

# **MANUAL OF OPERATION FOR RESEARCH**



**MINDORO STATE COLLEGE OF AGRICULTURE AND TECHNOLOGY**

*Victoria, Oriental Mindoro*

2007

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# THE RESEARCH UNIT

## ***HISTORICAL BACKGROUND***

As a mandated function of the State College, Research started as one of the major programs in the institution shortly when RA 8007, an act converting the former Mindoro College of Agriculture and Technology in Victoria, Oriental Mindoro into a state college and named Mindoro State College of Agriculture and Technology took effect on May 25, 1995. On the said year, an inventory of the facilities of the college was made and part of it was identified for research utilization. Corollary to this was the designation by the College President of the first Director for Research in the year 1996 who was at the same time designated also as Director for Extension. Since that time up to the present, the operations of research were coordinated simultaneously with extension activities by the Director for Research and Extension.

Among the significant pioneer research projects undertaken were on rice and on banana. This gave rise to the establishment of what are now income-generating projects on rice seed production and on mass propagation of tissue-cultured banana planting materials in the Main Campus of the college.

With the integration of the two formerly CHED-supervised institutions in the province, namely the Polytechnic College of Calapan and Bongabong College of Fisheries to become campuses of the State College in 2000, research in MinSCAT expanded to include several concerns other than agriculture-based projects which include fishery and technology-based projects in Bongabong and Calapan City Campuses. Likewise, research projects in the Main Campus expanded as well to include agro/forest ecosystems research, education and institutional development studies.

Presently, research operation in the College is spearheaded by the Director for Research and Extension in the Main Campus and a Director for Research each for the Bongabong and Calapan City Campuses. The research organization in each campus is presently evolving into a vital function unit in the college which addresses relevant concerns necessary to realize the vision, mission, goals and objectives set for the welfare and benefit of its clientele and the development concerns of the country as a whole.

## ***PURPOSES AND SCOPE OF THE RESEARCH PROGRAM***

The Research Program is an integral component of the Mindoro State College of Agriculture and Technology which aims on working for the generation / development of priority technologies and information, as well as verification, piloting and commercialization of the technologies resulting to economically feasible, socially acceptable and environmentally sound and technology-based enterprises.

The program essentially operates to realize its primordial task of pushing the frontiers of knowledge in the different academic disciplines offered by the College in accordance with the mandates and to put this knowledge into utilization by the intended clientele

## ***VISION***

By the year 2012, MinSCAT has a well-organized and functional center for research which adheres to the concept of relevance to national thrust and which focuses activities toward generation of knowledge, infrastructure and technologies crucial to economic development.

## ***MISSION***

To contribute to the economic development of Oriental Mindoro by conducting viable and relevant researches in education, agriculture, fisheries, industrial and information technology and their allied areas.

## ***GOALS***

Strengthen research capabilities of the institution in social, technology and agricultural spheres.

## ***OBJECTIVES***

1. To undertake researches in education, agriculture, fishery and technology-related areas for social and economic development in the province of Oriental Mindoro.
2. To establish and strengthen research linkages with various national and international research agencies, either government or non-government organizations.
3. To develop means of communication channels for effective dissemination of generated, variable technologies.
4. To develop means of translating research results for greater productivity to improve the quality of life.

## ***PROGRAMS***

The Research Program shall be working with the development of technologies and informations which have short and long-term impact on the economic, social and environmental welfare of its clientele.

The program components shall cover a range of basic and applied research on agriculture, education, the biological, physical and social sciences.

## **ORGANIZATIONAL STRUCTURE**

The Research Unit of each College Campus shall be a distinct office headed by a Director who shall be designated by the College President / Campus Dean for a specific term without prejudice to redesignation, subject to the confirmation of the Board of Trustees. He / She shall be preferably a doctoral degree holder with an academic rank of at least Associate Professor. He / She must have at least three years of actual research management experience.

Directly under the Office of the Research are the Research Coordinators, representing each academic department in the College. Program / Project Leaders of the different research programs / projects are coordinated in the respective departments.

The Research Management, the head implementers of the policies and programs of the College research function, shall be composed of the Research Director as Chair, with the research coordinators of the different academic departments as members.

A Research Council based in each College campus shall serve as the policy-making body of the Research Unit. It shall be constituted to serve as the clearinghouse of ideas on the research priority-setting, implementation and evaluation of researches. It shall be headed by the College President/Campus Dean as Chair, and the Director for Research as Vice-Chair and the College Research Coordinators as members.

## **DUTIES AND RESPONSIBILITIES**

### **A. Director for Research**

- A.1. Directs planning, implementation and evaluation of research programs and policies to insure the effective development of packages of technologies to help respond to local/regional and national needs; The function of research policy formulation and review is done with the Research Council;
- A.2. Coordinates with other units of the College and/or related agencies to bring about inter program/agency complementation and efficient utilization of available resources through a functional management information system;
- A.4 Represents the Research Unit in appropriate bodies / offices, chairs staff meetings and resolves conflicts based on established policies and sound management practices; and
- A.4. Other duties and responsibilities:
  - A.4.1. Signs the daily time records, application of leave of absence, sick leave, itinerary travel, clearance papers of all Research staff and Project Coordinators
  - A.4.2. Signs financial reports of various research projects

## **B. Research Coordinators**

- B.1 Coordinate programming, planning, implementation and evaluation of research programs / projects in their respective academic department
- B.2 Complements with other units of the College to bring about efficient utilization of available resources and cause continuous enrichment of project activities related to conceptualization of research priorities.
- B.3 Represents the academic department in appropriate bodies, chairs meetings of project staff and resolves issues / problems and
- B.4. Performs other duties and responsibilities as directed / requested.

## **C. Program/Project Leader**

- C.1 Helps Research Coordinator carry out objectives of the research/extension project through the performance of the following duties and responsibilities:
  - C.1.1 Formulates research program/project plans and operational schemes;
  - C.1.2 Provides advice to Research Coordinator on the direction and evaluation of staff performance;
  - C.1.3 Carries out research program / project plans and oversee their full implementation;
  - C.1.4 Identifies problems that may adversely affect the unit's stability and institutes measures to solve or put them under control;
  - C.1.5 Prepares preliminary reports on the research project and helps finalize terminal reports and other write-ups that may be requested;
  - C.1.6 Sees to it that the welfare of the research project staff is properly taken care of; and
  - C.1.7 Observes/evaluates research project staff performance.
- C.2 Attends in-service training programs and participates actively in unit meetings/activities;
- C.3 Chairs meetings as may be assigned; and,
- C.4 Performs other duties and responsibilities as directed / requested.

## **D. Study Leader**

- D.1 Helps prepare research proposals;
- D.2 Conducts experiments/surveys on research priority areas;

- D.3 Carries out plans/proposals specifically assigned to him/her and makes necessary reports on activities undertaken;
- D.4 Supervises enumerators/field workers in the conduct of their activities; and
- D.5 Performs other duties related to the conduct of the research and other jobs as required by the program/project leader.

***E. Research Assistant (Technical)***

- E.1 Assists in the conduct of experiments/studies according to the approved proposal;
- E.2 Provides assistance to the field staff in day-to-day activities and/or problems related to the study and insures smooth communication and relationship between and among other members;
- E.3 Gathers data needed in the project experiment and help analyze and interpret results;
- E.4 Supervises utility workers in the efficient conduct of their activities;
- E.5 Reports to the study leader the status of the experiment and problems encountered;
- E.6 Undertakes solution of problems suggested to them by the study leader;
- E.7 Cooperates with the research team where his/her professional competence is needed; and
- E.8 Performs other duties and responsibilities as maybe required by study/project leader.

***F. Research Assistant (Social Science Research)***

- F.1 Assists in the conduct of socio-economic surveys in study sites based on approved proposal;
- F.2 Gathers, tabulates and analyzes the data needed in the research project and helps in the analysis and interpretation of results;
- F.3 Supervises research aides/enumerators in the efficient conduct of research;
- F.4 Monitors and documents field level activities of farmer cooperators, LGUs, POs and other sectors; and
- F.5 Performs other duties as may be assigned by the immediate supervisor.

***G. Utility Worker***

- G.1 Cleans the research offices / laboratory / experimental areas / nursery / animal barns or shed



G.2 Performs ground maintenance like watering the plants and sweeping the grounds;  
and

G.3 Performs other work assigned from time to time by the immediate supervisor.



## **A. Planning and Implementation Process**

The Research planning and implementation process involves the following:

- A.1 *Studying the environment* – Program planning which is done by Research management starts with the analysis of the forces and conditions relevant to the Research programs. Such forces include internal environmental factors as institutional capacity, structure, support systems (financial and administrative) and organizational management.

Major consideration of the external factors focus on the political and national policies, laws and procedures of the government as well as the development programs of National Economic Development Authority (NEDA), Department of Agriculture (DA), Department of Science and Technology (DOST), Department of Environment and Natural Resources (DENR) and Commission on Higher Education (CHED).

- A.2 *Setting of priorities* – In setting the Research priorities and agenda the Research Department should consider institutional mandates as well as the regional and national research agenda. It should also consider the information and feedback from various agencies and sources such as:

*National Agencies.* The national priorities set by various agencies are usually referred to and serve as basis for setting the Research priorities and agenda of an institution of higher learning. These include the DOST, Science and Technology Agenda for National Development (STAND), the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development's (PCARRD), Medium Term Research and Development Plan for Philippine Agriculture and Natural Resources; CHED, National Higher Education Research Agenda 1998-2007, DA, National Agricultural Research and Extension Agenda (NAREA), and DENR Medium Term Research plan.

*Regional Agencies.* Regional priorities in agriculture and natural resources of the various agencies in the region are also important bases in setting priorities in Research.

*Local Government Units.* Aside from the above, the institution should be sensitive to the priorities set by various local government units in the province and the region, in particular, and the nation, in general.

*Other Funding Agencies.* The institution should also maintain close collaboration with various national and international funding agencies. Through their Research & Extension grants the facilities of the College and the competence of its manpower can be improved.

- A.3 *Translating Priorities into Action Plans and Research Proposals*

Once the priorities are set, translating them into action plans follows. The Research Division and the specialized centers prepare an action plan with their corresponding proposals. The prepared proposals are submitted to the Office of the Director for Research for review, consolidation and further study by the College

Research Council before endorsement by the Office of the President to appropriate funding agencies.

#### *A.4 Preparing Capsule Research Proposal*

Generally, proposals are reviewed on the basis of the following:

- ◆ adherence to set priorities
- ◆ non-duplication
- ◆ adequacy, clarity and attainability of objectives
- ◆ soundness of methodology as it relates to objectives (the methodology should be adequate, should contain the details of experiment and the variables/ indicators should be clearly stated)
- ◆ workability of task schedules based on methodology
- ◆ reasonability of budget estimates relative to scope of work

#### *Capsule Proposal Format*

- I. Research Title
- II. Name of Proponent
- III. Proponent's Academic Department / Discipline
- IV. Rationale of the Study
- V. Objectives of the Study
  - General
  - Specific
- VI. Expected Outputs
- VII. Duration / Time Frame
- VIII. Cost (Total Budgetary Requirement)

### ***B. Technology Development Process***

According to PCARRD of the DOST, the technology development process is composed of five major phases. These are technology generation, verification, adaptation, dissemination and commercialization (PCARRD Highlights 2001, 1997 and 1995).

*B.1 Technology Generation (TG).* This is the scientific and experimental stage wherein a Research center utilizes all its resources human/technical, financial, material, physical and other resources to generate a component technology or a package of technology.

*B.2 Technology Verification (TV).* A technology is classified for verification if it can be incorporated in a package of technology that has potential for improving existing farmers' practices. Specifically, it should satisfy the following:

B.2.1 It is an integrated technology conducted in the farmers' fields;

B.2.2 It has been tested for two seasons in TG trials;

B.2.3 It has shown economic and technical feasibility in TG trials. Its computed return based on TG trial is better than that of farmers' practices as shown by marginal rate of return (MRR); and

- B.2.4 It is perceived to be socially acceptable and environmentally safe.
- B.3 Technology Adaptation (TA).** A technology is classified as technology for adaptation if it meets the following criteria:
- B.3.1 It is conducted in the station or the farmers' field and is only a component of technology;
  - B.3.2 It has been tested for TG research for at least one season;
  - B.3.3 It has shown good potential for economic feasibility as based on TG research; and
  - B.3.4 It has good potential for acceptance by intended end users.
- B.4 Technology Dissemination (TD).** This is the stage when promoters of technologies can use varied approaches and methods in bringing technologies to end users. Technologies are ready for dissemination if these have met the following criteria (PCARRD Highlights 2001):
- B.4.1 General adaptability – these are replicable under field conditions;
  - B.4.2 Economic profitability – their percent of profitability is equal to the prevailing rate of interest on loans of formal financial institutions. Profitability also considers social costs and benefits;
  - B.4.3 Social acceptability – these do not contradict social norms and values prevailing in the community; and
  - B.4.4 Potential availability of support services – users have access to market, credit facilities, material inputs and others.
- B.5 Information for Dissemination (ID).** Research Division generates information not technologies, but they are very useful in the world of work. Information that is products of research is important to agricultural and rural development. Information for dissemination can be of help in the following:
- B.5.1 Possess significant social and economic implications associated with technology adoption;
  - B.5.2 Contribute to a better understanding of research problems;
  - B.5.3 Offer information gaps in basic knowledge of agriculture, forestry and natural resources; and
  - B.5.4 Help policy makers formulate policies in food, agriculture and natural resources.
- B.6 Technology Commercialization (TC).** Technologies that have successfully passed the piloting stage, or have passed the criteria for piloting, or have not been piloted

yet, but have high potential for commercialization are considered priority technologies for commercialization.

Technologies are selected based on the following criteria:

- B.6.1 Provide the best alternative for improving income and productivity of a greater majority of people; and
- B.6.2 Provide immediate solutions to self-sufficiency problems, environmental sustainability, import substitution, export generation and promotion of alternative sources of food.

### **C. Equivalent Teaching Load**

The different programs under Research may have distinct and separate plantilla positions composed of faculty and non-academic staff. Faculty/Staff from other departments and offices in the College are also encouraged to get involved in Research activities.

However, every faculty must have a mother unit where he/she can be identified. His/Her involvement in research functions must be approved by the head of the mother unit to gain legitimate equivalent teaching load (ETL). Appropriate designation shall be issued to each faculty indicating the ETL.

#### *Equivalent Teaching Load (ETL) of Various Positions under the Research Program*

Position/Designation	ETL
Director	12
Program Leader	6-8
Project Leader	4-6
Study Leader	3
Laboratory in-charge	3

### **D. Incentive Schemes**

#### *D.1 Honoraria*

Honorarium is a form of remuneration for services rendered beyond the minimum regular workload of an individual whose broad and superior knowledge, expertise or professional standing in a specific field contributes significantly to scientific and technological research and development (PD 1502 and Accounting and Auditing Manual for Research Operations (AAMRO Book 1). It is an honorary payment or reward given as compensation for services rendered by officials/employees on assignment to special projects (OCPC CPG No. 80-4, Aug 7, 1980, implementing LOI No., dated June 30, 1977). For this purpose special project is an inter-agency or inter committee activity, or an undertaking by an individual or a composite group of officials/employees from various agencies which is not among the regular primary functions of the agency concerned.

The granting of honoraria/incentives to researchers, technical and support personnel is provided to encourage productivity and acknowledge extraordinary performance and efficient delivery of services and output in the College.

#### D.1.1 Coverage

Honorarium is paid to a government official or employee or to a private individual who is involved in the conceptualization of studies, projects or programs and in the implementation and coordination of Research activities, or rendition of advisory , administrative and/or management functions in the conduct of Research activities.

Researchers and technical support personnel authorized by the agency head who render therein shall be entitled to honorarium/incentive pay. Technical personnel shall also include accountants and personnel whose technical expertise in their own field of specialization is required. On the other hand, support personnel shall include, but not limited to clerks, typists, drivers and other of similar or equal rank as determined by the agency-head on a case to case basis.

Officials and employees assigned to special activities (task forces, study groups, teams, technical review panels, committees and consultancy group) which are beyond their normal workload shall be entitled to honorarium or incentive pay, provided that such funds have been allocated in the budget or made available through grants/donations, or income from outside sources.

#### D.1.2 Rates

Honorarium/incentive pay must be provided in approved line item budget except in special assignments. In cases where specific provisions of rates of honorarium are stipulated in the MOA/MOU for project with foreign funding, the terms of the contract shall be followed. Payments of honorarium/incentive for project staff and other personnel concerned shall be made only after the targeted milestones are attained or after six months of project completion for activities of projects whose duration is less than six months. Payment for committee work may be based on actual performance of work.

#### D.1.3 Limitations/Exemptions

No honorarium shall be paid regardless of the source of fund without prior approval by the head of the agency. Such authority to receive honorarium shall be expressly stated in a special order signed by the head of the agency.

No individual may be entitled to receive honorarium/incentive pay in more than one project/study/activity within the program or project. In case where the individual is assigned/designated in more than one study/project/activity within each project/program, he/she shall receive only the highest honorarium/incentive pay.

## *D.2 Incentives for Authors of Published Research, Scientific, Scholarly Works and Books*

The granting of fair incentive can be provided to encourage the publication of research, scientific, scholarly works and books by faculty and staff members aside from the self-fulfillment the author gets for the publication of his work.

## *D.3 Merit System for the Scientific Career System (SCS)*

D.3.1 Qualified and deserving faculty and staff involved in research can be recommended to avail of the Merit System for the SCS established within the Civil Service pursuant to Executive Order No. 784 dated 17 March 1982. The SCS was organized on 19 July 1983 with the issuance of Executive Order No. 901. The establishment of the SCS was further reinforced by Section 4 of R.A. 8439 entitled "Magna Carta for Scientists, Engineers, Researchers and other Science and Technology Personnel in Government".

D.3.2 One of the objectives of the Merit System is to provide a system of rewards and recognition for outstanding career scientists to insure their continued service in scientific R and D in government.

D.3.3 Under the SCS, researchers can be conferred with a rank to the extent they meet the minimum qualifications as follows:

D.3.3.1 Scientist I to IV – completion of master's degree in the appropriate field of science and ten (10) years of productive scholarship and professional Research work or a doctoral degree and five (5) years of productive scholarship and professional Research work.

a. Scientist I must garner at least 50 points in scientific productivity (productive scholarship and professional R and D work) measured in terms of (a) scientific findings, technologies, discoveries, inventions, major research papers, book articles, etc. and, (b) acceptance of scientific findings, inventions discoveries and technologies as evidenced by citations and acceptance by end users.

b. Scientist II must garner at least 60 points in scientific productivity

c. Scientist III must garner at least 70 points in scientific productivity

d. Scientist IV must garner at least 80 points of scientific productivity.

D.3.3.2 Scientist V – Completion of doctoral degree in appropriate fields of science and ten (10) years of productive scholarship and professional R and D work beyond the doctorate degree. He/she must garner at least 90 points in scientific productivity.



D.3.3.3 Conferment requires that the scientist-applicant is given the minimum point-score for the rank by each rater.

Under exceptional circumstances such as awards to Filipino scientists by internationally recognized award giving bodies, by unanimous agreement, the Scientific Career Council (SCC) may confer a rank to the scientific personnel.

D.3.4 The rate of compensation, fringe benefits and allowances in the SCS shall be in accordance with existing laws. The agency concerned shall pay the salary, allowances and fringe benefits of the scientist. The SCS shall establish a system for providing additional incentives to scientists subject to the availability of funds and existing accounting and auditing rules and regulations.

After being conferred with a SCS rank, the scientist is entitled to receive the salary grade (SG) corresponding to the rank as follows:

Scientist I – SG 26  
Scientist II – SG 27  
Scientist III – SG 28  
Scientist IV – SG 29  
Scientist V – SG 30

### ***E. Monitoring and Evaluation***

Monitoring and evaluation of ongoing and completed Research projects are important tools in seeing to it that resources invested to such projects are used efficiently and effectively. Evaluation activities should be included at various phases in the design and implementation, and completion of a project whether it is funded from external or local sources. Evaluation activities are usually organized at various phases in a project, namely:

- E.1 Ex ante or before implementation* – to identify and define a potential project and appraise its likely results. This requires identification of a problem that the project will aim to alleviate, and an assessment of the environment within which the project will be implemented.
- E.2 During implementation* – to monitor project activities as they are being implemented or at least to make periodic checks that implementation is covering planned activities. Monitoring includes field evaluation, agency in house reviews and integrated reviews.
- E.3 Ex post or after completion* – to demonstrate that the objectives of the project have been achieved as planned or to verify whether the project led to the expected impact on the people who were to benefit from it.

Monitoring and ex-post evaluation suppose that there is a clearly identifiable activity or set of activities with specified expected results, a time frame and measurable standard of accomplishment. Monitoring of ongoing projects confirms that activities are being implemented as planned. Bottlenecks and problems are identified as they emerge and are corrected before causing too much

damage. It keeps the manager aware of what is being achieved and facilitates management's task of noticing unexpected effects and problems so that implementation plans can be revised. It is possible that changes have to be made during the implementation stage or after completion, such as addition of an experiment and addition of a pilot village or survey site.

Evaluating a completed project confirms whether the activities did or did not lead to the expected results. It also seeks to explain what in the way the activity was designed and implemented, facilitated or hampered in reaching the desired results. It is therefore necessary, as with monitoring, that the activity be clearly identifiable, with well-defined expected results against which actual results can be measured.

The evaluation of a completed research activity can go one step further to demonstrate the impact of the results on the people who are expected to benefit from it. In this case, the evaluation goes beyond the activity as originally planned to see if the reasoning underlying the activity was correct and to estimate the contribution of research to development.

Monitoring is generally aimed at:

- a. Determining the status of projects to ensure that progress and output are in accordance with plans;
- b. Assessing project resources to determine if these are being used efficiently and effectively and are available at the right time in the required amount;
- c. Promoting coordination among participating agencies by disseminating information on the scope, schedules and problems of on-going projects;
- d. Providing necessary feedback in project control so that prompt corrective measures can be instituted when required; and
- e. Providing feedback necessary in planning and evaluation of projects.

## ***F. Monitoring and Evaluation Methods/Tools***

*F.1 Regular Meetings.* Offices should conduct weekly or monthly meetings so that problems can be given immediate solutions.

*F.2 Field evaluation.* Field evaluation consists of regular visits to experimental sites at specific dates. An evaluation team conducts these visits to discuss with the researchers the progress of project implementation. Field evaluation schedules can be synchronized with the quarterly meeting of the Regional Technical Working Group (RTWG) of the regional consortium or the Regional RD and E Network. It has the following objectives:

- a. To observe the actual conduct of the experiment, particularly in terms of methodology;

- b. To verify information contained in technical and financial reports;
- c. To recommend alternative courses of action to improve project performance; and
- d. To consult with researchers on the possibility of undertaking other priority projects.

*F.3 Agency In-House Review.* The agency in-house review (AIHR) is conducted annually to assess the attainment of objectives of the college/university's completed and on-going Research projects; to identify problems met during project implementation and recommend specific courses of action to these problems; to update the College's Research plans; to identify new researchable areas, generated technologies requiring field testing, verification and piloting; and to identify mature and potential technologies ready for packaging, dissemination and/or significant information for policy formulation and development planning of the agency.

*F.4 Regional Integrated Review.* This is the second level review conducted annually by PCARRD through the regional consortium. Significant breakthroughs or technologies and information for dissemination identified in the agency in-house reviews are elevated in this regional integrated review.

This activity aims to:

- a. Identify significant Research breakthroughs which could be widely disseminated in the region;
- b. identify technologies or significant information for policy planning; and
- c. formulate regional Research framework plans.

#### *F.5 Report Requirements*

##### *F.5.1 Progress/Terminal Reports*

After completion of the projects, submission of terminal reports should be strictly enforced. The following guidelines may be observed:

- a. On the last quarter of implementation, the Office of the Director for Research should send reminders to program/project leaders to submit their terminal reports.
- b. Terminal reports are expected to be submitted to the Office of the Director for Research two months after project completion. This in turn should be immediately submitted to PCARRD in compliance with PCARRD Administrative Order 143-e Series of 1996.
- c. The Office of the Director for Research should not entertain proposals from researchers with pending terminal reports.

d. Completed Research projects are published in the College Research Journal. This is a bi-annual publication of the Research Unit catering to completed and ongoing research projects with significant information and the winners of the best graduate and undergraduate theses.

e. Researchers shall be encouraged to submit manuscript in publishable form.

#### F.5.2 Accomplishment Report

Research Division should submit their accomplishment report featuring the significant Research activities/events implemented during the period in review.

### **G. Students' Involvement in Research**

#### *G.1 Access/Use of Research Facilities*

The Research facilities should be under the supervision and management of faculty with plantilla item, preferably those with regular teaching loads.

G.1.1 Students can use the facilities with some minimal fees.

G.1.2 The Research facilities can also be used to serve the farmers' laboratory test needs and needs of private/commercial establishments with appropriate payments whenever available.

#### *G.2 Undergraduate and Graduate Thesis Support*

Students can be junior researchers and can be involved as part of big Research programs and projects. Financial or material supports are granted if funds are available.

G.2.1 Objective:

a. To strengthen students' research capabilities by providing graduate and undergraduate thesis financial assistance.

G.2.2 Criteria for Application

a. Graduate and undergraduate students of the College with an approved thesis outline can apply for thesis support.

G.2.3 Guidelines for Availment

a. The thesis should be in line with the existing research thrusts/priorities of Research.

b. In case the thesis is not in line with the research thrusts of Research, the following criteria will be considered:

- b.1 Importance to national development considering its social, economic and environmental impact;
- b.2 Originality (done by the students themselves); and
- b.3 Urgency in terms of the college's needs.
- c. The college research coordinator in consultation with the department chairperson selects the entries for their corresponding colleges.
- d. The thesis proposals are then submitted to the Research Office on or before the following schedules:
  - August – thesis to be conducted during the second semester
  - February – thesis to be conducted during the first semester
- e. Submitted proposals are then referred to the concerned divisions of the Research Office for review. The research division chiefs designate a research council to be composed of three members (division chief as chairman and two members who are experts on the concerned field as members).
- f. The Research management team together with the college research coordinators finally reviews and approve the thesis to be funded.
- g. Only two students per semester (one graduate and one undergraduate) who are on the stage of conducting their theses could avail of the financial support.
- h. Each student is entitled to a thesis support in the form of supplies and materials with a maximum amount of P 5,000.00 per semester.
- i. Upon approval, a written memorandum of agreement is signed by the student, thesis adviser and the Director for Research.
- j. After the completion of the research, students are required to submit two (2) copies of the manuscript to the Research Office.

### *G.3 Search for Best Graduate and Undergraduate Theses*

#### **G.3.1 Objectives:**

The main objective of the search is to encourage students to develop outstanding thesis/dissertation by giving incentive to their work.

Specifically, it aims to:

- a. select one outstanding thesis each for the undergraduate level and graduate level; and
- b. provide certificate of recognition to students with outstanding thesis.

### G.3.2 Mechanics of Implementation

#### a. Who May Join?

Theses of all graduating undergraduate/graduate students can be considered for the best thesis award. These include all science and non-science undergraduate and graduate theses. However, theses which are part of any on-going government and non-government funded researches are not eligible in the search.

Selection is done sequentially in three levels, namely:

- Department Level

Every department screens students' theses during the final defense. For the undergraduate level, the selection committee, composed of the chairman and the members of the faculty, selects one outstanding thesis for the department.

For the graduate level, members of the advisory committee recommend potential candidates to the department where the students belong. The selection committee, composed of the chairman and the faculty members, then selects one outstanding thesis/ dissertation for the department.

Those selected for each department in the undergraduate and the graduate levels are submitted to the head of the screening committee in the college and Graduate School, respectively.

- College/Graduate Level

From all nominees in each department, the selection committee composed of the dean, the department chairpersons and the college research coordinator selects one outstanding undergraduate thesis for the college.

For the graduate level, the selection committee, composed of the dean and chairpersons, selects the best Master's thesis for each graduate degree program.

- Final Selection Level

The best thesis for each college and graduate programs are then submitted to the Director for Research for final screening.

All nominees from each college are evaluated by a screening committee composed of the Research management team and the college research coordinators.

b. Requirements for Participation

The following are submitted to the chairman of the final screening committee (the Director for Research) not later than three working days before the meeting of the Academic Council to approve the candidates for graduation:

- one (1) copy of the final manuscript; and
- five (5) copies of the abstract and the summary, conclusions and recommendation.

c. Criteria for Selection

The following are the criteria for the selection of the best thesis award.

	Weight (%)
I. Originality (student's original proposal)	30
II. Organization (validity of approach and reliability of results)	30
III. Relevance/Significance (potential contributions to countryside development considering its social, economic and ecological impacts)	40
TOTAL	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 100

A cut-off point of 85 percentile for undergraduate level and 90 percentile for graduate level for the above criteria are maintained during the final selection. The candidate(s) receiving the highest point which is equal or above the cut-off point are considered winners.

d. Incentives

- All college nominees for the best thesis are given a certificate of recognition.
- The selected best theses are immediately published in the Research Journal of the College

## **H. Policies and Procedures**

### *H.1 Designation of Program, Project or Study Leader*

- a. Proponents of approved and funded proposals are automatically designated as the research leader. If for some reason, one or two of the original proponents will no longer be available at the time of implementation, qualified personnel from Research or other academic units can be considered. Recommendation for replacement can be made by the Director for Research in consultation with the concerned Research/Project leader. Said recommendation is to be endorsed to the College President who in turn should issue the appropriate designation.

- b. Personnel with academic or non-academic designation (research assistant) or equivalent can be designated as: a) program/project leader, provided that he/she has at least an MS degree with two years of research experience; or b) study leader, provided that he or she has a BS degree with at least three years of research experience.
- c. Designation of personnel from other units should be cleared with the heads of concerned unit.

## *H.2 Designation of Officer In-Charge*

- a. For short duration of absence/official business (OB)/travel (one month or less)
  - Designation is done by the officer concerned, copy furnished the proper authorities
- b. For longer duration of absence/OB/travel (more than one month)
  - Designation is done by higher authority upon recommendation, if possible, of the officer concerned.

## *H.3 Hiring/Termination of Personnel*

- a. For project personnel (research assistants, aides, laborers)
  - After thorough review / evaluation the project / study leader can recommend the hiring or termination of personnel to the Director for Research.
  - The Director for Research issues the designation / termination notice to the personnel concerned.
- b. For personnel with academic rank
  - A committee, composed of the Director for Research and Research Coordinators, screens and recommends the personnel for hiring/termination and endorses to the Office of the College President for appropriate action.

## *H.4 Promotion of Personnel*

- a. Program / project / study leader recommends to the Director for Research personnel for promotion based on evaluation/promotion criteria.
- b. Promotions committee of the College screens and recommends personnel to the College President.

## *H.5 Workload*

- a. Research personnel with academic rank should carry a minimum teaching load per semester with equivalent contact hours per week (CHW) of 9/semester. The normal workload is 18 CHW. As per College policy, honorarium shall be allowed only after the personnel have met the normal workload.



- b. Academic personnel who have not met the minimum required teaching load should inform his/her immediate supervisor so that additional assignment can be given either by the office or in other units of the college to attain the normal workload.
- c. Teaching assignments other than the regular ones requested by the academic units should be coursed through the Director for Research. Decision will be arrived at upon discussion with the faculty member concerned and his immediate supervisor.
- d. Researchers should also observe the maximum limit of workload which is equivalent to 30 CHW.

#### *H.6 Use of Equipment and Supplies*

A Designated equipment / supply keeper detailed in the Research Office shall take charge and monitors use of equipment and supplies in the Research Department. As required, personnel should sign in a logbook for equipment/supplies borrowed/withdrawn

#### *H.7 Checking of Attendance and Signing of Daily Time Records (DTR)*

The Director for Research signs the daily time records (DTR) of all program / project / study leaders, RAs, utility workers / laborers and clerical staff under the Research Unit.

#### *H.8 Problems and Grievances*

All problems and grievances should be tackled first within the unit before these are elevated to higher authorities.

### ***I. Guidelines in the Use of Facilities***

#### *I.1 Persons who can Use the Research Laboratory Facilities and Experimental Area*

##### *I.1.1 Research Staff/Personnel*

A request form must be properly filled up by the personnel intending to use the laboratory facilities subject to the approval of the concerned director in consultation with the laboratory/facility in-charge.

##### *I.1.2 University Faculty/Students*

- a. Faculty members and students from other units are allowed to use the Research laboratory facilities and experimental area upon recommendation of the major adviser and approval of the concerned director in consultation with the laboratory/training facility in-charge.
- b. Undergraduate and graduate classes from other units may only be allowed in the Research laboratory upon request of the department chairman subject to the approval of the Director for Research.

- c. Students are not allowed to use any of the laboratory equipment without the assistance/strict supervision of the laboratory in-charge.
  - d. Students undertaking laboratory work are required to provide their own chemicals/reagents and other materials needed.
- I.1.3 Non-College Personnel Including Regional Consortium Member Institutions
- a. They are only allowed to use the laboratory facilities upon request of the head of the agency and approved by the College President and DRE.
  - b. The use of any laboratory facility is only allowed with the supervision of the laboratory in-charge.

### ***J. Linkages and Fund Sourcing***

Funds for Research operations given by the DBM to SUCs are usually limited and thus, oftentimes the management relies heavily on external support. This necessitates the preparation and submission of research proposals to local, national and international funding agencies/ organizations.

- J.1 Local Linkage.* Within the College, the faculty and staff involved in Research must have good working relationship since they usually complement each other. The Research should in itself be a unifying mechanism to ensure that all the efforts of its manpower are in concert to create impact to target communities.

The College must likewise establish a viable linkage with the Provincial Government where the College is located since the province is considered as the immediate impact zone of all its Research programs and activities.

The municipal/local government units within the province can very well serve as partners in the whole technology development process i.e. from technology generation to commercialization. Oftentimes, they rely on the innovations/ technologies from SUCs to uplift the economic and social life of the people within its areas of jurisdiction.

- J.2 National Linkage.* National government agencies involved in RET like Department of Agriculture (DA), Bureau of Agricultural Research (BAR), Bureau of Fisheries and Aquatic Resources (BFAR), Bureau of Postharvest Research and Extension (BPRE), Philippine Carabao Center (PCC), National Irrigation Administration (NIA), Philippine Rice Research Institute (PhilRice), DA-Agricultural Training Institute (DA-ATI), Department of Science and Technology (DOST), Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD), PCAMRD, PCIERD, Department of Environment and Natural Resources (DENR), Department of Education (DepEd) can be tapped either as collaborating or funding agencies. Regional offices of these national agencies can be consulted and partnerships can be established. For instance, there are 14 national research and development consortia throughout the country under the realm of PCARRD and these consortia have viable mechanism for planning and administering RET in the region.

*J.3 International Linkage.* Offshore linkages can also be established to provide the research faculty and staff with opportunities to work with their international counterparts/agencies. Innovations and technologies generated as a result of this collaborative undertaking may find significance not only in the Philippines but for other countries as well.

# Research Organizational Chart

