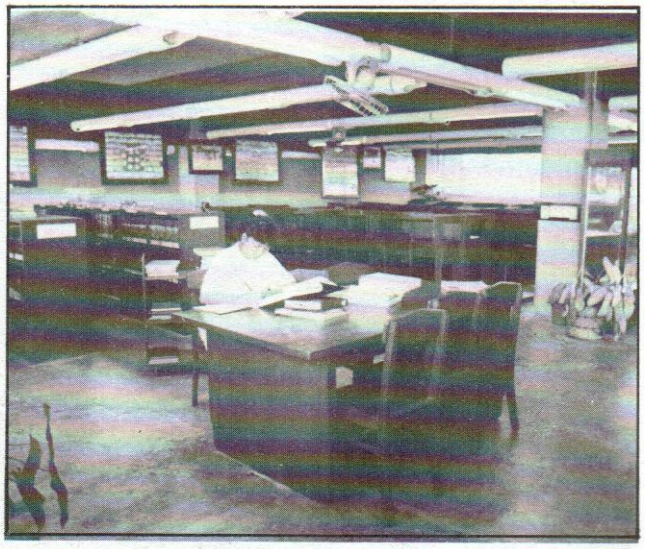
This section prepared two hundred seventy-four (274) volumes of different titles for binding.

ViSCAiana Section

This section acquired an additional one hundred eighty two (182) copies of graduate and undergraduate theses and twenty (20) different titles of research terminal reports which have been classified, catalogued and circulated for use.

Philippine Root Crops Information Service (PRIS)

PRIS continued its bibliographic data-based through on-line search services. It produced 1,884 documents on cassava, sweet potato, yam, taro and minor root crops. Aside from maintaining its linkages with 14 cooperating institutions and other agencies, two regional sub-centers were established in order to increase the access of root crop researchers to root crop development: one at Benguet State University (BSU) for Luzon and the other one at Central Mindanao University (CMU) for Mindanao.



The ViSCAiana Section of the College Library.

OFFICE OF STUDENT AFFAIRS

The Office of Student Affairs (OSA) provides assistance to the students in the' form of various services, such as: counseling, career guidance, housing, recreation, student organization and activities coordination and student discipline.

Guidance Services Section

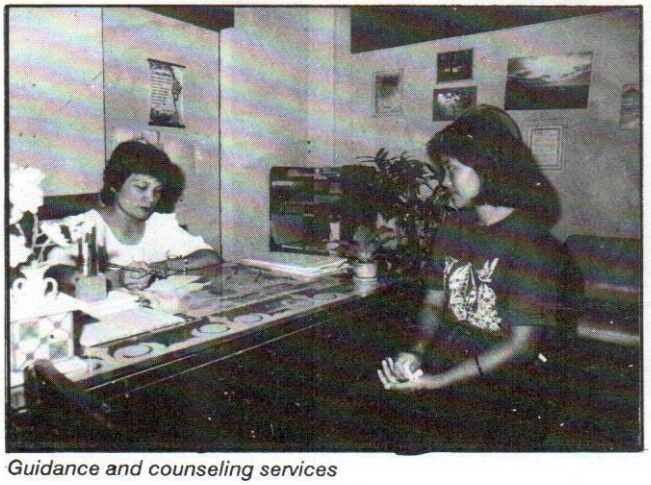
This section conducted counseling services as well as provided psychological tests to college students as well as aptitude and vocational tests to first and fourth year students, respectively, of the ERHS. Likewise, it extended testing service for job placement and/or promotions of clerks, drivers and security guards.

Planning, Placement and Follow-up Section

This office is instrumental in the development of well-rounded students from the time they enter ViSCA until their graduation and even in their employment.

Incoming freshmen and transferees who fell short of ViSCA's admission requirements were given assistance to be able to enrol in a recommended degree. Likewise, assistance was extended to students enrolled in the technician courses in procuring NCEE application forms and during the review.

This is also in-charged of screening applicants for assistanships either through scholarships and grants, student assistanships or the ViSCA Students Emergency Loan Fund (ViSCASELF).



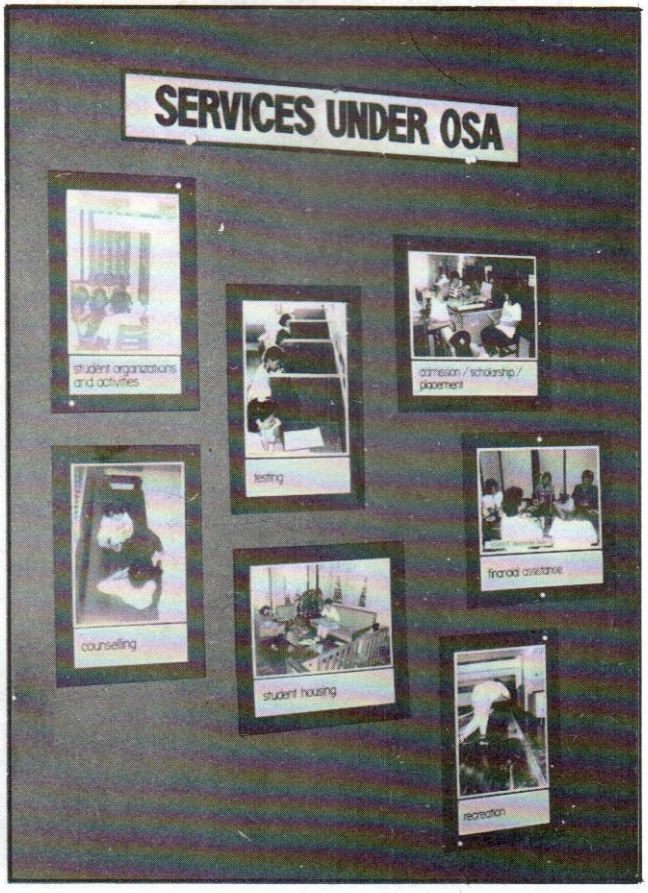
Guidance and counseling services

Student Personnel Services Section

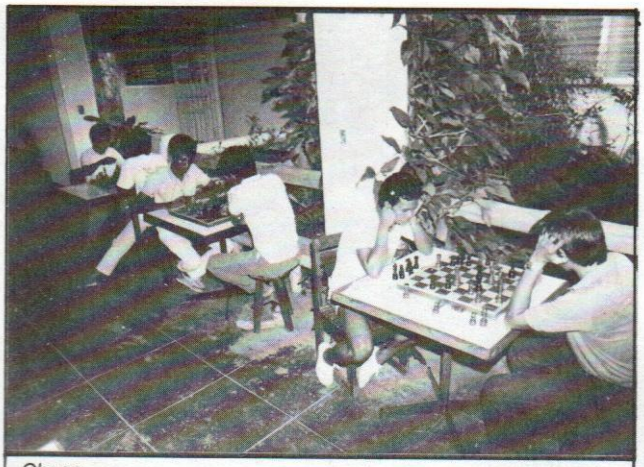
The 17 dormitories/cottages for undergraduate and graduate students located on campus housed 63% of the studentry during the first semester, 60% during the second semester and 62% during summer.

The Recreational Services, through the ViSCA Recreation Center (VRC), served students, staff and visitors in promoting wholesome sports and games and as a practice area of Physical Education students and ViSCA constituents for sports competition.

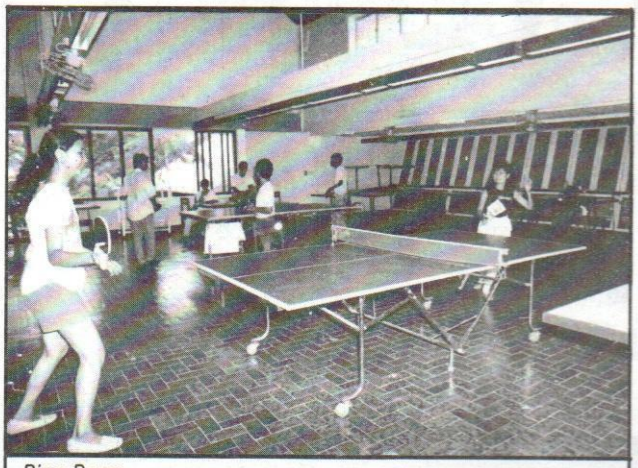
Only 37 campus student organizations were screened and accredited in 1989. Of this total, 4 were class organizations, 16 course-related organizations, 14 Greek-lettered organizations, and 3 religious organizations. The Supreme Student Council was not



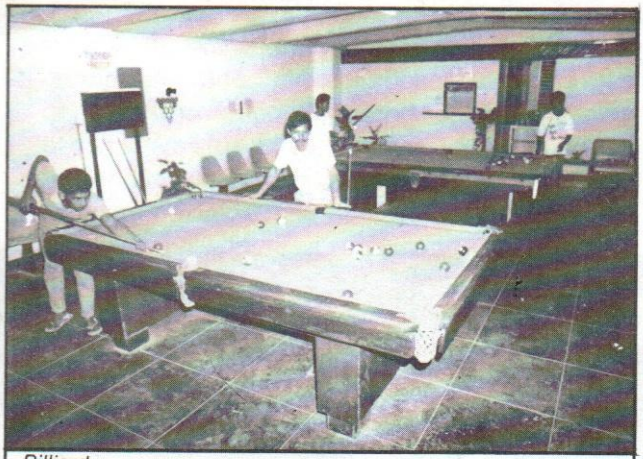
organized during the year. Four (4) athletic factions were actively functioning in the campus but did not seek accreditation from OSA, to wit: AGGIES Supersonics, ADEDAS Skippers, FABEC Blazers, and HAGES Avant Gardes.



Chess



Ping-Pong

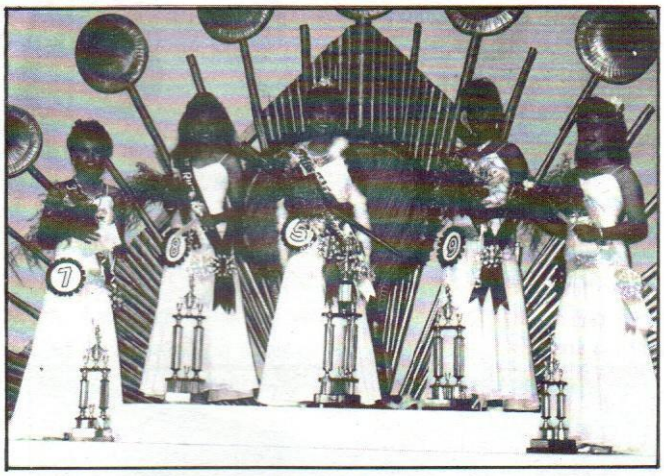


Billiard

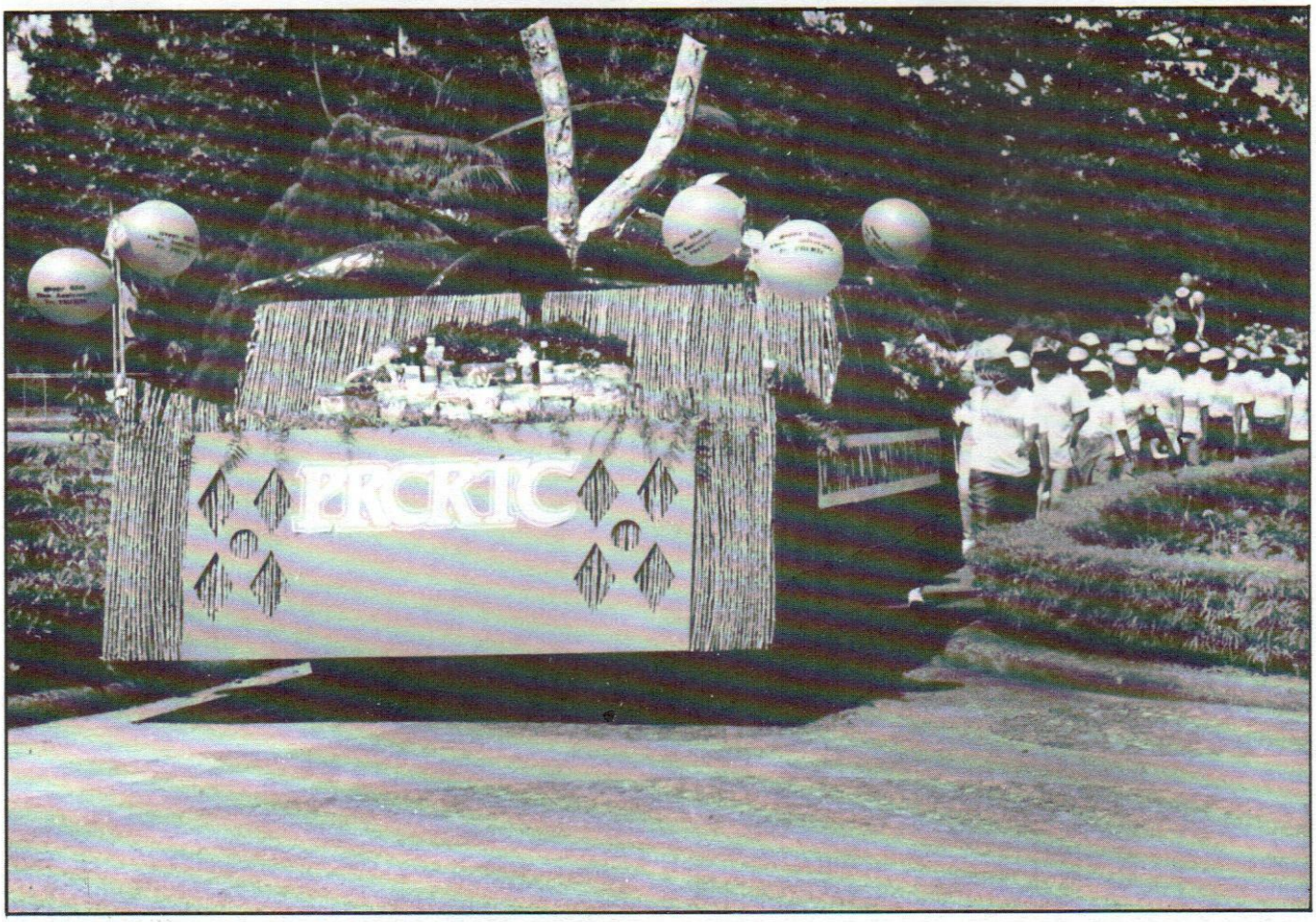
Bowling

Some of the Recreational Facilities of the ViSCA Recreation Center (VRC).

Bareback riding was one of the events competed during the staging of "Rodeo '89."



The five finalists of the 1989 "Miss ViSCA" Quest.



The PRCRTC Float won the "Best Float Award" during ViSCA's 65th Anniversary Celebration.

MISCELLANEOUS

* The "Best Paper Award in Weed Science" was won by Dr. Lualhati M. Noriel, Professor of the Department of Plant Protection, during the " 20th Pest Control Council of the Philippines Annual Convention" held from May 9 to 12, 1989 at Baguio Hyatt Regency Hotel. The title of her paper was "Fungicidal Activity of *Portulaca oleracea* L. Extract Against *Helminthosporium maydis* Nisik. and Miyake in Corn (*Zea maize* L.)".

* Mr. Raul L. Rana, ViSCA graduate and is working at UPLB, won the "Best Undergraduate Thesis in Entomology" entitled "Effect of *Metarhizium anisopliae* (Metch) Sorok. Infection on the Fecundity and Survival of the Sweet Potato Weevil, *Cylas formicarius* (Fabr.) (Coleoptera: Curculionidae)" during the "20th Pest Control Council of the Philippines Annual Convention".

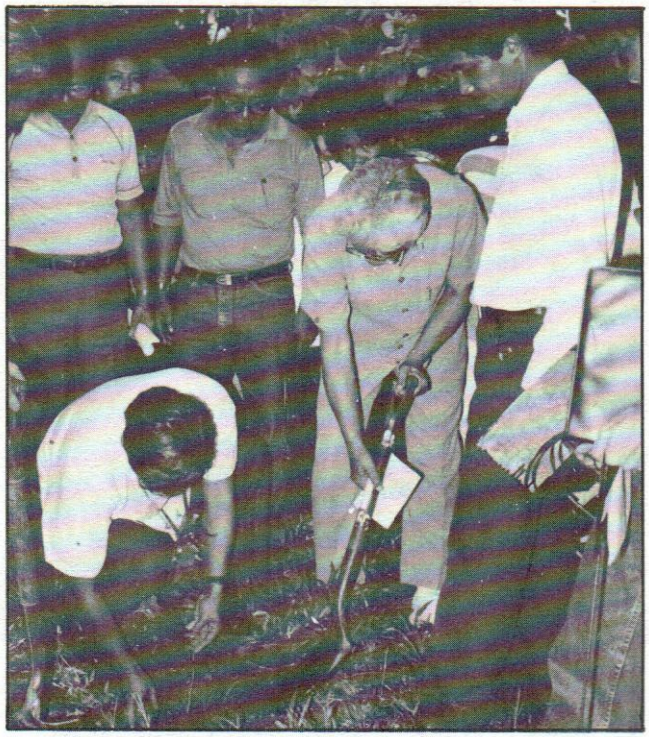
* ODREx coordinated and facilitated the putting up of the College Roving Exhibits during the Ormoc City Agro-Industrial Fair, Tacloban City Centennial Celebration, Baybay Agro- Industrial Fair and the Philcite Exhibitions in Manila. During the Baybay Fair, ViSCA won the award for "Best Exhibits".

* Dr. Gelia T. Castillo, internationally known Filipino sociologist, was the guest to the 8th anniversary rites of the Center for Social Research. She conducted a lecture related to the anniversary theme: "Facing the Challenges of Economic Development and Social Justice in the Philippines Today".

Dr. Gelia T. Castillo during CSR's anniversary celebration.

* ViSCA participated in a month-long environmental awareness celebration launched by the Department of Environment and Natural Resources. Various activities related to the theme were made, like: cleanliness contest on ViSCA campus, tree planting, alay linis, lecture-demonstration, slide and dramatic presentations, and literary contest (slogan, poster, essay writing, and impromptu speech).

* Six agencies/institutions including ViSCA hosted a two-day seminar-workshop from September 14 to 15, 1989 to establish standard operating procedures for the coordination of activities for root crop germplasm and a region-based network of germplasm collection, conservation and exchange of germplasm for abaca, including in-vitro conservation and disease clean-up as well as formulation of standard descriptors to be used by member agencies in the network. The sponsoring agencies were: Institute of Plant Breeding at UP Los Banos, PCARRD, Fiber Development Authority, and the two ViSCA-based centers: the Philippine Root Crop Research and Training Center and the National Abaca Research Center and ViSCA.

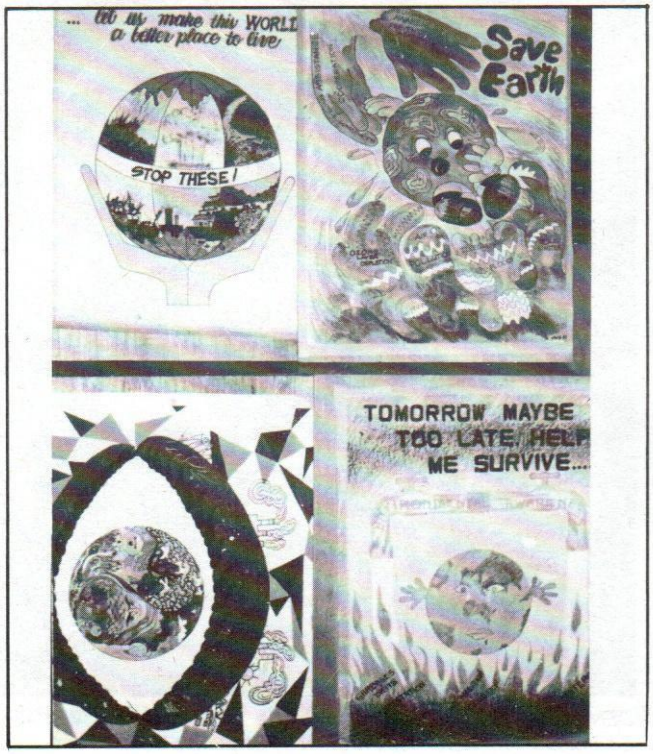


DENR Assistant Secretary Renato de Rueda opened ViSCA's Environmental Awareness Program by planting a tree.

* Dr. Dely P. Gapasin, Deputy Executive Director for Research and Development of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) and Dir. Leopoldo N. Ulanday of the Regional Office of the Department of Environment and Natural Resources were the guest speakers during the 1989 "Farmers' Field Day" with the theme "Environmental Protection for Sustained Farm Productivity".

* Twenty-nine student organizations competed for the various awards for the booth contest held during the Anniversary. The following were the winners of the different categories: Most Artistic Booth - The Builders (first prize) and Lakas-Angkan (2nd prize); Most Symbolic Booth - Lakas Angkan (first prize) and Beta Phi Upsilon (second prize); Most Original Booth - Plant Protection Majors Association (first prize) and Lakas Angkan (second prize); and Booth of the Year was won by Lakas Angkan.

* The Secretary of the Department of Budget and Management, Hon. Guillermo N. Carague, was the commencement speaker during ViSCA's 36th Collegiate Commencement exercises on April 9, 1989, while Dr. Iluminado C. Nical, Dean of Graduate School of Leyte Institute of Technology (LIT) in Tacloban City was the invited speaker during the 59th Commencement Exercises of the Experimental Rural High School (ERHS) on March 31, 1989.



The winning posters decrying the ill-effects of environmental destruction.

* Prof. Baldur V. Berlepsch, visiting Professor of the University of the Philippines at Diliman, Quezon City, talked during the Lecture-Open Forum on "German Culture" last May 16, 1989 at the Auditorium of the Department of Arts and Letters.

* Mr. Soren H. Jensen, associate professional officer of the Food Administration Organization (FAO), Regional Office for Asia was on ViSCA campus to observe and discuss with some staff about Farming Systems Research, Extension and Training Programmes.

"Most Outstanding" (top) and "Most Artistic" (bottom) Booths constructed by the sectarian groups of ViSCA.

* Ms. Brigette Vanders Borg of the Food and Agriculture Organization (FAO) based at Bangkok, Thailand, visited the Department of Forestry on January 23, 1989 to discuss with the faculty the possibilities of cooperative research activities with the regional wood energy development program.

Another visitor of the Department of Forestry on January 25, 1989 was Dr. Charles Mehl of Winrock International, based at Kasetsart University, Bangkok, Thailand to discuss with the faculty regarding the possibilities of a research grant with ViSCA, DOF and Winrock.

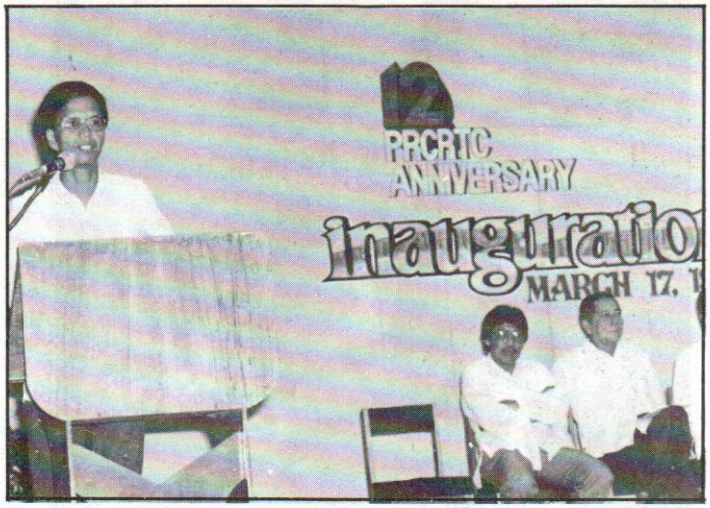
* The San Isidro Rural Systems Development Project (SIRSDP) in San Isidro, Leyte, a community-based project of the Center for Social Research of ViSCA in cooperation with the Field Operations Division of the Land Bank of the Philippines (Tacloban Branch) sponsored "Pasidungog '88" on March 9, 1989 in Hda. Maria, San Isidro, Leyte with Mr. Norberto Nazareno, LBP Consultant, as guest speaker. The affair was a tribute to the outstanding farmers and farmers' associations in San Isidro, Leyte covered by SIRSDP. It was highlighted by a tour in farmers' fields and demonstration farm, awarding of prizes and plaque, and presentation of accomplishment reports and plans of the farmers' associations.

* Senator Edgardo J. Angara, chairman of the Senate Committee on Education, Arts and Culture, was the guest speaker during the 11th Honors and Awards Program on February 17, 1989 at the College Gymnatorium. In his speech, he emphasized the need for the Philippine post-secondary and college education schools to offer technology courses promoting entrepreneurship.

* The Philippine Root Crop Research and Training Center (PRCRTC) established the root soy sauce pilot plant in Maasin, So. Leyte during the year.

* Dr. Leo A. Gonzales of FNRI, was the guest speaker during the 12th anniversary of the Philippine Root Crop Research and Training Center (PRCRTC) on March 20-21, 1989. The program was highlighted by the giving of an "UGAT Award" for excellence to the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD). Other awards were given to outstanding ViSCA root crop researcher, outstanding research assistant/aide, outstanding PRCRTC administrative staff and outstanding laboratory/field worker. Plaques were given to the first two categories, while the rest received citation and cash prizes.

Members of the different farmers' associations in San Isidro, Leyte took their oath during the "Pasidungog '88."



Dr. Manuel K. Palomar, Director of PRCRTC, delivered his opening address during the 12th Anniversary of PRCRTC.

* The Bachelor of Animal Science students and the Department of Animal Science and Veterinary Medicine sponsored "Rodeo'89" competition as one of the highlights during the 65th ViSCA anniversary. Five teams competed in the different events with the Bull Punchers proclaimed the overall winner followed by Rugged Charolais, Belted Galloway, Speedy Jockey and D' Mighty Rider as 2nd, 3rd, 4th and 5th placers, respectively.

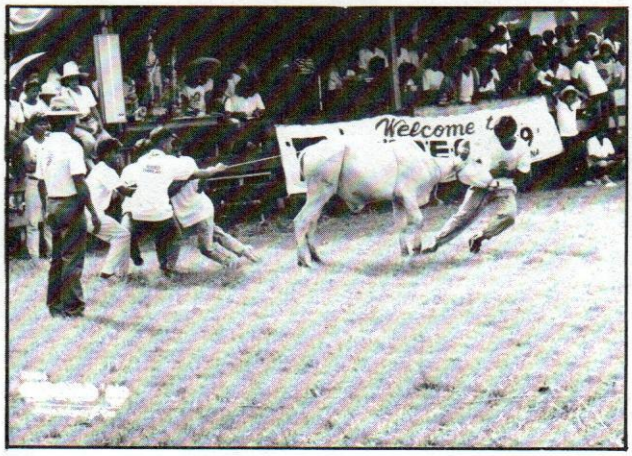
* Miss Louella Cubillo, "Miss ViSCA '89" won another beauty title when she was crowned "Miss SCUAA '89" last October 23, 1989 at the Naval Institute of Technology (NIT), Naval, Biliran Sub-Province during the Region VIII State Colleges and Universities Athletic Association Meet held from October 22 to 26, 1989. The title carried a cash prize of ₱1,000.00, a trophy and gift package from Colgate-Palmolive Philippines.

"Miss ViSCA 89" Miss Louella Cubillo (top) was also crowned "Miss SCUAA '89" at Naval Institute of Technology in Naval, Leyte, Biliran Sub-province.

* The Communication Arts Section of the ViSCA Experimental Rural High School (ERHS), through the leadership of Mrs. Paz C. Pala and the staff of the "Tillers Bulletin", the official school paper of ERHS, sponsored a Seminar-Workshop on Campus Journalism from January 19 to 21, 1989 at the ViSCA Social Hall with the theme "The Role of the School Paper in the National Campaign for Peace, Unity and Progress".

* Director Romeo C. Escandor of the National Economic Development Authority (NEDA) Region VIII was the anniversary speaker during ViSCA's 65th birthday as an educational institution.

* Miss Valerie B. Villanueva was awarded Outstanding Science Club member during the 60th Commencement Exercises of the Experimental Rural High School (ERHS) on April 10, 1990. An Achiever's Award was also given to her and Geraldine A. Go for winning first in the regional and national search for The Outstanding Young Scientists (TOYS). Other Achiever awardees were: Binh V. Ly, for winning first in the regional level and participation in the national Philippine Mathematics Olympiad and as President of the ERHS Science Society SY 1989-1990 that led to the hosting of the Regional Science Camp and Regional Bb. Agham; and Irwin Joseph B. Taganas, as DYDCAT Corps Commander that led to winning the first place of the CAT Annual Tactical Inspection.



"Rodeo '89" competition was one of the highlights during ViSCA's 65th Anniversary Celebration.

* The Regional Coconut Research Center (RCRC) and its staff celebrated for the first time, its foundation anniversary last December 8 to 9, 1989, after 14 years of existence.

* Forester Edgardo Alegre, who graduated in 1988, was the lone board passer out of the five examinees who took the Forestry Licensure Examination given by the Professional Regulation Commission.

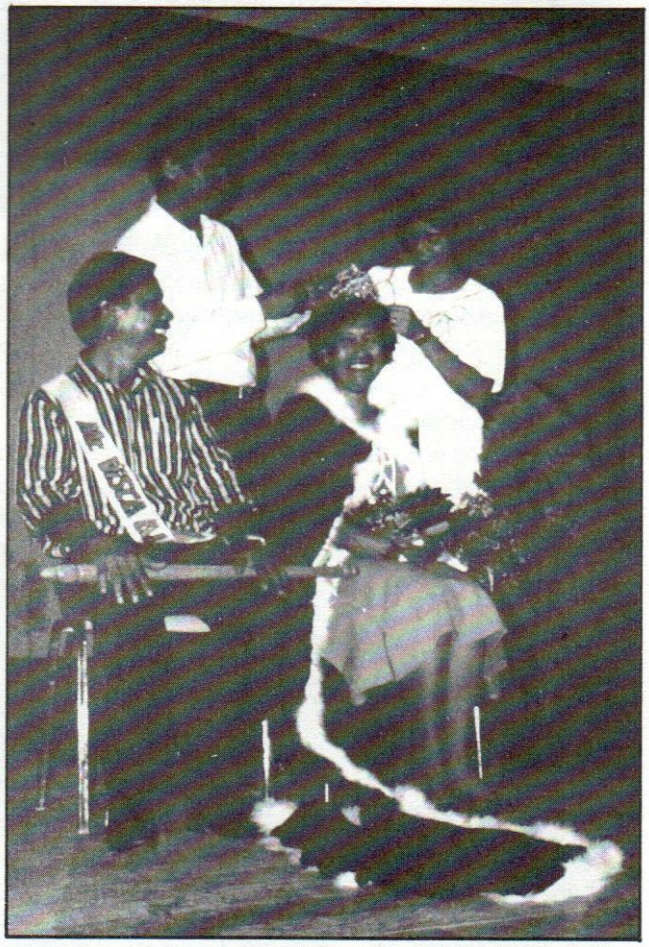
* A one-hundred percent (100%) board passing mark was obtained in this year's Professional Agricultural Engineering Licensure Examination given by the Professional Regulation Commission. Ricky C. Gabor copped the 12th place, while Ruben M. Lampayan got the 20th place in the said examination. The other engineers were: Edna V. Nemenzo, Feliciano Sinon, Donald Ugsang and Maria Lourdes G. Valencia.

* Mr. James A. Patindol, staff of the Department of Agricultural Chemistry and Food Science, and Maria Antonia I. Cavero, passed the Board Examinations for Chemists.

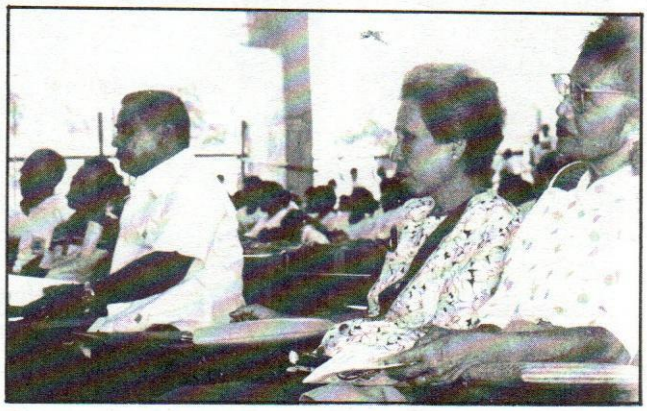
* Once again the "Mt. Pangasugan Award" and "Service Award" were conferred to 3 retirees and 13 faculty/staff members, respectively, during the Anniversary Convocation held last July 31, 1989. Recipients of the "Mt. Pangasugan Award" were: Prof. Andres F. Duatin, former associate professor and college secretary; Mrs. Juanita V. Montesclaros, former instructor of the Experimental Rural High School (ERHS); and Mr. Alfredo R. Florendo, former forest guard of the Department of Forestry.

Mr. Ricky Gabor received a special award as 12th placer of the 1989 Engineering Licensure Examination.

* The ViSCA Alumni Association (VAA) celebrated ViSCA anniversary on campus by sponsoring the various activities, to wit: Alumni Night (July 29) and Thanksgiving Mass and a grand lechon luncheon at the beach (July 30). Mr. Rafael Caintic (1963) of the National Economic Development Authority (NEDA) Region VIII and Ms. Erlinda Edon (1962) of the Baybay North Central School came out as the "Mr. and Ms. Alumni" during the Alumni Night.

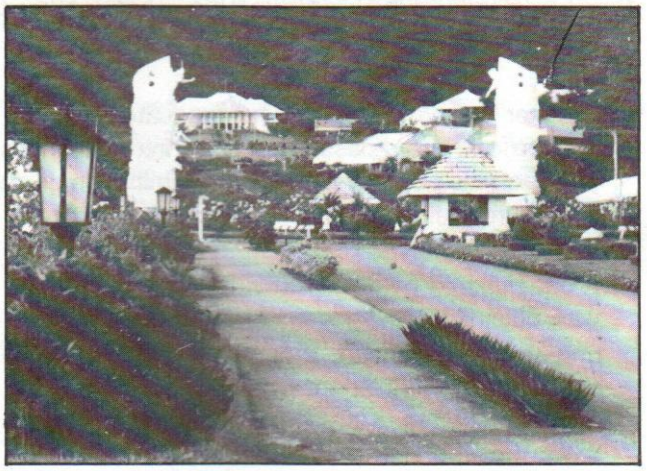


The crowning of "Mr. & Ms. Alumni '89"

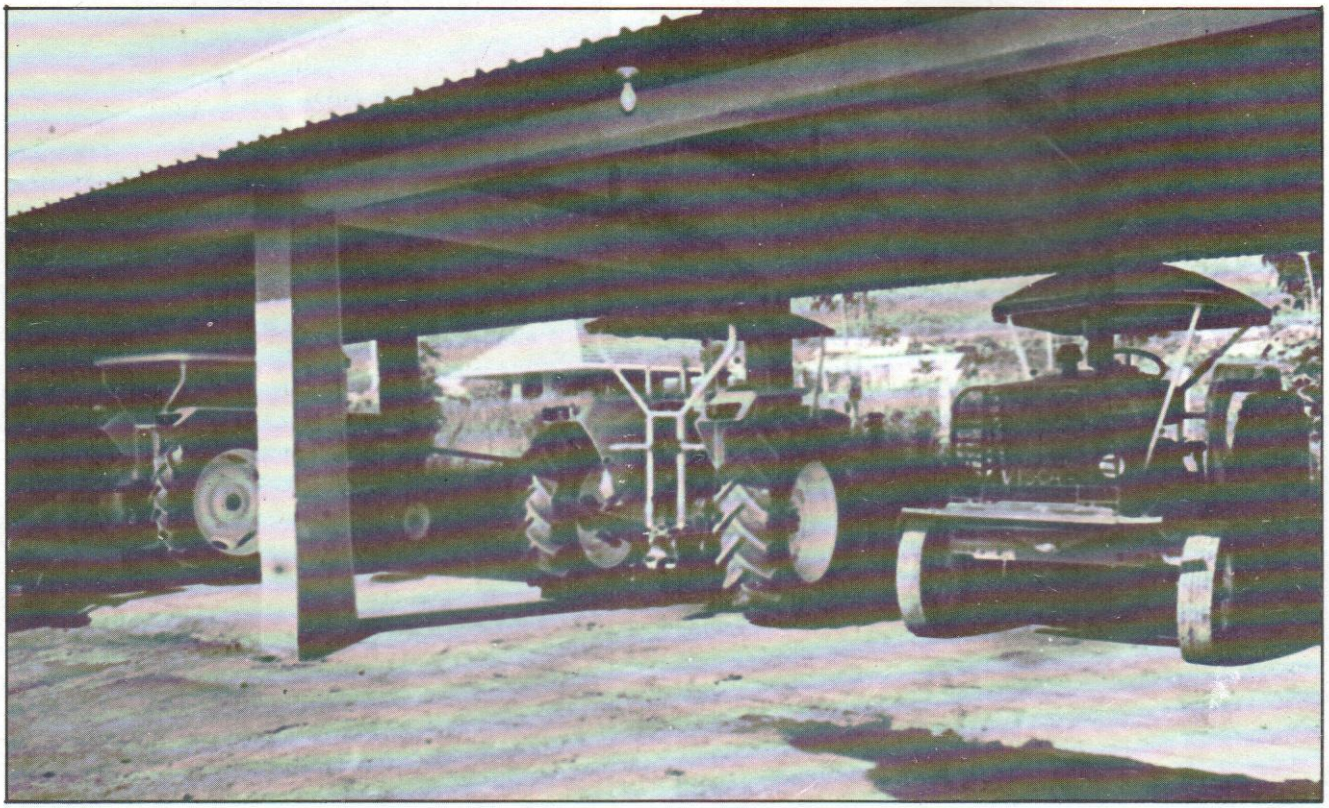


Some recipients of the "Mt. Pangasugan Award" and "Service Award."

The ViSCA lower campus viewed from the Administration Building.



The ViSCA upper campus



Heavy-duty four-wheel tractors

PHYSICAL RESOURCES

ViSCA occupies 1,099.46 hectares of land distributed into: grounds and campus (61.50 has.); cropping area (143.80 has.); animal project (6.50 has.); pasture (140.00 has.); forest reservation (594.00 has.); experimental farms (109.46 has.); and for other use, including quagmire (44.20 has.).

A total of 158 infrastructures are existing on campus, as follows: 12 academic buildings, 5 research centers, 19 student dormitories, 20 (4-door) apartment units, 10 duplexes, a 14-door Bachelors' quarters, a 20-door Warner apartment, 33 cottages, and the rest are high school laboratory buildings, screen houses, hostel and training halls, nurseries, piggeries, other offices and the gymnatorium.

Major infrastructure accomplishments in 1989 was the completion of Phase I of the Farm and Resource Management Institute (FARMI) building, as well as repairs of three college buildings: Department of Agronomy and Soil Science, Department of Agricultural Chemistry and Food Science and Department of Plant Breeding and Agricultural Botany. Other completed construction included: Lago-lago foot bridge; retaining wall at the Lago- lago river; and repairs of the following: nine (9) staff houses, drainage in the apartment and duplex houses, and the spillway to the coconut project.

Awards for the construction of FARMI Phase II and Agritech Dormitory were given to the winning bidders. Likewise, ViSCA secured the offer of the second lowest bidder to undertake the repair of the DAEAM building at a cost based on the lowest bidder's bid price plus his forfeited bid bond, as well as secured the offer of the second and lowest bidders of the Food Technology building for possible negotiation with PBAC after the original contractor abandoned the project.

As of December 31, 1989, the inventory of ViSCA vehicles showed that the following were in good running condition: 3 units Toyota vans, 25 units jeeps (8 Nissan Patrol jeeps, 15 Military/renegade type, 1 Fierra type, and 1 Pinoy type), 3 mini- buses (2 of which were Hi-Ace and 1 Isuzu), 4 school buses, 6 heavy-duty trucks (3 dump trucks, 1 garbage truck, 1 Isuzu Elf and 1 G. M. truck), 3 Ford rangers, 1 Land Rover, 1 Datsun Automobile, 1 road grader, 1 road roller and electricity generating sets. Some of the vehicles were assigned to the different departments, centers and offices of the College.

ViSCA also maintained 4 units of heavy-duty four-wheel tractors, 2 hand tractors, 4 trailers and ten kinds of digging tools.

Maintenance of the landscape of the ViSCA campus as well as fencing of the borderlines and along the highway, the drainage and irrigation canals were done during the year.

The Department of Animal Science and Veterinary Medicine had accomplished the following : acquisition of a computer facility, airconditioned the AI Center and the "cold" room of the Forage Analysis laboratory, installation of an additional feed mixer for the feed mill, renovation of about 2 hectares of *Pennisetum purpureum* and one hectare *Panicum maximum* pastures, and repairs of animal sheds and houses and the perimeter fences of the pasture area.

The Department of Horticulture had expanded the coffee project area as well as increased the collection of ornamental plants. Shed houses for both the cacao and coffee projects were built. The area within the peripheral fence of the department was converted into a flower garden. The department was also the lead unit in putting up the Flower and Garden Show during the College anniversary.

The Regional Coconut Research Center had constructed cabinets for office and laboratory supplies and four office tables for the staff. The center also acquired construction materials for the gadget display shed as well as fenced and painted the storage shed house for fertilizers and pesticides. One unit music mate was purchased by the center during the year and reconditioned a SUZUKI TS 125 motorcycle for office use.

STATEMENT OF ALLOTMENTS, EXPENDITURES AND BALANCES
CALENDAR YEAR 1989

Program/Projects	Personal Services		Maint. & Optg. Exp.		Capital Outlay		BALANCES			TOTAL
	Allotment	Expenditure	Allotment	Expenditure	Allotment	Expenditure	PS	MOE	CO	
Advanced Education	766,578	766,578	2,398,175	2,398,175	-	-	0.00	0.00	0.00	0.00
Higher Education	11,434,122	11,434,122	2,601,114	2,601,114	-	-	0.00	0.00	0.00	0.00
Secondary Education	1,847,634	1,847,634	572,407	572,407	-	-	0.00	0.00	0.00	0.00
Research Services	6,671,891	6,671,891	9,555,133	9,555,133	-	-	0.00	0.00	0.00	0.00
Extension Services	1,214,138	1,214,138	25,000	25,000	-	-	0.00	0.00	0.00	0.00
Auxiliary Services	1,066,764	1,066,764	872,127	872,127	-	-	0.00	0.00	0.00	0.00
Gen. Adm. & Supp. Serv.	6,093,100	6,093,100	6,624,671	6,624,671	-	-	0.00	0.00	0.00	0.00
Salary Standardization	5,387, 165	5,387,165	-	-	-	-	0.00	0.00	0.00	0.00
Personnel Benefits	2,552,000	2,552,000	-	-	-	-	0.00	0.00	0.00	0.00
Capital Outlay	-	-	-	-	2,850,000	600,170.82	0.00	0.00	2,249,829.18	2,249,829.18
Foreign Assisted Projects	858,755	781,266.74	2,966,325	2,443,464.80	2,000,000	1,816,581.90	77,488.26	522,860.20	183,418.10	783,766.56
Sub-total	37,892,147	37,814,658.74	25,614,952	25,092,091.80	4,850,000	2,416,752.72	77,488.26	522,860.20	2,433,247.28	3,033,595.74

TOTAL ALLOTMENT: P68,357,099.00 EXPENDITURE: P65,323,503.26 UNEXPENDED BALANCE: P3,033,595.74

FISCAL RESOURCES

ViSCA's total budget for 1989 was ₱68,357,099.00 wherein 91.48% (₱62,532,019.00) was taken from the National Treasury and the remaining 8.52% (₱5,825,080.00) was contributed by the United States Agency for International Development (USAID) for the Farming Systems Development Projects (FSDP). The breakdown of this year's budget by function is as follows:

Instruction	₱ 19,620,030.00
Higher Education	14,035,236.00
Advanced Education	3,164,753.00
Secondary Education	2,420,041.00
Research	16,227,024.00
Extension	1,239,138.00
Auxiliary	1,938,891.00
General Administration	12,717,771.00
Capital Outlay	2,850,000.00
Administration of Personnel Benefits	2,552,000.00
Salary Standardization	5,387,165.00
USAID Grant	5,825,080.00
Total	₱ 68,357,099.00

The budget for Personal services was ₱37,892,147.00, Maintenance and Other Operation Expenses was ₱25,614,952.00 and ₱4,850,000.00 for Capital Outlay.

Resource Generation

This year's total gross sales from ViSCA's income-generating projects, namely: revolving fund projects, trust fund projects and special fund projects reached ₱777,895.21 which marked an increase of ₱124,553.81 (19.06%) over the previous year's income. The gross sales of the different Revolving Fund projects amounted to ₱585,457.46 which was derived from rice farm, poultry, piggery, pineapple, and seed bank projects. On the other hand, all the projects under Trust, General and Special funds had a gross income of ₱192,437.75 (Table 10).

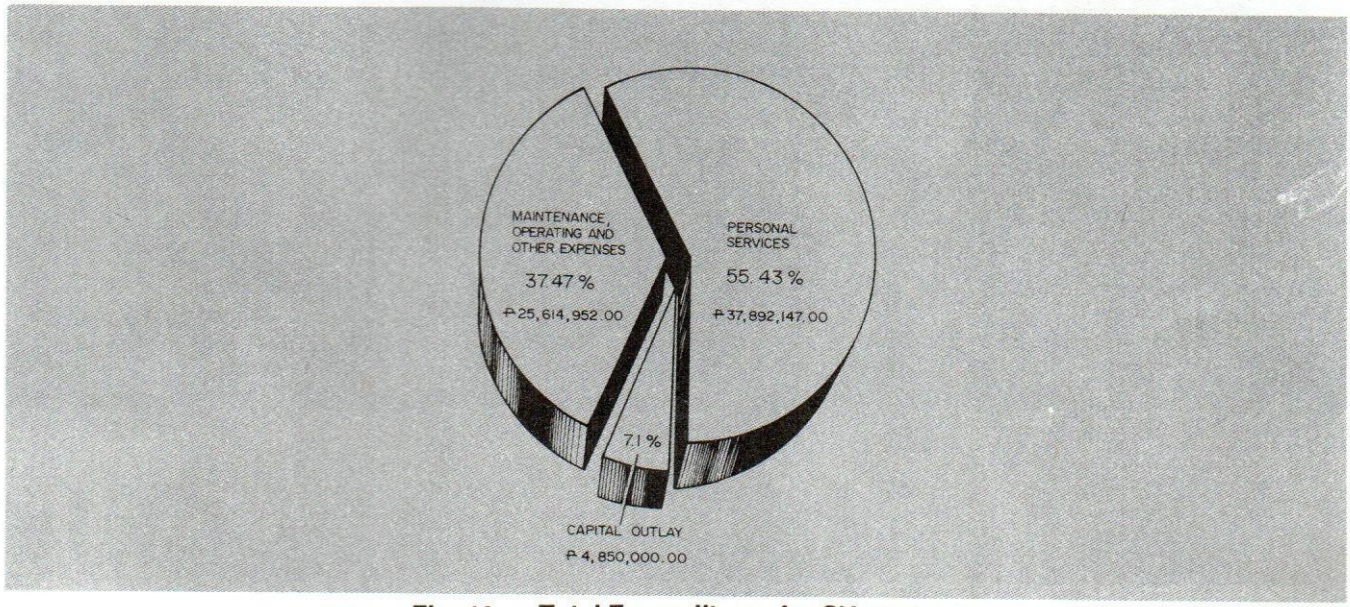


Fig. 10. Total Expenditures for CY 1989.

Table 10. Gross Sales from January to December 1989 of the Different Income-Generating Projects of the College.

Dept./Center/Office	Name of Projects	Gross Sales
An. Sci. & Vet. Med.	Poultry	₱ 260,975.80
	Piggery	109,799.00
	Rice Farm	123,055.51
	Dairy Goat/Sheep	20,864.00
	Duck	4,136.00
	Rabbit	1,583.50
RCRC	Pineapple	69,895.00
High School	Seedbank - A	17,899.00
	Seedbank -B	3,833.15
Horticulture	Vegetables/Floriculture	13,120.25
Guest House	Lodging	13,220.00
Library	Fines	8,827.50
IGPO	Fruit Trees	15,289.15
	Market & Other Facilities	64,653.10
Infirmary	General	14,934.20
	Trust	3,248.00
Plant Breeding	Corn By-Products	2,160.00
	Sweet Potato By-Products	27,044.00
Forestry	Forest Products	2,593.05
NARC	Abaca Products/By-Products	765.00
Total		₱ 192,437.75

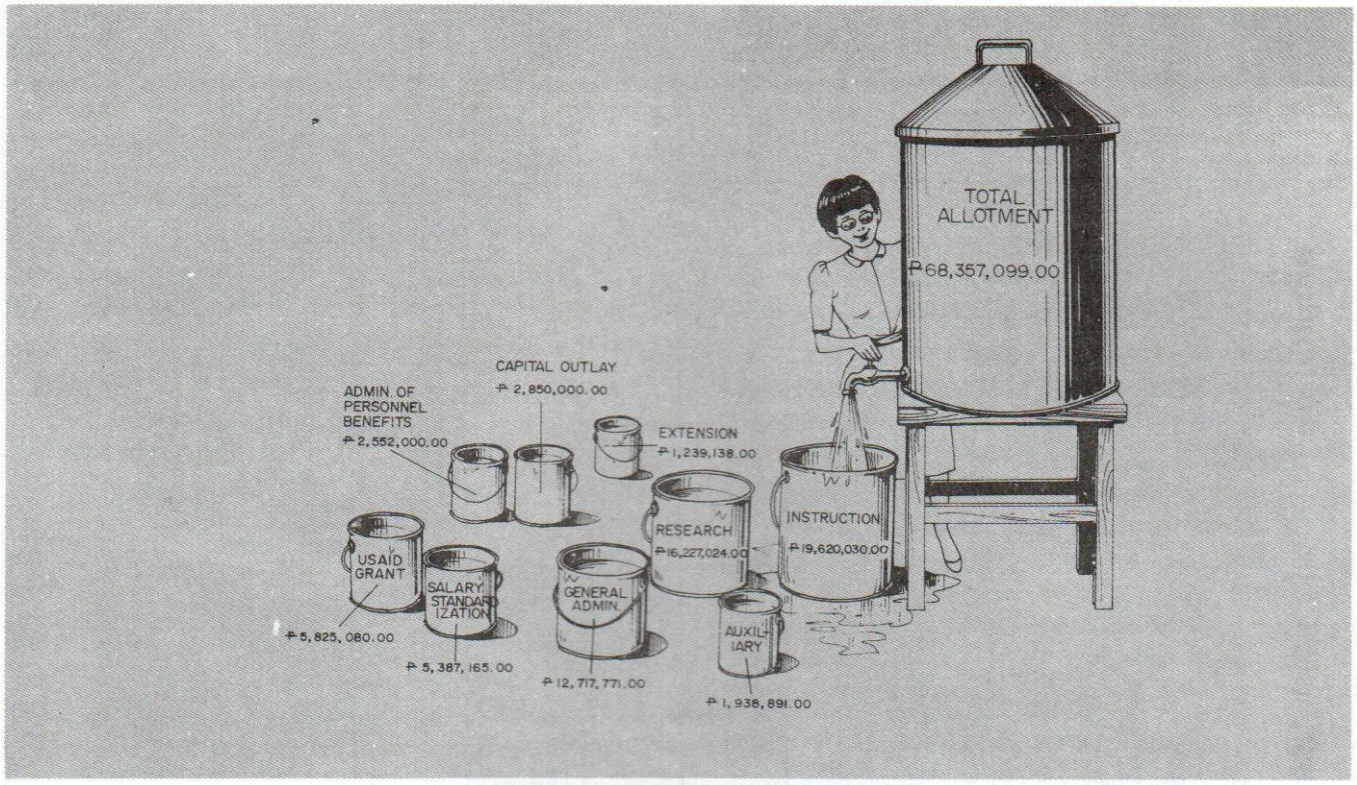


Fig. 11. Distribution of allotment among the major programs of the college.

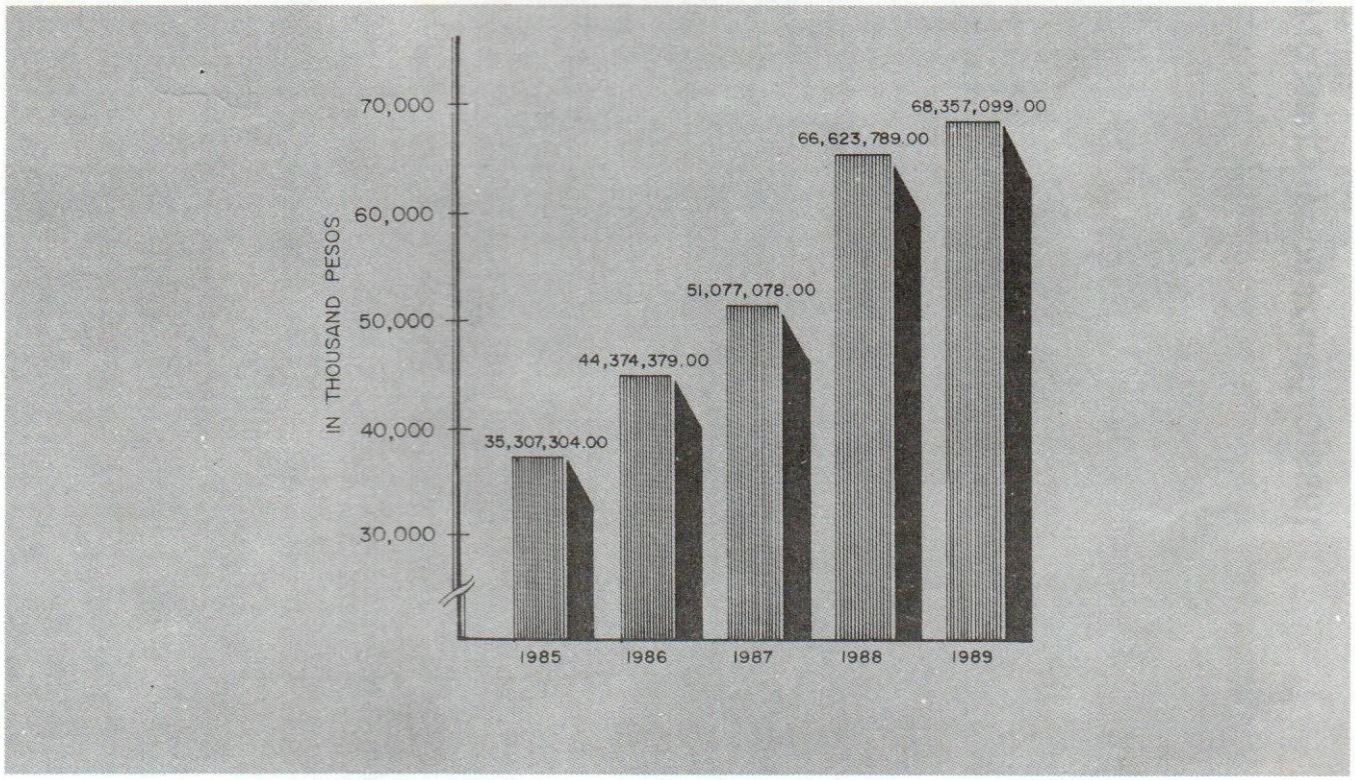
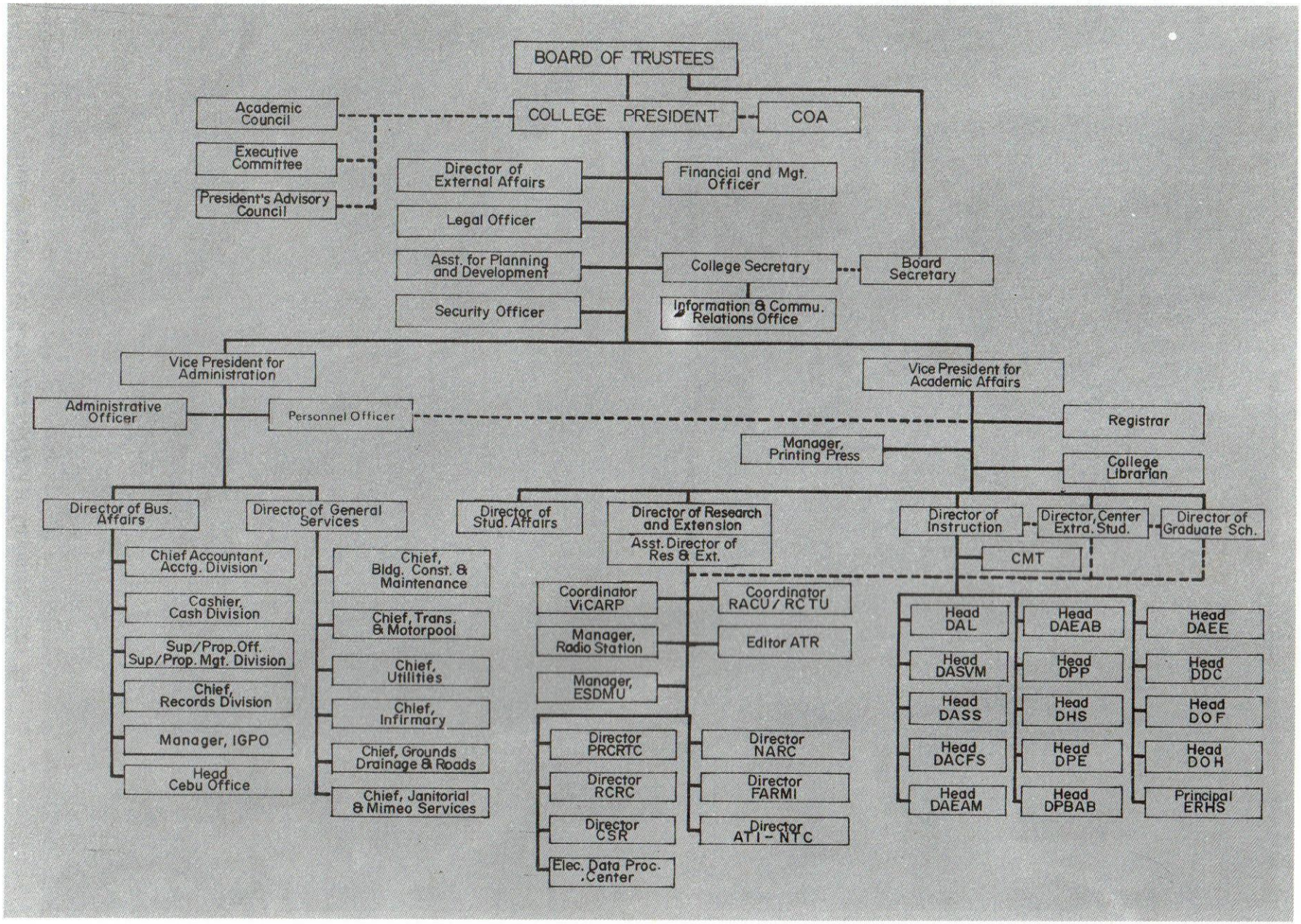


Fig. 12. Summary of ViSCA's allotment in the last 5 years.

1989 Organizational Chart of the Visayas State College of Agriculture



GENERAL ADMINISTRATION

General Administration is the sector of the College that provides support services to the major programs. It includes the offices of the President, Vice President for Academic Affairs and Vice President for Administration, together with all the staff offices under their direct supervision.

Aside from the Board of Trustees that governed the administration of the College, ViSCA has organized an Executive Committee and President's Advisory Council which may help the president in the decision and policy formulation of the college. The former is composed of the directors of the different research and training centers and heads of the different academic departments, offices and units of ViSCA while the latter is composed of all directors and the College Secretary.

Despite the ViSCA conflict and problems met, the year 1989 ended with various achievements. Construction projects were continued and several equipment were acquired through the financial support of the national budget, United States Agency for International Development (USAID), New Zealand Government and other international agencies.

Human Resources

The total ViSCA personnel as of December 31, 1989 was 1,264 broken down as follows:

Faculty			243
Research			487
regular	-	53	
contractual	-	174	
casual	-	260	
Administrative			534
regular	-	197	
casual	-	337	
Total			1,264

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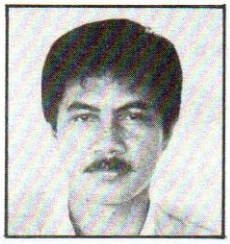

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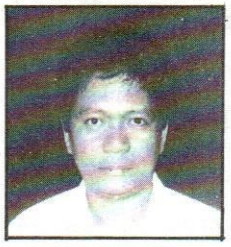

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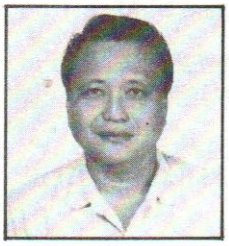

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The 1989 ViSCA Annual Report is published by the Planning and Development Office in cooperation with the various offices, departments and research and training centers/institutes of the College.

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