

### BULACAN AGRICULTURAL STATE COLLEGE

### **IDEOLOGY**

The Bulacan Agricultural State College upholds integrity and dedication as its prime virtues, elicits personnel's and students' best potentials, advocates academic excellence at all times, and performs as a solid arm of the national government in its agricultural development goals.

### **PHILOSOPHY**

The Bulacan Agricultural State College believes that paramount to achieving holistic excellence is the implementation of output-based and realistic policies translated into execution of development strategies of every unit of an institution to impart significantly in its overall success as a service-oriented organization .

### **VISION**

The Bulacan Agricultural State College as an outstanding higher education institution in the nation with its provision of affordable and exc ellent education.

### **MISSION**

The Bulacan Agricultural State College shall strive for excellence in Agriculture and other allied disciplines. It shall provide for and address ever-changing educational needs and services for those seeking to expand their intellectual horizons. It shall address national and international issues and be established as a major presence and contributor to the progress of the global community.



### RESEARCH, EXTENSION AND TRAINING

### VISION

An organization delivering quality and excellent services for technology generation and promotion, improved productivity, increased income and enriched environment.

### **MISSION**

RET Office shall uphold people empowerment and strengthen its resource-generation capabilities to develop and promote technologies that would contribute to a better life and a well-managed environment.

#### GOALS

- 1. Deliver quality and excellent services to clienteles.
- 2. Develop appropriate technologies, processes and systems for improved productivity and enriched environment.
- 3. Provide appropriate services that would enhance manpower competencies and increase productivity and income.
- 4. Showcase research outputs as income-generating technologies.

### **OBJECTIVES**

- 1.To develop human resource and project management capabilities, and encourage student participation to RDEP activities.
- 2.To improve research teaching process and management for effective technology utilization, efficient environmental conservation and increased productivity.
- 3. To promote, package and pilot technologies for wide scale adoption and commercialization for manpower advancement and institutional development.
- 4. To propagate technologies as an effort to help uplift living condition in the community.

## THE RESEARCH, DEVELOPMENT & TECHNOLOGY MANAGEMENT OFFICE

### INTRODUCTION

The Bulacan Agricultural State College (BASC), as part of its mission, aims to engage in basic and applied research projects and activities addressing educational, management, systems, information and agricultural problems in its service areas. College policies on intellectual property will be used by the researchers as their guide in protecting research outputs that have potential for commercialization.

Research and intellectual property must come together in attaining the RET Office goals and objectives. Research to be functional and effective must be responsive and geared towards the vision-mission-goals of the College especially in the advancement of quality instruction, training and extension. It shall support the indigenous, appropriate and self-reliant, scientific and technological capabilities and their application to the country's productive system and national life.

BASC is mandated by Presidential Decree No. 609 to enhance basic and applied research projects and activities with its aim to solve educational, agricultural and community problems as a whole. It was in this context that the Research and Intellectual Property Unit (RIPU) under the Research, Extension & Training (RET) Office of BASC was established in 1998 and became the Research, Development & Technology Management (RDTM) office in 2009.

The RDTM is headed by a Director supported by program leaders, project in-charge, institute coordinators and technical and support staff.

The RDTM focuses on promoting scientific and technological programs and projects for technology generation, technology transfer and utilization, and protecting the intellectual property of the researchers. Likewise, it is directed in strengthening technological and agricultural education. Thus, program planning in research is being done in the office to identify directions and match this with the available resources and capabilities of the College.

Toward this end, the research, development and technology management of BASC has clearly defined its direction in terms of vision, mission, thrusts, organization and the implementing mechanisms to realize its programs, projects and activities.

PART 1. RESEARCH AND DEVELOPMENT THRUSTS AND PRIORITY CONCERNS, STRATEGIES OF IMPLEMENTATION, COMMODITY THRUSTS, COMPOSITION/ORGANIZATION AND FUNCTIONS

### A. Research Thrusts and Priority Concerns

The objectives of the office are achieved through proper

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planning, coordination and implementation strategies and programs. In setting strategies, available resources, potentials, issues and constraints which affect results or outputs are considered.

The following are in consonance with the changing needs and demands, location-specific problems and technological advancements:

1. Strengthen the Agricultural Research Program and other Initiatives

Focusing on major research programs namely, (1) Contribution in rice self sufficiency, (2) Production of quality vegetables and fruits, (3) Intensification of research on animal and aquaculture production, (4) Social researches as benchmark of improving services delivery and (5) Watershed management. These programs shall serve as basis for project preparation, evaluation, programming and allocation. It also includes projects to be supported by external funds coming from PCAARRD, DA, DA-BAR, CHED, NEDA and other funding sources both local and foreign.

2. Enhancing Commercialization of Matured Technologies.

Continuing efforts of assessing needs and existing technologies, establishing or piloting research projects which will serve as show window of the College and commercialization of matured technologies will make possible smooth flows in the technology transfer and avoid costly mistakes in promoting inappropriate technologies. It is necessary to verify or validate existing technologies based on general adaptability, economic profitability, social acceptability, environmental safety and potential availability of support services.

3. Establish Linkages or Networking

Tie ups or linkages with national or international

organizations or institutions, local government units (LGU's), private business and industry sectors, and non-governmental organizations to provide financial support and data or information sharing are established.

4. Improvement of Research Facilities

Upgrading, modernizing and purchase of state-of-theart facilities will make research more efficient, effective and responsive to the needs of the service clientele.

5. Human Resource Development

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San Ildefonso, Bulacan

#### ACKNOWLEDGEMENT RECEIPT

This is to acknowledge receipt of one (1) copy of the manuscript of			
(Name of	Student)	(Course)	
with his/her thes	is/dissertation entitled		
Office	Name	Signature	Date

An adequate, competent and capable manpower directly involved in research activities is organized and continuously trained and developed.

### **B.** Strategies of Implementation

- 1. Participate in identifying regional research priorities which should be integrated with national agricultural programs and bring these to the attention of policy-making bodies such as PCAARRD, DOST, DA, DA-BAR, PhilRice, CHED and NEDA.
- 2. Conduct studies on socio-economic profile of the region to understand better the problems of agro-industrial production and rural communities.
- 3. Integrate student researches into the overall research program of the College.
- 4. Develop system of documentation of research activities, publication and dissemination of research results and provide for exchange of information among agencies in the country and in the region.
- 5. Conduct regular conferences or interactions among researchers and extension workers to relate research programs to extension programs.
- 6. Formulate and regularly update research agenda on priority areas which will serve as reference in preparing proposals for implementation in crops, livestock, forestry, engineering, information communication technology, social science researches, veterinary medicine, alternative sources of energy, food and feed processing, and the like.
- 7. Conduct research in-house review as an evaluation activity and documentation of research outputs.
- 8. Monitor and evaluate research activities regularly to minimize problems in implementation.
- 9. Maintain and improve technical laboratories and services to cater the needs of researchers in the academe, government and non-government institutions and entrepreneurs.
- 10. Coordinate closely with other research agencies and researchers in the region.
- 11. Generate and coordinate interdisciplinary research programs.
- 12. Establish linkages with local, national and international funding agencies.
- 13. Generate resources through packaging of fundable research project or program proposals for submission to funding

institutions or organizations.

### C. Commodity Thrusts

The RDTM under RET Office is an arm of the College mandated to perform one of the three-fold functions of the College, that is conducting relevant researches towards solutions to problems affecting farmers, entrepreneurs, housewives and other individuals with the aim of improving agricultural productivity and increasing income. The office, through the years, endeavoured to conduct researches with the meagre annual budgetary allocation to pursue its research functions that focused on the following commodity thrusts and priority program areas:

- 1. Priority Commodities
  - 1.1 Rice
  - 1.2 Bittergourd
  - 1.3 Goat & Carabao
- 2. Focus R & D Programs
  - 2.1. Contribution in Rice Self-sufficiency (Rice Production in Water Scarce Areas)
  - 2.2. Production of Quality Vegetable & Fruits
  - 2.3. Intensification of Research on Animal & Aquaculture Production
  - 2.4. Watershed Management
  - 2.5. Social Researches as Benchmark of Improving Services Delivery
- 3. Other Research Initiatives
  - 3.1. Corn
  - 3.2. Legumes
  - 3.3. Agro-Industrial Wastes Recycling and Utilization
  - 3.4. Agro-biodiversity
  - 3.5. Soil and Water Conservation
  - 3.6. Upland and Dryland Agriculture
  - 3.7. Production and Post-Production Facilities
  - 3.8. Information Technologies
  - 3.9. Administrative Management
  - 3.10. Water Resource Development
  - 3.11. Product Development (Meat, Milk, Vegetables, Fish)

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# Republic of the Philippines **BULACAN AGRICULTURAL STATE COLLEGE**San Ildefonso, Bulacan

#### SUMMARY SHEET FOR ORAL EXAMINATION

Name of Student Researcher:			
Degree Sought: Major:			
Thesis/Dissertation Title:			
Date of Oral Examination: _			
Place:			
Adviser:			
Final Grade:			
Examination Committee	Examinee's Rating	Signature	
1.			
2.			
3.			
Remarks:			
Chairman, Examination Cor	mmittee Thesi	s/Dissertation Adviser(s)	
	Institute Dean		

*Note:* The adviser has the responsibility to encode the final grade and submit the same to the registrar's Office.

### Republic of the Philippines

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Name o	of Student Researcher:	
Degree	Sought:	Major:
	Dissertation Title:	
	f Oral Examination:	
Place: _		
	CRITERIA	RATING
I. Manı	uscript	
	<ul><li>A. Timeliness</li><li>B. Depth/Breath</li><li>C. Impact/Significance</li><li>D. Format and Style</li></ul>	10% 20% 20% 10%
	Sub-total	60%
II. Defe	ense	
	A. Mastery of the Study B. Quality of Answers/Organization/I C. Communication Skills/Articulation	
	Sub-total	40%
	Grand Tota	al 100%

# PART 2. RESEACH, DEVELOPMENT AND TECHNOLOGY MANAGEMENT UNIT COMPOSITION OR ORGANIZATION AND FUNCTIONS

### A. Composition

The Research, Development and Technology Management Office is headed by a Director designated by the Board upon the recommendation of the Vice President of RET and other officials of the College. Directly under the Office of the Director are the Program Leaders, Project In-charge and RDTM Institute Coordinators. Parallel with these staff are technical, facilitative and support staff.

Researches coming from the various Institutes , through the Institute Coordinator, shall be under the coordinator of the RDTM Director.

### **B.** Organizational Structure

The RDTM is directly under the Office of the Vice President for Research, Extension & Training (RET), which is, likewise under the Office of the President (Figure 1).

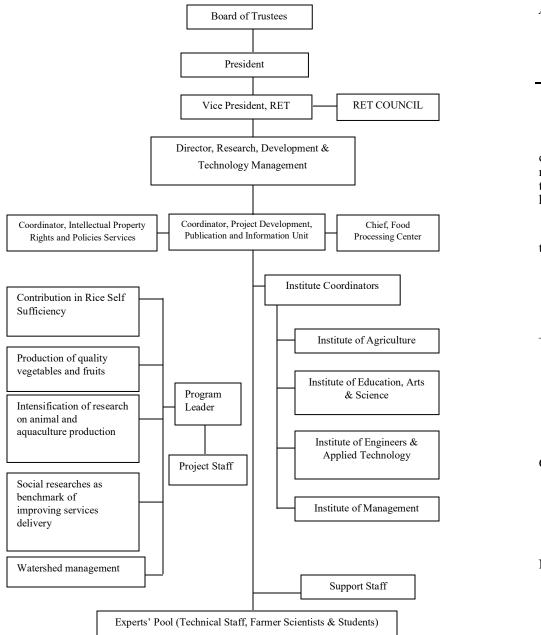


Figure 1. Organizational Structure of the Research, Development & Technology Management Office

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### CERTIFICATION OF APPROVED OUTLINE

dissertation ofreviewed and evalua	ited on suggestions/comments giv	is the revised copy of the thesis, which was presented This is to certify further en during the oral presentation
Permission thesis/dissertation.	is hereby granted for the	e researcher to conduct his/her
	EXAMINATION COM	MITTEE
Member		Member
_	Chairman	
Conforme:		
	Adviser	-
Noted:		
	ostitute Dean	

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### GUIDELINES IN THE CONDUCT OF ORAL PRESENTATION

#### I. Ground Rules

### A. For the Examination Committee

- 1. The examination committee shall scrutinize the manuscript by asking relevant questions to make the research scholarly and in conformity to the prescribed standards.
- The examination committee shall give recommendations/ suggestions/ comments which are to be incorporated in the manuscript.
- 3. The examination committee shall give the final decision as to the result of the defense.

#### B. For the Researcher

- 1. The researcher should answer politely the questions asked by the examination committee.
- 2. The researcher may politely request the examination committee to repeat the question if he/she fails to understand clearly.
- 3. The researcher may politely refuse to answer the question asked by the examination committee if it is outside the ambit of his/her thesis/dissertation.

#### II. Criteria for Evaluation

#### A. Manuscript

A. Wanuscript	
1. Timeliness	10%
2. Depth/Breath	20%
3. Impact/Significance	20%
4. Format and Style	10%
Sub-total	60%
B. Oral Presentation	
1. Mastery of the Study	20%
2. Quality of Answers/Organization/Logic	10%
3. Communication Skills/Articulation	10%
Sub-total	40%
Grand Total	100%

### C. Qualifications, Duties and Responsibilities of RDTM Staff

## 1. Director for Research, Development & Technology Management (RDTM)

The Director of RDTM shall be designated by the President after consultations with the RET Vice President subject to the confirmation by the Board of Trustees.

The qualifications of the Director shall be as follows:

- a. Holds an advanced degree preferably Ph.D. in social or agricultural sciences;
- b. Must have at least five (5) years of research experiences and competence in social/agricultural science.

The Director, preferably a distinguished senior researcher who is knowledgeable in research management, coordinates, consolidates and operationalizes the research programs of the College in coordination with the RET Vice President and the College President. The specific duties and responsibilities of the Director are the following:

- a. facilitates the preparation or consolidation of College Research Agenda;
- b. co-chairs the standing or ad hoc committee which assess, review and recommend research proposals for funding by national or foreign agencies;
- c. provides leadership in the formulation of research programs that aligned with the regional or national development goals or college research agenda;
- d. coordinates with the Chief of the College Financial Services and Supply Office for the procurement of supplies and equipment targeted for the period;
- e. recommends general policies and guidelines on research and development activities;
- f. spearheads the regular monitoring and evaluation of the implementation of researches;
- g. prepares and submits pertinent reports and recommendations to the President through the Vice President of RET
- h. initiates and strengthens linkages of BASC with other research

- i. reviews or compiles thesis of graduate and undergraduate students;
- j. performs other functions and duties pertinent to RDTM as may be directed by higher authorities;
- k. formulates and implements specific IP policies and guidelines;
- l. provides oversight supervision, guidance, capacity building including IP filing and handling of technology transfer agreements;
- m. assists in the preparation, filing and prosecution of IP registration;
- n. leads in the negotiation of technology transfer agreements;
- o. links with business sector for marketing and patentable and patented products; collects royalties resulting technology transfer arrangements and to manage and disburse the same in accordance with the IP guidelines;

## 2. Institute Research, Development & Technology Management Coordinators

The Institute RDTM Coordinator shall be endorsed by the Director of RDTM through the Institute Dean and approved by the College President upon recommendation of the RET Vice President.

The Institute RDTM Coordinator must be a competent researcher in his/her field of specialization. The duties and responsibilities of Institute RDTM Coordinator are as follows:

- a. receives and endorses proposals submitted by faculty and students to the Director of RDTM. In case that there will be recommendations, the proposal should be returned to the proponent for refinement;
- b. monitors schedule of activities of faculty and student researchers;
- c. compiles research manuscripts or documents of the Institute;
- d. submits reports regarding Institute research activities to the RET Vice President through the Director of RDTM;
- e. informs members of the faculty and students in his or her institute regarding RDTM policies, priority thrusts and research updates;

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# Republic of the Philippines BULACAN AGRICULTURAL STATE COLLEGE San Ildefonso, Bulacan

NOTICE C	OF SCHEDULE OF DEFENSE
(Date)	
We are pleased to inform yo posal/final defense of	ou of the schedule of the thesis/dissertation pro-
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with the thesis/dissertation en	ititled
Schedule of Defense:	
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	of a copy of his/her thesis/dissertation manuscript you find fundamental defects that warrant post- ase inform us on due time.
Thank you very much.	
Signature of Thesis/ Dissertar Over Printed Name	
Conforme:	
, Examination Co	ommittee
Date Received	

## Republic of the Philippines BULACAN AGRICULTURAL STATE COLLEGE

San Ildefonso, Bulacan

NOMINATION OF EXAMINATION COMMITTEE
Date
Dear Dr:
Please be informed that you are hereby nominated to act as of the Examination Committee for the thesis/
dissertation entitled of
taking up
(Course)
You will be notified as to the details of his/her schedule for oral examination.
Truly yours,
Signature of Thesis/ Dissertation Adviser Over Printed Name
Conforme:
, Examination Committee
Approved:

Institute Dean

- f. spearheads the preparation and implementation of Institute research agenda and programs in consultation with the RET Vice President and Director of RDTM:
- g. keeps records of research activities or outputs of faculty in the Institute;
- h. gives ratings in research of the faculty based on approved evaluation criteria to be validated by the Dean and the Director of RDTM; and
- i. assists in the preparation and implementation of activities to be facilitated by the RET Office in coordination with the Institute Dean.

### 3. Program or Project In-charge

The Program or Project In-charge shall:

- a. implement, monitor, supervise and evaluate research programs, projects or activities based on the approved work plans and activities;
- b. coordinate all research activities with the concerned staff or units of the College;
- c. prepare periodic reports for submission to the College President or Vice President for RET through the Director of RDTM;
- d. present project status or accomplishments of the project to local, regional, national or international forum, conferences, trainings and the like.

### 4. Science Research Specialist, Analyst or Assistant

The Science Research Specialist, Analyst or Assistant shall:

- a. assist in the preparation of research proposals and other research projects;
- b. assist in the gathering of data of projects implemented by the RDTM;
- c. assist in the monitoring of researches and prepares periodic reports of researches implemented;
- d. assist in the preparation of technical papers for presentation and terminal reports;
- e. document researches being implemented by the Office;
- f. help in the organization, analysis and interpretation of collected data;
- g. supervise laborers in the efficient conduct of their studies;
- h. prepare and submit reports of data gathered; and
- i. perform other related jobs as required by higher authorities.

### 5. Technical Staff or Consultant

A technical staff shall be designated by the Director of RET in consultation with the Director of RDTM and subject to the approval by the College President.

The staff must be a senior researcher and should maybe competent in the field of specialization. She must be an expert or specialist and maybe designated as in-charge of research and extension projects.

The technical staff shall::

- a. provide technical assistance under his or her expertise;
- b. be in-charge of research, extension or income generating project (s); and
- c. perform other related jobs as may be required by higher authorities.

### 6. Clerk

The clerk shall:

- a. encode research and research-related documents and reports;
- b. organize office files and fixtures; and
- c. perform other related jobs as required by higher authorities.

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## Republic of the Philippines BULACAN AGRICULTURAL STATE COLLEGE

San Ildefonso, Bulacan

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LETTER	FOR THE PRESENTA	TION OF OUTI	INE	
The Dean Institute of				
Madam:				
I have the honor to re	quest permission to preso	ent my thesis/disse	ertation o	utline
on	at	o'clock	in	the
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Thank you very much Very truly yours, Student's Signature C				
Recommending App	oroval:			
Signature of Thesis/ I Over Printed	Dissertation Adviser I Name			
Approved:				
-	Institute Dear	1		

### Republic of the Philippines BULACAN AGRICULTURAL STATE COLLEGE

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### APPLICATION FOR APPROVAL OF THESIS/DISSERTATION TITLE

Name of Student:	
Major Field:	
Date of Application:	
Title:	
Objectives or Statement of the Problem  1. 2. 3. 4.	
	Student's Signature
Approved:	Date
Signature of Thesis/ Dissertation Adviser Over Printed Name	
Noted:	
Institute Dean	

# PART 3. RDTM FACILITIES, OPERATIONAL GUIDELINES IN THE USE OF FACILITIES AND FINANCIAL MANAGEMENT

### A. RDTM FACILITIES

The following are the available facilities of the Research, Development and Technology Management Office.

- 1. The RDC building which houses the following facilities:
  - a. RET Vice President's Office
  - b. Director of RDTM Office
  - c. Research Staff Office
  - d. Research Laboratory Rooms
  - e. Conference Room
  - f. Storage Room
  - g. Information Shop Center
- 2. Grain Storage Building
  - a. Rice Thresher
  - b. Grain Cleaner
  - c. Pumps and Engines
  - d. Irrigation Hose
  - e. Hand Tools
  - f. Sack Sewer
  - g. Multi Cab
  - h. Hand Tractor
  - i. Grain Moisture Meter
  - j. Weighing scale
  - K. Oven for soil
- 3. Rain Gauge
- 4. Greenhouses and Field Experimental Area
- 5. Nursery

- 6. Food Processing Center
  - a. Processing tools and equipment
  - b. Drying facilities
  - c. Storage
  - d. Packaging equipment
- 7. Audio-visual Facilities
  - a. Sound System
  - b. LCD Projector
  - c. Laptop Computers
  - d. Overhead Projector
  - e. Television Set
  - f. VCD/CD
  - g. Camera and Video Camera
- 8. Office and Field facilities
  - a. Desktop Computer Units with Complete Accessories
  - b. Ceiling and Stand Fans
  - c. Typewriter
  - d. Ring Binder
  - e. Refrigerators
  - f. Air-conditioning Units
  - g. Water Dispenser
  - h. Filing Cabinets
  - i. Office Tables
  - j. Chairs
  - k. Kitchen Utensils
  - 1. Hand Tools
  - m. Karaoke

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### THESIS/ DISSERTATION ADVISER NOMINATION

Name of Student	::		
(Last)	(First)	(MI)	
Degree Sought:			
I hereby request thesis/dissertatio	n adviser.		to be my
Conforme:			
	sis/ Dissertation Adviser inted Name		
Date:			
Noted:			
Institu	ute Dean		
Date:			

### APPROVAL AND ACCEPTANCE

This thesis/dissertation entitled,	
	, prepared and
submitted by	, in partial fulfilment of the
requirements for the degree	
major in	, is hereby approved and
accepted.	
Signature Over Printed Thesis/Dissertation	Name of the Adviser
Reviewed and evaluated	onat the
with a gr	ade of
Member, Examining Committee	Member, Examining Committee
Chair, Examining Co	ommittee
Accepted as partial fulfilment of the degreemajor in	•
Chair, Department of	Institute Dean
Date Signed	Date Signed

#### B. OPERATIONAL GUIDELINES

### 1. RDC Conference Room

- a. BASC faculty and students can use the RDC Conference Room; however, they are required to maintain the clean-liness and orderliness of the Conference Room before and after using.
- b. A request shall be made by the user subject to the approval of the RET Vice President or College President. The Director of RDTM shall be furnished a copy of the approved request.
- c. Non-BASC personnel are allowed to use the RDC Conference Room upon request and approval by the College President.
- d. A rental fee of PhP 3,000 per day is collected and a service charge of PhP 30.00 per hour is collected for the use of audio visual equipment.
- e. Payment in cash should be made at the Cashier's Office by the clientele and the clientele is required to present the original receipt to the Vice President for RET.
- f. Fifty percent (50%) discount is given to BASC partners or collaborators and alumni.

### 2. RDTM Equipments and Facilities

- a. BASC faculty and students can use the RDTM Equipment and facilities, however, they are required to pay or fix whatever damages may occur during its intended purpose.
- b. A request form (Barrowers Slip) is made by the user subject to the approval of the staff handling the memorandum receipt of the equipment and RET Vice President. The Director of RDTM shall be furnished a copy of the approved request.
- c. Non-BASC personnel are allowed to use the RDTM equipments and facilities upon request and approval by the College President.

### C. FINANCIAL MANAGEMENT

The Office of the Vice President of RET is being issued a copy of notice of cash allocation (NCA) for each year as basis in preparing the needed budget in support of the different units of the Office. For the Institute Extension and Training Programs, their budget allocation is integrated in the RET Budget, RDTM in particular. Institute RDTM Coordinators are required to prepare an annual work plan as basis in allocating their annual budget.

The budget officer prepares a separate ledger for the unit so that each item of the fund could easily be accounted as to its availability. Likewise, the Director of RDTM must have his or her own ledger and reconcile regularly with the Accounting and Budget Officer.

For special funded projects, the project or program leader has the authority to use the funds allocated for the project based on the approved operational work and financial plan. To ensure efficient spending, the Vice President for RET recommends for the approval of each voucher and other related documents. The accounting office, on the other hand, controls the expenditures in accordance with the expenses classes in the budget and sub-allotments.

Program, project and study leaders shall disburse funds according to accounting and auditing procedures. This shall be applied to all types of extension projects funded locally or internally and externally.

Supplies and materials contained in the operational plan shall be taken cared of by the project leader or proponent in coordination with the procurement and supply office as to the specifications and documents prescribed.

Travel allowance of staff conducting extension work shall be subject to the existing College and COA auditing and accounting rules and regulations.

### PART 4. GENERAL POLICIES AND GUIDELINES IN THE CONDUCT OF RESEARCH ACTIVITIES

The following policies shall serve as guidelines in the conduct of research activities:

### A. Designation of Program/Project/Study Leader

Proponents of approved research proposals are automatically designated as the Program, Project or Study Leader. If not available, qualified staff are to be considered. Recommendations should be made by the proponent in consultation with the Director of RDTM. The RET Vice President issues the designation with the approval of the College President. Researchers, who will be on leave for one month or more, shall inform the Director of RDTM and designation of OIC Program, Project or Study Leader shall be made by the RET Vice President upon the recommendation of the researcher (s).

### **B.** Equivalent Teaching Load for Research

Research personnel with academic rank should carry a maximum teaching load with equivalent contact hours per week (CHW) of 9 per semester. The normal workload is 18 CHW. A system of deloading a faculty member of his or her minimum teaching

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### **Elements of Undergraduate Thesis Manuscript**

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Approval Sheet
Acknowledgement
Bibliographical Sketch
Abstract
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### Chapter I. The Problem and Its Background

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Significance of the Study
Scope and Limitation of the Study
Time and Place of the Study
Definition of Terms

Chapter II. Review of Related Literature and Studies

Chapter III. Methodology

Chapter IV. Results and Discussions

Chapter IV. Summary, Conclusions and Recommendations

Literature Cited

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## Elements of Undergraduate Thesis Outline

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hours per week shall be made. An honorarium shall be allowed only after the personnel have met the normal load. Researchers should also observe the maximum limit of workload which is equivalent to 30 CHW. The Director for RDTM shall have an ETL of 6; Institute Program Leader -4; RDTM Coordinator -3; Project Leader -2; Study Leader -1.5; and Faculty detailed at the RET -1.

### C. Income Generated from Research

For all research projects including those under trust fund and with memorandum of agreement as legal basis, transaction shall strictly follow the financial management and auditing procedures of the College. The income generated from the sales of the produce could be utilized for research activities. Proposed use of income must be submitted by the proponent (s) subject for approval by the College President.

### D. Preparation and Approval of Travel Order

The RET Vice President should sign the Travel Order of research personnel, and the VP for ACSA, RET Vice President and Dean should sign the Travel Order of faculty researchers, duly approved by the College President.

### E. Preparation of Performance Targets and Annual Procurement Plan

Researchers prepare their performance (OPCR and IPCR) targets for the year together with the list of supplies and materials needed in the conduct of the research and these will be submitted to the Director of RDTM for consolidation and preparation of annual procurement plan for submission to the Vice President of RET and the Supply Office. This will be the basis in the procurement of supplies and materials needed for the project.

### F. Granting of Honorarium

Researchers are granted honorarium or incentives to encourage productivity and acknowledge extraordinary performance and efficient delivery of services and output in the College. Honorarium is a form of remuneration for services rendered beyond the minimum 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).

The implementing guidelines and policies of the College in providing incentives to the researchers or proponents of the project or program will be followed.

### **G.** Intellectual Property Rights Protection

The College respects intellectual property rights of researchers. All best research outputs or models shall be submitted to the IPR office for patenting. The researcher in coordination with the RET Vice President shall apply for the patenting of his or her invention, production or process generated. Expenses incurred in this activity shall be shouldered by the College Administration but for externally-funded projects, the funding agency shoulders the expenses. Ownership of the patented research model and royalty sharing shall be based on the policies and guidelines prepared by the RDTM.

### H. Services of English Critic/Reader Critic

English Critic shall be consulted to edit and check the analysis of data, respectively for student researches.

A pool of English Critics shall be identified and designated by the Director of RDTM. A minimum fee of three hundred pesos (PhP300) for undergraduate students and one thousand pesos (PhP1000) for graduate students shall be collected provided that he or she is not a member of the guidance or advisory committee.

## I. Selection of Participants to Research and Intellectual Property Trainings

Identification or selection of participants' trainings must be done by the Director for RDTM in coordination with the Dean concerned, recommended by the RET Vice President and approved by the College President.

Research personnel who are personally invited to trainings, seminars or conferences shall secure approval from the Dean, RET Vice President and the College President.

In submitting reports to the President on research matters, activities or accomplishments, attention should be made to the RET Vice President and a copy should be furnished to the Director of RDTM and Institute Dean.

### J. Submission of Reports

Program/Project/Study Leaders and Institute Coordinator shall submit a monthly accomplishment report every last working day of the month in time with the monthly meeting of the RDTM staff. Report from the Institute coordinators should be duly endorsed by the Dean.

For research terminal reports or manuscripts, faculty researcher shall submit four (4) bound copies, one copy each for the RET Vice

### Elements of Graduate Thesis and Dissertation Manuscript

Cover Page
Title Page
Approval Sheet
Acknowledgement
Bibliographical Sketch
Abstract
Table of Contents
List of Tables
List of Figures

Chapter I. The Problem and Its Background
Introduction
Statement of the Problem
Hypothesis
Conceptual Framework
Significance of the Study
Scope and Limitation of the Study
Location of the Study
Definition of Terms

Chapter II. Methodology

Chapter III. Results and Discussions

Chapter IV. Findings, Conclusions and Recommendations

Literature Cited

Appendices

### **Elements of Graduate Thesis and Dissertation Outline**

Cover Page

Title Page

Approval Sheet

Table of Contents

Chapter I. The Problem and Its Background

Introduction
Statement of the Problem
Hypothesis
Conceptual Framework
Significance of the Study
Scope and Limitation of the Study
Location of the Study
Definition of Terms

Chapter II. Review of Related Literature and Studies

Chapter III. Methodology

Literature Cited

Appendices

President or Director of RDTM, Institute Dean, funding agency (for externally-funded projects) and the researcher.

### K. Publication of Research Outputs

The existing policy and incentive scheme for authors of published research, scientific and scholarly works shall be adopted.

Cash incentive with Certificate of Recognition will be given to researches who have published the following:

### L. Research Output Utilization or Commercialization

All patented research models, technologies, inventions, etc. shall be commercialized by the College Administration. Some research outputs shall be utilized for the improvement of the teaching or learning process. This shall also be extended to the community for the improvement of the quality of life of the people through extension services.

### M. Evaluation of Faculty's Performance in Research

- 1. The performance rating of each faculty in the Institute shall be given by the Institute RDTM Coordinator and to be validated by the Dean and Director for RDTM. Supporting documents must be submitted together with the performance rating.
- 2. The evaluation criteria of faculty rating in research and development and the "Modelong Guro sa Pananaliksik" must be regularly reviewed or updated and disseminated.

Nature Type	Cash Incentives	Amount (PhP)
Books with copyright	National	30,000
	International	50,000
Chapter in a book with	National	10,000
copyright	International	20,000
Research paper in an ISI, ISSI or AHCI listing		50,000
Full paper in a peer reviewed publication/	Local (CHED Accredited Journal)	5,000
journals which are not in neither ISI, ISSI nor AHCI listing	Regional (CHED Accredited Journal)	10,000

National (CHED Accredited Journal)	15,000
International (CHED Accredited Journal)	20,000
Local (Non-CHED Accredited Journal)	2,000
Regional (Non-CHED Accredited	5,000
National (Non-CHED Accredited Journal)	15,000

### N. Granting of Incentives

- 1. All research proposals must pass the review or evaluation of the Project Development, Publication and Information Unit (PDPIU) of the RET Office.
- 2. All research proposals must pass the review following the flowchart on the approval of research proposals. The deloading of faculty shall be done during the semester upon submission and approval of the research proposal through the Office for funding and implementation.
- 3. For approved researches with funding, a copy of the approved research proposal must be submitted by the Institute RDTM Coordinator to the RET Vice President for proper recording purposes. The Director of RDTM in turn will make the necessary recommendations as to the deloading privileges that the researchers should enjoy. In the same manner, the Research Coordinators must provide the Director of RDTM with the copies of the progress report every semester to facilitate subsequent recommendations on deloading for the succeeding semester.
- 4. Faculty members who can generate fund with at least PhP 50,000 total approved budget for research from external sources are entitled to claim cash incentives of PhP 5,000 for every research proposal approved for implementation.
- 5. Authors of adjudged best paper/poster awards of annual conventions of regional/national professional association and societies are entitled to receive the following cash incentives (if more than one author, to shared among authors).

### Appendix 9



Republic of the Philippines San Ildefonso, Bulacan

### BULACAN AGRICULTURAL STATE COLLEGE RESEARCH, EXTENSION & TRAINING

Telefax Nos.: (044) 901-1427; 677-

2264 Email:retpbasc@yahoo.com

### Accomplishment Report

(April 2014)

### A. Research, Development & Technology Management (RDTM)

No.	Program/Project/ Activity	Output (April 2014)	Future Activity (May 2014)

## Department of Agriculture ANNEX B

### PROJECT CONCEPT NOTE

Project Title:	
Proponents:	
Proponent Type:	
<b>Expected Project Start Date:</b>	
<b>Expected Completion Date:</b>	
Project Summary:	
Describe the project in under 150 words. Your summary should include the project topic, planned activities, timing and location:	
Total Cost of proposal:	Total amount being sought
	Funding agency:
	Maintenance and other Operating Expenses (MOOE)

A copy of the paper or poster must be submitted to the RDTM Office accompanied by a copy of the original award certificate for verification from the award-giving body and accomplished claim form.

### 6. Peer Award Incentive

Category	Best Poster	Best Paper	
Local	1st Prize= PhP 1,500	1st Prize= PhP 2,000	
	2nd Prize= PhP 1,000	2nd Prize= PhP 1,500	
	3rd Prize= PhP 500	3rd Prize= PhP 1,000	
Regional	1st Prize= PhP 2,000	1st Prize= PhP 3,000	
	2nd Prize= PhP 1,500	2nd Prize= PhP 2,000	
	3rd Prize= PhP 1,000	3rd Prize= PhP 1,000	
National	1st Prize= PhP 3,000	1st Prize= PhP 7,500	
	2nd Prize= PhP 2,500	2nd Prize= PhP 5,000	
	3rd Prize= PhP 1,500	3rd Prize= PhP 2,000	
International	Equivalent to 200% of the National Prize		

BASC faculty or staff recognized or cited by another agency, a local government unit, scientific organization or an award-giving body, local or international for meritorious R&D work and professional excellence are eligible for cash incentive award.

Only those recipients of top awards (not finalists or recipients of plaque of recognition) may be given cash incentives amounting to:

Department of Agriculture Bureau of Agricultural Research DETAILED PROPOSAL FORMAT

### A. BASIC INFORMATION

- 1. Title of the Project
- 2. Proponent (s)
  - 2.1 Name and Signature
  - 2.2 Designation
  - 2.3 Institution
  - 2.4 Address
  - 2.5 Telephone Number (s)
  - 2.6 Fax Number
  - 2.7 Email Address
- 3. Implementing Agency
  - 3.1 Lead Agency
  - 3.2 Collaborating Agency (s0
- 4. Project Duration
- 5. Project Location
- 6. Total Budget Requirement
  - 6.1 Budget Requested
  - 6.2 Agency Counterpart
  - 6.3 Other Sources

### **B. TECHNICAL DESCRIPTION**

- 1. Rationale
- 2. Objectives
- 3. Review of Literature
- 4. Methodology
- 5. Workplan Schedule
- 6. Budget Summary
- 7. Logical Framework
- 8. Potential Intellectual Property
- 9. Financial Viability (For Technology Commercialization proposals)
- 10. Business Plan Format (For Technology Commercialization proposals)

In is given to tive will the mem-

Local	3,000	cases that award
National	10,000	a group, incen-
International	20,000	be shared among bers.

## e shared among

### O. Undergraduate and Graduate Thesis or Dissertation Support

- 1. Faculty and students are granted thesis or dissertation support (financial or materials) if funds are available.
- 2. Graduate and undergraduate students of the College with an approved thesis or dissertation outline can apply for thesis support.
- 3. The thesis should be in line with the existing research thrusts and priorities of the College R & D Agenda.
- 4. Research proposals are submitted and evaluated based on the flowchart on the approval of research proposals.
- 5. Only two students per semester (one graduate and one undergraduate) who are on the stage of conducting research could avail of the financial support.
- 6. Each student is entitled to a thesis support in the form of supplies and materials with a maximum amount of PhP 5,000.
- 7. Upon approval, a written memorandum of agreement is signed by the student, thesis adviser and the Vice President for RET.
- 8. After completion of the research, students are required to submit electronic copy and publishable format of the thesis or dissertation, and two (2) copies of the manuscript to the RET Office.

#### PART 5. IMPLEMENTATION, MONITORING AND EVALU-ATION OF RESEARCH AND DEVELOPMENT PRO-**GRAMS**

Research involves a series of planned activities undertaken to obtain a valid, reliable objective and verifiable answers to problems,

### Department of Agriculture Bureau of Agricultural Research CAPSULE PROPOSAL FORMAT

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### A. BASIC INFORMATION

- 1. Title of the Project
- 2. Proponent (s)
  - 2.1 Name and Signature
  - 2.2 Designation
  - 2.3 Institution
  - 2.4 Address
  - 2.5 Telephone Number (s)
  - 2.6 Fax Number
  - 2.7 Email Address
- 3. Implementing Agency
  - 3.1 Lead Agency
  - 3.2 Collaborating Agency (s0
- 4. Project Duration
- 5. Project Location
- 6. Total Budget Requirement
  - 6.1 Budget Requested
  - 6.2 Agency Counterpart
  - 6.3 Other Sources

### **B. TECHNICAL DESCRIPTION**

- 1. Rationale
- 2. Objectives
- 3. General Methodology
- 4. Expected Output
- 5. Potential Impact
- 6. Milestone
- 7. Users
- 8. Budget Requirement
  - 8.1 Personnel Services (PS)
  - 8.2 Maintenance and Other Operating Expenses (MOOE)
  - 8.3 Equipment Outlay (EO)
  - 8.4 Administrative Cost
- 9. Logical Framework
- 10. Financial Viability (for Technology Commercialization proposals)

using the method of observation, documentation and inquiry or other less direct approaches which are acceptable in the scientific tradition. Research is a mandated scientific function of the College, and as such, the faculty and other staff who are qualified to conduct researches, whether as individuals or teams, are encouraged and given opportunity and support to pursue researches in their areas of competence.

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### A. The Development of the Research and Development Agenda

The College R&D Agenda shall be revised and updated annually by the RET Office in coordination with the research division chiefs, research coordinators and researchers in the different Institutes of the College, students, alumni, farmers, entrepreneurs and other stakeholders considering the local needs as well as the regional and national priorities.

### **B.** Preparation of Research Proposals

The preparation of the research proposals must be limited within those projects that are identified within the research agenda except for highly meritorious and emergency cases.

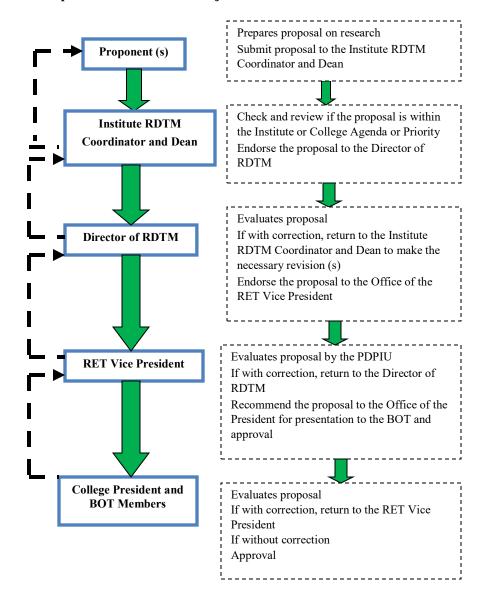
The preparation of the research proposals involves two phases:

- a. Preparation of capsule research proposals; and
- b. Preparation of detailed research proposals.

### C. Processing of Research Proposals: BASC-Funded Projects

- a. Priorities are spelled out in the College R&D Agenda and Program.
- b. Capsule research proposals should follow the prescribed format (Appendix 2). It should be first submitted by the proponent to the Institute RDTM Coordinator to check if the proposal is within the institute or college agenda. He or she then endorses the proposal to the Director of RDTM.
- c. The Director for RDTM reviews the research proposal submitted. After the initial evaluation, the proposal should be returned to the proponents to integrate all corrections or suggestions made. The proponent re-submits the revised proposal to the Director of RDTM.
- d. The Director of RDTM endorses the proposal to the RET Vice President for further evaluation and recommendation before it is subjected for its approval by the Board of Trustees

## D. Flowchart in the Submission and Approval of Research Proposal-BASC Funded Projects



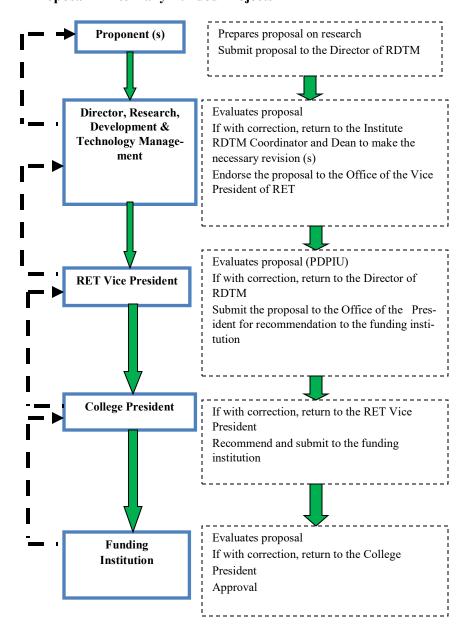
(17) Personnel Requirement	
	Percent time devoted to the Project
Program/Project Leader:	
Others:	
(18) Budget (See form 2B-2)	
(19) Literature Cited	
(20) Capsule Curriculum Vitae (One-pag	ge brief C.V. only)
(21) Certificate of incorporation (if appli	icable)

### DOST Form No. 2B DETAILED RESEARCH & DEVELOPMENT PROJECT PROPOSAL

(For the Component Project)
(To be accomplished by the researcher)

(1) Title/Leader/Gender/Agency/Address/Telephone/Fax/Email				
	Program Title:			
	Project Title:			
	Leader/Gender: Agency/Address:	Telephone/Fax/Email		
	Agency/Address.	reteptione/r-ax/Email		
(2)	Cooperating Agencies	(3) Research & Development Station		
(4)	Site of Implementation/Municipality/District/	Province/Region		
(5)	Classification	(6) Mode of Implementation		
Re	search: Development:	Single Agency		
	Basic Pilot Testing	Multi Agency		
	AppliedTech. Promotion/			
	Commercialization			
(7)	Sector/Commodity	(8) Discipline		
utili	ald include a brief introduction, a general statemen ization of the expected output and the impact the intarget users and the country.)			
(10) ject	Objectives (Statement of the specific purpose t.)	o address the problem areas of the pro-		
	Review of Literature (Related researches/active-art of current technology/information from which			
	) Scientific Basis/Theoretical Framework (Includent relevant relationships to be tested.	de concepts, theories and variables that		
to b	) Methodology (Details such as: a) variables to le used and their layout; c) experimental procedure luation method and observations to be made, strate	s and design; d) statistical analysis; e)		
	Major Activities/Workplan (Enumerate in chien. Use gantt chart.	onological order the tasks to be under-		
is e	(15) Expected Output (Indicate the specific products, processes or services which the project is expected to produce; quantify when possible; economic benefits to be derived from the project based on ex-ante analysis.			
	Target Beneficiaries (Who the clienteles are an the use of the project outputs).	d what are the expected outcome/effects		

## E. Flowchart in the Submission and Approval of Research Proposal – Externally Funded Projects



### F. Budget Flowchart

For the release of supplies and materials needed in the conduct of research projects, the following flowchart is followed:

Project or Study Leader prepares the Purchase Request (PR) and submits list of supplies & materials to the RET Vice President

### G. Research and Development Project Monitoring and Evaluation

RET Vice President consolidates and forwards the PR to the Budget Office for funding and to the College President for approval

The mechanisms for monitoring of on-going and completed

Approved PR is forwarded to the Procurement Office for canvass and purchase of supplies and materials

research projects are the monthly accomplishment report submitted by

Supply Office releases supplies and materials to the RET Vice President (for BASC funded researches) and RET Vice President releases the supplies and materials to the researcher (s)

For externally-funded researches, supplies and materials are released directly to the researcher (s)

the researchers to the Office of the RET Vice President through the Director of RDTM for presentation to the Agency In-House Review and the Regional Symposium of Completed and On-Going R&D Projects.

### H. Submission of Reports

Monthly accomplishment reports are submitted following the required format (Appendix 11).

### Appendix 5b

### DOST Form No. 1B CAPSULE RESEARCH & DEVELOPMENT PROPOSAL

(For the Component Project) (To be accomplished by the researcher)

(1) Title/Leader/Gender/Agency/Address/Tele	phone/Fax/Email
Program Title: Project Title:	
Leader/Gender:	
Agency/Address:	Telephone/Fax/Email
rigology/riddress.	rerephonest aw Emair
(2) Cooperating Agencies	(3) Research & Development Station
(4) Classification	(5) Mode of Implementation
Research: Development:	Single Agency
BasicPilot Testing	Multi Agency
AppliedTech. Promotion/	
Commercialization	
(6) Priority Agenda	(7) Sector Commodity
BiotechnologyHealth Products	
ICTBasic Research	
Alternative EnergyOthers	(8) Discipline
Environment	
(9) Significance (State the research problem and needs of the country. The proposal should justify re would include a brief introduction, a general statem utilization of the expected output and the impact the the target users and the country.)	source expenditure. A typical justification nent concerning the historical basis for R & D,
(10) Objectives (Statement of the specific purpos ject.)	e to address the problem areas of the pro-
(11) Methodology (Brief description of how proj	ects will be implemented).
(12) Major Activities (Enumerate in chronologic gantt chart)	al order the tasks to be undertaken. Use
(13) Expected Output (Indicate the specific prodis expected to produce and how these can be used;	
(14) Target Beneficiaries (Who the clienteles are of the use of the project outputs).	and what are the expected outcome/effects
(15) Implementing Schedule	Month Year
Duration: Planned St	
In months Planned Co	ompletion date:
(16) Estimated Budget by Source           Source of Fund         PS         MOE         COE         TOT	PS MOE CO TOTAL  — — — — — — — — — — — — — — — — — — —

Appendix 5a

### DOST Form No. 1A CAPSULE RESEARCH & DEVELOPMENT PROPOSAL

(For the Whole Program) (To be accomplished by the researcher)

(1) Title/Leader/Ge	nder/Agency/A	ddress/Telephone/Fa	ax/Email	
Program Title:		Total Du	ration	
Coordinator/Gender:				
Agency/Address:				
Telephone/Fax/Emai	":			
Project Title:		I	Ouration:	
1		_		
2		_		
3.		_		_
	(use	separate page if neces	sary)	
(2) Executive Summa	ry (Significanc	e, objectives, expecte	ed output and me	ethodology)
(3) Budget Summar	ry for the whole	e program		
Total Budget				
Source of Fund	PS	MOE	CO	TOTAL
Total				
Y1 Budget				
Source of Fund	PS	MOE	CO	TOTAL
Total				
<u>Yn Budget</u> Source of Fund	PS	MOE	CO	TOTAL
Source of Fund	rs	MOE	CO	IUIAL
Total				
	(use	separate sheet if neces	ssary)	
(4)		Submitted by		Endorsed by
Signature				
Name				
Designation/Title:				
Date				

Note: To be submitted together with the detailed R & D Proposals of the component projects.

Terminal reports are submitted two months after completion of the project. Reports to be submitted must be in four copies, one copy each for the RET Vice President, Director of RDTM, Institute Dean/RDTM Coordinator and the researcher including the electronic copy of the research. Completed research projects are published in the BASC R&D Journal.

### I. Field Evaluation

Field evaluation consists of quarterly visits to the experimental sites at specific dates. An evaluation team composed of the RET Vice President, Director of RDTM, Dean, and Institute RDTM Coordinator conducts the field evaluation to discuss with the researcher the status or progress of project implementation.

Staff assigned to monitor the progress of these on-going projects may visit the research site or stations. The committee is composed of the following:

Chairman: RET Vice President

Members: Director of RDTM

Dean

Institute RDTM Coordinator

### J. Presentation of Research Outputs

The Agency In-House Review is conducted annually to evaluate the attainment of the objectives of the College completed and ongoing R&D projects with the following objectives: (1) to identify problems met during project implementation and recommend courses of action to these problems; (2) identify new researchable areas and generated technologies; and (3) to identify mature and potential technologies ready for packaging, dissemination and significant information for policy formulation and development planning of the College.

During the In-house Review, Best R&D Papers and Poster are chosen and given cash incentive and a certificate of recognition and these are selected based on the criteria set by CLARRDEC or PCARRD for the Regional Symposium. Best papers selected will compete during the CLARRDEC Regional Symposium.

### Research Category

1 Creativity, originality and quality of work	30%
1.1 Rationale/state of the art (to include analysis of the	
problem)	,
1.2 Objectives	
1.3 Conceptual/analytical framework/methodology	
2. Significance of Findings	40%
2.1 Contribution to new knowledge S&T advancement	-
2.2 Relevance to national/regional development	L
2.2.1 Regional significance only	
2.2.2 Regional/National significance	1.50/
3. Manuscript/Write-Up	15%
3.1 Accuracy of figures and language	
3.2 Clarity and style	
3.3 Cogency and logic	1.50/
4. Presentation	15%
4.1 Clarity of presentation	
4.2 Visual aids	
4.3 Stage presence	
4.4 Voice modulation	
4.5 Response to inquiries	
TOTAL	100%
Development Category	
1. Creativity, originality and quality of work	30%
1.1 Rationale/state of the art (to include analysis of the problem)	;
1.2 Objectives	
1.3 Conceptual/analytical framework/methodology	
1.4 Acceptability of technology to end-users	40%
2. Significance of Findings	
2.1 Social acceptability (to determine the social signing of the technology to target end-users	ificance

- tions listed on the first page.
- References— related literature used in the study from book or journals arranged using APA format.

### Guidelines for Publishable Format of Paper

### J. D. Cruz<sup>1</sup>

<sup>1</sup> Undergraduate Student, Institute of Engineering, BASC

### Abstract

Use the standard format of writing as indicated in the manuscript format, except that the spacing should be set in double. The College is intended to highlight some critical elements of manuscript preparation that will help speed the review and evaluation processes.

### Introduction

Students are required to prepare a paper in a publishable format. Your paper should be a succinct account of aspects of your research and key findings. The contents of your paper should include:

- Title– should be concise, informative, containing key words; do not exceed 1 line length, ideally £10 words.
- Authors—include only initials and family name.
- Authors' affiliations and email address of the first author.
- Abstract- concise statement of the scope of the work and principal findings should be from 150-200 words only.
- Keywords— major terms/concepts in the study should be maximum of 5 words placed after the abstract.
- Introduction- the reasons for the work, essential background & objectives of your research (£ 200 words).
- Methodology
   — materials and sufficient information on the methods used; research design and data gathering and data analysis techniques applied.
- Results- a succinct account of the most important results presented in the table or graphs.
- Discussion- significance of the results using related literature. (Results and discussion may be presented in a single section if this works better, depending on the nature of your work)
- Conclusions and recommendations- summary of the key findings, and provide recommendations for end users in relation to research needs for development and impact.
- Acknowledgement- recognition of all donors and partners who contributed to the research, other than the author's organiza-

- 2.2 Technical feasibility (to assess how well a technology is able to achieve what it was designed to do)
- 2.3 Financial/economic viability (to examine the financial/economic soundness of promoting the use of a particular technology
- 2.4 Environmental soundness (to understand the ecological implication of introducing a particular recommended technology
- 2.5 Political acceptability (to assess the political relevance of promoting the technology among LGUs and stakeholders)

### 3. Manuscript/Write-Up

15%

- 3.1 Accuracy of figures and language
- 3.2 Clarity and style
- 3.3 Cogency and logic

### 4. Presentation

15%

- 4.1 Clarity of presentation
- 4.2 Clarity and style
- 4.3 Stage presence
- 4.4 Voice modulation
- 4.5 Response to inquiries

### TOTAL 100%

Best in Poster is selected based on the following criteria:

Originality - 40% Clarity in message - 30% Visual impact - 30%

### TOTAL 100%

### K. Search for the Modelong Guro sa Pananaliksik

The Modelong Guro sa Pananaliksik shall be given to outstanding faculty who had shown exemplary accomplishment in research based on the criteria set by the Director of RDTM. This is given annually during the BASC Recognition Program. Candidates or nominees shall be required to submit documents for review of the Evaluation Committee.

The award is open to all faculty members who are qualified for the award, a preliminary selection shall be conducted at the Institute level. The faculty who will be selected will be recommended by their respective Dean to the Evaluation Committee. The general requirements for qualification are the following:

1. Must not hold major administrative designation from the RET Office;

- 2. The accomplishments for the year shall be considered in the selection of the awardee.
- 3. Must have accumulated 80 points or above.

The following are the criteria in the selection (with supporting documents):

- 1. For every research proposal approved (maximum of 20 points)
- 2. For every research completed and on-going project (maximum of 20 points)

Classifica- tion	Local/ Provincial	Regional	National	International
Study	5	8	10	12
Project	7	9	12	15
Program	8	10	15	20

Note: Supporting documents for completed project is the terminal report and for the on-going project is the progress report

3. Publications (maximum of 15 points)

For every research article published in various levels:

Classification	Local/ Provincial	Regional	National	International
Study	5	7	10	12
Project	7	9	12	15
Program	9	11	15	20

3.1 Local - 5 points

3.2. Regional or National - 10 points

3.3. International - 15 points

### Appendix 3

## DETAILED RESEARCH PROPOSAL (BASC-Funded Researches)

- 1. Title
- 2. Proponents
- 3. Research Area (Under what Program or Project)
- 4. Focused Commodity
- 5. Implementing Institutes/Agencies
- 6. Cooperating Agencies
- 7. Duration (Planned Start Date and Planned Completion Date)
- 8. Rationale/Significance of the Proposal
- 9. Objectives
- 10. Expected Outputs
- 11. Review of Related Literature
- 12. Methodology
- 13. Proposed Budget (Detailed, Supplies and Materials only)
- 14. Work and Financial Plan
- 15. Attachments (Required and Supporting Documents)

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# CAPSULE RESEARCH PROPOSAL FORMAT (BASC-Funded Researches)

- •
- 1. Title
- 2. Research Area (Under what Program or Project)
- 3. Focus Commodity
- 4. Discipline
- 5. Implementing Institutes/Agencies
- 6. Cooperating Agencies
- 7. Proponent's (Name, Major Field, Highest Degree Obtained)
- 8.Implementing Schedule (Planned Start Date and Planned Completion Date)
- 9. Proposed Budget (Supplies and Materials Only)
- 10. Rationale/Significance of the Proposal
- 11. Objectives
- 12. Expected Output
- 13. Major Activities/Methodologies

4. Research Papers Presented (maximum of 15 points)

For every research paper presented in various levels:

4.1 Local - 5 points

4.2 Regional/National - 10 points

4.3 International - 15 points

5. For Every Thesis or Dissertation Involvement (maximum of 5 points

Classification	Undergraduate	Graduate
As Adviser	2	3
As Member or Chairman – Examining Committee	1	2

6. Linkage established (maximum of 10 points)

For every linkage established

Local or Provincial - 3 points Regional or National - 5 points International - 10 points

Supporting documents can be in the form of MOA's, MOU's, marketing agreements, communications, certificate, travel order with certificate of appearance.

7. Awards received - related on research activities (maximum of 15 points)

For every award received

7.1 Local or Provincial - 5 points 7.2 Regional - 10 points 7.3 National or International - 15 points

# PART 6. POLICIES AND GUIDELINES IN THE CONDUCT OF GRADUATE AND UNDERGRADUATE THESIS OR DISSERTATION

### A. Rationale

The Bulacan Agricultural State College offers degree programs with thesis or dissertation, one of the basic requirements for the student to fulfil a degree program.

Students undergo research activities that focus on their specialized field. Research activities contribute much to the training and exposure of the students in solving problems related to agriculture, engineering, social development, education, agri-business management, information technology, food technology, environmental and the like. With the basic principles of research methodology, all relevant activities are documented and presented in a scientific form with specific format and elements.

This manual was organized for the students who are interested and are required to undergo research activities in the form of thesis or dissertation as partial fulfilment of the course requirement of a degree program. This presents guidelines, policies, elements and format of undergraduate and graduate thesis or dissertation.

### **B.** Subject or Course Offering

In some degree programs of the College requiring thesis or on-the-job training, students are given the option to choose whether they will take thesis or field practice.

### C. Thesis Adviser

A student is advised to choose his/her adviser first before he/ she decides what research area he/she will be working on. The adviser should come from the faculty of the Institute. He/she can include adviser (co-adviser) from other institute/agency especially if the study will be financed by a certain institution/agency. A letter of request to the adviser shall be made by the researcher which should be conformed by the former.

### **D.** Examination Committee

For the undergraduate and masteral graduate students, the examination committee shall be composed of the following

Chairman - Expert on the Field

2 Members - Faculty members of the Institute

For the Doctoral Program, a chairman and four members will comprise the committee.

- 19. Department of Agriculture-Central Luzon Integrated Agricultural Research Center (DA-CLIARC)
- 20. Non-government Organizations (NGOs) Social Action Center of Pampanga
- 21. Praxis Fides Mutual Benefit Inc.
- 22. Irrigated Rice Research Consortium
- 23. Bureau of Soils and Water Management
- 24. Department of Agriculture-Regional Field Units (Region 1,2,4,5, CAR)
- 25. DA-Agricultural Training Institute (DA-ATI)
- 26. DA-Bureau of Animal Industry (DA-BAI)
- 27. Department of Environment and Natural Resources

### SERVICES OFFERED

- 1. Soil Analysis
- 2. Project Development and Resource Generation Training
- 3. Farm Plan Formulation and Development
- 4. Feasibility Studies Preparation
- 5. Consultancy
- 6. Artificial Insemination for Carabao
- 7. Financial Assistance
- 8. Surveying
- 9. Water Resources Development
- 10. Food Processing
- 11. Business Management
- 12. Product Development, Launching, Marketing and Commercialization
- 13. Training Services on Crop Production Technologies

### Appendix 2

### LIST OF MATURED TECHNOLOGIES

- 1. Water-saving Technologies for Rice Production (Aerobic Rice & Controlled Irrigation)
- 2. Best Management Practices in Vegetable Production
- 3. Artificial Insemination for Carabao
- 4. Goat Upgrading and Production
- 5. Food Processing
- 6. Product Development and Processing Fabric Conditioners

### LINKAGES

- 1. East-West Seed Company
- 2. International Rice Research Institute
- 3. Provincial Government of Bulacan
- 4. Local Government Units
- 5.State Colleges and Universities (ISU, PSU, BPSU, ASCOT, DMMMSU, CLSU, PAC, RMTU, etc.)
- 6. International Crops Research for Semi-Arid Topics (ICRISAT)
- 7. University of the Philippines at Los Baños
- 8. Commission on Higher Education (CHED)
- 9. National Economic Development Authority (NEDA)
- 10. Philippine Rice Research Institute (PhilRice)
- 11. Department of Agriculture-Bureau of Agricultural Research (DA-BAR)
- 12. Department of Science and Technology (DOST)
- 13. Technology Application and Promotion Institute (TAPI-DOST)
- 14. Institute of Plant Breeding (IPB, UPLB)
- 15. Philippine Council for Agriculture, Forestry and Natural Resources
- 16. Research and Development (PCARRD)
- 17. Central Luzon Agriculture and Researches Research and Development Consortium (CLARRDEC)
- 18. Department of Agriculture-Regional Field Unit 3 (DA-RFU-3)

Note: If the project is part of a program, this form should be submitted together with detailed R & D proposal for the whole program.

### E. Oral Examination

### 1. Audience Composition

Aside from the Examination Committee, Dean, Adviser (s), faculty members of the Institute, selected students from the Institute may attend the oral exam. One faculty from the Institute should act as secretary during the oral examination.

### 2. Outline and Final Defense

The presenter will be given a maximum of one hour in his/her presentation and it will be followed by a review and evaluation by the examination committee. A form will be provided indicating the marking of the student whether the research (outline or results) is evaluated as passed, failed or conditional passed. Working technical paper should be given at least one week before the date of oral presentation. After the defense, the researcher should present the improved outline at most three weeks after the oral presentation to the adviser and examination committee. The examination committee will decide after the oral presentation whether the student shall repeat or not the oral presentation with the incorporated suggestions, comments or recommendations.

After the oral presentation of research results or manuscript, a circulating copy of the manuscript shall be furnished to the concerned technical staff to further review and evaluate the scientific paper. A circulating page for the confirmation and approval of each technical staff involved in reviewing and evaluating the manuscript will be required.

## **F. Manuscript Format** (see Manuscript Format for Undergraduate Thesis)

### G. Letter of Requests

At the start, the student should submit a letter of request for approval to the selected faculty who will act as adviser and/or co-adviser. After acceptance, a second letter should be organized requesting for the approval of the adviser on the thesis title to be conducted.

The researcher should furnish a letter informing the examination committee and other concerned staff at least one week before oral presentation.

### H. Reproduction and Distribution of Manuscript

At least 7 copies of the manuscript shall be reproduced and should be distributed among the offices of the College working on research and instruction as follows:

- 1. Adviser;
- 2. Institute;
- 3. College Library (2 copies);
- 4. RET Office;
- 5. Student; and
- 6. Registrar's Office.

### I. The Thesis Student

Thesis students are those conducting researches as partial fulfilment for the attainment of the degree.

The qualifications are as follows:

- 1. Undergraduate Student student of at least senior standing can conduct the study.
- 2. Graduate Student student who has finished academic requirement and passed the Comprehensive Examination leading to his or her degree

A thesis student may enrol 3 units per semester and by the time he or she has enrolled 6 units, he or she should have finished his or her thesis. However, after registering 6 units in thesis writing and he or she has not undertaken the final examination, he or she may be allowed to register another 3 units until completion.

### J. Educational Qualification and Functions of the Thesis or Dissertation Adviser

a. A thesis adviser must be a specialist in the research discipline, he or she is involved as an adviser. He or She

### Department level shall be initia

ted and facilitated by the Institute Dean following the prescribed criteria approved by the Institute/Department.

- 2. Technical paper(s) for submission to the RET Office for evaluation shall be endorsed by the Institute Dean.
- 3. The paper should be in publishable format not more than five pages. (Appendix 4).
- 4. Best student researcher (s) shall be given Php2,000 & certificate of recognition as incentives during the Annual Recognition of the College
- 5. RET executive staff shall act as members of the evaluating committee (RET Vice President as Chairman) during the presentation and evaluation of the research technical paper following the prescribed criteria.

Criteria for Evaluation for Best Student Research/Thesis

### A. Technical Paper

1. Impact/Significance	50%	
A. soundness of		
B. relevance		
2. Format of the Paper	10%	
	Sub-total	60%
B. Oral Presentation		
1. Mastery of the Resear	20%	
2. Quality of Answers	15%	
3. Multi-media presenta	5%	
	Sub-total	40%
	<b>Grand Total</b>	100%

### N. Conduct of Research

During the study, the researcher should report regularly to his or her study or consult any problem with his/her adviser about the conduct of the research.

Advisers should monitor closely the activities and see to it that the procedures are accurately executed to ensure reliability and validity of results. In cases of dishonesty, sanctions based on the Student manual will be imposed.

### O. Analysis and Interpretation of Findings

After gathering data, the researcher collates tallies, categorizes and tabulates them. Frequent consultations with the Adviser and Statistician should be made for accuracy of statistical computations and interpretation of results.

### P. Examination Fees

Graduate students (MS and Ph.D.) are required to pay the amount approved by the Board of Trustees as incentives for the Examining Committee based from the approved IGS Manual.

Students are advised not to serve foods or drinks before, during and after the presentation. The Student and Adviser may or may not serve light snacks to the Examination Committee during the oral presentation.

### Q. Venue

Final examination shall be conducted at any venue as maybe authorized by the Advisory Committee within the college (for undergraduate thesis) and at the Office of the Dean (for graduate thesis) or at any venue as may be authorized by the Advisory Committee within the College.

### R. Award for Best Student Researcher

This award will be given annually to the student researcher (s) who had performed outstanding performance in the conduct of undergraduate thesis showcasing excellent results and positive impact towards the advancement of appropriate technologies in the field of agriculture, information, business, education, agricultural engineering, administration, food technologies and other related fields.

### **Guidelines and Selection Process**

1. Selection process of best technical paper at the Institute/

shall have the following minimum qualifications:

- 1. Ph.D for doctoral degree
- 2. MS or MA for masteral degree
- 3. BS for undergraduate students
- b. A thesis adviser shall guide the thesis student in the conceptualization of the research problem, conduct of the research and interpretation and analysis of the data or results of the study. In the graduate program, the Committee assists the students not only the adviser.

### **K.** Preparation of Thesis Outline

Upon approval of the thesis or dissertation title, the student conceptualizes the research problem in consultation with the adviser. The Director for RDTM , adviser and student shall first make a thorough investigation of previous studies conducted in the College and by other educational or research institutions. Approval will be in the form of clearance issued by the RDTM office. Preparation of research proposal shall follow the format prescribed by the RET Office.

### L. Evaluation Scheme for Student Researches

All research proposals shall undergo series of review and screening processes. Thesis advisers shall do preliminary screening. Should there be suggestions and recommendations, the proposal shall be returned to the researcher(s) for revision or refinement. The bases of evaluation are relevance, priority area and the technical aspect such as format, methodology and the like. After the proposal was approved by the adviser or advisory committee, the student can conduct the actual research. However, the Institute Dean, RET will be given copy of the approved outline.

### M. Ocular Inspection

Ocular inspection shall be conducted by the Adviser, the Director of RDTM, the Dean, the Institute RDTM Coordinator, the Examination Committee and their authorized representative after laying out the experimental area or a week after the acquisition of stock and a week before the final gathering of the data or at any stage of the experiment. For social sciences, the study area maybe visited if the Examination Committee deemed it necessary.