annual report

VISAYAS STATE COLLEGE OF AGRICULTURE
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VISAYAS STATE COLLEGE OF AGRICULTURE

BAYBAY, LEYTE • 7127 • PHILIPPINES

ANNUAL REPORT 1979

VISAYAS STATE COLLEGE OF AGRICULTURE

Baybay, Leyte 7127
PHILIPPINES

VISAYAS STATE COLLEGE OF AGRICULTURE
Baybay, Leyte

OFFICE OF THE PRESIDENT

June 1, 1980

Hon. Onofre D. Corpuz
Chairman, ViSCA Board of Trustees and
Minister of Education and Culture
Manila

S i r :

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 1979 in compliance with the Department Memorandum No. 55, S. 1978 of the Ministry of Education and Culture.

Very truly yours,

F. A. BERNARDO
President

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DEPARTMENT HEADS

Andresito D. Acabal, B.S.
Acting Head, Chemistry

Ernesto C. Bumatay, M.S.
Acting Head, Forestry

Rodolfo G. Escalada, Ph.D.
Head, Agronomy & Soils

Susano C. Faelnar, M.A.
Head, Arts & Letters

Dely P. Gapasin, Ph.D.
Head, Crop Protection

Guindolino R. Gerona, Ph.D.
Head, Animal Science & Veterinary
Medicine

Lelita R. Gonzal, M.S.
Acting Head, Agricultural Botany
& Plant Breeding

Concepcion T. Monserate, M.A.
Head, Home Science

Roque O. de Pedro, Jr., M.S.
Acting Head, Agricultural Engineering
& Applied Mathematics

Federico R. Flores, Ph.D.
Head, Agricultural Development Education

Remedios A. Ravello, B.S.
Acting Head, Physical Education

Camilo D. Villanueva, M.S.
Head, Agricultural Economics

Leonardo M. Gapuz, M.Agr.
Principal, Experimental Rural High School

PART ONE | INTRODUCTION

> The College shall primarily provide higher vocational, professional, and technical instruction and training in agricultural and industrial fields with special emphasis given to the coconut industry. It shall also promote research, advanced studies and progressive leadership in the fields of agriculture, including agricultural education and home technology with special emphasis given to coconut industry, fishery, forestry and industrial education.
>
> - P.D. 470

Within a short span of five years, the Visayas State College of Agriculture has emerged from obscurity into renown unprecedented in its long history in the field of agricultural education. Since its establishment in 1974, ViSCA has been a leader in promoting agriculture and rural development not only in the Visayas region but in the whole archipelago.

Development is a never-ending process and it is difficult to contrive a precise appraisal of the achievements of the school. However, the impact of ViSCA's programs in strengthening and improving the farming skills of the rural man that speaks well of its achievements is evidenced not only by the various awards the institution has received but also by the gradual transformation of the region it serves.

As the year 1979 comes to a close, the events, which drew the involvement of many people from all walks of life from our countryside to other parts of the world in an attempt to seek the kind of institutional response appropriate to the changing needs of our society, are once again recorded for feedback evaluation, for posterity and for recognizing and giving due credit to those who have contributed to the achievements of the College. In spite of the difficulties and constraints met during the year, ViSCA was able to tackle these challenges with strong conviction, vigor and optimism. Its students and staff aggressively manifested their commitment to the cause of national progress.

Relentlessly, ViSCA marches toward its avowed goal of redeeming the small Visayan farmer from the shackles of poverty and illiteracy.

The vital task ViSCA is burdened with - that of sharing its agricultural resources and technology for the betterment of the Philippine economy - is not easy. But with the dynamism and ambition of its administrators and staff and the continued attention and support of concerned government agencies and leaders, ViSCA will, and can, face the future with vision and confidence.

HIGHLIGHTS OF ACTIVITIES AND ACCOMPLISHMENTS

The year 1979 was replete of the events that were blended with the total effort of reaching ViSCA's avowed goals. In assessing our accomplishments one needs to have a good grasp of the events and activities which involved ViSCA. Hereunder are the highlights of the activities and accomplishments during the year.

1. Budget Deputy Minister Was ViSCA's Guest Speaker During Commencement Exercises

Deputy Minister of the Budget Manuel S. Alba was the guest speaker during the 26th collegiate and 49th high school commencement exercises on April 3. During the ceremony, the College President conferred degrees and diplomas to 187 college and 85 high school graduates.

2. Natural Resources Minister Jose J. Leido Was the Guest Speaker as ViSCA Celebrated its 55th Anniversary

From August 24 to September 1, ViSCA commemorated its 5th anniversary as a state college and its 55th anniversary as an institution of learning. Natural Resources Minister, Jose J. Leido, Jr., who joined the celebration as guest speaker, pledged to help in the acquisition of 4,000 hectares of forest land to be used as research laboratory at ViSCA. Also, during this affair, ViSCA gave Length of Service Award to 10 staff members, Mount Pangasugan Award to 7 former administrators of ViSCA, Outstanding Alumni Award to 4 prominent persons, ViSCA Sandigan Award to 2 leading funding institutions and Special Award to 2 ViSCA staff who formulated the melody and lyrics of the ViSCA song.

3. IBP Assemblyman Was Guest Speaker During the Staff Housing Complex and RTC-RD Inauguration

Dr. Waldo Perfecto, assemblyman of the Interim Batasang Pambansa (IBP), was the guest speaker during the inauguration of the Governor Benjamin Romualdez Staff Housing Complex and the Regional Training Center for Rural Development (RTC-RD) building on July 2.

4. COCOFED President Was Guest Speaker During the Inauguration of COCOFED Homes

Four COCOFED homes donated by the Philippine Federation of Coconut Farmers costing ₱1.63 million were inaugurated on March 29 with Ms. Maria Clara Lobregat, COCOFED President, as guest speaker.

5. National Economic Planning Minister Visited ViSCA

National Economic Planning Minister Gerardo Sicat, who was here in a surprise visit on July 16, observed the inevitable emergence of ViSCA as the nerve center of agro-industrial development in the Visayas.

6. World Bank Officials Visited ViSCA During Anniversary Fete

The commemoration of the ViSCA 55th anniversary was graced with the opportune coming on August 31 of the World Bank mission composed of Ms. Shiguto M. Ashers, technical economist and Arch. Sverrir Sigurdsson, consultant. The mission was here to evaluate the progress and thresh out the problems of the development projects at ViSCA funded by the World Bank 4th education loan.

7. Sri Lankan Scientist Was ViSCA Consultant

Dr. Ranjith Mahindapala, Crop Protection Officer of the Coconut Research Institute, Lunuwila, Sri Lanka, was in ViSCA from April 30 to July 31 as a consultant of the College on pest management program with emphasis on epidemiology of plant diseases particularly root crops and coconut. He reviewed and made innovations on crop protection program of the College. He also taught as a visiting professor.

8. USAID Consultant Helped Expand Animal Science Curriculum

Dr. Berl Koch, consultant of the United States Agency for International Development (USAID) and resident senior animal scientist of the Integrated Agricultural Production and Marketing Project of the Central Luzon State University, visited the college on June 24 to 30 to review, evaluate and recommend changes in the Animal Science curriculum of ViSCA.

9. ViSCAn Received National Award for Teaching from CSSP

Dr. Dely P. Gapasin, Associate Professor and Head of the Crop Protection Department received a plaque and cash award of ₱2,000 from the Crop Science Society of the Philippines (CSSP) for winning the Achievement Award in Crop Science Teaching. The award was given at UPLB in April. It was the first time in 10 years that this national award was given to an individual outside of UPLB.

10. ERHS Student Topped the Accreditation Examination for INTAPS

Dan Bernardo, a graduate of the ViSCA Experimental Rural High School (ERHS), topped the accreditation examination for the Integrated Academic Program in the Sciences (INTAPS) by validating 26 units, thus beating the best from the University of the Philippines and the science high schools all over the country.

11. ViSCA Staff Was UPCAAA Awardee

Dr. Emiliana N. Bernardo, Director of Instruction, was conferred by the University of the Philippines College of Agriculture Alumni Association the Distinguished Alumnus Award for meritorious service in agricultural education during the 61st Loyalty Day and 70th Foundation Year of the UP College of Agriculture on October 10.

12. ViSCA Student Won Sigham Award

Rex N. Bernardo, a third year student of the ViSCA ERHS was the Sigham (Sigaw ng Agham) Junior Scientist Medal Awardee during the National Science Fair and Quiz sponsored by the National Science Development Board (NSDB) held in Zamboanga City from December 3 to 7.

In the Eastern Visayas regional competition, two entries of the ViSCA ERHS were adjudged as Most Outstanding Science Project. One ERHS delegate was declared as Special Project Exhibitor, and another two students copped third and fourth prizes in the science quiz.

13. ERHS Cadet Corps Captured First Place

The Experimental Rural High School cadet corps copped the first place among 23 competing units during the tactical inspection on March 8. With the commendable leadership of Mr. Dominador Ugsang, the Citizen's Army Training (CAT) Commandant, the ERHS Cadet Corps has successfully maintained its top rating for 3 consecutive years.

14. PRCRTC-ViSCA Awarded Six Undergraduate Scholarship Grants

Six undergraduate students enrolled in the Bachelor of Science in Agriculture curriculum were awarded scholarships by the Philippine Root Crop Research and Training Center in cooperation with ViSCA. The grant includes a stipend of ₱300 a month, book allowance of ₱250 a semester, tuition and other school fees of approximately ₱250 a semester or ₱100 every summer, and thesis support of not more than ₱250 for senior grantee.

15. ViSCA Exhibits and Float Adjudged the Best

ViSCA closed the door of its activities for the year 1979 as it romped away with four first-place trophies during the Baybay Town Fiesta Agro-Industrial Fair Exhibits on December 27. It also captured the ₱300 first prize in the Float Contest.

16. ViSCA Hosted the 5th International Symposium on Taro and Cocoyam

On September 24 and 25, some fifty prominent agricultural scientists and researchers from all over the world convened at ViSCA for the 5th International Symposium on Taro and Cocoyam.

NSDB Minister Melecio B. Magno and PCARR Director-General Jose D. Drilon hailed the symposium as a bold thrust toward looking for a breakthrough in solving the food problem of mankind.

17. ACAP Sponsored Agricultural Economics Seminar-Workshop at ViSCA

From November 15 to 25, ViSCA played host to the seminar-workshop on "Agricultural Economics: Teaching and Course Evaluation," sponsored by the Association of Colleges of Agriculture in the Philippines (ACAP). The strengths and weaknesses of Agricultural Economics courses were stressed and the participants successfully devised a new standardized curriculum.

18. First Regional Conference on Crop Protection Held in ViSCA

The first regional conference of the Philippine Association of Entomologists in the Visayas was held in ViSCA from March 4 to 6. The conference, whose guest speaker was Mr. Lane Holdcroft of the USAID, was attended by more than one hundred delegates coming from the different parts of the country.

19. PRCRTC Sponsored Seminar on Rapid Propagation Techniques for Cassava

The Cassava Section of the Philippine Root Crop Research and Training Center (PRCRTC) sponsored a seminar on rapid propagation techniques for cassava from January 29 to 31 as one of its approaches on helping the national food production campaign. Participating agricultural schools were the University of Southern Mindanao, Palawan National Agricultural College, Isabela State University and the University of the Philippines at Los Baños.

20. NSDB/NIST Sponsored One-Month Training on Food Processing

Farmer clientele and their families and interested college staff members of ViSCA participated in the one-month biotech field service and mushroom culture training and workshop from October 23 to November 20. The training-workshop which was sponsored by the NSDB and the National Institute of Science and Technology (NIST) covered lectures and practicum on mushroom planting and spawn propagation, and on the processing of ham, sausage, corned beef, coco vinegar, coco nata, and wine.

21. RTC-RD Conducted Workshop-Conference for Trainors and Inter-Agency Seminar-Workshops for Rural Development Workers

Academicians, researchers and trainors from academic institutions and private and public agencies engaged in rural and agricultural development programs in the Visayas, converged at the newly blessed RTC-RD Complex from February 10 to 16 to discuss innovative approaches in extension teaching. The participants were the prospective resource persons who will be involved in future trainings of the Center. Six inter-agency seminar-workshops participated in by 335 rural development workers were conducted by the RTC-RD during the year.

22. Cebu Extensionists Underwent Training at RTC-RD

The first seminar-workshop for rural development workers of Cebu was conducted by the Regional Training Center for Rural Development at ViSCA from July 15 to 29. The participants

included 56 extension workers and 9 field supervisors from the Ministries of Agrarian Reform, Agriculture, Natural Resources, and Local Government and Community Development.

23. ViCARP Held Seminar-Workshop at ViSCA

Personnel from the Bureau of Plant Industry (BPI), Bureau of Animal Industry (BAI), and Forest Research Institute (FORI) of Region VII and VIII and ViSCA Academic Personnel converged at the RTC-RD at ViSCA on July 13 and 14 in a seminar-workshop conducted by ViCARP.

24. Firemanship and Fire Prevention Training Conducted for ViSCA Fire Brigade

With the acquisition of a ₱308,013 Hino Motor fire truck, the ViSCA fire brigade completed a firemanship and fire prevention training on campus handled by the Cebu Fire Department and a local fire extinguisher firm from January 9 to 10. The training covered lectures and demonstrations on the rudiments of fire fighting.

25. NPAS Seminar-Workshop Conducted at ViSCA

A new performance evaluation system was disclosed in the seminar-workshop on New Performance Appraisal System held from February 6 to 7. Atty. Teodoro Cañete, Region VIII Civil Service Commission Director, headed the training team in coordination with the staff of the ViSCA Personnel Office.

26. Fifteen Training Sessions Completed for Coconut Farmers and COCOFED Scholars

During the year, the Regional Coconut Research Center has trained 695 coconut farmers and 37 ViSCA COCOFED scholars in its 15 training sessions (3-day duration) on "Coconut Hybridization, Replanting and General Cultural Practices."

27. ViSCA Staff Represented the Philippines in the International Congress of Plant Protection

Dr. Emiliana N. Bernardo, Director of Instruction and professor in the Department of Crop Protection, represented the Philippines in the 9th International Congress of Plant Protection held at Washington D.C., USA from August 5 to 12. The theme of the Congress was: "Protecting the World's Food Supply."

28. PRCRTC Director Reelected to International Post

Dr. Marianito R. Villanueva, Director of the Philippine Root Crop Research and Training Center at ViSCA, was reelected to the post of Secretary of the International Society for Tropical Root Crops (ISTRC) for a second term covering the period 1980-1982, during the 5th International Root Crop Symposium held in Manila from September 17-21, 1979. He was first elected as Secretary of the Society in 1976 during the fourth symposium held in Colombia, South America.

29. Doctoral Study Linkage Established Between Philippine Agricultural Schools and the Japanese University of Agriculture

In June, a doctoral study linkage was established between

the agricultural schools of the Philippines and the agricultural universities of Japan. The program is open to staff members of the Central Luzon State University and ViSCA who have adequate experience in research and capable of undertaking independent research work.

30. NSDB Granted ₱0.3 Million to ViSCA

The NSDB, through its institution building program, has granted ViSCA ₱300,000 to purchase supplies and equipment for Chemistry, Biology and Physics laboratories.

31. Key Administrative Post Holders Named

On July 1, Dr. Samuel S. Go was named Vice-President for Administration. Director Francisco G. Bascug took back the Office of Business and Administrative Affairs and Director Manuel A. Ancheta, the Office of Student Affairs on the same date. Engr. Manuel C. Capacio was appointed Superintendent of the Physical Plant Office per Administrative Order No. 45 issued by the College President.

32. Office of the Director of Extension Created

Dr. Celedonio M. Gapasin was appointed Director of Extension effective August 16, 1979. He was also designated Officer-in-Charge of the Development Planning Office.

33. Two Extension Divisions Were Added to the College Extension Organizational Structure

The Non-Formal Education Division and the Extension

Communication Division were created and approved by the College academic council and concurred in by the Board of Trustees on December 12 as additional divisions to the extension program of the College. The former will handle short-term nondegree training courses in extension and the school-on-wheels, while the latter is entrusted mainly to handle the rural radio station and the extension publication office.

34. ADE Head Appointed Director of RTC-RD

The head of the Agricultural Development Education (ADE), Dr. Federico R. Flores, was appointed director of the RTC-RD vice Dr. Celedonio M. Gapasin who assumed post as director of extension. Dr. Flores, in addition to his being the head of the ADE, was entrusted with the task of coordinating and supervising the implementation of rural development training programs and activities of the RTC-RD in the Visayas. Dr. Gapasin has to oversee and exercise direct administrative control of all extension programs and extension-related activities of the College.

35. Two Heads and Five Acting Heads of Academic Departments Were Appointed

Professor Susano Faelnar and Professor Concepcion Monserate were appointed heads of the Arts and Letters Department and Home Science Department respectively during the middle part of the year. Likewise, the following ViSCA staff were assigned as department acting heads: Ms. Remedios Ravello, Physical Education;

Mr. Ernesto Bumatay, Forestry; Dr. Wilfredo Floresca, Animal Science and Veterinary Medicine; Engineer Roque de Pedro, Agricultural Engineering and Applied Mathematics; and Mr. Andresito Acabal, Agricultural Chemistry.

36. Outstanding ViSCAns Feted

The year 1979 was highlighted with the celebration of a very significant event, the Awards Nite, held on December 18 at the Social Hall. Meritorious performance awards were given to 31 academic and non-academic staff members whose conducts proved to be typical of an illustrious public servant. Of the 31 awardees, Dr. Emiliana N. Bernardo and Dr. Dely P. Gapasin, both professors of the Department of Crop Protection, got the outstanding performance awards.

37. College Cafeteria and ViSCA Tennis Court Inaugurated

The College Cafeteria which can accommodate some 240 persons and the ViSCA's second shell tennis court were inaugurated on July 14 and July 29, respectively. The cafeteria which costs ₱675,000 also boasts of a conference room.

38. ViSCA Foundation Elementary School Celebrated its First Foundation Day.

For the first time since its establishment on March 1976, the ViSCA Foundation Elementary School commemorated its foundation day on October 7. The celebration was ushered with a parade on campus participated by joyful and grateful school children, staff and parents.

39. Graduate Courses Were Offered the First Time During the Summer Term

The first graduate courses in ViSCA leading to Master of Science in Agricultural Development Education (MSADE) and Master in Agricultural Development Education (MADE) were offered during the summer term (April-May) by the Department of Agricultural Development Education.

40. Agricultural Chemistry Offered as Major Field of Specialization

The Department of Agricultural Chemistry started offering the degree of Bachelor of Science in Agriculture with major in Agricultural Chemistry at the start of school year 1979-80. With the implementation of this new curriculum, the department has at present 12 major students.

41. ViSCA ERHS Implemented the New Agricultural Science Curriculum

The ViSCA Experimental Rural High School has integrated its old vocational agriculture and vocational homemaking curricula into one curriculum which is presently called the Agricultural Science curriculum. The new curriculum, which is college and vocational preparatory was implemented beginning June of school year 1979-80.

42. VPA Sports Meet Held

The ViSCA Personnel Association (VPA), a partnership of all ViSCA regular staff, held its annual sports intramural meet from February 9 to 10. The affair was highlighted by the

awarding of trophies and banners to the winners and the induction ceremony of the newly elected VPA officers.

43. Tenor Soloist Entertained ViSCA Community

In a plethora of dulcet songs, Enrico M. Saboren, a young tenor who was a gold medal winner in a national singing competition and has travelled to Europe and Russia as a soloist of the UP Madrigal Singers, was showcased by the ViSCA Cultural Affairs Committee in a recital at the Social Hall on November 21. The well-known soloist entertained ViSCA music lovers with debonair arias.

44. Musical Evangelist Treated ViSCA Community

Albert Faurot, a well-travelled musical evangelist from Silliman University, treated the college community with a vast repertoire of past and contemporary music in the evening of February 1 at the Arts and Letters auditorium.

45. Three New Publications Prepared

The maiden issue of the Annals of Tropical Research, a scientific journal of ViSCA in technical researches, was published in July. Dr. Manuel Palomar is the editor in chief. Two centers also prepared their own publications. The RTC-RD released its RTC-RD Newsletter beginning March and the PRCRTC, The Radix, a semi-annual research publication in root crops, which circulated in August.

46. RCRC Designed and Constructed a Copra Dryer

A 600-to 700-nut capacity copra dryer was designed and constructed by the Regional Coconut Research Center (RCRC) under the leadership of Dr. Ly Tung, Center Director. This experimental semi-direct type dryer will hopefully boost the quality of copra in the future.

47. Completed, Ongoing and Proposed ViSCA Researches Totaled to 666

At year's end the status of completed, ongoing and proposed ViSCA researches for both staff and students were as follows:

	Staff Research	Student Research	Total
Completed	22	34	56
Ongoing	156	117	273
Proposed	57 (1980) 280 (1981)	-	337
		Grand Total	666

48. Seventy-Two Staff Were Recipients of ViSCA's Staff Development Program

During the year, a total of 72 academic staff members were on scholarship grants (master, 44 and doctorate, 28). Majority of those who are studying in the Philippines are at UP Los Baños and those abroad are in the United States. The sources of funding for those taking their masters are mostly from ViSCA and PCARR, while those on the doctoral program are from the World Bank and IDRC.

PART TWO | INSTITUTIONAL PROGRAM

I. INSTRUCTION

During the past year, ViSCA continued its active pursuit of excellence in instruction and academic programs relevant to the needs of the Visayas. This was in line with the primary instructional objective of the College which is to produce leaders and professionals in priority areas of technical agriculture, extension, rural development education, marketing and agricultural business management to meet current and future manpower needs of the region.

The strategies followed towards achieving excellence in instruction included selective admission of incoming freshmen and awarding of scholarships to poor but deserving students; improvement of existing facilities and acquisition of additional ones; improvement of teaching competence of the staff through graduate studies, seminars, workshops and conferences, and teaching performance evaluation by the students.

To attain greater relevance of academic programs to the needs of the region, some of the existing curricula were revised for enrichment in depth and in breadth of subject matter coverage and new degree programs were developed.

A. Higher Education

1. Objectives

a. To produce leaders and professionals, particularly in the fields of extension, cooperative education and marketing and agricultural business management and in priority areas of technical agriculture to meet actual and anticipated needs in the Visayas region.

b. To produce agricultural graduates with managerial and administrative know-how that are indispensable to managing small-scale agro-based industries and in overseeing the agricultural and rural development programs in the region.

c. To produce extension technicians as may be required by specific government action programs in food production, agrarian reforms and rural development.

d. To establish special projects and innovative laboratories that will help students learn agriculture as a science, an art and business and to provide them with realistic training and experience in rural development work.

e. To utilize local research findings in improving the instructional program to the extent that this is possible without discounting the value of the "universals" in science and the humanities and to make teaching more effective by improving the methods and techniques.

f. To give the student an opportunity in every course he takes to integrate knowledge in some problem-oriented manner such that he may appreciate how different components fit into a meaningful whole.

g. To continue to make students aware of the world of work so that they may develop the proper sense of values and have a more realistic appraisal of their future occupational opportunities.

2. Student Development

a. Enrolment

Student enrolment for the two semesters and one summer covered are reflected in Tables 1, 2 and 3. The first table specifically shows enrolment breakdown by degree programs and the ratio of male to female students. Among the 7 BS degree programs, the highest enrolment was in BSA followed by BSADE and BSAE while the least was in BSF followed by BSHE. Although in general there were more female than male students in the populace, this did not hold true for all degree programs.

Tables 2 and 3 present the enrolment breakdown by curricular term and year levels. It should be worth mentioning here that the enrolment quota of about 500 for incoming freshmen in June was not met (only 219) because of some confusion created by the

cancellation of the NCEE. A total of 1,929 graduating high school students took the ViSCA entrance examination administered in 16 testing centers in the Visayas and Mindanao in late January up to early February 1979. Unable to receive their NCEE ratings and not learning about the cancellation, some students who qualified for admission based on the ViSCA Admission Test did not come for registration. This was the reason why total enrolment in June 1979 was lower than that in June 1978 (Table 3).

Figure 1 shows the growth of college enrolment for the past five years.

b. Dropouts

Table 4 shows that the average dropout rate for the first and second semester 1979 was only 1.72 percent compared to 7.67 percent in 1978. The great improvement in the dropout rate may be attributed largely to the rigid selective admission through the ViSCA Admission Test which was not implemented in 1978.

There was no dropout in the nondegree program.

Figure 1. GROWTH OF COLLEGE ENROLMENT (Average).

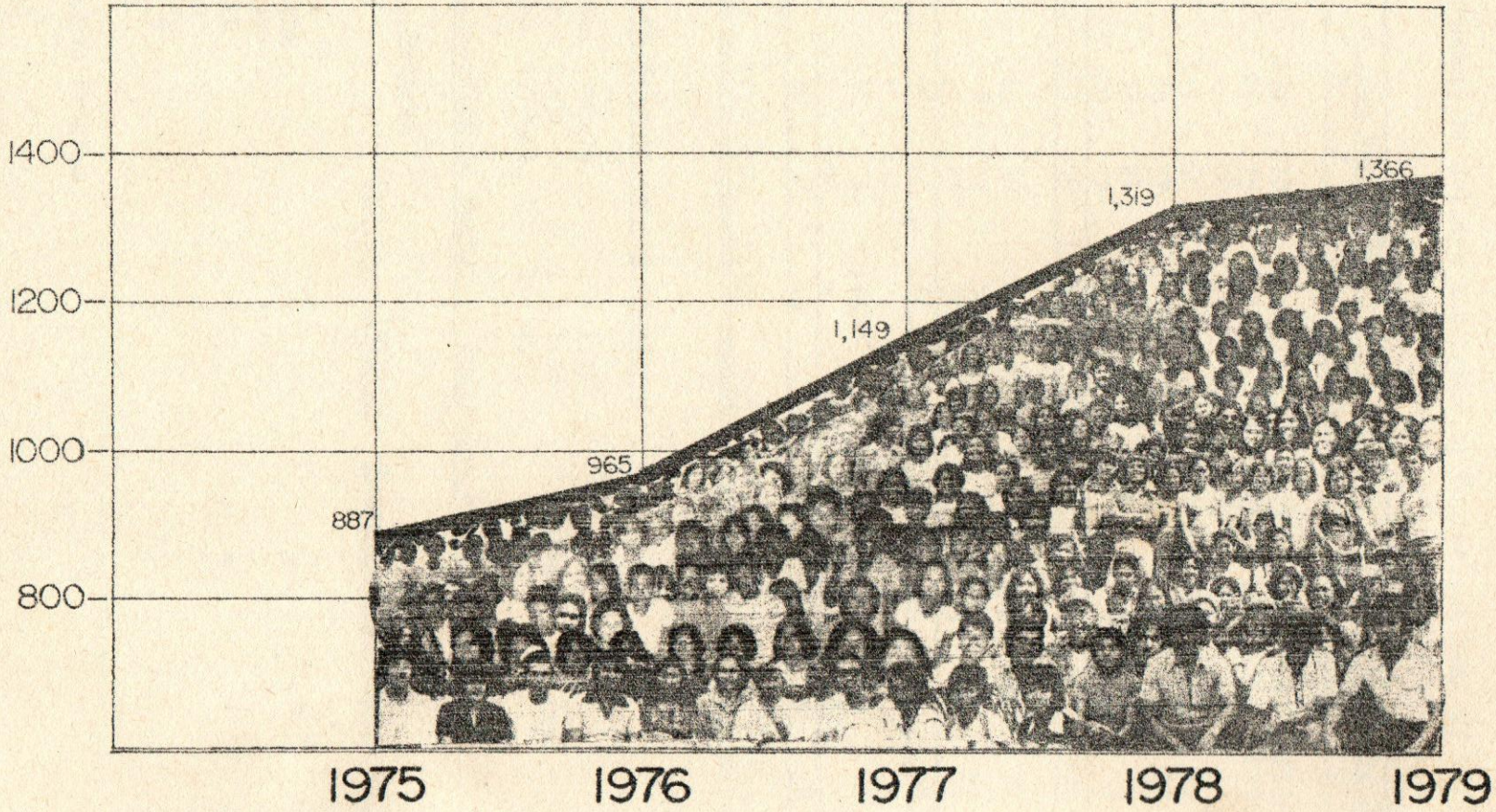


Table 1. Summary of College Enrolment by Course and Sex, CY 1979.

Course	2nd Sem. 1978-79			Summer 1979			1st Sem. 1979-80		
	M	F	Total	M	F	Total	M	F	Total
BSA	194	270	464	129	213	342	187	282	469
BSADE	68	175	243	45	123	168	56	175	231
BSHE	-	50	50	-	34	34	-	51	51
BSAE	171	60	231	112	41	153	193	72	265
BSAB	46	77	123	37	72	109	54	87	141
BAS	32	21	53	34	22	56	49	31	80
BSF	10	2	12	7	2	9	18	8	26
Sub-Total	521	655	1,176	364	507	871	557	706	1,263
FRC	43	20	63	21	18	39	48	17	65
HET	6	32	38	3	12	15	10	45	55
CPTC	17	13	30	15	12	27	4	7	11
Sub-Total	66	65	131	39	42	81	62	69	131
Special	10	4	14	-	-	-	3	1	4
MSADE	-	-	-	8	3	11	6	7	13
Sub-Total	10	4	14	8	3	11	9	8	17
GRAND TOTAL	597	724	1,321	411	552	963	628	783	1,411

Ratio of Male to Female Students:

2nd Sem. 1978-79	1 : 1.21	
Summer, 1979	1 : 1.36	Average: 1 : 1.27
1st Sem. 1979-80	1 : 1.25	

Rank According to Number of Enrolment by Curriculum:

Degree Program	2nd Sem. 1978-79	Summer, 1979	1st Sem. 1979-80
BSA	1	1	1
BSADE	2	2	3
BSAE	3	3	2
BSAB	4	4	4
BAS	5	5	5
BSHE	6	6	6
BSF	7	7	7
Nondegree Program			
FRC	1	1	1
HET	2	3	2
CPTC	3	2	3

Table 2. Summary of College Enrolment by Term, Curriculum and Year.

Course	1st Year	2nd Year	3rd Year	4th Year	5th Year	Special Students	Total
2nd Sem. 1978-79						MSADE	
BSA	174	116	77	97	-	-	464
BSADE	84	58	61	40	-	-	243
BSHE	19	4	13	14	-	-	50
BSAE	108	66	33	24	-	-	231
BSAB	61	36	26	-	-	-	123
BAS	2	25	26	-	-	-	53
BSF	1	1	10	-	-	-	12
FRC	31	32	-	-	-	-	63
HET	13	25	-	-	-	-	38
CPTC	-	30	-	-	-	-	30
Special	-	-	-	-	-	14	14
Total	493	393	246	175	-	14	1,321
Summer, 1979							
BSA	148	98	44	54	-	-	342
BSADE	60	26	59	23	-	-	168
BSHE	16	3	9	6	-	-	34
BSAE	99	23	23	8	-	-	153
BSAB	49	37	23	-	-	-	109
BAS	1	30	25	-	-	-	56
BSF	1	2	6	-	-	-	9
FRC	21	18	-	-	-	-	39
HET	10	5	-	-	-	-	15
CPTC	-	27	-	-	-	-	27
MSADE	-	-	-	-	-	11	11
Total	405	257	189	91	-	11	963
1st Sem. 1979-80							
BSA	100	147	92	130	-	-	469
BSADE	11	69	68	83	-	-	231
BSHE	6	22	5	18	-	-	51
BSAE	68	94	49	38	16	-	265
BSAB	27	56	32	26	-	-	141
BAS	1	12	39	28	-	-	80
BSF	6	1	10	9	-	-	26
FRC	24	41	-	-	-	-	65
HET	39	16	-	-	-	-	55
CPTC	-	11	-	-	-	-	11
Special	-	-	-	-	-	4	4
MSADE	-	-	-	-	-	13	13
Total	282	469	295	332	16	17	1,411

Table 3. Comparative Summary of College Enrolment by Course and Term, CY 1978 and 1979.

Course	2nd Sem.				Summer				1st Sem.			
			Increase (Decrease)				Increase (Decrease)				Increase (Decrease)	
	1978	1979	No.	%	1978	1979	No.	%	1978	1979	No.	%
BSA	418	464	46	11	289	342	53	18	556	469	(87)	15
BSADE	270	243	(27)	(10)	167	168	1	.5	304	231	(73)	(24)
BSHE	42	50	8	19	22	34	12	54	65	51	(14)	(21)
BSAE	175	231	56	32	82	153	71	86	251	265	14	5
BSAB	57	123	66	115	61	109	48	78	129	141	12	9
BSF	-	12	12	-	-	9	9	-	-	26	26	-
BAS	-	53	53	-	-	56	56	-	-	80	80	-
FRC	55	63	8	14	40	39	(1)	(2)	82	65	(17)	(21)
HET	41	38	(3)	(7)	25	15	(10)	(40)	44	55	11	25
CPTC	73	30	(43)	(59)	37	27	(10)	(27)	40	11	(29)	(72)
Special	19	14	(5)	(26)	5	-	(5)	(100)	17	4	(13)	(76)
MSADE	-	-	-	-	-	11	11	-	-	13	13	-
Total	1,150	1,321	171	15	728	963	235	32	1,488	1,411	(77)	(5)

Table 4. Number of Dropouts by Year (Degree Programs).

Course	1st Year		2nd Year		3rd Year		4th Year		5th Year		Total	
	Enrol	DO	Enrol	DO	Enrol	DO	Enrol	DO	Enrol	DO	Enrol	DO
2nd Sem. 1978-79												
BSA	174	-	116	1	77	-	97	1	-	-	464	2
BSADE	84	1	58	-	61	-	40	-	-	-	243	1
BSHE	19	-	4	-	13	-	14	-	-	-	50	-
BSAE	108	-	66	-	33	-	24	-	-	-	231	-
BSAB	61	-	36	-	26	-	-	-	-	-	123	-
BAS	2	-	25	1	26	-	-	-	-	-	53	1
BSF	1	-	1	-	10	-	-	-	-	-	12	-
Dismissed due to poor academic performance												18
Total	449	1	306	2	246	-	175	1	-	-	1,176	22
Summer 1979	None											
1st Sem. 1979-80												
BSA	100	5	147	1	92	-	130	-	-	-	469	6
BSADE	11	1	69	-	68	-	83	-	-	-	231	1
BSHE	6	-	22	-	5	-	18	-	-	-	51	-
BSAE	68	-	94	4	49	-	38	-	16	-	265	4
BSAB	27	-	56	-	32	-	26	-	-	-	141	-
BAS	1	-	12	-	39	-	28	-	-	-	80	-
BSF	6	1	1	-	10	1	9	-	-	-	26	2
Dismissed due to poor academic performance												7
Total	219	7	401	5	295	1	332	-	16	-	1,263	20

Dropout rate:

2nd Sem. 1978-79 = 1.87%
1st Sem. 1979-80 = 1.58%
Average = 1.72%

c. Graduates

Table 5 compares the number of graduates in 1979 with that of 1978. The decrease in BSA and BSAEd graduates can be attributed primarily to the phasing out of the Option B program of BSA and BSAEd, the latter having been replaced by BSADE. However, there was a marked increase in the number of HET graduates and the first batch of CPTC, thereby making the total number of graduates of 1978 and 1979 almost equal.

Table 5. Number of Graduates, 1978 and 1979.

Course	1978	1979	Increase (Decrease) No.	Increase (Decrease) %
BSA	67	42	(25)	37
BSAEd	38	19	(19)	50
BSADE	4	8	4	50
BSHE	10	7	(3)	30
BSAH	1	1	-	-
Sub-Total	120	77	(43)	(36)
HET	5	23	18	360
FRC	-	2	2	-
CPTC	-	20	20	-
Sub-Total	5	45	40	800
GRAND TOTAL	125	122	(3)	(2)

3. Personnel Development

a. Staff Profile

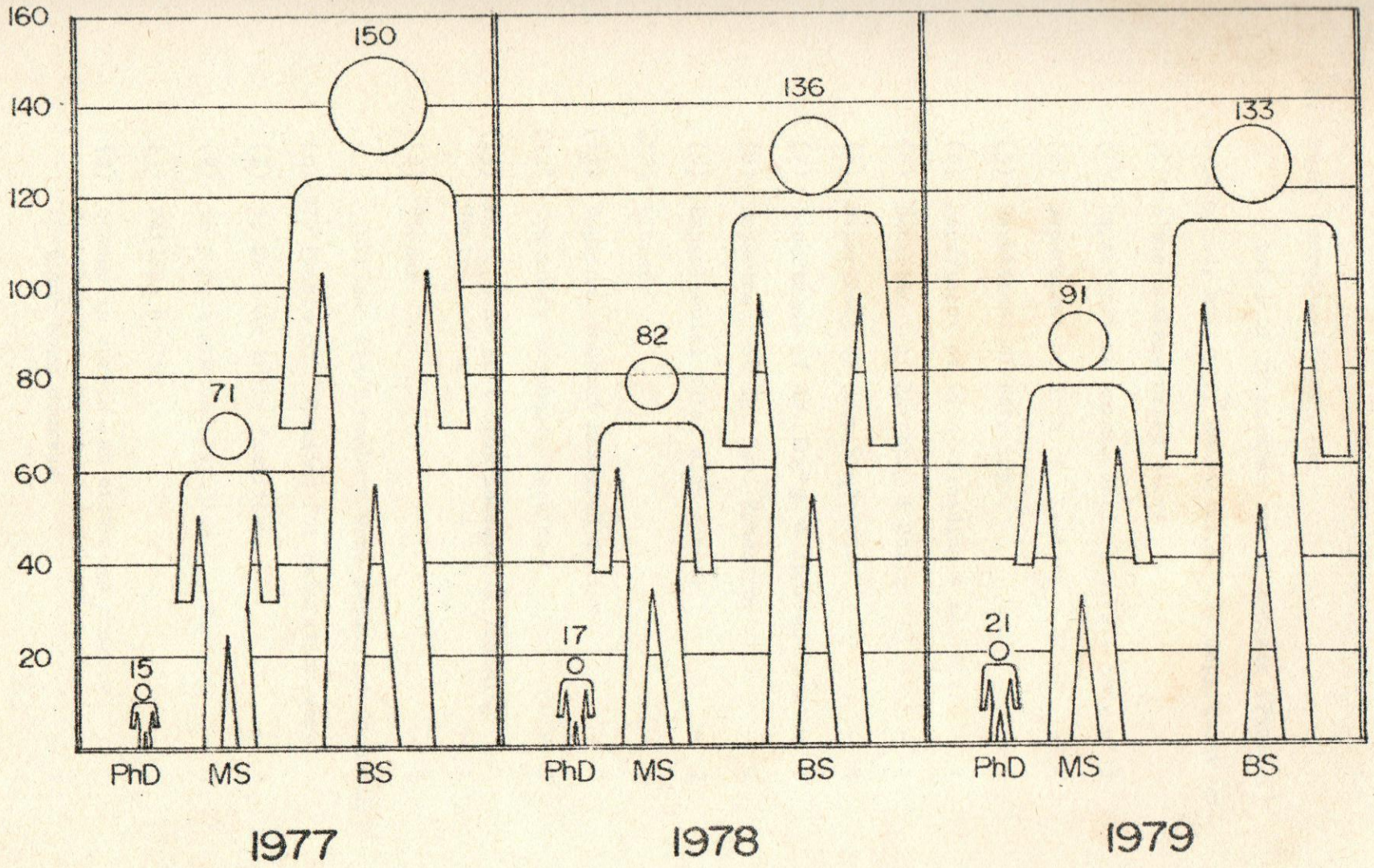
Table 6 reflects the academic strength of the different departments. Based on the number of staff members with graduate degrees, the department of Agricultural Development Education ranks first in strength followed by Crop Protection. Figure 2 shows the increase in the number of MS and PhD degree holders. This added strength resulted mostly from staff development rather than from recruitment.

Table 6. Profile of Academic Staff by Departments as of December 31, 1979.

Department/Office	PhD/EdD	MS/MA	BS	Total
Agronomy and Soils	1	6	12	19
Crop Protection	4	9	7	20
Plant Breeding & Ag. Bot.	-	3	6	9
Agricultural Economics	-	6	5	11
Agricultural Chemistry	-	1	8	9
Animal Science & Vet. Med.	2	6	6	14
Agricultural Engineering	-	10	11	21
Ag. Dev. Education	6	14	5	25
Home Science	-	7	3	10
Arts and Letters	2	7	5	14
Physical Education	-	-	5	5
Forestry	-	1	7	8
ERHS	-	13	22	35
CES	2	1	14	17
PRCRTC	1	4	7	12
RCRC	1	3	5	9
Administrative Offices	2*	-	5	7
Total	21	91	133	245

* President Bernardo and Vice-President Jesena

Figure 2. GROWTH OF ACADEMIC STAFF.



b. Staff Recruitment/Turnover

A total of 28 academic staff members (Table 7) were hired, mostly as substitutes. By department or office the numbers hired were:

(1) Department of Animal Science & Vet. Med. - 3
(2) Department of Arts & Letters - 2
(3) Department of Forestry - 3
(4) Department of Plant Breeding & Ag. Bot. - 1
(5) Department of Agronomy & Soils - 4
(6) Department of Crop Protection - 4
(7) Department of Ag. Eng'g. & Applied Math - 3
(8) Department of Ag. Dev. Education - 1
(9) Experimental Rural High School - 2
(10) Library - 1
(11) Regional Coconut Research Center - 1
(12) Community Extension Service - 1
(13) Philippine Root Crop Research & Training Center - 1
(14) ViCARP - 1

Thirteen staff members were separated from ViSCA in 1979 (Table 8). Reasons for separation were:

(1) to be near their families - 6
(2) to pursue graduate studies - 4
(3) failing health - 1
(4) change in curricular offerings thereby reducing the number of teachers needed to teach some courses - 2

Table 7. List of New Appointees at ViSCA, CY 1979.

	Name	Department	Academic Rank	Date Appointed
1.	A. Ayque	Animal Science & Vet. Med.	Instructor	9/7/79
2.	M. Angus	Animal Science & Vet. Med.	Asst. Instructor	10/2/79
3.	R. Cerilles	Arts and Letters	Instructor	4/17/79
4.	A. Bangi	Forestry	Instructor	11/14/79
5.	L. Guzman	Animal Science & Vet. Med.	Instructor	9/7/79
6.	E. Mangaoang	Forestry	Instructor	11/14/79
7.	V. Tanguilig	Ag. Bot. & Plant Breeding	Instructor	11/13/79
8.	F. Villamayor	Agronomy & Soils	Asst. Professor	7/16/79
9.	G. Apura	Arts and Letters	Instructor	6/1/79
10.	N. Arche	Crop Protection	Instructor	6/5/79
11.	M. Brigoli	Agricultural Engineering	Asst. Instructor	4/16/79
12.	B. Fabre	Agronomy & Soils	Instructor	5/16/79
13.	F. Flores	ERHS	Instructor	7/5/79
14.	M. Guzman	ERHS	Asst. Instructor	11/2/79
15.	R. Gonato	Crop Protection	Asst. Instructor	6/1/79
16.	R. Dedal	ViCARP	Asst. Instructor	4/16/79
17.	C. Jaime	Library	Senior Librarian	8/1/79
18.	A. Escasinas	Agronomy & Soils	Asst. Instructor	11/1/79
19.	A. Dingal	PRCRTC	Asst. Instructor	7/1/79
20.	J. Monter	RCRC	Res. Assistant	11/1/79
21.	B. Dargantes	CES	Asst. Instructor	9/1/79
22.	G. Sadsad	Ag. Dev. Education	Asst. Professor	5/1/79
23.	V. Remorosa	Crop Protection	Asst. Instructor	6/1/79
24.	R. Ong Sotto	Crop Protection	Asst. Instructor	6/11/79
25.	M. Odejar	Agricultural Engineering	Instructor	9/24/79
26.	G. Montecillo	Agronomy & Soils	Instructor	5/3/79
27.	J. Lambating	Agricultural Engineering	Instructor	6/10/79
28.	M. Bonita	Forestry	Instructor	6/6/79

Table 8. List of Staff Members Separated as of December 31, 1979.

	Name	Department	Academic Rank	Status	Reason for Leaving
1.	L. Corcino	Arts & Letters	Asst. Professor	Permanent	Transferred
2.	R. Paguntalan	Agricultural Engineering	Instructor	Temporary	Resignation
3.	H. Torreno	Crop Protection	Asst. Instructor	Temporary	Resignation
4.	L. Go	Forestry	Asst. Professor	Temporary	Appt. Expired
5.	L. Guasa	Arts & Letters	Instructor	Temporary	-do-
6.	J. Perez	Ag. Dev. Education	Asst. Instructor	Temporary	-do-
7.	L. Calungsod	ERHS	Instructor	Temporary	-do-
8.	E. F. Espina	ERHS	Instructor	Temporary	-do-
9.	N. Kabristante	ERHS	Asst. Instructor	Temporary	-do-
10.	E. Cinco	Home Science	Instructor	Temporary	Transferred
11.	A. Sazon	Agronomy & Soils	Instructor	Temporary	Resignation
12.	L. Salapa, Jr.	CES	Asst. Instructor	Temporary	Resignation
13.	E. A. Espina	Physical Education	Asst. Professor	Temporary	Transferred

c. Staff Development

(1) Graduate Studies

Table 9 shows the staff members from each department who were on study leave. Most academic departments had five staff members on leave with the exception of ADE which had 10. Of the 72 staff members on study leave, 45 were in technical fields (physical and biological sciences), 26 in social sciences, and 1 in library science. The sources of funding are reflected in Table 10.

Most of those pursuing doctorate programs were on ViSCA-World Bank fellowships while those on masteral programs were supported by PCARR and ViSCA. All of them were on study leave with pay.

Ten staff members got reinstated last year before finishing their degree programs. However, they were allowed to continue working on their theses on campus and therefore given light service loads. Their names are listed in Table 11.

Among the staff members included in Tables 9 and 11, 12 finished their degree programs before December 31, 1979. They were:

1. Compendio, Pedro Adonis
2. Dumaluan, David
3. Pedro, Roque de
4. Tongco, Alejandro
5. Tuanggang, Lorna
6. Pedro, Lorenza de
7. Ligason, Lucila
8. Aparra, Narciso
9. Marquez, Prudencio
10. Taganas, Ildefonso
11. Montesclaros, Juanita
12. Esguerra, Nelson

Table 9. List of Scholars on Study Leave by Departments.

Department/Name	Degree Pursued	Institution Attended	Date Started	Expected Completion	Funding Institution
Agronomy & Soils					
1. P. Pascual	Ph.D.	NCST/UPLB	7/79	8/82	WB Comb.
2. M. San Pascual	M.S.	UPLB	6/78	6/80	ViSCA
3. E. Alcober	M.S.	UPLB	1/79	10/80	ViSCA
4. A. Almendras	M.S.	UPLB	6/79	5/81	ViSCA
5. N. Gloria	M.S.	UPLB	6/79	5/81	ViSCA
Crop Protection					
1. R. Oro	Ph.D.	Univ. of Guelph	9/76	8/80	IDRC
2. L. Talaboc	Ph.D.	Penn. State Univ.	1/78	12/81	WB
3. F. Cariño	M.S.	UPLB	6/78	5/80	NSDB
4. J. Lim	M.S.	UPLB	6/77	5/80	ViSCA
5. N. Esguerra	Ph.D.	Univ. of Hawaii	1/77	11/79	WB
Agricultural Botany					
1. F. Saladaga	Ph.D.	Louisiana State Univ.	1/78	12/80	IDRC
2. M. Galinato	M.S.	UPLB	6/78	5/80	ViSCA
3. R. Sebidos	M.S.	UPLB	11/78	10/81	SEARCA
4. O. Capuno	M.S.	UPLB	6/78	10/80	PCARR
5. O. Diongson	M.S.	UPLB	11/78	10/80	ViSCA
Agricultural Economics					
1. E. Olan	Ph.D.	Kansas State Univ.	9/76	8/80	WB
2. N. Pascual	Ph.D.	NCSU/UPLB	9/77	10/80	WB Comb.
3. R. Aliño	M.S.	UPLB	6/77	10/80	ViSCA
4. A. Agarcio	M.S.	UPLB	6/79	5/81	ViSCA
5. L. Salundaguit	M.S.	UPLB	Sum/78	5/80	PCARR
Agricultural Chemistry					
1. L. Gloria	Ph.D.	Univ. of Newcastle Upon Tyne	9/77	8/80	WB
2. O. Monera	M.S.	UPLB	6/78	5/80	PCARR
3. D. Varron	M.S.	UPLB	6/78	5/80	PCARR
4. E. Landerito	M.S.	UPLB	6/76	5/79	ViSCA
Animal Science					
1. O. Posas	Ph.D.	Univ. of Arkansas	9/77	8/80	WB Comb.
2. S. Sanchez	Ph.D.	Iowa State Univ./UPLB	3/77	4/80	WB Comb.
3. R. Amarille	M.S.	Univ. of Queensland	11/77	8/80	Colombo Plan
4. M. Tangonan	M.S.	UPLB	6/78	5/80	PCARR
5. E. Parilla	M.S.	UPLB	6/79	5/81	ViSCA
Agricultural Engineering					
1. M. Escalante	Ph.D.	Iowa State Univ.	9/77	8/80	WB
2. C. Talaboc	Ph.D.	Univ. of Wisconsin	9/77	8/80	WB
3. A. Tongco	Ph.D.	Colorado State Univ.	9/79	8/82	WB
4. H. Celino	M.S.	AIT	6/78	5/80	ViSCA/AIT
5. P. Compendio	M.S.	AIT	8/77	5/79	ViSCA/AIT
6. R. Lopez	M.S.	UPLB	6/79	5/81	PCARR

Table 9. List of Scholars ... (continued)

Department/Name	Degree Pursued	Institution Attended	Date Started	Expected Completion	Funding Institution
Ag. Dev. Education					
1. R. Salcedo	Ph.D.	Univ. of Wisconsin	9/77	8/80	WB
2. A. Salcedo	Ph.D.	Univ. of Wisconsin	9/77	8/80	WB
3. J. Juego	Ph.D.	Univ. of Illinois	1/77	10/79	WB Comb.
4. J. Tan	Ph.D.	UPLB	6/78	3/81	WB Comb.
5. V. Canora	Ph.D.	Ohio State Univ.	9/77	8/80	WB
6. F. Saladaga	Ph.D.	Louisiana State Univ.	9/78	8/81	WB
7. A. Torres	M.S.	UPLB	11/77	3/80	ViSCA
8. J. Gapuz	M.S.	UPLB	6/79	3/80	ViSCA
9. O. Colis	Ph.D.	UPLB	11/78	10/81	WB Comb.
10. A. Yap	Ph.D.	UPLB	11/78	10/81	WB Comb.
Home Science					
1. L. Ponce	Ph.D.	Ohio State Univ.	9/78	8/81	WB
Arts & Letters					
1. J. Seroy	Ph.D.	UP Diliman	6/78	5/81	WB Comb.
2. P. Tan	Ph.D.	UP Diliman	6/78	3/81	WB Comb.
3. C. Silao	Cert.	UP Diliman	11/79	3/80	ViSCA
Forestry					
1. E. Nasayao	M.S.	UPLB	11/78	3/81	ViSCA
ERHS					
1. P. Marquez	M.S.	UPLB	11/77	6/79	ViSCA
2. R. Mercado	M.Agr.	UPLB	6/78	3/80	ViSCA
3. J. Subere	M.A.	USC	6/78	3/80	ViSCA
4. J. Dabuet	M.A.	MSAT	6/79	5/81	ViSCA
5. I. Taganas	M.A.T.	MSAT	11/77	6/79	ViSCA
CES					
1. E. Ponce	Ph.D.	Ohio State Univ.	9/77	8/80	WB
2. B. Dabuet	M.S.	UPLB	6/78	5/80	PCARR
3. E. Saz	M.S.	UPLB	6/78	5/80	PCARR
4. B. Amihan	M.S.	UPLB	11/78	5/80	PCARR
PRCRTC					
1. R. Talatala	Ph.D.	Univ. of Nebraska	9/78	10/81	WB
2. J. Bacusmo	M.S.	UPLB	11/78	10/80	ViSCA
3. M. Quevedo	M.S.	UPLB	6/79	5/81	ViSCA
4. N. Pido	M.S.	UPLB	6/79	5/81	ViSCA
5. A. Mariscal	M.S.	UPLB	11/78	10/80	ViSCA
6. D. Trigo	M.S.	UPLB	11/78	10/80	ViSCA
7. J. Pardales	M.S.	UPLB	6/78	3/80	PCARR
RCRC					
1. C. Carcallas	Ph.D.	Oregon State Univ/UPLB	1/78	12/80	WB Comb.
2. M. Pepino	Ph.D.	Ohio State Univ.	9/77	8/80	WB
3. B. Agarcio	M.S.	UPLB	6/79	5/81	ViSCA
4. L. Nasayao	M.S.	UPLB	11/79	10/81	ViSCA
5. G. Sensano	M.S.	UPLB	6/77	3/80	PCARR
Library					
1. R. Napiere	M.S.	UP Diliman	6/78	3/80	ViSCA

Table 10. Summary of Staff Scholarship in 1979 and Their Funding.

Degree	WB	IDRC	Colombo Plan	PCARR	ViSCA	SEARCA	AIT	NSDB	Total
Ph.D./Ed.D.	26	2	-	-	-	-	-	-	28
M.S./M.A.	-	-	1	11	28	1	2	1	44
Total	26	2	1	11	28	1	2	1	72

Table 11. List of Staff Members Working on Their Theses in ViSCA.

	Name	Degree Pursued	Department
1.	R. Agbisit	M.S.	Agronomy & Soils
2.	L. Evangelio	M.S.	Agronomy & Soils
3.	R. Jaime	Ph.D.	Ag. Dev. Education
4.	M. Reyes	M.S.	Forestry
5.	M. Bonita	M.S.	Forestry
6.	M. Avena	M.S.	Forestry
7.	T. Pagalan	M.A.	ERHS
8.	P. Aniceto	M.S.	ERHS
9.	T. Aparra	M.S.	ERHS
10.	F. Villamayor	Ph.D.	PRCRTC

(2) Seminars, Workshops, Conferences and In-Service Trainings

A number of staff members who did not pursue graduate studies during the year, either because they already had graduate degrees or they were slated for study leave at a later date, were encouraged to attend seminars, conferences, workshops or trainings to update their competencies in their fields of specialization. These refresher activities were professionally profitable most especially to those

conducting research. The various activities attended by staff members of the various departments were as follows:

Department of Agronomy & Soils

Seminar on New Performance Appraisal System, ViSCA, February 6-7, 1979

Paper presented "Multiple Cropping on Annual Crops" during BAEx Achievement Week, Alang-alang, Leyte, June 27-29, 1979

Agricultural Research and Development Workshop sponsored by ViCARP, ViSCA, July 13-14, 1979

Seminar on Soil Morphology - Soil Taxonomy Classification and Soils Researches on Agro-Technology Transfer, ViSCA, July, 1979

V International Root Crops Symposium, ViSCA, September 17-22, 1979

International Society for Tropical Root Crops (Taro and Cocoyam) Symposium, ViSCA, September 24-25, 1979

Semi-Annual Meeting of the Rice Technical Working Group of the Philippine Seed Board, Manila, November 6-7, 1979

Meeting for all the Study Leaders in the Cacao Breeding Project, UPLB, December 11-12, 1979

Department of Crop Protection

IX Congress of Plant Protection, Washington, D.C., August 5-11, 1979

V International Symposium on Tropical Tuber Crops, September 10-21, 1979

International Symposium on Taro and Cocoyam, ViSCA, September 23-24, 1979

FAO Technical Working Party on Coconut Crop Production, Protection and Processing, Manila, December 5-9, 1979

Annual Convention of the Crop Science Society of the Philippines, UPLB, April 23-27, 1979

Annual Convention of the Pest Control Council of the Philippines, Manila, May 3-6, 1979

Annual Meeting, Federation of Institutions in Marine and Freshwater Sciences, Cebu City, October 18-20, 1979

PCRDF Chairholders' Meeting, Cavinti, Laguna, November 14-17, 1979

National Commodity Team Meeting for Root Crops, PCARR, Los Baños, Laguna, December 19, 1979

1st PAE Regional Conference for the Visayas, ViSCA, March 3-5, 1979

Department of Plant Breeding & Agricultural Botany

V International Symposium in Root and Tuber Crops, Manila, October 14-18, 1979

International Symposium on Taro and Cocoyams, ViSCA, September 23-24, 1979

Department of Agricultural Economics

Seminar-Workshop on "Teaching Agricultural Economics and Courses " sponsored by ACAP-DSE, ViSCA, November 15-27, 1979

Resource Persons Development Program, ViSCA, February 14-16, 1979

Silver Anniversary of the Philippine Agricultural Economics and Development Association, PICC, Manila, July 27, 1979

Department of Agricultural Chemistry

Agricultural Research and Development Workshop sponsored by ViCARP, ViSCA, July 13-14, 1979

V International Symposium on Taro and Cocoyam, ViSCA, September 24-25, 1979

Department of Animal Science and Veterinary Medicine

Bakahang Barangay, sponsored by Central Bank, BAI, Tacloban City, March 20-24, 1979

Agricultural Research and Development Workshop sponsored by ViCARP, ViSCA, July 13-14, 1979

Lectures on Swine Production, Gacat and Hindang, Leyte, September, 1978; Caridad, Baybay, Leyte, November, 1979

In-Service Training on Bio-Tech Food Processing and Mushroom Culture, ViSCA, October 23 and November 26, 1979

Department of Agricultural Engineering and Applied Mathematics

Agricultural Engineering Research Workshop, Los Baños, Laguna

Seminar on Copra-Making Technology, Pagbilao, Quezon City

Seminar-Workshop on College Mathematics Teaching, Adamson University, Manila

Regional Mathematics Seminar-Workshop, DWU, Tacloban City

Department of Agricultural Development Education

Conference on Communication for Agricultural and Rural Development

Agricultural Research and Development Program

National Applied Rural Sociology Team Meeting

Rural Training for Peace Corps Volunteers

Seminar-Workshop for Rural Development Workers

Leadership Training on Rural Women

Special Course in Basic Photography, Manila

Department of Home Science

International Symposium on Taro and Cocoyam, ViSCA, September 23-24, 1979

Seminar on Integration of Population Concepts on Some Courses on BSA Curriculum, Cebu City, January 22-27, 1979

In-Service Training on Bio-Tech Food Processing and Mushroom Culture, ViSCA, October 23 and November 26, 1979

Department of Arts and Letters

Reorientation of Teaching English, Pilipino, and Other Languages in the Context of Philippine Bilingual Policy, UP Diliman, Quezon City, June 1-3, 1979

Convention of Spanish Teachers, Manila, October 26-27, 1979

Department of Forestry

ViCARP Seminar on Agricultural Research and Development, ViSCA, July 13-14, 1979

ERHS

Conference on Educational Technology, Baguio City, November 26-30, 1979

Regional Seminar on Teaching Mathematics at the Secondary Level, Tacloban City, October 18-20, 1979

Regional Science Fair and Quiz, Tanauan, Leyte, November 5-9, 1979

National Science Fair and Quiz, Zamboanga City, December 3-7, 1979

d. Staff Evaluation by Students

Semestral evaluation of the teaching performance of the faculty by their students was continued. As in the previous years, its purpose was not to punish those found needing improvement but to help them improve themselves by pinpointing their areas of weaknesses. The department head administered the evaluation of his teaching staff, while personnel of the Office of the Director of Instruction administered the evaluation of the department heads. This

was done during the last two weeks of classes in a given semester. As much as possible, teachers were evaluated in general education or foundation subjects where the need for improvement in teaching was presumed to be greatest.

Majority of the teachers showed marked improvements in performance based on evaluation ratings and on comments of students on the way the teachers handled their classes. Table 12 compares the average departmental ratings for the past three years.

Comparing last year's ratings with those of the previous two years, only two departments had lower ratings in 1979 compared to their 1977 ratings and, two departments. when compared with 1978 ratings. The lower performance rating of few departments last year (compared with their performance in 1978 and 1977) might have been due to the poor performance of some teachers who joined the staff of said departments last year who, unlike others, had not had the benefit of the previous evaluations. Nonetheless, considering that the highest rating possible was 1.0 and the lowest was 5.0, it can be said that the general performance of the teaching staff was very satisfactory and, as a whole, much better last year than in the previous two years.

Table 12. Summary of Teaching Performance Evaluation Ratings for Three Years, 1977, 1978 and 1979, by Departments.

	Department	Mean Rating 1977	1978	1979
1.	Agronomy & Soils	2.14	1.89	1.79
2.	Crop Protection	1.78	1.78	1.64
3.	Plant Breeding & Ag. Bot.	1.89	1.90	1.67
4.	Agricultural Economics	1.92	2.02	1.84
5.	Agricultural Chemistry	1.78	1.92	1.82
6.	Animal Science & Vet. Med.	2.04	1.77	1.76
7.	Agricultural Engineering	1.91	1.80	1.77
8.	Ag. Dev. Education	1.82	1.69	1.66
9.	Home Science	1.80	1.78	1.87
10.	Arts & Letters	1.81	1.77	1.66
11.	Physical Education	1.87	1.59	1.58
12.	Forestry	2.61	1.70	1.89
	Average	1.96	1.80	1.74

e. Awards

As in 1978, faculty members who excelled in teaching performance as gauged by their respective students were also honored in 1979. The first four honorees listed (Table 13) were also recipients of similar awards in 1978.

Table 13. Recipients of Merit Awards, Academic Staff.

	Name	Department	Kind of Award
1.	Dely P. Gapasin	Crop Protection	Outstanding Faculty
2.	Emiliana N. Bernardo	Crop Protection	Outstanding Faculty
3.	Lelita R. Gonzal	Ag. Botany	Meritorious Service
4.	Alicia S. Go	Arts & Letters	Meritorious Service
5.	Paciencia P. Milan	Crop Protection	Meritorious Service
6.	Manuel K. Palomar	Crop Protection	Meritorious Service
7.	Catherine C. Villanueva	ERHS	Meritorious Service
8.	Camilo D. Villanueva	Ag. Economics	Meritorious Service

f. Computation of Faculty Workload

A new set of guidelines for determining faculty workload was approved by the Board of Trustees per Board Resolution No. 40 dated October 9, 1979. These new guidelines were based largely on the "Guidelines for Determining Faculty Workload" for ACAP member-institutions. However, they still include many important provisions of the old guidelines.

Among the important revisions and additions to this new set of guidelines were the following:

(1) Reducing the minimum workload from 17 to 15 and the maximum from 25 to 23 units.

(2) Increasing the workload unit equivalent for laboratory contact hour from 0.6 to 0.8 per hour.

(3) Increasing the workload unit per student from .01 to .02 for lecture class and .02 to .03 for laboratory class. Unlike before only students in excess of the prescribed maximum number of students per class were considered for additional workload units.

(4) Decreasing the maximum teaching load allowable for academic heads and other college officials from 6 to 5 units.

(5) Increasing the minimum workload unit for varsity coach from 0.5 to 1 per team.

(6) Increasing the maximum workload unit allowable for project-in-charge from 5 to 10.

(7) Giving of workload units to some activities not provided for in the previous guidelines such as:

(a) Coordination of the activities in several class sections of one course.

(b) For publication:

	Technical	Semi-Popular	Popular
Editor	4	3	2
Associate Editor	-	2	1.5
Contributor	-	0.75	0.5
Editorial Board Member	1	-	-

(c) Special assignment of faculty members - workload unit equivalent to be determined by the Director of Instruction.

g. Payment of Honoraria for Work Overload

Board of Trustees Resolution No. 40 dated October 9, 1979 authorized payment of work overload starting second semester 1979-80. Activities to be considered for overload payment were teaching, research (for which a faculty member is not receiving honorarium) and student thesis advising.

Formula: $MH = \frac{MS}{23} \times$ No. of units, or

Monthly Honorarium equals Monthly Salary over Twenty-Three times the Number of Units*

*No. of units refers to the workload units above 23 units. (the maximum number of workload units per semester)

Application:

An Assistant Professor receiving a monthly salary of ₱1,211.00 with a total teaching workload units of 26:

$$MH = \frac{MS}{23} \times \text{No. of units}$$

$$= \frac{₱1,211}{23} \times 3$$

$$= ₱52.65 \times 3$$

$$= ₱157.95$$

Note: For less than one month of service, honorarium shall be computed using the formula

$$\frac{MH}{30} \times \text{No. of days (inclusive of Sundays/Holidays)}$$

h. Technical Consultants

Dr. Ranjith Mahindapala of the Coconut Research Institute of Sri Lanka served as World Bank Consultant in the Department of Crop Protection from April to June 1979. He helped prepare syllabi for new courses and improve existing ones. He also offered a course in Epidemiology and assisted in planning some research programs in crop protection.

To improve the Bachelor of Animal Science (BAS) curriculum, Dr. Berl Koch of Central Luzon State University, Muñoz, Nueva Ecija, was invited by the Department of Animal Science and Veterinary Medicine as its consultant. He helped improve the curricular offerings of the department.

4. Curriculum Development

a. Offering of Two New Degree Programs

(1) Bachelor of Animal Science

The BSA degree major in Animal Science was developed into Bachelor of Animal Science with majors in Animal Husbandry and Animal Health. It was separated from BSA to allow inclusion of additional courses needed by those specializing in animal science. In addition to animal husbandry, training for students in animal health was added to augment the limited number of veterinarians servicing the poultry, hog and livestock industry particularly in the Visayas.

(2) Bachelor of Science in Forestry

The return of some staff members in forestry with graduate degrees, the presence on campus of some foresters connected with the Forest Research Institute (FORI), and the pressing need for more forestry graduates pushed the implementation of the BSF program in June 1979. It should be mentioned that this program was approved about 4 years ago.

b. Implementation of the BSA Major in Agricultural Chemistry

Some third year BSA students were allowed to major in Agricultural Chemistry starting June when it was felt that the needed instructional facilities and staff expertise were already available. These resources will be improved further with the expected arrival of more laboratory

equipment and the return in 1980 of additional staff members with graduate degrees in Chemistry.

c. Courses Instituted, Revised or Abolished

For BSA major in Horticulture:

The following courses were added as major core courses:

Ag. Bot. 31 - Plant Breeding
Hort. 37 - Post-Harvest Physiology
Hort. 35 - Plantation Crop Production & Management

Courses transferred from core to elective courses:

Hort. 34 - Plant Propagation & Nursery Management
Soils 31 - Advanced Soil Fertility

Courses revised:

Hort. 35 - Plantation Crop Production & Management I
Hort. 36 - Plantation Crop Production & Management II
Hort. 48 - Plantation Crop Products

Courses abolished because of duplication:

Hort. 36 - Abaca
Hort. 41 - Coconut

For BSA major in Soil Science:

Courses added as major core courses:

Soil Sci. 32 - Soil Physics
Soil Sci. 36 - Agricultural Geology
Ag. Bot. 42 - Field Plot Technique and Experimental Design

Courses added as elective major courses:

Ag. Bot. 36 - Plant Nutrition
Ag. Chem. 33 - Quantitative Inorganic Chemistry
Agron. 32 - Legumes
Agron. 36 - Cereals
Agron. 44 - Pasture & Forage Crops
Agron. 46 - Root Crops
Hort. 35 - Plantation Crop Production & Management
Hort. 31 - Tropical Olericulture
Hort. 46 - Pomology & Orchard Management

Courses revised:

Soils 37 - Rocks and Minerals was changed to
Soil Science 36 - Agricultural Geology

For BSAE (Fifth year)

Courses offered for the first time:

AE 51 - Irrigation Engineering
AE 53 - Agricultural Machine Design
AE 55 - Environmental Control Engineering
AE 57 - Refrigeration Engineering
AE 52 - Rural Electrification
AE 54 - Water Management Engineering
AE 56 - Agricultural Machinery
AE 58 - Crop Processing

For BSADE:

The following courses were proposed for institution:

Ag. Ed. 36 - Principles of Education
Ag. Ed. 43 - Non-Formal Education Program in Agriculture
Ag. Ed. 45 - Principles and Methods of Teaching Agriculture in the Elementary Schools
Ag. Ed. 47 - Educational Programs and Monitoring System
Ag. Ed. 49 - Administration and Supervision
Ag. Ed. 50 - Planning Instructional Programs
RDE 98 - Research Planning and Manuscript Preparation
Ag. Ext. 49 - Administration and Supervision in Extension Education
Dev. Com. 32 - Educational Broadcasts
Dev. Com. 50 - Management and Production of Community Newspaper
Dev. Com. 41 - Science Reporting and Feature Writing

Courses proposed for abolition:

Ag. Ext. 41 - Teaching Adults and Out-of-School Youths
Ag. Ed. 43 - Educational Research
Ag. Ed. 45 - Observation and Participation

Courses proposed for revision:

Ag. Ext. 36 - Philippine Rural Society to read
Ag. Ext. 36 - Social & Cultural Change
Ag. Ed. 100 - Student Teaching Program to read
Ag. Ed. 100 - Observation and Participation

Dev. Com. 36 - (Communication Campaigns and Programs) was added to the courses required for the Ag. Ext. Curriculum

For Arts & Letters:

In compliance with MEC Order No. 22, dated July 21, 1978 increasing the number of units in Pilipino from 6 units to 12 units, two new courses in Pilipino had been instituted and offered:

Pilipino 13 - Panunuring Pagbabasa at Pagsulat ng Sanaysay
Pilipino 14 - Panunuring Pampanitikan

Courses for revision:

Speech 11 - Effective Speech to read Speech Communication
Social Sci. 13- (Life & Works of Rizal) to read Social Science 12

For MSADE and MADE:

Courses offered for the first time:

ADE 211 - Advanced Educational Psychology
ADE 222 - Social Science Research
Ag. Ext. 216 - Farmer Education Program in Agriculture
Ag. Ext. 215 - Rural Social System
Ag. Ext. 218 - Ext. Strategies for Rural Development
ADE 213 - Modern Educational Theories & Principles
Ag. Ext. 217 - Teaching Farmer Classes in Agriculture
Stat. 221 - Social Science Statistics

Proposed Courses:

Agron. 110 - Field Crop Production & Management
Agron. 120 - Plantation Crop Production & Management
Agron. 130 - Root Crops Production & Management

d. Proposed New Degree Program

(1) Bachelor of Science in Experimental Statistics

There is a great demand for graduates of BS Experimental Statistics who will be most qualified to serve the needs of research centers and agencies,

academic institutions, and other entities. It is planned that graduates of this degree program will have intensive training in experimental statistics as applied to agriculture, forestry and rural development. They will be eligible for employment as statisticians, teachers and researchers. To date, there is no single institution in the country offering this course. The degree program was developed last year and its implementation is projected to start June 1980.

e. Curricular Offerings:

(1) Advance Education

Master of Science in Agricultural Development Education (MSADE)
Master of Arts in Development Education (MADE)
with majors in:
* Agricultural Development Education
* Agricultural Extension

(2) Higher Education

Four-Year Degree Programs:

Bachelor of Science in Agriculture (BSA)
with majors in:
* Agricultural Botany and Plant Breeding
* Agricultural Chemistry
* Agricultural Economics
* Crop Protection
* Horticulture
* Agronomy
* Soils

Bachelor of Animal Science (BAS)
with majors in:
* Animal Husbandry
* Animal Health

Bachelor of Science in Home Economics (BSHE)
with majors in:
* Home Economics Extension
* Secondary Home Economics Teaching

Bachelor of Science in Agricultural Development Education (BSADE) with majors in:
* Agricultural Education
* Agricultural Extension
* Development Communication

Bachelor of Science in Agri-Business (BSAB)
with majors in:
* Business Management
* Livestock Enterprise Management
* Crop Enterprise Management

Bachelor of Science in Agricultural Engineering (BSAE)

Bachelor of Science in Forestry (BSF)
with majors in:
* Forest Resource Management
* Forest Biological Science

Two-Year Nondegree Programs

Forest Ranger Course

Home Economics Technician Course

(3) Secondary Education

Agricultural Science Curriculum

B. Secondary Education - The Experimental Rural High School

Another component of ViSCA's instructional program is the Experimental Rural High School which, for the past year, tried to maintain and achieve its goal of providing assistance in the region on innovations for effective and relevant secondary education.

In the beginning, there were only two curricula which were offered, namely vocational agriculture for boys and vocational

homemaking for girls. With the conversion of this institution into a state college, the agricultural science curriculum, a college preparatory in nature, was added. However, after five years of operation, studies on the performance of graduates of the two vocational curricula showed that majority of them wanted to continue their studies in college rather than going into farming or putting up an enterprise.

Since results of the studies revealed that the vocational curricula had outlived their usefulness, revision was made this year retaining and making the agricultural science curriculum both vocational and college preparatory in nature.

1. Objectives

   a. To provide assistance in the region on innovations for effective and relevant secondary education;

   b. To produce high school graduates adequately prepared for college education or profitable vocational employment; and

   c. To help in the implementation of some BS degree programs of ViSCA by serving as a laboratory for college students in Agricultural Development Education and Home Science Departments.

2. Student Development

   a. Enrolment

      From the time of its implementation, the Experimental Rural High School has always practiced selective but democratic admission and maintained its enrolment population

at the 500 level. Table 14 shows that the student enrolment for school year 1979-80 was 474 students with the male (55.1%) slightly higher than the female (44.9%). Table 15 reflects the student enrolment for 1979 summer classes. Students who failed in some subjects were given the opportunity to move to the next level without back subject by attending summer classes. This has also minimized the number of irregular students.

Although vocational agriculture and vocational homemaking were already integrated with the agricultural science curriculum, there were still 155 students enrolled in the two curricula. The old curricula has to be phased out gradually until all of the students have graduated.

b. Distribution of Students by Province

Majority (87.1%) of the high school students came from the province of Leyte. Most of them were from the neighboring towns and barrios of ViSCA. The province of Southern Leyte had 10.1 percent, Cebu 1.5 percent and Mindanao and Luzon 1.1 percent of the students (Table 16).

c. Financial Assistance

(1) Scholarship

A total of 51 students were granted scholarships during the year. Four of whom were full scholars receiving ₱80.00 monthly stipend while the rest were partial scholars entitled to ₱40.00 a month. Both groups enjoyed free tuition fees.

Table 14. ERHS Enrolment for SY 1979-80.

Year/Curriculum	Male	Female	Total
1st Year			
Agricultural Science	73	77	150
2nd Year			
Agricultural Science	68	46	114
3rd Year			
Agricultural Science	11	17	28
Vocational Agriculture	58	-	58
Vocational Homemaking	-	29	29
4th Year			
Agricultural Science	11	16	27
Vocational Agriculture	40	-	40
Vocational Homemaking	-	28	28
Total	261	213	474

Table 15. ERHS Enrolment for Summer 1979.

Year	M	F	Total
1st Year	18	-	18
2nd Year	42	27	69
3rd Year	27	9	36
4th Year	4	7	11
Total	91	43	134

Table 16. ERHS Enrolment Distribution by Province .

Province	No.	%	Rank
Leyte	413	87.1	1
Southern Leyte	48	10.1	2
Cebu	7	1.5	3
Samar	1	0.2	5
Others (Mindanao & Luzon)	5	1.1	4
Total	474	100.0	

(2) ViSCASELF and Student Labor

The ViSCA Student Emergency Loan Fund had extended financial assistance of ₱940.00 to 16 high school students and a total amount of ₱4,171.00 for work-study grants to 34 students.

d. Housing

Because of lack of facilities, only 26.6 percent of the high school student population were accommodated in the dormitories. Thirty-four percent were in the Boys' Dorm while 66.0 percent were in the Girls' Dorm. A number of students were living on campus with the faculty members and in cottages built by themselves.

e. Dropout

The dropout rate was 15.0 percent less than that of 1978-79. As usual, the biggest number of dropouts came from first year level. Table 17 shows the number of dropouts for two school years.

Table 17. Number of ERHS Dropouts for SY 1978-79 and SY 1799-80.

Year	1979-80			1978-79		
	M	F	Total	M	F	Total
1st Year	9	7	16	17	2	19
2nd Year	8	2	10	11	1	12
3rd Year	7	-	7	4	1	5
4th Year	1	-	1	2	2	4
Total	25	9	34	44	6	40

Bernardo also received a Science Club Junior Scientist Research Grant which will qualify him to participate in the 1980 London International Youth Science Forthnight scheduled from July 30 to August 30, 1980.

In the regional competition, the following were the winning participants and their projects:

(1) Science Fair - Rex Bernardo - Special Project Exhibitor

Project: Cyto-Mutagenic Effects of Certain Phyto-extracts Upon Living Tissues

Clyde Colis - Most Outstanding Science Project

Project: Growth and Yield Response of Sweet Potato (Ipomoea batatas (l) Poir) to Sucrose and Coconut Water Soaking Treatments

Raul Rene Yap - Most Outstanding Science Project

Project: The Effect of Variable Electric and Magnetic Field Intensities on the Gross Weight Gain of Chicken

(2) Quiz - Veronica Escasinas - 3rd Prize

Clyde Valenzona - 4th Prize

Other notable achievements of the Experimental Rural High School for this year were the following:

(1) Dan Bernardo, a graduate of the ERHS, topped the accreditation examination for Integrated Academic Program in Sciences (INTAPS), validating 26 units, thus beating the best from the University of the Philippines and the science high schools all over the country.

(2) The ERHS cadet corps copped 1st place among 23 competing units during the annual CAT-1 tactical inspection.

3. Personnel Development

a. Staff Profile

The Experimental Rural High School has 34 regular academic staff members with 12 holding masters degrees. This excludes 9 casual workers who are handling administrative jobs. Table 18 shows the distribution of academic staff according to the subject they teach. The Communication Arts and Social Science Section has the most number of staff compared to the other sections.

Table 18. Distribution of ERHS Regular Staff According to Major Subjects They Teach.

Section	B.S.	M.S.	Total
Communication Arts & Social Sciences	5	5	10
Math & Sciences	6	3	9
Home Science & Homemaking	5	1	6
Vocational Agriculture	4	2	6
YDT & CAT	2	-	2
Administrative (Principal)	-	1	1
Total	22	12	34

b. Faculty Development

(1) Graduate Degree Program

In addition to the 5 staff members who are pursuing MS/MA degrees, the ERHS sent one more in 1979.

However, at the end of the year, two reported for duty after the completion of their masteral work and another two, also reported for duty but are still on the process of completing their thesis work. The list of the staff under faculty development is given in Table 19 below.

Table 19. List of ERHS Staff under Faculty Development.

Name	Degree Pursued	Institution Attended	Status
Marquez, Prudencio	M.S.	UPLB	Completed
Taganas, Ildefonso	M.A.T.	MSAT	Completed
Aparra, Teresita	M.S.	UPLB	Lacking Thesis
Pagalan, Tempura	M.A.	USC	Lacking Thesis
Subere, Josefina	M.A.	USC	Ongoing
Dabuet, Jovita	M.A.	MSAT	Ongoing

It is worth mentioning that two of the ERHS staffers were able to finish their theses while on active teaching, thus fulfilling the requirements for a masteral degree. They were Ms. Juanita Montesclaros and Ms. Catherine Villanueva, instructors in Pilipino and Social Science, respectively.

(2) Seminars, Workshops and Conferences

Besides scholarship grants in the graduate level, faculty members and administrative staff had also been encouraged to attend in-service training through seminars, workshops, conferences and science fair and quiz. Those which attended are shown in Table 20.

Table 20. Seminars, Workshops, Conferences and Science Fair & Quiz Attended by ERHS Staff.

Nature	Date		No. of Participating Staff
1. Conference on Educational Technology	11/26-30/79	Baguio City	1
2. Regional Seminar on Teaching Mathematics at the Secondary Level	10/18-20/79	Tacloban City	3
3. Regional Science Fair and Quiz	11/5-9/79	Tanauan, Leyte	3
4. National Science Fair and Quiz	12/3-7/79	Zamboanga City	2
5. Workshop on Local Guidance Program	9/22/79	ViSCA	1
6. Seminar-Workshop on New Performance Appraisal System (NPAS)	3/79	ViSCA	3

c. Awards

In a schoolwide selection for the outstanding staff members of ViSCA for 1979, two of ERHS staff were recipients of meritorious awards. The awardees were Ms. Catherine C. Villanueva for academic teaching and Ms. Paz L. Abapo for the clerical category.

4. Curriculum Development

Since its operation, the Experimental Rural High School, has undergone many changes. These ranged from revisions and additions of new subjects to a complete revamp of the high school curriculum.

For this year, the major change was the integration of the two vocational curricula and the old agricultural science curriculum into one - the New Agricultural Science - which is both college and vocational preparatory. It is college preparatory in the sense that emphasis is given to academic subjects (English, Math, Chemistry and Physics) and that elective courses are included to give the students a feel of the possible fields of specialization on degree programs they may pursue in college. The inclusion of vocational subjects during the first three years and a summer "practicum" that will provide students the management and manipulative skills in operating an enterprise makes it also vocational preparatory in nature.

The experimental feature is also incorporated in the curriculum by including extra meeting hours in the academic subjects where students are deficient or slow. Students are regrouped each year according to their performance in the yearly evaluation. This will enable the teachers to take the necessary corrective measures to remedy the deficiencies until the students graduate.

The other instructional developments of the ERHS this year included the following:

a. Increased and improved teaching materials
b. Conducted extra English classes to first year students and extra meeting to 3rd year vocational section.

c. Conducted extension classes in Mathematics.

d. Implemented bilingualism in some social science classes.

e. Sponsored a local agro-science fair and quiz.

f. Sent staff and students to regional and national science fair and quiz.

II. RESEARCH

ViSCA's research program is aimed at improving the lot of the rural poor and increasing the income of small farmers. It is commodity-oriented following the national priorities set up by PCARR with due consideration to regional needs. The approach is interdisciplinary, interdepartmental and interagency.

A. The Visayas Coordinated Agricultural Research Program (ViCARP)

For the first time, the Visayas Coordinated Agricultural Research Program, or ViCARP for short, has been organized and made operational. Unlike the Southern Mindanao Agricultural Research Center (SMARC) in USM, Kabacan, North Cotabato or the Central Luzon Agricultural Research Center in CLSU, Muñoz, Nueva Ecija which are center-oriented, ViCARP focuses on cooperative research programs involving BPI, BAI, FORI and other agricultural colleges and universities in Regions VII and VIII.

1. The objectives of ViCARP are as follows:

   a. To make the agricultural Research and Development (R & D) program attuned to regional conditions and needs.

   b. To sharpen the focus on high priority regional problems in agriculture and rural development.

   c. To decentralize decision-making and expedite implementation of action-oriented R & D projects.

   d. To promote better cooperation and improved communication among regional units and government line agencies.

   e. To evolve a system of coordination and management of R & D projects within the region.

2. Essential Components/Cooperating Units

Under ViCARP, the essential components/cooperating units have been identified as follows:

a. Regional Research Center (RRC) - At present, ViSCA is playing the key role as the regional research center for Regions VII and VIII.

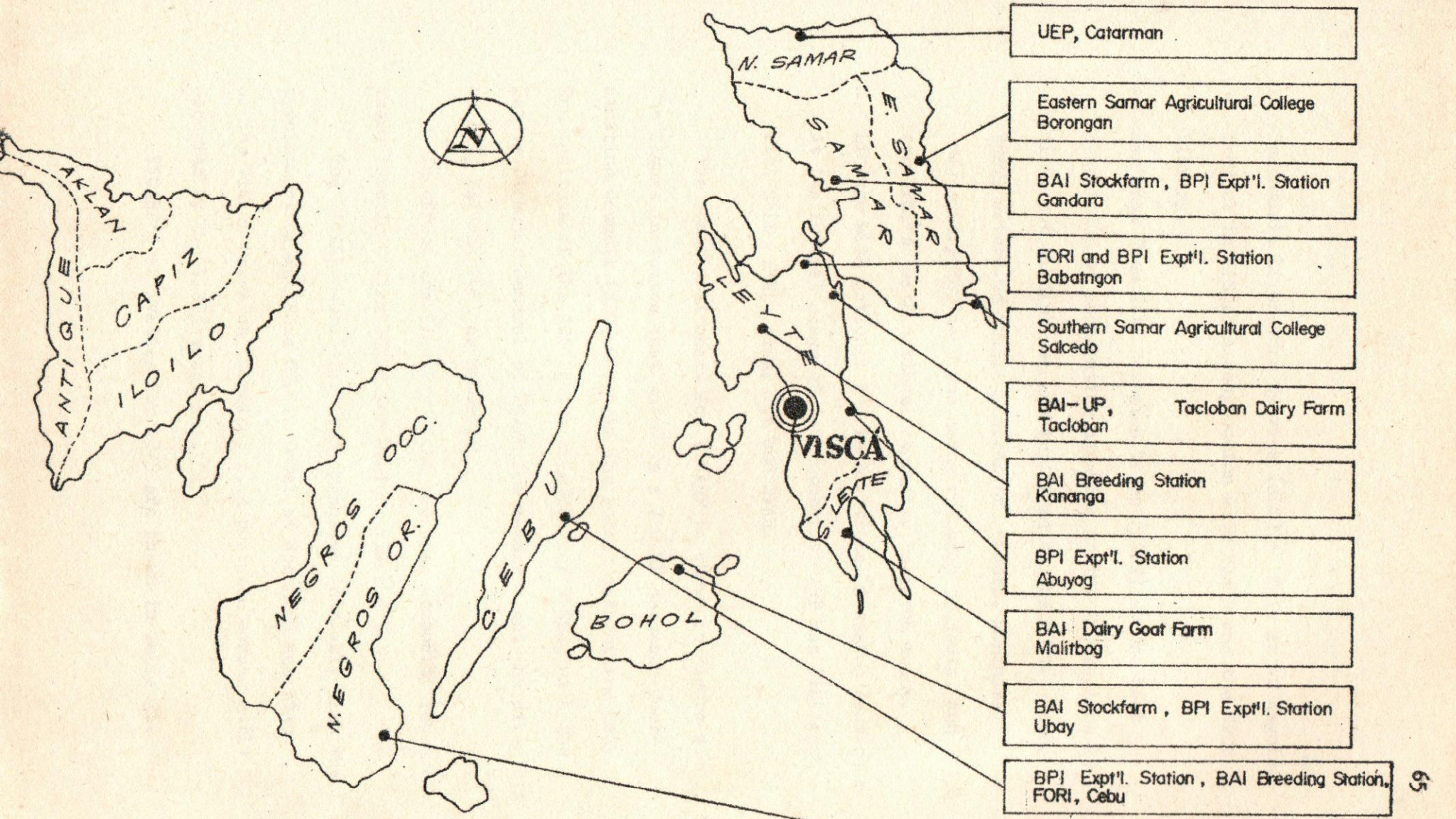
b. R & D Training Center (RDTC) - In view of its component research staff and the availability of training facilities at the RTC-RD on its campus, ViSCA has been identified as the RDTC of ViCARP.

c. Applied Communication Unit (ACU) - The Extension Research and Development Division (ERDD) under the ViSCA Director of Extension shall double up as the ACU of ViCARP. This is in line with PCARR's new program of establishing ACU's in major agricultural research centers in the country.

d. Technology Verification Units (TVU) - Selected experiment stations of different government line agencies (BPI, BAI, FORI) and other schools as well as farm of farmer cooperators serve as TVUs. Figure 3 indicates ViCARP's cooperating R & D stations.

e. Input Development Units (IDU) - The regional R & D system which is ViCARP is not complete without IDUs. These units are cooperators which shall take care of seed production, livestock dispersal, agricultural chemical supply, irrigation systems development and provision of credit.

Figure 3. VICARP COOPERATING R & D STATIONS.



f. Scientific Literature Service (SLS) - This is an ongoing project in ViSCA in cooperation with PCARR and the UPLB Library.

g. Regional Commodity Research Teams (RCRT) - The best scientists of cooperating agencies in the two regions in different disciplines are appointed to the RCRT. These RCRTs determine priority areas of concern, minimize unnecessary duplications among research projects, and coordinate with national commodity research teams.

h. Linkage with national and international research centers - At its initial stage of development ViCARP has linkages with UPLB, IRRI, AIDA, PCA and BFAR.

The functional chart for ViCARP is shown in Figure 4. The figure indicates that there is a ViCARP Research Coordinating Council (RCC) which is the policy determining body. The chairman of the RCC is the president of ViSCA, with the Deputy Director General of PCARR for research and the directors of BPI, BAI and FORI as members.

In effect the ViCARP RCC and regional commodity research teams function like PCARR for Regions VII and VIII.

The ViCARP Secretariat was organized initially with the appointment of Ms. Rosa Ofelia Dedal as Research Assistant of the ViCARP Research Coordinator, a position concurrently occupied by the ViSCA president.

ViCARP's activities for 1979 are shown in Table 21.

Figure 4. VICARP FUNCTIONAL CHART.

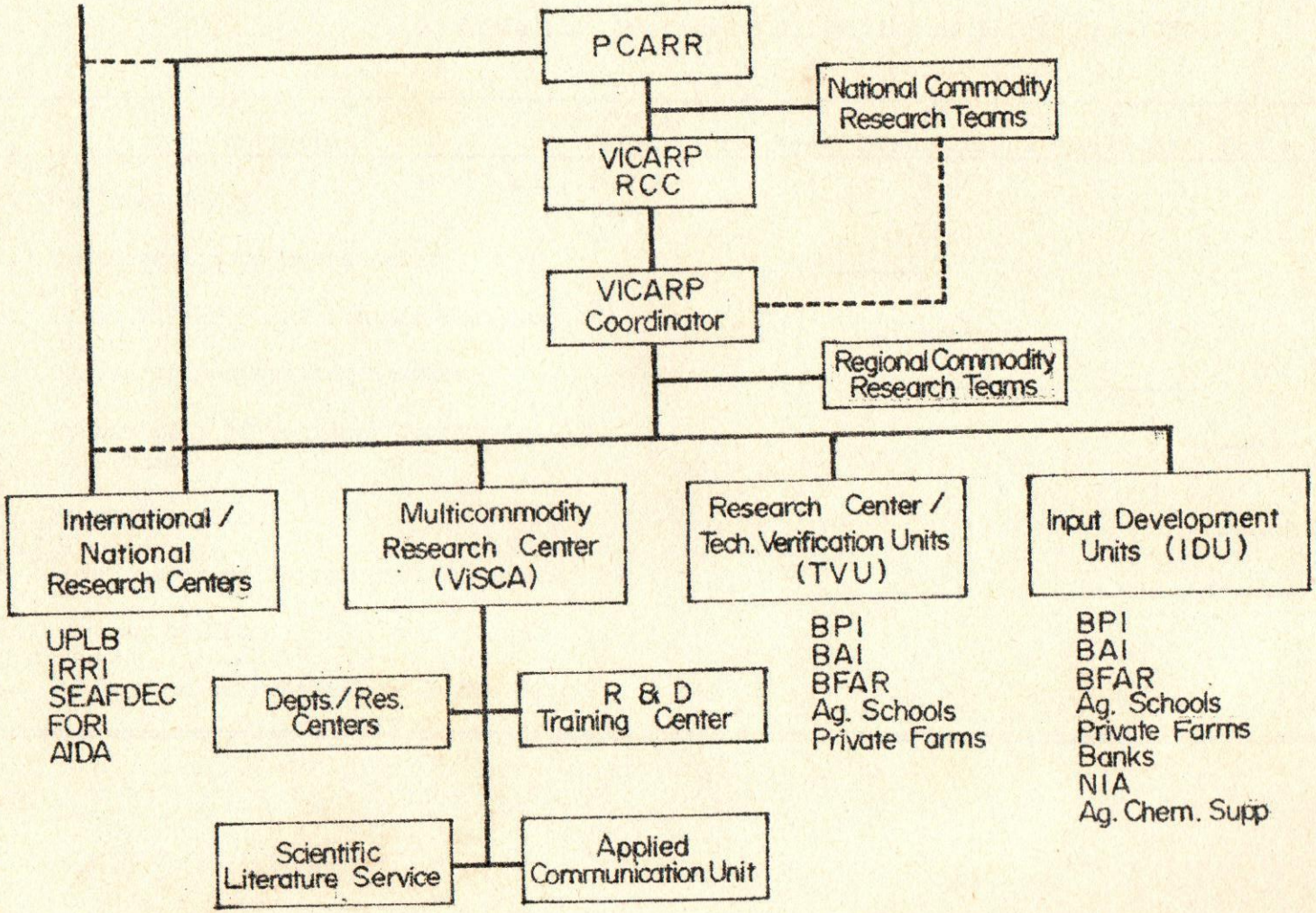


Table 21. Program of Activities of ViCARP for 1979.

Activity	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1. Meeting of RCC	———									
2. Organization of Secretariat			———							
3. First ViCARP R & D Seminar-Workshop				———						
4. Survey of Cooperating Stations				———	———	———				
5. Appointment of Regional Commodity Team							———			
6. Meeting of RCC							———			
7. Development of Coordinated Research							———	———		
8. Meeting of RCC								———		
9. Submission of Proposal to PCARR									———	

3. Number of Completed, Ongoing and Proposed Research Projects

Table 22 presents the total number of completed, ongoing, and proposed research projects of the staff and students of ViSCA for 1979, 1980 and 1981.

A total of 56 researches were completed in 1979, about 40 percent of which were staff researches and 60 percent were student researches. Even as a large number of staff and student research projects (273) are still ongoing, 57 new research projects are proposed to be started in 1980, if funds could be made available.

Commoditywise, root crops had the lion's share of research projects, with 42.79 percent of the total, followed by coconut with 15.62 percent. Applied rural sociology and socio-economics researches account for 14.72 percent of the total number of research projects.

The list of research projects are in Appendix 1.

4. Research Fund

In 1979, ViSCA had a total budget of ₱3,419,314. In 1980, funds available for research is a little less (₱2,510,821) than that in 1979, but a substantive amount is requested for 1981 (₱15,594,553). For the breakdown of these amounts by commodity, see Table 23.

5. Publications of the Staff

A total of 13 technical papers and 38 semi-popular publications are shown in Appendix 2. Most of the publications were on root crops.

Table 22. Total Number of Completed, Ongoing and Proposed Researches of the Staff and Students of ViSCA*.

Commodity	Completed (1979)		Ongoing (1979)		New Research Proposals		Total	
	Staff	Students	Staff	Students	1980	1981	No.	%
Root Crops	17	8	80	42	25	113	285	42.79
Coconut	2	5	25	16	1	55	104	15.62
Abaca	-	1	4	1	3	12	21	3.15
Corn and Sorghum	-	2	5	3	8	23	41	6.16
Legumes	-	3	7	3	3	8	24	3.60
Vegetables	-	1	1	-	6	25	33	4.96
Rice	-	2	4	2	-	-	8	1.20
Sugarcane	-	-	1	-	-	-	1	0.15
Poultry	-	1	-	6	-	6	13	1.95
Livestock	-	1	2	11	-	3	17	2.55
Forestry	2	-	1	-	-	3	6	0.90
Fruits	-	-	-	-	1	1	2	0.30
Cereals	-	-	-	-	1	1	2	0.30
Cacao	-	-	4	2	-	-	6	0.90
Aquaculture	-	1	-	-	-	-	1	0.15
Socio-Economics	-	3	7	25	7	6	48	7.21
Applied Rural Sociology	1	6	15	6	1	21	50	7.51
Soil and Water Resources	-	-	-	-	1	3	4	0.60
Total	22	34	156	117	57	280	666	100.00

* Research projects classified under different commodities may include processing, marketing and other socio-economic aspect since the commodity approach is interdisciplinary and interdepartmental.

Table 23. Breakdown of Research Fund by Commodity for 1979, 1980 and 1981.

Commodity	Ongoing 1979	New Researches 1980	Proposal 1981	Total Budget
Root Crops	₱ 1,579,069.26	₱ 1,595,883.10	₱ 6,676,431.40	₱ 9,851,383.76
Coconut	549,176.00	208,339.00	412,172.13	1,169,687.13
Abaca	21,129.00	104,454.00	1,531,220.00	1,656,803.00
Corn and Sorghum	9,848.00	80,507.00	1,262,711.00	1,353,066.00
Legumes	462,786.50	25,038.00	8,000.00	495,824.50
Vegetables	1,353.00	11,652.00	564,254.00	577,259.00
Rice	103,576.00	-	-	103,576.00
Sugarcane	34,011.00	-	-	34,011.00
Poultry	-	-	46,000.00	46,000.00
Livestock	48,101.00	-	83,000.00	131,101.00
Forestry	-	-	2,196,980.40	2,196,980.40
Fruits	-	-	322,904.00	322,904.00
Cereals	-	2,353.00	94,008.00	96,361.00
Cacao	57,908.00	-	-	57,908.00
Socio-Economics	228,110.00	328,883.00	1,276,905.00	1,833,898.00
Applied Rural Sociology	324,247.00	110,142.00	922,858.00	1,357,247.00
Soil and Water Resources	-	43,570.00	197,110.00	240,680.00
Total	₱ 3,419,314.76	₱ 2,510,821.10	₱ 15,594,553.93	₱ 21,524,689.79

The papers were published mostly in the Annals of Tropical Research, ViSCA Vista, Radix and ADE Quarterly.

6. Significant Research Results

Among the numerous research findings of ViSCA, the following are the more significant and interesting results:

a. Root Crops

(1) High yielding varieties of root crops were identified and recommended by the Philippine Root Crop Research and Training Center.

As shown in Table 24 below, three varieties of cassava and five varieties of yams were identified high yielding. Only BNAS-51 with a yield of 35 tons/ha. was noted to be the highest yielder among varieties of sweet potato. Only one variety of gabi, PR-G068, which is yielding 30 tons/ha. is recommended.

Table 24. Recommended High Yielding Varieties of Root Crops.

Root Crops	Variety/ Selection No.	Local Name	Months to Harvest	Yield tons/ha. FW	DW	Starch	Alcohol
Cassava	PR-C13	Kadabao	10-12	42	14.4	4.9	7560
	PR-C24	Golden Yellow	8-10	43	16.9	8.4	7740
	PR-C62	Columbia	10-12	46	15.2	7.9	8280
Sweet Potato	PR-S10	BNAS-51	4	35	11.55	7.35	4375
Gabi (Taro)	PR-G068	Kalpao	7	30			
Yams	PR-A35	Kinampay Type A	7-8	27			
	PR-A5	Farm Lisbon	8-9	68			
	PR-A7	Florido	8-9	58			
	PR-A10	Kabus-ok	7-8	52			
	PR-A11	Kinabayo	7-8	48			

(2) Processing machines were also developed for root crops. Among these are: pedal-operated cassava and sweet potato razor-grater, pedal-operated chipper-grater and hand operated grater. These are significant developments for the benefit of barangay-level root crop processing industries for food, animal feed, flour, etc.

(3) In the socio-economic studies on the production of major root crops in Eastern Visayas it was found out that:

(a) the three most important food grown in terms of area planted were rice, corn and root crops.

(b) farmers raising major root crops were more of the subsistence type rather than that of the semi-commercial scale farmers.

(c) the average farm area cultivated by the farmers was 2.15 hectares;

Most of the crops were planted in marginal lands. Approved cultural and management practices for root crops were not followed by most farmers, especially the importance of soil analysis. Very few availed of the technical assistance from private or government agencies.

(d) the average production per hectare in kilograms was 1,743.72 for sweet potato; 1,300.40 for cassava and 1,606.27 for gabi.

(4) The study on the existing industrial processing of root crops in the Philippines revealed that:

(a) six industrial processing firms for root crops were existing in the country. Five of these were processing cassava into starch and one was processing cassava and a small quantity of sweet potato converted into starch. The country has 2 dried chopped cassava millers for feeds.

(b) industrial processors of cassava have various direct market outlets. These are the reprocessing firms, wholesalers, wholesaler-retailers, re-packing firms, retailers and consumers.

(5) Cassava bacterial leaf blight (Xanthomonas manihotis) infected four species of Euphorbiaceous plants, namely: Manihot glaziovii Muell. Arg., Manihot esculenta Crantz (variegated ornamental cassava), Euphorbia pulcherrima Willd., and Pedilanthus tithymaloides (L) Poit. The diagnostic character of the disease on Manihot spp. alternate hosts was similar to that on Manihot esculenta Crantz. Control measures against bacterial leaf blight should therefore take into consideration these alternate hosts.

(6) Among the species of predators of cassava spider mites, the coccinellid beetle ranked first with a

consumption rate of 70.70 percent and 58.54 percent per day in the laboratory and screenhouse, respectively. It was followed by the staphylinid beetle with a consumption rate of 52.46 percent and 29.27 percent per day in the laboratory and screen house, respectively. The coccinellid larvae preferred to feed on adult spider mites. However, both the eggs and nymphs were also attacked but at lower rates. Staphylinid larvae showed no preference of feeding on the developmental stages of mites.

b. Coconut

(1) The Regional Coconut Research Center has developed a semi-direct ViSCA copra dryer with a capacity of 600 to 700 dehusked nuts at a time, and produces good quality copra. It uses only about 50 percent of the shells from one batch to cook the meat and can control the correct drying temperature. Uniform drying temperature can be maintained for three hours even in the absence of the copra maker. The dryer is locally made and designed in such a way that the small coconut farmers can avail themselves of it.

(2) Ccconut seedlings fertilized with 100 g. seaweed salt exhibited the least number of coconut gray leaf spots among the treatments. However, statistically, it did not vary significantly with the number of lesions

manifested by the plants fertilized with 800-1000 ml. seawater and 60-80 g. seaweed salt. Under similar conditions of the experiment, 800 ml. seawater and 60-80 g. seaweed salt are the optimum levels of each kind of salt materials that could reduce the number of leaf spots produced by Peztalozzia palmarum Cooke.

c. Livestock

Four breeds of dairy goat were identified to have high performance in milk production. The following breeds gave high yield of milk per day when milking is done twice a day. Anglo-Nubian (3.2 kg/day), Saanen (3.7 kg/day), Toggenburg (3 kg/day) and French Alpine (2.7 kg/day).

d. Corn

Ipil-ipil intercrop significantly advanced the maturity of corn and increased ear length, ear diameter, and grain per plant. However, tasseling, plant height, ear height, number of ears per plant, and shelling percentage were not significantly affected. Plots intercropped with 10, 15 and 20 ipil-ipil plants per linear meter gave computed yield of 69, 93, 73, 40 and 71 grams per plant, all of which were significantly higher than the control plots which yielded 48.5 grams per plant. They indicate that the grain yield per plant was improved by the ipil-ipil intercrop.

e. Soybean

When UPLB Sy-2 variety of soybeans was inoculated

with Allen 527 strain of Rhizobium, Tk-5 with Tal 102, and Clark-63 with Tall 377, higher yields were obtained than the rest of the treatments. Inoculating these soybean varieties with other strains used did not increase plant height and grain significantly. The results showed that specific variety requires specific strains.

f. Heat-Tolerant Tomato

Variety PI 365914 flowered and matured the earliest among the varieties that survived bacterial wilt epidemic. It grew 131.8 cm. tall and produced the highest fruit yield (4.9 tons/ha.). This was followed by PI 365916 and PI 365917 which flowered and matured within 41.3 and 51 days from sowing, respectively. PI 36517 grew the tallest (141.3 cm.) among the different varieties and yielded 1.9 tons/ha. VC 9-1-2-9a was the shortest (56.45 cm.) among the different varieties with a yield of 1.2 tons/ha.

g. Macro Socio-Economics

(1) A study on the flow of major commodities produced in the Eastern Visayas region revealed the following:

(a) producer's marginal cost in performing a marketing function is very much lower than its marginal revenue. Producers who performed some marketing services like assembling, sorting, processing and transporting were getting higher peso return than those who sold their products immediately after it is produced.

(b) twenty-five percent of the rice consumption is coming from outside the region which implies that rice production in Eastern Visayas was not enough for the inhabitants.

(c) ninety percent of corn grits consumed in the region came from other regions.

(d) inflow and outflow of hogs was minimal. Profitability of hog buying and selling was maximized when dealers were engaged in processing and retailing.

(e) Leyte is most dependent on out-of-the-region supply of chicken eggs among the 5 provinces in Region VIII.

(2) Another study on the socio-economic profile of the rural areas in the Eastern Visayas region revealed that:

(a) the region had about 2.6 million people distributed in the five provinces, 135 municipalities and 3 chartered cities. A municipality had about 23 barrios; 38 percent of which had no roads and 8 percent had no schools. Coconut, rice and root crops were the major crops in the rural areas.

(b) information dissemination was mostly by personal contact and costly innovations were not readily acceptable by them. The variables found to be positively related with people's innovativeness were: education, wife's involvement, gross income, income dissatisfaction and size of farm. Age,

sex, number, dependents, length of residence, occupational experience and tenure status were not significantly associated with adoption of farm innovations.

(c) an average of 2 agencies were existing and 4 programs such as Green Revolution, Family Planning, Beautification and Sanitation, and Samahang Nayon were found. The rural people had favorable attitude towards the government programs.

(3) The radio program preference among ViSCA Social Laboratory farmers indicated the following:

(a) the actual listening time to radio programs among farmers in the ViSCA Social Laboratory barrios was from 7:00 to 9:00 in the evening, while the hours they would really prefer to listen to radio were from 6:00 p.m. to 9:00 p.m., their time for relaxation.

(b) the type of radio program liked most was the drama. Their program preferences were those on rice farming, corn farming, poultry raising, coconut farming, pig raising and vegetable farming.

III. EXTENSION

The primary mission of the extension program of the College is to develop and test innovative strategies, methods, and techniques of extension for the dissemination of technology relevant to the needs of the rural poor - the small Visayan farmer and his family. In 1979 ViSCA consistently took active leadership and initiative in rural development with the involvement of the Community Extension Service, Regional Training Center for Rural Development, and 12 academic departments of ViSCA. In discharging its extension function, the College maintains a continuous research, and evaluation and consultation with government agencies involved in rural development.

Six objectives had been formulated as guide in planning, implementing and evaluating the extension programs of ViSCA. They were the following:

1. To experiment and develop innovative extension strategies, methods, and techniques relevant to agricultural and rural development.
2. To use mass media channels in disseminating information relevant to the improvement of farming and rural living.
3. To provide farmer leaders, extensionists, and extension supervisors opportunities for continuing education through trainings to update their knowledge levels and skills in their respective fields, and to keep them abreast with new developments in extension and rural development.
4. To conduct short-term nondegree training courses on practical agriculture, rural industries and other aspects of rural

living for those who are unable to avail themselves of the degree programs offered in the College.

5. To coordinate and monitor the extension activities of the various departments/units of the College.

6. To establish cooperative linkages with government and private agencies engaged in extension and rural development.

A. Office of the Director of Extension

The Office of the Director of Extension (ODEx) was created on August 16, 1979 with Dr. Celedonio M. Gapasin as director. The office is charged with the following functions to:

1. Formulate the philosophy, guiding principles, direction and strategy of the ViSCA extension program.

2. Plan and implement a continuing non-formal education program with the involvement of available expertise in the different departments and research centers of ViSCA.

3. Undertake a periodic review of the programs, performance and annual budgetary requirements of RTC-RD and CES and make necessary recommendations to the President.

4. Identify, train and develop a corps of subject-matter specialists who shall

   a. be responsible for information dissemination for different technical departments, and

   b. serve as department liaison officers for extension activities.

5. Prepare the College integrated yearly plan on extension activities and submit to the President annual budgetary proposals.

6. Assist the President in raising funds to support extension projects, and
7. Perform other functions which the President may assign from time to time.

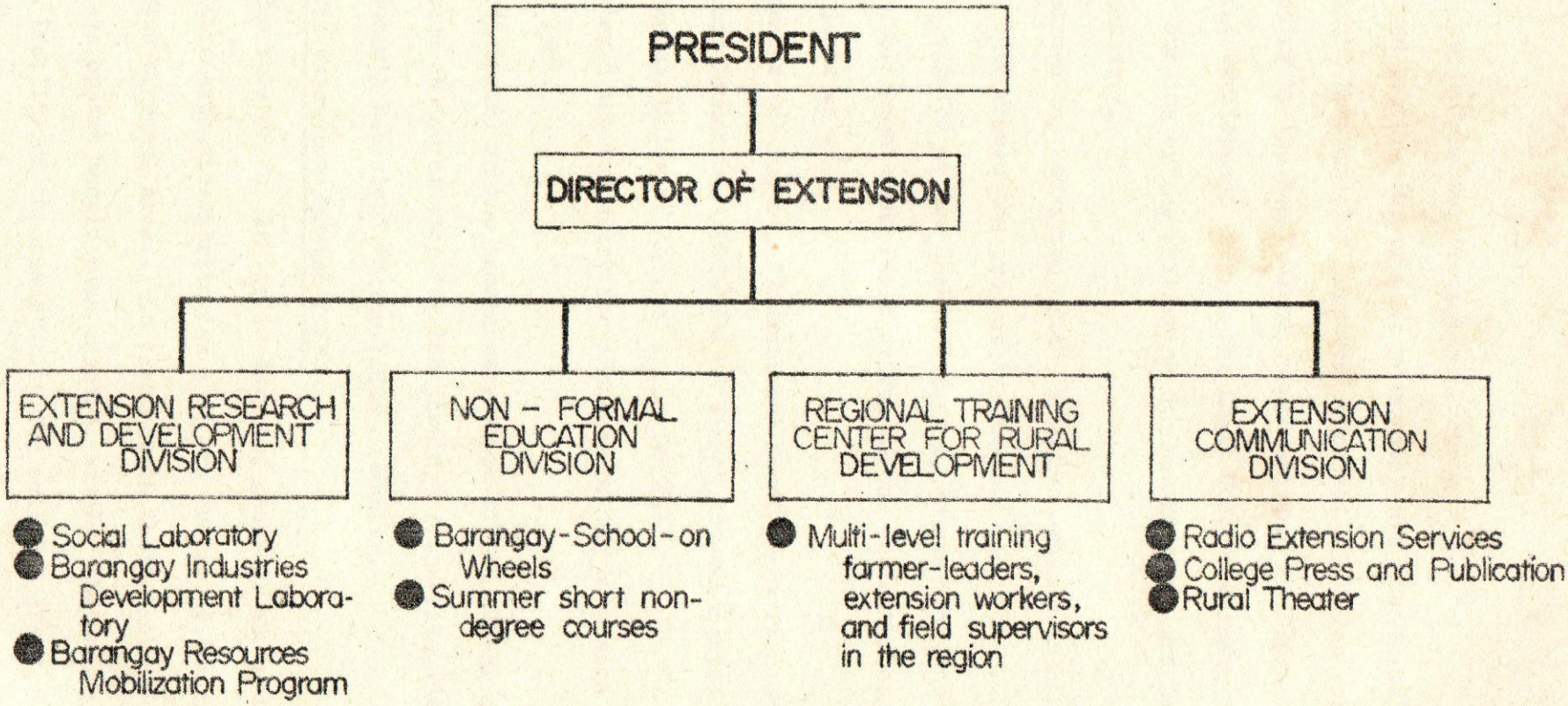
The ODEx shall provide the overall administration and supervision of all extension programs and extension-related activities of the College. It shall also coordinate and monitor all extension activities, seminars and workshops of the various College units. Figure 5 shows the organizational structure of the extension program of ViSCA. Under each office are the specific programs.

The Non-Formal Education Division and the Extension Communication Division were the additions to the college-wide extension program. The organizational structure of the extension program was approved by the Academic College Council and concurred in by the College Board of Trustees in December 1979. Effective January 1, 1980, the office of the Community Extension Service will be called the Extension Research and Development Division.

At year's end the ODEx had accomplished the following:

1. Formulated the guidelines in organizing, implementing and evaluating the extension program of the College.
2. Participated in the preparation of the "Conceptual Framework for a Comprehensive University Extension Program."
3. Prepared proposals on:
   a. Health Extension Learning Program (Project HELP)
   b. Barangay Extension Program Assistant (BEPA)
   c. Pick-Your-Own Vegetable Garden

Figure 5. VISCA EXTENSION ORGANIZATIONAL STRUCTURE.



d. Subject-Matter Specialist Program

4. Helped prepare two project proposals: the "Non-Formal Education for the Economically Deprived" (Project NEED) for possible funding by the New Zealand government and the "Barangay-Based Rural Development Program for Small Coconut Farmers in Leyte" for funding by the Philippine Coconut Research and Development Foundation.
5. Observed the operation of the school-on-wheels in Roxas City and interviewed the project in-charge.
6. Participated in the SEARCA Regional Seminar-Workshop on the Accomplishments and Perspectives of the Social Laboratory Projects at UPLB.
7. Prepared the report, "Educational Development Plan on Non-Formal Education, 1980-1984 of ViSCA" for submission to the Regional Office of the MEC in Region VIII.
8. Reviewed the budgetary requirements of the extension program for 1981.
9. Participated in the seminar-workshops of the RTC-RD and CES.
10. Served as coordinator for the showing of the film, "Abortion - A Woman's Decision" to the ViSCA community.

B. Community Extension Service (CES)

The role of the CES is to develop, conduct, and evaluate alternative extension strategies that are suited to the needs and conditions of rural areas. In response to these tasks three rural development models were created, namely: the Social Laboratory (SL), a facility of the institution for evolving strategies and

approaches for accelerating agricultural and rural development through research, training, and demonstration; the Barangay Industries Development Laboratory (BIDL), designed for barangays with limited agricultural potentials but with abundant labor and raw materials for cottage industries; and the Barangay Resources Mobilization Program (BRMP), designed to develop self-reliance among rural people as the solution to their problems with minimum assistance from the government by emphasizing efficient utilization of human and natural resources in the achievement of socio-economic goals.

Figure 6 shows the service areas and programs of the CES.

1. Social Laboratory (SL)

This model started in November 1975 with three barangays - San Isidro, Gacat and Kansungka. Three additional sites were selected and added in 1977 which included the barangays of Igang, Maganhan, and Hibunawan.

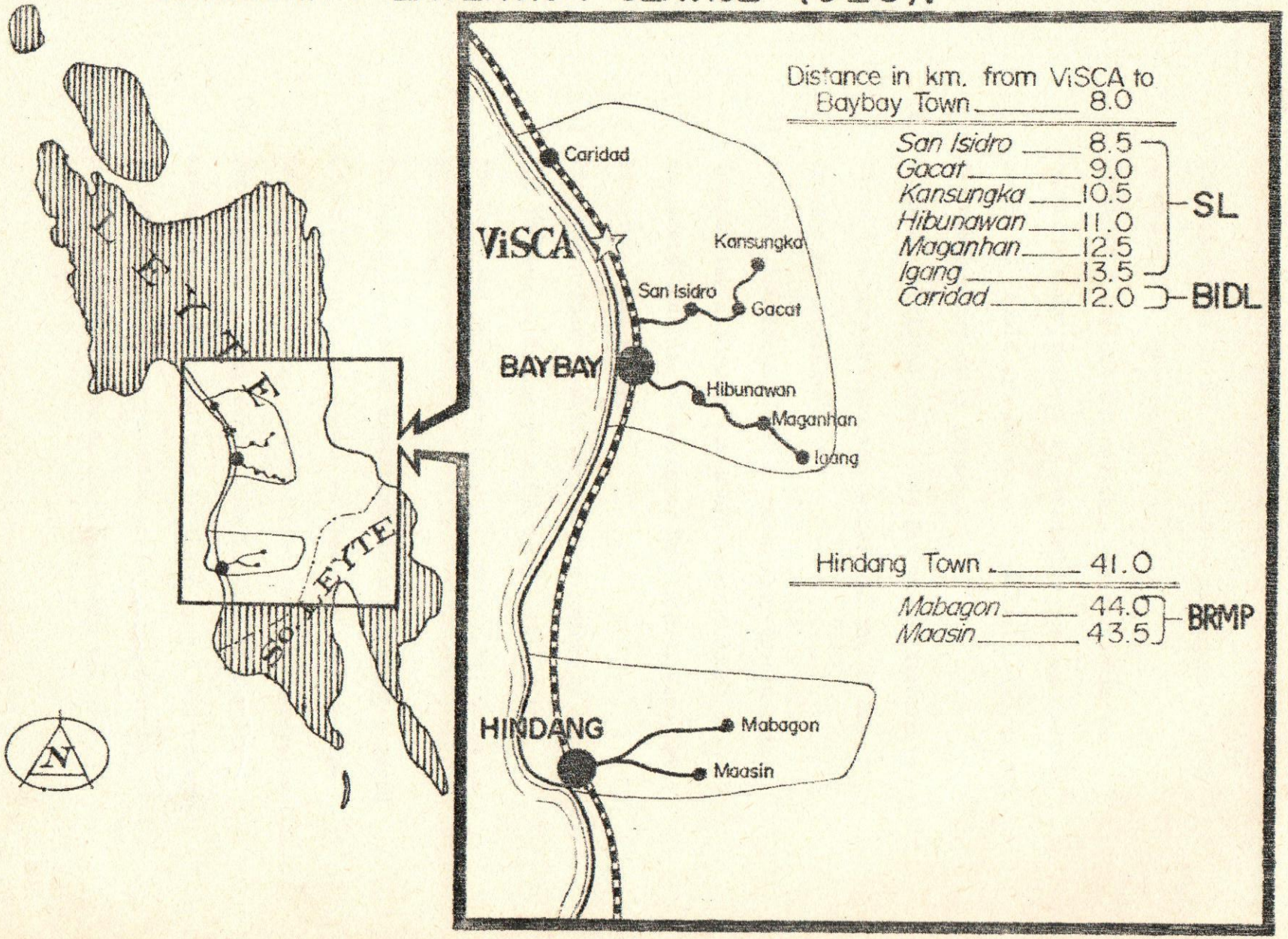
The following were the major activities and accomplishments for the year 1979.

a. Leadership Training and Institution Building

(1) Reorganized the Advisory Board which plans and monitors the activities of the six Social Laboratory barangays.

(2) Reorganized the Rural Development Consultative Board whose 14 members are composed of representatives from the municipal government, ViSCA administration and other government agencies and private sectors.

Figure 6. LOCATION OF SERVICE AREAS AND PROGRAMS OF THE COMMUNITY EXTENSION SERVICE (CES).



The Board acts as the consultative and advisory body of the Social Laboratory.

(3) Extended technical and advisory assistance to the Samahang Nayon members to strengthen the association so that it could provide more functional services to its members and other farmers.

(4) Produced certified rice seeds for the SL farmers by three seed growers who are members of the SL Seed Growers Association.

(5) Provided the residents with reasonably-priced prime commodities and other household needs through the consumers' outlets of barangay San Isidro, Kansungka, Hibunawan and Igang.

(6) Provided primary health care to the community through the "Botica sa Barangay" which is a joint venture of the Samahang Nayon Association of Kansungka, Gacat, and San Isidro.

(7) Trained and extended assistance to rural women engaged in cottage industries such as abaca and macrame bag-making, egg salting, and food processing and preservation.

(8) Organized the Rural Youth Clubs in each of the six barangays and assisted them in their sports and cultural activities, animal production project, construction of community infrastructures and leadership training.

b. Production Technology Transfer

(1) Crop Production - Assisted the farmers in procuring agricultural loans, managing rice seedbeds, applying zinc oxide and insecticides, controlling weeds, "Sabog Tanim," controlling common corn pests, proper drying of copra, layouting a vegetable garden and preparing the land for root crop production. Two hundred forty-eight farmers of the SL with a total cultivated land area of 149.33 ha. borrowed ₱101,146.05 for their M-99 programs. Forty-one farmers borrowed ₱10,064.05 for M-55 loans. A 500 square-meter mongo culture demonstration farm was put up in barangay San Isidro and two 200 square-meter demonstration plots on soil insecticide incorporation in two barangays were established. These were jointly sponsored by ViSCA and Planters Products, Inc.

(2) Animal Production in the Department of Animal Science and Veterinary Medicine - Trained 23 barangay residents as animal vaccinators to help in the immunization campaign. CES field technicians rendered technical assistance to farmers in castration, breeding rabbits and preventing anemia in pigs. They also assisted farmers in obtaining piggery and duckery project loans.

(3) Inland Fisheries Development - Trained farmers in inland fish culture particularly on hatchery management and practices. Helped establish, develop and stock

a 1,150 square-meter fishpond with carp and tilapia fingerlings. A rice-fish culture demonstration farm was also established on an 800 square-meter area. Creeks were converted into ponds and seeded them with fingerlings. Dispersal of fingerlings to interested farmers was also facilitated.

(4) Reforestation - Established barangay nurseries and distributed different fruit trees. Planted giant ipil-ipil seedlings on barren and unproductive land to conserve and improve soil fertility.

c. Social Technology Transfer

(1) Conducted monthly meetings with rural women's association and discussed ways of improving family living through barangay cleanliness and beautification program, production and marketing cottage industries (like garment construction), root crop processing and egg salting, and participation in barangay fiesta activities.

(2) Established rural youth organizations and involved them in production technology training such as duck and rabbit raising, leadership development, socio-cultural activities, capital development projects and community development projects.

d. Infrastructure Development

Constructed through cooperative effort or "pintakasi" the San Isidro outdoor stage for cultural activities, the

Kansungka community chapel, Gacat and San Isidro health centers, Igang barangay nursery and the community school's water-sealed toilets, various purok centers, and road construction projects.

e. Live Training Laboratory

Supervised student interns who were Agricultural Extension majors from the Department of Agricultural Development Education of ViSCA in conducting their field practice; assisted students and staff members in conducting research and rural service activities - Paglilingkod Bagong Lipunan (PBL) and Youth Countryside Action for Progress (YCAP).

2. Barangay Resources Mobilization Program (BRMP)

a. Agro-Forestry

(1) Planted 468 fruit tree seedlings at Hindang.

(2) Germinated giant ipil-ipil seeds at the school nursery.

(3) Extended technical assistance to agro-forestry cooperators in weeding, fertilizing, pruning, and spraying of cacao trees, and in fertilizing and inducing the flowering of mango trees.

b. Agricultural Production Technology Transfer

(1) Established in barangay Maasin and Mabagon demonstration plots on peanut field trial, corn production result demonstration and corn-soybean intercropping demonstration utilizing an area of 1,000 square meters.

(2) Diffused information on the cultural requirements of rice, corn, banana, root crops, vegetables and coconut.

c. Animal Production

(1) Conducted a seminar in cooperation with BAI livestock inspector on swine disease prevention and control, demonstration on castration and vaccination of livestock.

(2) Extended to 193 cooperators raising 265 swine, rabbit and carabao technical assistance which included the building of rabbit nests for pregnant does, treating rabbit mites, improving hog ration, cutting the navel and needle teeth of piglets and deworming hogs.

d. Infrastructure Development

(1) Constructed the Mabagon chapel, 0.8 kilometers of feeder road, waiting shed, and newsboard, the Maasin multi-purpose hall, basketball goals, road beautification, and welcome sign through a "pintakasi."

e. Leadership and Socio-Cultural Activities

(1) Sponsored a beauty contest, sports and socio-cultural activities during town fiestas.

(2) Conducted leadership trainings at RTC-RD for the officers of the youth organizations.

3. Barangay Industries Development Laboratory (BIDL)

a. Technology Transfer

(1) Introduced the following income-generating activities: abaca-macrame bagmaking, twining, balling and joining of fibers, garment construction, Romblon bagmaking, and mat weaving.

(2) Initiated the granting of ₱2,000 from the National Council of Churches of the Philippines to the Caridad Home Industries Association as initial capitalization for a macrame project.

(3) The Food Handlers Association of Caridad sponsored a canteen during the barangay fiesta and served as food caterer whenever seminars and training programs were conducted in the barangay.

b. Gadget Development

(1) Constructed tools, machines, and models for the BIDL such as garment construction patterns, clutch and shoulder bag moulders, balling gadget, 4-spindle twining machine (manual and engine-operated), and rubber-tension regulators.

(2) Developed instructional aids - steps in pattern drafting and guidelines in meal planning.

c. Leadership and Institution Building

(1) The Local Advisory Council (LAC) monitored and supervised the barangay activities and evaluated the purok projects.

(2) The Caridad Home Industries Association (CHIA) provided capital and opened markets for income-generating projects.

(3) CES staff members conducted leadership trainings for members of community organizations.

d. Infrastructure Development

(1) Improved the BIDL Display and Training Center

(2) Constructed purok centers, purok boundary markers and erected fences fronting each house.

Twenty-six short-term nondegree training courses in the form of seminars, workshops, conferences, and demonstrations were conducted by the CES staff in cooperation with private and government agencies. Majority of the trainings were offered in the Social Laboratory barangays. The non-formal education activities are presented in Table 25.

4. Student Development

The CES staff members were not only involved in extension work in designated barangays but they also participated in teaching academic courses in extension. The staff acted as cooperating extensionists in the field-practice program of senior student majors in Agricultural Extension. Likewise, they assisted students conducting social research in the CES barangays. During the year three staff members were involved in teaching agricultural education and extension courses to 77 students.

5. Personnel Development

A progressive extension program takes into account the professional improvement of its staff. Attendance to in-service trainings and obtaining advance degrees should be encouraged.

Ten in-service trainings were attended by the CES staff at an average of two weeks per training (Table 26). Presently four staff are on study leave for graduate studies, three on the masteral and one on the doctoral program.

Table 25. Non-Formal Education Activities Conducted by the CES.

Title of Training	Date	Place	No. of Participants	Staff Involved	Resource Persons
A. Social Laboratory					
1. Trouble Shooting of Hand Tractor Engine	Feb. 5	Gacat	33	E. Balbarino S. Dagoy B. Pascual F. Jazon	E. Gaviola Managbanag
2. Swine & Carabao Castration	Feb. 25	San Isidro	29	S. Dagoy B. Pascual	
3. Family Living, Agriculture, Cooperatives & First Aid	Feb. 18	Gacat	42	S. Dagoy L. Salapa E. Balbarino F. Jazon	
4. Bookkeeping, Accounting & Auditing Procedures	March 25	Kansungka	11	B. Mazo F. Jazon S. Dagoy	
5. Macrame Bag Making	March 10	Hibunawan	16		
6. Barangay Vaccinators' Training	April 27-28	ViSCA	23	L. Salapa A. Ricarte A. Balbarino S. Dagoy B. Pascual C. Caliente	J. Griffin V. Subere I. Masendo T. Milleza T. Fernandez
7. Hatchery Management & Practices	April 29-30	BFAR Babatngon	2	C. Caliente L. Salapa A. Ricarte	BFAR staff
8. Garment Construction	May 1 - 15	San Isidro	20	B. Pascual F. Jazon	R. Taganas L. Zapatos E. Rosillo
9. Duck Egg Production	May 5	Igang	11	L. Salapa	
10. Abaca Hanger Making	May 10 - 11	San Isidro	5	B. Pascual F. Jazon	E. Rosillo L. Zapatos R. Taganas
11. Camote Fertilization and Other Recommended Practices	July 15	Kansungka	20	E. Balbarino S. Dagoy	PRCRTC staff

Table 25. Non-Formal Education .... (Continued)

	Title of Training	Date	Place	No. of Participants	Staff Involved	Resource Persons
12.	Leadership Training for Rural Women	Aug. 24 - 26	ViSCA	38	All CES staff	M. Mojado N. Capuyan D. Nuevas R. Montejo A. Go S. Ancheta D. Alcober R. Jaime
13.	Echo Seminar on Probation Law	Aug. 18	San Isidro	94	B. Pascual	Baybay Municipal Court and Court of Agrarian Relations Employees
14.	Plant Asexual Propagation	Sept. 10	Maganhan	28	A. Ricarte	A. Evangelio
15.	Leadership Training for Rural Youth	Oct. 5-7	ViSCA	64	All CES staff	E. Arradaza B. Ferraren J. Armachuelo H. Tojeno A. Israel N. Capuyan
16.	Vinegar Making, Wine Making,	Oct. 6	San Isidro	28	F. Jazon B. Pascual	NIST/NSDB Trainors
	Prunes Preparation, Banana	Oct. 9	Maganhan	36	E. Ventula A. Ricarte	
	Blossom Dehydration, Ginger	Oct. 30	Gacat	15	E. Balbarino F. Jazon	
	Powder and	Oct. 31	Igang	20	E. Ventula	
	Mushroom	Nov. 6	Hibunawan	22	E. Ventula	
	Culture	Nov. 8	Kansungka	17	F. Jazon	
17.	Lupong Tagapayapa Echo Seminar	Oct. 31	Maganhan	15	A. Ricarte	R. Abreu M. Mojado E. Alera
18.	Rural Youth Leadership Echo Seminar	Oct. 26	Maganhan	28	A. Ricarte	SPKM Officers

Table 25. Non-Formal Education ... (Continued)

Title of Training	Date	Place	No. of Participants	Staff Involved	Resource Persons
B. Barangay Resources Mobilization Program					
1. Prevention and Control of Swine Diseases	March 16		38	A. Rebadulla	T. Milleza L. Flandez
2. Barangay Vaccinators Training	April 27 - 28	ViSCA	12	A. Rebadulla	J. Griffin T. Milleza T. Fernandez V. Subere I. Macariola
3. Leadership Training for Rural Youth	Oct. 5 - 6	ViSCA	64	All CES staff	E. Arradaza B. Ferraren J. Armachuelo H. Tojeno A. Israel N. Capuyan
C. Barangay Industries Development Laboratory					
1. Garment Construction	Jan. 1 April 30	Caridad Caridad	28 13	E. Igsolo E. Igsolo	
2. Castrating and Injecting Piglets	March 20	Caridad	105	E. Igsolo	BAEx staff
3. Satisfied Users Club Seminar	March 1-31	Caridad		E. Igsolo	POPCOM staff
4. Leadership Training for Rural Women	Aug. 24 - 26	ViSCA	10	All CES staff	M. Mojado N. Capuyan D. Nuevas R. Montejo A. Go S. Ancheta D. Alcober R. Jaime
5. Vinegar Making, Wine Making, Prunes Preparation, Banana Blossom Dehydration, Ginger Powder and Mushroom Culture	Oct. 26 Nov. 15	Caridad	15	E. Igsolo	NIST/NSDB Personnel

Table 26. In-Service Training Programs Attended by the CES Staff.

Title	Date	Place	Staff Involved
Training on Duck Raising	March 6-16	Mayondon, Los Baños, Laguna	A. Rebadulla A. Ricarte
Second In-Service Training for Teachers and Instructors of Fisheries (Phase II)	April 23 - May 23	Nasugbu, Batangas	A. Caliente
Leyte Seed Growers Association Conference	Aug. 28	Abuyog, Leyte	B. Pascual
International Root Crops Symposium	Sept. 24 -25	ViSCA, Baybay, Leyte	A. Rebadulla
Third Seed Growers Regional Symposium	Oct. 10-12	Naval, Biliran	A. Rebadulla
Training Course on Mushroom Spawn Production and Cultivation	Oct. 22 - November 20	ViSCA, Baybay, Leyte	B. Pascual
Training Course on Food Processing and Preservation	Oct. 22 - Nov. 20	ViSCA, Baybay, Leyte	F. Jazon E. Ventula B. Pascual
Multilevel Training for Farmer-Leaders, Extensionists and Supervisors	Nov. 18-28	RTC-RD, ViSCA Baybay, Leyte	E. Igsolo A. Ricarte B. Pascual E. Balbarino
Regional Seminar Workshop on the Accomplishments and Perspective of the Social Laboratory Projects	Nov. 26 - Dec. 9	UPLB, College, Laguna	P. Peñaranda S. Dagoy
Leyte Seed Growers Conference	Dec. 21	BPI, Tacloban	B. Pascual

6. Research and Publications

The research and documentation team of the CES in cooperation with the research personnel of other technical departments of ViSCA completed two researches. These were:

a. A Benchmark Study of Can-ipa, Bubon, Cantagnos and Butigan, Baybay, Leyte

b. Case Studies on the ViSCA CES Projects during the First Two Years of CES Field Operations

Nine ongoing researches are being undertaken. The following are:

a. The Communication of New Farm Technology to the Small Farmers in Leyte

b. The Training Needs of Coconut Farmers in Eastern Visayas

c. An Appraisal of the Training Needs of Rural Development Workers in the Visayas

d. An Appraisal of the Kansungka Consumers' Cooperative (1979)

e. Income-Generating Activities of Rural Women in Barangay Hibunawan, Baybay, Leyte

f. The Status of the Samahang Nayon of Maganhan, Baybay, Leyte

g. Swine Production Practices at the Barangay Resources Mobilization Projects

h. Income-Generating Activities of Rural Women in the Barangay Industries Development Laboratory, Caridad, Baybay, Leyte

i. Survey of the Migration Pattern of the Out-of-School Youth of Barangay Gacat, Baybay, Leyte

For information dissemination, the CES has a quarterly publication, The Extension Gazette, which contains news items

and other information about the activities in the barangay. It is printed in English. Another is the Ang CES Balita which is a bimonthly mimeographed publication in the vernacular with news items, farm tips, quizzes, and human interest items for the barangay residents and change agents interested in CES activities.

There are also primers and bulletins in the vernacular prepared by the CES staff and which are distributed during trainings. The following are the titles:

a. Kaon ng Lisohong Utanon Adlaw-Adlaw

b. Ang Pagplano sa Pagkaon

c. Dugang Pagkaon sa Masuso

d. Ang Pagkaon sa Inyong mga Anak

e. Gabayan sa Paghimo ug:

(1) Suka gikan sa tubig sa lubi
(2) Nata de coco
(3) Binulad nga puso sa saging
(4) Pinulbos nga luy-a
(5) Balimbing o iba prunes
(6) Bino gikan sa prutas
(7) Pagpatubo ug owaping

f. Ang Pamaagi sa Diskusyon sa Pundok

g. Pamaagi Diha sa Miting

h. Ang Pagpangulo sa mga Kalihokan sa mga Banikanhong Kapunongan

i. Paghimo ug Minutas Resolusyon ug Talaan sa Panalapi

j. Ang Pagtipig sa Talaan

The CES in cooperation with the Department of Animal Science and Veterinary Medicine has prepared two extension farm bulletins: "Ang Panahon sa Panghayopan" and "Kasagarang

Salut sa mga Baktin." These were circulated by CES for the barangay residents.

7. Financing

The BIDL and CES received separate appropriations from the College for 1979. The appropriation for BIDL was ₱35,005.94 while for CES was ₱180,789.04. The CES also got outside funding from the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) for the Social Laboratory program. The total support from January to August amounted to ₱25,515.00.

The expenditures of the CES and the BIDL for 1979 were as follows:

Source	Where Spent	Amount
ViSCA		
CES	Personal Services	₱ 157,789.04
	Maintenance & Operating Expenses	23,000.00
BIDL	Personal Services	28,505.94
	Maintenance & Operating Expenses	6,500.00
SEARCA	Personal Services	25,515.00
	Total	₱ 241,309.98

8. Special Projects/Programs

a. Youth Countryside Action for Progress (YCAP)

A CES staff member coordinated the YCAP activities of the College. The activities were done at the CES barangays

under the supervision of the barangay-based field staff. Table 27 shows the accomplishments of the students.

b. Youth Community Service Club (YCSC)

The club members rendered community service at the CES barangays. Joint activities with youth association in the barangays were undertaken.

C. Regional Training Center for Rural Development (RTC-RD)

The RTC-RD is a component of the college-wide extension program whose main function is to train farmer leaders and rural development workers of service agencies of the government in the Visayas in social and production technology areas. The first training of extensionists conducted by the Center was in June 1978. This was followed by a regional program consultation in rural development involving regional directors and program planners of line agencies.

To have a pool of resource persons who are knowledgeable and dedicated to the mission of the RTC-RD, a work conference was conducted during the early part of 1979 for prospective and selected trainors of the Center. Participants came from academic institution and service agencies.

The training thrust of RTC-RD during the year was intensified as facilities and equipment were made available.

The highlights of accomplishments during the year were the following:

1. Conducted a work-conference for 32 resource persons and six interagency seminar-workshops for 335 rural development workers

Table 27. YCAP Accomplishments.

Place	No. of Students	Accomplishments
Igang	47	Constructed an889 sq.m. of rice-fish demonstration farm, a nursery pond, a barangay ronda outpost and a reading center. Repaired the Home Economics building and the foundation of the fish breeding tank shed.
Maasin, Hindang, Leyte	88	Constructed the Barangay Multi-Purpose Center, planted peanuts at the demonstration farm and performed road beautification activities.
San Isidro	27	Constructed 8 sq.m. bathroom at Purok Magsaysay. Cleared and cleaned the Hinubigon Creeks. Constructed a dike to be used as community fishpond.
Gacat	28	Constructed a concrete boundary marker between San Isidro and Gacat and a lunch counter with hollow block wall at the Gacat Elementary School.
Kansungka	25	Constructed a bleacher by digging, scraping and removing the soil from the side of the hill overlooking the basketball court.
Hibunawan	21	Constructed a barangay ronda outpost and reading center and cleaned and landscaped the surroundings.
Maganhan	25	Constructed and fenced a Barangay Brigade Center and put up a flower garden. Sponsored sports and cultural activities during the barangay's 38th anniversary celebration.
Caridad	26	Hauled sand and gravel for cementing the BIDL flooring and constructed a comfort room for the BIDL Display and Training Center.
Mabagon	23	Renovated, fenced and landscaped the barangay chapel and hauled soil for its flooring and constructed a basketball court and a waiting shed.

of 17 government service agencies (Table 28). Majority of the participants from line agencies were from the Ministry of Agriculture (53.73%). This was followed by the Agrarian Reform (14.33%), Natural Resources (8.66%),and Local Government and Community Development (7.76%). Other agencies like the POPCOM, MSSD, MDS, and MOH likewise participated in the seminar-workshops and they comprised 15.52 percent of the total number of participants.

2. Systematized the training operations of the Center by:
   a. improving the instruments for conducting situation analysis;
   b. developing a balanced and enriched two-week training curricula;
   c. selecting qualified resource persons;
   d. formulating criteria for selecting training participants; and
   e. instituting an evaluation system.
3. Held the first multi-level training of farmers, extensionists, and supervisors of area isolate H14 on November 18-29 at ViSCA. This training activity was jointly sponsored by the Farmers Training Center for Rural Development (FTC-RD) of Sab-a Basin and the RTC-RD, ViSCA.
4. Utilized the RTC-RD building complex as venue for other training activities of private and government agencies. This projected a better image of the Center earning the goodwill of the larger community. Several activities were conducted during the year

Table 28. Distribution of Training Participants by Agency Affiliation and Level of Participation in Six RTC-RD Trainings.

Agency	E. Samar Mar. 11-31			N. Samar Apr. 15-May 6			Cebu July 15-29			Bohol Sept.6-19			E. Leyte Nov. 18-28			N. Cebu Dec. 2-14			Total			GRAND TOTAL
	DPE	DPM	DPO	DPE	DPM	DPO	DPE	DPM	DPO	DPE	DPM	DPO	DPE	DPM	DPO	DPE	DPM	DPO	DPE	DPM	DPO	
BAEx	11	1	-	17	-	-	10	8	-	14	4	-	8	-	-	11	2	-	71	15	-	86
BAI	1	-	-	5	1	-	8	2	-	7	2	-	2	-	-	4	1	-	27	6	-	33
BPI	3	7	-	4	5	-	2	7	-	3	8	-	2	1	-	4	4	-	18	32	-	50
BS	2	3	-	-	-	-	2	-	-	2	-	-	1	-	-	-	-	-	7	3	-	10
BFD	6	-	-	-	2	-	-	2	-	-	2	-	2	1	-	-	-	-	8	7	-	15
BFAR	2	-	-	2	-	-	1	1	-	1	-	-	1	-	-	2	-	-	9	1	-	10
MAR	18	1	-	9	1	-	4	2	-	-	-	-	5	1	-	7	-	-	43	5	-	48
MLGCD	-	10	-	-	3	-	1	1	-	1	2	-	2	-	-	4	1	-	8	17	-	25
BAEcon	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
BL	-	-	-	3	-	-	1	-	-	-	-	-	1	-	-	-	-	-	5	-	-	5
MDS	-	-	-	-	-	-	-	1	-	1	-	-	3	-	-	-	-	-	4	1	-	5
MSSD	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
NIA	-	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	5	-	-	5
POPCOM	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	4	1	-	6	2	-	8
MOH	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1
ViSCA	-	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	5	-	-	5
NGA	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	1
Others 1/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-	26	26
Total	43	22	-	40	13	-	34	25	-	29	19	-	36	3	26	36	9	-	218	91	26	335

1/ Farmer leaders (DPO)

Legend: DPE - Development Program Extensionists
DPM - Development Program Managers
DPO - Development Program Operators (Farmer-leaders)

such as in-service trainings, regional conventions, leadership trainings, symposia, conferences and seminar-workshops.

5. Published the RTC-RD Newsletter beginning March 12. Topics covered during training seminars were summarized and important issues on rural development which had been overlooked or under-emphasized were presented. The section on "Glimpses" kept trainees and Center staff in touch with some personal values inherent to a change agent. Articles and news releases pertinent to the network and to the Center trainings appeared in the newspapers, The Freeman of Cebu City and The Reporter of Tacloban City and in radio broadcasts through stations DYDY and DYRC of Cebu City.
6. Two Center staff attended the network planning conferences at UPLB from December 17 to 18, 1979.
7. Center Director, Dr. Federico R. Flores, outlined a number of activities, i.e., mini seminar-workshop on recurring training topics/needs, and institution of co-curricular and sports activities designed to meet the intellectual and physical needs of the Center staff and to achieve a closer interpersonal relationship among themselves.

D. Extension and Community Services of Other Departments

A number of extension activities were conducted by the different departments in non-formal education classes, information disseminations, farm visits and individual farmer consultations.

Lectures on the academic, research and extension programs of the various departments were given to campus visitors from

government and private educational institutions and agencies. Tours to teaching and research facilities and experimental areas were also conducted.

Displays of department activities and programs were set up for the public during the following occasions: regional conferences, inauguration of infrastructures, college anniversary celebration, international symposium and town fiesta of Baybay.

Specifically, the extension activities and community services rendered by the different departments were as follows:

1. Agricultural Development Education

The Development Communication Section continued to maintain the ViSCA newsboard where newspaper clippings of current events were posted to keep staff and students abreast with national, international and local news. Seven of the staff members of the department rendered services either as participants or resource persons in 23 seminar-workshops on and off campus.

On October 22 to 27 a workshop on "Data Processing, Analysis and Interpretation" was conducted for media researchers of the Bureau of Agricultural Extension in Region VIII. Another seminar-workshop, "New Thrusts in Student Teaching," was conducted on December 10 to 11 participated in by coordinators and college supervisors of student teaching and administrators of cooperating schools in Region VIII.

2. Crop Protection

Consultations with farmers, researchers and other clientele regarding their pest problems were made by subject matter

specialists through their Plant Pest Clinic. Identification of pests, diagnosis and control recommendations were made by the specialists.

Thirty-five clients were served. About 50 different kinds of pests were identified and control measures were recommended. The clients were researchers from the Philippine Root Crop Research and Training Center and the Regional Coconut Research Center, farmers from the Social Laboratory barangays and other barrios, extensionists from the Community Extension Service of ViSCA, the Bureau of Plant Industry, Abaca Industry Development Authority and instructors of ViSCA.

Some staff members participated as facilitators during trainings and seminars sponsored by the RTC-RD for farmers and rural development workers of Samar, Leyte, Cebu, Bohol and Zamboanga.

3. Home Science

A non-formal class on garment selection and construction was conducted. Instructors in handicraft served as trainors during the seminar-workshop for coordinators of Industrial and Practical Arts and Home Economics in the school division of Leyte. In August the instructors in handicraft served as consultants during the echo seminar-workshop of 100 Industrial Arts and Home Economics teachers of Baybay North and South School districts. The staff served as resource persons during trainings of the Community Extension Service, and the Regional Coconut Research Center.

4. Animal Science and Veterinary Medicine

A rodeo was put up by the department during the anniversary celebration in August to foster a closer relationship between the personnel of the Bureau of Animal Industry and ViSCA and the rural farmers of Baybay and to promote better livestock production in the region.

Three rural farmers of Hindang and Baybay, Leyte were recipients of the department's buck loan project.

The department provided resource persons during the RTC-RD trainings on topics of livestock production and control of animal diseases.

A number of visitors enroled in the Master of Arts in Teaching Elementary Agriculture (MATEA) were given lecture demonstrations in their fields of interest in animal production.

The extension club of the department, under the leadership of Dr. Tomas Fernandez, Jr., immunized 500 heads of chicken on campus and surrounding barrios against avian pest and fowl pox. Some 200 hogs were vaccinated against swine plague and 250 dogs against rabies.

5. Forestry

The department distributed seeds, seedlings and planting materials to residents of nearby barangays and to academic and administrative personnel of ViSCA in compliance with the implementation of P.D. 1153 and PROFEM. Two of the staff members acted as resource persons on Forest Protection Program. Information on Forestry and Forest Reforestation program was

disseminated to barrio residents, training participants of RTC-RD and excursionists to ViSCA.

6. Physical Education

To foster a closer relationship between nearby schools and ViSCA and to implement the Physical Fitness Program of the government, the department sponsored the Age-Group Trackfest, a sports on track events. Four elementary schools with 500 pupils participated in the events.

Mr. Eliseo Pastrano of the department officiated in the softball tournament for women during the Purok Day at barangay Kansungka, one of the Social Laboratory barangays of the College.

7. Agronomy and Soils

The staff members served as resource persons during the trainings of the RTC-RD from March to November and the Regional Coconut Research Center from January to June.

The department projects were shown to visitors from agricultural fishery schools, researchers, personnel of government and private agencies and farmers of Leyte. Lecture-demonstrations on asexual plant propagation were administered.

Demonstration plot on cropping system using cereals and legumes was conducted in San Agustin, Baybay. During the Field Day, the staff participated by clarifying some of the problems met by farmers.

Some vegetable and ipil-ipil seeds were distributed to visitors and community residents.

8. Agricultural Economics

During the year, selected staff members were invited by the RTC-RD as resource speakers in farm management, agribusiness and marketing.

9. Arts and Letters

For two successive nights, the staff members presented a play, "Of Puppets and Strings," for the entertainment of students, guests, visitors and the general public during the 55th ViSCA anniversary celebration. A float was also put up by the department during the anniversary.

10. Agricultural Botany and Plant Breeding

The mini botanical garden of the department is one of the favorite places frequently visited by many visitors on campus. About 500 students and staff of different institutions visited the garden for their training in plant identification, classification and collection.

Leaflets on medicinal plants and weeds were prepared and distributed to interested parties. Many were given out when the department depicted its activities in an exhibit during the college anniversary celebration, International Symposium on Taro and Cocoyam and Agro-Industrial Fair at Baybay.

PART THREE | AUXILIARY SERVICES

Another component of ViSCA which provides assistance in the form of coordinated system of housing and accommodation, guidance and counseling, medical and dental care and adequate reference materials is the Auxiliary Services. This component is composed of the Library and the Infirmary which both cater to the needs of students and staff and the Office of Student Affairs which is primarily concerned with student welfare.

A. The Library

1. Objectives

a. To build a sound library collection supportive of the college curriculum, research and extension program;

b. To service this collection in the most effective and efficient manner to the satisfaction of its library clientele; and

c. To expand and renovate the library quarters.

2. Personnel Development

a. Staff Profile

Responsible for safeguarding materials acquired by the College to support its instructional, research and extension programs, the Library was manned by 19 staff members plus 8 student assistants who helped maintain

and manage the Library. Nine were regular staff while the rest were casual workers.

b. Staff Development

Two members of the staff were on study leave. They were:

(1) Rebecca B. Napiere - pursuing a master's degree at the University of the Philippines at Diliman.

(2) Paz C. Pala - a UNESCO grantee taking a 9-month Diploma Course for Science Information Specialist at the Institute of Library Science, University of the Philippines.

3. Facilities Development

The problem of space was partly solved this year by converting one of the adjacent rooms into a reading room for high school students. It had a sitting capacity for 24 students which was not enough for the present high school population.

Physical renovation of the library quarters and acquisition of seven new bookshelves capable of accommodating 4,200 books helped the library in keeping and safeguarding new acquisitions.

4. Accomplishments

The following were the major activities and accomplishments of the library:

a. Streamlined its records by:

(1) revising the card catalog from dictionaries to divided, i.e. separating authors, titles and subject cards,

(2) maintaining an Outstanding Orders File/In Process File to minimize duplication of titles and to facilitate ordering of books;

(3) separating the high school collection from the college collection; and

(4) updating the serials for more effective control of subscription, claiming of missing numbers, servicing, indexing and binding.

b. Increased its total collection to 25,094 on the following materials:

(1)	Books	24,600
(2)	Periodicals (bound)	32
(3)	Theses and Disserations	68
(4)	Serials	394
	T o t a l	25,094

Some of the notable acquisitions were donated by the following generous donors:

Donor	Date of Acquisition	No. of Volume
Dr. & Mrs. C. M. Gapasin, ViSCA, Baybay, Leyte	March 1979	61
Dr. Reeshon Feuer, IRRI	November 1979	58
British Embassy	March-May 1979	103
United States International Communication Agency	May 1979	46
Association of Colleges of Agriculture in the Philippines	June 1979	9
International Development Research Council (IDRC)	January 1979	32
Asia Foundation	December 1979	83
T o t a l		382

c. Adopted direct purchasing by the acquisitions department.

This procedure had shortened the acquisition time from 9-12 months to 3-4 months for foreign titles and one month for Filipiniana titles.

d. Shifted from Dewey Decimal Classification to Library of Congress Classification. It was 75 percent completed as of December 31, 1979.

e. Published titles of new library acquisition materials and distributed them to all departments and offices of the College.

f. Renovated the library quarters.

The Library department had kept track of the use of its resources. There were 155,980 students who were admitted to the Library against 10,479 from the staff. A total of 10,535 books were loaned to faculty and 39,083 to students.

B. The Infirmary

1. Objectives

a. To provide effective and efficient health-care delivery system to the ViSCA populace; and

b. To provide and promote optimum health for the ViSCA populace.

2. Personnel Development

a. Staff Profile

With the aim of providing effective and efficient health-care delivery system to the ViSCA community, the Infirmary, formerly referred to as the Health Center, had two resident physicians, a dentist, a nurse and a dental aide. Medical and dental health services were the two major activities of the unit.

b. Staff Development

To update their knowledge and information in the medical field some staff members underwent trainings. Table 29 shows the name of the staff and type of training they attended.

Table 29. Trainings Attended by the Infirmary Staff.

Name	Type of Training	Date	Institution Attended
Dr. I. P. Bertulfo	Second Post-Graduate Course for Family Physicians	3/7-19/79	FEU - Manila
Dr. C. M. Miranda	MEC National Convention of School Physician Association	11/8-10/79	Philippine Plaza Hotel, Manila
Ms. J. P. Laguna	Regional Convention for Nurses	10/26-27/79	St. Paul Hospital, Tacloban City

3. Facilities Development

The World Bank-funded Infirmary building, which is expected to be operational in the second quarter of 1980, necessitates the immediate procurement of office and medical/dental equipment. Below is the list of equipment procured in 1979:

Equipment	Date of Acquisition
1 Office table	1-4-79
3 Office chairs	1-4-79
1 Stethoscope BD US	1-18-79
1 Sphygmomanometer, 300 mg. HG	1-18-79
1 02 Therapy set	2-1-79
1 unit Ambulance (Nissan)	5-7-79
1 set Height-Weight Scale	5-15-79
1 Bicycle	8-6-79
1 set Dressing cart with jars & cover	12-4-79
1 Electronic calculator	12-12-79
1 Medical gauge 02 Floro Gauge (C1G)	12-20-79

4. Accomplishments

The important activities and accomplishments of the Infirmary are enumerated in Table 30.

C. Office of Student Affairs (OSA)

Another constituent of the Auxiliary Services is the Office of Student Affairs which coordinates the operation of all student activities and services. It is primarily concerned with students' welfare which includes guidance and counseling, accommodations, coordination of student organizations, financial assistance and testing and admission.

1. Objectives

a. Counseling

(1) To reduce the number of student dropouts; and

(2) To assist the students in healthfully adjusting to their socio-psychological world.

b. Accommodation

(1) To have at least 70 percent of the students on campus dormitories;

(2) To implement planned dormitory programs through the assistance of selected dormitory advisers; and

(3) To develop cooperative living among dormitory residents.

c. Student Activities

(1) To allow students to practice leadership and responsible freedom; and

(2) To instill good followership.

Table 30. Accomplishments of the Infirmary.

Activities	Number of Persons Served				Total
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
a. Medical Services					
(1) Consultation and treatment of students	555	404	1,133	408	2,500
(2) Consultation and treatment of faculty and employees	187	150	196	145	678
(3) Consultation and treatment of staff dependents and outsiders	136	217	281	219	853
(4) Annual physical and medical examination of students for enrolment	-	1,885	-	169	2,054
(5) Physical and medical examination of faculty staff and new applicants for employment	303	104	136	127	670
(6) Immunization against CT-DPT and polio	-	1,899	98	267	2,264
b. Dental Services					
(1) Dental examination of students	299	1,940	377	157	2,773
(2) Prophylaxis	190	110	312	98	710
(3) Gum treatment	58	52	81	41	232
(4) Filling	36	108	161	27	332
(5) Extraction	79	72	173	39	363

d. Financial Assistance

(1) To help poor but deserving students get a college education through scholarships and part-time work; and

(2) To provide petty cash loans to students whose allowances are delayed for emergency purposes.

e. Testing

(1) To give students under probation or to be "culled" reconsideration through aptitude, personality and intelligence tests to discover in what field they might be successful.

2. Student Development

a. Origin

As to their place of origin, ViSCA students came from all over Western, Central and Eastern Visayas, and Western Northeastern and Southeastern Mindanao. In 1979 an average of 9.22 percent (Table 31) of the student population came from outside the Visayas region.

Table 31. Distribution of Students by Region, CY 1979.

Region	2nd Sem.1978-79		1st Sem.1979-80		Average	
	No.	%	No.	%	No.	%
Western Visayas	30	2.27	33	2.34	31	2.27
Central Visayas	266	20.14	273	19.35	269	19.69
Eastern Visayas	901	68.21	979	69.38	940	68.82
Western Mindanao	11	0.83	14	0.99	13	0.95
Northeastern Mindanao	57	4.31	63	4.46	60	4.39
Southeastern Mindanao	45	3.41	40	2.84	43	3.15
Other Regions	11	0.83	9	0.64	10	0.73
Total	1,321	100.00	1,411	100.00	1,366	100.00

b. Accommodation

For the current year 1979, an average of 740 students or 54.2 percent of the total student population were accommodated in the different college dormitories and residence halls. Some stayed with faculty members in staff houses. Others were in cottages which they themselves built inside the campus and the rest lived in nearby barangays. Distribution of students living in dormitories/residence halls is indicated in Table 32.

Table 32. Distribution of Students Accommodated in Dormitories/Residence Halls.

Dormitories/Residence Halls	: 2nd Sem. : 1978-79	: 1st Sem. : 1979-80
Men's		
1. Zea Maize	140	102
2. Molave	57	58
3. Coconut	42	46
4. Mahogany	15	16
5. Narra	-	13
6. Mulberry	-	78
Sub-Total	254	313
Women's		
1. Daisy	16	15
2. Everlasting	48	57
3. Jasmine	22	20
4. Magnolia	55	78
5. Sampaguita	38	33
6. Sunflower	82	78
7. Waling-waling	62	59
8. Bougainvilla	24	27
9. Calachuchi	64	57
10. Mariposa	-	78
Sub-Total	411	502
GRAND TOTAL	665	815

b. Organizations

Twenty-six student organizations were registered and recognized in 1979. Of this number, 14 were course-or class-related organizations while 11 were interest and service associations. Aside from these departmental organizations, the Supreme College Student Council was also reactivated during the year. Below is a list of recognized student organizations.

Student Organizations

(1) Agricultural Economics Society
(2) Crop Protection Majors Association
(3) COCOFED Scholars Organization
(4) Compassionate Society
(5) Department of Animal Science Extension Club
(6) Freshman Students Organization
(7) Future Homemakers of the Philippines
(8) Future Teachers of Agriculture
(9) Forestry Students Society
(10) G-Clefers Club
(11) Interdorm Council
(12) Junior Students Organizations
(13) Kapisanan ng mga DevCom Majors
(14) Philippine Society of Agricultural Engineers
(15) Students' Aide of Agronomy & Soils Majors
(16) Sophomore Students Organization
(17) Society of Agribusiness Students
(18) Siklaban Performing Arts Corps
(19) ViSCA Botanical Society
(20) ViSCA Repertory Club
(21) Youth Community Service Club
(22) ViSCA Chemical Society
(23) College Seniors Organization
(24) ERHS Science Society (High School)
(25) Future Homemakers of the Philippines (High School)
(26) Supreme College Student Council

c. Financial Assistance

(1) Scholarships

To help lighten the financial problems of the students, the College, through the coordination of the

Office of Student Affairs, offers three kinds of scholarships. These are the Entrance Scholarship which is awarded to freshmen every first semester of the year; Honorific Scholarship which is enjoyed by high school valedictorians and salutatorians; and Full or Partial Scholarship which is given to upperclassmen who meet the prescribed grade-point average.

In 1979, 8.6 percent of the total student population in the second semester and 5.7 percent in the first semester enjoyed the ViSCA-funded scholarship program. However, students also availed with the other forms of scholarships given by private individuals, student organizations and public agencies. This brought a total percentage of ViSCA student scholars to 42.8 percent in the second semester of 1978-79 and 42.5 percent in the first semester of 1979-80 (Table 33).

Figure 7 indicates the growth in student scholarship from 1977 to 1979.

(2) Work-Study Grants

A student needing work to help defray his college expenses may take a part time job as student assistant or laborer. A student assistant receives ₱1.00 per hour or a maximum of ₱100.00 a month while a student laborer gets ₱0.75 per hour or ₱75.00 a month.

Table 33. Distribution of Scholars Funded by ViSCA and Other Agencies.

Category	2nd Sem. 1978-79	1st Sem. 1979-80
ViSCA Funded		
Entrance	-	10
Honorific	-	12
Full	49	17
Partial	64	41
Sub-Total	113	80
% to Total Enrolment	8.6	5.7
Funded by Other Agencies		
COCOFED	371	423
PhilSucom	2	3
State	5	9
NFAC	3	3
PRCRTC	6	6
NSDB	1	1
SSFRC	16	7
SNPL	35	44
COCOFED Organ	12	23
Don T. Certeza	1	1
Sub-Total	452	520
% to Total Enrolment	34.2	36.9
GRAND TOTAL	565	600
% to Total Enrolment	42.8	42.5

Figure 7. GROWTH IN STUDENT SCHOLARSHIP.

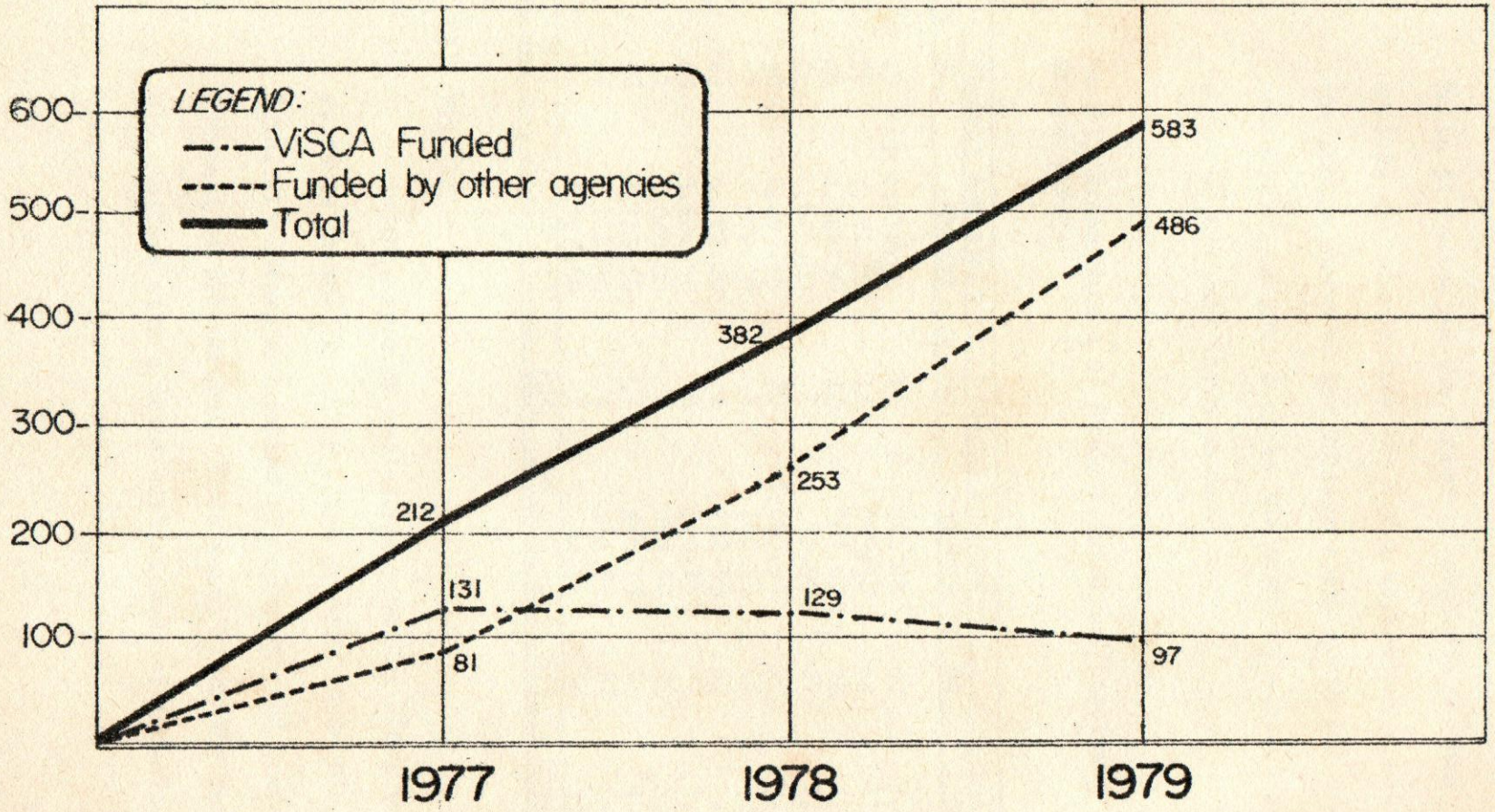


Table 34 indicates the number of students who had availed assistance from the ViSCA work-study grant and the amount spent by the College every month for the whole year. Figure 8 shows the trend in student scholarship for the past three years.

Table 34. Monthly Distribution of Student Assistant/Laborer & Expenditures.

Month	Student Assistant		Student Laborer		Total	
	No.	Amount	No.	Amount	No.	Amount
January	45	₱ 4,212.50	15	₱ 853.88	60	₱ 5,066.38
February	50	4,581.50	14	859.50	64	5,441.00
March	46	4,322.50	12	583.62	58	4,906.12
April	26	1,623.00	1	72.00	27	1,695.00
May	30	2,893.75	30	3,883.33	60	6,777.08
June	7	472.00	3	180.50	10	652.50
July	64	5,781.00	4	252.38	68	6,033.38
August	63	5,201.50	8	526.13	71	5,727.63
September	67	5,049.00	5	294.50	72	5,343.50
October	56	4,413.50	7	466.13	63	4,879.63
November	63	4,218.50	4	235.50	67	5,454.00
December	54	4,212.68	1	34.13	55	4,246.81
Total	571	₱47,981.43	104	₱8,241.60	675	₱56,223.03

(3) ViSCASELF

Another type of assistance given by ViSCA to students is the ViSCASELF which provide funds for emergency loan. It covers a duration of one month and bears an interest of 0.1 percent. This year, ViSCASELF served 870 students with a total disbursement of ₱74,173.00 (Table 35).

Figure 8. GROWTH OF STUDENT WORK-STUDY GRANTS.

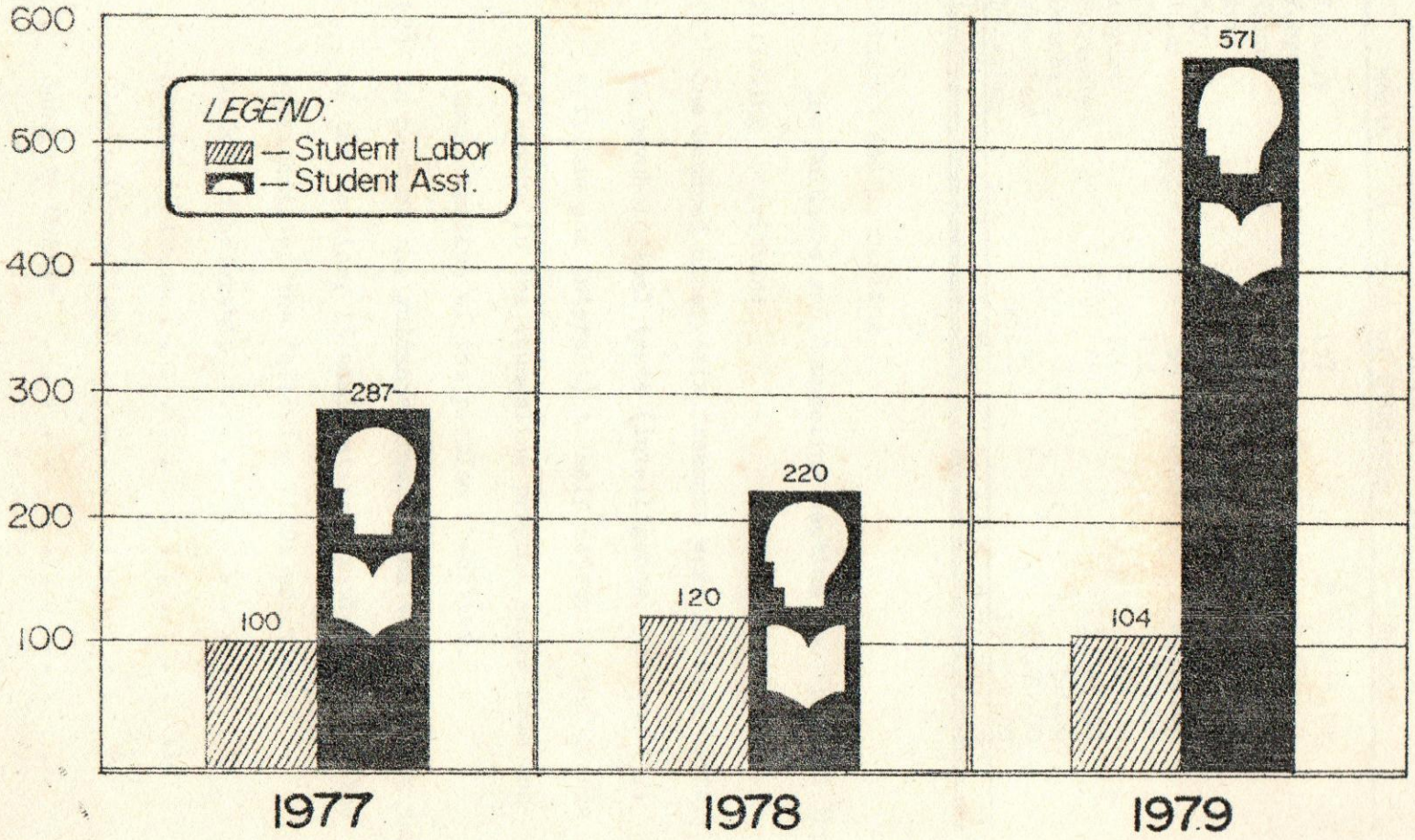


Table 35. Monthly Distribution of ViSCASELF Loan Releases.

Month	Number of Students	Amount
January	137	₱ 11,835.00
February	113	9,450.00
March	1	100.00
April	-	-
May	40	3,075.00
June	53	4,710.00
July	114	10,270.00
August	145	11,063.00
September	38	2,965.00
October	1	50.00
November	53	5,170.00
December	175	15,785.00
Total	870	₱ 74,173.00

d. Guidance and Counseling

The Guidance and Counseling section accomplished the following activities:

(1) One hundred ninety-six freshmen were given a battery of psychological tests (intelligence, personality, aptitude and interest) to help determine the course of action in the counseling program aside from the administration of the problem checklist.

(2) As part of the guidance program and the extension service of the section, it administered examinations to the applicants of the following ViSCA positions:

COCOFED Scholarship	31
Clerks (Entrance)	116
Clerks (Promotion)	24
Security Guards	4
Drivers	7
Total	182

(3) Organized counseling groups between faculty and staff and reprogrammed consultation hours to help advice and solve student problems.

(4) Intensified career counseling through the use of personal data and psychological profile.

3. Personnel Development

a. Staff Profile

The Office of Student Affairs is headed by a director. Assisting him are the following: a guidance counselor who is incharge of testing and admission, two assistant guidance counselors who are responsible for student scholarships and organizations, a dormitory manager who takes care of student accommodations and two clerks who handle the administrative job of the office.

b. Staff Development

Only one among the staff, Ms. Nellie Capuyan, was able to attend conferences this year. These were the following:

(1)	Conference of COCOFED Coordinators	6/10-11/79 Cebu City
(2)	Conference of Resource Persons	2/1-2/79 ViSCA
(3)	Conference on Study Now, Pay Later	11/26-30/79 Baguio City

4. Facilities Development

The physical facilities of this unit improved this year. A more spacious office was made available to accommodate a larger

number of students for guidance and counseling services. It also acquired the following equipment:

a. Amplifier and public address system

b. Camera with attachments

c. Tape recorder cassette

d. Two typewriters

e. One bicycle

f. One sala set, 4 chairs, sofa and side table

PART FOUR | ADMINISTRATIVE AND SUPPORT SERVICES

In implementing its comprehensive development program, ViSCA has considered change, innovation and effectiveness as the watch-words. The Administration has to find better ways of optimizing the use of College resources and at the same time introduce new programs necessary in maintaining the growth momentum the institution has gained during the six years of its existence as a state college.

In 1979 ViSCA had infused new ideas and marshalled its administrative staff to face new challenges. New administrative units were created while existing offices were strengthened through the reshuffling of office heads.

This report documents the significant accomplishments of the Administrative Services in 1979.

A. Objectives

1. General - To provide direction and coordination as well as render supportive services to the different units of the College.

2. Specific -

   a. To formulate policies, guidelines and development programs;

   b. To assess the implementation of programs and projects;

   c. To maintain and/or repair infrastructure and other facilities and machinery of the College.

d. To maintain effective business operations; and

e. To maintain peace and order as well as protect College property.

B. Personnel Development

1. Seminar-Workshops

a. Key staff members of all administrative offices attended the seminar-workshop on the mechanics of the New Performance Appraisal System conducted by the Regional Office of the Civil Service Commission on February 6-7, 1979.

b. Selected staff members attended a seminar on Zero-Based Budgeting in December 1979.

c. Heads of the Accounting and Cash Divisions attended a seminar-workshop on current and new policies and procedures affecting Treasury Checking Account for Agencies (TCAA).

2. Recruitment/Turnover

A total of 4 non-academic staff were recruited during the year to fill up the positions vacated by some of the staff who resigned and transferred to other agencies. The list of the new recruits and those separated are found in Tables 36 and 37.

Table 36. List of New Non-Academic Staff.

	Name	Department	Non-Academic Rank	Date Appointed
1.	Capacio, M.	PPO	PPO Superintendent	7-16-79
2.	Goltiano, H.	Information	Information Editor	9-1-79
3.	Pepito, M.	Crop Prot.	Laboratory Tech.	8-20-79
4.	Israel, G.	OBAA	Accounting Clerk	9-1-79

Table 37. List of Separated Non-Academic Staff.

Name	Department	Position	Reason for Leaving
1. Valenzona, R.	Information	Clerk	Resigned
2. Vissoro, T.	Crop Prot.	Lab. Tech.	Resigned
3. Arancon, S.	PPO	Draftsman	Resigned
4. Lapuebla, A.	PPO	Architect	Resigned
5. Cedicol, L.	Information	Info. Editor	Transferred
6. Enriquez, C.	DPO	Research Aide	Transferred
7. Daclag, I.	OBAA	Clerk	Resigned
8. Parilla, A.	CES	Clerk	Resigned
9. Fernandez, B.	Ag. Econ.	Clerk	Transferred

3. Awards

Like the academic staff, non-academic personnel were also given recognition of their exemplary performance during the year. A total of 23 personnel were given meritorious service awards (Table 38).

Table 38. List of Non-Academic Staff Awardees.

Name	Department	Kind of Award	Category
1. Braga, M.	PPO	Meritorious Award	Unskilled
2. Nuñez, P.	PPO	Meritorious Award	Unskilled
3. Ormellada, J.	PPO	Meritorious Award	Unskilled
4. Cuero, J.	Crop Prot.	Meritorious Award	Unskilled
5. Lapasanda, D.	PPO	Meritorious Award	Skilled
6. Galenzoga, P.	OP	Meritorious Award	Skilled
7. Singson, F.	PPO	Meritorious Award	Skilled
8. Paraiso, E.	PPO	Meritorious Award	Skilled
9. Montajes, S.	PPO	Meritorious Award	Clerical
10. Abapo, P.	ERHS	Meritorious Award	Clerical
11. Amihan, M.	Crop Prot.	Meritorious Award	Clerical
12. Fernandez, E.	PO	Meritorious Award	Clerical
13. Gaviola, E.	PPO	Meritorious Award	Supervisory
14. Capuyan, N.	OSA	Meritorious Award	Auxiliary
15. Alumbro, V.	SO	Meritorious Award	Special
16. Bartolini, P.	PRCRTC	Meritorious Award	Research

Table 38. List of Non-Academic ... (Continued)

	Name	Department	Kind of Award	Category
17.	Mandras, B.	Crop Prot.	Meritorious Award	Research
18.	Enriquez, L.	ODI	Meritorious Award	Research
19.	Lavega, M.	PRCRTC	Meritorious Award	Research
20.	Pascual, B.	CES	Meritorious Award	Extension
21.	Miranda, L.	Library	Meritorious Award	Supervisory-Adm.
22.	Villanueva, M.	PRCRTC	Meritorious Award	Supervisory-Adm.
23.	Go, S.	V-P	Meritorious Award	Supervisory-Adm.

C. Institutional/Facilities Development

1. Improvement of the water system through the construction of a bigger water reservoir.
2. Installation of a radio communication system for the Security Force and the Transportation Unit.
3. Acquisition of servicing equipment for motor vehicles.
4. Acquisition of office equipment such as typewriters, calculators and filing cabinets.
5. Acquisition of farm tools and hand tractors for the income-generating projects.

D. Organization

1. Creation of the Office of the Vice-President for Administration and Office of the Director of Extension.
2. Organizational revamp which placed the Personnel Office and the Library together with the other offices under the Office of the President. The Legal Office, Infirmary, Physical Plant Office, Security, Income-Generating Project Office and Office of Business and Administrative Affairs were placed under the Office of the

Vice-President for Administration. The other salient feature of the organizational change was the placing of the RTC-RD and the Community Extension Service under the Office of the Director of Extension (See Figure 9 for the ViSCA Organizational Chart).

3. Reassignment of the following key personnel:

   a. Dr. Samuel S. Go - Vice-President for Administration

   b. Dr. Celedonio M. Gapasin - Director of Extension

   c. Dir. Francisco G. Bascug - Director of OBAA

   d. Dir. Manuel A. Ancheta - Director of OSA

   e. Dr. Federico R. Flores - Director of RTC-RD

   f. Engr. Manuel C. Capacio - Superintendent of Physical Plant Office.

E. Accomplishments

1. Development Planning Office

   a. Updated briefing information

   b. Prepared budgetary estimates for 1980

   c. Updated service area information needed for development plan revision.

   d. Prepared the following:

      (1) 5-Year Development Plan

      (2) 1978 Annual Report

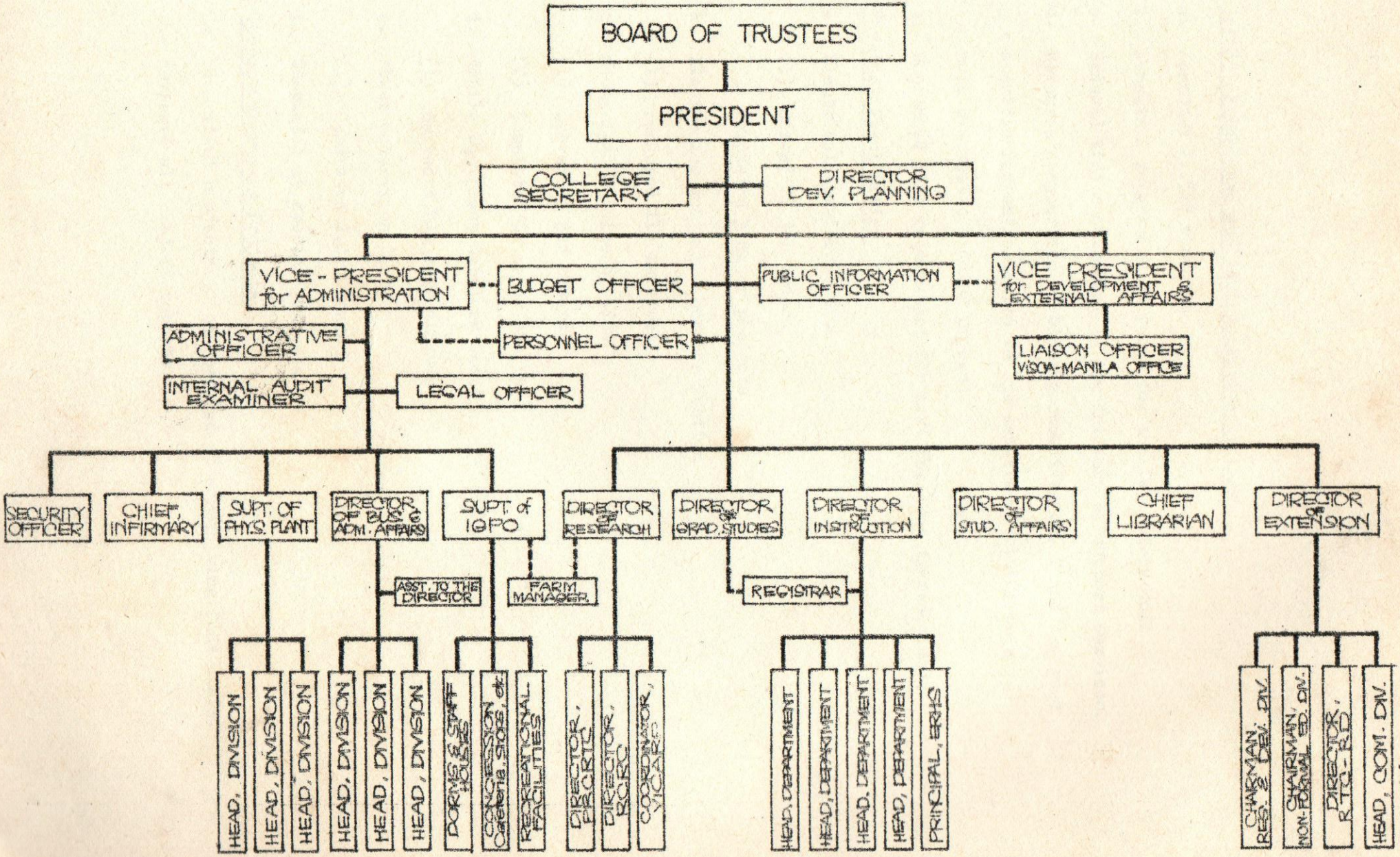
      (3) ViSCA 55th Anniversary Souvenir Program

      (4) ViSCA: Facts & Figures

      (5) Briefing Charts

      (6) Reports required by NEDA and MEC

Figure 9. VISCA ORGANIZATIONAL CHART.



2. Office of Business and Administrative Affairs

   a. Approved 11,527 vouchers

   b. Finalized separation of funds for the Depository Unit

   c. Reduced time requirement in the delivery of support services.

   d. Revamped composition of bidding committee No. 2 and assigned specific responsibilities to its members resulting to a more systematic bidding process.

   e. Shortened time requirement for most business transactions.

3. Physical Plant Office

   a. Electrical Service Section

      (1) Served 77 job orders

      (2) Completed 3 major projects

   b. Electronics Equipment Service Section

      (1) Rendered 113 services

   c. Mechanical Service Section

      (1) Served 53 job orders

      (2) Completed 22 major projects

   d. Mobile Equipment Services Section

      (1) Served 4,848 trip tickets

   e. Power Generation Section

      (1) Generated 2,415 hours

   f. Completed 25 special projects

4. Income-Generating Projects

   a. Identified projects to be operated on a revolving fund basis.

   b. Reviewed all project reports

c. Conducted lectures and demonstrations to students and teachers visiting the College.

d. Obtained the following project incomes for 1979:

(1) Animal Projects

(a)	ERHS Poultry and Rabbitry	₱ 48,111.00
(b)	ERHS Piggery	30,537.00
(c)	College Poultry and Rabbitry	44,315.00
(d)	College Piggery	4,996.00
(e)	College Dairy-Ranch (Goat)	3,274.00
(f)	College Dairy-Ranch (Cattle)	10,218.00
	Total	₱141,451.00

(2) Farm Crops

(a)	Rice Farm	₱ 29,963.00
(b)	Vegetable-Seed Bank	2,510.00
(c)	Nursery	3,268.00
(d)	Abaca-Banana	3,500.00
(e)	Pomology	249.00
(f)	Root Crops	2,540.00
(g)	Forestry	1,459.00
(h)	Coconut (Rental)	18,200.00
	Total	₱ 61,689.00

(3) Student and Staff Services (Rental)

(a)	Canteen and Cafeteria	₱ 10,098.00
(b)	Minimarket	435.00
(c)	Guest House	1,973.00
(d)	Bakery	792.00
(e)	Botica sa Barangay	25.00
	Total	₱ 13,323.00

Summary

Animal Project	₱141,451.00
Farm Crops	61,689.00
Student and Staff Services	13,323.00
Total	₱216,463.00

5. Legal/Claims Office

   a. Prepared 412 documents

   b. Paid ₱204,053.57 to 28 tenants

   c. Paid ₱17,157.00 to 3 landowners

6. Security Unit

   a. Maintained peace and order on the campus

   b. Reduced to a minimum level pilferage of College property

   c. Arrested a snatcher and recovered the stolen money.

   d. Arrested violators of College rules and regulations:

      (1) 110 students
      (2) 172 non-students
      (3) 11 staff members

PART FIVE | PHYSICAL FACILITIES / DEVELOPMENT

ViSCA is one of the few institutions in the country today which received assistance from the Philippine Government and private agencies for developing their physical facilities and laboratory equipment.

A. Building

Since 1977 when ViSCA started its massive building construction until the end of this year, the contract amount for physical facilities development summed up to a grand total of ₱62,177,617 (Table 39). During the latter part of 1979, the first phase of the construction of the administration, library, and agro-reforestation buildings began. Sometime during the middle part of 1980, a PCARR-funded building will rise. This building will house research facilities on abaca and coconut and the office of the Visayas Coordinated Agricultural Research Program (ViCARP).

A report from the Physical Facilities Development Office of ViSCA revealed that majority of the buildings which were expected to be completed in 1979 did not meet the deadline. Only four buildings were completed as scheduled. The causes of the delay particularly for World-Bank-funded building projects were:

Table 39. Status of Physical Facilities Development for 1979.

	Project/ Building	Contract Amount	% Completion	Contract Time in Calendar Days	Date Started	Expected Date of Completion	Adjusted Date of Completion
I.	**World Bank Funded**						
1.	Site Dev. & Util.	₱13,349,000	98.50	360	3/78	3/79	3/30/80
2.	AgDev-AgEcon	3,397,289	89.70	240	7/78	3/79	6/30/80
3.	Social Lab	950,127	95.00	240	7/78	3/79	6/30/80
4.	RTC-RD	3,365,809	100.00	180	5/78	11/78	Completed
5.	Physical Plant	1,353,862	91.13	240	7/78	3/79	6/30/80
6.	Infirmary	986,994	98.80	240	7/78	3/79	6/20/80
7.	Crop Protection	3,000,000	83.00	300	7/78	5/79	7/31/80
8.	Agro. & Soils	2,350,000	83.00	300	7/78	5/79	7/31/80
9.	Field Houses	1,820,000	92.50	300	7/78	5/79	7/31/80
10.	Ag. Bot. & Plt. Brdg.	2,120,000	83.00	320	7/78	5/79	7/31/80
11.	Ag. Eng'g.	3,960,000	91.50	240	5/78	1/79	6/30/80
12.	Ag. Eng'g. Workshop	1,823,750	93.00	240	5/78	1/79	6/30/80
13.	Ag. Chem.	2,146,250	93.00	240	5/78	1/79	6/30/80
14.	Home Science	2,281,000	73.74	240	7/78	2/79	6/30/80
15.	College Union	2,566,000	98.40	240	7/78	2/79	3/30/80
16.	Ani. Sci. & Vet. Med.	2,671,000	94.50	240	7/78	2/79	3/30/80
17.	Auxiliary Unit	1,164,000	95.80	240	7/78	2/79	3/30/80
	Sub-Total	₱49,305,081		4,400			
II.	**R.P. Funded**						
1.	Crop Res. Center	2,320,289	100.00	120	4/78	6/79	Completed
2.	Arts & Letters	2,619,543	100.00	303	9/77	11/78	Completed
3.	Duplexes	1,604,000	100.00	246	12/77	5/79	Completed
4.	Boys Dorm	1,551,000	100.00	240	2/78	11/79	Completed
5.	Cafeteria	675,000	100.00	148	2/78	6/79	Completed
6.	Administration Bldg (Phase I)	900,000*	75.71	210	8/79	7/80	4/80
7.	Library Bldg(PhaseI)	700,000*	66.59	210	8/79	7/80	4/80
8.	Agro-Reforestation Bldg (Phase I)	872,704*	85.00	240	8/79	7/80	4/80
	Sub-Total	₱11,242,536		1,717			
III.	**Private Funding**						
1.	COCOFED Dorm A & B	690,000	100.00	330	8/77	8/78	Completed
2.	COCOFED Dorm C & D	940,000	100.00	210	5/78	4/79	Completed
	Sub-Total	₱ 1,630,000		540			
	GRAND TOTAL	₱62,177,617		6,657			

* Phase I Contract price.

1. Change orders

   a. adjustments of building structure to the actual condition of site;

   b. additional requirements requested by the owner and the executive architects; and

   c. change of building site

2. Lack of cement and fuel

   The Committee on Bids and Awards of EDPITAF approved a 30-calendar day extension for lack of cement and 30 calendar-day extension for lack of fuel.

3. Bad weather

4. Increased cost of fuel which triggered off price hikes of construction materials.

5. Suspension of contract date due to change orders.

B. Equipment

In 1979 World Bank-funded equipment procurement amounted to ₱9,656,456.72 (Table 40).

Table 40. Amount of World Bank Equipment Procured in 1979.

Item	Cost	%
1. Vehicles and Farm Machinery	₱ 3,345,458.12	34
2. Audio, Office Printing Equipment	1,887,850.05	20
3. Radio Station	1,993,008.04	21
4. Power Generating Equipment	1,094,317.51	11
5. Textbooks, Journals & References	1,335,823.00	14
Total	₱ 9,656,456.72	100

In addition to the World-Bank funded equipment, ViSCA also received on September 22, 1979 a grant for equipment from NSDB amounting to ₱299,526.00. Below is the breakdown of the grant:

Physics - ₱70,797.00

1.	1 overhead projector	₱ 3,000.00
2.	1 dewpoint hygrometer	4,500.00
3.	1 AC-DC variable voltage	1,000.00
4.	1 power supply	1,790.00
5.	1 spectrometer	6,000.00
6.	1 oscilloscope	8,000.00
7.	1 Boyle's Law apparatus	890.00
8.	1 coefficient of Linear Expension Apparatus	1,400.00
9.	1 refraction telescope	8,897.00
10.	1 AC-DC generator	3,900.00
11.	1 electrostatic generator	3,900.00
12.	1 demonstration micrometer	1,000.00
13.	2 Hooke's Law apparatus	1,000.00
14.	1 digital voltmeter	2,350.00
15.	1 analog voltmeter	2,670.00
16.	1 tortion apparatus	5,000.00
17.	1 sonometer	3,100.00
18.	1 impact apparatus	6,000.00
19.	1 magnetic effect of current apparatus	3,300.00
20.	1 adjustible capacitator	3,100.00

Chemistry - ₱111,641.36

1.	1 mettler balance	₱10,000.00
2.	1 chromatography cabinet	4,950.00
3.	2 glass blowing kit	2,351.00
4.	2 viscosimeter	8,000.00
5.	1 titrimeter	3,052.00
6.	1 potentiometer	2,800.00
7.	2 pH meter	2,800.00
8.	2 melting point apparatus	14,220.00
9.	1 refractometer	10,193.36
10.	1 refraction apparatus	5,840.00
11.	2 muffle furnace	5,069.00
12.	1 oven	2,000.00
13.	1 wiley mill	4,932.00
14.	1 water analyzer set	4,875.00
15.	1 bomb calorimeter	11,200.00
16.	1 polarimeter	12,000.00
17.	1 evaporator	3,384.00
18.	1 metal grinder	3,975.00

Biology - ₱ 89,858.00

1.	5 microscopes, composed with oil immersion, trinocular	₱ 7,164.00
2.	5 microscopes, stereoscope	5,000.00
3.	1 microscope, slide projector	3,315.00
4.	1 demineralizer	1,422.00
5.	1 distilling apparatus	1,786.00
6.	1 pH meter	1,500.00
7.	1 analytical balance	10,000.00
8.	1 centrifuge, table model	3,000.00
9.	1 sterilizing cabinet	1,000.00
10.	1 autoclave	10,000.00
11.	1 colony counter	4,600.00
12.	1 opaque projector	3,000.00
13.	1 incubator	5,000.00
14.	1 polarimeter	12,000.00
15.	1 rotary microtome	10,071.00
16.	1 vacuum pump	5,000.00
17.	1 kymograph	3,000.00
18.	1 hygronometer	3,000.00

Summary

Physics	-	₱ 70,797.00
Chemistry	-	111,641.36
Biology	-	89,858.00
Sub-Total	-	₱ 272,296.36
10% contingency		27,229.64
Total		₱ 299,526.00

PART SIX FINANCIAL STATEMENT AND ANALYSIS

A. The 1979 Budget

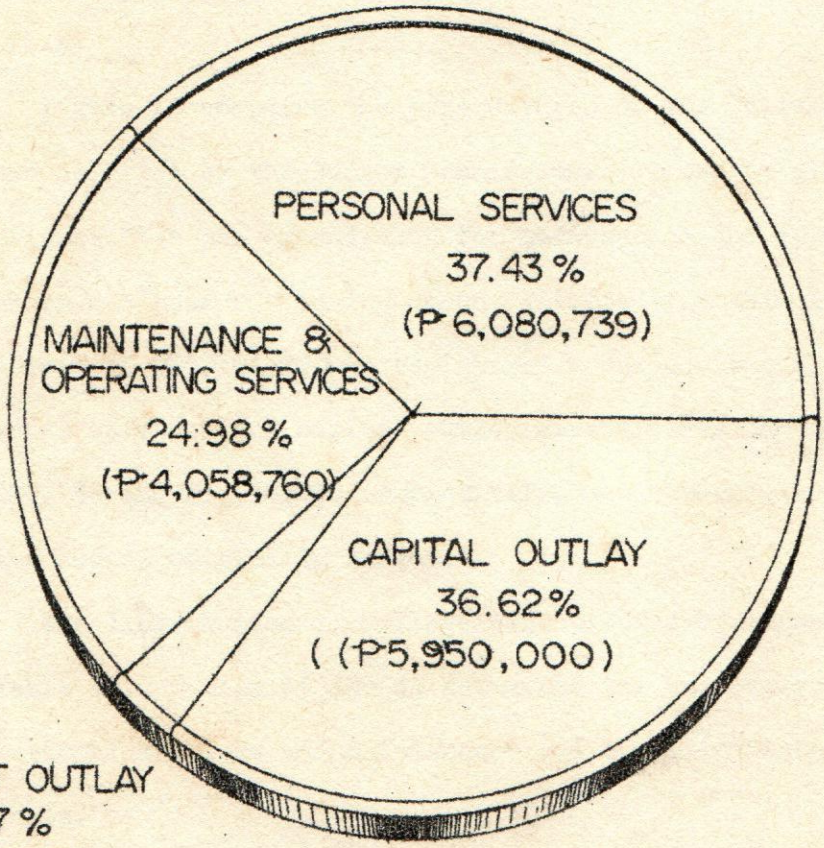
ViSCA's adoption of the participatory and zero-base budgeting concepts in 1979 has produced a development-oriented budget. The full involvement of all college units in the budget preparation, adoption of priorities with special emphasis on countryside development through formal and non-formal education and a thorough budget review enabled ViSCA to acquire the amount needed to undertake more instructional, research and extension projects and at the same time speeded up the completion and construction of more infrastructure projects.

For the year 1979, the total appropriation for ViSCA including the amount allotted for capital outlay was ₱19,967,000. However, due to budgetary reserves imposed by the Ministry of the Budget only ₱16,246,345 was released (Table 41). Because of this financial constraint, the College had had to generate mandatory measures though in a reasonable or practical manner taking care that no essential services were sacrificed or prejudiced, particularly priority projects. Accordingly, the allotted budget had to be reprogrammed as shown in Figure 10.

Table 41. Summary of 1979 Budget Appropriation, Allotment and Expenditures.

Project	Appropriation	Total Allotment	Cash Disbursement/ Expenditures
Higher Education	₱ 3,768,000	₱ 3,536,364.83	₱ 3,716,713.61
Secondary Education	811,000	756,706.47	731,995.68
Research	2,918,000	2,266,159.06	1,751,472.51
Extension	374,000	352,386.61	472,621.60
Auxiliary Services	406,000	318,104.70	368,086.39
Gen. Administration	2,827,000	3,066,623.33	3,211,432.21
Sub-Total	11,104,000	10,296,345.00	10,252,322.00
Capital Outlay	8,863,000	5,950,000.00	5,950,000.00
GRAND TOTAL	₱19,967,000	₱16,246,345.00	₱16,202,322.00

Figure 10. PERCENTAGE DISTRIBUTION OF REPROGRAMMED BUDGET.



B. Expenditures

Although the amount allotted by the Budget Commission was 18.6 percent lesser than the amount appropriated, still ViSCA was able to achieve its objectives by reprogramming the available funds. As the year ended, the total expenditures of the six major projects of the College, namely: Higher Education, Secondary Education, Research, Extension, Auxiliary Services and General Administration, amounted to ₱16,202,322 which represented 99.73 percent of the total allotment. There was a balance of ₱44,023.00 which was the difference of the allotment and expenditures due to the unrealized income during the year.

Figure 11 compares the expenditures of the College against the amount allotted by the Budget Commission. It can be gleaned from the figure that the expenditure for maintenance and operating expenses was lesser than the amount allotted for this item. However, a deficit of ₱23,154.00 was registered under equipment outlay. Personal services and capital outlay expenditures amounted to ₱6,080,739 and ₱5,950,000 respectively, which were exactly equal to the amount originally budgeted.

The distribution of College expenditures by items is presented in Table 42. Tables 43 and 44 summarize the quarterly expenditures of personal services and maintenance and operating expenses by projects.

Figure 11. COMPARATIVE FIGURES BETWEEN AMOUNT ALLOTTED AND EXPENDITURES.

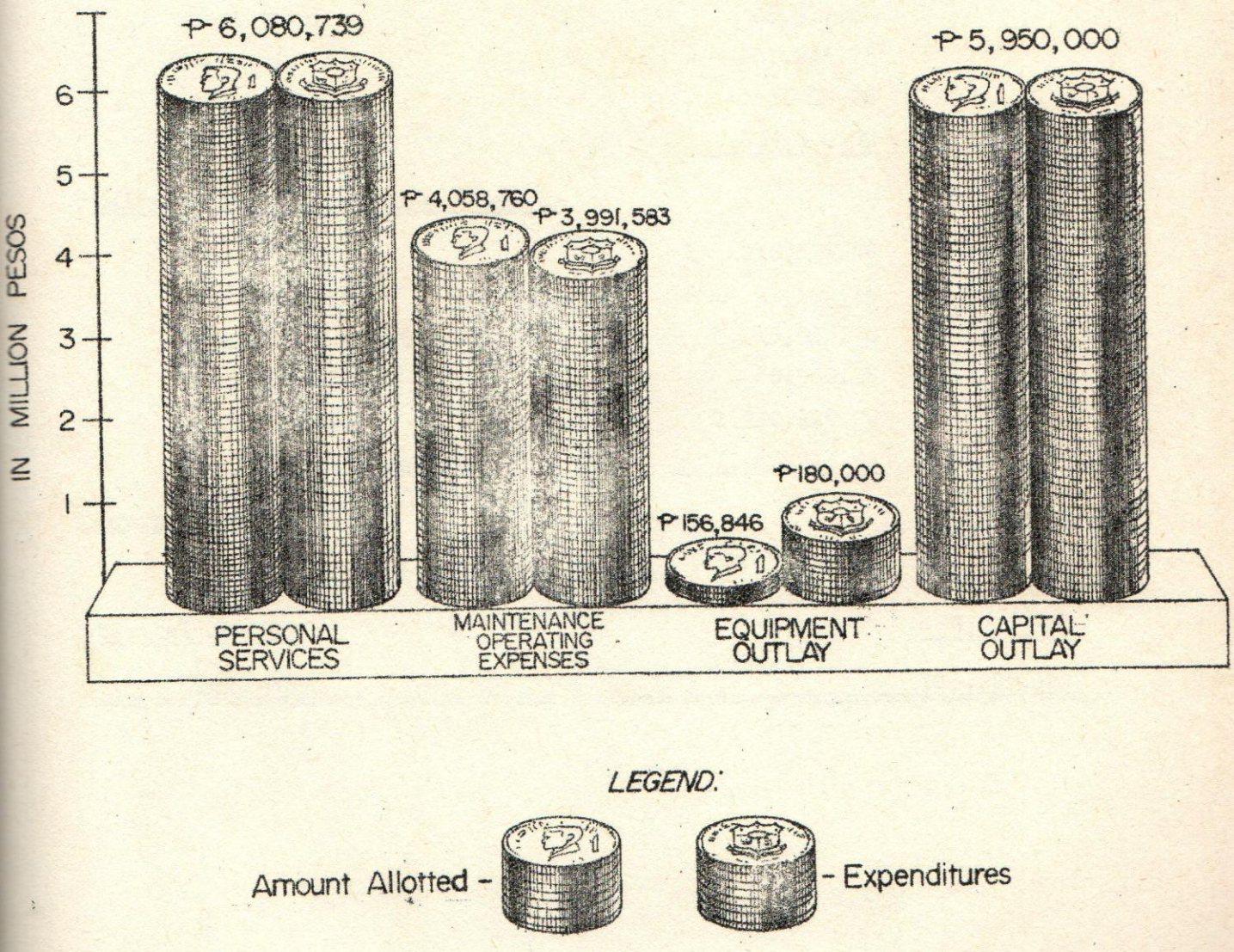


Table 42. Distribution of College Expenditures by Items.

Personal Services	Amount	
Regular employees	₱ 4,507,123.50	
Casual employees	795,262.79	
Substitutes	86,377.67	
Honoraria	231,945.76	
Student Labor	85,029.28	
GSIS	375,000.00	₱ 6,080,739
Maintenance and Operating Expenses		
Travel	₱ 216,615.58	
Communication	22,293.15	
Repairs and Maintenance	1,019,048.76	
Transportation	8,982.25	
Other Services	1,242,229.22	
Supplies and Materials	1,482,414.04	₱ 3,991,583
Equipment Outlay		180,000
Total for Current Operating Expenses		₱10,252,322
Capital Outlay		5,950,000
GRAND TOTAL		₱16,202,322

Table 43. Quarterly Expenditures for Personal Services by Projects.

Project	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Higher Education	₱ 613,130.57	₱ 634,105.86	₱ 753,787.63	₱₱ 961,202.68	₱₱2,962,226.74
Secondary Education	118,570.05	120,642.54	124,310.43	189,268.51	552,791.53
Research	184,556.75	184,211.10	154,916.00	146,308.98	669,992.83
Extension	56,643.15	69,599.10	67,797.22	82,169.57	276,209.04
Auxiliary	62,280.98	59,521.06	71,497.82	86,627.96	279,927.82
Administration	296,818.50	263.920.34	303.730.23	475,121.97	1,339,591.04
Total	₱1,332,000.00	₱1,332,000.00	₱1,476,039.33	₱1,940,699.67	₱6,080,739.00

Table 44. Quarterly Expenditures for Maintenance and Operating Expenses by Projects.

Project	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Higher Education	₱ 200,166.82	₱ 136,199.26	₱ 258,400.80	₱ 135,321.24	₱ 730,088.12
Secondary Education	90,330.57	7,929.97	81,203.18	(259.57)	179,204.15
Research	249,126.42	634,428.83	120,149.59	77,173.59	1,080,878.43
Extension	12,846.04	15,208.22	8,964.45	4,393.85	41,412.56
Auxiliary	24,220.44	12,152.84	41,630.80	10,154.40	88,158.57
Administration	516,709.71	560,330.88	550,155.20	244,645.38	1,871,841.17
Total	₱1,093,400.00	₱1,366,250.00	₱1,060,504.11	₱471,428.89	₱3,991,583.00

Originally, the schedule of expenditures for capital outlay was programmed for different projects as seen in Table 45. However, because of the pressing need to complete and construct more infrastructures the amount for each project was revised (Table 46).

Table 45. Original Schedule of Expenditures for Capital Outlay.

Project	Appropriation	Reserve	Allotment
1. Completion of Crop Research Center	₱ 1,800,000	₱ 300,000	₱ 1,500,000
2. Construction of multi-purpose Gymnasium	1,200,000	200,000	1,000,000
3. Construction of Administration building	900,000	150,000	750,000
4. Construction of Staff Housing	800,000	-	800,000
5. Construction of Agro-Reforestation building	700,000	100,000	600,000
6. Construction of Library building	500,000	100,000	400,000
7. Construction of Student Dorm	800,000	200,000	600,000
8. Renovation of High School building	300,000	-	300,000
9. Unprogrammed	1,863,000	-	-
Total	₱ 8,863,000	₱ 1,050,000	₱ 5,950,000

Table 46. Revised Schedule of 1979 Capital Outlay Expenditures by Projects.

Project	Amount
PFDO	₱ 37,291.50
Land Acquisition	1,411,691.39
Duplex Staff Houses	266,318.72
Boys Dormitory	611,426.00
Crop Research Center	324,671.98
PIU	5,362.00
Cafeteria	259,097.00
PPO	477.00
Arts and Letters	318,964.67
Site Development	98,111.80
Forestry	33,228.00
Gymnasium	20,000.00
Administration	770,604.00
Agro-Reforestation	953,485.94
Library	583,220.00
High School	256,050.00
Total	₱5,950,000.00

PART SEVEN

SUMMARY OF MAJOR PROBLEMS AND RECOMMENDATIONS

I. Instruction

A. Higher Education

1. Dearth of classroom and laboratory facilities and office space.

Even rooms with very poor lighting and ventilation had to be utilized and laboratory classes had to be scheduled 10:00 A.M. to 1:00 P.M. to effect three shifts. This was necessitated by the very inadequate number of classrooms and instructional equipment. Many staff offices were crowded due to limited space.

- Hurry up the construction of academic buildings and the purchase of equipment by EDPITAF.

2. Understaffed departments.

The work of the numerous staff members on study leave had to be distributed among the remaining ones, thus resulting to overloading of some teachers. Hiring of enough substitutes was not always possible because qualified applicants in some fields of specialization like Forestry and Plant Breeding were very limited. Aggravating the situation

was the fact that other institutions needing said applicants usually could offer a salary much higher than what ViSCA could give.

- Make the salary scale for ViSCA staff competitive.

3. Delayed completion of graduate studies.

Because of delay in the completion of thesis research, many staff members on study leave could not return to ViSCA on time. Such delay was caused by the difficulty in securing thesis funds.

- ViSCA should get funds from the Philippine government to provide each scholar enough money for research.

B. Secondary Education

1. Lack of reference materials in the library.

Textbooks and other reference materials were very limited there being only five copies for each kind. Fiction books were lacking.

- The library should purchase more textbooks, references and fiction books for high school students to improve and encourage the students to read which could train them to express their ideas.

2. Insufficient audio-visual aids and other teaching materials.

Lack of audio-visual aids and other teaching materials resulted in the use of the traditional methods of teaching among the staff. The overloading of teachers and unavailability of an illustrator or artist prevented the preparation of teaching aids.

- Update the course contents with the aid of professional journals, periodicals and reference books; hold regular seminar-workshops for the staff on the preparation of teaching materials and educational research methodology; and hire an illustrator or artist for the high school department.

3. Dearth of classrooms, laboratory facilities, teachers workrooms and other physical facilities.

Laboratory facilities and instructional equipment were not adequate to meet the needs of both the teachers and students. Workrooms for teachers were lacking which impeded the attainment of maximum teaching efficiency.

- Improve the teaching-learning facilities by providing wider and replaceable writing boards, workrooms, bulletin boards and laboratory facilities, so that teaching materials and other visual aids like charts, graphs, pictures and other learning devices can be installed; and provide slide projectors and speech laboratory equipment which will give students a wide variety of learning experiences on various subjects.

4. Poor organizational set-up

The present high school organizational structure needs improvement.

- Encourage planning initiatives among the staff by having a more realistic and effective organizational set-up and relegate decision-making to the different sections.

This will pave the way for faster evolvement of innovations in teaching, learning environment and school organization and policies for greater efficiency of the staff.

5. Inadequate field trips or educational tours.

High school students had very few field trips or educational tours during the year.

- Encourage field trips or educational tours among students and staff. This is one of the important teaching-learning activities because they enrich the students' experience and broaden their learning horizon.

6. Absence of a cafeteria for high school students

High school students lack social interaction, group identity and the motivation to learn. They do not get sufficient nutritious food.

- Provide a cafeteria solely for secondary students.

7. Reduction of rice farms

The rice farms of high school students had been reduced. The former land area for this purpose should be restored and maintained by the students for their rice production model farm projects, rice-fish farms, cooperative farm projects and semi-directed farm projects.

II. Research

1. Very limited land area for experimental purposes. This is the most serious research problem facing ViSCA.

- Expedite the expropriation of land under P.D. 1107; lease temporarily private farms for short-run experiments; and try to

obtain government approval for the purchase of Hacienda Concepcion Espina (512 ha.) in San Jose, Ormoc City.

2. Limited research fund for support of staff thesis/dissertation and for undergraduate student thesis.

   - Expand the research programs following PCARR priorities and integrate staff thesis/dissertation research and undergraduate student research in these programs and request from the Government of the Philippines to increase the College budget for research to take care of important basic research not covered by PCARR priorities.

3. Need for more emphasis on technology verification and technology packaging to serve the interest of small farmers and rural communities.

   - Strengthen these aspects of activities under ViCARP and seek financial support from PCARR, NSDB, PCRDF, USAID and other sources.

4. Limited number of scientific journals and other library references.

   - Request the Budget Ministry to increase the budget for the library in 1981; include library support in the PRCRTC and RCRC budgets; and improve the Scientific Literature Service (SLS).

5. Weak linkages with other research agencies in the region.

   - Strengthen the linkages by: (a) inviting scientists of other research agencies to ViSCA-sponsored seminars, (b) involving them in technology verification activities, and

(c) publishing a ViCARP Newsletter which should serve as a medium of communication among scientists in the region.

6. Imbalanced research staff capabilities in different disciplines and definite weaknesses in some important areas such as chemistry, processing, soil science, and animal science.

- Recruit qualified staff by offering better salaries and fringe benefits, and improve staff development program in weak areas of concern.

III. Extension

1. Lack of funds for infrastructure projects

- Initiate fund-raising activities like benefit dances, raffle draws and soliciting donations.

2. Existence of outstanding debts of Samahang Nayon members with the SN consumers' outlets.

- Make a follow-up of members with debts and allow only those with good standing to get credit beyond their capital stock.

3. Reluctance of farmers to follow recommended production practices and the lack of technical knowledge.

- Intensify the collaboration with other line agencies and conduct more farm demonstrations.

4. Trained barangay vaccinators lack vaccines for their immunization campaign.

- Contact livestock inspector from BAI for the procurement of sufficient vaccines.

5. Few participation of clientele in trainings due to conflicts in farm operations.

   - Schedule trainings on days when the clientele would be free from their farm work.

6. Lack of quality consciousness among cottage industry cooperators.

   - Field staff should conduct frequent home visits to check on workmanship of cottage industries and create committees for organized cottage industry cooperators.

7. Inadequate funds for Community Extension Service projects.

   - Set aside a more realistic amount for the implementation of programs of the unit during the year to enable the staff to carry on their projected activities.

8. Little incentives given to field-based technicians in terms of housing and transportation needs.

   - Allot housing and transportation allowances to field-based technicians to give them more incentives to visit the homes and farms of their clientele in the barangay.

9. Weak or non-existent support for Subject Matter Specialist (SMS) on extension trainings and communication.

   - Plan and implement a better organization and program of SMS from among the academic staff of ViSCA.

10. Absence of a coordinating unit for the college-wide extension-training program conducted by academic departments.

   - Organize a division or unit to coordinate all extension training programs.

IV. Auxiliary Services

A. Library

1. Limited space for the number of students and staff members being served.

   - Hasten the construction of the new college library.

2. Lack of space for high school students.

   - Convert the present library staff quarters into a high school library.

3. Inadequate library budget for the acquisition of books and other reference materials.

   - Increase library funds to upgrade library collections and meet high-quality standard.

4. Lack of personnel to provide and insure better service.

   - Request for additional regular items.

B. Infirmary

Limited medical care program for outpatients consultations or treatments and the health needs of those requiring hospital bed care cannot be met because of lack of facilities and man-power especially in the nursing staff.

- Hire additional staff to meet the 24-hour services of the infirmary.

C. Office of Student Affairs

1. Lack of dormitories with cooking facilities for men who could not afford meal prices in the canteen, cafeterias or other catering houses.

- Construct cooking dormitories for men to meet the needs of students coming from low-income families.

2. Substandard off-campus lodging and food-catering houses.

- The Office of Student Affairs in cooperation with the Infirmary staff should regularly check off-campus housing and food catering houses and only the deserving ones should be recommended to continue operating licenses and permits, for catering houses should be required before they are allowed to operate.

3. Low freshmen enrolment due to the confusion created by the cancellation of the NCEE, communication problems and inadequate information sent to prospective applicants.

- Require staff administering the entrance test to be at the testing centers three days before the scheduled examination to provide adequate information to high school seniors about the programs and projects of ViSCA.

4. Problems of the counseling and testing unit include: lack of privacy for counseling; absence of a testing room; limited testing materials; indifference of some instructors; and inadequate training among the counselors.

- Provide a room for testing and for the guidance counselor; create a guidance committee composed of representatives from the different academic departments and regularly send the staff to attend seminars or summer courses.

5. Limited amount allotted for student loans; low compensation for student workers; and late submission of school accounts and grades of scholars or grantees to sponsoring agencies causing the delay in the renewal of their scholarships.

   - Implement the approved rate of student workers; study the possibility of extending bigger loans and on longer term bases to meet the emergency needs of the students; send students' school accounts and grades as early as possible to parents or sponsoring agencies without having to pay for certification fees to lessen students' expenses in the submission of the requirements.

6. Limited number of co-curricular and non-curricular activities causing fraternity and sorority organizations to continue their underground activities on campus.

   - Construct the gymnatorium as early as possible; complete the construction of the College Union and organize the varsity teams to discourage fraternities and sororities and create wholesome recreational activities for students.

V. Administrative and Support Services

A. Office of Business and Administrative Affairs

1. Late submission of Certificate of Travel Completed (Appendix B) by staff members who went on travel and some had overlapping travels without liquidating first their previous travels.

   - Send reminders regularly to staff members concerned.

2. Insistence of staff members in different departments on purchasing supplies without previously approved requisitions.

   - Require all departments/offices to submit a quarterly procurement program of supplies as basis of making requisitions and subsequent purchases at the beginning of each quarter.

3. General lack of office space for the whole administrative staff comprising the Cash, Accounting, Records, Property-Supply Divisions and the main office.

   - Annex the present Agricultural Development Office as soon as the new Agricultural Development building is finished.

4. Slow communication with different offices due to distance.

   - Install a telephone system.

5. Absence of service vehicle for the OBAA.

   - Provide a ready transportation for the office to maximize business transactions.

6. General lack of proper storage area for liquid fuels and lubricants, inflammable stockpaints, thinner and chemicals.

   - Expedite construction of gasoline/diesel storage tank and a bodega for inflammable stock at least 20 meters away from a permanent building.

7. Absence of low-salaried administrative staff housing.

   - Construct a number of units of semi-permanent type at reasonable costs using local materials.

B. Development Planning Office

1. Difficulty in the preparation of some office reports especially the students' dropout rate.

   - The Office of the Registrar should prepare the list of student dropouts during the enrolment period to make it systematic and accurate.

2. Detailed presentation and discussion of the College statistical data which required more pages making the report bulky.

   - Shorten the presentation and discussion of the report to minimize printing expenses.

3. Difficulty in finding sources of current information because in many instances the NEDA Regional Offices cannot provide adequate information.

   - Exert effort by tapping sources of information from government and private agencies, institutions and individual persons.

4. Delayed submission of report to the budget office due to revision of some data which did not tally with the College budget proposal.

   - The Budget Office should supply the DPO enough information on the accurate enumeration of the financial needs of the College.

5. Delayed publication of the ViSCA 55th anniversary souvenir program because some articles from agencies outside ViSCA were received late.

- Send information earlier to give the office concerned enough time to prepare.

6. Inadequate data on research and extension of the brochure ViSCA: Facts and Figures.

- Update data about ViSCA at least twice a year or every end of the semester and include those of research and extension.

7. Delayed completion of briefing charts and visual aids because of the many requests from academic departments and other offices and the lack of technical devices and equipment necessary to finish the job.

- Schedule and prioritize illustration jobs.

8. Lack of accurate data for long-term projections in the preparation of the second five-year development plan.

- Create committees to evolve programs and projections for instruction, research, extension, administration and auxiliary services of the College.

C. Physical Plant Office

1. Insufficient funds for emergency labor needed for the repair and improvement of facilities to meet the needs of a rapidly expanding institution.

- Hire more emergency laborers to augment the regular working force of the office.

2. Lack of administrative technical personnel.

- Employ more administrative technical staff.

D. Income-Generating Project

1. Lack of personnel

- Employ an accounting clerk to check all project reports submitted to the office.

2. No permanent granary.

- Construct a permanent granary.

E. Legal/Claims Office

1. The Legal Office is not furnished immediately with copies of contracts involving ViSCA projects, including change orders and extension of time for the completion of the projects.

- Send immediately to the Legal Claims Office a copy of the contract, change order and extension of time for the completion of the project.

2. Difficulty in convincing landowners affected by P.D. 1107 to submit their land titles and other pertinent papers to the office for processing due to the influence of a big landowner involved in the expropriation case who persuaded small landowners to desist from entering into a negotiated sale with ViSCA.

- Intensify information drive to convince the landowners and tenants of the benefits they can get from the expansion program of ViSCA and the futility of their resistance.

3. A number of land titles are still in the names of the deceased predecessors and heirs legally entitled to the land. They are scattered all over the country.

   - Prepare the necessary papers for those who signified their intention to sell their share if there are several heirs to a parcel of land and pay them the amount equivalent to the area that they ought to have inherited.

4. Difficulty in paying the tenants for lands already sold to ViSCA because of their stubborn refusal to register their claims.

   - Intensify the information drive to tenants.

5. Inability of most landowners to pay the liens and encumbrances over their lands which is one of the causes of the delay in the processing of the transaction.

   - For ViSCA to help finance the landowners in paying some of the encumbrances through cash advance and extend the time for the liquidation of cash advance.

6. Unwillingness of several owners and some co-owners to sell their lands.

   - Pay the co-heirs who will negotiate with ViSCA after the completion of the necessary documents even if some of them could not be contacted because of unknown addresses.

F. <u>Security Unit</u>

1. Lack of personnel

   - Hire additional security guards.

2. Lack of cooperation among staff and students in the implementation of College rules and regulations.

   - For staff and students to report immediately to the Security Unit any violation of College rules.

3. Lack of fence around the campus.

   - Fence strategic places of the compound to compel all staff, students and outsiders to pass through the gates where guards are stationed.

4. Delay of investigation of violators.

   - Create a peace-and-order committee to investigate promptly reports of violations.

Appendix 1

Completed Staff Researches

A. Root Crops

1. Bartolini, P. U. Flowering Frequency Observations Among 445 Sweet Potato Cultivars in the Germplasm Pool.
2. Cotejo, F. R. Jr. The Effects of Rates and Methods of Fertilization on the Growth and Yield of Lowland Gabi.
3. Cotejo, F. R. Jr. The Effects of Fertilization on the Growth and Yield of Lowland Gabi Intercropped with Rice.
4. Cotejo, F. R. Jr. High Rates of NPK Fertilization for Hawaiian Lowland Gabi.
5. Cotejo, F. R. Jr. The Effect of Rate of Fertilization and Rhizome Removal on Tuber Rot Infestation on Lowland Gabi.
6. Cotejo, F. R. Jr. The Effect of Rhizome Removal on Tuber Rot Infestation on Lowland Gabi.
7. Cotejo, F. R. Jr. The Effects of Length of Cuttings on the Growth and Yield of Cassava.
8. Cotejo, F. R. Jr. The Effects of Missing Hills on Cassava Yield Data.
9. Cotejo, F. R. Jr. The Effects of Mulching and Flooding on Weed Intensity Growth and Yield of Gabi.
10. Gapasin, D. P. Effects of Sanitation and Preplant Pesticide Application on the Infestation of the Sweet Potato Weevil in the Tubers.
11. Laguna, R. S. Study on the Different Root Crops in the Philippines.
12. Tupas, G. L. The Regulation of Length Quality Control in Sucker Production of Colocasia esculenta (L) Schott.
13. Tupas, G. L. A Study on the Growth and Yield Performance of Xanthomonas spp. under the Coconut Plantation and in the Open Condition.
14. Tupas, G. L. Rapid Seedpiece Production Technique for Gabi.
15. Villanueva, C. D. Study on the Existing Industrial Processing of Root Crops in the Philippines.
16. Villanueva, M. R. Preliminary Herbicide Screening for Upland Gabi.
17. Villanueva, M. R. Advance Herbicide Screening for Sweet Potato.

B. Coconut

1. Tung, Ly. Effects of Partial Separation of Nuts of Young Seedlings on their Subsequent Growth until Ready for Transplanting.
2. Tung, Ly. Effect of Nut Position in the Bunch on Germination, Growth, and Quality of Seedlings.

C. Applied Rural Sociology

1. Quiton, V. A. Factors Affecting ViSCA Students Choice of Degree Program/Major Field.

D. Forestry

1. Reyes, M. H. The Growth and Survival of Containerized Muluccas sau Seedlings.
2. Avena, M. M. Forestry Manpower Survey of the Philippines.

Completed Student Researches

A. Root Crops

1. Corcilles, S. D. Farm Management Practices of Root Crops Farmers in Hindang, Leyte.
2. Dedal, R. O. Host Range of Cassava Bacterial Blight Causal Organism (Xanthomonas manihotis Starr.)
3. Duatin, M. A. Influence of Foliage Color and Shape on the Abundance of Insect Pests Attacking Sweet Potato (Ipomoea batatas L.)
4. Martinez, M. Susceptibility of Cassava at Different Stages of Growth to Cercospora Leaf Spot Disease (Cercospora henningsii Allescher).
5. Perez, R. Preliminary Studies on Biological and Mechanical Transmission of Gabi Mosaic Virus.
6. Perez, V. Predators of Cassava Spider Mites and their Efficiency as Biological Control Agents.
7. Salamat, R. Biology of the Black Leaf Folder (Brachmia sp.) of Sweet Potato.
8. Tisang, G. A. Marketing Practices of Root Crops Vendors in Baybay Public Market.

B. Coconut

1. Alonzo, J. Influence of Seawater and Seaweed Salt on the Severity of Coconut Gray Leaf Spot.
2. Amabao, D. H. Management and Economic Analysis of the Coconut Project in ViSCA.
3. Aroy, P. Physical and Chemical Inactivation of Pestalozzia palmarum Cke., Causal Agent of Coconut Leaf Blight.
4. Garcia, S. Susceptibility of Coconut Seedlings to the Leaf Spot Fungus, Pestalozzia palmarum Cke.
5. Gelzano, B. S. Marketing Structure of Copra in Matalom, Leyte.

C. Abaca

1. Impuesto, E. M. Marketing of Abaca in Baybay, Leyte.

D. Corn and Sorghum

1. Rosa, J. M. de la. A Study on the Growth and Yield of Sweet Corn Intercropped with Varying Population of Ipil-ipil (Leucaena leucocephala) on a Hillside.

2. Otaza, R. Q. The Effects of Different Population Densities and Nitrogen Level on the Yield and Yield Components of Sorghum.

E. Legumes

1. Laguna, M. S. Evaluation of Twelve Varieties of Peanuts (Arachis hypogea) under ViSCA conditions.

2. Monter, J. D. Comparative Yield Performance of 16 Varieties of Mungo in the Open under ViSCA Conditions (Wet Season).

3. Ritaga, I. A. Effect of Inoculation with Different Strains of Rhizobium japonicum on the Growth and Yield of Different Varieties of Soybeans.

F. Vegetables

1. Carillo, I. M. Evaluation of Twenty-One Heat Tolerant Tomato Varieties under ViSCA Conditions.

G. Rice

1. Cabiling, J. Q. Palay Marketing Practices in Selected Barangays of Albuera, Leyte.

2. Hinampac, D. B. A Case Study on Masagana 99 in Tugbong, Kananga, Leyte.

H. Poultry

1. Aragon, B. M. Economic Analysis and Utilization for Instruction of the ViSCA College Poultry Project.

I. Livestock

1. Caidlang, C. Gastro-intestinal Parasites of Hogs and Effects of Deworming on the Growth of Littermates at Farm Level.

J. Aquaculture

1. Ballesteros, R. B. Management and Economic Analysis of Two Typical Fishpond in Magallanes, Agusan del Norte.

K. Socio-Economics

1. Acasio, A. F. Farm Management Analysis of Student's Program at ViSCA.

2. Bisnar, D. Socio-economic Profile of Samahang Nayon Members in Inopacan, Leyte.

3. Tolorio, R. P. Structure and Functions of the Occidental Leyte Farmer's Multi-Purpose Cooperative Association Incorporated.

L. Applied Rural Sociology

1. Dumas, E. E. Poster Design Shape Preference Among Rural People.
2. Fernando, F. P. Source of Farm Information and Information-Seeking Behavior of Rice Farmers in the First Three Social Laboratory Barrios of ViSCA.
3. Galvez, Z. C. Radio Listing on Patterns and Program Preferences of Farmers in Selected ViSCA Social Laboratory Barrios.
4. Paduano, O. C. The Influence of Modern Farm Information on Adoption Decisions by Selected Farmers in Dulag, Leyte.
5. Ritaga, W. A. A Survey on Agricultural CES Balita Researches.
6. Suyom, R. M. Perceived Information Needs of Rural House in Selected ViSCA Social Laboratory Barrios.

Ongoing Staff Researches

A. Root Crops

1. Barilea, N. B. Collection, Preservation and Taxonomic Studies on the Flora of ViSCA.
2. Barilea, N. B. and Oracion, M. Z. Collection, Identification and Maintenance of Medicinal and Fragrant Plant in the Visayas Region (Leyte and Samar).
3. Bartolini, P. U. Timing and Frequency of Topping Sweet Potato at Varying Levels of Nitrogen.
4. Bartolini, P. U. The Relationship Between Growth Habit and Yield of Sweet Potato.
5. Bartolini, P. U. The Relationship of Morphological Characteristics and Methods of Planting to Tuber Yields of Cassava and Sweet Potato.
6. Bartolini, P. U. The Relationship Between Branching Habit and Yields of Cassava.
7. Bartolini, P. U. Screening and Selection of Promising Varieties.
8. Bartolini, P. U. Hybridization of Selected Parental Accessions from the Germplasm Collection.
9. Bartolini, P. U. and Villamayor, F. G. Jr. Variety-Fertilizer-Population Trials.
10. Bartolini, P. U. Dry Matter and Starch Determination of Promising Sweet Potato Cultivars.
11. Bartolini, P. U. Genotypic and Morphological Effects of Gamma Irradiation on Sweet Potato.
12. Bernardo, E. N. Development of Control Methods for Sweet Potato and Cassava Pests.
13. Bernardo, E. N. Selection of Sweet Potato Varieties Resistant to the Weevil, Cylas formicarius elegantulus Fabr. and Development of Resistant Variety-Chemical Control Combination.
14. Bernardo, E. N. Selection of Cassava Varieties Resistant to the Spider Mite, Tetranychus kansawai Kishida, and Development of Resistant Variety-Chemical Control Combination.
15. Clarete, Celso. Polarity and Optimum Depth of Cassava Stakes.
16. Cotejo, F. R. Jr. Development of a Practical Method of Storing Tubers in the Farms.
17. Cotejo, F. R. Jr. The Nutrient Balance for Root Crops and their Soil Environment.
18. Cotejo, F. R. Jr. Yield Optimization in Sweet Potato and Cassava Thru Proper Timing and Application of N, P and K Fertilizer.

19. Cotejo, F. R. Jr. Cultural Management Techniques for Lowland Gabi Under Monoculture System.

20. Cotejo, F. R. Jr. Evaluation of Simple Method of Leaf Area Measurement in Root Crops.

21. Cotejo, F. R. Jr. Finding the Index for Leaf Area Measurement of Root Crops.

22. Cotejo, F. R. Jr. The Effects of Organic Matter Addition on the Kinetics of P Release from Different Sources of P for Root Crops.

23. Cotejo, F. R. Jr. The Effects of Lime on the Kinetics of Release from Different P Sources on Acidic Soils.

24. Cotejo, F. R. Jr. The Effects of Levels on N on the Response of Root Crops to Rates and Sources of Phosphorus.

25. Cotejo, F. R. Jr. The Relative Agronomic Effectiveness of Different Sources of P for Root Crops on P Deficient Soils.

26. Escalada, R. G. Cultural Management System for the Production of Sweet Potato and Cassava.

27. Estrada, E. Variety Collection and Testing of Native and Exotic Varieties of Yam (Dioscorea sp.) in the Philippines.

28. Evangelio, F. A. Interaction Between Shoot Number and Method of Planting and their Main Effects on Cassava Production.

29. Evangelio, F. A. Effect of Potassium Levels on the Yield of Cassava.

30. Evangelio, F. A. Dry Matter Distribution and Yield in Cassava as Affected by N-K Balance.

31. Gapasin, D. P. Biological Study of Sweet Potato Insect Pests and their Natural Enemies with Emphasis on the Leaf Miners.

32. Gapasin, D. P. Severity of Damage of Sweet Potato Pests with Emphasis on the Weevil as Influenced by Crop Rotation.

33. Gonzal, L. R. Floral Biology of Selected Cassava and Sweet Potato Varieties.

34. Gonzal, L. R. Effect of Gibberellin and Boron Applied Singly or in Combination of Flowering, Pollen Viability and Seed Production in Cassava and Sweet Potato.

35. Gonzal, L. R. Physiology of Cassava and Sweet Potato Studies to Identify Physiological Parameters Basic to High Yield.

36. Gonzal, L. R. Relationship Between Translocation of Carbohydrates and Yield in Cassava and Sweet Potato.

37. Labra, J. S. The Effects of the Different Methods of Seedbed Preparation and Planting on the Yield and Other Agronomic Characteristics of Cassava.

38. Labra, J. S. Planting Methods for Yield Optimization of Gabi as Affected by the Different Levels of Fertilization.

39. Labra, J. S. Study in Different Population of Cyrtosphyrma Varieties in Relation to its Yield Potential.

40. Palomar, M. K. Studies on a Virus -like Mosaic Disease of Gabi.

41. Palomar, M. K. and Lao, F. O. Screening of Sweet Potato Selections for Resistance to Tuber Rot.

42. Secreto, A. C. System of Continuous Cropping for the Sustained Production of Sweet Potato and Cassava.

43. Secreto, A. C. The Relationship Between Leaf Types and Yield of Cassava and Sweet Potato and Different Nitrogen Level.

44. Secreto, A. C. Collection, Evaluation and Varietal Improvement of Winged Bean Varieties.

45. Secreto, A. C. Growing Pattern-Plant Types, Interaction in Relation to Production of Winged Bean Storage Roots.

46. Secreto, A. C. The Effect of N, P and K Fertilizer on the Production of Winged Bean Storage Root.

47. Secreto, A. C. Staking and Non-Staking Studies on the Production of Storage Roots Producing Winged Bean Varieties.

48. Secreto, A. C. Effect of Different Soil Types on the Production of Winged Bean.

49. Secreto, A. C. The Effect of Vegetative and Reproductive Pruning on the Yield of Winged Bean Edible Storage Roots.

50. Sebidos, R. F. Identification of Selection Indices Basic to High Yield in Cassava and Sweet Potato.

51. Sebidos, R. F. Screening, Selection and Hybridization of Cassava Varieties.

52. Tanguilig, V. C. Studies on the Nutrient Deficiency and Toxicity Symptoms of Cassava and Sweet Potato.

53. Tupas, G. L. A Diagnostic Survey on the Agronomic Problems of Root Crop Production in Selected Areas of the Philippines.

54. Tupas, G. L. Nutritional Studies on Root Crops.

55. Tupas, G. L. The Influence of Soil pH on Tuber Formation.

56. Tupas, G. L. Variety Testing of Native and Introduced Hawaiian Gabi (Colocasia esculenta (L) Schott) in the Philippines.

57. Tupas, G. L. Collection and Evaluation of Xanthosoma in the Philippines.

58. Tupas, G. L. Inducement of Seed Production in Gabi.

59. Tupas, G. L. A Diagnostic Survey on the Agronomic Problems of Root Crop Production in Selected Areas of the Philippines.

60. Villamayor, F. G. Jr. Production of Cassava Cuttings Through High Density Planting and the Subsequent Evaluation of the Cuttings.

61. Villamayor, F. G. Jr. Effects of Depth of Cultivation on Root Size and Yield of Cassava.

62. Villamayor, F. G. Jr. Weed Control in Cassava Using Diuron.

63. Villamayor, F. G. Jr. Leaf Area Determination Through Measured Leaf Dimension.

64. Villamayor, F. G. Jr. Simulated Fertilizer Pot Study in Cassava.

65. Villamayor, F. G. Jr. Preliminary Study on the Interaction Between Plant Population and Time of Harvest.

66. Villamayor, F. G. Jr. Preliminary Study on the Induction of Flowering in Cassava Through Stem Girdling.

67. Villanueva, M. R. Some Physiological and Agronomic Considerations in the Production of Cassava.

68. Villanueva, M. R. Design and Development of Tools for Production of Root Crops at the Farm Level.

69. Villanueva, M. R. Post-Harvest Technology on Root Crops Under Philippine Conditions.

70. Villanueva, M. R. Collection and Evaluation of Native and Exotic Varieties of Yams (Dioscorea sp.) and their Emphasis on Ubi (D. alata) and Tugui (D. esculenta).

71. Villanueva, M. R. Establishment of a Cultural Management System for the Production of Yam with Particular Emphasis on Ubi (D. alata) and Tugui (D. esculenta).

72. Villanueva, M. R. Collection, Evaluation and Selection of Native and Hawaiian Varieties of Gabi and Production Under Improved Cultural Management.

73. Villanueva, M. R. Cultural Management Techniques for Upland Gabi Monoculture, Multiple Cropping and Crop Rotation System.

74. Villanueva, M. R. A Program for the Establishment of a National Root Crop Research and Outreach for the Philippines.

75. Villanueva, M. R. Manpower Development.

76. Villanueva, M. R. Germplasm Collection, Hybridization and Selection of Improved Varieties.

77. Villanueva, M. R. Information Linkage for the Root Crop Industry.

78. Villanueva, M. R. Coordination.

79. Villanueva, M. R. On Farm Trials of Major Root Crops.

80. Villanueva, M. R. Collection, Evaluation and Culture of Local and Exotic Varieties of Yams (Dioscorea sp.) under Philippine Conditions.

B. Coconut

1. Agro & Soils Staff. Effect of Periodic Hedge Cutting of Giant Ipil-ipil and Madre de Cacao on the Yield of Coconut.

2. Agro & Soils Staff. Chemical Characterization of "Coconut Soils" in Eastern Visayas and Leaf Analysis of Coconut Grown on these Soils.

3. Bernardo, E. N. Seedling Reaction of Coconut Varieties and Hybrid to the Coconut Scale and Tetranychid Mites.

4. Bernardo, E. N. and Milan, P. P. Control of the Coconut Scale, Aspidiotus destructor Signoret and Tetranychid Mites by Coccinelled Beetles.

5. Gapasin, D. P. Development of Control Measures for Some Coconut Pests in Eastern Visayas using Natural Enemies and Varietal Plant Resistance.

6. Gapasin, D. P. Biology and Mass Rearing of Important Lepidopterous Pests of Coconut and their Parasites.

7. Gapasin, D. P. and Gapasin, R. M. Effect of Intercropping Young Coconut Trees on Incidence of Insect Pests and Plant Diseases.

8. Napiere, C. M. Monitoring the Incidence of Coconut Diseases and Insect Pests and their Natural Enemies in Leyte and Samar.

9. Palomar, M. K. Development of Control Measures Against Leaf Spot Blight Diseases of Coconut Seedlings.

10. RCRC Staff. Evaluation of Selected Dwarf Coconut Population in Baybay, Leyte Under 4 Levels of Fertilizer Application.

11. RCRC Staff. Yield Performance Evaluation of 3 Imported Hybrids of Coconut Grown Under ViSCA Conditions.

12. RCRC Staff. Germplasm Collection Establishment and Evaluation of Coconut Cultivars.

13. RCRC Staff. Development of Crop Logging Technique for Coconut in Eastern Visayas.

14. RCRC Staff. Studies on Intercropping Coconut with Some Selected Annuals in Eastern Visayas.

15. RCRC Staff. Primary Processing of Coconut.

16. Santiago, R. M. Performance of Different Coconut Dwarf Population under Few Levels of NPK Fertilization.

17. Tung, Ly. Yield Performance of Three Imported Hybrids of Coconut Grown under ViSCA Condition.

18. Tung, Ly. Coconut Germplasm Collection and Establishment.

19. Tung, Ly. Comparative Yield Trial of Baybay, Dumano, YMD x WAT Hybrid Grown under ViSCA Condition.

20. Tung, Ly. Comparative Yield Trial of Existing Varieties and Hybrids of Coconut.

21. Tung, Ly. Intercropping Coconut with Some Selected Annuals in Eastern Visayas.

22. Tung, Ly. Utilization of Heterosis in Coconut.

23. Tung, Ly. Studies on "Albuera" Population and its Utilization in the Hybridization Program.

24. Tung, Ly. Effect of Nut Trimming and Source of Chlorine on Germination and Growth of Coconut Seedlings.

25. Tung, Ly. Genetic Studies of Baybay Population, Albuera Population, and Dumano Population and their Utilization in the Hybridization Program.

C. Abaca

1. Agbisit, R. T. Multiplication of 12 Abaca Clones Out of 52 Musa Clones.

2. Alcober, E. R. Effects of Storing Tuxy and Leaf Sheaths of Fiber Recovery and Physical Properties of Fifty Two (52) Musa Clones.

3. Gloria, N. M. Effects of Storing Stalks of Different Duration on Fiber Recovery and Tensile Strength of 52 Musa Clones.

4. Javier, R. R. The Effects of Giant Ipil-ipil Shade Trees Planted at Varying Distances on the Growth and Yield of Abaca.

D. Sorghum

1. Briones, E. D. Effects of Cutting on Tillering and Ratoon Performance of 5 Varieties of Sorghum.

2. Escalada, R. G. Performance Test of Plant and Ratoon Crops of Sorghum (Sorghum bicolor).

3. Escalada, R. G. Effects of Zero Tillage on the Growth and Yield of Ratoon Sorghum.

4. Escasinas, A. B. Adaptability Test of Grains of Sorghum at Region VIII.

E. Corn

1. Agro & Soils Staff. Adaptability Test of Two Mexican Corn (Zea mays) Varieties at ViSCA.

F. Legumes

1. Briones, V. P. Regional Advanced Yield Trial of Mungo.

2. Escalada, R. G. Regional Advanced Yield Trial of Peanut.

3. Escalada, R. G. Cultural Management of Sweet Potato, Cassava and Gabi under Various Multitude Cropping Scheme Utilizing Legumes as Source of Nitrogen.

4. Fabre, B. E. Intercropping Sweet Potato, Cassava and Gabi with Legumes as a Cultural Management.

5. Javier, R. R. Adaptation of Cowpea Varieties under Coconut and in the Open.

6. Javier, R. R. Crop Rotation of Sweet Potato, Cassava and Gabi with Legumes as a Cultural Management.

7. Posas, M. A Farm Approach to Time and Sequence of Root Crops - Legume Cropping System and their Economic Consideration.

G. Vegetables

1. Briones, E. Effects of Spacing on Eggplant Intercropped with Legumes.

H. Rice

1. Napiere, C. M. Screening of Rice Selections to Insect Pests.
2. Javier, R. National Cooperative Rice Performance Tests.
3. Napiere, C. Screening of Rice Selections to Diseases.
4. Posas, M. B. ViSCA - Phil. Seedboard Varietal Trial on Lowland Irrigated Rice.

I. Sugarcane

1. Trenuela, R. M. Performance of 11 Varieties of Sugarcane Using Single Eye Cutting at Closer Spacing under ViSCA Conditions.

J. Cacao

1. Santiago, R. Breeding Cacao Yield Disease Resistance.
2. Santiago, R. Fertilization Studies in Cacao under Coconut.
3. Briones, V. Environmental Changes under Cacao-Coconut Environment.
4. Agbisit, R. Farm Demonstration Test of Cacao under Coconut.

K. Livestock

1. Gerona, G. Management of Pastures under Coconut.
2. Gerona, G. Grazing vs. Cut-and-Carry Trial of Goats under Coconut.

L. Applied Rural Sociology

1. ADE Staff. Impact of Rural Development Programs on the Activities and Socio-economic Status of the Rural People in Region VIII.
2. Capuyan, N. A Survey on the Distribution of ViSCA Graduates 1956-1977.

3. Caliente, A. C. The Effect of Trainings for Coconut Farmers on the Adoption of Technology and the Increase of Coconut Production in Eastern Visayas.

4. Dagoy, S. C. Profile of Rural Development Workers in the Visayas.

5. Dargantes, B. B. Effectiveness of Rural Development Workers as Perceived by the Clientele.

6. Enemecio, F. Y. Formulation and Testing of Readability Guide for the Construction of Agricultural Reading Materials.

7. Escalada, M. M. Survey of Rural Development Information Coverage of Radio Stations Serving the Eastern Visayas.

8. Escalada, M. M. Communication Profile and Training Needs in Communication as Perceived by Development Agents in Leyte.

9. Flores, F. R. Assessment of In-Service Training Needs of Rural Development Workers in the Visayas.

10. Go. A. S. Appraising Readability of Agricultural Publications and Farmers' Readership, Reading Level and Interests; Constructing Prototypes and Testing their Readability.

11. Go, A. S. Farmer's Readership, Reading Level and Interests.

12. Israel, A. V. An Assessment of the Training Programs for Coconut Farmers in Eastern Visayas.

13. Peñaranda, P. The Training Needs of Coconut Farmers in Eastern Visayas.

14. Peñaranda, P. Communication of New Farm Technology to Small Farmers in Leyte (Joint Project - ERDD & ADE)

15. Peñaranda, P. An Appraisal of the Training Needs of Rural Development Workers in the Visayas.

M. Socio-Economics

1. Alkuino, J. M. Agro-economic Studies of Root Crops in the Philippines.

2. Alkuino, J. M. Consumption and Utilization of Root Crops in the Philippines.

3. Mesorado, N. B. Factors Associated with Adoption of Improved Technology of Root Crops in the Philippines.

4. Villanueva, C. D. Production and Management Practices of Root Crop Farmers in the Country.

5. Villanueva, C. D. An Intensive and Critical Survey of Existing Industrial Processing of Root Crops and Projection for the Next Decade.

6. Laguna, R. S. Study on the Utilization and Distribution of Processed Root Crops in the Philippines.

7. Laguna, R. S. Projection and Speculations of the Industrial Root Crops for the Next Decade.

N. Forestry

1. Avena, M. Economic Feasibility of Giant Ipil-ipil Plantation for Energy Wood Production.

Ongoing Student Researches

A. Root Crops

1. Armachuelo, J. Effect of Gamma Radiation (60Co) and Ethyl Methyl Sulfonate on Winged Beans.
2. Baliad, M. The Effect of Tillage on the Growth and Yield of Sweet Potato.
3. Bautista, A. R. Growth and Yield of Sweet Potato (BNAS-51) as Influenced by Different Potassium (K) Levels in Three Soil Types.
4. Barsalote, E. Effect of Gabi Mosalo Virus on Growth and Yield of Gabi.
5. Belonias, E. C. Effect of Gibberellin and Kinetin on Flowering of Sweet Potato.
6. Burdeos, A. Effect of Tuber Depth on the Degree of Sweet Potato Weevil (Cylas formicarius elegantulus Fabr.) Infestation.
7. Caalim, T. Longevity of Coconut Gray Leaf Spot Pathogen Pestalozzia palmarum Cke.
8. Cawayan, S. Effect of Inorganic Fertilized-Nematode Interaction on the Yield of Sweet Potato (Ipomoea batatas Lam.) var BNAS #51.
9. Cerna, A. Effect of Different Rooting Media on Root and Shoot Production of Cassava Stem Cuttings.
10. Coloma, R. F. Artificial Drying of Sweet Potato (Ipomoea batatas) Chips Using the Kukum Dryer.
11. Cruz, R. O. Design Development and Evaluation of a Pedal Chipper Grater for Root Crops.
12. Cruz, C. de la. Effect of Brown Leaf Spot on the Growth and Yield of Sweet Potato.
13. Dajao, A. Jr. The Effect of Time and Method of Planting and Plant Population on the Production of Sweet Potato (April and May Planting).
14. Diputado, M. Jr. Effect of Growth Regulators on Sprouting of Sweet Potato Tubers.
15. Duatin, J. Host Range of Gabi Mosaic Virus.
16. Densing, M. Insect Pests Attacking Taro at Different Stages of Growth.
17. Espina, C. D. Jr. Solar Drying of Gabi (Colocasia esculenta) Chips Using Different Drying Surfaces.
18. Fernandez, S. Epidemiology of Cassava Bacterial Blight.

19. Gildo, I. Varietal Screening for Resistance of Sweet Potato to Meloidogyne incognita.

20. Guarte, R. C. Drying Characteristics of Cassava (Manihot esculenta Crantz).

21. Jularbal, C. Biology of Sweet Potato Spider Mites (Tetranychus neocalidonicus Andre (Tetranychidae, Acarina)

22. Longakit, I. Early Growth and Tillering of Sugarcane as Affected by Different Sweet Potato Intercrop.

23. Lopez, E. Effect of Different Levels of Helicotylenchus Nematode Infestation on the Growth and Yield of Sweet Potato.

24. Maureal, A. Laboratory Evaluation of Ten Insecticides Against Oxya chinensis

25. Mirambel, G. C. Jr. Solar Drying of Sweet Potato Chips (Ipomoea batatas) using Various Surfaces and Drying Beds.

26. Moralde, N. Development of a Technique for Evaluating Sweet Potato Varieties for Resistance to Sweet Potato Spider Mites (Tetranychus neocalidonicus Andre.).

27. Narca, M. R. Solar Drying of Gabi (Colocasia esculenta) Chips Different Drying Surfaces and Drying Beds.

28. Narit, A. F. Drying Characteristics of Cassava Chips of Different Densities under Different Surfaces and Various Drying Beds.

29. Nayre, R. R. Design and Construction of a Cassava Grates.

30. Olasiman, A. Interaction Between Root-Knot and Reniform Nematodes and their Effect on Yield of Sweet Potato.

31. Odiz, L. Mutational Effects of 60Co Irradiation on Ubi.

32. Patindol, R. M. Drying of Cassava Chips of Mesh Trays Placed under the Shed.

33. Quirol, P. Mutational Effects of Gamma Irradiation (60Co) and Ethylmethyl Sulfonate on Sweet Potato.

34. Raagas, A. M. The Effect of Border Forms of Adjacent Plots in Fertilizer Experiment on Gabi.

35. Sanchez, M. I. Effect of Growth Regulators on Growth and Yield Performances of Sweet Potato.

36. Sanico, F. The Influence of Source and Length of Storing Cuttings on Growth and Yield of Sweet Potato.

37. Solis, A. Survey and Pathogenicity of Fungi Causing Tuber Rot of Sweet Potato.

38. Umerez, E. Growth and Sporulation of Sweet Potato Leaf Spot Pathogen Cercospora batatas Zimm.

39. Urdaneta, L. Comparative Study of Organic (Ipil-ipil) and Inorganic (amosol) Fertilizer on the Yield of Sweet Potato.

40. Valida, A. F. Inducement of Rooting in Sweet Potato Seedpieces by Chemical Treatment.

41. Vasquez, E. Comparative Study of the Biology of Sweet Potato Weevil Cylas formicarius elegantulus Fabr. reared on Stem and Tuber of Sweet Potato.

42. Visorro, G. The Influence of Genotype and Level of Nitrogen on the Yield of Sweet Potato.

B. Coconut

1. Almaden, E. Response of Coconut Seedlings to Spacing and Varying Level of Nitrogen and Potassium Application.

2. Buyser, M. Survey and Pathogenicity of Foliar Fungal Pathogen of Coconut.

3. Cabales, R. Longevity of Helminthosporium spp. under Artificial and Natural Conditions.

4. Cañete, J. Biology and Chemical Control of Copra Beetle, Necrobia rufipes De Geer (Coleoptera, Cleridae) under Laboratory Conditions.

5. Cayme, T. Evaluation of the Ten Foreign Coconut Varieties Cultivars for Resistance to Tetranychid Mites.

6. Gabrido, M. Host Range of Helminthosporium incurvatum Dresche. Causal Agent of Coconut Brown Leaf Spot Diseases.

7. Garcia, N. L. The Effect of Three Artificial Drying Methods of Coconut Meat in Different Sizes on the Quality of Copra.

8. Grate, B. Interaction of Gray Leaf Spot Diseases and Brown Leaf Spot Fungi in Culture and on Coconut Seedlings.

9. Laurino, S. Determination of the Minimum Test Insects and Experimental Plants Needed in Studying the Biology of the Coconut Scale (Aspidiotus distructor Signoret).

10. Leona, A. Effect of Phosphorus on the Severity of Coconut Gray Leaf Spot on Seedlings.

11. Monreal, R. Biology and Host Range of an Unidentified Beetle Attacking Copra.

12. Orias, R. R. Design and Development of a Ground Nut Sheller.

13. Paloma, E. B. Design, Development and Evaluation of Pedal and Operated Coconut Shedder.

14. Remanes, R. Comparison of Two Media of Breeding Sites for Rhinoceros Beetle (Oryctes rhinoceros Linnaeus) in the Field.

15. Tabudlong, I. Assessment of Rat Damage on Coconut in ViSCA and Vicinity.

16. Veloso, A. R. Effects of Different Soil Types on the Growth of Coconut Seedlings Fertilized with Different Fertilizer Levels.

C. Abaca

1. Bales, R. Preliminary Studies on Fiber Recovery and Fiber Quality of 10 Abaca Varieties under ViSCA Conditions.

D. Corn

1. Nayre, V. A. A Design of a Hand-Operated Corn Sheller.

E. Sorghum

1. Berido, W. P. Growth and Yield Performance of Sorghum Intercropped with Legumes.

2. Capuno, R. B. The Effect of Green Manure Crops on the Organic Matter Content of the Soil and the Growth and Yield of Sorghum.

F. Legumes

1. Acedo, A. Jr. The Effect of Residual N from Legumes (Mungo, Bushbeans, and Soybeans) and Different P and K Levels on the Growth and Yield of Sweet Potato.

2. Larente, Z. The Effect of Mulching (Rice Straw) and Varying Levels on N on Growth and Agronomic Characteristics of Mungo.

3. Pagalan, S. S. Response of Soybean to Kind and Rate of Application of Foliar Fertilizers.

G. Cacao

1. Avellana, A. The Effect of Pad Maturity and Seed Placement on the Germination and Subsequent Growth of Cacao Seedlings.

2. Sabundo, A. Growth of Cacao Seedlings in Different Soil Media as Affected by Different Nitrogen Level.

H. Rice

1. Araullo, P. A. Artificial Drying of the Rice (Oryza sativa) Using Kukum Dryer.

2. Zapanta, A. M. A Comparative Study on the Milling Performance of Three High Yielding Rice Varieties Using Cono and Kiskisan Rice Mills.

I. Poultry

1. Alcober, M. The Effect of Anthelmintic on the Performance of Native Chicken Raised at Farm Level Conditions.
2. Barientos, C. Growth and Feed Conversion Performance of Muscovy Ducklings Feed with Varying Levels of Sweet Potato at Various Ages.
3. Bestil, L. Effect of Method of Salt Supplementation on Performance of Broilers.
4. Cavada, M. Performance of Broilers Fed at Different Ages with Rations Partially Substituted with Cattle Manure.
5. Garcia, L. Meat Production Performance and Carcass Quality of Muscovy Ducks Fed with Kitchen Refuse.
6. Requitillo, A. Time and Frequency of Insemination in the Production of Hybrid Ducklings.

J. Livestock

1. Caballero, E. The Effect of Commercially Available Anthelmintis on Haemocus sp. in Goats.
2. Castil, R. Effect of Roughage: Concentrate Ration on Energy Protein and Feed Efficiency of Rabbits.
3. Dumanhug, C. Comparative Energy and Protein Efficiency of Broilers and Rabbits.
4. Ellicot, W., E. Borja and Maurillo. Survey of the Swine Management Practices in Six Towns in Leyte.
5. Lolo, F. Comparative Energy and Protein Efficiency of Layers and Rabbits.
6. Maniwang, D. Prevalence of Fascioliases in Ormoc City and the Economic Importance of Infected Liver in Slaughtered Cattle.
7. Martus, N. Survey of Mollusca Intermediate Hosts of Fasciola hepatica in ViSCA Pasture Area.
8. Sabarez, M. Prevalence of Faciolasis in Baybay, Leyte and the Economic Importance of Infected Livers in Slaughtered Carabaos.
9. Teopes, G. Preservation of Tissues for Histological Study Using Indigenous Materials.
10. Vecilao, S. Prevalence of Fasciolasis in Ormoc City and Economic Importance of Infected Liver in Slaughtered Carabaos.
11. Villacorte, L. Effect of Slaughter Weight on Energy, Protein and Feed Efficiency of Rabbits.

K. Socio-Economics

1. Aliño, M. Cost and Returns of Poultry in Talisay, Cebu.
2. Amihan, U. Cost and Returns of Abaca Production in Baybay, Leyte.
3. Ayaso, C. Economic Evaluation of Masagana 99 in Karigara, Leyte.
4. Aves, G. Cost and Return Analysis of Sugarcane Farms in Ormoc District.
5. Baring, J. Farm Management and Cultural Practices, Costs and Returns of Coconut Farms in Ormoc City.
6. Buo, V. A Case Study on the Status of Rice Mills in Baybay, Leyte.
7. Cosmod, R. Cultural and Management Practices of Coconut Farms in Baclayon in the Province of Bohol.
8. Corilla, E. R. Costs and Returns of Corn Production in Poro, Cebu.
9. Euguio, E. Pachydern Philippine, A Case Study.
10. Loreto, F. I. Marketing Cooperatives in Baybay, Leyte.
11. Felicidad, R. Sources, Costs and Effects of Credit to Rice Farmers in Hinundayan, Southern Leyte.
12. Gellona, D. Production and Management Practices of Masagana Farmers in Gabas, Baybay, Leyte.
13. Martinez, J. A Business Analysis of Coconut Farms in Baybay, Leyte.
14. Mausisa, L. A Case Study of Cooperative Credit Union, Inc. in San Ricardo, Southern Leyte.
15. Mecina, M. Agricultural Credit Needs of Coconut Farms in Alang-Alang, Leyte.
16. Mindajao, E. Financing, Fishing Practices, Costs and Returns of Fishermen in Limasawa Island.
17. Modesto, R. Financing and Farm Management Practices of Rice Farmers in Five Selected Barangays in Tanauan, Leyte.
18. Nuñez, A. Structure and Practices of the Hilongos Consumer's Cooperative, Inc.
19. Nuñez, M. Sources and Uses of Credit by Rice Farmers in Baybay, Leyte.
20. Rico, I. Tenure, Land Use and Farm Management of Coconut Farm in Altavas, Aklan.
21. Ruña, R. Economic Analysis of Masagana 99 Program (Phase VIII-XII) in Baybay, Leyte.
22. Sacay, M. Economic Analysis of Rice Milling Operation in Ormoc City.
23. Secuya, B. B. Jr. Production, Management and Cultural Practices, and Returns of Coconut Farms in Minglanilla, Naga and Carcar, Cebu.

24. Suello, M. Marketing of Copra in Sevilla, Bohol.

25. Valenzona, B. Socio-economic Profile of Samahang Nayon in Selected Barrios of Baybay, Leyte.

L. Applied Rural Sociology

1. Austero, J. Training Needs in Communication of Development Agents in Selected Towns of Leyte.

2. Ayaay, I. Communication Behavior, Awareness and Knowledge of Improved Cultural Practices in Coconut of Selected Coconut Farmers in Dagami, Leyte.

3. Bernal, E. Feasibility Study of Using Barangay Newsboard as a Means of Communication in Barangay Guadalupe.

4. Buezuela, R. A Content Analysis of the Front Pages of Philippine Newspaper Published Before and After the Declaration of Martial Law.

5. Melgazo, M. Some Factors Affecting the Choice of Sources of Information of the Rural Populace in Hilongos, Leyte.

6. Rosolada, A. B. Farm Information Exposure and Innovativeness of Selected Coconut Farmers in Sagbayan, Bohol.

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A. Root Crops

1. Bartolini, P. U. Variety Trial and Management of Sweet Potato Grown During the Dry Season on Rainfed Lowland Rice Farmers.
2. Bartolini, P. U. Allelopathic Effects on the Continuous Planting of Sweet Potato.
3. Bartolini, P. U. Studies on the Seasonal Pattern of Sweet Potato Weevil Infestation.
4. Cotejo, F. R. Jr. The Economics of Fertilization on Root Crop Production.
5. Cotejo, F. R. Jr. Evaluation and Calibration of Methods of N, P and K Analyses with the Yield of Root Crops.
6. Cotejo, F. R. Jr. Influence of Fertilization and Native Soil Fertility on Insect Resistance, Disease Resistance, Storage Quality and Eating Quality of Root Crops.
7. Cotejo, F. R. Jr. Effects of Fertilization and Cultivation on Weed Intensity, Growth and Yield of Root Crops.
8. Cotejo, F. R. Jr. Effects of Method of Planting Materials on the Effectivity of Herbicides on Cassava.
9. Cotejo, F. R. Jr. The Effects of Fertilization and Length of Planting Materials on Weed Intensity, Growth and Yield of Cassava.
10. Cotejo, F. R. Jr. Effects of Different Degree of Shading on the Growth and Yield of Colocasia and Xanthosoma.
11. Cotejo, F. R. Jr. Finding the Index Leaf for Plant Analysis of Root Crops.
12. Evangelio, R. A. Production of Foliage and Effects of Defoliation in the Tuber Production of Cassava.
13. Labra, J. S. Tillage Requirement of Various Root Crops under Varying Agroclimatic Conditions.
14. Lavega, M. L. Farm and Station Variety and Cultural Trial for Colocasia esculenta Schott.
15. Pardales, J. Maximum Water Requirement and Irrigation for Root Crops.
16. PRCRTC Staff. Varietal Farm Screening of Sweet Potato in Rainfed Lowland Rice Field.
17. PRCRTC Staff. Management System for the Production of Sweet Potato in Rainfed Rice Fields.
18. Secreto, A. C. The Effect of Pruning on the Storage Root Yield of Winged Bean of Different Nitrogen Level.

19. Secreto, A. C. The Effect of Growth Retardant on the Production of Winged Bean.

20. Secreto, A. C. Mulching Study of Winged Bean.

21. Secreto, A. C. Foliage, Pod and Tuber Production of Winged Bean.

22. Tupas, G. L. Development of Techniques for Rapid Seedpiece Production of Sweet Potato and Cassava.

23. Villanueva, F. G. Mixed Farming of Colocasia esculenta and Tilapia nilotica.

24. Villanueva, M. R. Advance Herbicide Screening for Cassava.

25. Villanueva, M. R. Variety Trial and Management of Sweet Potato in Idle and Rainfed Lowland Rice Fields.

B. Coconut

1. RCRC Staff. Development of Crop Logging Techniques for Coconut in Eastern Visayas.

C. Abaca

1. DAS Staff. Growth and Yield Performance of Five Abaca Varieties under Varying Rates of Fertilizer Application.

2. Santiago, R. M. Performance Evaluation of Abaca/Banana Varieties on Hilly Areas under Specific Rates of Fertilizer Application.

3. Santiago, R. M. Performance Evaluation of Five Varieties of Table Bananas under Varying Levels of Fertilizer Application.

D. Corn and Sorghum

1. DAS Staff. Variety Trial of Recommended Corn and Sorghum Varieties/Hybrids in the Sab-a Basin.

2. DAS Staff. Variety Trial of Recommended Corn Variety/Hybrids.

3. DAS Staff. Variety Trial of Recommended Sorghum Variety/Hybrids.

4. Javier, R. R. Monthly Planting for the Sustained Production of Corn, Sorghum, and Field Legumes in Marginal Hilly Areas.

5. Javier, R. R. Crop Rotation of Corn and Sorghum with Legumes as a Source of Orgnic Fertilizer in Marginal Hilly Areas.

6. Javier, R. R. Marginal Hilly Areas and Slopelands Utilization for Corn, Sorghum and Field Legumes in the Sab-a Basin.

7. Trenuela, R. M. The Influence of Varying Plant Population and Fertility Levels on the Yield of Corn, Sorghum and Field Legumes in Marginal Hilly Areas.

8. Villamayor, F. P. Fertilizer Requirements of Promising Downy Mildew Resistant Field Corn Varieties in Different Soil Types at Sab-a Basin.

E. Legumes

1. Abit, S. E. Effects of Restorer and Varying Levels of NPK on Grain Yield of Mungo.
2. Briones, V. P. Effects of Spacing on Mungo (Vigna radiata) under Varying Levels of NPK.
3. Escasinas, A. B. Adaptability Study of the Different Field Legumes in Marginal Areas.

F. Fruits

1. DAS Staff. Establishment of Lanzones (Lansium demosticum) and Jackfruit (Artocarpus interfolia) Orchards in the Hillsides in the Sab-a Basin.

G. Vegetables

1. Agbisit, R. T. Regional Adaptability Test on Cucurbits.
2. Agbisit, R. T. Yield Performance of Five Varieties of Cucumber.
3. Briones, E. D. Regional Adaptability Test on Solanaceous Crops.
4. Briones, E. D. Varietal Trial of Tomato and Sweet Pepper.
5. DAS Staff. Variety Trial of Vegetables in the Sab-a Basin.
6. Evangelio, L. A. Performance Test of Five Cabbage Varieties in the Rainfed Areas During the Wet and Dry Seasons.

H. Cereals

1. Application of Zn Fertilizers on Rice Grown on Waterlogged Soils and Pest Soils of Sab-a Basin.

I. Socio-Economics

1. CES Staff. Farmer Member's Involvement, Perception of an Attitude Towards the Samahang Nayon in Region VIII.
2. Loan Repayment Behavior and Loan Utilization of Farmers in Region VIII.
3. Laguna, R. S. Marketing and Disposal of Abaca Fibers.
4. Quiton, G. Socio-Economic Profile of Abaca Farmers in the Philippines.
5. Tudtud, D. M. Domestic Consumption and Utilization of Abaca Fiber.
6. Villanueva, C. D. Production Management and Cultural Practices of Abaca Producers in the Philippines.
7. Villanueva, C. D. Socio-Economic Studies on Abaca Production and Marketing in the Philippines.

J. Applied Rural Sociology

1. Escalada, M. M. Profile of Philippine Agricultural Extension System.

Research Proposals for 1981

A. Root Crops

1. Abit, S. E. Effectiveness of Mulching Ipil-ipil Leaves Fertilization, and Various Green Manure Crops on the Yield Performances of Taro (Colocasia esculenta) and Cassava (Manihot esculenta).

2. Abit, S. E. Grass Mulching and Ipil-ipil Leaves Fertilization Techniques in Increasing Yield of Taro (Colocasia esculenta) and Cassava (Manihot esculenta).

3. Bacusmo, J. L. Compatibility and Combining Ability Studies of Sweet Potato, Cassava, Gabi and Yams.

4. Bartolini, P. U. Evaluation and Development of Root Crop Varieties Suitable Under Marginal Conditions.

5. Bartolini, P. U. Cytological Studies: Sweet Potato, Cassava, Gabi and Yam.

6. Bernardo, E. N. Biological Control of Some Important Pests of Root Crops.

7. Bernardo, E. N. Biology and Efficiency of Parasites Attacking Some Major Pests of Root Crops.

8. Bernardo, E. N. and Mandras, B. Parasites of the Sweet Potato Weevil and their Potential for Biological Control.

9. Bernardo, E. N. Effect of Some Cultural Practices on the Population of Major Pests and Tuber Yield of Cassava and Sweet Potato.

10. Bernardo, E. N. and Remoroza, V. Effect of Hilling-up on the Severity of Infection by Sweet Potato Weevil on the Tubers.

11. Cariño, F. and Madras, B. Chemical Control of the Chinese Grasshopper, Oxya chinensis Thunberg.

12. Catay, J. A. Determination on the Kind and Quantity of Fertilizer Applied in Relation to Aroma and Ubi (Kinampay Variety).

13. Cotejo, F. R. Jr. The NPK Requirements of Yams under Different Soil and Climatic Conditions.

14. Cotejo, F. R. Improving the Productivity of Root Crops Grown in Marginal Soils.

15. Cotejo, F. R. Improving the Productivity of Root Crops Grown in Stony Calcareous Soils.

16. Cotejo, F. R. Jr. Yield Response of Sweet Potato to Different Levels of Missing Hills as Affected by Population and Fertilization.

17. Cotejo, F. R. Jr. Cropping Systems for Root Crops under Hillside Farming Conditions.

18. Diamante, J. Utilization of Root Crops for Fermentation and Yeast Production.

19. Diamante, J. Utilization of Root Crops Wastes in Methane Gas Production.

20. Dingal, A. G. Selection of Staking Materials and Proper Staking Method for Yield Optimization in Yams.

21. Esguerra, N. M. and Perez, V. Effect of Sanitation on the Population of Spider Mites and Tuber Yield of Cassava.

22. Escalada, R. G. The Use of Foliar Fertilizers on Root Crops and their Economic Considerations.

23. Evangelio, F. A. An Agronomic Approach to Reconditioning Opened and/or Eroded Hillsides for Root Crop Production.

24. Evangelio, F. A. Improving the Productivity of Root Crops Grown in Heavy Acidic Soils.

25. Evangelio, F. A. Yield Response of Cassava to Different Levels of Missing Hills as Affected by Population and Fertilization.

26. Evangelio, F. A. The Production of Foliage and Tubers in Cassava as Influenced by Plant Density and Nitrogen Fertilizer Application Expt. 1 Interaction Between Variety and Nitrogen Level.

27. Evangelio, F. A. Effect of Age and Frequency of Topping on the Dry Matter Yield and Quality of Cassava Shoots.

28. Fabre, B. E. A Comparative Study on the Effects of Four Animal Manures on the Growth and Yield of Cassava and Gabi and on the Bulk Density of the Soils.

29. Floresca, W. S. The Reproductive Performance of Gilts Fed Cooked Sweet Potato as a Basal Feed Component under ViSCA Condition.

30. Gapasin, D. P. Biology, Host Range and Efficiency of Predators of Spider Mites Attacking Cassava and Sweet Potato.

31. Gapasin, D. P. Identification, Biology and Efficiency of the Natural Enemies of Major Pests Attacking Root Crops.

32. Gapasin, D. P. and Perez, V. Biology and Efficiency of Natural Enemies Attacking Spider Mites of Cassava and Sweet Potato.

33. Gapasin, D. P. and Mandras, B. Identification of the Natural Enemies of Important Taro Insect Pests and their Potential for Biological Control.

34. Gapasin, R. M. Studies on Nematodes Affecting Sweet Potato.

35. Gapasin, R. M. Field Reaction of Sweet Potato to Meloidogyne incognita and Rotylenchulus reniformis.

36. Gapasin, R. M. Varietal Screening of Sweet Potato to the Root-Knot Nematode, Meloidogyne spp.

37. Gapasin, R. M. Chemical Control of Root-Knot and Reniform Nematodes Affecting Sweet Potato.

38. Gapasin, R. M. Determination of Reaction and Yield Loss of Selected Sweet Potato Varieties to Stem and Foliage Scab.

39. Gapasin, R. M. Longevity of Xanthomonas manihotis Starr in vitro and in vivo.

40. Gonzal, L. R. Effect of Water Stress on Growth and Yield of Selected Cassava and Sweet Potato Varieties.

41. Gonzal, L. R. Survey and Identification of Weed Associated with Cassava, Sweet Potato and Gabi.

42. Javier, R. R. Cropping System for Sweet Potato (Ipomoea batatas) and Cassava (Manihot esculenta) in Marginal Hilly Areas.

43. Labra, J. S. Tillage Requirements of Various Root Crops under Varying Agroclimatic Conditions.

44. Labra, J. S. Cultural Practices on Yam Production.

45. Labra, J. S. **The Effect of Mulching and Set Polarization on the Growth and Yield of Yams.**

46. Labra, J. S. Evaluation of Different Tillage Practices under Continuous Cropping of Root and Tuber Crops in Hillside.

47. Labra, J. S. Farm Trials of Semi-Continuous Cassava Cultivation.

48. Lao, F. O. Interaction Effect of Root-Knot-Reniform Nematodes on the Yield of Sweet Potato.

49. Lao, F. O. Development, Effect on Yield and Control of Sweet Potato Stem and Foliage Scab.

50. Lao, F. O. Mode of Dissemination and Infection of the Sweet Potato Scab, Sphaceloma batatas Saw.

51. Lao, F. O. Host Range and Longevity of the Sweet Potato Scab, Sphaceloma batatas Saw.

52. Lao, F. O. Etiology and Mode of Dissemination of the Pathogen Causing Cercospora Leaf Spot of Cassava.

53. Ligason, L. P. Fresh Miki Noodle from Composite - Coconut Wheat Flour.

54. Mariscal, A. M. Floral and Reproductive Biology Studies: Sweet Potato, Cassava, Gabi and Yam.

55. Milleza, T. G. Development of Utilization Techniques for Fresh Tubers and Processed Products as Feeds.

56. Milleza, T. G. Contract Growing of Pigs Fed Cooked Sweet Potato as a Basal Ingredient in Selected Farms of Baybay, Leyte.

57. Monserate, C. T. Development of Kropeck from Cassava in Combination with "Kuyot".

58. Monserate, C. T. Wheat Flour Substitution Using Coco Pith Flour.

59. Napiere, C. M. Host Range, Longevity, Survival and Epidemiology of the Cassava Bacterial Blight Pathogen, Xanthomonas manihotis Starr.

60. Napiere, C. M. Host Range of Cassava Bacterial Blight Pathogen.

61. Napiere, C. M. Epidemiological Studies of Cassava Bacterial Blight.

62. Napiere, C. M. Survey, Collection and Identification of Natural Enemies of Major Pests of Root Crops.

63. Napiere, C. M. Varietal Screening of Sweet Potato to Reniform Nematode, Rotylenchulus reniformis.

64. Napiere, C. M. Control of Sweet Potato Scab Using Resistant Variety-Chemical Combination.

65. Napiere, C. M. Etiology, Mode of Dissemination, Longevity and Host Range of Cercospora Leaf Spot Pathogen of Cassava.

66. Napiere, C. M. Longevity and Host Range of Cercospora spp. Causing Leaf Spot in Cassava.

67. Newby, S. L. The Growth Performance of Growing-Finishing Pigs, Fed Different Preparations of Sweet Potato under Confinement.

68. Palomar, L. S. Utilization of Cassava, Coco Meat and Coco Pith Flour as Wheat Flour Substitutes.

69. Palomar, L. S. Development of Chips from Taro and Cassava.

70. Palomar, L. S. Development of Cassava Chips.

71. Palomar, L. S. Development of Taro Chips from Taro Tubers.

72. Palomar, M. K. Survival of Xanthomonas manihotis Starr in the Root Rhizosphere of Non Host Plants.

73. Palomar, M. K. and Alonzo, J. Fungicidal Control of Phytophthora Leaf Blight of Taro.

74. Pardales, J. R. Jr. Pollen Viability Studies: Sweet Potato, Cassava, Gabi and Yam.

75. Pedro, L. de. Development of Mass Rearing Techniques for Predators, Parasites and their Hosts.

76. Pedro, L. de. Chemical Control of Major Pests Attacking Root Crops.

77. Pedro, L. de. and Duatin, M. Chemical Control of Insect Pests Attacking the Above Ground Parts of Sweet Potato.

78. Pedro, L. de. Chemical Control of Cassava Spider Mites, Tetranychus kanzawai Kishida.

79. Posas, M. Effects of Grass Mulching and Green Manuring on Tuber Yield of Taro (Colocasia esculenta) and Cassava (Manihot esculenta).

80. PRCRTC Staff. Design and Development of Rier Root Crops

81. PRCRTC Staff. Studies, Design and Development of Harvesting and Processing Machines for Root Crops.

82. PRCRTC Staff. Comparative Study on the Field Response of Major Root Crops Grown on Different Soil Types in the Visayas Region.

83. PRCRTC Staff. Studies and Development of Untrafficable Areas of Leyte and Samar Provinces.

84. PRCRTC Staff. Screening and Breeding for High B-Carotene and Protein Content in Sweet Potato.

85. PRCRTC Staff. Selection and Hybridization for High B-Carotene and Protein Contents in Sweet Potato.

86. PRCRTC Staff. Effect of Nitrogen and Potassium Applied Singly or in Combination on B-Carotene, Protein and Starch Content of Sweet Potato.

87. PRCRTC Staff. The Cytology and Compatibility Studies of Major Root Crops Varieties: Sweet Potato, Cassava, Gabi and Yam.

88. PRCRTC Staff. Technology Development on the Use of Root Crops as Source of Energy.

89. PRCRTC Staff. Selection of High Alcohol-Yielding Microorganisms.

90. PRCRTC Staff. Mass Cultivating of High Alcohol-Yielding Microorganims.

91. PRCRTC Staff. Processing of Root Crops for Alcohol Production.

92. PRCRTC Staff. Host Range, Longevity, Survival and Epidemiology of the Cassava Bacterial Blight Pathogen, Xanthomonas manihotis Starr.

93. PRCRTC Staff. Host Range of Cassava Bacterial Blight Pathogen.

94. PRCRTC Staff. Longevity of Xanthomonas manihotis Starr. in vitro and in vivo.

95. PRCRTC Staff. Survival of Xanthomonas manihotis Starr. in the Root Rhizosphere of Non-Host Plants.

96. PRCRTC Staff. Epidemiological Studies of Cassava Bacterial Blight.

97. Secreto, A. C. Production of Cassava on the Hillsides under Minimal Weed Control.

98. Secreto, A. C. Varietal Response of Sweet Potato and Cassava to Different Levels of Missing Hills.

99. Secreto, A. C. Effect of Cropping Pattern and Density of Planting on the Weed Population and Tuber Production in Sweet Potato, Cassava and Gabi in Hillsides.

100. Secreto, A. S. Yield Response of Cassava to Different Levels of Population at Different Periods of Harvesting.

101. Trenuela, R. S. Mulching and Frequency of Ipil-ipil Leaves Fertilization on the Growth and Yield of Taro (Colocasia esculenta) and Cassava (Manihot esculenta).

102. Tupas, G. L. Flower Induction Studies for Gabi (Taro) and Yams.

103. Tupas, G. L. Regional Farm and Station Evaluation of Promising Varieties of C. esculenta (L) Schott and their Cultural Management.

104. Villamayor, F. G. Cyanide Content of Cassava Cultivar at Different Fertility Levels and Stages at Maturity.

105. Villamayor, F. G. Determining of Suitable Tillage Practices at the Farm Level for Optimum Root Crops Production.

106. Villamayor, F. G. The Role of Missing Hills in Cassava and Sweet Potato Production.

107. Villamayor, F. G. Yield Response of Sweet Potato and Cassava to Different Replanting Time of Missing Hills.

108. Villamayor, F. G. A Feasibility Study on the Production of White Potato in the Lowland with the Use of Nurse Crops.

109. Villamayor, F. G. A Continuous Production Scheme for Cassava at the Farm Level under Minimum Tillage.

110. Villanueva, M. R. Evaluation and Development of Hillside Farming Techniques for Root Crops Production.

111. Villanueva, M. R. Production of Foliage for Animal Feed and Effect of Defoliation in Tuber Production in Cassava.

112. Villanueva, M. R. Effects of Degree of Defoliation on Dry Matter Yield and Quality of Cassava Shoots, Expt. 1 Interaction Between Variety and Age of Topping.

113. The Influence of Harvesting Replanting Pattern on the Yield of Cassava.

B. Coconut

1. Bernardo, E. N. Development of Mass Rearing Techniques for Parasites, Predators, Pathogens and Their Hosts.

2. Bernardo, E. N. Biological Control of Some Important Insect Pests of Coconut.

3. Bernardo, E. N. Identification of the Natural Enemies of the Coconut Leaf Miner and Their Potential for Biological Control.

4. Cariño, F. Determination of Aflatoxin and Other Mycotoxins in Moldy Copra.

5. Esguerra, N. M. Collection, Isolation and Identification of Natural Enemies of Four Major Insect Pests of Coconut.

6. Esguerra, N. M. Survey and Identification of Insect Pests Attacking Copra in Leyte.

7. Esguerra, N. M. Studies on Population Dynamics of Rhinoceros Beetle, Oryctes rhinoceros L., in Established and Newly Replanted Plantations.

8. Gapasin, D. P. Biological Control of Some Important Insect Pests of Coconut Using Native Parasites, Predators and Pathogens.

9. Gapasin, D. P. Evaluation of Efficiency of Promising Species of Natural Enemies in the Laboratory.

10. Gapasin, D. P. Biology of Promising Species of Parasites and Predators.

11. Gapasin, D. P. Studies on the Insect Pests and Microorganisms Affecting Copra.

12. Gapasin, D. P. Biological Studies on the Important Insect Pests Attacking Copra.

13. Palomar, M. K. Evaluation of Fumigants and Insecticides for the Control of Copra Pests.

14. Gapasin, R. M. Host Range of Helminthosporium sp. and Pestalozzia sp.

15. Gapasin, R. M. Survey of Parasitic Nematode Associated with Coconut in Leyte and Their Pathogenicity.

16. Gapasin, R. M. Studies on Population Dynamics of Rhinoceros Beetle in Established and Newly Replanted Plantations.

17. Gapasin, D. P. Effectivity of the Parasites of Slug Caterpillars for Biological Control.

18. Lao, F. O. Culture, Identification and Pathogenicity of the Causal Organisms Involved in Gray and Brown Leaf Spot Diseases of Coconut.

19. Monserate, C. T. Wheat Flour Substitution in the Development of Coco Golorias Using Flour from Dessicated Coconut.

20. Monserate, C. T. Development of Dessicated Coco Cereal Stick.

21. Napiere, C. M. Longevity of Helminthosporium sp. and Pestalozzia sp. in vitro and in vivo.

22. Napiere, C. M. Effect of Physical and Chemical Agents on Helminthosporium and Pestalozzia Pathogens.

23. Palomar, L. S. Development of Food Products from Coconut for Cottage Industry.

24. Palomar, L. S. Identification, Development and Evaluation of Coconut Meat Delicacies for Cottage Industries.

25. Palomar, M. K. Field Evaluation of the Efficiency of Baculovirus as Biological Control Agent for Rhinoceros Beetle.

26. Palomar, M. K. Identification of Molds and Other Microorganisms Affecting Copra and Their Effect on its Quality.

27. Palomar, M. K. Effect of Helminthosporium and Pestalozzia Pathogens.

28. Palomar, M. K. Evaluation of the Efficiency of Baculovirus and Biological Control Agent for Rhinoceros Beetle.

29. Palomar, M. K. Comparative Studies on Gray and Brown Leaf Spot Diseases of Coconut.

30. Palomar, M. K. Longevity of Helminthosporium sp. and Pestalozzia sp. in vitro and in vivo.

31. RCRC Staff. Studies and Development of Coconut Oil Extracted at Village Level.

32. RCRC Staff. Improvement of Processing System of Coir Fiber.

33. RCRC Staff. Characterization of the Ecological and Micro Climatological Environment under a Coconut Grass Community.

34. RCRC Staff. Utilization of Cassava, Coconut and Coco Pith Flour as Wheat Flour Substitution.

35. RCRC Staff. Fresh Miki Noodles from Composite Coconut Wheat Flour.

36. RCRC Staff. Wheat Flour Substitution Using Coco Pith Flour.

37. RCRC Staff. Coconut Fertilizer Verification Trials in Cooperator's Farm in Sab-a Basin Areas.

38. RCRC Staff. On Farm Trials on Distancing, Cultivation and Fertilizer Application for Coconut in Sab-a Basin Area.

39. RCRC Staff. Coconut Intercropped with Cacao in Sab-a Basin Areas.

40. RCRC Staff. Coconut Intercropped with Black-Pepper in Sab-a Basin Areas.

41. RCRC Staff. Effects of Organic and Inorganic N on the Productivity of the Coconut Grown on 4 Important Coconut Soil Types in Leyte.

42. RCRC Staff. Studies on Coconut-Based Cropping Systems Utilizing Annual Crops in Sab-a Basin Areas.

43. RCRC Staff. Coconut Intercropped with Coffee.

44. RCRC Staff. Effects of 4 Fertilizer Levels on the Performance of Cacao Grown under Bearing Coconut Palms.

45. RCRC Staff. Comparative Studies on Gray and Brown Leaf Spot Diseases of Coconut.

46. RCRC Staff. Studies on the Insect Pests and Microorganisms Affecting Copra.

47. RCRC Staff. Survey and Identification of Insect Pests Attacking Copra.

48. RCRC Staff. Biological Studies on the Important Insect Pests Attacking Copra.

49. RCRC Staff. Evaluation of Insecticides for the Control of Copra Pests.

50. RCRC Staff. Identification of Molds and Other Microorganisms Affecting Copra and Their Effect on its Quality.

51. RCRC Staff. Determination of Aflatoxin and Other Mycotoxin in Moldy Copra.

52. Talaboc, L. V. Host Selection and Determination of Host Specificity of Parasites and Predators.

53. Talaboc, L. V. Immunity Reactions of the Hosts to the Parasites.

54. Villamayor, F. P. Quantification of Soil Factors Affecting Productivity of Coconuts Grown on 10 Major Soil Types on the Island of Leyte.

C. Abaca

1. Crop Protection Department Staff. Survey of Insect Pests and Diseases Attacking Abaca in the Philippines.

2. Agbisit, R. Agroforestation Development Involving Abaca, Giant Ipil-ipil, Coffee and Root Crops in Kaingined Areas in Leyte.

3. Agbisit, R. T. NPK Fertilizer Trials with Selected Abaca Clones under a Monoculture Cropping System.

4. Alcober, E. R. Studies on the Physical and Morphological Properties of Abaca (Musa textiles Nee) Fiber as Affected by Pre-extraction Storage.

5. Alcober, E. R. The Influence of Different Mehods of Storing Abaca Stalks on the Physical and Morphological Properties of the Fiber.

6. Fabre, B. Optimum Rates of NPK Application for Selected Abaca Clones under Different Climatic Conditions.

7. Javier, R. The Effect of Giant Ipil-ipil (Leucaena leucocephala) Shade trees Planted at Varying Distances on the Growth and Yield of Abaca.

8. Montecillo, G. P. Methods and Timing of Fertilizer Application for Abaca under the Prevailing Climates of Region VIII.

9. Napiere, C. Survey on Insect Pests and Diseases of Abaca in the Philippines.

10. Santiago, R. M. Effect of Storing Tuxies from Abaca Stalks at Different Stages of Maturity on Fiber Physical and Morphological Properties.

11. Santiago, R. Response of Abaca Grown with Covercrop to Varying Levels of Nitrogen and Potassium Application.

12. Santiago, R. M. Germination and Subsequent Growth of Abaca as Affected by Soaking of Seedpieces in Coconut Water and in Different Fertilizer Solutions.

D. Corn and Sorghum

1. Apor, F. The Effect of Defoliation on the Yield of Corn.

2. Briones, V. P. Variety Trial of Recommended Corn and Sorghum Varieties/Hybrids in the Sab-a Basin.

3. Briones, E. B. The Effect of Cutting Height on Tillering and Ratoon Performance of Some Varieties of Sorghum.

4. Briones, V. P. Cultural Weed Control for Maximum Production of Corn and Sorghum.

5. Escalada, R. G. Adaptability Test, Cultural Management and Ratoon Cropping of Sorghum (Sorghum bicolor Moeveh)

6. Escalada, R. G. The Effect of Zero Tillage on the Growth and Yield of Ratooned Sorghum.

7. Escalada, R. G. Weed Control in Cereals in the Visayas.

8. Escalada, R. G. Chemical Weed Control in Corn and Sorghum.

9. Escasinas, A. B. Adaptability Test of Grain Sorghum in the Visayas.

10. Escasinas, A. B. Organic Matter Requirement of Corn and Sorghum from Ipil-ipil in Marginal Hilly Areas.

11. Fabre, B. F. Practical Utilization of Green Manuring and Composting as a Means of Maintaining Soil Fertility for Corn Production.

12. Javier, R. R. Marginal Hilly Areas and Slopeland Utilization for Corn, Sorghum and Field Legumes in Sab-a Basin.

13. Javier, R. R. Monthly Planting for the Sustained Production of Corn, Sorghum and Field Legumes in Marginal Hilly Areas.

14. Javier, R. R. Crop Rotation of Corn and Sorghum with Legumes as a Source of Organic Fertilizer on Marginal Hilly Areas in Sab-a Basin.

15. Javier, R. R. Utilization of Marginal Hilly Areas for Corn and Sorghum with Ipil-ipil as a Source of Organic Matter in Region VII and VIII.

16. Javier, R. R. The Influence of Various Fertilizer Levels and Population Densities on Corn and Sorghum Planted in Between Ipil-ipil Strips in Marginal and Hilly Areas.

17. Pascual, M. S. San. The Effect of Zero Tillage on the Growth and Yield of Ratooned Sorghum.

18. Reyes, S. B. Fertilizer Trial of Corn under Marcos Corn Experiment Station Condition.

19. Trenuela, R. N. Variety Trial of Recommended Sorghum Varieties/ Hybrids in the Sab-a Basin.

20. Trenuela, R. N. The Influence of Varying Plant Population and Fertility Levels on the Yield of Corn, Sorghum and Field Legumes in Marginal Hilly Areas in Sab-a Basin.

21. Villamayor, F. B. Fertilizer Requirements of Promising Downy Mildew Resistant Field Corn Varieties in Different Soil Types at the Sab-a Basin.

22. Villamayor, F. B. Application of Zinc Fertilizers on Corn Grown in Calcareous Soils in Leyte.

23. Villamayor, F. B. Lime Requirement of Corn Planted in Luisiana Clay and Maasin Clay in the Island of Leyte.

E. Legumes

1. Agbisit, R. T. The Rates and Methods of Application of NPK Fertilizers on the Growth and Yield of Winged Beans.

2. Briones, E. D. Duration of Weed Competition and Weed Control in the Growth and Yield of Winged Beans.

3. Escalada, R. G. Cultural Management of Winged Bean in the Visayas.

4. Escasinas, A. B. Adaptability Study of the Different Field Legumes in Marginal Hilly Areas in Sab-a Basin.

5. Evangelio, L. A. The Effects of the Method of Planting on the Growth and Yield of Winged Beans Planted During the Wet and Dry Season.

6. Gapasin, D. P. Biology and Control of Stomoptervx subsecievella (Miller), a Leafminer Attacking Beans.

7. Ludevise, A. N. Yield Response of Mungo to liming and to Different Levels of NPK.

8. Santiago, R. M. The Effects of Plant Population and Planting Geometry on the Growth and Yield of Winged Beans.

F. Fruits

1. DAS Staff. Establishment of Lanzones (Lanzium domesticum) and Jackfruit (Arthocarpus integrefelia) Orchard in the Hillsides of Sab-a Basin.

G. Cereals

1. Villamayor, F. B Application of Zinc Fertilizer on Rice Grown Waterlogged Soils of Sab-a Basin.

H. Forestation

1. Bumatay, E. C. Economic Feasibility of Rehabilitating "Kaingined" Areas under an Intercropping System of Giant Ipil-ipil and Some Root Crops.

2. Bumatay, E. C. Effect of Fertilization on the Growth and Survival of Giant Ipil-ipil (Leucaena leucocephala Cem.) Seedlings Outplanted in Grassland in Region VII and Region VIII.

3. Bumatay, E. C. Mineral Requirement of Some Premium Species (Acle, Temase and Narra) in Central and Eastern Visayas.

I. Poultry

1. DASVM Staff. Studies on the Production of Hybrid Ducks.

2. Fernandez, T. J. Biological Control of Schistozomiasis Using Ducks.

3. Floresca, W. F. Growth Performance and Carcass Characteristics of Hybrid Ducklings Fed at Different Levels of Dried Cassava Tubers.

4. Masendo, I. R. Time and Frequency of Insemination in Relation to Egg Fertility.

5. Masendo, I. R. Incubation Combinations for Hatching Eggs.

6. Palomar, L. S. Development of Food Products from Carabeef and Duck Meat.

J. Livestock

1. Bantugan, S. C. Performance of Pregnant Does Grazed on Native Vegetation under Coconut Supplemented with Dried Cassava Chips.

2. DASVM Staff. Utilization of Duck Meat in Preparing a Nutritious Snack Item Called Quapeck.

3, Monserate, C. T. Tosino and Tapa from Chemically Tenderized Carabeef.

K. Vegetables

1. Agbisit, R. T. Yield Performance of Five Varieties of Cucumber in Sab-a Basin.

2. Briones, E. B. Variety Trial of Tomato and Sweet Pepper.

3. Briones, E. B. Critical Period and Frequency of Manual Weeding on the Growth and Yield of Vegetables.

4. DASVM Staff. Growth Performance of Dairy Goats Fed with DPW.

5. DASVM Staff. Biological Control of Fascioliasis with the Use of Mallard Ducks.

6. DASVM Staff. Survey of Goat Parasites in Eastern Visayas.

7. DASVM Staff. Survey of Duck Parasites in Eastern Visayas.

8. DASVM Staff. Yield of Some Grasses and Legumes.

9. DASVM Staff. Feedlot Fattening of Goats.

10. DASVM Staff. Swine Dispersal and Scheme for Rural Farmers.

11. DASVM Staff. Growth Performance and Carcass Quality of Ducks Fed with Kitchen Refuse.

12. DASVM Staff. Effect of Different System of Feeding Ducks on the Growth of Muscovy Ducks.

13. DASVM Staff. Survey of Ecto Indo Parasites Affecting Cattle and Carabaos in Eastern Visayas.

14. DASVM Staff. Growth, Cost and Return from Three Methods of Artificial Rearing of Goats.

15. Escalada, R. G. Variety Trial of Vegetable in Sab-a Basin.

16. Escalada, R. G. Weed Control on Vegetables in the Visayas.

17. Escalada, R. G. Chemical Weed Control in Vegetables.

18. Esguerra, N. M. and Remoroza, V. M. Biology and Chemical Control of Eggplant Fruit Borer.

19. Evangelio, L. S. Performance Test of Five Cabbage Varieties Grown in Rainfed Space of Sab-a Basin During Dry and Wet Season.

20. Evangelio, L. A. Effects of Different Land Preparation Techniques and Organic Mulches on the Growth and Yield of Carrot and Radish Grown During Dry and Wet Months.

21. Gapasin, D. P. and Mandras, B. T. Biology and Control of a Leaf Eating Caterpillar, Diaphania indica Saunders, Attacking Ampalaya.

22. Gapasin. R. M. and Ong Sotto, R. A. Interaction of Nematode and Virus and Its Effects on the Growth and Yield of Pole Sitao.

23. Lao, F. O. Injury Level of Bush Beans to Rust Infection (Uromyces phaseoli).

24. Montecillo, G. P. Effects of Spacing and Fertilizer Levels on the Growth and Yield of Eggplant (Splanaceous melongena L.).

25. Palomar, L. S. Development of Food Products from Carabeef and Duck Meat.

L. Socio-Economics

1. Econ. Staff. A Prospective Outlook into Swine Raising as a Socio-Economic Reform Factor.

2. Laguna, R. S. Marketing Channels/Structure of Copra/Nuts in Eastern Visayas.

3. Mesorado, N. B. Domestic Consumption and Utilization of Coconut and Coconut-by-Products at the Farm Level in the Eastern Visayas.

4. Quiton, G. T. Cost and Returns Studies for Different Sizes of Coconut Farmers in Eastern Visayas.

5. Villanueva, C. D. Socio-Economic Studies on Coconut Production and Marketing.

6. Villanueva, C. D. Production and Management Practices of Coconut Farmers in Eastern Visayas.

M. Applied Rural Sociology

1. Alcober, D. L. Farmer Member's Involvement, Perception of an Attitude Towards the Smahang Nayon Program in Region VIII (Leyte and Samar).

2. Alcober, D. L. Loan Repayment Behavior and Loan Utilization of Farmers in Region VIII (Leyte and Samar).

3. Alcober, D. L. Socio-Physiological and Communication Factors Associated with Loan Repayment.

4. Flores, F. R. Role and Organization of Agricultural System in the Philippines.

5. Jaime, R. A. Farmer's Utilization of Agricultural Loan.

6. Aspirations and Practices Toward Improved Living Conditions of the Rural Poor and Low-Income Coconut Farmers in Leyte.

7. Socio-Economic Implication of the Use of Microorganism as Food.

8. Socio-Economic Acceptance of Microorganism as Food.
9. Cost and Return Analysis of Using Microorganims as Food.
10. Integrated Implementation of Marine Fishing and Coconut Farming Program on the Coastal Barangays of Western Leyte.
11. Synthesis of Research Finding on Formal Education in Agriculture.
12. Non-Formal Education in Agriculture Through Supervised Modular Instruction.
13. Factors Influencing Agricultural College Student Choice of Degree Program Major Field.
14. Follow-up Study of the Graduates of the Master of Arts in Teaching Elementary Agriculture (MATEA) in Eastern Visayas.
15. Utilization of Perceived Effectiveness of Para-Professional for Agricultural Development in the Visayas (Region VI, VII, VIII).
16. Training Needs in Communication of Development Agents in the Visayas (Region VI, VII, VIII).
17. Role and Organization of Agricultural System in the Philippines.
18. Socio-Economic Studies on Abaca Production and Marketing in the Philippines.
19. Socio-Economic Profile of Abaca Farmers in the Philippines.
20. Production, Management and Cultural Practices of Abaca Producers in the Philippines.
21. Marketing and Disposal of Abaca Fibers.

N. Soil and Water Resources

1. Acabal, A. Chemical Evaluation of Drinking Water in ViSCA.
2. Acabal, A. Gas Chromatographic Evaluation of Pesticide Residues in Soil Planted to Root Crops in ViSCA.
3. Acabal, A. Survey on the Level of Heavy Metal Pollutants from Baybay to Isabel - A Baseline Information.

Appendix 2

Technical and Semi-Popular Publications of the Staff (1979)

A. Root Crops

1. Technical Publications

a. Gapasin, R. M. 1979. Pathogenicity of Meloidogyne spp. and Rotylenchulus reniformis on Sweet Potato. Annals of Tropical Research. 1 (1): 20-26.

b. Gapasin, R. M. 1979. Survey and Identification of Plant Parasitic Nematodes Associated with Sweet Potato and Cassava. Annals of Tropical Research. 1 (2): 120-134.

c. Lao, F. O and Divinagracia, G. G. 1979. Culture of Sweet Potato Scab Fungus (Sphaceloma batatas Saw). Annals of Tropical Research. 1 (1): 1-13.

d. Mandras, B. T. and Gapasin, D. P. 1979. Biology and Host Range of Chinese Grasshopper (Oxya chinensis Thunberg).

e. Milan, P. P. 1979. Ecology of Mosquitoes in the Philippine Community. Annals of Tropical Research. 1 (2): 142-153.

f. Trigo, D. M. and Palomar, M. K. 1979. Sweet Potato as a Culture Medium Ingredient for Sclerotium rolfsii Sacc. Annals of Tropical Research. 1 (1): 67-72.

2. Semi-Popular Publications

a. Bartolini, P. U. 1979. Genetic Erosion - Its Implication to Modern Agriculture. Radix. I (1): 7-8.

b. Bartolini, P. U. 1979. Cassava - The Crop with a Bright Future. Radix. I (1): 19-21.

c. Bartolini, P. U. 1979. The Obscure Arrowroot (Maranta Arundinacea Linn): A Promising Food Crop in the Philippines. ViSCA Vista. II (7): 10-12.

d. Bartolini, P. U. 1979. The Influence of Seed Quality on Crop Performance in Soybean and Sorghum. ViSCA Vista. II (4): 21.

e. Bartolini, P. U. and Tisang, N. N. 1979. Timing and Frequency of Topping Sweet Potato at Varying Levels of Nitrogen, ViSCA Vista. 11 (6): 21.

f. Evangelio, F. A., Sebidos, R. F. and Apilar, E. G. 1979. Performance of 16 Promising Cassava Hybrids from Puerto Rico, Radix. I (1): 9.

g. Evangelio, F. A., Sebidos, R. F., Apilar, E. G. and Perez R. 1979. A Modified Rapid Propagation Technique for the Establishment of Disease-Free Cassava Materials. Radix. I (1): 22-23.

h. Evangelio, F. A. 1979. Cassava - Its Potential in the Philippine Economy. ViSCA Vista. II (6): 11-13.

i. Evangelio, F. A. 1979. Effects of Earthworm on Soil Properties and Pasture Productivity. ViSCA Vista. II (4): 15-17, 20.

j. Evangelio, F. A. 1979. Influence of Variety, Spacing and Fertilizer on the Stem and Tuber Production of Potatoes (Solanum tuberosum, L.) ViSCA Vista. 11 (7): 12.

k. Gapasin, R. M. 1979. Survey, Pathogenicity and Control of Plant Parasitic Nematodes Associated with Major Root Crops in Leyte. ViSCA Vista. 2 (6): 14-15.

l. Pardales, J. R. and Forio, A. F. 1979. Length of Cassava Planting Materials. ViSCA Vista. II (4): 19.

m. Pardales, J. R. 1979. The Role of Natural Water Stress on Some Agronomic Characters of Lowland Gabi Planted in the Upland under Different Levels of Fertilizer Application. ViSCA Vista. 2 (4): 22-23.

n. Pardales, J. R. 1979. Edible Aroids: Their Potential as Root Crops, ViSCA Vista. II (3): 11-13.

o. Pardales, J. R., Villanueva, M. R., Talatala, R. L. and Capuno, O. B. 1979. Management of Sweet Potato in Lowland Field Previously Planted to Rice. ViSCA Vista. I (2): 21-22.

p. Pardales, J. R. and Forio, A. F. 1979. Some Common Weeds Associated in Gabi Production. ViSCA Vista. I (2): 21-22.

q. Pardales, J. R. 1979. The Influence of Planting Materials and Positions of Planting on the Yield of Cassava. ViSCA Vista. II (3): 15-17.

r. Secreto, A. C. 1979. Winged Bean: A Potential Tuber Crop. Radix. I (1): 16-18.

s. Tupas, G. L. 1979. Rapid Propagation Technique for Gabi. Radix. I (1): 10-11.

t. Tupas, G. L. 1979. Preliminary Evaluation of Hawaiian Gabi Varieties in the Philippines. ViSCA Vista. II (2): 18-19.

u. Tupas, G. L. 1979. Consideration of Ecological Relationship. ViSCA Vista. II (1): 13-14.

v. Tupas, G. L. 1979. The Role of Savanna Tree Species in Plant Succession and Reforestation. ViSCA Vista. II (7): 13-15.

w. Tupas, G. L., Villanueva, M.R. and Lavega, M. L. 1979. Evaluation of Sweet Potato Cultivars Introduced by Seeds from Open Pollinated Field in Taiwan. ViSCA Vista. II (2): 17.

x. Tupas, G. L. and Lavega, M. L. 1979. The Influence of Light Quality on Seed Germination of Sweet Potato. ViSCA Vista. II (2): 17.

y. Tupas, G. L., Cotejo, F. R., Jr. and Lavega, M. L. 1979. Yield Trial on Ten Varieties of Upland Gabi. ViSCA Vista. II (1): 23.

z. Villanueva, M. R. and Labra, J. S. 1979. Planting Methods for Optimization of Cassava Yield. Radix. I (1): 5-6.

aa. Villanueva, M. R. 1979. Program Highlights of the Philippine Root Crop Research and Training Center. ViSCA Vista. II (5): 7-10.

ab. Villanueva, M. R. 1979. Current Status of Cassava in the Philippines. ViSCA Vista. II (1): 18-20.

ac. 1979. The Winged Bean Research Program at PRCRTC. ViSCA Vista. II (4): 6.

B. Legumes

1. Semi-Popular Publication

a. Bulilan, N. T. and Lozada, E. 1979. Deep Bin Drying Characteristics of Unshelled Peanuts. ViSCA Vista. 2 (7): 16.

C. Poultry

1. Technical Publications

a. Palomar, L. S. 1979. Chemical and Organoleptic Characteristics of Fresh Sausage with Different Levels of Duck Meat. Annals of Tropical Research. 1 (1): 14-19.

b. Tibon, Ma. E. and Gerona, G. R. 1979. Effect of Feeding Cobb Broilers at Different Ages with Various Levels of Cono Rice Bran. Annals of Tropical Research. 1 (1): 50-55.

c. Palomar, L. S. 1979. Smoked Product from Duck Meat. Annals of Tropical Research, Vol. I, No. 2.

2. Semi-Popular Publication

a. Ayaso, T. 1979. Role Performance of the Bureau of Agricultural Extension Home Management Technician (HMT's) in the Nutrition Program of Leyte. ADE Quarterly.

D. Tobacco

1. Technical Publication

a. Pedro, L. B. de and Rejesus, B. M. 1979. Biology and Feeding Preference of Tobacco Budworm, Helicoverpa assulta (Guenne). Annals of Tropical Research. 1 (2): 135-141.

E. Applied Rural Sociology

1. Technical Publications

a. Alesna, W. T. 1979. Effectiveness of Community Newsboard as a Micro Medium of Development Communication. Annals of Tropical Research. I (1): 45-49.

b. Sadsad, G. T. 1979. Mass Media Habits of Rural People in a Philippine Municipality. Annals of Tropical Research. I (2): 104-111.

c. Tongco, A. C. and Saz, E. B. 1979. Group Farming Experiences in Western Leyte, Philippines. Annals of Tropical Research. I (1): 27-34.

2. Semi-Popular Publications

a. Alcober, D. L. 1978. Innovative Performance of Coconut Farmers in the Province of Leyte and Southern Leyte. ADE Quarterly. II (4): 11-20.

b. Go, A. S. 1979. ESP: A Teacher's Search for Relevance. Philippine Journal of Education.

c. Juego, J. R. 1977. Student Teaching Program. ADE Quarterly. 3 (4): 8-16.

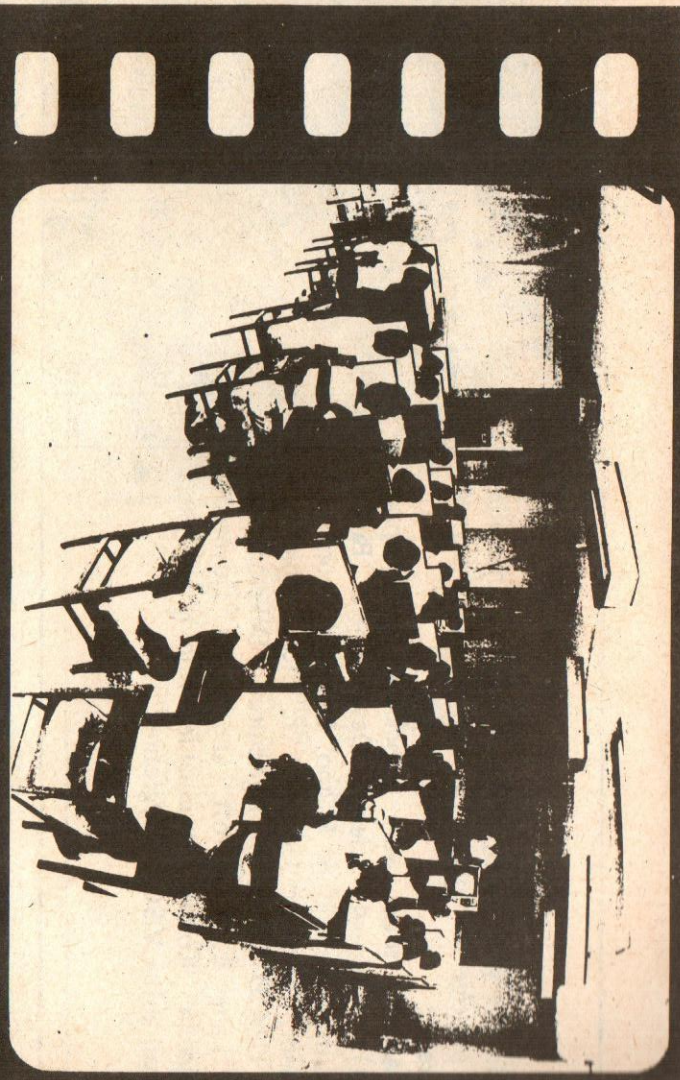
d. Quiton, V. A. 1979. Non-Formal Education for Rural Youths: Philippine Experience. ADE Quarterly. 3 (4): 1-7.

e. Quiton, V. A. 1979. Research Trends and Priorities in Agricultural Education. ADE Quarterly. III (2&3): 1-7.

f. Quiton, V. A. 1978. The Management of Social and Organizational Change. ADE Quarterly. II (4): 1-10.

g. Juego, J. R. 1979. Student Identify Their Roles in the Off-Campus Student-Teaching Program. ADE Quarterly, Vol. III No. 4.

Pictorial Highlights of the Year in Review



In five years time, ViSCA has gained unassailable prestige to attract a number of renowned figures.

Among them were (clockwise from upper right): National Science Development Board Chairman Melecio S. Magno, National Economic Planning Minister Gerardo G. Sicat, Chief of the USAID Office of Agricultural Development Dr. Lane E. Holdcroft, and Leyte Governor Benjamin "Kokoy" Romualdez who is enjoying a stroll at the ViSCA playground.

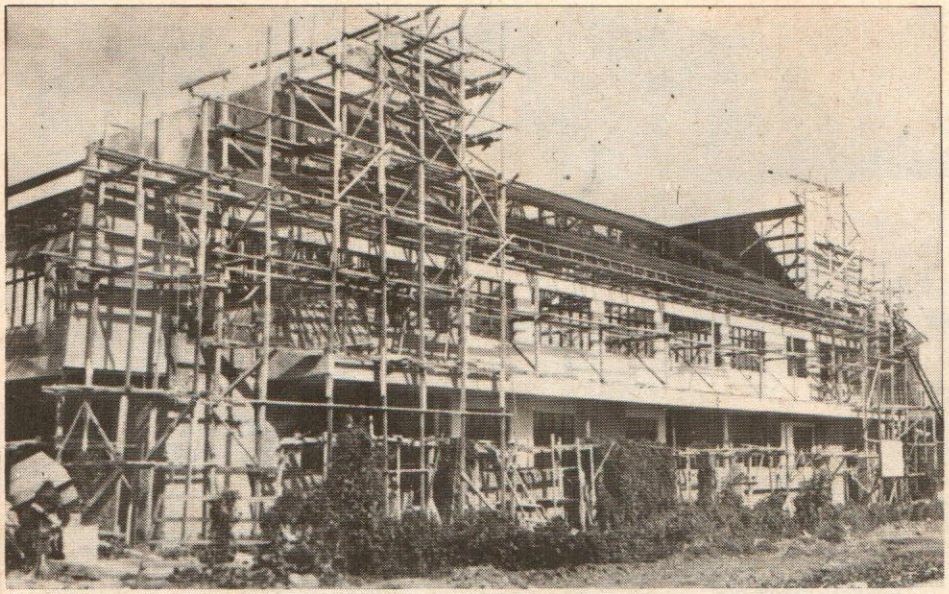
(Left) Deputy Budget Minister Manuel S. Alba keynoting the 26th collegiate and 49th High School commencement exercises on April 3, 1979.

(Below) Dr. Don L. Plucknett, President of the International Society for Tropical Root Crops, before world renowned savants gathered on campus on September 24 and 25, 1979 for the 5th International Symposium on Taro and Cocoyam.

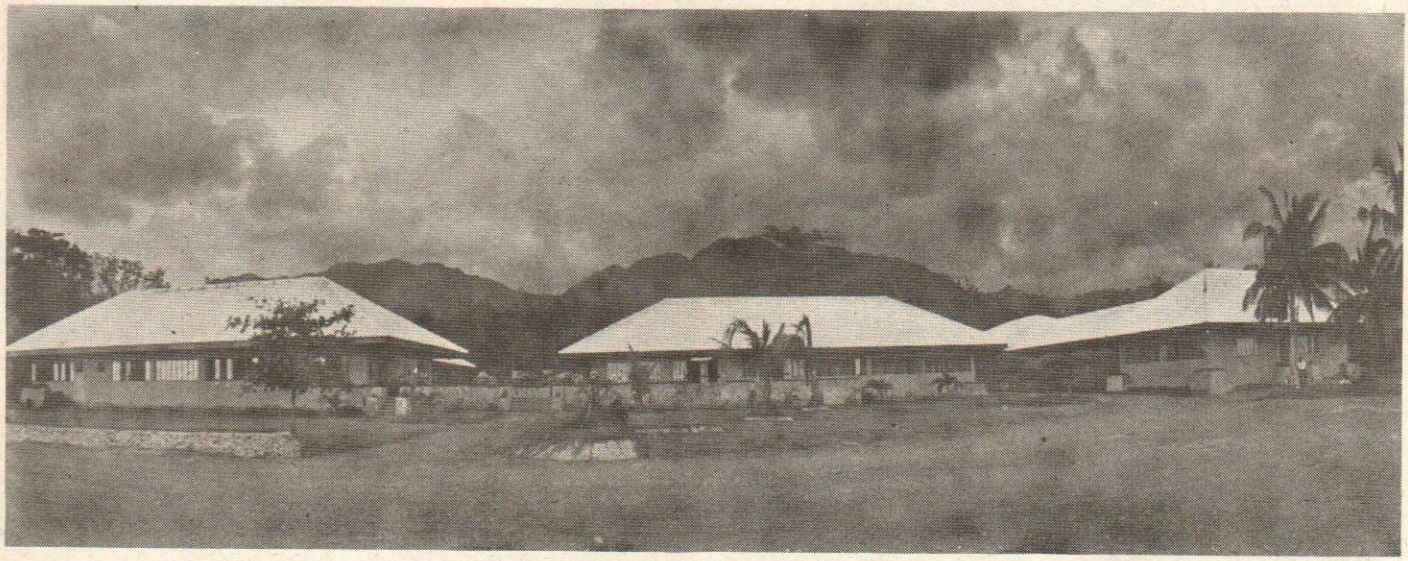
(Left) Dr. F. A. Bernardo addressing the regional conference for the Visayas of the Philippine Association of Entomologists held at ViSCA from March 4 to 6, 1979.

(Above) The Visayas Coordinated Agricultural Research Program (ViCARP) sets up the mechanism for coordinated agri-research in the seminar-workshop conducted on campus from July 13 to 14, 1979.

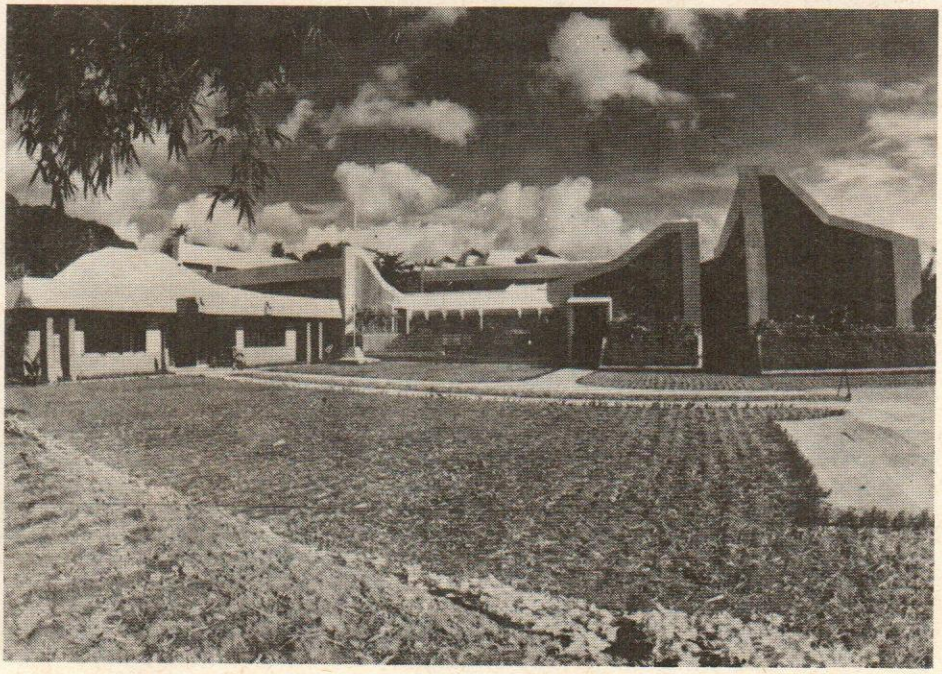
(Below) Participants of the ACAP-sponsored seminar-workshop on "Agricultural Economics: Teaching and Courses Evaluation" listen to Dr. Ulrich Boehm, programme coordinator for Asia-Pacific of the German Foundation for International Development.

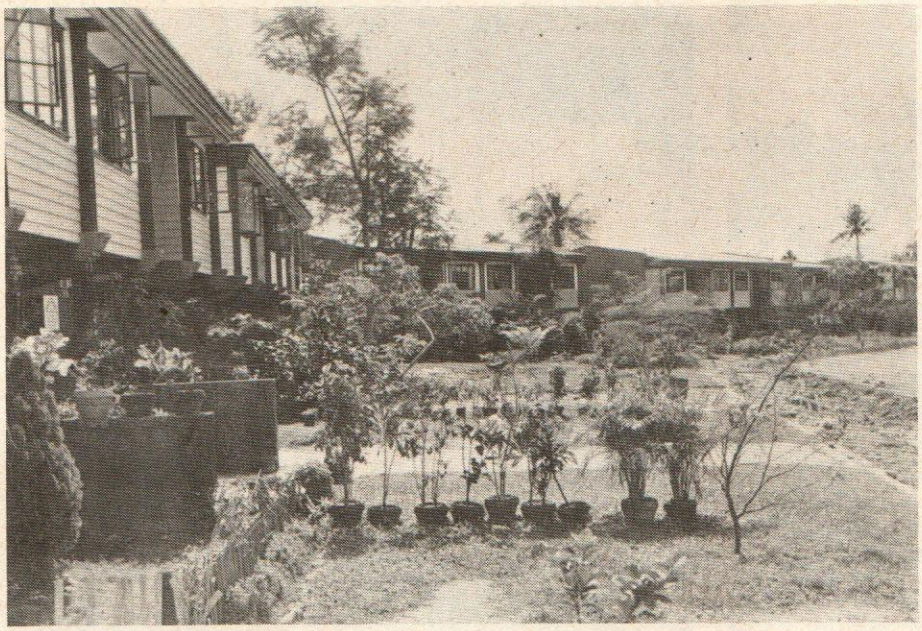


With financial support from the Philippine government and other agencies such as the World Bank, building constructions have been going on relentlessly on the vast campus since 1978. Photos show the initial stages of construction of the Agronomy and Soils (left) and the Agricultural Botany and Plant Breeding (middle) buildings. Far below is the nearly completed Crop Protection building.



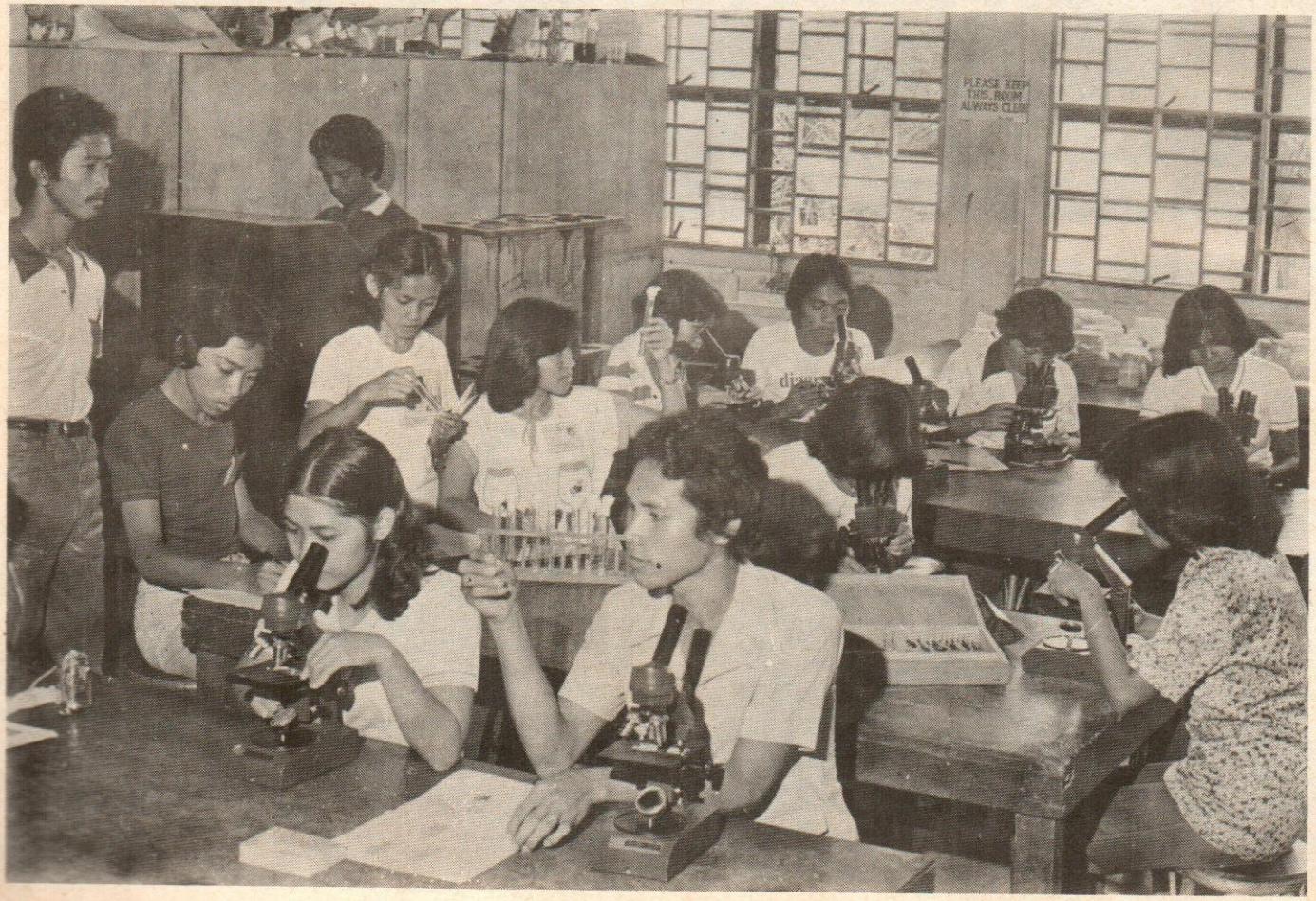
On this page are some of the completed edifices. (Above) The Arts & Letters building where students go to attain proficiency in speech and writing skills for communication. Middle photo is the Regional Training Center for Rural Development which houses the facilities for training rural development workers in the Visayas, and below, the Philippine Root Crop Research and Training Center which is in charge of research and development of root crops in the country.

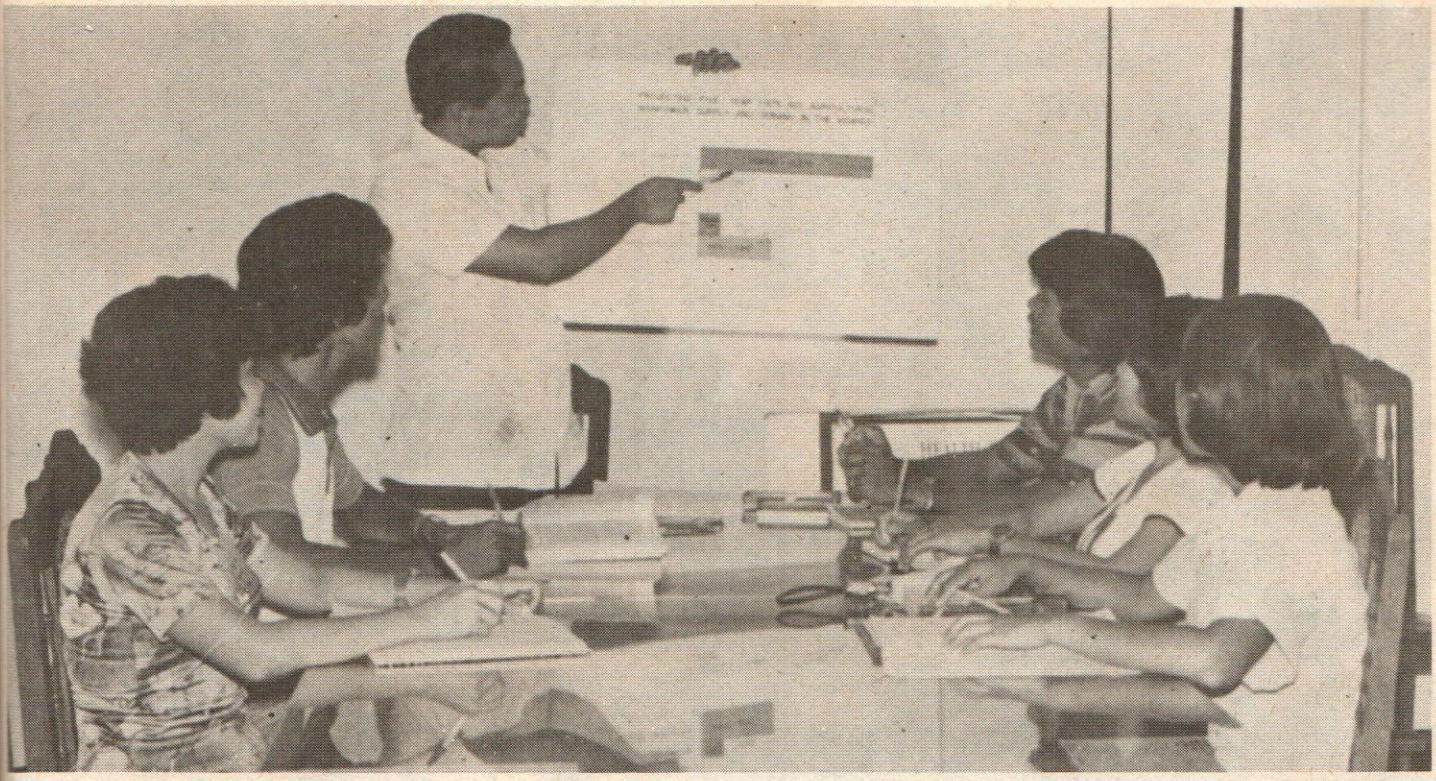




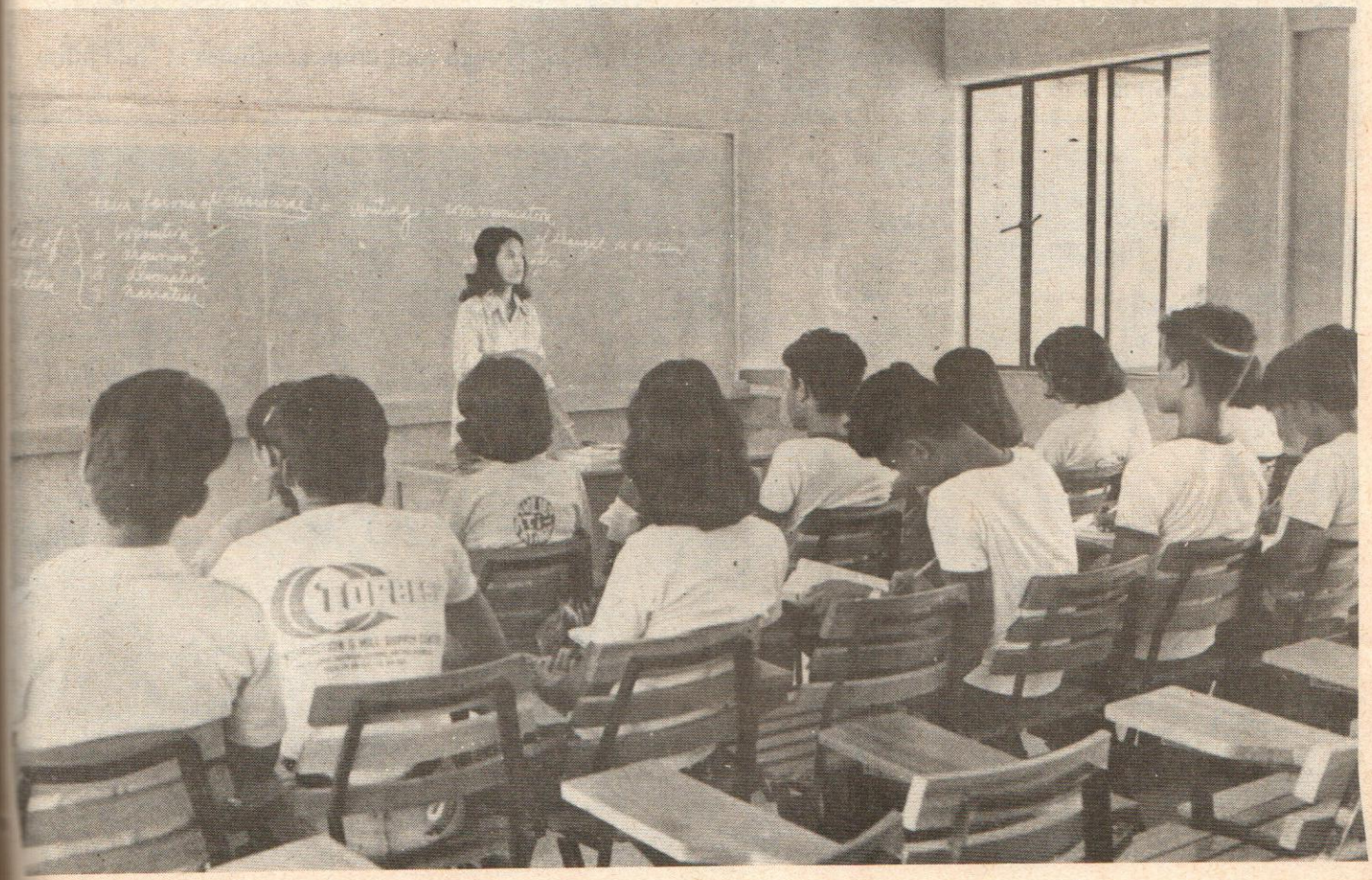
ViSCA has 14 four-door apartment units (left) and 10 new duplex cottages (middle photo) for staff housing. It has 16 residence halls/dormitories. Lower photo shows the Mahogany Men's Hall and the COCOFED dormitories both flanking the College Cafeteria.

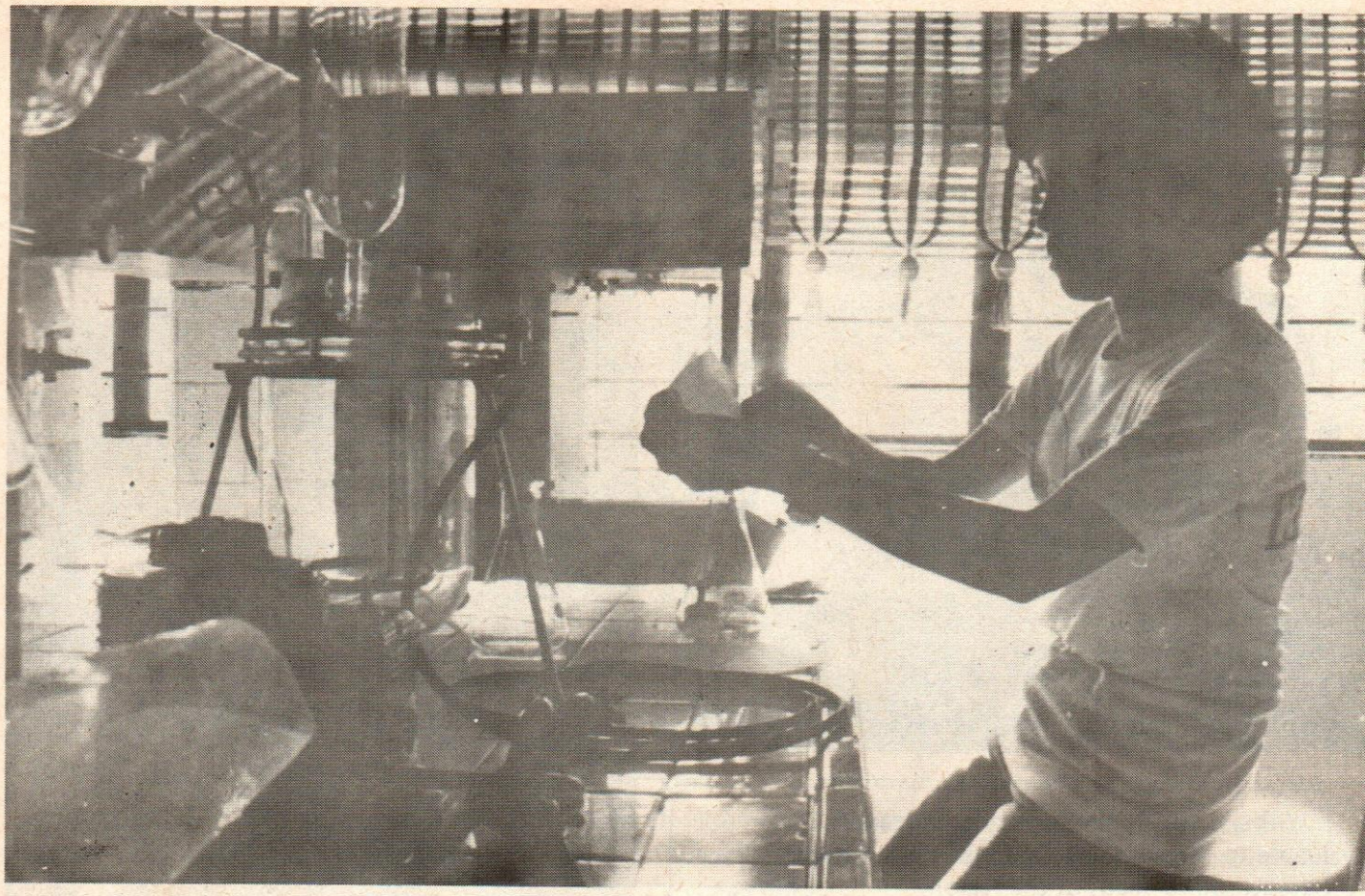
ViSCA recently purchased advanced laboratory equipment in order to boost its instructional capability.





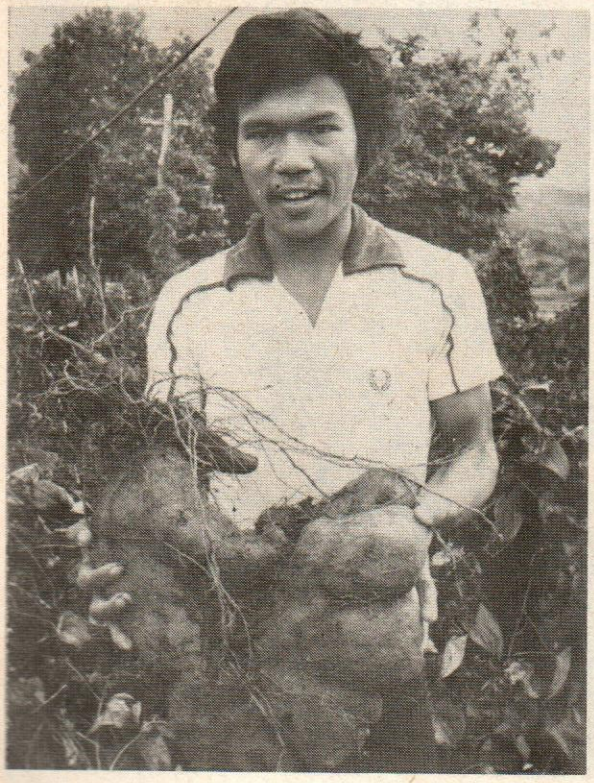
Without letup, the academe endeavors to improve its curricular offerings in order to make them more valuable to students who want to gain a strong educational base and to attain greater relevance of academic programs to the needs of the region.

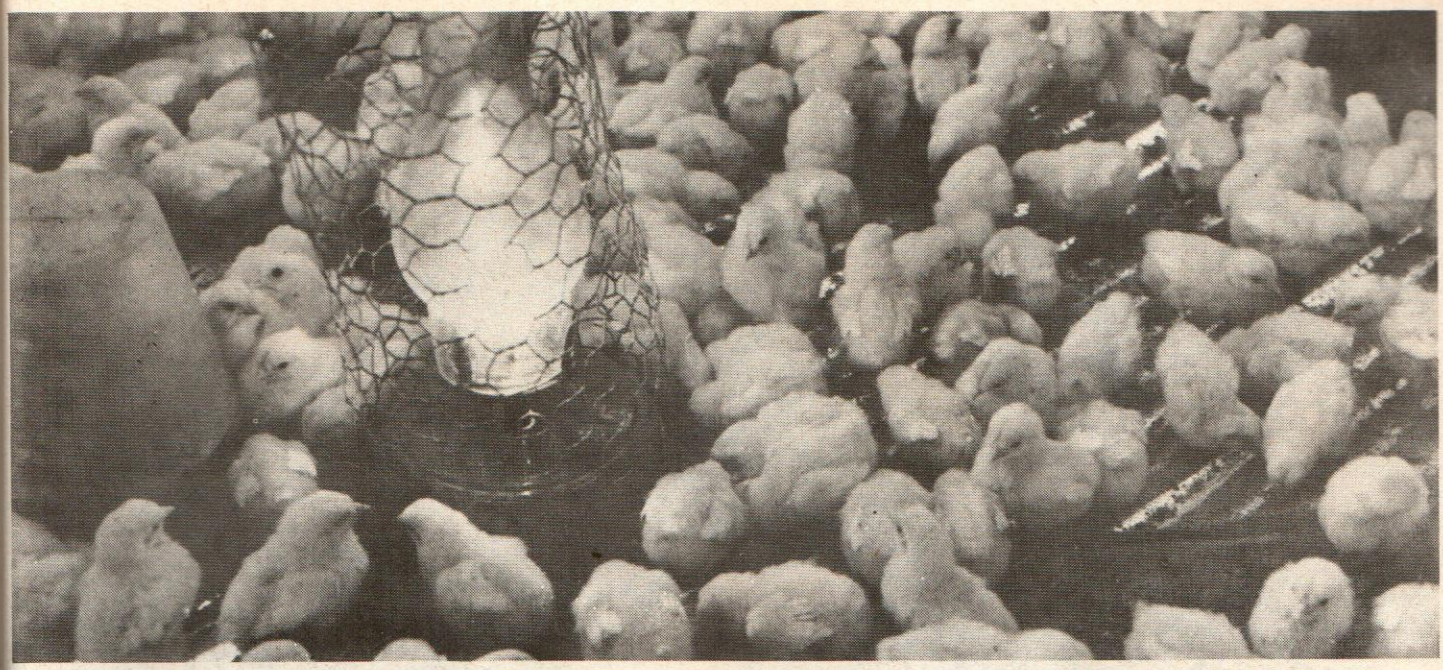




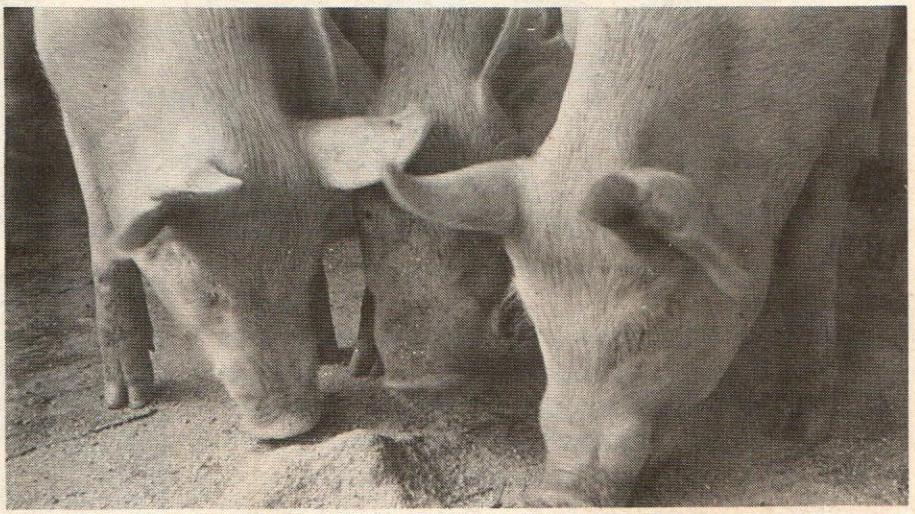
Sound research programs underscore ViSCA's efforts to evolve relevant technology packages helpful to the small Visayan farmers.

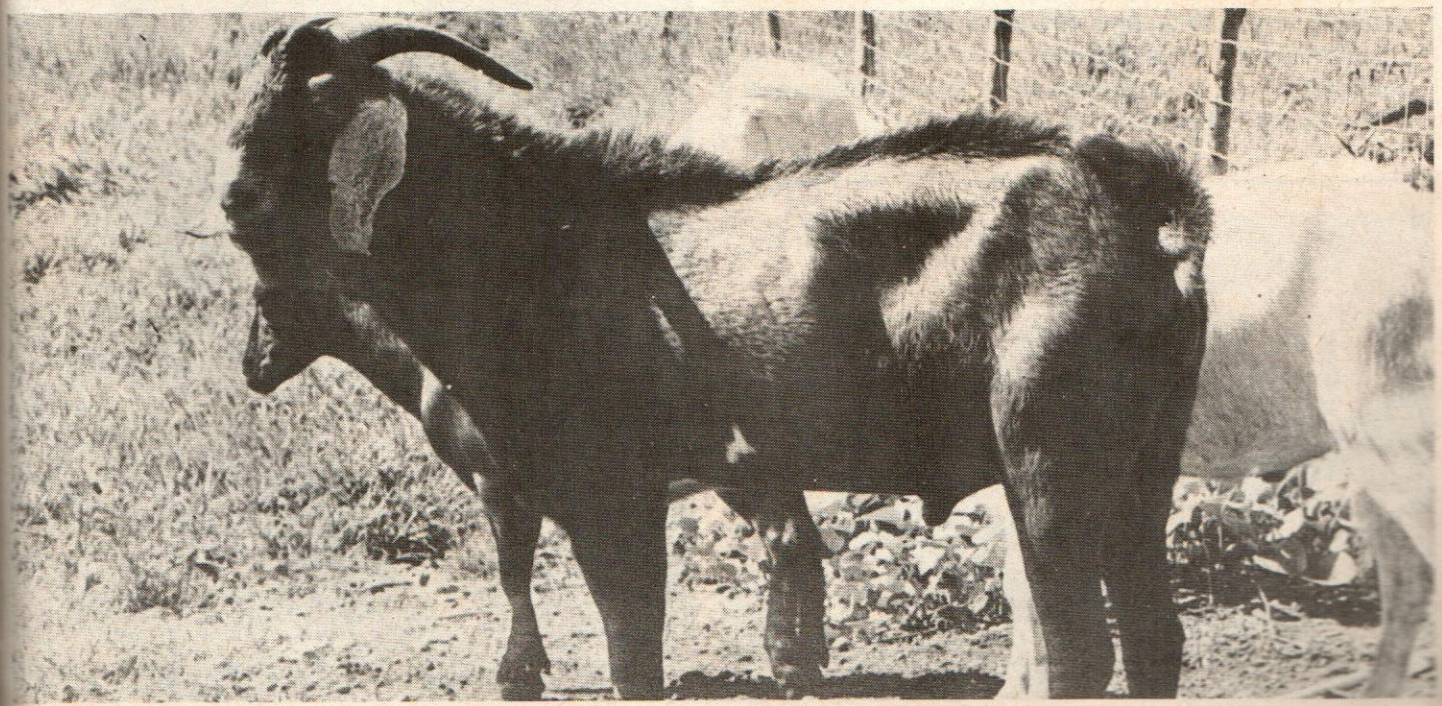
The search for the solution of the global imperative on food through root crops continues at the Philippine Root Crop Research and Training Center.





The Department of Animal Science and Veterinary Medicine endlessly seeks to discover better methods of poultry and livestock production and propagation.





ViSCA has provided leadership in demonstrating patterns of rural development approaches. (Above) Mr. Salvador Dagoy of the Community Extension Service discusses the latest developments and problems in agriculture with farmer leaders.

(Right) Egg-salting is a ViSCA-initiated project that augments the income of the rural folks.

(Below) ViSCA extension workers meet with the members of the Barangay Advisory Board and farmers of the Social Laboratory barangays.

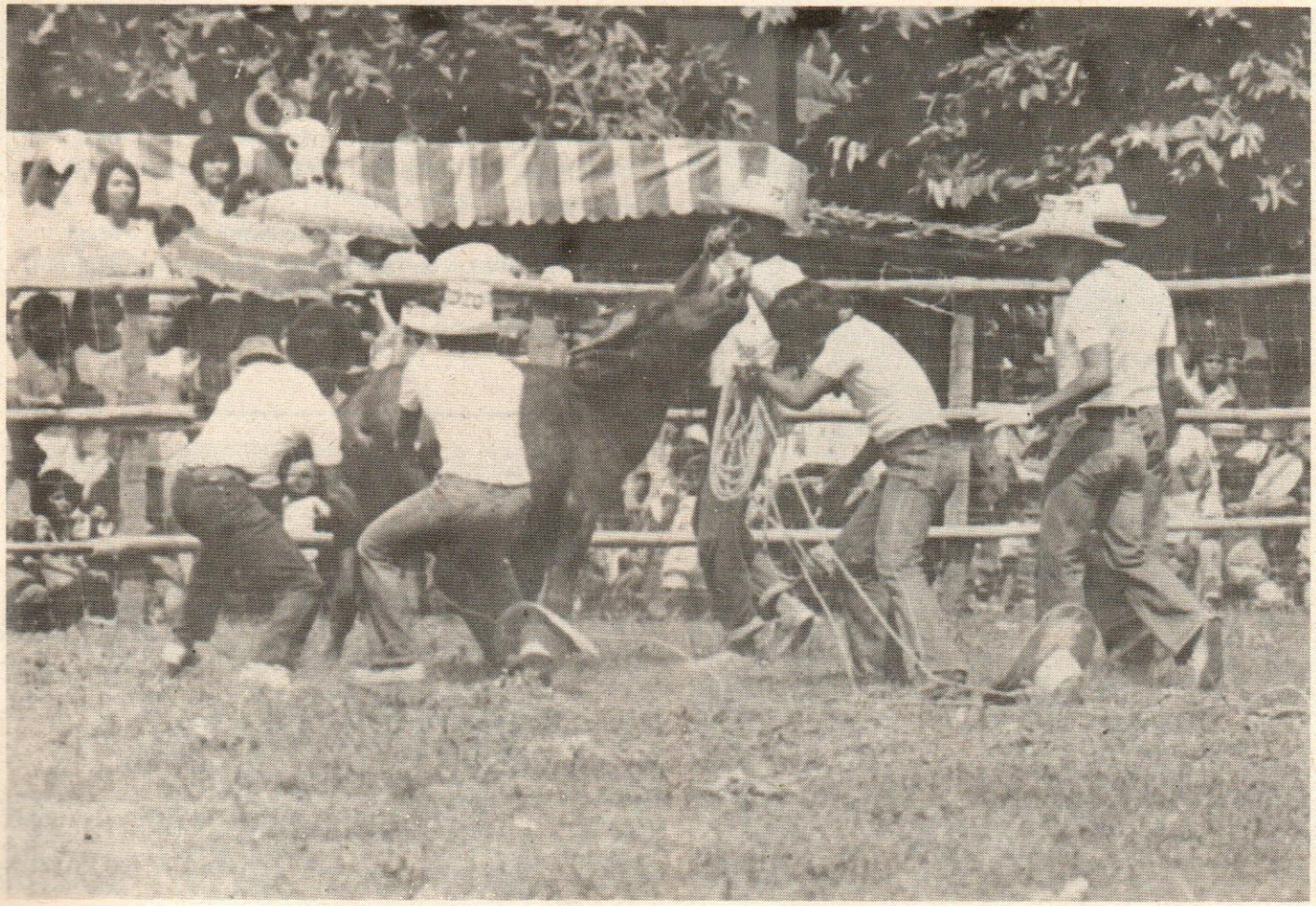
(Above) Rural development workers undergoing training at the Regional Training Center for Rural Development at ViSCA.

Left photo shows an extension worker receiving his certificate of completion in a leadership training.

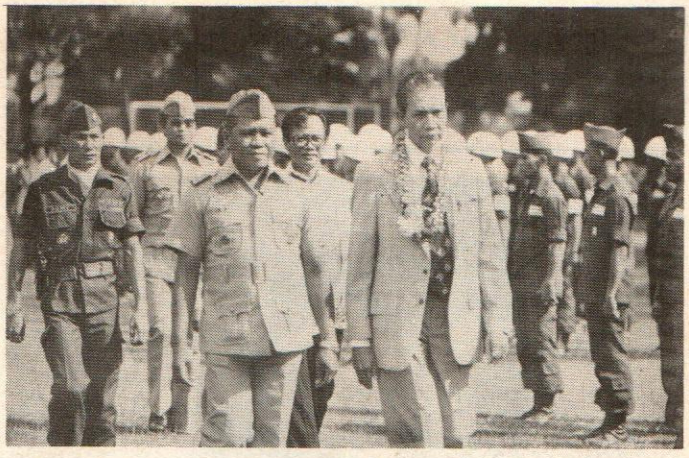
(Below) ViSCA extension workers demonstrating improved farming techniques.

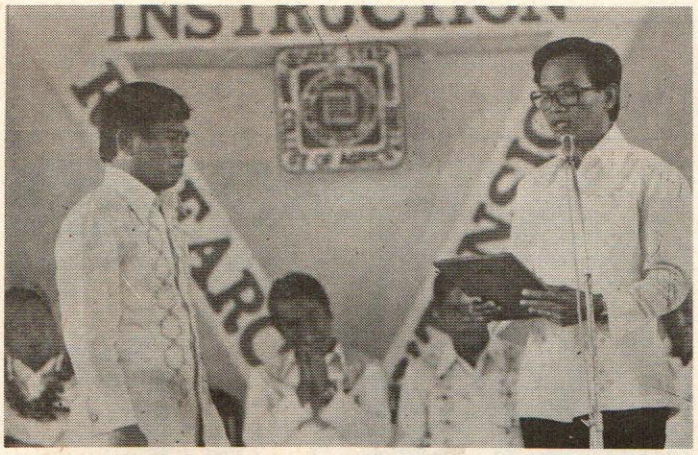
Cheerful staff, students, alumni and friends greeted ViSCA as it celebrated its 55th year as an educational institution from August 24 to Sept. 1, 1979.

Photos on this page show the members of the administrative staff and two floats in the loyalty parade that reeled off the celebration, and an event in the 1st ViSCA Rodeo Invitational (lower photo).



(Clockwise from upper right) Mr. Napoleon D. Dignadice (with lei), superintendent of VAC, 1963-71, being welcomed to ViSCA; Mr. Dominador D. Clemente, superintendent of BNAS, 1949-58, cutting the ceremonial ribbon which opened the exhibits; Hon. Jose J. Leido, Jr. delivers his keynote address as guest speaker during the celebration; an Dr. Samuel S. Go, ViSCA vice-president for administration, receiving the Outstanding Alumnus Award.

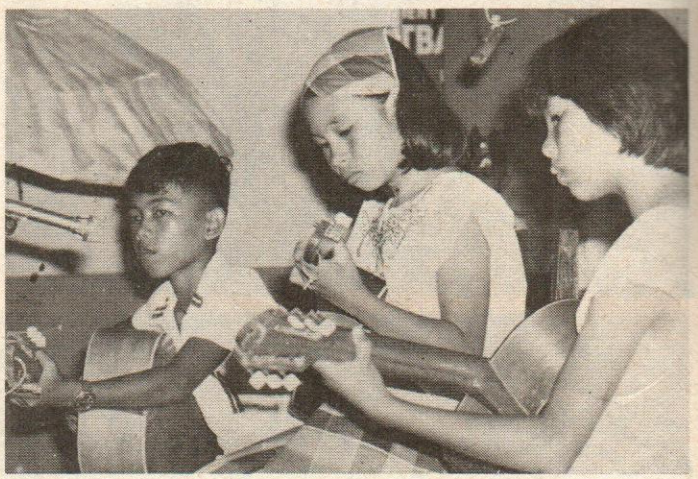




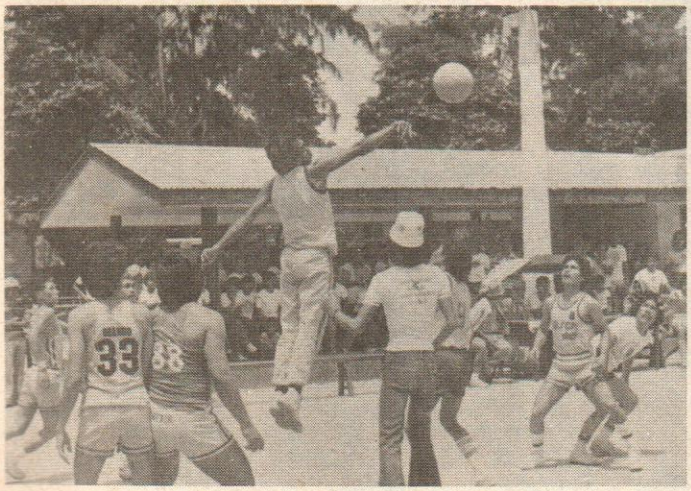
Life at ViSCA offers varied ideal diversions from the usual academic routine. There are games and cultural presentations.

— "Of Puppets and Strings" presented during the 55th anniversary celebration.

— High School students with their "Pandango sa Tapis".



— A musical piece from ViSCA Foundation Elementary School virtuosos.



— A friendly ball game.

— Cheers for the 1979 College Sportsfest champion — Golden Eagles.