

MINUTES OF THE 25th REGULAR BOARD OF TRUSTEES MEETING
HELD ON JULY 14, 1978, AT THE OFFICE OF THE
MINISTER OF EDUCATION AND CULTURE
METRO MANILA

Present:

Hon. Juan L. Manuel Minister Ministry of Education and Culture, Metro Manila	Chairman
Hon. F. A. Bernardo President Visayas State College of Agriculture	Vice-Chairman
Prof. Andres F. Duatin College Secretary Visayas State College of Agriculture	Secretary

Also Present:

Dr. Cesar C. Jesena, Jr. Vice-President External Affairs and Development Visayas State College of Agriculture	Invited
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The Chairman called the meeting to order at 1:22 p.m.

- 1 I. Approval of the Minutes of the Previous Meeting:
- 2 Approved without corrections.
- 3 II. Matters Arising from the Approved Minutes:
- 4 A. Causes of Failures Among the High School Students
- 5 Pres. Bernardo, in complying with the request of

1 the Board in its previous meeting, made a brief verbal summary
2 of the findings on the study of the causes of failures on
3 some subjects of some of the students of the Experimental Rural
4 High School at ViSCA. He enumerated the following as probable
5 causes of failure: (Appendix A)

- 6 1. Very low percentile rank in:
7 (a) Abstract reasoning
8 (b) Numerical ability
9 (c) Language usage

10 2. Low mental ability

11 3. Half-day class field work

12 4. Poor study habits

13 In view of these findings, Pres. Bernardo advanced
14 his plans to consider the possibility of offering a general
15 high school which should prepare students for higher educa-
16 tion and non-formal education to prepare boys and girls, and
17 even adults, for earlier employment.

18 The Minister agreed in principle to the offering
19 of a general high school and non-formal education at ViSCA.

20 III. Report of the President:

21 A. Possible Purchase of a Hacienda near Ormoc City

22 Pres. Bernardo apprised Minister Manuel of the
23 decision of the Board in its previous meeting authorizing the
24 College President to negotiate for the purchase of Hacienda
25 Espina near the city of Ormoc.

1 He described the hacienda as an ideal site for
2 research projects in agriculture with existing roads and
3 an irrigation canal of the NIA crossing through it.

4 Aware of the provisions of PD 1107, Pres. Bernardo
5 prepared an amendment to the decree, the draft of which he
6 handed to Minister Manuel for his information.

7 IV. Administrative Matters:

8 Before deliberating on the matters in the agenda,
9 Minister Manuel suggested that administrative matters may
10 be sub-divided into (a) Routine Matters and (b) Policy
11 Matters. Routine matters may include promotions, appoint-
12 ments, and the like while policy matters may include direct-
13 ives. The suggestion was well taken.

14 A. Routine Matters

15 1. Recommendation for appointment as new members
16 of the ViSCA Board of Trustees. Pres. Bernardo presented
17 his proposal recommending the reappointment of Mr. Rufino
18 D. Ayaso, Jr. and the appointment of Mr. Baldrich T. Ocan-
19 ada as members of the ViSCA Board of Trustees in accordance
20 with the provisions of Presidential Decree 1437, dated
21 June 10, 1978, (Biocdata of recommendees, Appendix B).

22 On motion made and duly seconded, the Board passed:

23 BOARD RESOLUTION NO. 22, s. 1978

24 Favorably endorsing the recommendation of
25 the College President to reappoint Mr. Rufino
26 D. Ayaso, Jr., Acting Regional Director of BAEx;
27 Region VIII and appoint Mr. Baldrich T. Ocanada,

1 an alumnus of ViSCA and Assistant
2 Regional Executive Director of NEDA
3 in Region VIII, as members of the
4 ViSCA Board of Trustees in accordance
5 with the provisions of Presidential
6 Decree No. 1437, dated June 10, 1978,
7 particularly the provisions of Section
8 I which specify two (2) prominent
9 citizens as members, one of whom should
10 be an alumnus of the College

11 2. Recommendation for appointments. The College Pres-
12 ident (1) recommended the approval of the appointments
13 of one staff member to the position of assistant professor;
14 (2) presented for Board notation the appointments of seven
15 staff members as authorized by Board Resolution No. 6, s.
16 1974; (3) recommended the approval of the change of status
17 of two employees from temporary to permanent; (4) recom-
18 mended the approval of the promotion/salary adjustment of
19 five employees; and (5) recommended the approval of the
20 proposed reclassification of position of sixteen staff
21 members, (Appendix C).

22 On motion made and duly seconded, the Board passed:

23 BOARD RESOLUTION NO. 23, s. 1978

24 Approving the recommendation to appoint Ms.
25 Lourdes A. Goias Asst. Prof. I (Step 3, Old rate),
26 at ₱14,568 p.a. effective June 1, 1978.

27 Also approving the appointment; as authorized
28 by Board Resolution No. 6, s. 1974, of the following:

29 1. Mr. Alan L. Presbitero, Instructor I, at
30 ₱9,756 p.a. effective June 13, 1978;

2. Ms. Alice R. Martinez, Asst. Instructor II (Step 3), at ₱8,664 p.a., effective June 19, 1978;
3. Mr. Norberto F. Canada, Instructor II (Step 2), at ₱11,148 p.a., effective June 5, 1978;
4. Ms. Judith C. Bulawan, Asst. Instructor II (Step 1) at ₱7,956 p.a., effective June 1, 1978;
5. Ms. Nellie U. Carcallas, Personnel Aide, at ₱5,964 p.a., effective June 16, 1978; and
6. Ms. Milagros L. Gamotin, Accounting Clerk at ₱5,964 p.a., effective July 1, 1978, (Appendix C).

BOARD RESOLUTION NO. 23a, s. 1978

Approving the recommendation for permanent status of the following:

1. Ms. Virgenita G. Albarico as Instructor I, effective August 1, 1978; and
2. Mr. Arturo M. Biscante as Driver-Messenger of the VISCA Manila Office, effective August 1, 1978, (Appendix C).

BOARD RESOLUTION NO. 23b, s. 1978

Approving the recommendation to ^{PROMOTE/}adjust the salary of the following:

1. Mr. Sixto P. Sandoval, Adm. Asst. II, at ₱10,776 p.a., effective August 1, 1978;
2. Ms. Sonia P. Salandanan, Adm. Asst. I, at ₱9,228 p.a., effective August 1, 1978;
3. Ms. Paz C. Pala, Librarian, at ₱10,776 p.a., effective August 1, 1978;
4. Ms. Lolita U. Enriquez, Research Asst. III (Step 2), at ₱10,260 p.a., effective July 1, 1978; and
5. Lt. Maximo M. Villalino, Security Officer, at ₱10,260 p.a., effective July 1, 1978, (Appendix C).

BOARD RESOLUTION NO. 23c, s. 1978

Approving the proposed position reclassification for the following VISCA Scholars/Fellows who have just returned from their respective studies:

1. Ms. Pluminada C. Abihay as Asst. Prof. II (Step 3) at ₱16,860 p.a.;
2. Mr. Constancio M. Napiere as Asst. Prof. I (Step 3) at ₱16,004 p.a.;
3. Mr. Teodulo C. Milleza as Asst. Prof. I (Step I) at ₱15,264 p.a.;

- 1 4. Ms. Paciencia P. Milan an Asst. Prof.
2 I (Step 1) at ₱15,264 p.a.;
- 3 5. Mr. Veronico P. Subere as Instructor
4 V (Step 1) at ₱15,264 p.a.;
- 5 6. Ms. Avelina C. Floresca as Instructor
6 IV (Step 3) at ₱15,264 p.a.;
- 7 7. Ms. Fredeswinda C. Lao as Instructor
8 IV (Step 1) at ₱14,532 p.a.;
- 9 8. Mr. Rebecca M. Santiago as Instructor
10 IV (Step 1) at ₱14,532 p.a.;
- 11 9. Ms. Grace B. Alo as Instructor IV
12 (Step 1) at ₱14,532 p.a.;
- 13 10. Mr. Nonilon T. Bulilan as Instructor
14 IV (Step 1) at ₱14,532 p.a.;
- 15 11. Mr. Pedro P. Pascual as Instructor
16 IV (Step 1) at ₱14,532 p.a.;
- 17 *12. Dr. Tomas J. Fernandez, Jr., as Instructor
18 IV (Step 1) at ₱14,532 p.a.;
- 19 *13. Ms. Antonia Cecilia D. Yap as Instructor
20 IV (Step 1) at ₱14,532 p.a.;
- 21 *14. Ms. Florenda O. Labus as Instructor
22 IV (Step 1) at ₱14,532 p.a.;
- 23 *15. Mr. Ruben M. Gapasin as Instructor
24 IV (Step 1) at ₱14,532 p.a.;
- 25 *16. Ms. Lutgarda H. Salares as Instructor
26 III (Step 1) at ₱13,152 p.a.

27 All to take effect upon availability of positions
28 in their respective departments or upon release of
29 funds for upgrading purposes, (Appendix C).

30 *Per Academic Personnel Board policy, the
31 minimum rank given to MS graduate of technical
32 field is Instructor IV.

- 33 3. Recommendation to pay honorarium to the Editor of the
34 Research Journal. Pres. Bernardo presented for Board
35 approval his recommendation to pay honorarium to the
36 editor of the research journal and recommended the
37 appointment of Dr. Manuel K. Palomar as editor of the
38 Tropical Science Journal.

39 On motion made and duly seconded, the Board passed:

BOARD RESOLUTION NO. 24, s. 1978

Approving the recommendation to pay honorarium to the editor of the Tropical Science Journal at the rate of ₱500 per issue and noting the College President's recommendation to appoint Dr. Manuel K. Palomar Editor of the Tropical Science Journal, effective immediately, with suggestion to present Dr. Palomar's bio-data in the next meeting of the Board.

V. Budgetary Matters:

A. Budget Proposal for the Research Journal

The College President presented the proposed budget for the research journal (Appendix D) to finance the first issue which is expected to be published before the year ends.

On motion made and duly seconded, the Board passed:

BOARD RESOLUTION NO. 24a, s. 1978

Approving the proposed budget of the Tropical Science Journal for the first issue, 1978, after excluding the proposed Administrative Cost at ₱1,401.40 and Equipment Outlay of ₱7,000.00, leaving a total approved appropriation of ₱16,802.55 (Appendix D), chargeable to the ViSCA research fund.

B. Budget Proposed for the ViSCA Foundation Elementary School

In presenting the proposed budget for the ViSCA Foundation Elementary School, (Appendix E), Pres. Bernardo told Minister Manuel that he (the President) "had to open an elementary school to serve the needs of members with children."

"This elementary school is open only for the children of the staff," the College President continued.

On motion made and duly seconded, the Board passed:

BOARD RESOLUTION NO. 25, s. 1978

Approving in toto the proposed budget for the ViSCA Foundation Elementary School for the school year 1978-79, and allowing the release of ViSCA's contribution to the foundation in the amount of \$39,800 distributed as follows:

1. For Budget Year 1978 - \$19,900 and
 2. For Budget Year 1979 - \$19,900;
- to take effect immediately, subject to availability of funds.

VI. Academic Matters:

The proposed Bachelor of Animal Science (BAS) Curriculum, a four-year degree program, was presented for the second time for Board approval.

On motion made and duly seconded, the Board passed:

BOARD RESOLUTION NO. 26, s. 1978

Approving in toto the proposed Bachelor of Animal Science (BAS) curriculum to take effect as soon as possible, subject to the availability of faculty, facilities, and other instructional materials necessary (Appendix F).

VII. Other Matters:

A. Proposed 1978 Budget for the Project Implementing Unit (PIU) ViSCA

Pres. Bernardo presented for Board approval the 1978 Budget for the Project Implementing Unit (PIU), supported by ViSCA, (Appendix G).

On motion made and duly seconded, the Board passed:

BOARD RESOLUTION NO. 27, s. 1978

Approving in toto the proposed budget of the Project Implementing Unit (PIU) which is supported by Capital Outlay Funds of ViSCA in the amount of ₱214,600 distributed as follows:

I. Salaries (contractual)	₱9,950/mo.
II. Honorarium	₱4,800/mo.
III. Transportation	₱1,200/mo.
IV. Supplies and Materials	₱1,500/mo.
V. Sundries	₱ 500/mo.

or a grand total of ₱17,950 per month, for a period of one year operation, or ₱214,600, to take effect immediately, subject to availability of funds and the usual COA regulations.

There being no other matter to discuss, the Chairman adjourned the meeting at 2:30 p.m.

Certified True and Correct:

(SGD.) ANDRES F. DUATIN
Secretary

Attested:

(SGD.) HON. JUAN L. MANUEL
Chairman
Minister, Ministry of Education
and Culture, Metro
Manila

Approved as Corrected: September 19, 1978

POSSIBLE CAUSES OF FAILURES OF ERHS STUDENTS
(School Year 1977-78)

Status of Failures of ERHS Students

Introduction

THE most important products of our school are the graduates - the output of the system. All inputs in terms of the curriculum, teacher, medium of instruction, facilities and equipment are the means of turning out quality products. In the implementation of the education program, major problems must be solved; otherwise they either lower the quality of the product or fail to produce the desired output as in the case of dropouts or failures of students.

Statistics on the holding power of vocational schools show that of the 26,000 first year enrollees in 1964 in the trade, agriculture and fishery high schools, only 13,321 graduated in 1968 and 13,269 or about 50 percent left school without finishing the course (Statistics Bulletin, 1968). Since the investment of the government in vocational education is ₱417 per students per year (Annual Report, 1968-69), those who dropped out meant the loss to the Bureau of Vocational Education of ₱5,533,173 for the period.

Official records of the Visayas Agriculture College (former name of ViSCA) revealed that from 1960 to 1970, out of an average of 200 first year enrollees, only an average of 80 finished the course or a retention rate of 40 percent (Bascug, 1972). Rosario (1947-58), in his study on dropouts found a similar trend at the Nueva Vizcaya National Agricultural School where out of 1,033 freshmen admitted over a period of eight years, only 275 or 27 percent graduated.

The aforementioned figures suggested the need to know the possible causes of dropouts or failures in schools.

Status of Failures of ERHS Students

The data presented on the Rationale of the Proposal for ERHS Summer Classes were based on the 3rd quarterly grade reports (Table 1) which were the latest grade reports at the time the proposal was made. However, Table 2, shows that the percentage of failures was decreased from 41.61 percent to 15.58 percent with 26.03 percent decreased in failures as shown in Table 3. Because of this decrease, only Communications Arts II (English), Pilipino IV, Mathematics I and II and Economics were offered last summer. Pilipino IV and Economics were offered as advanced courses for those third year students who failed in Science III.

Possible Causes of Failures

1. From the results of the Academic Promise Test, conducted last November 1977, it was found that all those who failed in academic subjects obtained a very low percentile rank in abstract reasoning, numerical ability, verbal ability and language usage. These results are consistent with the very low performance in academic subjects. Hence they can be considered as possible cause for failures.

2. Furthermore, the records in the guidance office on the mental ability of students show that the students who failed had very low mental ability. The very low mental ability might be another cause of failures.

3. The fact that the greatest percentage of failures is in the vocational agriculture curriculum as shown in Tables 4 and 5, might lead us to another possible cause of failure which is the half-day daily exposure to field work. The seven academic subjects of the

Table 1. Percentage of Failures of ERMS Students Based on the Third Quarterly Grade Report

vocational agriculture curriculum plus the physical exertion required in their farming program make it very difficult for them to achieve the necessary progress in the learning process. This is especially true to students who have very low I. Q.										
Academic Subjects	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	Total					
Am. Arts (English)	17	3.23	6	1.14	32	6.08				
Am. Arts (Pilipino)	15	4.15	15	3.42	45	14.44				
Mathematics	12	2.28	-	-	20	3.80	6	1.14	38	7.22
Science	21	3.99	25	4.75	10	1.90	3	.57	59	11.21
Social Science	7	1.33	1	.19	4	.76	1	.19	13	2.47
Total	69	13.11	43	8.17	73	13.87	34	6.46	219	41.68

Enrollment: 1st Year - 167
2nd Year - 129
3rd Year - 127
4th Year - 103
Total 526

Table 2. Percentage of Failures of ERMS Students Based on the Fourth Quarterly Grade Report

Academic Subjects	Percentage of Failures								Total	
	1st Yr.		2nd Yr.		3rd Yr.		4th Yr.			
	No.	%	No.	%	No.	%	No.	%	No.	%
Literature										
Am. Arts (English)	5	.95	5	.95	5	.95	-	-	15	2.85
Am. Arts (Pilipino)	8	1.52	-	-	-	-	-	-	8	1.52
Literature	1	.19	-	-	-	-	-	-	1	.19
Science	3	.57	-	-	16	3.04	-	-	19	3.61
Mathematics	21	3.99	11	2.09	3	.57	-	-	35	6.65
Social Science	3	.57	-	-	1	.19	-	-	4	.76
Total	41	7.79	16	3.04	25	4.75	-	-	82	15.58

Table 3. Comparison of the Total Percentage of Failures of ERHS Students During the 3rd and 4th Quarters

Table 1. Percentage of Failures of ERHS Students Based on the Third Quarterly Grade Report

Academic Subjects	Percentage of Failures									
	1st Yr.		2nd Yr.		3rd Yr.		4th Yr.		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Comm. Arts (English)	5	.95	4	.76	17	3.23	6	1.14	32	6.08
Comm. Arts (Pilipino)	23	4.37	13	2.47	22	4.18	18	3.42	76	14.44
Literature	1	.19	-	-	-	-	-	-	1	.19
Science	12	2.28	-	-	20	3.80	6	1.14	38	7.22
Mathematics	21	3.99	25	4.75	10	1.90	3	.57	59	11.21
Social Science	7	1.33	1	.19	4	.76	1	.19	13	2.47
Total	69	13.11	43	8.17	73	13.87	34	6.46	219	41.68

Enrollment: 1st Year - 167

2nd Year - 129

3rd Year - 127

4th Year - 103

Total 526

Table 4. Comparison of the Total Percentage of Failures of ERHS Students During the Fourth Quarter by Curricular Offerings

Academic Subjects	Percentage of Failures by Curricular Offerings									
	1st Yr.		2nd Yr.		3rd Yr.		4th Yr.		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Comm. Arts (English)	5	.95	5	.95	5	.95	-	-	15	2.85
Comm. Arts (Pilipino)	8	1.52	-	-	-	-	-	-	8	1.52
Literature	1	.19	-	-	-	-	-	-	1	.19
Science	3	.57	-	-	16	3.04	-	-	19	3.61
Mathematics	21	3.99	11	2.09	3	.57	-	-	35	6.65
Social Science	3	.57	-	-	1	.19	-	-	4	.76
Total	41	7.79	16	3.04	25	4.75	-	-	82	15.58

= 526

Table 3. Comparison of the Total Percentage of Failures of ERHS Students During the 3rd and 4th Quarters

Academic Subjects	Percentage of Failures					
	Third Quarter		Fourth Quarter		Decrease in Failures	
	No.	%	No.	%	No.	%
Comm. Arts (English)	32	6.08	15	2.85	17	3.23
Comm. Arts (Pilipino)	76	14.44	8	1.52	68	12.93
Literature	1	.19	1	.19	-	-
Science	38	7.22	19	3.61	19	3.60
Mathematics	59	11.21	35	6.65	24	4.56
Social Science	13	2.47	4	.76	9	1.71
Total	219	41.61	82	15.58	137	26.03

- 526

Table 4. Distribution of the Total Percentage of Failures of ERHS Students During the 3rd Quarter by Curricular Offerings

Academic Subjects	Percentage of Failures by Curricular Offerings							
	Homemaking (Vocational)		Vocational Agriculture		Agricultural Science		Total	
	No.	%	No.	%	No.	%	No.	%
Comm. Arts (English)	7	1.33	24	4.56	1	.19	32	6.08
Comm. Arts (Pilipino)	20	3.80	55	10.47	1	.19	76	14.46
Literature	-	-	-	-	1	.19	1	.19
Science	13	2.47	20	3.80	5	.95	38	7.22
Mathematics	14	2.66	41	7.79	4	.76	59	11.21
Social Science	1	.19	12	2.28	-	-	13	2.47
Total	55	10.45	152	28.90	12	2.28	219	41.63

- 526

Table 5. Distribution of the Total Percentage of Failures of ERHS Students During the 4th Quarter by Curricular Offerings

Academic Subjects	Percentage of Failures by Curricular Offerings							
	Vocational Homemaking		Vocational Agriculture		Agricultural Science		Totals	
	No.	%	No.	%	No.	%	No.	%
Comm. Arts (English)	1	.19	10	1.90	4	.76	15	2.85
Comm. Arts (Pilipino)	2	.38	5	.95	1	.19	8	1.52
Literature	-	-	-	-	1	.19	1	.19
Science	8	1.52	5	.95	6	1.14	19	3.61
Mathematics	6	1.14	22	4.18	7	1.33	35	6.65
Social Science	1	.19	2	.38	1	.19	4	.76
TOTAL	18	3.42	44	8.36	20	3.80	82	15.58

= 526

APPENDIX B

BIO-DATA

NAME	- Rufino D. Ayaso, Jr.
DESIGNATION	- Actg. Regional Director
DATE & PLACE OF BIRTH	- April 17, 1923; Barugo, Leyte
CIVIL STATUS	- Married
NAME OF SPOUSE	- Ms. Dalisay Brazil
NUMBER OF CHILDREN	- Nine (9)
CITY ADDRESS	- BAE Compound, Tacloban City
PROVINCIAL ADDRESS	- Barugo, Leyte

EDUCATIONAL QUALIFICATION:

Barugo Elementary School, Barugo, Leyte	- 3rd Grade	- 1930-33
Tacloban Catholic Institute, Tacloban City	- 7th Grade	- 1933-36
Tacloban Catholic Institute, Tacloban City	- 4th Yr. H.S.	- 1936-1940
UP College of Agriculture, College, Laguna	-	- 1947-51

CIVIL SERVICE ELIGIBILITY:

Senior Agriculturist	- Cebu City	- August 20, 1955 - 70.06%
Provincial Agriculturist	- Cebu City	- April 27, 1968 - 75.34%

SERVICE RECORD:

INCLUSIVE DATES	DESIGNATION	STATUS	SALARY	OFFICE	BRANCH
12/13/41 - 1946	Corporal		37.	Phil. Army	National
1/5/52 - 11/30/52	Mun. Agri. Inspector	Temp.	1,260	B.P.I.	Provincial
12/1/52 - 6/30/53	Mun. Agriculturist	Temp.	1,560.	B.A.E.	Provincial
7/1/53 - 9/31/57	Asst. Prov'l Agrcl't	Temp.	2,160	B.A.E.	Provincial
10/1/57 - 2/3/58	-do-	Perm.	2,400	B.A.E.	Provincial
2/4/58 - 3/31/59	Reg'l. Ru. Clubs Agt	Perm.	2,710	B.A.E.	National
4/1/59 - 6/30/59	-do-	Perm.	3,339	B.A.E.	National
7/1/59 - 6/30/60	-do-	Perm.	3,566.40	B.A.E.	National
7/1/60 - 6/30/61	-do-	Perm.	3,877.20	B.A.E.	National
7/1/62 - 6/30/63	-do-	Perm.	4,404.	B.A.E.	National
7/1/63 - 3/31/64	-do-	Perm.	4,770.96	A.P.C.	National
7/1/65 - 6/30/68	Actg. Prov'l Agric				
	Prov'l Agric'st	Perm.	5,112	B.A.E.	National
7/1/68 - 6/30/75	-do-	Perm.	15,000	B.A.E.	Provincial
7/1/75 - 12/31/76	-do-	Perm.	16,500	B.A.E.	Provincial
1/1/77 - 7/31/77	-do-	Perm.	18,150	B.A.E.	Provincial
8/1/77 - 9/7/77	-do-	Perm.	21,624	B.A.E.	Provincial
9/8/77 - 3/6/78	Prov'l Agric. &				
	OIC, Reg. VIII	Perm.	21,624		Provincial
3/7/78 - Present	Actg. Regional				
	Director	Perm.	22,728	B.A.E.	National

RUFINO D. AYASO, JR. - Provincial Agriculturist

IN-SERVICE TRAININGS, SEMINARS, STUDY AND SCHOLARSHIP GRANTS

<u>Field of Training</u>	<u>Place of Training</u>	<u>Period of Training</u>	<u>Conducted by</u>
all Leadership Training	-Georgia, U.S.A.	-Jan-Mar 3, 1961	-NEC-ICA
Extension Communication	-Georgia, U.S.A.	-Jan-Mar 3, 1961	-NEC-ICA
Ext. Admin. Supervision	-Louisiana, U.S.A.	-Mar 6-May 5, 1961	-NEC-ICA
Observation on Agri'l Ext. Service	-Hawaii, U.S.A.	June, 1961	-NEC-ICA
-do-	-Puerto Rico	-May, 1961	-NEC-ICA
Personnel Management	-Tacloban City	-Feb. 7-11, 1966	-Prov'l & CSC
Post Nutrition Survey Sem.	-Cebu City	-June 27-30, 1966	-NSDB
Training Course for RCPCG Directors	-UPCA	-Oct. 3-15, 1966	-RCPCG(NFAC)
Farm Mgmt. Seminar	-Tacloban City	-Mar. 6-11, 1967	-Prov'l RCPCG
Farm Mgmt. Seminar	-Cebu City	-Mar. 13-18, 1967	-Reg'l. RCPCG
Rice Culture Seminar	-Tacloban City	-Oct. 23-25, 1968	-RCPCG
Corn Culture Seminar	-Tacloban City	-Mar. 21-23, 1968	-RCPCG
Technical Skills Dev. Sem.	-Bacolod City	-Jan. 22-26, 1968	-APC
Vegetable Culture Seminar	-Cebu City	-Sept. 11-13, 1968	-RCPCG
Seminar Workshop on Rural Communication	-Tacloban City	-Dec. 9-14, 1968	-RCPCG
Coconut Culture Seminar	-Tacloban City	-Sept. 15-17, 1969	-RCPCG
Extension Adm. & Seminar-Workshop	-Diliman, Q.C.	-Sept. 22-28, 1969	-APC & CSC
Planning, Operation & Mgmt of Integrated Agricultural Project	-Japan	-Aug. 9-Sept. 8, 1970	-Japanese Govt & Colombo Plan
ASEAN Agri'l Extension Sem.	-Quezon City	-April 1-18, 1973	-ASEAN
Study Tour	-Makati, Rizal	-Nov. 2-22, 1975	-NFAC-AIM
Management Program for NFAC	-Tagaytay City	-Feb. 4-13, 1977	-BAE-DAP
Executive Development Training Prog. for Prov'l & City Agriculturist			
6th PCARR Team Leaders Confab with NEDA Reg'l Directors & DA/DNR Reg'l Officials	-Cebu City	-Feb. 27-Mar. 1, 1978	-PCARR

RUFINO D. AYASO - Provincial Agriculturist

II. CIVIC ORGANIZATIONS

- UPCA Alumni Association of the Philippines
- UPCA Alumni Association, Cebu Chapter
- UP Alumni Association, Leyte Chapter
- Phil. Association of Technical Assistance Participants, Leyte Chapter
- American Society of Agronomist
- Leyte BAE Employees Association
- Leyte BAE Employees Cooperative Credit Union, Inc.
- LSBDA Employees Cooperative

III. SPECIAL AWARDS

- The Presidential Golden Flow Award for Government Service as Masagana 99 Program Officer for Leyte-1974
- DANR Citation for Exemplary Service and Leadership under the Masagana 99 Rice Production Program- 1974
- Most Outstanding Provincial Agriculturist in Region VIII for Fiscal Year 1974-75 BAE-UNIVET ATLAS
- Most Outstanding Provincial Agriculturist in the Phil. for Fiscal Year 1974-75 BAE-UNIVER-ATLAS
- Most Outstanding Provincial Agriculturist in Region VIII for Fiscal Year 1976

IV. OTHERS

- Member - Board of Trustees-
Visayas State College of Agriculture
- Member- Board of Directors-
Phil. Rural Development and Services Corp.
- Provincial Chairman -NFA6
- Member-Board of Directors-Sab-a Basin Dev. Authority
- Provincial Program Officer for Rice (Masagana 99)
- Provincial Coordinator -Fertilizer & Pesticides Authority
- Officer in Charge- Deyte Sab-a Basin Dev. Authority
- Regional Coordinator - Masagana 99 Rice Production Prog. Region VIII.

Respectfully submitted:

(SGD) RUFINO D. AYASO, JR.
Actg. Regional Director

CURRICULUM VITAE

NAME - BALDRICH T. OCANADA
 DATE OF BIRTH - February 8, 1935
 CIVIL STATUS - Married
 PRESENT OFFICE ADDRESS - National Economic and Development
 Authority
 Tacloban City, Philippines

EDUCATIONAL QUALIFICATIONS:

- a. Post Graduate Course on Comprehensive Rural-Regional Development Planning, Hebrew University of Jerusalem, Israel, 1965-67
- b. Bachelor of Science in Agricultural Education, Visayas State College of Agriculture, 1958
- c. Post Graduate Course on Rural Leadership and Agricultural Communication, University of the Philippines, College of Agriculture, Los Banos, Laguna, 1963 (18 units)
- d. Post Graduate Course on Master of Science in Management, U.P. at Tacloban, 1974 (12 units)

POSITION HELD AND OTHER EXPERIENCES:

- a. Chief, Program Coordination Division, National Economic and Development Authority (NEDA). December 16, 1974 to present (Designated Assistant Regional Executive Director of NEDA Region VIII)
- b. Assistant Provincial Agriculturist, Department of Agriculture, May 19, 1964 - December 15, 1975
- c. Designated Agricultural Extension Specialist. Bihaha-an Tibak Rice Research Demonstration and Production Project, Department of Agriculture, 1967-68. (A joint undertaking of the Republic of the Philippines and the Republic of China)

- 2 -

- d. Designated Agricultural Extension Specialist, RP-Japan Demonstration Farm Project, Department of Agriculture, 1969-71. (A Joint undertaking of the Philippines and Japanese Governments)
- e. Farm Management Technologist, Department of Agriculture, June 17, 1959- May 18, 1964
- f. Teacher of Agriculture. Department of Education and Culture, June 16, 1958 - June 16, 1959

HONORS AND AWARDS RECEIVED:

- a. Finished Secondary Education as First Honor, 1954
- b. Graduated Bachelor of Science in Agriculture Education as HIGHEST IN SCHOLARSHIP, Visayas State College of Agriculture, 1958
- c. Chosen and Awarded as Municipal Agriculturist of the Year 1961-62
- d. Chosen and awarded as Outstanding Alumnus of the Visayas Agricultural College, 1968

SCHOLARSHIP RECEIVED:

- a. Post Graduate Course on Comprehensive Rural Regional Development Planning 1965-67, Hebrew University of Jerusalem, Israel (Colombo Plan)
- b. Group Course on Agricultural Extension Management, 1971, Japan (Colombo Plan)
- c. Post Graduate Course on Rural Leadership and Agricultural Communication - 1963, UPCA, Los Banos, Laguna

GOVERNMENT SPONSORED SEMINARS AND TRAINING ATTENDED:

- a. Regional Planning and Financial Programming at Cebu City, sponsored by UNDP, June 1977

- 3 -

- b. Administrative Discipline Seminar, 1972, Tacloban City
- c. Seminar-Workshop for Extension Administrators and Supervisors, 1972, Cebu City
- d. Workshop in Applied Nutrition, 1968, Tacloban City
- e. First Municipal Executive Seminar, 1960, Tacloban City
- f. Industrial Estate Project Planning, December 1977, (UNDP Sponsored)
- g. Integrated Area Development Project, February 1978 (UNDP sponsored)
- h. Rice Production Training, 1973 (Sponsored by the Department of Agriculture)

MAJOR WORK EXPERIENCES:

The following are my work experiences in my capacity as a former Farm Management Technician, Former Assistant Provincial Agriculturist, Agricultural Extension Specialist of the Department of Agriculture and at present as Chief of the program Coordination Division of the NEDA:

- a. Agricultural Project Identification;
- b. Appraisal of Project proposal submitted by various line agencies and the private sector;
- c. Monitoring project implementation (one of the main activities of the undersigned as Chief of the Program Coordination Division of NEDA, Region VIII)
- d. Preparation of program/project proposals (both agricultural and non-agricultural);
- e. Participated the preparation of a Comprehensive Regional Development Plan of Region VIII;
- f. Hired and Assumed as Economist to the Intermodal Transport Study of Eastern Visayas. (A two-year Study of commodity flow and transport modes)

- g. Implementation fo foreign-assisted program/
projects (Experience in working with Taiwanese
and Japanese agricultural Technicians/specialist
from 1967 to 1971);
- h. Served as lecturer in various government-sponsored
seminars, workshops and trainings in Eastern Visayas
Region. The Following are the subject matters
lectured in various occassions:
- Program Fomulation
 - Agricultural Extension Approaches
 - Economic Reforms
 - Regional Development Issues and Problems
 - Farm Management
 - New Philippine Foreign Policy
 - Development Planning
 - Development Perspective
- i. Coordinated Town Planning projects of Tacloban City
and Ormoc City and prepared the Urban Land Use
plan of Hilongos, Leyte

CIVIL SERVICE EXAMINATIONS PASSED:

PACB Worker - 1957

Provincial Agriculturist - 1964

Agricultural Extension Technologist - 1967

Junior Teacher of Agriculture - 1957

Clerical - 1956

(SGD) BALDRICH T. OCANADA

APPENDIX C

I. NEW APPOINTMENTS

A. Ad Interim

Dept. of Forestry

1. Ms. Lourdes A. Go
MS in Forestry
UPLB 1978

Asst. Professor I (Step 2)
P14,568.00 p.a.
Item No. 10(3)
Effectivity: June 1, 1978

B. As Authorized by Board Resolution No. 6, s. 1974

Dept. of Ag. Engineering

2. Mr. Alan L. Presbitero
BS in Ag. Engineering
UPLB 1976

Instructor I (Step 1)
P9,756.00 p.a.
Item No. 44(21)
Effectivity: June 13, 1978

Dept. of Ag. Chemistry

3. Ms. Alice R. Martinez
BS in Chemistry
Siliman Univ. 1978

Asst. Instructor II (Step 3)
P8,664.00 p.a.
Effectivity: June 19, 1978

Dept. of Arts and Letters

4. Mr. Norberto F. Canada
BS in Education
CSJ-R 1974

Instructor II (Step 2)
P11,148.00 p.a.
Item No. 44(28)
Effectivity: June 5, 1978

Dept. of Ag. Economics

5. Ms. Judith C. Bulawan
BS in Agriculture
ViSCA 1978

Asst. Instructor II (Step 1)
P7,956.00 p.a.
Item No. 123 (11)
June 1, 1978

Business and Administrative Affairs

6. Ms. Nellie U. Carcallas
BS in Elementary Educ.
Univ. of Mindanao 1964
CS Eligibility-First Grade

Personnel Aide
P5,964.00 p.a.
Effectivity: June 16, 1978
Item No. 86

7. Ms. Milagros L. Camotin
BS in Commerce
Univ. of San Carlos 1967
CS Eligibility - CPA

Accounting Clerk
P5,964.00 p.a.
Item No. 91 (2)
Effectivity: July 1, 1978

II. FOR PERMANENT STATUS

- | | |
|---|---|
| 1. Ms. Virgenita G. Albarico
CS Eligibility - Teacher
Length of Service - 3 years | Instructor I
Effectivity: August 1, 1978 |
| 2. Mr. Arturo M. Biscante
Length of Service 2 1/2 yrs. | Driver-Messenger
Effectivity: August 1, 1978 |

III. FOR PROMOTION/POSITION RECLASSIFICATION/SALARY ADJUSTMENT

A. Promotion/Salary Adjustment

- | | |
|---|--|
| 1. Mr. Sixto P. Sandoval
Present Position-Adm.
Assistant I | Adm. Assistant II
P10,776.00 p.a.
Item No. 45
Effectivity: August 1, 1978 |
| 2. Ms. Sonia P. Salandanan
Present Position - Clerk-
Typist | Adm. Assistant I
P9,288.90 p.a.
Item No. 57
Effectivity: August 1, 1978 |
| 3. Ms. Paz C. Pala
Present Position - Library
Assistant | Librarian
P10,776.00 p.a.
Item No. 48 (2)
Effectivity: August 1, 1978 |
| 4. Ms. Lolita U. Enriquez
Present Position - Account II | Research Asst. III (Step 2)
P10,260.00 p.a.
Item No. 43 (2)
Effectivity: July 1, 1978 |
| 5. Lt. Maximo M. Villalino
Present Salary - P8,400 | Security Officer
P10,260.00 p.a.
Effectivity: July 1, 1978 |

B. Position Reclassification

- | | |
|---|--|
| 1. Ms. Iluminada C. Abihay
MS in Dev. Communication
Points: 54.60 | Asst. Professor II (Step 3)
P16,860.00 p.a. |
| 2. Mr. Constancio M. Napiere
MS in Plant Pathology
Points: 51.25 | Asst. Professor I (Step 3)
P16,044.00 p.a. |
| 3. Mr. Teodulo O. Milleza
MS in Animal Science
Points: 50.85 | Asst. Professor I (Step 2)
P15,264.00 p.a. |
| 4. Ms. Paciencia P. Milan
MS in Zoology
Points: 47.90 | Asst. Professor I (Step 1)
P15,264.00 p.a. |

- | | |
|---|--|
| 5. Mr. Veronico S. Subere
MS. in Animal Science
Points: 50.45 | Instructor V (Step 1)
P15,264.00 p.a. |
| 6. Ms. Avelina C. Floresca
MA in Home Economics
Points: 49.50 | Instructor IV (Step 3)
P15,264.00 p.a. |
| 7. Ms. Fredeswinda O. Lao
MS in Plant Pathology
Points: 47.50 | Instructor IV (Step 1)
P14,532.00 p.a. |
| 8. Mr. Rebecco M. Santiago
MS in Horticulture
Points: 47.45 | Instructor IV (Step 1)
P14,532.00 p.a. |
| 9. Ms. Grace B. Alo
MS in Applied Nutrition
Points: 47.40 | Instructor IV (Step 1)
P14,532.00 p.a. |
| 10. Mr. Nonilon T. Bulilan
MS in Ag. Engineering
Points: 47.25 | Instructor IV (Step 1)
P14,532.00 p.a. |
| 11. Mr. Pedro P. Pascual
MS in Agronomy
Points: 47.10 | Instructor IV (Step 1)
P14,532.00 p.a. |
| *12. Dr. Tomas J. Fernandez, Jr.
MS in Veterinary Pathology
Points: 45.05 | Instructor IV (Step 1)
P14,532.00 p.a. |
| *13. Ms. Antonia Cecilia D. Yap
MS in Rural Sociology
Points: 43.60 | Instructor IV (Step 1)
P14,532.00 p.a. |
| *14. Ms. Florenda O. Labus
MS in Genetic Conservation
Points: 42.10 | Instructor IV (Step 1)
P14,532.00 p.a. |
| *15. Mr. Ruben M. Gapasin
MS in Plant Pathology
Points: 40.25 | Instructor IV (Step 1)
P14,532.00 p.a. |
| *16. Ms. Lutgarda H. Salares
MS in Applied Nutrition
Points: 44.50 | Instructor III (Step 1)
P13,152.00 p.a. |

Effectivity date - upon availability of position their
respective department or release of funds
for upgrading purposes.

*Per Academic Personnel Board policy, the minimum rank given to
MS graduate of technical field is Instructor IV.

VISAYAS STATE COLLEGE OF AGRICULTURE
Baybay, Leyte

Proposed Budget of VISCA Research Journal
First Issue, 1978

I. Personnel Services

Student Assistant (₱1.00/hr. for 150 hrs.) ₱150.00

Typist (₱3.00/hr. for 100 hrs.) 300.00

Artist/Illustrator (₱10.00/hr. for 20 hrs.) 200.00

Total for Personnel Services ₱ 650.00

II. Maintenance and Operating Expenses:

Printing of journal 9,300.00

Supplies and Materials 460.15

Travel 1,873.50

Sundry 5,920.30

Total for Maintenance & Operating Expenses 17,553.95

III. Equipment Outlay 7,000.00

GRAND TOTAL 25,203.95

A. Printing of VISCA Journal

Description: Size: 6" x 9"

124 total pages including cover

coated 200 lb. cover

Wiggins book paper (50) lb. for inside pages

Cost:

Inside pages ₱75/1000 copies/pages 120 pages ₱9,000.00

Cover ₱150/1,000 copies/pages 4 pages 300.00

Total Cost

₱9,300.00

(Estimate from G.T. Printers, Cebu)

B. Supplies and Materials

Bond paper	15.50/ream	62.00
Mimeo paper	13.95/ream	27.90
Onion skin paper	13.45/ream	13.45
Carbon paper	28.00/box	28.00
Stationery	35.00/ream	35.00
Typewriter ribbon	10.40/spool	10.40
Gestetner Stencil	46.50/quire	46.50
Gestetner Ink	39.40/tube	39.40
White envelope	22.50/box	22.50
Brown envelope	0.15 each	75.00
(for mailing journal)		
Art materials		50.00
Miscellaneous items (Paste, ballpen, clips etc.)		50.00

Total for Supplies and Materials

460.15

C. Travel

I. Cebu

1. Purchase supplies and materials and make arrangements with printer (4 days)

Boat fare (Baybay to Cebu and back)	46.00
Per diem for 4 days (₱35/day)	140.00
Allowance for 4 days (₱10/day)	40.00

Total for Travel

226.00

2. Bring manuscripts and instructions to printer (2 days)

Boat fare (Baybay to Cebu and back)	₱46.00
Per diem for 2 days (₱35/day)	70.00
Allowance for 2 days (₱10/day)	20.00

₱136.00

3. Get galley proofs and other materials from printer (2 days)

136.00

4. Return proofs and give final instructions to printer (3 days)

181.00

5. Get blue print from printer for final corrections (2 days)

136.00

6. Return blue print for final printing (2 days)

136.00

7. Get 1,000 copies of journal from printer (2 days)

136.00

Sub - total

₱1,087.00

Manila

Purposes:

1. Check possibility of printing journal in Manila
2. Visit national libraries for verification and authentication of manuscripts accepted for publication to avoid article duplication

VISCA to Tacloban and Back (College jeep)	₱200.00
VISCA to Manila and back (plane)	402.00
Airport fees	4.50
Per diem for 4 days	140.00
Allowance for 4 days	40.00

Sub - total

₱786.50

T O T A L

₱1,873.50

Sundry

1. Honorarium		₱1,800.00
Associate Editor	₱ 500.00	
Reviewers (2 persons at ₱50@ for 12 papers)	1,200.00	
Bookkeeper (Accountant/Business Manager)	100.00	
2. Communication		
Mailing journal (Surface mail)		230.00
local ₱0.60@ (200 copies)	120.00	
foreign ₱1.20@ (50 copies)	60.00	
(For VISCA scholars and selected libraries abroad)		
Official communications, telegrams etc	50.00	
3. Contingency		2,488.90
4. Administrative Cost		1,401.40
Total for Sundry		₱5,920.30

Equipment Outlay

1. typewriter (1)

Description:

"OLIVETTI" Linea 98, elite type with dust cover
22" carriage ₱7,000.00

Dealer: Business Equipment Corporation

APPENDIX E

June 27, 1978

The President
Visayas State College of Agriculture
Baybay, Leyte

Sir:

The members of the Board of the VISCA Educational Foundation, Inc, have just approved the annual budget of ₱79,600 for the operation of the VISCA-Foundation Elementary School during school year 1978-79. This amount is bigger than last year's budget of the elementary school by ₱10,632 due to the following reasons:

1. There is a to employ a full time ~~M~~indergarter and Nursery teacher as a result of an increase in enrollment. Last year the two classes were handled by a ~~part~~-time teacher.
2. The proposed 8% increase in the teachers' salary to keep abreast with the drive of the Department of Education and Culture to increase the salary of elementary school teachers, requires a bigger allotment for personal services.
3. The need to hire one more staff member who can act as head teacher, librarian and floating or substitute teacher has to be met to provide better service to the elementary school pupils.

In this connection, therefore, I wish to request for the release to the VISCA Educational Foundation, Inc., VISCA's contribution for the operation of the VISCA-Foundation Elementary School in the amount of ₱39,800 which shall be distributed as follows:

1. For Budget Year 1978 - ₱19,900
2. For Budget Year 1979 - ₱19,900

In behalf of the members of the VISCA Educational Foundation, Inc., I wish to thank you once again for your continued support to the projects of the Foundation.

Very truly yours,

(SGD) SAMUEL S. GO
Chairman, VISCA Educational Foundation Inc.

Inc:

1978-79 Budget of the VISCA
Foundation Elem. School

A True copy: bbejr

ViSCA-FOUNDATION ELEMENTARY SCHOOL

BUDGET FOR SCHOOL YEAR 1978-79

Income

I.	ViSCA Contribution	¥39,800.00
II.	Parents Contribution	14,000.00
III.	ViSCA Bakery	12,000.00
IV.	Book Service	6,000.00
V.	Coconut Project	2,000.00
VI.	Interest	4,500.00
VII.	Miscl. Income	<u>1,300.00</u>

TOTAL ¥79,600.00

Expenditures

I.	Personal Services	¥62,600.00
II.	Supplies and Materials	6,000.00
III.	Travel & Staff Development	4,000.00
IV.	Library Materials and Equipment	<u>7,000.00</u>

TOTAL ¥79,600.00

SUMMARY OF CHANGES ON THE PROPOSED BACHELOR
OF

Details of the 1978-79 Budget

I. Personal Services:

A. On the Total Number of Credit Units

Salaries of 2 teachers each ₱650/mo.	₱15,600.00
" " 6 " " 600/mo.	43,200.00
" " 2 " " aides each ₱100/mo.	2,000.00
" " 1 consultant & 2 part time teachers ₱50/mo.	1,800.00
Sub-Total	₱62,600.00

II. Supplies and Materials:

Office supplies	700.00
Classroom supplies	1,300.00
Supplies for preparation of teaching aids	2,000.00
Kindergarten & Nursery Snacks	2,000.00
Sub-Total	₱6,000.00

III. Travel & Staff Development:

B. On the Course Schedule

Tacloban to attend conferences	400.00
Various seminars	1,600.00
Demonstration teaching	600.00
Summer program	1,400.00
Sub-Total	4,000.00

IV. Library Materials and Equipment:

C. On the Content of Courses

Tablet Chairs	₱1,200.00
Teachers Tables	800.00
1. Cabinets	2,400.00
Books & Newspapers	2,600.00
Sub-Total	₱7,000.00

2. As Hlt 42 and An Hlt 48 did have contents that overlapped. The content - Major diseases of farm animals - was deleted from An Hlt 42, General Veterinary Medicine. On the other hand, the content - prevention and control - was also deleted from An Hlt 48, page 21.

GRAND TOTAL

₱79,600.00

A True Copy:

B. B. Estabillo, Jr.

SUMMARY OF CHANGES ON THE PROPOSED BACHELOR
OF ANIMAL SCIENCE CURRICULUMA. On the Total Number of Credit Units

The total number of credit units for the General Education courses is now 75, instead of 74. The increase of 1 was due to the required subject, Land Reform and Taxation, which is now a 3-unit course.

So, the total number of credit units for the BAS curriculum is now 159, instead of 158.

Note: The negative sign (-) after the subject Anat. & physiol in the former proposal created confusion among the Trustees. As also indicated, it was under Major Courses; but it is a fundamental course under the proposed curriculum. This now properly indicated under Fundamental Courses, page 14.

B. On the Course Schedule

The course schedule for the first and second semesters of the first year; summer after the first year; and the first semester of the second year has been adjusted to conform with the course schedules of the other degree programs of the College.

Specifically, Sta 11 had to replace Social Science 11 which had to replace An Sci 31, a laboratory subject to lessen the summer load of the second year students, page 16.

C. On the Overlapping of Course Contents

1. An Sci 31, Feeds and Feeding and An Sci 41, Animal Nutrition, while closely related, do not overlap in course content, pages 19 & 20. There was no change made in these subjects.
2. An Hlt 42 and An Hlt 48 did have contents that overlapped. The content - Major diseases of farm animals - was deleted from An Hlt 42, General Veterinary Medicine. On the other hand, the content - prevention and control - was also deleted from An Hlt 48, page 21.
3. An Sci 44, Incubation was changed to Incubation and Hatchery Management to make it more concise a tittle for its proposed contents, page 22.

CURRICULAR PROPOSAL

Title: BACHELOR OF ANIMAL SCIENCE

Proponent: DEPARTMENT OF ANIMAL SCIENCE AND VETERINARY MEDICINE
Baybay, Leyte

Rationale:

At its present status, the animal industry in the country, particularly that of the countryside, cannot yet afford to hire the services of professional veterinarians. This situation may explain the absence of veterinary practitioners for livestock and poultry in the rural areas even though their services are badly needed. Escudero (1976) stated that about 50 percent or more of the animals raised by backyard raisers die before reaching market age. In consonance with the recent efforts of the government to promote and accelerate the establishment of the animal industry, the services for animal health along with the husbandry aspects of animal production must be provided to the producers.

The present BSA curriculum has many major fields including Animal Husbandry and Animal Protection. However, within the limits of the curriculum which has a ceiling of 159 units, it is not possible to have more than 6 units of fundamental Animal Science courses and 37 units of major courses. As such, the major fields still lack in-depth subject matter coverage of other basic and specialized areas of Animal Husbandry and Animal Health necessary for on-the-farm and countryside work. This limitation, particularly that of the Animal Protection major was pointed out by Mr. Richard K. Johanson, Chief of the Education Projects Division for East Pacific Region of the World Bank in his letter to EDPITAF. In view of this, it is desirable to offer a separate curriculum with Animal Husbandry and Animal Health majors to provide the industry with adequately trained manpower.

The proposed Bachelor of Animal Science (BAS) has 9 units of fundamental Animal Science courses and 54 units of major courses. The specialization in Animal Health includes 36 units of major veterinary science courses and 18 units of major Animal Science courses, while the specialization in Animal Husbandry includes 36 units of major Animal Science courses, 9 units of Veterinary Science courses and 9 units of major electives which include Agricultural Economics. The inclusion of Agricultural Economics will give the students a better background on managerial skills. Moreover, the proposed curriculum affords opportunity to specialize in certain commodities such as poultry production, swine production and ruminant production. Thus, a student who may specialize in poultry production will have 9 units more of poultry production courses and/or the related major electives than majors in other commodities. It also provides adequate technical orientation to prepare the graduates for animal farming operations.

During the workshop on "Education in Animal Science" held at UPLB on September 7, 1977, representatives of the major employers of the graduates of the proposed curriculum, namely, the Bureau of Animal Industry and the National Meat Inspection Commission, expressed their need for 600 to 800 livestock and poultry technologists and veterinary assistants and about 10,000 livestock and meat inspectors in the next 5 years. The representatives from the private and commercial farms have also indicated their preference for graduates of this program to be employed as herdsmen, veterinary assistants and farm managers. A survey (1976) conducted by VISCA in the Visayas revealed that Regions VI, VII, and VIII alone would need 1,250 graduates with specialization related to animal science. The graduates from the proposed curriculum can also be employed as research assistants, teachers in agricultural schools and colleges,

sales representatives of companies carrying veterinary products and other related employment. To meet the foregoing demand for technical manpower, the Department feels that the institution of Bachelor of Animal Science (BAS) with majors in Animal Health and Animal Husbandry is necessary.

Apparently, the time and cost constraints in obtaining a 6-year degree in Doctor of Veterinary Medicine further suggests that offering specialization in Animal Health as a major in a 4-year degree course (BAS) to meet the needs of farmers in the countryside is more advantageous to developing countries like the Philippines.

The option of students to undertake these work or farm practice is offered only to students majoring in Animal Health. The Animal Husbandry majors are required to conduct theses in order to avoid an overlap with the Agriscience program which offers farm practice for students who opt for farm practice in Agriscience Management. Furthermore, students from their own department with co-adviser from the staff of the Department of Animal Science and Veterinary Medicine.

Objectives:

1. To produce graduates to meet the manpower requirement of the poultry and livestock industry.

2. To train researchers and technologists in the field of Animal Husbandry and Animal Health.

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PROJECTED ENROLMENT FOR THE ANIMAL HUSBANDRY AND ANIMAL HEALTH MAJOR FIELDS

Assumptions:

- About 70% utilization of laboratory rooms for instruction with a capacity of 30 students per room. Therefore each laboratory room will be utilized 7 out of 10 possible laboratory sessions per week;
- Major specialization will start on the second semester of the second year;
- Proportion of drop outs: 10% every year;
- Equal number of major students will enroll in each major field (30 students in each field or a maximum of 70 starting on the 4th year, SY 1981-82).

PROJECTED ENROLMENT OF MAJOR STUDENTS FOR 5 YEARS

School Year	No. of Students Enrolled in Service Subject	Y E A R			
		2nd	3rd	4th	Total
1978-79	347	30	-	-	30
1979-80	427	40	27	-	67
1980-81	452	60	36	24	120
1981-82	463	70	54	32	156
1982-83	523	70	63	49	182

Note: Projection is based on the revised projected enrolment of VISCA from the Office of DOPD.

PROJECTED FACULTY REQUIREMENTS

Assumptions:

- The semester (1st or 2nd) with more teaching staff requirement will be the basis for projecting the yearly requirement.
- Total workload unit is calculated based on VISCA's computation guide for Academic Staff Workload (a minimum of 17 total workload units).

FACULTY REQUIREMENT FOR 5 YEARS

(Full-time Equivalent)

	1978-79	1979-80	1980-81	1981-82	1982-83
Teaching Load	4.17	3.62	13.4	12.41	15.4
Research	1.18	.71	1.4	2.0	2.94
Extension	1.41	2.11	2.11	2.11	2.11
Faculty Development	5.0	6.0	5.0	0	8
Administrative	1.53	1.52	2.71	3.0	3.23
T o t a l	12.29	17.96	24.62	27.22	32.68

FACILITIES:

- A. Laboratory* (adequately equipped under the IB Assistance Program)
 - a.1. Anatomy and Physiology - 1 unit, area - 90 m²
 - a.2. Parasitology - 1 unit, area - 90 m²
 - a.3. Infectious Disease and Diagnostic - 1 unit, area - 120 m²
 - a.4. Breeding & Genetics - 1 unit, area - 90 m²
 - a.5. Nutrition - 1 unit, area - 120 m²
 - a.6. Dairy Research - 1 unit, area - 120 m²
 - a.7. Product Processing - 1 unit, area - 120 m²
 - a.8. Research Laboratory (for precision and delicate instruments) - 1 unit, area 90 m²
 - a.9. Slaughter House - 1 unit, area - 90 m²
 - a.10. Cold Storage - 1 unit, area - 20 m²
- B. Classroom and other types of facilities*
 - b.1. Lecture Hall - 1 unit, area - 120 m²
 - b.2. Classroom - 1 unit, area - 65 m²
 - b.3. Seminar room - 1 unit, area - 60 m²
 - b.4. Library - 1 unit, area 100 m²
 - b.5. Offices (Faculty and Head)
 - b.6. Others such as maintenance, preparation and storages rooms, etc.
- C. Field Houses*
 - c.1. Feed Mill - 1 unit, area - 300 m²
 - c.2. Field laboratory houses - 3 units, area of 60 m² each
 - c.3. Small animal and experimental animal shed - 1 unit, area - 250 m²
- D. Field Projects
 - d.1. Broiler House - 1 unit
 - d.2. Layer House - 1 unit
 - d.3. Duck House and Pond - 1 unit
 - d.4. Rabbit House - 1 unit
 - d.5. Piggery House - 2 units
 - d.5. Incubating and Breeding House* - 1 unit
 - d.7. Breeder House* - 1 unit
 - d.8. General Purpose Goat Barn - 1 unit
 - d.9. Duck and Rearing Barn* - 1 unit
 - d.10. Milk House - 1 unit, area - 40 m²
 - d.11. Cattle Shed + 1 unit, area - 250 m²
 - d.12. Several more under consideration.
- E. Pasture and Reservation - 111 hectares

* Construction will start in mid 1978.

DESIRED PROFILE OF STAFF STRENGTH ON THE 5TH YEAR (1982-83)

Approaches:

- a. Strong faculty development program through VISCA Fellowship, WB Technical Assistance, Colombo Plan, PCARR Scholarship and other scholarship programs
- b. Strong Recruitment program
- c. Adequate instruction, research and extension facilities.
- d. Competitive salary scale.

	Existing	Proposed
	Units	Units
I. <u>General Education Courses:</u>	75	75
II. <u>Fundamental Courses:</u>	47	30
A. <u>Social Sciences:</u>		
a.1. AG. ECON. 21 - Farm Management	(3)	(3)
a.2. AG. EXT. 21 - Ag. Ext. Teaching	(3)	(3)
B. <u>Physical Sciences:</u>		
b.1. CHEM. 21 - Biochemistry	(3)	(3)
b.2. SOILS 21 - Fund. Soils & Fert.	(3)	(3)
b.3. SOILS 22 - Soils Fert.	(3)	(-)
b.4. AG. ENG. 20 - Irrig. Drainage & Met.	(3)	(-)
b.5. AG. ENG. 21 - Farmshop Practice	(2)	(-)
b.6. AG. ENG. 22 - Farm Mach. & Equipt.	(3)	(-)
C. <u>Plant Sciences:</u>		
c.1. AGRONOMY 21 - Fund. Crop Prod.	(3)	(3)
c.2. HORTI. 22 - Gen. Horti.	(3)	(-)
D. <u>Animal Sciences:</u>		
d.1. Prin. of An. Sci. I	(3)	(3)
d.2. Prin. of An. Sci. II	(3)	(3)
d.3. Anat. & Physiol Farm Animals	(-)	(3)
E. <u>Others:</u>		
e.1. AG. BOT. 21 - Prin. Genetics	(3)	(3)
e.2. MICRO 21 - Gen. Micro	(3)	(3)
e.3. CROP PROT 21 - Prim. Crop Prot.	(3)	(-)
e.4. CROP PROT 22 - Pest Control	(3)	(-)
III. <u>Major Courses:</u>		
A. <u>Animal Protection major</u> <u>(Animal Health major)</u>	37	54
a.1. <u>Animal Sciences</u>		
a.1.1. Feeds and Feeding	(3)	(3)
a.1.2. Anat. & Physiol of Farm Animals	(3)	(-)*
a.1.3. System Physiol	(3)	(3)
a.1.4. Poultry Production	(-)	(3)
a.1.5. Swine Production	(-)	(3)
a.1.6. Ruminant Production	(-)	(3)
a.1.7. Animal Nutrition	(-)	(3)
a.1.8. Vetk & Pltry Prod & By-Products	(-)	(3)
a.2. <u>Animal Protection (Animal Health)</u>		
a.2.1. Pathogenic Microorganism	(3)	(3)
a.2.2. Animal Disease Control	(3)	(3)
a.2.3. Epidemiology	(3)	(-)
a.2.4. Animal Parasitology	(3)	(3)
a.2.5. Vet. Pharm & Pharmacology	(3)	(2)
a.2.6. Nutritional Def. Dis.	(3)	(-)
a.2.7. Animal Health and Management	(3)	(3)
a.2.8. Advanced Anatomy	(-)	(3)
a.2.9. General Pathology	(-)	(3)
a.2.10. Food Hygiene & Public Health	(-)	(2)
a.2.11. Diagnostic Procedure	(-)	(1)
a.2.12. Undergraduate Seminar	(1)	(1)
a.2.13. Thesis/Field Practice	(6)	(6)
a.2.14. Gen. Vet. Medicine	(-)	(3)

* Fundamental course in the proposed curriculum.

<u>B. Animal Husbandry major</u>		37	54
<u>b.1. Animal Science courses (36 units)</u>			
b.1.1	Feeds and Feeding	(3)	(3)
b.1.2	Anat & Physiol Farm Animals	(3)	(-)*
b.1.3	Poultry Production	(3)	(3)
b.1.4	Swine Production	(3)	(3)
b.1.5	Ruminant Production	(3)*	(3)
b.1.6	Animal Nutrition	(3)	(3)
b.1.7	Prin Animal Breeding	(3)	(3)
b.1.8	Dairy Production	(3)*	(3)
b.1.9	Livestock Selection	(-)	(2)
b.1.10	Livestock & Poultry Products and By-Products	(3)*	(3)
b.1.11	Behavior and Ecology of Farm Animals	(-)	(3)
b.1.12	Undergraduate Seminar	(1)	(1)
b.1.13	Thesis	(6)	(6)
<u>b.2. Animal Protection (Animal Health) Courses (2 Units)</u>			
b.2.1	Animal Dis. Control	(3)	(3)
b.2.2	Animal Parasitology	(3)*	(3)
b.2.3	Animal Health and Management	(-)	(3)
<u>b.3. Major Elective Courses (2 Units)</u>			
b.3.1	Poultry Management	(-)	(3)
b.3.2	Poultry Breeding & Reproduction	(-)	(3)
b.3.3	Incubation	(-)	(3)
b.3.4	Swine Management	(-)	(3)
b.3.5	Swine Breeding & Reproduction	(-)	(3)
b.3.6	Feedlot and Range Management	(-)	(3)
b.3.7	Dairy Products	(-)	(3)
b.3.8	Pasture and Forage Crops	(-)	(3)
b.3.9	Principles of Accounting	(-)	(3)
b.3.10	Farm Finance	(-)	(3)

SUMMARY OF COMPARATIVE COURSE ANALYSIS

I. General Education Courses -----	75	75
II. Fundamental Courses -----	47	30
III. Major Courses -----	37	54
Total Units	159	159

ABOLITION, MODIFICATION AND INSTITUTION OF COURSES

Rationale:

The proposed institution of a Bachelor of Animal Science (BAS) with majors in Animal Health and Animal Husbandry to replace the existing Bachelor of Science in Agriculture (BSA) with majors in Animal Protection and Animal Husbandry necessitates the restructuring of courses in order to strengthen the curricular program. To accomplish this, the Department has to abolish or modify some courses in the existing program (BSA) in terms of course title, course number, and course description. Likewise new ones have to be instituted. The courses proposed for institution take into account the subjects recommended by the workshop group on "Education in Animal Science" held at UPLB on September 7, 1977. The workshop was participated in by representatives from the Office of the Director of BAI, National Meat Inspection Commission (NMIC), UPLB, ViSCA, Philippine Veterinary Medical Association (PVMA). UP College of Veterinary Medicine and representatives from private sectors.

I. Abolition:

AN. PROT. 46 - NUTRITIONAL DEFICIENCY DISEASES - Nutritional deficiency susceptibility of malnourished animals to diseases.

Prerequisite: An. Sci. 33
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

AN. PROT. 43 - EPIDEMIOLOGY - Principles of epidemiology of poultry and livestock diseases.

Prerequisite: An. Prot. 32
3 hours/week (lec.)
Credit: 3 Units

AN. PROT. 45 - VETERINARY PHARMACY AND PHARMACOLOGY - Prescription, preparation and administration of drugs.

Prerequisite: Chem. 21 & An. Sci. 36
5 hours/week (2 lec., 3 lab.) Credit: 3 Units

II. Modification and/or change of either course title, number, descriptive title or course description.

A. Animal Health major:

a.1. AN. SCI. 36 - SYSTEMS PHYSIOLOGY - Body systems with emphasis on digestion and absorption; intermediary metabolism and energy exchanges; body fluids; endocrine systems.

Prerequisite: Chem. 21 and An. Sci. 35
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

TO READ:

AN. HLT. 37 - SYSTEMS PHYSIOLOGY - Digestive, urinary, endocrine and other systems; body fluids.

Prerequisite: An. Sci. 24
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

a.2. AN. PROT 32 - PATHOGENIC MICROORGANISMS - Isolation, management, biochemical characteristics and diagnosis, transmission and immunology.

Prerequisite: Micro 21
7 hours/week (1 lec., 6 lab.)
Credit: 3 Units

TO READ:

AN. HLT. 38 - PATHOGENIC MICROORGANISMS - Biology and control of common bacterial, fungal and viral pathogens.

Prerequisite: Micro 21
7 hours/week (1 lec., 6 lab.)
Credit: 3 Units

a.3. AN. PROT. 36 - ANIMAL DISEASE CONTROL - Principles of livestock health and sanitation. Prevention and control of common livestock and poultry diseases.

Prerequisite: An. Sci. 35 & Micro 21

TO READ:

AN. HLT. 35 - ANIMAL DISEASE CONTROL - Principles of livestock health and sanitation, epidemiology, prevention and control of diseases of farm animals, and immunology.

Prerequisites: An. Sci. 24 and Micro 21
5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

a.4. AN. PROT 44 - ANIMAL PARASITOLOGY - Morphology and ecology of common animal parasites; prevention and control.

Prerequisite: An. Sci. 35
5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

TO READ:

AN. HLT. 36 - ANIMAL PARASITOLOGY - Morphology, life cycles and ecology of parasitic arthropods, helminths & protozoa; and their pathogenesis and control.

Prerequisite: An. Sci. 24
5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

a.5 AN. PROT 48 - ANIMAL HEALTH AND MANAGEMENT - Relationships of housing, equipment, feeding and population control and other management practices with animal health.

Prerequisite: An. Prot. 43
3 hours/week (3 lec.)

Credit: 3 Units

TO READ:

AN. HLT. 46 - ANIMAL HEALTH AND MANAGEMENT - Management

a.6. AM. PROT 99 - UNDERGRADUATE SEMINAR

Credit: 1 Unit

TO READ:

AN. HLT. 99 - UNDERGRADUATE SEMINAR

Credit: 6 units

a.7. AN. PROT 100 - UNDERGRADUATE THESIS

Credit: 6 units

TO READ:

AN. HLT. 100 - UNDERGRADUATE THESIS

Credit: 1 Unit

B. Animal Husbandry major:

b.1. AM. SCI. 21 - PRINCIPLES OF ANIMAL SCIENCE I - Fundamentals

of anatomy and physiology, genetics, reproduction, endocrinology, lactation, digestion, nutrition, and animal health.

Prerequisite: Zool. 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 units

TO READ:

AM. SCI. 21 - PRINCIPLES OF ANIMAL SCIENCE I - Fundamentals

of anatomy and physiology, genetics, reproduction, endocrinology, lactation, digestion, nutrition, growth, environmental physiology and animal health.

Prerequisite: Zool. 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 units

b.2. AM. SCI. 31 - POULTRY PRODUCTION - Commercial poultry

production including incubation and hatchery practices, economics of production and project proposals.

Prerequisite: Am. Sci. 22

5 hours/week (2 lec., 3 lab.)

Credit: 3 units

TO READ:

AM. SCI. 32 - POULTRY PRODUCTION - Principles and practices

of poultry production; brooding, rearing, culling and selection, feeding, including waste disposal and marketing.

b.3. AN. SCI. 32 - SWINE PRODUCTION - Feeding and management practices of commercial swine enterprise, economics of production and project proposals.

Prerequisite: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

TO READ:

AN. SCI. 33 - SWINE PRODUCTION - Principles and practices in swine production including waste disposal and marketing.

Prerequisites: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credits: 3 Units

b.4. AN. SCI. 42 - ANIMAL NUTRITION - Functions and metabolism of various nutrients, nutritive value required for maintenance, growth, reproduction, lactation and other bodily functions of farm animals.

Prerequisite: An. Sci. 33 and Chem. 21
Credit: 3 Units
5 hours/week (2 lec., 3 lab.)

TO READ:

AN. SCI. 41 - ANIMAL NUTRITION - Functions and metabolism of various nutrients, metabolic disorders and nutritional requirements of farm animals.

Prerequisite: An. Sci. 31 and Chem. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

b.5. AN. SCI. 41 - CARABEEF AND BEEF PRODUCTION - Principles and practices of carabeef and beef production.

Prerequisite: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

TO READ:

AN. SCI. 35 - RUMINANT PRODUCTION - Principles and practices of carabeef, beef and chevon production (horse included).

Prerequisite: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

b.6. AN. SCI. 46 - PROCESSING OF LIVESTOCK AND POULTRY PRODUCTS AND BY-PRODUCTS - Slaughtering, carcass fabrication processing and preservation of meat, milk and poultry and their by-products.

Prerequisite: An. Sci. 35 and Micro 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

TO READ:

AN. SCI. 34 - LIVESTOCK AND POULTRY PRODUCTS AND BY-PRODUCTS - Live animal evaluation and inspection and slaughtering; fabrication, processing and pre-

III. INSTITUTION OF THE FOLLOWING COURSES:

A. Animal Health major:

a.1. AN. HLT. 35 - ADVANCED ANATOMY - gross and microscopic study of organs and tissues of farm animals.

Prerequisite: An. Sci. 24
7 hours/week (1 lec., 6 lab.)
Credit: 3 units

a.2. AN. HLT. 41 - GENERAL PATHOLOGY - Principles of veterinary pathology; body reactions to etiologic agents; postmortem examination.

Prerequisite: An. Hlt. 38
5 hours/week (2 lec., 3 lab.)
Credit: 3 units

a.3. Pub HLT. 41 - FOOD HYGIENE AND PUBLIC HEALTH - Handling of meat, egg, milk and their by-products; food poisoning; zoonoses. Regulations and legislations.

Prerequisite: An. Hlt. 36 and 38
5 hours/week (1 lec., 3 lab.)
Credit: 2 units

a.4. AN. HLT. 42 - GENERAL VETERINARY MEDICINE - Differential diagnosis of major diseases, treatment & control.

Prerequisite: An. Hlt. 34
5 hours/week (2 lec., 3 lab.)
Credit: 3 units

a.5. AN. HLT. 43 - ELEMENTARY PHARMACOLOGY - Indications and mode of actions of common drug preparations of their toxicity.

Prerequisite: An. Sci. 24
2 hours/week (1 lec.)
Credit: 2 units

a.6. AN. HLT. 40 - DIAGNOSTIC PROCEDURE - Theories and methods of laboratory diagnosis.

Prerequisite: Zool. 11
3 hours/week (lab.)
Credit: 1 unit

a.7. AN. HLT. 100a - FIELD PRACTICE

Credit: 6 units

B. Animal Husbandry major:

b.1. AN. SCI. 39 - LIVESTOCK SELECTION - Evaluation of productive merits of individual animals with emphasis on swine and dairy.

Prerequisite: An. Sci. 22
4 hours/week (1 lec., 3 lab.)
Credit: 2 units

b.2. AN. SCI. 48 - BEHAVIOR AND ECOLOGY OF FARM ANIMALS - Behavior of farm animals and principles of environmental

- b.3. AN. SCI. 42 - POULTRY MANAGEMENT - Management requirements of various ages of layers; broilers and ducks with emphasis on housing and other ecological consideration.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.4. AN. SCI. 43 - POULTRY BREEDING AND REPRODUCTION - Genetic factors affecting economic traits; methods of breeding; physiology of egg production.
Prerequisite: An. Sci. 37
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.5. AN. SCI. 44 - INCUBATION AND HATCHERY MANAGEMENT - Principles of incubation; types, and operation of incubators; fertility; embryonic development; sexing; and other hatchery management practices.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.6. AN. SCI. 45 - SWINE BREEDING AND REPRODUCTION - Genetic factors affecting economic traits; methods of breeding; physiology of reproduction.
Prerequisite: An. Sci. 37
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.7. AN. SCI. 46 - SWINE MANAGEMENT - Management requirements of various classes and ages of swine with emphasis on housing and ecological considerations.
Prerequisite: An. Sci. 33
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.8. AN. SCI. 47 - FEEDLOT AND RANGE MANAGEMENT - Feedlot and range operations including stocking, feeding, and pasture establishment; soil and water conservation; waste disposal; equipment.
Prerequisite: An. Sci. 35
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
- b.9. AN. SCI. 49 - DAIRY PRODUCTS - Principles of processing milk and milk products; milk industry and markets.
Prerequisite: An. Sci. 38
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

COURSE ANALYSIS

I. GENERAL EDUCATION - 75 units

A. Humanities - 27 units

Humanities	11	Introduction to Humanities	3
English	11	Communication Skills I	3
English	12	Communication Skills II	3
English	13	Writing the Scientific Paper	3
Spanish	11	Communication Skills I	3

Math.	11	College Algebra	3
Math.	12	Plane Trigonometry	3
Physics	11	General Physics I	3
Physics	12	General Physics II	3
Chem.	11	General Chemistry I	3
Chem.	12	General Chemistry II	3
Statistics	11	Elementary Statistics	3

C. Biological Sciences - 9 units			
Biology	11	General Biology	3
Botany	11	General Botany	3
Zoology	11	General Zoology	3

D. Social Sciences - 18 units			
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Educ.	11	General Psychology	3
Educ.	12	General Sociology	3
Econ.	11	General Economics	3
Soc. Sci.	11	Phil. Hist. & Institutions	2
Soc. Sci.	13	Life and Works of Rizal	3
Econ.	12	Land Reform and Taxation	3

II. FUNDAMENTAL COURSES - 30 units			
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A. Social Sciences - 6 units			
Ag. Econ.	21	Farm Management	3
Ag. Ext.	21	Agricultural Extension Teaching	3

B. Physical Sciences - 6 units			
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Chemistry	21	General Biochemistry	3
Soils	21	Fundamentals of Soils & Fert.	3

C. Plant Sciences - 3 units			
Agron.	21	Fundamentals of Crop Production	3

D. Others - 6 units			
Micro.	21	General Microbiology	3
Ag. Bot.	21	Prin. Genetics	3

E. Animal Sciences - 9 units			
An. Sci.	21	Principles of Animal Science I	3
An. Sci.	22	Principles of Animal Science II	3
An. Sci.	24	Anatomy & Physiol of Farm Animals	3

III. MAJOR CORE COURSES - 27 units

A. Animal Sciences - 18 units			
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An. Sci.	31	Feeds and Feeding	3
An. Sci.	32	Poultry Production	3
An. Sci.	33	Swine Production	3
An. Sci.	34	Poultry Prod. and By-Products	3
An. Sci.	35	Ruminant Production	3
An. Sci.	41	Animal Nutrition	3

B. Animal Health - 9 units			
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An. Hit.	36	Animal Disease Control	3
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IV. MAJOR COURSES - 27 units (Animal Health)

An. Hlt. 37	System Physiology	3
An. Hlt. 35	Advanced Anatomy	3
An. Hlt. 38	Pathogenic Microorganisms	3
An. Hlt. 41	General Pathology	3
An. Hlt. 42	Gen. Vet. Med.	3
Pub Hlt. 41	Food Hygiene and Public Health	2
An. Hlt. 48	Diagnostic Procedure	1
An. Hlt. 99	Seminar	1
An. Hlt. 100/100a	Field Practice/Undergraduate Thesis	6
An. Hlt. 43	Elementary Pharmacology	2

V. MAJOR COURSES - 27 units (Animal Husbandry)A. Required - 18 units

An. Sci. 38	Dairy Production	3
An. Sci. 39	Livestock Selection	2
An. Sci. 40	Behavior and Ecology of Farm Animals	3
An. Sci. 99	Seminar	1
An. Sci. 100	Undergraduate Thesis	6
An. Sci. 37	Prin. Animal Breeding	3

B. Electives - 9 units

An. Sci. 42	Poultry Management	3
An. Sci. 43	Poultry Breeding and Reproduction	3
An. Sci. 44	Incubation and Hatchery Management	3
An. Sci. 45	Swine Breeding and Reproduction	3
An. Sci. 46	Swine Management	3
An. Sci. 47	Feedlot and Range Management	3
An. Sci. 49	Dairy Products	3
Agron. 44	Pasture and Forage Crops	3
Ag. Econ 41	Principles of Accounting	3
Ag. Econ 33	Farm Finance	3

SUMMARY:

	<u>Major Field</u>	
	<u>Animal Husbandry</u>	<u>Animal Health</u>
General Education Courses	75	75
Fundamental Courses	30	30
Major Core Courses	27	27
Major Courses (Required)	18	27
Major Electives	9	0
	<u>159</u>	<u>159</u>

BACHELOR IN ANIMAL SCIENCE

COURSE SCHEDULE

FIRST YEAR

1st Semester		2nd Semester	
ENG.	11 (Com. Skills I)	ENG.	12 (Com. Skills II)
MATH.	11 (Col. Algebra)	MATH.	12 (Plane Trigo)
EDUC.	11 (Gen. Psych.)	EDUC.	12 (Gen. Socio)
BIO.	11 (Gen. Biol.)	BOT.	11 (Gen. Botany)
ECON.	11 (Gen. Econ.)	ZOO.	11 (Gen. Zoology)
CHEM.	11 (Gen. Chem. I)	CHEM.	12 (Gen. Chem. II)
MIL.SCI.	11/Euthenics 11	MIL.SCI.	12/Euthenics 12
P.E.	11	P.E.	12

1st Semester		2nd Semester	
STAT.	11 (Intro to Humanities)	STAT.	11 (Elem. Statistics)
HUMANITIES	11 (Intro to Humanities)	HUMANITIES	11 (Intro to Humanities)
STAT.	11 (Elem. Statistics)	STAT.	11 (Elem. Statistics)

1st Semester		2nd Semester	
SPANISH	11 (Com. Skills I)	SPANISH	11 (Com. Skills I)
AN.SCI.	22 (Prin. An. Sci. II)	AN.SCI.	21 (Prin. of Animal Science I)
AGRON.	21 (Fund. Crop. Prod.)	AGRON.	21 (Fund. Crop. Prod.)
PHYSICS	11 (Gen. Physics I)	PHYSICS	11 (Gen. Physics I)
ECON.	12 (Land Reform & Tax.)	ECON.	12 (Land Reform & Tax.)
ENGL.	13 (Writing Sc. Paper)	ENGL.	13 (Writing Sc. Paper)
CHEM.	21 (Gen. Biochem)	CHEM.	21 (Gen. Biochem)
MIL.SCI.	21/Euthenics 21	MIL.SCI.	21/Euthenics 21
P.E.	13	P.E.	13

1st Semester		2nd Semester	
SPANISH	11 (Com. Skills I)	SPANISH	11 (Com. Skills I)
AN.SCI.	22 (Prin. An. Sci. II)	AN.SCI.	21 (Prin. of Animal Science I)
AGRON.	21 (Fund. Crop. Prod.)	AGRON.	21 (Fund. Crop. Prod.)
PHYSICS	11 (Gen. Physics I)	PHYSICS	11 (Gen. Physics I)
ECON.	12 (Land Reform & Tax.)	ECON.	12 (Land Reform & Tax.)
ENGL.	13 (Writing Sc. Paper)	ENGL.	13 (Writing Sc. Paper)
CHEM.	21 (Gen. Biochem)	CHEM.	21 (Gen. Biochem)
MIL.SCI.	21/Euthenics 21	MIL.SCI.	21/Euthenics 21
P.E.	13	P.E.	13

1st Semester		2nd Semester	
SPANISH	11 (Com. Skills I)	SPANISH	11 (Com. Skills I)
AN.SCI.	22 (Prin. An. Sci. II)	AN.SCI.	21 (Prin. of Animal Science I)
AGRON.	21 (Fund. Crop. Prod.)	AGRON.	21 (Fund. Crop. Prod.)
PHYSICS	11 (Gen. Physics I)	PHYSICS	11 (Gen. Physics I)
ECON.	12 (Land Reform & Tax.)	ECON.	12 (Land Reform & Tax.)
ENGL.	13 (Writing Sc. Paper)	ENGL.	13 (Writing Sc. Paper)
CHEM.	21 (Gen. Biochem)	CHEM.	21 (Gen. Biochem)
MIL.SCI.	21/Euthenics 21	MIL.SCI.	21/Euthenics 21
P.E.	13	P.E.	13

1st Semester		2nd Semester	
SPANISH	11 (Com. Skills I)	SPANISH	11 (Com. Skills I)
AN.SCI.	22 (Prin. An. Sci. II)	AN.SCI.	21 (Prin. of Animal Science I)
AGRON.	21 (Fund. Crop. Prod.)	AGRON.	21 (Fund. Crop. Prod.)
PHYSICS	11 (Gen. Physics I)	PHYSICS	11 (Gen. Physics I)
ECON.	12 (Land Reform & Tax.)	ECON.	12 (Land Reform & Tax.)
ENGL.	13 (Writing Sc. Paper)	ENGL.	13 (Writing Sc. Paper)
CHEM.	21 (Gen. Biochem)	CHEM.	21 (Gen. Biochem)
MIL.SCI.	21/Euthenics 21	MIL.SCI.	21/Euthenics 21
P.E.	13	P.E.	13

SOC SCI 11 (Phil. Hist. & Institution)
AG. BOT 21 (Prin. Genetics)

Summer

3 0 3
2 3
3 0 3

18
(2)
(1.5/1)

21
(2)
(1.5/1)

6
3
3

18
(2)
(1.5/1)

18
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Lec Lab Unit

COURSE SCHEDULE FOR ANIMAL HEALTH MAJOR

THIRD YEAR

1st Semester

			Lec.	Lab.	Units
AN. SCI. 33	(Swine Production)		2	3	3
AN. HLT. 35	(Advanced Anatomy)		1	6	3
SPAN. 12	(Com. Skills I)		3	0	3
AN. HLT. 37	(Systems Physiology)		2	3	3
SOC SCI 13	(Life Work - Rizal)		3	0	3
AN. SCI 31	(Feeds and Feeding)		2	3	3
					18

2nd Semester

AN. HLT 34	(An. Dis. Control)	2	3	3
AN. SCI 32	(Poultry Production)	2	3	3
AN. HLT 36	(An. Parasitology)	2	3	3
AN. HLT 38	(Patho. Microorganisms)	1	6	3
AG. ECON 21	(Farm Management)	2	3	3
SPAN. 13	(Read. Lit. I)	3	0	3
AN. HLT 100	(Undergraduate Thesis)			1
				19

FOURTH YEAR

1st Semester

SPANISH 14	(Read. Lit. II)	3	0	3
AG. EXT 21	(Ag. Ext. Teach.)	3	0	3
AN. HLT 41	(Gen. Pathology)	2	3	3
AN. SCI 41	(An. Nutrition)	2	3	3
AN. SCI 35	(Ruminant Production)	2	3	3
AN. HLT 43	(Elem. Pharmacology)	2	0	2
AN. SCI 100	(Undergraduate Thesis)			1
				18

2nd Semester

AN. HLT 42	(Gen. Vet. Med.)	2	3	3
AN. HLT 46	(An. Hlt. and Mgt.)	3	0	3
AN. HLT 48	(Diagnostic Procedure)	0	3	1
PUB HLT 31	(Food Hygiene & Pub. Hlt.)	1	3	2
AN. SCI 34	(Livstk & Poultry Prod. & By-Products)	2	3	3
AN. HLT 99	(Undergraduate Seminar)			1
AN. HLT 100	(Undergraduate Thesis)			4
				17

COURSE SCHEDULE - ANIMAL HUSBANDRY

THIRD YEAR

1st Semester

AN. SCI 33	(Swine Production)	2	3	3
AN. SCI 32	(Poultry Production)	2	3	3
SPAN. 12	(Com. Skills II)	3	0	3
AN. SCI 35	(Ruminant Production)	2	3	3
AN. SCI 39	(Livestock Selection)	1	3	2
SOC SCI 13	(Life Work - Rizal)	3	0	3
AN. SCI 31	(Feeds and Feeding)	2	3	3
				20

2nd Semester

AN. SCI 37	(Prin. An. Breeding)	2	3	3
AN. HLT 37	(An. Dis. Control)	2	3	3
AG. ECON 21	(Farm Management)	2	3	3
SPAN. 13	(Read. Lit. I)	3	0	3
AN. HLT 36	(An. Parasitology)	2	3	3
AN. SCI 32	(Poultry Production)	2	3	3

FOURTH YEAR

1st Semester			
SPANISH	14	(Read. Lit. II)	3
AN. SCI.	41	(An. Nutrition)	3
AG. EXT.	21	(Ag. Ext. Teaching)	3
AN. SCI.	34	(Livest. & Poultry Prod. & By-Products)	3
MAJOR ELECTIVE			3
UNDERGRADUATE THESIS			1
16			
2nd Semester			
AN. SCI.	48	(Behavior and Physiology of Farm Animals)	3
AN. HLT.	46	(An. Health Mgt.)	3
MAJOR ELECTIVE			3
MAJOR ELECTIVE			3
UNDERGRADUATE SEMINAR			1
UNDERGRADUATE THESIS			4
17			

I. FUNDAMENTAL COURSES:

A. Social Sciences

1. AG. ECON. 21 - FARM MANAGEMENT - Management, land utilization, farm labor, analysis of costs and returns, farm finance, and marketing of agricultural products.
Prerequisites: Econ. 11 & Agron. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units
2. AG. EXT. 21 - AGRICULTURAL EXTENSION TEACHING - Principles, methods and techniques in agricultural extension teaching.
Prerequisites: Education 21
5 hours/week (1 lec.)
Credit: 3 Units

B. Physical Sciences

1. CHEMISTRY 21 - GENERAL BIOCHEMISTRY - Structure and functions of important biomolecules in living systems.
Prerequisites: Chemistry 12
3 hours a week (1 lec.)
Credit: 3 Units
2. SOILS 21 - FUNDAMENTALS OF SOILS AND FERTILIZER - Soils genesis and classification, nature and properties of soil components; methods of applying fertilizers and economics of fertilization; soil conservation and management.
Prerequisites: Chem. 11
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

D. Others

1. MICRO. 21 - GENERAL MICROBIOLOGY - Principles of Microbiology in relation to agriculture; microbiology of foods and some industrial processes.

Prerequisite: Biology 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

2. AG BOT. 21 - PRINCIPLES OF GENETICS - Laws of heredity and variation; transmission, distribution, arrangement, structure and function of genetic materials.

Prerequisite: Ag. Bot. 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

E. Animal Sciences

1. AN. SCI. 21 - PRINCIPLES OF ANIMAL SCIENCE I - Fundamentals of anatomy and physiology, genetics, reproduction, endocrinology, lactation, digestion, nutrition, growth, environmental physiology and animal health.

Prerequisite: Zool. 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

2. AN. SCI. 22 - PRINCIPLES OF ANIMAL SCIENCE II - Importance and problems of poultry and livestock production; breeds; selection; housing; cultural and management practices; nutrition and marketing.

Prerequisite: An. Sci. 21

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

3. AN. SCI. 24 - ANATOMY AND PHYSIOLOGY OF FARM ANIMALS - Comparative anatomy and physiology of farm animals.

Prerequisite: An. Sci. 21 & Zool. 11

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

II. MAJOR CORE COURSES:A. Common For Both Majors:

1. AN. SCI. 31 - FEEDS AND FEEDING - Composition and use of feeds; formulation of rations; feeding practices; and feed mill operation.

Prerequisite: An. Sci. 22

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

2. AN. SCI. 32 - POULTRY PRODUCTION - Principles and practices in poultry production; brooding, rearing, culling and selection, feeding, including waste disposal and marketing.

Prerequisite: An. Sci. 22

5 hours/week (2 lec., 3 lab.)

Credit: 3 Units

3. AN. SCI. 33 - SWINE PRODUCTION - Principles and practices in

4. AN. SCI. 44 - ANIMAL NUTRITION - Functions and metabolism of various nutrients, and metabolic disorders and nutritional requirements of farm animals.

Prerequisites: An. Sci. 31 and Chem. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

5. AN. HLT. 34 - ANIMAL DISEASE CONTROL - Principles of livestock health and sanitation, epidemiology prevention and control of diseases of farm animals and of immunity.

Prerequisites: An. Sci. 24 and Micro. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

6. AN. SCI. 35 - RUMINANT PRODUCTION - Principles and practices of carabeef, beef and chevon production (Horse 180 Head)

Prerequisites: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

7. AN. HLT. 36 - ANIMAL PARASITOLOGY - Morphology, life cycles and ecology of arthropods, helminths and protozoas and their pathogenesis and control.

Prerequisites: An. Sci. 24
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

8. AN. HLT. 46 - ANIMAL HEALTH AND MANAGEMENT - Management practices, population density and environmental factors affecting animal health.

Prerequisites: Animal Hlt. 34
3 hours/week (lec.)
Credit: 3 Units

B. For Animal Health majors:

1. AN. HLT. 35 - ADVANCED ANATOMY - Gross and microscopic study of organs and tissues of farm animals.

Prerequisites: An. Sci. 24
7 hours/week (1 lec., 6 lab.)
Credit: 3 Units

2. AN. HLT. 37 - SYSTEMS PHYSIOLOGY - Digestive, urinary, endocrine and other systems; body fluids.

Prerequisites: An. Sci. 24 & Chem. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

3. AN. HLT. 38 - PATHOGENIC MICROORGANISMS - Biology and control of common bacterial, fungal, viral pathogens.

Prerequisites: Micro 21
7 hours/week (1 lec., 5 lab.)
Credit: 3 Units

4. AN. HLT. 41 - GENERAL PATHOLOGY - Principles of veterinary pathology; body reactions to etiologic agents; post mortem examination

5. PUB. HLT. 41 - FOOD HYGIENE AND PUBLIC HEALTH - handling of meat, egg, milk and their by-products; food poisoning; zoonoses. Regulations and legislations.

Prerequisite: An. Hlt. 36
4 hours/week (1 lec., 3 lab.)
Credit: 2 Units

6. AN. HLT. 42 - GENERAL VETERINARY MEDICINE - Major diseases of farm animals, differential diagnosis, treatment and control.

Prerequisite: An. Hlt. 34
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

7. AN. HLT. 43 - ELEMENTARY PHARMACOLOGY - Indication and mode of action of common drug preparations and their toxicity.

Prerequisite: An. Sci. 24
2 hours/week (2 lec.)
Credit: 2 Units

8. AN. HLT. 43 - DIAGNOSTIC PROCEDURE - Theories and methods of clinical and laboratory diagnosis; prevention and control.

Prerequisite: An. Sci. 11
3 hours/week (lab.)
Credit: 1 Unit

9. AN. HLT. 99 - UNDERGRADUATE SEMINAR

Credit: 1 Unit

10. AN. HLT. 100/100a - UNDERGRADUATE THESIS/FIELD PRACTICE

Credit: 6 Units

C. For Animal Husbandry Majors:

1. AN. SCI. 34 - LIVESTOCK AND POULTRY PRODUCTS AND BY-PRODUCTS -

Live animal evaluation, inspection and slaughter; fabrication, processing and preservation of meat, egg and their by-products.

Prerequisite: An. Sci. 24 and Micro 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

2. AN. SCI. 37 - PRINCIPLES OF ANIMAL BREEDING - Genetics of livestock improvement; animal breeding plans and artificial insemination.

Prerequisite: An. Sci. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

3. AN. SCI. 38 - DAIRY PRODUCTION - Feeding, care and management of dairy animals, hygienic production of milk.

Prerequisite: An. Sci. 22
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

4. AN. SCI. 39 - LIVESTOCK SELECTION - Evaluation of productive merits of individual animals with emphasis on swine and dairy.

5. AN. SCI. 95 - SEMINAR
Credit: 1 Unit
6. AN. SCI. 100 - UNDERGRADUATE THESIS
Credit: 6 Units
lectives:

1. AN. SCI. 42 - POULTRY MANAGEMENT - Management requirements of various breeds of fowls, turkeys and ducks with reference to housing and ecological considerations.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

2. AN. SCI. 43 - POULTRY BREEDING AND REPRODUCTION - Genetic factors affecting economic traits; physiology of egg production.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

3. AN. SCI. 44 - INCUBATION - Principles of incubation, types and operation of incubators; fertility; embryonic development; hatching and hatchery management.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

4. AN. SCI. 45 - SWINE BREEDING AND REPRODUCTION - Genetic factors affecting economic traits; methods of breeding; physiology of reproduction.
Prerequisite: An. Sci. 32
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

5. AN. SCI. 46 - SWINE MANAGEMENT - Management requirements of various breeds and age of swine with emphasis on housing and ecological considerations.
Prerequisite: An. Sci. 33
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

6. AN. SCI. 47 - FEEDLOT AND RANGE MANAGEMENT - Feedlot and range operations including stocking, feeding, and pasture establishment; soil and water conservation; waste disposal; equipment.
Prerequisite: An. Sci. 35
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

7. AN. SCI. 49 - DAIRY PRODUCTS - Principles of processing milk and milk products; milk industry and markets.
Prerequisite: An. Sci. 38
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

8. AGRON. 44 - PASTURE AND FORAGE CROPS - Production of forage crops; management and utilization of range lands.
Prerequisite: Agron. 21
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

9. AC. SCI. 41 - PRINCIPLES OF ACCOUNTING - Accounting principles as applied to agricultural business.
Prerequisite: Econ. 11
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

10. AC. SCI. 41 - PRINCIPLES OF ACCOUNTING - Accounting principles as applied to agricultural business.
Prerequisite: Econ. 11
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

11. AC. SCI. 41 - PRINCIPLES OF ACCOUNTING - Accounting principles as applied to agricultural business.
Prerequisite: Econ. 11
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

12. AC. SCI. 41 - PRINCIPLES OF ACCOUNTING - Accounting principles as applied to agricultural business.
Prerequisite: Econ. 11
5 hours/week (2 lec., 3 lab.)
Credit: 3 Units

APPENDIX G

PROPOSED BUDGET FOR THE
PROJECT IMPLEMENTING UNIT (PIU)
SUPPORTED BY VISCA

I. SALARY (Contractual)

A. One (1) Technical Staff Head		₱1,500/month
B. One (1) Supervising Engineer		1,300/month
C. Four(4) Resident Inspectors	₱1,200.00 each	4,800/month
D. Two(2) Draftsment	800.00 each	1,600/month
E. One (1) Secretary/Bookkeeper		750/month
	Sub-total	₱9,950/month

II. HONORARIUM

A. One (1) Project Architect		₱1,200.00/mo.
B. One (1) Asst. Project Architect		500.00/mo.
C. One (1) Equipment Procurement Officer		500.00/mo.
D. One (1) Asst. Equipment Procurement Officer		250.00/mo.
E. One (1) Rural Development Sector Officer		500.00/mo.
F. One (1) Technical Assistance Program Officer		250.00/mo.
G. Three (3) Division Heads	₱300.00 each	900.00/mo.
H. Three (3) CBA II Member	300.00 each	900.00/mo.
		₱4,800.00/mo.

III. Transportation and Travel _____ ₱1,200.00/mo.

IV. Supplies and Materials _____ 1,500.00/mo.

V. Sundries _____ 500.00/mo.

GRAND TOTAL/MONTH _____ ₱17,950.00

/QUARTER _____ 53,850.00

/YEAR _____ 214,600.00