Republic of the Philippines
Mountain Province State Polytechnic College
Bontoc, Mountain Province

MPSPC Research Manual

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Republic of the Philippines
Mountain Province State Polytechnic College
OFFICE OF THE COLLEGE /BOARD SECRETARY
Bontoc, Mountain Province

BOT REFERENDUM NO. 001, S. 2021
APPROVED ON 8 APRIL 2021
NOTED DURING THE 121ST BOARD MEETING ON 30 APRIL 2021

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REFERENDUM APPROVING THE REVISIONS TO THE RESEARCH MANUAL

Referendum No. 001, s. 2021

BE IT RESOLVED, AS IT IS HEREBY RESOLVED, that the Board hereby approved the proposed revisions to the Research Manual.

APPROVED

CERTIFIED TRUE AND CORRECT:

DERINE D. AGUID
College/ Board Secretary

PREFACE

This Research Manual was revised to dovetail with the Cordillera Research and Development Agenda in relevance to the Harmonized National Research and Development Agenda 2017-2022. Also, the changes were made to provide a framework for Research and Development activities concentrated on regional advancement relative to the existing needs of the region.

Particularly, the chapters on the procedures and operations of research activities were reorganized from the previous manual as the content was expanded to include other salient features. Chapter 1 highlights the definition on research based from the Frascati Manual 2015 and RA 10055 (Philippine Technology Transfer Act of 2009). Chapter 2 presents the new organization structure of RDE, the new committees and their functions: the Research Review Committee, the Knowledge Management Committee, Research Journal Editorial Board, Ethics Committee, IPR Committee and the Research Ethics Committee. Part of Chapter 2 contains the expanded incentive scheme of the college. Chapter 3 details the guidelines in the formulation of the MPSPC Research and Development agenda and the departmental research program. Chapter 6 covers the enhanced policy on Intellectual Property Rights. A new addition to the manual is the Technology Transfer Protocol which sums up Chapter 7.

In consideration of the evolving the dynamics of the research environment , we hope that this new manual reflects the major thrust of the current administration which is articulated in excellent researches to be translated to relevant extension programs.

ANNIE GRAIL F. EKID
Vice President, Research Development and Extension

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I. INTRODUCTION

About this manual

This 2018 research manual revision was undertaken to update the MPSPC Researchers and other stakeholders involved in the delivery of research services of the College. This manual intends to update the research agenda, include suggestions, recommendations from the oversight committee, and directives in this revised manual that could be updated as the need arises. The manual serves as the official policy and guidelines in conducting research services in the college.

This manual presents research policies, an overview of the research services and the research agenda of the Mountain Province State Polytechnic College. The research services of the College are managed by the Research Development Unit and is supervised by the Office of the Vice President for Research Development and Extension (VPRDE). This manual describes how the various programs and activities are developed and provides an overview or introduction of how they work. The services of the unit as well as the different programs and activities are then discussed. This manual also describes the individuals and departments involved in research with their overall responsibilities and functions. This manual further presents the policies and legal issues involved in the program, such as qualifications of persons responsible as described in the college code, appropriate load equivalents of research activities as described in the faculty manual and other policies in other legal documents adopted in the operations of the Research Unit.

This Research Manual supplements the provisions of the College Code and other Operating Manuals of the college like the Faculty Manual, Academic Manual, Finance and Budgeting Manual and Memorandum of Agreement executed by the College and partner agencies. These are necessary to manage and administer the smooth implementation of research services, and shall be maintained by the Research Development Unit. This manual likewise provides frameworks and policies under which procedures are developed and disseminated or communicated to all concerned in memorandum or IRR forms.

Definition of Terms

1. Research is a systematic controlled inquiry, often involving analytical or experimental activities, which seeks to gain new knowledge and which may involve development of new or revised products. Research includes.
2. Research and Development (R&D) refers to creative work, undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and to use this stock of knowledge to devise new applications (RA10055; Frascati Manual, 2015).
3. The R&D type of activities adopted in this manual are the following:

a. Basic Research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular or use in view.
b. Applied Research is original investigation undertaken in order to acquire new knowledge applying established theories and principles based from previous works. It is, however, directed primarily towards a specific, practical aim or objective.
c. Experimental Development is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or in improving existing products or processes.

4. Program consists of at least two projects.
5. Project consists of at least two studies.
6. Study is specific type of a problem for investigation.

II. RESEARCH AND DEVELOPMENT UNIT

RESEARCH MANDATE, MISSION, OBJECTIVES and OUTPUTS

Research Mandate

The Research and Development Unit have the following mandates:

1. Provides leadership in the development of College-wide R&D agenda and programs;
2. Prepares annual R&D work and financial plans including supporting documents for the endorsement and release of funds;
3. Oversees, monitors and evaluates the implementation of the research programs of the college;
4. Introduce innovative approaches to improve governance thereby increasing overall efficiency of the college R&D system;
5. Ensures dissemination and utilization of research findings;
6. Source out funds for manpower development and acquisition of scientific and information technology facilities; and
7. Introduces innovative approaches to facilitate access among stakeholders, planners and other clientele to R&D information and knowledge outputs.

Mission

To provide practical, functional and useful research outputs contributing to the socioeconomic development of the community.

Objectives

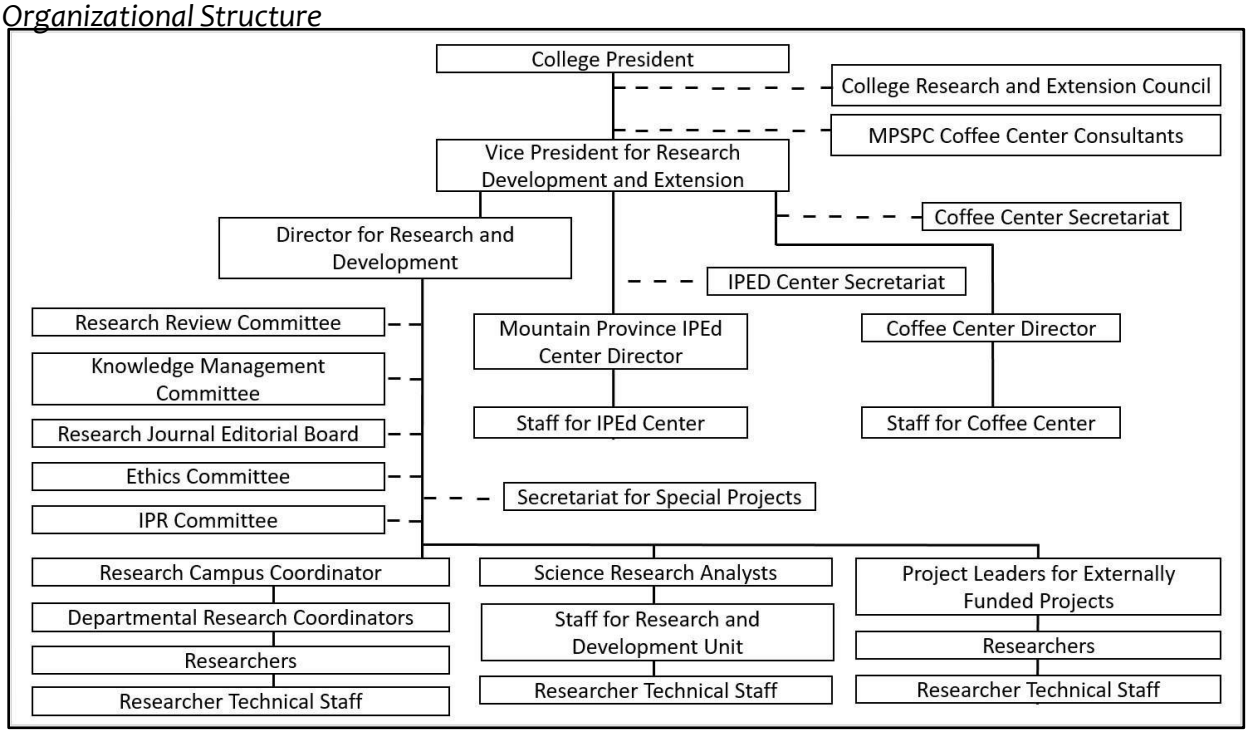
In the implementation of the mandates of research of the college, the Research and Development Unit aims to:

1. Prepare, develop and undertake basic and applied researches to generate knowledge and skills for the improvement of instruction and the quality of life of the people;
2. Coordinate all research activities of the college;
3. Publish completed research works in reputable journals;
4. Establish linkages with research consortia, research institutions, SUCs and other Agencies doing research services;
5. Render technical advisory and consultative services to researchers, Graduate School and Undergraduate Students.

Expected Output

The Research and Development services of the college are deemed to provide outputs in terms of publications, patents, products, progressive people, and partnerships and recommend policies for the welfare of its clientele and the general public as a whole.

Organizational Structure



RESEARCH AND DEVELOPMENT COUNCIL, COMMITTEES and CENTER CHIEF

1. *College Research and Extension Council (CREC)*

Composition:

The CREC is chaired by the College President and the Vice President for Research Development and Extension as the vice chairperson. Members of this council are the Director for Research, Director for Extension, Executive Deans of Tadian and

Bontoc Campuses, Campus Research Coordinators, Finance Management Officer, MPSPC Legal Officer, Science Research Analysts and others on invitational basis. Other members shall be included depending on the needed expertise or as may be deemed necessary by the VPRDE or the College President.

Roles and Responsibility:

The College Research and Extension Council shall be in-charge of the review and amendment of policies and guidelines relative to the conduct of research and extension activities.

2. *Research Journal Editorial Board (MPSPC-RJEB)*

Composition: Editor In-Chief
Managing Editor
Layout artist

Roles and Responsibility:

Shall publish research outputs into journals, digests, monographs, technical bulletins, newsletters, and appropriate printed materials.

The board shall have the following duties and responsibilities:

a) Takes charge of the publication of generated knowledge as results of research and extension activities;
b) Performs editorial assistance for R&E publications;
c) Establishes network with other institutions for publication exchange;
d) Performs other duties that may be assigned by the Director for Research, Director of Extension, Vice President for RDE and the College President.

3. *Research and Development Committee*

3.1. Research Review Committee (RRC) Composition:

The Research Review Committee shall be chaired by the Vice President for Research Development and Extension and the Director for Research as the vice chairperson. Members of this committee are the following: finance representative, Research Campus Coordinator, Department Research Coordinators, Science Research Analysts and Experts on specific fields.

Roles and Responsibility:

The RRC shall take responsibility in receiving and reviewing research proposals submitted for internal and external funding in terms of objectives, methodology and budgetary requirements and to recommend to the VPRDE for endorsement of the proposals for the President's approval.

3.2. Intellectual Property Rights Committee (IPRC)

Composition: Science Research Analyst
Director for Research
Campus Research Coordinators

Roles and Responsibility:

The IPRC shall promote awareness of and strengthen the intellectual property system in the RDU, and enhance enforcement of Intellectual Property policies relative to research outputs in the College.

The following are the duties and responsibilities of the committee:

a. Coordinates and assists in the evaluation, application, processing, and protection of intellectual properties created under the auspices of the College;
b. Disseminates Intellectual Property (IP) information and promotes efficient implementation and enforcement of the IP system;
c. Responsible in the capacity development of Intellectual Property Rights among MPSPC researchers;
d. Develop technology transfer protocol of Intellectual properties and Intellectual Property Rights.

3.3. Knowledge Management Committee (KMC)

Composition: Science Research Analysts
MIS Director
RDU and MIS Staff

Roles and Responsibility:

The Knowledge Management Committee shall support the daily operations and decision-making efforts of the RDU by serving as a repository of all information and data relevant to researches. The committee shall maintain a database of all researchers and researches conducted by the college.

Specifically, the committee have the following duties and responsibilities:

a. Builds up and classifies technologies, data and information relevant to the sector, and ensures that such materials be preserved and maintained in a stable repository;
b. Assists in the planning, implementation, and analysis of computer network for the sector.

3.4. Ethics Review Committee (ERC) Composition:

The Committee shall be composed core members from various disciplines such as Social Sciences, Nursing, a local board member, a lay person, Science Research Analysts and the Vice President for Research Development and Extension who

acts as the chairperson of ERC. The Committee shall co-opt a maximum of two (2) members at any time for independent expertise as and when required. The committee shall determine the duration of the co-option.

Roles and Responsibility:

The Ethics Review Committee (ERC) shall serve as the regulatory entity for research at the Mountain Province State Polytechnic College and shall review, evaluate and decide on the scientific and ethical merits of the research proposals. It is committed to ensuring and guaranteeing the rights, dignity, safety and protection of actual or potential individuals or community who participate in the research activities. Guided by applicable laws and regulations of the Philippine government and relevant institutional bodies such as the National Commission on Indigenous Peoples Education (NCIP), this Committee reviews and gives ethical clearance to the research proposals generated by the faculty of the Mountain Province State Polytechnic College. Depending on the conditions and need to conduct a review, the ERC can conduct either an expedited review or a full review.

Specifically, the committee have the following duties and responsibilities:

a. The Committee shall review research proposals submitted to it within a reasonable time and document its evaluation in writing to the applicant/s.
b. The Committee shall safeguard the rights, safety, and well-being of all research participants [actual & potential] taking into account the interests, needs of the researchers, and having due regard for the requirements of relevant regulatory agencies and applicable laws paying special attention to investigations that may involve vulnerable participants.
c. The Committee may request the investigator/s to explain any aspect of the study that may require personal appearance as its Committee meeting.
d. The Committee will make available acceptable standard format accepted by for submissions of research proposals.
e. The Committee meeting shall obtain relevant documents including but not limited to the following:

    i. Research protocol(s)/amendment(s)
    ii. Informed Consent form(s) and updates
    iii. Participant recruitment procedures (e.g. advertisements)
    iv. Written information to be provided to participants
    v. Investigator's Brochure (if clinical trial)
    vi. Available safety information
    vii. Information about benefits available to participants
    viii. The researcher’s CV
    ix. Other documents that the ERC may require.

f. The Committee shall consider the suitability of the investigator/s for the proposed study with a quorum with respect to the relevant qualification, training, and experience as documented by updated curriculum vitae and /or by other relevant documentation.

3.5 Research Center Chief

A Research Center operated by the College will be managed by a Research Center Chief. He shall be designated by the College President based on the expertise related to the goals and objectives of the center. He shall also assist the Vice President for Research Development and Extension and Director for Research and Development in the attainment of the Center Goals and Objectives.

RESEARCH AND DEVELOPMENT PERSONNEL, ROLES AND FUNCTIONS

The RDU personnel with their duties and responsibilities are as follows:

Vice President for Research Development and Extension (VPRDE) shall be appointed by the Board of Trustees upon the recommendation of the College President. Except when appointed to a plantilla position, the term of office shall be three years without prejudice to re-designation and shall assist the College President in the overall administration and management of research, development, and extension towards the attainment of the VMGO of the College (Art. 18C sec. 3.1, MPSPC College Code).

Director for Research Development shall have an appropriate doctoral degree in philosophy or science, at least an associate professor with a minimum of ten years of research experience with a track record in research and three years of college teaching experience and shall be designated by the College President in consultation with the Academic Council (Art. 42 sec 13, MPSPC College Code) and shall:

a. Manage the programs, projects and activities of the Unit in accordance with the priority thrusts of the college;
b. Review and update the College Research and Development Program;
c. Assist in the supervision and coordination of all research programs/projects/activities of the various units;
d. Formulate, update and carry out policies and programs in the research unit as mandated by the College;
e. Provide directions and guidelines in planning, programming, preparation of proposals under the research unit to ensure that these are congruent to identified thrusts and priorities; and
f. Perform other functions as may be assigned by higher authorities.

Science Research Analyst, as permanent staff of the RDU shall perform the following:

a. Make plans for the research and extension programs of the campus together with the coordinators;
b. Assist the Research Coordinators in implementing the research program of the campus;
c. Monitor research program/projects being implemented in the campus;
d. Coordinate with the other researchers, research coordinators/directors, Vice President for Research Development and Extension for the smooth implementation of the research programs of the College, and
e. Perform other functions as may be assigned by their immediate supervisor.

Campus Coordinator for Research shall be with an appropriate doctoral degree in philosophy or science. He/she must be at least an associate professor with at least seven years of research experience with a track record in research, three years of administrative experience or three years college teaching experience and shall serve a term of three years without prejudice for re-designation. The Campus Coordinator for Research shall be designated by the College President in consultation with the Academic Council (Art. 42 sec 5-6, MPSPC College Code) and shall:

a. Establish priorities in their respective areas of concern;
b. Initiate the conceptualization, planning and promotion of responsive research agenda;
c. Facilitate the processing and evaluation of proposals and endorses them for approval;
d. Recommend research programs to their respective Executive Deans;
e. Consolidate action plans, work and financial plans, quarterly progress reports and other needed reports as required.
f. Performs other research related services as maybe delegated or requested by higher authorities.

Departmental Research Coordinators shall be selected from among the faculty members within their respective departments by the Department Chairmen, recommended by the VPRDE and approved by the College president and shall:

a. Act as the arm of the Department Chairperson in the development/ formulation and implementation of the R&D programs of the Department;
b. Helps in the formulation of the College Research Development agenda;
c. Coordinates with the faculty researchers in the implementation of the research projects in the college whether GAA, externally-funded or commissioned research;
d. Manage the publication of departmental journals and to facilitate the processing and consolidation of reports from the departments;

e. Submit status reports of the department's research program; and
f. Performs other rese arch related services as maybe delegated or requested by higher authorities.

Researcher refers to a faculty member or staff under the administration who are conducting researches either funded through the GAA of the College or externally funded through the College.

The following are general roles, duties and responsibilities of researchers:

a. Follow policies and guidelines in the conduct of researches like procedures and processes in the approval of research works;
b. Submit to the RDU proposals for endorsement and consideration for RRC review and approval;
c. Submit to the RDU purchase requests based on approved Work and Financial Plan of the research proposal;
d. Submit to the RDU progress reports every end of each semester, copy furnished the Executive Dean's office, as part of monitoring and evaluation of the faculty researcher, particularly on the de-loading scheme to give way for research;
e. Failure on the part of the researcher to submit progress reports and/or terminal reports at the end of the semester shall force him or her to take additional loads for the succeeding term equivalent to the number of units de-loaded for him or her during the present term;
f. Present and subject the research output as an on-going and/or completed research during the Annual Agency In-House Review for evaluation;
g. Incorporate all suggestions given during the Agency-In-House Review and submit edited output in hard and electronic copy to the RDU for further review;
h. Submit to the RDU research articles in abstracted form following issued guidelines for writing research articles for publication in the MPSPC Journal or Department Journals;
i. Present completed researches that has undergone evaluation of the Annual Agency-In-House Review, recommended by the RDU and endorsed by the VPRDE in other National and International fora with the approval of the College President;
j. Researchers are liable to the financial accounting procedures of the college as a proponent of a budgetary expense; and
k. Researchers (except for staff) are entitled to a 3-unit load deloading equivalent per semester during the course of the study for every research study to be conducted or being conducted.

Program/Project Leaders of externally funded projects shall be designated through a Special Order by the College President upon recommendation of the VPRDE and shall lead the

approved externally funded research projects under their responsibility. The following are the general roles, duties and responsibilities of researchers whose research projects and studies are externally funded.

a. Abide by the terms and conditions stipulated in the Memorandum of Agreement or any legal paper pertaining to the conduct of the externally funded research;
b. Observe procedures, policies and guidelines of the college in the conduct of externally funded researches;
c. Submit to the RDU progress reports for endorsement to the funding agency;
d. Process official travels pertaining to the research activity through the RDU;
e. Process purchase requests and other financial matters through the RDU; and
f. Remain compelled and pledged to the funding agency and the college until the completion of the research project or study.

Research Staff who may be hired as Job Order or Contract of Service shall perform tasks stipulated in their contract;

Research technical staff whose positions may be created include Science Research Assistants, Science Research Specialists, Senior Science Research Specialists, and other appropriate technical positions as provided by the funding agency and/or the implementing agency (for Special Projects).

The Executive Deans of the two campuses must be informed of the research undertakings of their respective faculty members. They shall be given notices on the research activities undertaken in their respective campuses by the RDU.

BENEFITS, AWARDS AND INCENTIVES

1. General Policy

   To give credits and recognition to the concerned efforts and accomplishment of faculty and staff researchers, the MPSPC employs various initiatives to give benefits, incentives and awards to deserving individuals. These include the provision of workload equivalents to faculty members, opportunities for participation and attendance in scientific conferences and related activities, funds for publication of research outputs, and awards/recognitions given by the College's programs on awards and incentives for service excellence among others. For externally funded projects, monetary incentives are provided to program leaders, project leaders and study leaders. In some cases, administrative support services are likewise incentivized.

2. Faculty Workload Equivalents
   a. The Director for Research and Development is entitled for a twelve (12) units load equivalent for the designation.

b. Campus Research Coordinators are entitled six (6) units load equivalent for the designation.
c. Department Research Coordinators shall be on an "on-call" basis and shall be entitled to service credits upon request by the RDU and approved by the College President. Further, Research Coordinators are entitled to three (3) units load equivalent for the designation.
d. Researcher (except for staff) is entitled for three (3) units equivalent work load per study per semester of the duration of the study but with a maximum of two research studies per faculty.
e. Researchers conducting externally funded researches with honorarium shall not be entitled to any workload equivalent.
f. Researchers with multiple designations shall carry the load equivalent of the highest designation.

Summary of Workload Equivalent and Leave Benefits for Designations

Designation	**Academic Workload Equivalent**
Director	12 units
Campus Coordinator	6 units
Departmental Coordinator	3 units

Designation	**Leave Benefits**
Director	Vacation & Sick Leave
Campus Coordinator	Vacation & Sick Leave

3. Monetary Incentives
   Monetary incentives will be given in the following areas:
   a. Winning papers during conferences at different levels of presentations;
   b. Research publications/Authorship to any reputable journals that add credence to the institution;
   c. Recognized author citations are those works cited from reputable journals, book of international circulation, chapter in a book of international circulation, book of national circulation, or chapter in a book of national circulation; and
   d. Registered patents.

This manual implements the policy on incentive scheme approved by the BOT through Resolution No. 083, s. 2014 as stated in the following tables:

Table 1. Incentives for Presentations

LEVEL OF PRESENTATION	CRITERIA FOR SELECTION	INCENTIVE (PhP)
Agency In–House Review (AIHR), and Local Presentations (Municipal or Provincial)	1. The proposal was reviewed by the Research Review Committee and approved by the President for implementation or these are priority researches approved by the president for implementation. 2. Presented during the Research Proposal Review (RPR). 3. The final copy (hard and soft copy) of the research paper shall have been submitted to the R&D Office incorporating the comments and suggestions of the evaluators.	• 2,000 best paper • 1,250 papers qualified for regional symposium • 1,000 best presenter
	4. The best paper must be selected by the technical panel during the AIHR.	
Regional Level	1. The proposal was reviewed by the Research Review Committee and approved by the President for implementation or these are priority researches approved by the president for implementation. 2. Presented during the Agency In–House Review prior to presentation in the regional level. 3. Selected by the technical panel for presentation to the HARRDEC sponsored regional review. 4. The awardees are selected by the panel of the Regional Review. 5. Copy of the research paper in abstracted form must be submitted to the R&D Office.	Awardees (top three) for poster and oral presentations 2, 500.00 1,500.00 (Nonawardee) both poster and oral presentations
National	1. The proposal was reviewed by the College Research Council and approved by the President for implementation or these are priority researches approved by the president for implementation.	2,500 (Nonawardee) both poster and oral presentations

	2. Presented during the Agency In-House Review prior to presentation in the national level 3. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy) during the Agency In-House Review 4. The abstract submitted for the conference or forum must be recommended by the VPRDE or his authorized representative and approved by the President.	☐ 3,500 (Awardee) both poster and oral presentations
International	1. The proposal was reviewed by the College Research Council and approved by the President for implementation or these are priority researches approved by the president for implementation.	☐ 3,500 (Nonawardee) both poster and oral presentations
	2. Presented during the Agency In – House Review prior to presentation in international conferences 3. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy) 4. The abstracted manuscript submitted for the conference or forum must be recommended by the RDE Sector and approved by the President.	☐ 5,000 (Awardee) both poster and oral presentations

Table 2. Incentives for Published Works

Authorship	**CRITERIA**	**INCENTIVE (PhP)**
Authorship reputable journal	1. The proposal was reviewed by the Research Review Committee and approved by the	

	President for implementation or these are priority researches approved by the president for implementation. 2. Presented during the Agency In–House Review prior to the publication 3. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy) 4. Proof of refereeing shall be presented. 5. Proof of journal where the paper was published. 6. At least one year since the release of the journal is qualified for the incentive.	50,000.00

Table 3. Author Citation Incentives

Author Citation	**CRITERIA**	**INCENTIVE (PhP)**
	1. The proposal was reviewed by the Research Review Committee and approved by the President for implementation or these are priority researches approved by the president for implementation. 2. Presented during the Agency In–House Review prior to the publication. 3. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy). 4. Proof of journal where the paper was published. 5. Proof of journal or book where the citations published. 6. At least one year since the release of the journal is qualified for the incentive.	
Author citation in a reputable journal		1,000.00 for every citation
Author citation of a book of		1,000.00 for every citation
international circulation		
Author citation of a chapter in a book of international circulation		1,000.00 for every citations
Author citation of a book of national circulation		1,000.00 for every 3 citations

Author citation of a chapter in a book of national circulation		1,000.00 for every 3 citations

Table 4. Incentives for Patented Works

INTELLECTUAL PROPERTIES	CRITERIA	INCENTIVE (PhP)
Inventions	• Inventions should be a product of research activities of the faculty or staff of the college. • It should have undergone the process of evaluation that is from research proposal stage to technology development of the college. • The invention should be recommended by VPRDE or his authorized representative and approved by the President for patent application. • The invention must be commercially viable. • Inventions are deemed property of the college and whatever royalty derived shall be given proportionately as stipulated in the MPSPC IPR Policy	50,000.00
Utility Model	• Utility models should be products of researches of the faculty or staff of the college. • It should have undergone the process of evaluation from research proposal stage to technology development by the college.	25,000.00

	• The Utility Model should be recommended by RDE Sector and approved by the President for patent application. • The Utility Model must improve existing technology and contribute income to the College. • Utility models are deemed property of the college and whatever royalty derived shall be given proportionately as stipulated in the MPSPC IPR Policy.	
Copyrights	• Copyrighted works should be products of researches of the faculty or staff of the college. • The research should have undergone thorough screening /evaluation by the Research Review Committee and have been approved by the College President for implementation • The copyrighted research output shall be in the form of work book, modules, teaching guide and text book for instructional purposes and techno – guide and training modules to be used for extension activities. • Copyrighted materials are deemed property of the college and whatever royalty derived shall be given proportionately as stipulated in the MPSPC IPR Policy.	2,000 per work
Industrial Designs	• Industrial Designs should be products of researches of the faculty or staff of the college. • The research should have undergone thorough screening/evaluation by the College Research Council and have been approved by the College President for implementation • Must be commercially viable • Industrial Designs are deemed property of the college and whatever royalty derived shall be given proportionately as stipulated in the MPSPC IPR Policy.	1,000 per design

Note: To avail of the above mentioned incentives for Patents, research results that passed through the evaluation of the Research Review Committee and the AIHR and approved by the College President for implementation is a requirement. Research results of externally funded research can avail of the incentive provided that no similar incentive from the funding agency was received by the researcher.

5. Promotion

   Completed researches of researchers whether internally or externally funded when published/presented can be used for the NBC promotion system, provided that the research has undergone the process of approval of the research activities. Copies of approved completed research, published research outputs and list of patents will be issued to the committee on NBC for their references.

6. Awards

   The College will be giving Plaque of Recognition to the awardee/s of Best Researcher of the Year following the criteria set in the PRAISE system of the institution.

RESEARCH CAPABILITY DEVELOPMENT PROGRAM

1. Individual Research Agenda

   The College believes that the solid ground of research is based on the presence of experts and academic enthusiasts in a particular field of specialization or area of research. To enhance and align researchers in their field of specialization and area of interest, each researcher of the college can freely choose their areas of research interest and establish their own individual research agenda based on the R&D priorities of the College. The individual research agenda supports the horizontal learning and the development of researchers while focusing on their field of specialization, expertise and areas of interest.

2. Trainings

   The Research and Development Unit is also tasked to provide researcher's capability trainings in order to make the researchers capable in producing quality research outputs. These research capability training program has a three category; the first category are trainings to enhance the capability of the researchers to conduct research and are intended for those with academic rank of Instructor to Assistant Professor and nonteaching personnel who has a research function; second category are managerial trainings related for research, patenting and research publication. These trainings are intended for faculty with academic rank of Associate Professor and non-teaching personnel involved in research activities; and lastly, these types of trainings are intended for full pledge professors, Director for Research and Development, Vice President for Research Development and Extension and non-teaching personnel that includes trainings on policy formulation, peer review, research editing and research ethics.

Table 5. Matrix of Research Training Program of the College

Category	Expected Participants	Title of Trainings
1	Instructor Assistant professor Non-teaching personnel researchers	Quantitative Experimental Designs Qualitative Experimental Designs Literature Research review Research Tool Preparation Training on Statistical Analysis Research proposal write-shop
2	Associate Professor Non-teaching personnel researchers	Research Management Training on Intellectual Property Rights Research Publication Strategic Planning on R&D
3	Professor Director for Research VPRDE Non-Teaching personnel researchers	Peer Review Research Editing Research Ethics

3. Research Training Call from Outside the Agency

The RDU will prepare researcher's profile on trainings attended by the researcher. Prioritization of trainees will be based on the needs of the researchers and relevance of the activity.

4. Research Mentoring

Creating opportunities for group learning and information sharing is essential to developing a motivated and inspired research culture at the college. Through an engaged relationship between senior and junior academic researchers, research mentoring is a strategy that fosters academic freedom and information exchange between senior and junior researchers. Senior and junior academic researchers are encouraged to work together, share ideas, and develop knowledge in their respective fields as a group at the College.

A. Senior Academic Researcher

The depth of experience and knowledge that senior academic researchers bring to the table is valued by the college. Senior researchers are encouraged to use their own judgment when choosing research topics for both their own projects and teaching initiatives, as they are leaders in their disciplines. This flexibility seeks to foster creativity and intellectual depth while leveraging their vast knowledge base harmonizing with the College's R&D ambitions. Senior Academic Researchers are also encouraged to act as mentors in teaching research in their own chosen field, to help

younger researchers in the College to navigate their own research interests, inspire and teach research, development and innovation to students, and facilitate learning exchange to academics outside the institution, adding to a vibrant, diverse academic environment.

B. Junior Academic Researchers

Junior Academic Researchers are given the freedom to independently investigate and select their research topics because it is important to develop a sense of ownership and interest in emerging academic researchers. In order to improve their research agendas and academic paths, novice academic researchers are also urged to approach Senior Academic Researchers for advice and mentorship as they usually have the knowledge and experience to share. Likewise, Junior Academic Researchers are also encouraged to act as mentors in teaching research in their own chosen field, to help inspire students in research, development and innovation and help facilitate learning exchange to academics outside the institution whenever they can.

III. RESEARCH AGENDA AND DEPARTMENTAL RESEARCH PROGRAM

GUIDELINES IN THE FORMULATION OF THE MPSPC RESEARCH AND DEVELOPMENT AGENDA

The MPSPC Research and Development Agenda shall be formulated reflecting the following:

a. The research program must be aligned to the regional, and local development thrusts as spelled out in the national, regional and local development plans. It must address inclusive growth, poverty alleviation, sustainable development and good governance;
b. Research Development programs must be aligned and supportive of the thrusts and priorities addressing specific research needs in the region;
c. The regional commodity must be aligned and supportive of the thrusts and priorities for each commodity or commodity discipline in any field;
d. The provincial research thrusts and priorities must be considered as a guide in the formulation of research projects;
e. Research projects must be geared to the attainment of the college's VMGO and the administration's thrusts; and
f. The formulation of the Research Development projects when subjected to external funding must follow guidelines in the agenda setting, planning implementation, and monitoring and evaluation as outlined by any funding agency or entity.

The approved MPSPC R&D Agenda serves as the guide in the development of departmental research program of each department of the college.

<u>MPSPC Internal Research Activities</u>

MPSPC recognizes that policies need to be updated and revised to suit the current situation and the emerging issues and concerns affecting the institution. Internal researches of the college shall focus on the advancement of the delivery of services anchored in the mandate of the college such as Instruction, Research, Extension and Production.

Therefore, the following are the priority study areas but not only limited to the conduct of:

a) VMGO relevance
b) Policy development studies
c) Impact assessment studies

To be able to deliver and attain the objective of this agenda, the following strategies will be employed:

- Conduct of project proposal workshops;
- Conduct of Agency Research Proposal Review for internal funding;
- Research collaborations with other research institutions;
- Submission of project proposals to funding agencies and institutions; and
- Conduct of Quarterly Research Meetings with the Departmental Research Coordinators as venue for reporting and assessment of Departmental Research Programs

DEPARTMENTAL RESEARCH PROGRAM

Each department of the college should align their research program with the approved MPSPC Research and Development Agenda and based on the available expertise of the researchers of the department. The following are the different departmental research programs to be prepared and recommended for the approval of the Board of Trustees of the College.

a. Accountancy Department Research and Development Program
b. Agriculture and Forestry Department Research and Development Program
c. Criminology Department Research and Development Program
d. Business Administration Department Research and Development Program
e. Engineering Department Research and Development Program
f. Hotel and Restaurant Management and Tourism Department Research and Development Program
g. Information Technology Department Research and Development Program
h. Office Administration Department Research and Development Program
i. Nursing Department Research and Development Program
j. Teacher Education Department Research and Development Program – Main Campus
k. Teacher Education Department Research and Development Program – Tadian Campus
l. Graduate School Research and Development Program
m. Liberal Arts Department Research and Development Program

IV. RESEARCH AND DEVELOPMENT CYCLE

CORE CRITERIA AND PRIORITIZATION OF RESEARCHES

1. Core Criteria of a Research Proposal

All researches to be conducted by the teaching and non-teaching personnel of the college should pass the criteria and it should fall on the priority of the college as stipulated in the MPSPC Research Agenda and Departmental Research Program. The following are the core criteria of a research proposal.

Table 6. Core Criteria of a Research Proposal

Criteria	Description
1. Novelty:	- Aimed on finding out something new. - The pursuit of original and challenging objectives through the creation of new knowledge (such as seeking previous undiscovered phenomenon, structures or relationships) is a key criterion for R&D. - Any use of already available knowledge (adaption, customization, etc.) which does not entail an attempt to expand the state of the art should be excluded.
2. Creativity	- Should be based on original, not obvious, concepts and hypotheses - In addition to the development of new knowledge, an R&D project should have a creative approach, such as devising new applications of existing scientific knowledge or new uses of available techniques or technologies.
3. Systematic	- Should be well planned and budgeted
	- R&D is a formal activity that is performed systematically. In this context systematic means that the R&D is conducted in a planned way, with records kept of both the process followed and the outcome. To verify this, the purpose of the R&D project and the sources of funding for the R&D performed should be identified.
4. Transferable or Reproducible	- Results from the study should be reproducible. - To be generally applicable, the findings of an R&D project have to meet the criterion of being transferable/reproducible, in addition to the other three criteria. Transferring the results may for example be demonstrated by publications in the scientific literature and the use of instruments of intellectual property protection.

2. Prioritization criteria of Researches
   a. The R&D program/project shall be within the priority areas as listed in the MPSPC R&D Agenda and Departmental Research Program.
   b. The program/project shall exhibit the urgency and importance of the information or technology that shall be disseminated to the target area.
   c. The R&D program/project shall exhibit technical feasibility.
   d. The proponent/s shall manifest capability to carry out the program/project based on its approved Individual Research Agenda.
   e. The program/project shall show practicability of timetable and budget allocation.
   f. The research proposal is evaluated on the merits of satisfying the five core criteria:

SUBMISSION AND REVIEW OF RESEARCH PROPOSALS

1. Submission of Research Proposals

   Submission of research proposals for review are accepted twice a year during the start of the semesters. Non-faculty researchers may submit research proposals any time of the year.

   Required documents in the submission of research proposal.
   a. Printed and electronic copies of the research proposal; and
   b. Endorsement of the Research Campus Coordinator.

2. Prior to the Research Proposal Review (RPR)
   a. The researcher/s submit their research proposals to the Departmental Research Coordinators.
   b. The Department Research Coordinators will submit the proposals to the Campus Research Coordinator
   c. The RDU will receive the research proposals from the Campus Research Coordinators for recording.
   d. Person in-charge of the review of the proposals will check the form and style if all the parts of the proposal is complete with the necessary requirements.
   e. The RDU shall return the research proposal to the proponent to complete/revise the necessary details.
   f. The researchers shall submit their revised research proposal for final checking. However, the RDU may still return the proposal to the proponent for further polishing of their research proposal.

3. Research Proposal Review

   Research Proposal Review refers to a protocol of the college wherein the RDU conducts a review of the proposals of researchers to determine proposals to be endorsed for approval.

   The Research Proposal Review will be conducted every last week of January to first week of February and every last week of August to first week of September. The proponent is required to present his proposal during the proposal review for enhancement and comments.

4. After the Research Proposal Review
   a. After the RPR Review, the researcher/s are advised to incorporate all of the reviewers' comments and suggestions in their proposals and submit to the RDU.
   b. RDU staff will record and review if:
      i. All the reviewers' comments and suggestions are incorporated;
      ii. Form and style is properly followed; and,
      iii. The proposal is complete with the necessary requirements/attachments
   c. If all of the above stated criteria are met, the research proposals are then endorsed for approval and implementation. However, if the research proposal has not met the necessary requirements, the RDU shall return the research proposal to the proponent/s for revision. The process of review and checking shall go on until the research proposal shall meet the necessary requirements.

5. For Research Proposals Undergoing Table Review

   A table review may be scheduled by the RDU if there is sufficient number of research proposals submitted not covered during the regular proposal submission for RPR. Papers that will be submitted for table review are limited to the following:

   a. Needs immediate action
   b. Proponents with reasons deemed by the Unit valid; and
   c. Outputs of research workshops or trainings which did not fall during the regular proposal submission

   Proposal submission for table review will follow the RPR procedures.

ENDORSEMENT AND APPROVAL OF RESEARCH PROPOSAL

1. Endorsement of the Research Proposal

   After the Research Proposal Review, the enhanced research proposal will be submitted to the RDU by the researcher/s with the endorsement of the Campus Research Coordinator. The Director for Research will re-check if the comments and suggestions were properly addressed by the researcher. If necessary requirements are met, the proposal is then submitted to the Vice President for Research Development and Extension who shall endorse the proposal/s to the President for approval and budget allocation. The budgetary requirement of proposals shall be signed by the Accountant with a certification of funds available. A copy of the research proposal shall be given to the Finance Office for monitoring and for the audit of the research expenses. Work and Financial Plan (WFP) will be included.

2. Approval of Research Contract

   The endorsed research proposal will be transmitted to the Office of the President for approval. Upon approval of the research proposal, the RDU shall prepare the Research Contract to be signed by the Researcher/s and the College President. The date of signing of the Research Contract shall signify the start of the research activity. Copies of approved research proposal/s shall be given to the proponents of the research, the Research and Development Unit, Campus Research Coordinator, and the Department Research Coordinator for their file and references.

IMPLEMENTATION OF APPROVED RESEARCH PROPOSAL

1. Implementation of the Approved Research Proposal

The conduct of the research activity is the responsibility of the researcher/s based on the approved work and financial plan. Any planned revision of the work and financial plan should be coursed through the RDU for endorsement and approval.

Requisitions of supplies and materials shall be done through the existing government procurement procedure. It is the responsibility of the researcher to submit purchase request of all supplies and materials needed in his study to the RDU for consolidation and processing.

2. Requisition of Supplies and Materials

All supplies, materials and equipment requested by the researchers must be based in the approved work and financial plan in the research proposals. The regular procurement of supplies and materials for the researchers shall follow the procedures specified by the BAC Office.

MONITORING AND EVALUATION

1. Progress Reports

To properly evaluate the conduct of researches, semi-annual progress reports every end of the semester and quarterly reports should be submitted to the RDU for the monitoring of researches being undertaken by the faculty and staff researchers. Likewise, results of undergoing research activities may also be reported during research meetings.

Semi-Annual Progress Reports or Quarterly reports are required for all researches during the reporting period. The researchers for each of the study/project are responsible for the report. For multiple researchers, the report prepared should cover activities at all levels of implementation and those involved in the study. Semi-Annual Progress Reports are due every end of the semester (May and December) and quarterly reports are due every end the quarter. This is to determine the loading equivalents of researches that shall be given for the next semester. Submission procedures, including what information are required, shall be outlined in the communication that will be sent to the researchers by the Director for Research and Development approximately one month before each report is due.

These progress reports are used to help manage the project in terms of attaining deliverables and in the implementation of the study.

2. Meetings:

Research meetings are held in order to disseminate information from the RDU and to monitor research activities through reports coming from the different departments and offices undertaking research activities. The research meetings are as follows:

a. Departmental meetings — held regularly after the department research project is finalized and activated, to ensure that researchers understand expectations from the projects, and that the Department understands the level of participation the researchers need;

b. Progress meetings — held periodically throughout the research project and study implementation, determined as necessary by the Director for Research and Development or VPRDE; and
c. RDU Meetings — held as needed to discuss and resolve issues arising during the implementation of research projects and other research related activities.

SUBMISSION, REVIEW AND EDITING PROCESS FOR COMPLETED RESEARCHES

1. The Agency In-House Review (AIHR)

The Agency In-House Review is a regular annual research evaluation forum conducted by the RDU every year. This is a forum where all on-going and completed research studies, projects and programs are being evaluated by panel members from the consortium and other experts from institutions being invited by the College depending on the categories of submitted on-going and completed researches by the faculty and staff researchers.

2. Review Period

The RDU facilitates the conduct of an Annual Agency In-House Review (AIHR) every year. Completed projects and studies either internally or externally funded shall be presented during the AIHR. Another research review may be conducted within the year depending on the completed researches submitted to be reviewed. The AIHR shall be conducted every August or as may be scheduled by the research consortium as the Regional Symposium is scheduled every September to October.

3. Objectives

The AIHR is intended to evaluate the completed researches in preparation for regional, national and international research conferences. Specifically, it aims to:

a. evaluate the completed researches with regard to the attainment of the objectives;
b. identify problems met during the project implementation and recommend specific courses of action; and
c. to identify research papers that can be presented in regional/national/international research fora.

4. Prior to the Agency In-House Review
   a. The researchers submit their manuscripts to the Research Development Unit (RDU).
   b. The staff in the RDU receives the research papers and record them.
   c. Person in-charge will check the form and style if all the parts of the manuscripts is complete with the necessary requirements.
   d. The RDU shall return the manuscripts to the proponent to complete/revise the necessary details.
   e. The researchers shall submit their revised manuscripts for final checking. However, the RDU may still return the manuscripts to the proponent for further polishing of their study.

5. Oral Presentation

   Each project or study should be presented by the concerned researcher during the AIHR. Presenters must use appropriate visual materials. The use of multimedia presentation is encouraged. Presentation guidelines will follow the consortium format.

6. Evaluators

   The panel of evaluators are assigned by the consortium among pool of experts whose fields of specialization represent the majority of the projects/studies for review. They are generally renowned researchers in the region.

   The panel of evaluators shall come from the following:

   a. Regional sectoral experts pool, an inter-agency group composed of technical experts representing various disciplines; and
   b. Technical staff from funding agencies/institution/organizations.
   c. In cases that there are no evaluators within the region that could evaluate a specific specialization, the consortia may recommend or call for other experts from other consortia.

7. Review and Evaluation of Externally Funded Projects

   In addition to the AIHR, the technical review team of the funding entities reviews special projects periodically. The schedule, requirements and mechanism of the review are also prescribed by the funding entity. Project leaders are responsible for the Project Completion Report for such review. These should be coursed through the RDU.

8. After the Agency In-House Review (AIHR)
   a. After the AIHR, the researcher/s are advised to incorporate all of the reviewers' comments and suggestions in their manuscripts and submit to the RDU.
   b. RDU staff will record and review if:
      i. All the reviewers' comments and suggestions are incorporated;
      ii. Form and style is properly followed; and,
      iii. The paper is complete with the necessary requirements/attachments
   c. If all of the above stated criteria are met, the papers may be endorsed for presentations and publication.

IPR REGISTRATION OF FINAL MANUSCRIPT

Intellectual Property Right Registration will be facilitated by the IPR Committee of the RDU as long as all the documents are complete. For copyright registration, either an abstracted form of the research manuscript or the full paper may be submitted by the researcher in five copies to the RDU. For patents, utility models and industrial designs application, the inventor/researcher shall accomplish the required documents needed by the Intellectual Property Office such as the patent draft, application form for patent and other needed documents.

V. RESEARCH PRESENTATION AND PUBLICATION

Recognizing that research is an integral function of any state university, the Mountain Province State Polytechnic College has endeavored to support faculty researchers to conduct researches that are aligned to the emerging thrusts of the National Government which the College and its oversight agencies anchored their research agenda and programs. MPSPC also encourages its researchers to present their research outputs to various fora or conferences locally or internationally in order to share their newly acquired knowledge in their respective field of specialization and for the researchers to publish their outputs to reputable journals to enhance potential in author citation of the researches.

GENERAL POLICY FOR PRESENTATION AND PUBLICATION OF RESEARCH OUTPUTS

The College encourages researchers to disseminate their research outputs publicly through research presentations in local, regional, national and international conferences and publication in reputable journals. The MPSPC-RDU recognizes accepted and approved research outputs for presentation and publication endorsed by the College president as duly recommended by the Vice President for Research Development and Extension. The general purpose of presentation and publication of research outputs are to disseminate, share and extend the knowledge generated by the researchers.

Local Symposium/Conferences/Fora

Local symposium shall be organized at least once a year by the College inviting researchers within Mountain Province to present their research outputs. These symposium is organized mainly to disseminate research findings as a way of extending new knowledge to the stakeholders of the college.

Regional Symposium/Conferences/Fora

The College shall participate in a regional symposium with its affiliate consortium. It is a venue for the discussion and presentation of winning research outputs that were presented during the Agency-in-House Review. The following are the regional consortium/ office for the participation of regional symposia but not limited to:

CorCAARRD	regional symposium for Social, Agriculture, Aquaculture, Forestry and Natural Resources researches
CIERDEC	regional symposium for Industry, Energy, and Emerging Technology researches
CHRDC	regional symposium for Health, Medical and Clinical practice researches
CHED	regional symposium for Education researches

Scope and Objectives

The Regional Symposia involve the evaluation of completed researches in agriculture, forestry and natural resources, social, education, emerging technology and health researches regardless of the source of funds, during the year under review.

The Regional Sectoral/commodity Research Development conferences aim to:

a. Present, share and disseminate creation, generation, and appropriation of new knowledge generated by the Researchers in Health, Education, Social, Industry, Energy and Emerging Technology and AAFNR;
b. Serve as a venue for research idea generation for possible research project or program collaboration; and
c. Setting for possible technology transfer linkage to private or other interested individual or groups for the utilization of the research outputs.

Mechanics

The College shall adhere to the mechanics set by the implementing agencies, and consortia. Other Regional Symposia: Research outputs may also be evaluated by other regional symposia upon request or invitation.

NATIONAL AND INTERNATIONAL SYMPOSIUM/CONFERENCES

1. The Research and Development Unit shall receive invitations of call for paper presentations, screens the faculty and staff researches to be sent for national and international fora and conferences, and facilitates the processing of the papers of the faculty for research presentations. For faculty members who receive personal invitations from organizations, they are required to submit the invitation letters to the Office of the President for his action.

2. Research presentations either in national or international settings shall be accorded funding support coming from the RDE. Owing to budget limitations, international presentations held in the country shall be restricted to a maximum of three (3) presentations per faculty per academic year; however, in case a research has been accepted for presentation abroad, the RDE sector shall finance only once per academic year for the international travel, following a cost-sharing scheme. The faculty concerned shall be solely responsible for the airfare inclusive of travel tax and insurance fee while the RDE unit shall shoulder the Registration fee, Daily Subsistence Allowance (DSA), and publication fee.

3. Only completed researches not presented within the last three years are allowed to be presented for both national and international presentations.

4. For researches with multiple authors, only the presenter shall enjoy financial support to defray travel expenses, per diems and registration fees. The authors are also entitled to

receive the corresponding incentives, the distribution of which shall be determined by and among the parties involved based on the extent of contribution of each researcher in the realization of the study.

5. Prior to international presentation outside the country, the qualified researcher must seek first the consent of the Board of Trustees for the approval of the Authority to Travel in coordination of the RDE Sector.
   a. The presenter, upon return to duty shall submit photocopy of his certificate of presentation or award if any.

6. Theses or dissertations of the researchers are allowed to be presented and/or published provided that:

   a. There should be new findings about the study.
   b. The researcher submits a letter of intent to have his paper be presented and/or published.
   c. The researcher should secure a certificate/waiver from the host college/university to allow the publication of the thesis/dissertation.
   d. A copy of the research manuscript shall also be given to the RDU for filing; and
   e. A certification from the Research Review Committee waiving the evaluation process and allowing the research to be presented and/or published in a reputable research journal

7. The same research study can only be presented once for local, once for regional, once for national and once for international research presentations.

8. Fragmentary presentation of a research study is disallowed (i.e. presenting a part of the study in another conference and another part of the study in another presentation).

PUBLICATION OF RESEARCH OUTPUTS

The college promotes wide dissemination of research outputs through publication of all researches of the college in an reputable journals. In order to maintain up to date information of research output generated by the MPSPC researchers, the RDU supports three major research journal publication of the college namely: MPSPC Research Journal, Departmental Research journal and Student Research Journal.

Multiple publications of research results are not allowed in the research process. The publication in the MPSPC Journal or the Department Journals is the first public disclosure of research findings by the faculty researcher, student researcher and staff researchers.

Fragmentary publications are not allowed. Fragmentary publications include:

a. Publishing fragmented parts of a study in different publications
b. Publishing an abstract in a book of abstracts and then publishing a full paper in another publication without acknowledging the publication of the research in another publication
c. Publishing the research with different research titles but having the same content or results in the study or having a different title with slightly modified results in the studies being presented for publication

The selected research outputs for regional presentation to the CorCAARRD symposium during the AIHR shall be published in the MPSPC Research Journal. All other outputs of completed researches not selected but presented during the AIHR shall be published in the Departmental Research Journals.

Once published either on these two journals, output can also be published in reputable journals. However, multiple submissions to reputable is strongly prohibited.

MPSPC Research Journal

The College through the RDU maintains a yearly publication of the official multidisciplinary research journal, which is the MPSPC Research Journal. The journal will contain completed researches selected as winning papers in every category (Education; Social; Industry, Energy and Emerging Technology, Health and AAFNR) identified during the AIHR. These papers are recommended by the panel of evaluators to the Regional Symposium.

Researches which are to be published in the MPSPC Research Journal shall be encoded in Bookman Old Style size 11, on an A4 size bond paper and with a maximum of 12 pages in single space. Researches shall be submitted in electronic copies to the RDU. Deadline for the submission of completed researches shall be within two months after the conduct of the AIHR. For the details of the form and style of the researches submitted to the MPSPC Research Journal please refer to Appendix 2.

Departmental Research Journals

Each department of the College should publish its own departmental journal. Qualified research outputs to be published in a departmental research journal are papers presented during the AIHR but were not qualified for the Regional Symposium. The department should strategize ways on how to sustain the regular publication of their departmental journals including the funding requirements. They shall:

a. Determine their department editorial board; and
b. Determine the articles to be published.

The format for completed papers to be published in the Department Journals shall follow that of the MPSPC Research Journal paper preparation guideline.

Guidelines in Publishing Research Outputs in a reputable Journal

Research outputs that are to be published in a reputable Journal shall follow the format of the entity where the output is to be published. Before the publication of an MPSPC generated research output in other journals, a research paper should be recommended by the Director for Research and Development which will then be endorsed by the VPRDE to the College President for the approval of the publication of the research paper in the reputable Journal.

Publication fees of a research paper to any reputable Journal and indexed international journals shall be charged to Research funds, but should not exceed Php. 10, 000 per publication. A faculty can avail of funding support for a maximum of three (3) research publication per year. The name of MPSPC should be appended after the researcher's name in the research article that was published.

To avail of the publication fee, the researcher should attach the following supporting documents:

a. Letter to the VPRDE requesting for the publication fee reimbursement
b. Proof of refereeing evidence done between the researcher and the referee/publisher;
c. copy of accepted or published research article; and
d. communication from the organizer or publisher indicating the amount of publication fee

Categories of Refereed/Reputable journal

Category 1: Journals that are recognized by the Commission on Higher Education (CHED Recognized).

Category 2: Journals that are indexed or listed in high quality abstracting and indexing services.

VI. POLICY ON INTELLECTUAL PROPERTY RIGHTS

General Policy

Republic Act 8293, otherwise known as the Intellectual Property Code the of the Philippines shall be the main guiding tool for MPSPC to protect and secure the rights of the faculty, staff and student researchers under its employ. The enforcement of this law shall be enhanced by MPSPC adopting the policy guidelines governing ownership, protection, and utilization of intellectual property outputs of its students and employees in the interest of service, based on this code. BOT Resolution No. 038, s. 2010, approved the MPSPC Intellectual Property Rights Policy to support RA 8293 on a more detailed manner.

Scope and Coverage

The policies and guidelines shall be stipulated in this manual to apply to all intellectual properties generated by faculty researchers, student researchers and staff researchers of MPSPC. The policies and guidelines shall cover all employees of MPSPC having undertakings with intellectual property potentials, and all intellectual property transactions and negotiations with all partners in the local, national, and international research development network whether public or private. These policies and guidelines shall also apply to all Intellectual properties derived from MPSPC – directed, assisted, commissioned, contracted and collaborative research development projects.

Definition of Terms

1. **Assignee.** Refers to natural or juridical person to whom rights, title to and interest in Intellectual Property or proprietary information is assigned by the inventor or author, through an undertaking or any other legal instrument.
2. **Assignment.** Refers to the act of assigning all the rights, title to, and interest in intellectual property or proprietary information by the inventor or author, through an undertaking or any other legal instrument.
3. **Commercialization of Intellectual Property.** Refers to the purposeful effort to generate intellectual property for specific markets or commercial promotions, which includes technology transfer arrangements or commercialization.
4. **Creator/Inventor.** Refers to the natural person who made substantial creative and intellectual contribution to the creation of the intellectual property be it an invention or a copyright.
5. **Holder.** Refers to a natural or juridical person who owns the rights to an IP at any moment in time.
6. **Intellectual Property Rights.** This refers to intellectual property defined in the Intellectual Property Code of the Philippines.
7. **Protection of Intellectual Property.** Refers to the act of formally registering intellectual property rights with appropriate agencies to acquire vested rights thereto, and where registration is not required, protection shall mean the act of transferring legal ownership of intellectual property or proprietary information to individuals or organizations through proper documentation.
8. **Royalty.** Refers to payment made for use of property, especially a patent, copyrighted work, franchise, or natural resource. The amount is usually a percentage of revenues obtained through its use.
9. **Sponsored.** Refers to research work that is externally funded but MPSPC implemented.
10. **Directed or College Funded Research.** Refers to a research work conducted in the course of employment with the College and with the use of College facilities and resources.

11. **Collaborative Research Work.** Refers to a research work in partnership with an outside entity.
12. **Assisted Research.** This refers to any research development supported financially and/or in kind, wholly or partly by MPSPC and undertaken by any person, or entity, private or public.
13. **Author.** This refers to a person who has contributed to authorship and thereby entitled to have a publication attributed to them. A single publication may be attributed to more than one author.
14. **Authorship.** This is the intellectual participation in conceiving, executing or interpreting at least part of a research, scholarly or other academic output in the author's field of expertise, sufficient for the author to take public responsibility for that output.
15. **Visiting Research Fellow.** He or she is an honorary or visiting fellow appointed by the college to a non-salaried, full time or fractional position titled "Associate Fellow" or "Research Fellow"; and who is not a visiting student or volunteer who will undertake research activity under the college.
16. **Visiting Student.** He or she is a student whose home institution (institution at which the student has primary enrolment) is not of the college; and/or a student who undertakes part of their research under the program of the college but is not enrolled with any degree programs of the college (e g. A research practicum student whose home institution is not MPSPC).
17. **Volunteer.** This is a person who is not a Fellow, visiting student, staff member or student, but who is working on a college research development project on a voluntary capacity.
18. **Student.** This is a person who has been accepted for admission to or enrolled in any course or program offered by the college who undertakes part of his research under the program of the college.
19. **Research Assistant/Staff.** This refers to a person employed under the RDU programs, or as a staff of the College.
20. **Technology Transfer Arrangements.** According to the IP Code, this refers to the contract or agreements involving the transfer of systematic knowledge for the manufacture of a product, the application of a process, or rendering of a service including management contracts, and the transfer, assignment or licensing of all forms of intellectual property rights or propriety information.
21. **Third Party.** Refers to someone other than the principals directly involved in a transaction or agreement.

Obligations of Inventors and College Officials

It is in the college's policy that the following shall be the obligations of the inventor, copyright owner and the college officials who are directly involved in the management of researches:

Inventor/s and Copyright Owner/s.

The inventor/s and owner/s of copyright shall execute in favor of MPSPC, an Intellectual Property Rights Undertaking found in the MPSPC IPR policies and guidelines containing the following minimum provisions prior to any research undertaking:

1. The inventor and the owner of the intellectual property shall abide with the MPSPC intellectual property rights policy and guidelines.
2. The inventor and the owner of the intellectual property shall disclose to MPSPC Intellectual Property Rights Committee (IPRC) his intent to sale, offer, publish, present or communicate to the public of any information on any intellectual property or proprietary information at least three (3) months prior through the Intellectual Property Disclosure found in the MPSPC Intellectual Property polices and guidelines.
3. The inventor and the owner of the intellectual property shall assign to MPSPC the intellectual properties which may have been solely or jointly invented, created, or generated in connection with or generated with others in the performance of their regular duties, or those invented, created, or generated with the use of MPSPC funds, facilities, or services.
4. The inventor and the owner of the intellectual property shall cooperate fully with the MPSPC – IPR Committee and RDU in facilitating the application for the protection of intellectual properties such as patenting, registration for copyright, trademark, and the other forms of IP protection.
5. The inventor and the owner of the intellectual property shall assist in facilitating the promotion, technology transfer in any mode such as licensing, franchising, and other similar ones.
6. The inventor and the owner of the intellectual property shall preserve all confidential and proprietary information and refrain from using them in an unauthorized manner, both during their employment or contract with MPSPC and for a period of five (5) years after such employment or contract.

College Officials

The college officials, in the undertaking of the intellectual property rights protection shall:

1. Sign Confidentiality Agreements in connection with MPSPC research development derived intellectual properties;
2. Fulfill the provisions of MPSPC intellectual property rights and guidelines;
3. Observe all protocols in connection with any arrangement involving intellectual property or proprietary information;
4. Disclose any and all transactions involving MPSPC on intellectual property or proprietary information and ensure that the use thereof by a third party shall be covered by the required instrument; and

5. Guarantee that all Memorandum of Agreements entered into by MPSPC, which may generate any intellectual property or proprietary information, shall contain the following clauses:

> "Any intellectual property or proprietary information generated in the course of and is a result of the implementation of this agreement such as, but not limited to discoveries, inventions, works, databases, information system, reports, articles, research papers, research notebooks or records, tri-media presentations, and other project outputs, shall be subject to the MPSPC Intellectual Property Rights Policy and its Implementing Guidelines, and such other laws, rules, and regulations on intellectual property, all of which are deemed incorporated into this Agreement. All personnel involved in carrying out this agreement shall further be subject to such policies, rules and regulations".

6. The College will undertake to inform inventors about the consequences of potential disclosure because premature or inappropriate disclosure may defeat legal protection of intellectual properties. The College and Inventors will work together to facilitate both scholarly disclosures, and the acquisition of appropriate intellectual property protection.

Patent Ownership

The patent ownership will depend on the following:

1. Ownership of the patent shall be determined by the type of research enumerated hereunder:
    a) College funded research/work. MPSPC and the inventor shall be jointly owned by MPSPC, the sponsoring agency and the employee, or as determined by the agreement entered into by MPSPC and applicable law.
    b) Collaborative research/work. Patent shall belong in joint ownership among MPSPC, the employee and the outside entity.
    c) Assisted research/work. MPSPC and the inventor shall jointly own the patent.
2. The inventor is the sole owner of any intellectual properties or proprietary information emanating from such works created on his own time (i.e., outside office hours); or those that are unrelated to his assigned duties; or those of which the generation or creation of, did not utilize college resources, including pre-existing MPSPC-owned intellectual properties. Such intellectual properties or proprietary information may, however, be assigned to the college

Copyright Ownership

The ownership of copyrightable research output depends on the following:

1. For a College-funded research work, MPSPC and the inventor shall jointly own the copyright.

2. For a sponsored research work, copyright shall be jointly owned by MPSPC, the sponsoring agency or entity and the researcher, or as determined by the agreement entered into by MPSPC and applicable law.
3. For a collaborative research work, copyright shall belong in joint ownership among MPSPC, the researcher, and the outside entity.

Guideline in the Copyrighting and Patenting of Research Outputs

Only outputs of researchers which meet the set criteria shall be copyrighted or patented. The RDE office shall work for the copyrighting/patenting of intellectual properties which meet the following criteria:

1. Research output that has the potential for income generation. The outputs which may be copyrighted or patented is recognized to have economic value. These can be commercialized and the author/inventor as well as the College can benefit from these outputs.
2. Research results which can be used for instruction and extension and has unique results

Protection Application Procedure

The identified procedure shall be the guide of researchers in the application of IPRs, however, other procedures may be applied as may deem necessary.

1. Any faculty researcher, staff researcher, and student researcher and collaborative researchers, who shall create an intellectual property shall report in a prescribed form (Invention or Copyrightable Research/Work Disclosure Form) to the Intellectual Property Rights Committee for evaluation not later than three (3) months after such discovery of invention.
2. Upon determination by the IPR Committee that the discovery, invention or creation has IP or proprietary potentials and that there is obligation to assign rights to such discovery, the inventor shall execute a Deed of Assignment in favor of MPSPC.
3. The IPR Committee shall then prepare requirements for application for protection.
4. The Vice President for Research, Development and Extension shall endorse the application for protection.
5. The College President shall sign the application for patent or other appropriate mode of intellectual property protection.
6. The SRA assigned for research shall file the application for the appropriate protection of the intellectual property.

Revenue sharing

It shall be the policy of the College that royalties shall follow the following terms in cases of intellectual properties:

1. In all cases of intellectual properties, the creator or inventor shall receive 40% of the net income or revenue if it is funded by the College while 60% of the net income if the creator or inventor financed the research activity or it shall be subjected depending on the following:

    a. The nature and type of intellectual property; and
    b. The extent of assistance or contribution of the College or outside entity.

2. The share in the royalty of an external funding agency or collaborator, which made a substantial contribution to the intellectual property, shall be at the rate to be mutually agreed upon by the College and the outside entity.
3. The college shall share in the net royalties accruing to the College's rate of not less than 50%.
4. The College shall receive not less than 20% of the net royalties to finance the operations of an IPRM unit. These sharing arrangements will begin only after the MPSPC or the IPRM unit recoups its out-of-pocket costs uniquely associated with the protection of intellectual property. All expenses shall be charged initially against the budget allocation of the RDU, until such time that the income generated from intellectual properties are sufficient to finance protection application expenses.

Utilization of Revenues

The revenues generated from IPRs shall be used in the following manner:

1. All royalties, license fees, and other IP related incomes accruing to MPSPC shall be deposited in MPSPC's account to be administered and managed by the RDE to enable technology transfer and commercialization, promote research and develop intellectual properties. The department or unit where the invention is made shall get priority support.
2. The revenue shall be used to fund applications for intellectual property protection and IPRs annual dues as well as related expenses.

Conflict Resolution

1. In case of conflict arising from any of the provisions of this policy, the parties may agree to resort to mediation to settle the dispute with the assistance of the MPSPC's IPR Committee, the RDU and the office of the President.
2. In the event that MPSPC and the inventor cannot agree with respect to any of their respective rights or obligations, such dispute shall be submitted for determination to an arbitration panel of three (3) members having a member named by the inventor, a member named for the College and a chair selected by mutual agreement of the two nominees. The decision of a majority of such panel shall be final and binding upon both the inventor and MPSPC.

3. If the parties are not amenable to mediation, the parties may avail of any remedy provided for by existing laws, rules and regulations.

VII. TECHNOLOGY TRANSFER PROTOCOL General Policy

In accordance with the Philippine Transfer Act Law of 2009 or the RA 10055, the MPSPC fully recognizes that science, technology and innovation are essential for national development and progress. MPSPC shall facilitate the transfer and promote the utilization of intellectual property for the national benefit and shall call upon all researchers to take on technology transfer as a strategy to effectively translate research outputs into useful products and services that will redound to the benefit of its clientele.

The aims of this protocol is to give guidance to all MPSPC researchers and facilitate the transfer, dissemination, and effective use, management, and commercialization of intellectual property, technology and knowledge resulting from R&D funded by the government for the benefit of national economy.

Definition of Terms

For purposes of these policy, the following terms are defined as follows:

1. **Author** refers to the natural person who has created the work.
2. **Biodiversity** refers to biological diversity which means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
3. **Commercialization** refers to the process of deriving income or profit from a technology, such as the creation of a spin-off company, or through licensing, or the sale of the technology and/or IPRs.
2. **Genetic Material** refers to any material of plant, animal, microbial or other origin containing functional units of heredity.
3. **Genetic Resources** refers to any genetic material of actual or potential value.
4. **Government Funding Agency (GFA)** refers to any government agency or instrumentality, or government owned and/or controlled corporation that provides research grants and other technical and material support, from government appropriations and resources and those sourced from government-managed Official Development Assistance (ODA) funds.
5. **Indigenous Knowledge Systems and Practices** refer to systems, institutions, mechanisms, and technologies comprising a unique body of knowledge evolved through time that embodies patterns of relationships between and among peoples and between peoples, their lands and resource environment, including such spheres of relationships which may include social, political, cultural, economic, religious spheres, and which are the direct outcome of the indigenous peoples, responses to certain needs consisting of

adaptive mechanisms which have allowed indigenous peoples to survive and thrive within their given socio-cultural and bio-physical conditions.

6. **Spin-off firm or company** refers to a juridical entity that is an independent business technology taker with a separate legal personality from government funding agency, Research Development Unit and researcher created through the initiative of the researcher-employee who generated the technology.
7. **Technology** refers to knowledge and know-how, skills, products, processes, practices, inventions and/or innovations.
8. **Technology Transfer** refers to the process by which one party systematically transfers to another party the knowledge for the manufacture of a product, the application of a process, or rendering of a service, which may involve the transfer, assignment or licensing of IPRs.

Responsibilities of MPSPC - Research and Development Unit

1. Protect government interest in the Intellectual Properties and Intellectual Properties Rights generated from the R&D that is funded through a research contract. MPSPC is authorized to withhold from public disclosure, for a reasonable time, any information relating to potential IPR of MPSPC-RDU to allow to pursue full protection of such IPR.
2. Ensure adequate freedom to use the IP for further research to expand the knowledge frontier and requirements for publication of information as appropriate in accordance with government policy; and
3. Allow sharing of revenues from IP commercialization in a way that is not onerous to commercialization subject to existing laws requiring transparency and accountability.

Revenue Sharing: (provided in the IPR Policy)

All revenues from the commercialization of IPs and IPRs from R&D funded by MPSPC and other GFA(s) shall accrue to the MPSPC-RDU, as provided in the IPR policy which was adapted from RA no. 8439 or the Magna Carta for Scientists, Engineers, Researchers, and other S&T Personnel in Government". That in no case will the total share of the GFA(s) be greater than the share of the Researcher/s.

Sharing of revenues between MPSPC-RDU and researcher shall be governed by an employer-employee research contract, without prejudice to the rights of researchers.
Monetary revenues shall include but not limited to royalty payments, proceeds from sale of IP or technology, upfront technology transfer fees and dividends or sale from shares of stocks.

Where practicable, all non-monetary revenues shall be converted to cash value. The RDU shall have the discretion to determine the cash conversion value of the non-monetary benefits provided that the same is consistent with the Research Contract, and existing Laws and regulations.

Commercialization by the Researcher/s and Establishment of Spin-off Firms

The Author can commercialize his work and establish a spin-off firms by creating, owning, controlling, or managing a company or spin-off firm undertaking commercialization, or accepting employment as an officer, employee, or consultant in a spin-off firm undertaking such commercialization, provided that the concerned researcher-employee takes a leave of absence in the case of acceptance as an officer or employee of a spin-off firm, and/or a memorandum of agreement in a case as a consultant of a spin-off firm. The researcher-employee may still be allowed access to the RDU laboratory facilities, subject to reasonable fees and regulations which the RDU may impose.

The RDU may only allow for the commercialization of a research work when the author provide an opinion of a third-party expert regarding the efficiency, profitability and cost effectivity of the inventions and processes developed.

Use of Income and Establishment and Maintenance of Revolving Fund for R&D and Technology Transfer

The MPSPC-RDU shall open a bank account purposely for the safekeeping of revenues generated from the commercialization of IP generated from R&D funded and other Government Funding Agreement. The accumulated revenues shall be constituted as a revolving fund for use of the RDU undertaking technology transfer. The said income shall be used to defray intellectual property management costs and expenses, technology capability building, and technology transfer activities. No amount of said income shall be used for payment of salaries and other allowances.

Dispute Resolution

As a general rule, any dispute between the parties on the determination of government ownership should be resolved amicably. If the matter cannot be resolved amicably by the parties, then the administrative procedure for resolving any disputes on the determination for government ownership shall be subject to the mediation and arbitration rules of the Intellectual Property Office.

VIII. RESEARCH ETHICS POLICY General Policy

Republic Act No. 6713 known as the Code of Conduct of Ethical Standards for Public Officials and Employees shall be the guiding code for researchers but the following are policies to supplement the provisions of the said Republic Act. Moreover, some portions of the research ethics were also cited from the BSU Research Manual. All researchers whether faculty, student or staff shall be cognizant of the following policies and the Research Unit within its sphere of authority shall ensure the implementation of these policies.

Faculty researchers, student researchers and employees conducting research in the college have the moral obligation to apply the highest ethical standards in the conduct of

researches. It is the obligation of the faculty researchers, students and employees conducting researches to safeguard the integrity of MPSPC's research process. Research integrity and academic freedom should not be eroded by the financial rewards, fame and pressures of the researchers, though it is the mandate of MPSPC to conduct and promote researches for the benefit of its clientele.

Six Basic Principles of Research

Faculty researchers, student researchers and staff members who are conducting research should abide by the basic principles of research as follows:

1. **Honesty.** Researchers should present research outputs with utmost honesty. Fabrication, forgery, faking, and trump-up stories or anything that is untrue should strictly be avoided in the presentation of research outputs.
2. **Openness.** Research outputs should be accessible and unrestricted. Researchers should be approachable and friendly. Researchers should be open to criticisms and challenges.
3. **Carefulness.** Researchers should act with utmost caution to avoid unnecessary errors in the conduct of researches. Prudence and judiciousness should be practiced by the researchers at all times in all aspects of scientific work. In case there are errors, the researcher has the responsibility to ensure that these are corrected prior to dissemination.
4. **Credit.** Avoid plagiarism. Illegal use or breach of copyright is not allowed in the research process. Credit should be earned by the researcher through a manner that the credit is due to her or him.
5. **Intellectual Freedom.** The pursuit of new ideas is allowed to researchers. Old ones should be disparaged. Researchers should be open to change.
6. **Public Responsibility.** It is the obligation of the researcher to inform clientele, for whom the research work was conducted for, of the result of his or her study. Information and generated knowledge should be disseminated in the mass media. Research out-puts should be shared or communicated to a public that shall gain important and useful information from scientific works.

Management of Research Data

All data of research outputs should be made available to collaborators, supervisors, and funding institutions but should be consistent with the requirements of confidentiality. It should be known to all researchers that research data are legal documents. The availability of data at all times is necessary for purposes such as patenting rights, when data are compelled by standing committees or when the veracity of published results are challenged by other qualified researchers. It is the responsibility of the principal researcher or investigator to manage his or her data, which includes the decision to publish.

Authorship and Co-authorship

Authorship is a primary mechanism for the allocation of credits for scientific advances. To be named an author, a researcher must have made a substantial scholarly contribution to the work and be able to take responsibility for at least that part of the work they contributed. The privilege of faculty researchers, student researchers or staff members conducting researches shall be based on substantial contributions in a combination of:

a. Significant contribution to the conceptualization and design, gathering of data, and analysis and interpretation of data; and
b. Substantial input to drafting of the manuscript or revising it for intellectual content, or on final approval of the version of the manuscript to be published.

Only researchers who meet the above criteria shall be considered as author or coauthor. The participation of individuals who may have assisted the researcher by their encouragement and advice, or by providing space, administrative or financial support, providing of supplies and materials should be acknowledged in the text but not as authors or co-authors. The participation in acquiring funding for a research study or project and the participation in collecting data only does not merit for an authorship status.

The Primary or Senior author shall be the one who is submitting the completed research work. All authors should be responsible and accountable for the research. The primary or senior author shall have the following additional responsibilities:

a. Coordinate the completion and submission of the research work;
b. Abide by and satisfy the rules of submission;
c. Ensure that all the contributions of all collaborators are appropriately recognized; and
d. Ensure that each author in the team should have reviewed and authorized the submission of the research work in its original and revised forms.

Authorship and Co-Authorship Responsibilities

Collaborating researchers should discuss authorship at an early stage of the project and review their decisions at appropriate times before final submission of research articles for publication. Where there is a group of authors, one author should be appointed the corresponding author, to manage communication with the publisher and maintain a record of agreed authorship, authorship order and agreements regarding acknowledgement.

The following criteria should be applied equitably and fairly when deciding the order of authors in their publication:

a. The author who made the most significant intellectual contribution should be listed first, with subsequent authors listed in order of decreasing contribution;

b. Where the relative contributions are not easily distinguished, the authors must collectively agree on the order; and
c. Agreement to be an author on the final publication includes agreement to the order of authorship as printed in the submission to the publisher and on the authorship signatory document.

Research Proposal Review, Peer Review and Privileged Information

Research Proposal Review refers to a protocol of the college wherein the College Research Review Committee conducts a review of the proposals of researchers to determine proposals to be endorsed for approval.

Peer review on the other hand, can be defined as an expert critiquing of a research proposal, a researcher's status or progress report, an article submitted for publication or a research protocol. In the peer review, an evaluator or a reviewer should be an expert in the field or subject matter under review as determined by the RDU. There should be no conflict of interest of the evaluator or the reviewer.

Privileged information is the knowledge gained during the review of a research work. The privileged information should not be used by the reviewer to his or her benefit until the research work has already been made public. The names of the committee members conducting the review should be made known to the administration or management because the information shared during the review process should be guarded and cannot be shared with anyone unless it is very necessary and called for by the review process.

The reviewer or evaluator is prohibited from copying and using any material or paper under review in any manner. A written permission from the VPRDE, MPSPC Journal Editorial Board, author and oversight or collaborating agencies must be secured and approved before any material or paper under review is copied and used.

Conflict of Commitment and Conflicts of Interest

All researchers owe professional allegiance to MPSPC. A conflict of commitment occurs when the researchers time commitment to outside activities such business development, consulting, and teaching exceeds the permitted limits, or when the outside activities interfere with his primary commitment to MPSPC. The primary commitment of time and intellectual energies of all the researchers should be towards the pursuit of the mandates of MPSPC.

A conflict of interest occurs when other activities of the researcher are opposed to or affected by the faithful performance of official duty in MPSPC. These activities are identified as personal or financial concerns of the researcher that could compromise his professional judgment regarding the conduct of the research, whether externally funded or funded through the GAA. Other cases of conflicts include the following:

a. Any arrangement involving economic interest made by the researcher and sponsors or entities pertaining to the research work;
b. Using the College personnel or employees and students to perform services for other entities or companies;
c. Using the College's resources including official names, logos, personnel, equipment and facilities for non-college-related activities, such as engagement in business enterprises, contracting and sub-contracting, and purchasing, from entities, which the researcher has ownership or financial interest that can restrict a researcher's public reporting of research out-put; and
d. Any activity which can be reasonably determined to be a conflict of interest or commitment.

Humans and Animals as Subjects in Research

Principles of voluntary participation and informed consent of human subjects to ensure human subjects from risks and confidentiality is the responsibility of the researcher. Researches in health sciences and social sciences as well should have satisfied such principles before commencing with the research work. Researches involving humans as subjects should be reviewed and approved or endorsed by the Research Review Committee to ensure that the above-described principle is complied with.

Experimental animals as subject of research are the responsibility of the researcher. Researchers need to employ humane care of the animals, which means that the basic needs and welfare of the animal are satisfied before commencing with the study. A careful evaluation of the need for animals in research is necessary in any particular protocol considering the benefits of the research to society vis-à-vis the possible harm to these animals. The Animal Welfare Act (R. A. No. 8485) should be the main guide of the researchers and should be implemented.

Misconduct of a Researcher

Scientific negligence and deliberate dishonesty are the two broad categories of misconduct in research. Scientific negligence is when a researcher provides erroneous information without the premeditated intention to defraud. Scientific misconduct could be by deliberate acts or attempts of fraud, forgery, fabricated data, falsified or invented results, plagiarism, piracy, hoaxes and other forms of malicious acts.

STANDARD OPERATING PROCEDURES FOR RESEARCH ETHICS REVIEW

Rationale

Research is a public trust that must be ethically conducted, trustworthy and socially responsible if the results are to be valuable. For its entire life from project design to its administration, submission of the results for peer review to the publication have to be upstanding in order to be considered ethical. With the increasing collaborations with other

institutions and outsourcing of funds from national and private agencies, there will be different interpretations of ethical issues. As there is an upsurge of researches involving human beings and animals, institutional research protocols are essential to guarantee the safety and comfort of the subjects. Research review by the ethics committee is also required by international ethical standard governing research board, and has also been the staunch advocacy of the Philippine Health Ethics Review Board.

There is a need therefore for the regulation of the research activities through the establishment of the Research Ethics Board. Moreover, in order to foster a research culture that is ethically complaint, the systems and procedure for receiving, reviewing and approving research proposals are put in place. These systems should be standardized so as to allow expeditious, objective and reproducible review of proposals.

Coverage

These procedures shall apply to all the faculty and staff researchers of the Mountain Province State Polytechnic College who submit their proposals to the Research Development Unit and other external sources for funding. These guidelines cover the role of the Ethics Review Committee (ERC), tenure and conditions of appointment, the functions and responsibilities of officers, procedures and approval of review, and the communication of REC decision to the principal investigator in examining the ethical aspects of the submitted proposal.

Definition of Terms

The glossary of terms was lifted from the Standards and operational Guidance for Ethics Review of Health-Related Research with Human Participants, WHO (p.39-41).

1. **Ethical guidelines** are guidance documents which assist with decisions relating to the responsibility to adhere to established and relevant standard of ethical principles and practices
2. **Expedited review** is a review of proposals made by the REC chair or a designated voting member or group of voting members rather than by the active REC
3. **Informed Consent** is a decision to participate in research, taken by a competent individual who has received the necessary information; who has adequately understood the information; and who, after considering the information has arrived at a decision without having been subjected to coercion, undue influence or inducement, or intimidations
4. **Minimal risk** is the probability and magnitude of harm or discomfort anticipated in the proposed research are not greater, in and of themselves, than those ordinarily encountered in daily lives of the general population or during the performance of routine physical or psychological examination or test
5. **Principal investigator (PI)** is the main researcher overseeing or conducting the research process

6. **Vulnerable persons** are those who are relatively (or absolutely) incapable of protecting their own interests. More formally, they may have insufficient power, intelligence, education, resources, strength, or other needed attributes to protect their own interests. Individuals whose willingness to volunteer in a research study may be unduly influenced by the expectation, whether justified or not, of benefits associated with participation, or of a retaliatory response from senior members of a hierarchy in case of refusal to participate may also be considered vulnerable.

ROLE OF THE RESEARCH ETHICS REVIEW COMMITTEE

The Ethics Review Committee (ERC) shall serve as the regulatory entity for research at the Mountain Province State Polytechnic College and shall review, evaluate and decide on the scientific and ethical merits of the research proposals. It is committed to ensuring and guaranteeing the rights, dignity, safety and protection of actual or potential individuals or community who participate in the research activities. Guided by applicable laws and regulations of the Philippine government and relevant institutional bodies such as the National Commission on Indigenous Peoples Education (NCIP), this Committee reviews and gives ethical clearance to the research proposals generated by the faculty of the Mountain Province State Polytechnic College. Depending on the conditions and need to conduct a review, the ERC can conduct either an expedited review or a full review.

MEMBERSHIP

The Committee shall be composed core members from various disciplines such as Social Sciences, Nursing, a local board member, a lay person, Science Research Analysts and the Vice President for Research Development and Extension who acts as the chairperson of ERC.

The Committee shall co-opt a maximum of two (2) members at any time for independent expertise as and when required. The committee shall determine the duration of the co-option.

TENURE AND CONDITIONS OF APPOINTMENT

The Ethics Review Committee shall have a Chair, Vice-Chair, Secretary and other members. The members shall be appointed for a term of two years. To maintain continuity in the operations, at least two (2) members shall be retained with the outgoing chairman as the ex-officio member in the incoming committee. The members shall strive to provide their updated resumes, observe appropriate scientific conduct and uphold the confidentiality of the committee's proceedings.

RESIGNATION

A member may resign after giving at least one month's notice to the College President. The ERC members may then recommend to the College President for the replacement.

FUNCTIONS AND RESPONSIBILITIES OF OFFICERS

CHAIR
The Chair shall:

1. Conduct meetings in accordance with the regulations
2. Facilitate provision of training new committee members and continuing education for old members
3. Oversee the functions and activities of the Secretariat
4. Assign responsibilities and duties to any member of the Committee
5. Sign the minutes of the committee meetings
6. Sign endorsement letters for research proposals with the concurrence of the Committee
7. Provide liaison with the Philippine Health Research Ethics Board (PHILREB) and other accredited research ethics board

VICE CHAIR
The Vice Chair shall:

1. Perform all functions and duties of the Chair whenever the Chair is absent
2. Perform any other duties as assigned by the Committee or the Chair

SECRETARY and ASSISTANT SECRETARY (regular personnel from the RDU) The Secretary shall:

1. Call meetings in consultation with the Chair to reviewers
2. Dispatch proposals to reviewers for scientific review
3. Identify suitable reviewers in collaboration with the scientific community
4. Receive reviewed proposals and comments from reviewers within the stipulated period
5. Prepare proposal review documents for discussion at a regular Committee meeting
6. Oversee the functions and activities of the Administrator and the support staff
7. Take process and circulate the minutes of the REC
8. The Committee Secretariat shall keep and archive all original copies of the Committee minutes

OTHER MEMBERS OF ERC The other members shall:

1. Review all proposals presented to ERC and circulate to members and submit types of comments to ERC Secretariat
2. Attend REC meetings regularly and contribute constructively to deliberations
3. Offer technical support to uphold the integrity of ERC

REVIEW AND APPROVAL OF RESEARCH PROPOSALS

1. The Committee shall provide independent, competent and ethical review of research proposals.

2. The Committee shall review research proposals submitted to it within a reasonable time and document its evaluation in writing to the applicant/s.
3. The Committee shall safeguard the rights, safety, and well-being of all research participants [*actual & potential*] taking into account the interests, needs of the researchers, and having due regard for the requirements of relevant regulatory agencies and applicable laws paying special attention to investigations that may involve vulnerable participants.
4. The Committee may request the investigator/s to explain any aspect of the study that may require personal appearance as its Committee meeting.
5. The Committee will make available acceptable standard format accepted by for submissions of research proposals.
6. The Committee meeting shall obtain relevant documents including but not limited to the following:
   a. Research protocol(s)/amendment(s)
   b. Informed Consent form(s) and updates
   c. Participant recruitment procedures (e.g. *advertisements*)
   d. Written information to be provided to participants
   e. Investigator's Brochure *(if clinical trial)*
   f. Available safety information
   g. Information about benefits available to participants
   h. The researcher's CV
   i. Other documents that the REC may require.
7. The Committee shall consider the suitability of the investigator/s for the proposed study with a quorum with respect to the relevant qualification, training, and experience as documented by updated curriculum vitae and /or by other relevant documentation.

REGULAR MEETINGS

Frequency

The Committee shall convene regularly twice a year and as the need arises based on the agreed dates with the Research Review Committee. For special meetings which call for expedited reviews, the committee shall review and act upon a proposed research at convened meetings.

Quorum

At least half (1/2) of the ERC members shall constitute a quorum for a regular meeting.

RESEARCH ETHICS REVIEW

Depending on the conditions and need to conduct a review, the ERC can conduct either an expedited review or a full review.

EXPEDITED REVIEW

An expedited review can be conducted jointly by the ERC chairperson, the Secretary and one reviewer designated by the Chair.

For proposals to qualify under an expedited review these could include research investigations that present no more than minimal risk, chart reviews, surveys not involving delicate questions, and the use of stored specimens (eg. biopsy specimens)

FULL REVIEW

1. Studies which pose more than minimal risk to participants and which study target or may involve the vulnerable populations need to undergo full review.
2. The vulnerable population are required to undergo expedited review.
3. The Secretary of the ERC shall determine at least two experts within and /or outside the institution to review the proposal.
4. A copy of a proposal and a standard review form shall be given to the reviewers to assist them in reporting their reviews.
5. Within two weeks, the reviewer returns the review form, and the proposal to the Secretary who then consolidates the reviewers' comments, remove any reviewer identifiers and hand the comments over to the Principal Investigator or the researcher.
6. The PI satisfies the comments of the reviewers and submits the amended proposal to the Secretary who verifies if the comments have been integrated.
7. After the verification, the Secretary gives the copy to the Chair for final checking before the ERC gives the ethical clearance.

COMMUNICATING THE REVIEW DECISION OF THE ERC

1. The Chair officially communicates to the Principal Investigator the final decision of the ERC within two weeks from the date of the review.
2. The review decision shall be: formal approval, provisional approval, deferred approval or not approved. The reasons for review decisions that are deferred or not approved shall be given to the Principal Investigator in writing.

IX. STUDENT RESEARCH POLICY

The student research policy will present the guidelines in conducting research by the students in their theses, dissertations and research works as requirement in their course and research subjects. Student research outputs are qualified for paper presentation during the Student Research Forum by the College, Regional Student Research Symposium and National or International Research conferences or symposia. Winning papers during any of the research dissemination symposia are entitled to Student Research Incentives.

1. Student Research

   A student research is a research project or study pertaining to his course requirement or field of interest for the advancement and development of the Departmental Research Program. The research conducted should be aligned with the College's research agenda. A research study or project can be conducted by student researcher/s either solely or in groups.

2. Student Researcher

   A student researcher is a student of MPSPC who is conducting a research project or study pertaining to his course requirement or field of interest for the advancement and development of the Departmental Research Program. The research conducted should be aligned with the College's research agenda.

3. Qualifying Student Research Activities

   During the semestral offering of the thesis, dissertation or research subject of the students, the adviser or the research subject teacher shall submit the research title, name of adviser and expected year of completion to the RDU through the Departmental Research Coordinator. This will make the roster of research proposals of the students to be updated every semester or yearly.

4. Research Adviser

   A research adviser is a regular faculty or staff of the college chosen by a student researcher or group of student researchers, whose specialization is aligned with the research project or study being undertaken. A research adviser shall only take the role of an adviser as follows:

   a. guides the student researcher or researchers in the conduct of his research project or study;
   b. reviews students' research proposal and research outputs;
   c. ensures that the manuscript of students is subjected to an English Critique;
   d. ensure the completion of the study being undertaken within the specified time;
   e. must be present during students' proposal and final defense;
   f. entitled for a research adviser certificate to be issued by the VPRDE and the Director for Research and Development provided that all the documents of the advisee have been monitored and filed in the RDU
   g. performs other functions and services as may be required of a research adviser.

5. Student/s' Research Panel of Reviewers

   The composition of Panel of Reviewers for the student researches upon the recommendation of his course instructor shall be two regular employees who are technical experts on the field of study and one regular RDU personnel. The Panel of Reviewers shall convene with the student researchers and their adviser during the proposal and final presentation. Members of the panel shall critique the written output of the students as well as the presentation. Each panel member shall give a grade of the students based on the criteria given by the department. Students shall be given one week to two weeks to incorporate the comments and suggestions of all the panel members.

   The research adviser and research course instructor are not allowed to be panel members during the proposal and final defense.

6. Guide to Student Research Writing

   Please refer to Appendices 1 and 8. This guide to student research writing will be followed as a standard format in conducting research activity by the student.

7. Student Research Forum

   The students' forum is conducted annually by the RDU. It forms part of any of the major activities of the college. This is a venue for the students to disseminate their research outputs. A panel of evaluator critiques the presentations and give recommendations for the improvement of the research outputs and recommendations on how the outputs shall be fully utilized.

   The forum intends to select papers that can be presented in various regional, national and international research fora.

8. Student Research Journals

   Student researches are to be published in the Departmental Student Research Journals. Copies of Student researches shall be submitted to the RDU through the Research coordinators of the department.

9. Student Incentives during the Students' Research Forum

   Students participating in Students' Forum shall be entitled to incentives subject to the availability of funds. Likewise, the student researchers who disseminated their research outputs either through oral or poster presentations shall be given certificates of recognition by the Research and Development Unit.

Table 11. Student Incentives during the Students' Research Forum

LEVEL OF PRESENTATION	CRITERIA FOR SELECTION	INCENTIVE (PhP)
Institutional Student Research Forum	1. The paper was reviewed by the Panel Review and approved by the Adviser. 2. The final copy (hard and soft copy) of the research paper shall have been submitted to the RDU incorporating the comments and suggestions of the reviewers.	• 1,000 for best paper • 1,500 for papers qualified for the regional student research forum • 1,000 best presenter
Regional Level Non-Awardee	1. The paper was presented and qualified during the Institutional Student Research Forum. 2. Copy of the research paper in abstracted form must be submitted to the RDU.	□ 1, 500.00
Awardee		• Awardees (top three) for poster and oral presentations • 2,500
National Non – Awardee	1. The paper was presented during the Institutional Student Research Forum. 2. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy) during the Institutional Student Research Forum. 3. The paper was edited and reviewed by the RDU.	□ 2,500
Awardee		• Awardees (top three) for poster and oral presentations • 3,500
	4. The abstract submitted for the conference or forum must be recommended by the VPRDE or his authorized representative and approved by the President.	
International Non - Awardee	1. The paper was presented during the Institutional Student Research Forum. 2. The final copy of the research paper shall have been submitted incorporating the comments and suggestions of the technical panel (hard and soft copy) during the Institutional Student Research Forum. 3. The paper was edited and reviewed by the RDU. 4. The abstract submitted for the conference or forum must be recommended by the VPRDE or his authorized representative and approved by the President.	□ 3,500
Awardee		• Awardees (top three) for poster and oral presentations • 5,000

X. FINAL CLAUSE

REPEALING CLAUSE

All other guidelines of the same purpose, issued in full or in part by the College, if any, contrary to and inconsistent with any provisions of this manual is hereby repealed, modified or amended accordingly.

SEPARABILITY CLAUSE

If there are any provisions in this manual, or application of such provisions to any circumstances, is found to be invalid or unlawful, the other provisions not affected shall remain valid and subsisting.

EFFECTIVITY CLAUSE

This Research and Development Manual of Operations shall take effect upon Approval by the Board of Trustees.

REFERENCES

_____. 2016. Res. No. 024 s. 2016. Resolution Approving the IRR on Research Presentations and Publications

MPSPC. 2015. Research Manual 2015, Mountain Province State Polytechnic College. Bontoc, Mountain Province

OECD (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, DOI: http://dx.doi.org/10.1787/9789264239012-en

_____. 2009. Republic Act 10055. Philippine Technology Transfer Act of 2009.

_____. 1997. Republic Act 8293. Intellectual Property Code of the Philippines

_____. American Psychological Association format 6th edition.

APPENDICES – RESEARCH MANUAL

APPENDICES

The following appendices shown herewith are all new inclusions to the proposed Research Manual which are not present in the Research Manual 2015.

Appendix 1

Research Proposal Format/Guide for MPSPC Researchers and Students

Research Title:

- The research title should be written in upper case. It should present a problem and should capture the objectives of the study.
- It should be concise and informative and should comprise a maximum of 3 lines when centered on a bond paper in portrait orientation and on an inverted pyramid position.

*****Researcher: Name, highest educational attainment, School/Department

*****Implementing Schedule:

Start Date : _____

Completion date : _____

Duration : _____

*****Total Research Cost : _____

*****Fund Source : _____

I. INTRODUCTION

A brief discussion of the most relevant and recent works and facts that justify the need to conduct the study; contains the background of the study, conceptual framework/theoretical framework and objectives/statements of the problem of the study (in paragraph form).

a. Background of the Study:
   - The background of the study is written briefly depicting the main purpose of the study or to whom the study is being conducted for. It could be written in a zoom lens form or in a rationale style. Related literature is integrated in the background.
   - The background of the study must clearly give information on: o What is the context of the problem?
     - o In what situation or environment can the problem be observed?
     - o What is the identified research gap?

b. Conceptual/Theoretical framework

c. Statement of the problem/Objective of the study
   - What is it that we do not know? What gap in our knowledge will this research fill? What needs are to be improved?
   - What steps will the researcher take to try and fill this gap or improve the situation?

d. Hypotheses of the study (if applicable)

II. METHODOLOGY

a. Research Design (Experimental Design for experimental researches, include treatment lay-outs)
   - Identify the design of the study and the method used and justify why this is the most appropriate method for the investigation

b. Locale and time of the study
   - Identify the location and time of the study

c. Respondents
   - Identify the respondents of the study and their number
   - Identify the sampling tool used
   - Describe the sampling procedure/s used

d. Instrumentation

e. Data Collection Statistical Analysis (If applicable)

III. REFERENCES: All publications cited in the text should be presented in a list of references using the APA format. The list must only include those which were cited in the texts.

IV. *****WORK PLAN (Gantt Chart): Shows the activities, time frame and expected output

V. *****LINE ITEM BUDGET: Shows only the direct cost of the project.

VI. *****TERMS AND CONDITIONS IN THE CONDUCT OF THE STUDY

Items with ***** are **NOT APPLICABLE** for student researches.

Prepared by: (Researcher/s)

Appendix 2
Guide to Authors in Submitting Research Manuscript

I. GENERAL

Authors are requested to submit manuscripts softcopy and one hardcopy. It is strongly suggested that authors carefully check the final version of their manuscripts for compliance with the format and style of the College. In order to simplify journal production and minimize the number of errors, the final draft of the paper (once accepted by the Editorial Board) should be submitted as an electronic file created by a word processor. Likewise, authors are urged to send figures, photographs, graphs, and tables electronically, using programs that generate interchangeable formats (Corel Draw, Excel, Canvas, Freelance, etc.).

II. LANGUAGE

Manuscripts must be written in English except for researches which will be using Filipino as a medium in writing the research. Manuscripts written in English must preferably be edited by an English Critique in order to minimize the errors before submission and acceptance of the editorial board.

Exemption for studies using the Filipino language.

III. MANUSCRIPT ORGANIZATION

Authors are requested to follow the instructions given below:

a. Typing:
Manuscripts must be typed in Bookman Old Style size 11, with one and half spacing throughout (including footnotes, references, tables and legends) on a letter sized bond paper. One and a half spacing is equivalent to a maximum of 35 lines per page. All pages must be numbered in center bottom margin.

b. Size of manuscript:
Manuscript should not exceed 30 typewritten pages, including figures and tables. Short communications and technical notes are limited to six type written pages including illustrations.

Manuscript should be presented in the following order: Title, name(s) of the author(s), complete address/affiliation and e-mail address of the corresponding author, Abstract, Keywords, Introduction, Methodology, Results and Discussion, Conclusions, Recommendations, Acknowledgements and References.

c. Manuscript Layout:

The first page of the manuscript should contain the following items in the sequence given below:

- Title in English of up to a maximum of 18 words. For local terms indicate the scientific name.
- First name (initials are also acceptable) and surnames of all authors in bold. E.g.: **Joel D. Manuel** or **J.D. Manuel.**
- Affiliation(s) (not abbreviated), e-mail address, mobile number of the corresponding author must be given.
- Abstract should include the objectives, methods, results and conclusions. Its length should not exceed 300 words.
- Keywords should not be more than six.

d. Division of the text

Manuscripts should be divided into sections and subsections by headings and subheadings up to a maximum of three levels. To differentiate them, **CAPITAL BOLD LETTERS** should be used for the first order titles, **bold lower** case letters for the second order, and ***italic bold lower case letters*** for the third order. Titles of sections and subsections should begin at the left-hand margins, followed by the first paragraph with one blank space. From the second paragraph in each section, the line to start a new paragraph should be indented.

e. Quantities, units, abbreviations, nomenclature

Only SI quantities and units should be used (SI = Le Système International d' Unités). If data with non-SI units are reported, they should be put in parentheses behind the corresponding data with SI units. Symbols and abbreviations used to represent variables, constants, quantities, properties, etc. must be defined in the text at their first occurrence.

f. Tables

Every table must be referred to in the text. Tables are to be numbered with Arabic numerals in the sequence in which they appear. They should be typed on separate pages (one page per table). In the text, the position at which a table appears, should be marked by (Table ...) in the middle of the page as an extra line. Every table must begin with a title that starts with, for example, **"Table 1…"** appearing above just above the table. The table title must explain in detail the contents of the table. Tables must be presented in such a way that they can be read and understood without reference to the text.

The size of the tables should be such that they can be reproduced directly after reduction to a width of 85 mm. Tables of larger size (horizontally page) can be printed only in exceptional circumstances.

g. Figures

General remarks: Every figure must be referred to in the text. Figures will be printed in black and white.

The size of figures must not exceed the size of the manuscript page. Figures should be typed on separate pages (one page per figure) at the end of the manuscript. All figures should be numbered with Arabic numerals, and in the sequence in which they are cited in the text. The position at which a figure appears in the text must be marked by (Figure ...) as an extra line.

Every figure must be accompanied by a legend which immediately follows the figure number: **"Figure 1..."** appearing below the figure. Figure legends must contain sufficient explanatory details for their comprehension without reference to the text. Captions will be placed below the corresponding figures.

Particular care should be taken to make sure that the data shown in figures are explicitly labeled with regard to the units used, and that the accompanying legends provide adequate information about the conditions under which the data were obtained.

The quality of the figures must be such that they can be reproduced directly after reduction to a width of 8.5 cm. Figures of larger size can be printed only in exceptional cases. Numbers, letters, and symbols in the figures must be large enough to be still 7 cm high after reduction to the printed format.

Format: Regardless of the application use, when your electronic artwork is finalized, please save as" or convert the images to one of the following formats (note the minimum resolution requirements). Figures must be saved in the following format: JPG of 300 dpi or TIFF of 300 dpi. Do not supply files that are optimized for screen use (like GIF, BMP, PICT, WPG), the resolution is too low.

For bar graphics, please use different lines or fillings to differentiate them, and when presenting curves, please use well-differentiated lines. If letters or other markers/symbols are to be inscribed, it is advisable to use large-size letters. Always use uniform lettering and font size (Arial font 12, as in the entire text).

Diagrams: Diagrams must be submitted as original drawings of excellent quality. Photographs or photocopies of drawings are in general not suitable for reproduction.

Special symbols used should be explained in the diagram itself rather than in the legend, as such symbols may not appear in, or be lost during typesetting.

Halftones (*photographs, drawings, paintings with fine shading, etc.*) Halftones should have a minimum resolution of 300 dpi. For combination of artworks (e.g. halftones containing line drawing, extensive lettering, color diagrams, etc.) a minimum resolution of 600 dpi should be used. TIFF, JPG, PDF, MS Office files (Word, PowerPoint, Excel) can be used in figures. Images should approximate the desired size of the printed version.

h. Structural diagrams and mathematical equations

Structural diagrams of molecules as well as mathematical equations should be drawn or written at the appropriate places in the manuscript in an extra line. Equations should be denoted by Arabic numerals (in parenthesis) toward the right-hand margin.

i. Acknowledgements

Acknowledgements of financial support, advice, and other kinds of assistance should be made at the end of the paper under the heading "Acknowledgements".

j. References

Citations in the main text should be given by the surname and year of publication. For example, Mariano (2017), Lura and Baltazar (2007), Ellies et al. (1999; 2009) or: (Mariano, 2017; Lura and baltazar, 2007; Ellies et al., 1999; 2009).

The manuscript should be carefully checked to ensure that the spelling of authors' names and dates are exactly the same in the text as in the reference list. References should be listed in alphabetical order, and collected in a separate sheet at the end of the text. The final reference list should show the name of the author(s) followed by the year of publication, full title of article or book, journal name, volume and page numbers, as indicated below.

Journal articles

Jost, L. (2010). The Relation between Evenness and Diversity. Diversity 2, 207-232.

Reich, P.B., P. Bakken, D. Carlson, L. Frelich, S.K. Friedman, and D. Grigal. (2001). Influence of logging, fire and forest type on biodiversity and productivity in southern boreal forest. Ecology, 82(10): 2731-2748.

Mukhia, P., Wangyal, J., Gurung, D. (2011). Floristic composition and species diversity of the chirpine forest ecosystem, Lobesa, Western Bhutan. www.forestryenal.org.

Unpublished work

Papers that are unpublished but have been accepted must be cited with the journal's name followed by (in press). In all other cases, reference must be made to (unpublished work) or (personal communication).

Books and monographs

Brady, N.C. and R.R. Weil. (1996). The Nature and Properties of Soils. New Jersey: Prentice Hall Inc. 245-261.

Hartge, K. H., Stewart B. A. 1995. Soil Structure: Its Development and Function. Advances in Soil Science. CRC Lewis Publishers, Boca Ratón, FL, 424 p

Chapters in multi-author books

Wold, S., Sjöström, M. 1977. Chemometrics, Theory and Application. In: B. R. Kowalski (ed). ACS Symposium Series N° 52. American Chemical Society, Washington, DC, pp: 243–282.

Oades, J., M. 1989. An introduction to organic matter in mineral soils. In: J. B. Dixon, S.B. Weed (eds). Minerals in Soil Environments, Second Edition. Soil Science Society of America, Madison, WI, pp: 89-159.

Theses

Hassink, J. 1995. Organic matter dynamics and N mineralization in grassland soils. Doctoral thesis, Wageningen University, The Netherlands, 250 p.

Patents

Miller, B.O. 1952. U.S. Patent 2542356, Dow Chemical Company; Chemical Abstracts 51 (1961) 2870.

IV. COPYRIGHT

The RDE Sector strongly encourage the authors to submit the manuscript or the output of the research for copyright before any publication or presentation to be done.

V. MANUSCRIPT SUBMISSION

Authors are requested to submit softcopy and one hardcopy of the manuscript to the address mentioned in the correspondence.

VI. CORRESPONDENCE

All correspondence should be addressed to:

Director for Research
RESEARCH and DEVELOPMENT UNIT
2nd floor Science Building,
MPSPC - Bontoc
Mountain Province

Appendix 3
Research Contract

KNOW ALL MEN BY THESE PRESENTS:

This Professional Research Service Contract made and entered into by and between:

The MOUNTAIN PROVINCE STATE POLYTECHNIC COLLEGE (MPSPC) represented by its President, **REXTON F. CHAKAS, Ph. D.,** herein referred to as "**MPSPC**";

-and-

_____, Filipino, of legal age, single and employees of "MPSPC" herein referred to as "**RESEARCHER**." WITNESSETH:

WHEREAS, MPSPC is an institution of higher learning mandated to promote quality researches by providing assistance to approved researches that are presented, reviewed, and recommended by the Research Review Committee (RRC), and are consistent with MPSPC research priorities and national goals.

WHEREAS, it is mutually agreed that MPSPC shall contract the services of the **RESEARCHERS** to undertake the herein-described research to wit:

Research Title: _____

Date Approved:
Duration: _____
Estimated Budget: _____
Fund Sources: Fund 101 _____
Fund 164 _____

NOW THEREFORE, for and in consideration of the foregoing provisions, both parties do hereby mutually agree to undertake the following terms and responsibilities to wit:

MPSPC'S RESPONSIBILITIES

1. Facilitates the processing of the procurement of supplies and materials needed by the researcher in the conduct of his or her study based on the approved work and financial plan of the research study.
2. Monitors the conduct of the research studies in partnership with the Department Chairs and the Executive Deans.
3. Conducts proposal reviews through the Research Review Committee (RRC) and facilitate the conduct of Agency-In-House Review (AIHR) for on-going and completed researches as part of the college's processes and procedures for the conduct of researches.
3. Provides the guidelines and formats of the research as stipulated in the College Research Manual

4. Recommends for the approval by the College President of researches for presentation and publication in other national and international fora and research journals, respectively.
5. Facilitates the release of incentives for researchers whose completed researches are chosen for regional presentation during the AIHR as well as in other conferences where the researches are presented as stipulated in the Research Incentive Scheme.
6. Files records of all research proceedings, outputs and other documents pertaining to research and extension services.

RESEARCHER'S RESPONSIBILITIES:

1. Follows policies and guidelines in the conduct of researches as stipulated in the MPSPC Research Manual and other supporting policies and guidelines pertaining to research.
2. Submits to the RDE Unit purchase requests for materials needed for the conduct of the research based on approved Work and Financial Plan.
3. Researchers are entitled to a 3-unit load equivalent for every research study to be conducted or being conducted for a maximum of 2 research studies per semester; provided that such research studies have been approved for implementation.
4. Submits to the RDE Unit semestral progress reports every end of the semester, copy furnished the Executive Dean's office.
5. Submits to the RDE progress reports and/or terminal reports at the end of the semester.
6. Completes the research within the duration stated above. Failure to do so shall force the researcher to take additional loads for the next semester equivalent to the number of units de-loaded for him or her during the previous semester and refund 70% of the amount of supplies granted to the researchers.
7. Presents the research output as an ongoing and/or completed research during the Annual Agency In-House Review for evaluation.
8. Incorporates all suggestions given during the Agency-In-House Review and submit edited manuscript to the RDE Unit for finalization.
9. Submits to the RDE Unit research articles in abstracted form following issued guidelines for writing research articles for publication in the MPSPC Journal or Department Journals.
10. May present completed researches that have undergone evaluation of the Annual AgencyIn-House Review in other national and International fora with the approval of the College President.
11. Researchers are required to abide by the financial accounting procedures of the College with regard to the expenses incurred in the study.

REVENUE SHARING SCHEME

Both parties agree that any Intellectual Property (IP) and Intellectual Property Rights (IPR) generated in this research activity is subject to revenue sharing scheme under the MPSPC- IPR policy.

AMENDMENT PROVISION

1. The parties may, by mutual consent, modify, amend, or delete any words, phrases, sentences or provisions of this contract;
2. Any additional amendments on the stipulations hereof shall be done through a supplementary agreement to be prepared by the party requiring such and shall be mutually consented by the parties. Notarization shall be taken care of by the party who prepared the amendments.

EFFECTIVITY

1. This contract shall take effect immediately upon its approval and shall remain enforced for the duration stated above.
2. The parties are enjoined to abide in good faith the provisions of this Contract and shall renew such before the start of every semester while the research is on-going.

The parties are enjoined to abide in good faith the provisions of this Contract and shall renew such before the start of every semester while the research is on-going.

IN WITNESS WHEREOF, the parties have hereunto affixed their respective signatures this _____day of _____20__.

MPSPC: Researchers:

REXTON F. CHAKAS, Ph.D.
President

_____
_____

WITNESSES:

ANNIE GRAIL F. EKID
Vice President for Research, Development & Extension

JOEL C. FARODEN
Director for Research and Development

ACKNOWLEDGMENT

Republic of the Philippines) Province
of Mountain) S.S.
Municipality of Bontoc) X----------
X

BEFORE ME, a notary public this _____day of _____20___personally appeared the parties known to me to be the same persons who executed the foregoing instrument and acknowledged to me that the same is their free and voluntary act and deed.

This instrument consists of three (3) pages including this page.

WITNESS MY HAND AND SEAL.

Appendix 4
Individual Research Agenda

Name of Researcher: _____
Present Position: _____
Department: _____ Mobile Number: _____ e-mail Address: _____ ORCID Number: _____

Focus Area of Research: _____
Target Research Activities: _____

Educational background	
Bachelor Degree	
Major field/ Field of Specialization	
Masteral	
Doctoral	
Post-Doctoral	
Research Background	
Completed Research	
Ongoing Research	
Published Research Work	
Copyrighted work	

I hereby certify that the above information is true and correct.

(Name of Researcher)
Researcher

Approved:

(Signature over Printed Name)
Vice President for Research, Development and Extension

Appendix 5
Research Status Monitoring Form

RESEARCH STATUS MONITORING FORM					
I. RESEARCHER'S INFORMATION					
Name of the Lead Researcher/ Project/Program Leader:					
Name of Study Leader(s)					
Researcher(s)					
Department/Office					
Contact Details (Mobile, email)					
II. DETAILS OF RESEARCH PROPOSAL					
Title of Research					
Components	☐ Peace ☐ Governance ☐ Others: _____		☐ Health ☐ Information ☐		☐ Environment ☐ Nursery Establishment
Nature of Research:	☐ Education	☐ Social	☐ Appl ed	☐ Technology	
Date Approved:					
Date Started:					
Target Completion Date:					
Stages of Activity	% of completion based on Work Program		Remarks		
1. Preparatory Activities a. Issuance of Research Contract b. Purchase Request of Supplies/Materials					

2.Gathering of Data		
3.Tabulation and Consolidation of Data		
4.Analysis of Data		
5.Interpretation of Data		
6.Making the Draft		
7.Technical Report		
8. AIHR Presentation		
III. PRESENTATION IN VARIOUS FORA, PUBLICATION	*(Details)*	
III. REQUEST FOR	☐ Deloading	☐ Funding ☐ Incentive

IV. DATES OF MONITORING	***V. CERTIFICATION***
Date: *Remarks:* *Date:* *Remarks:* *Date:* *Remarks:* *Date:* *Remarks:*	*I hereby certify that the information given are true, correct and the research being conducted/completed is authentic.* _____ *Department Research Coordinator* **TIMOTHY W. PUMA-AT** *SRA* *Noted by:* **JOEL C. FARODEN** *Director for Research and Development*

Appendix 6
Narrative Progress Report

Department: _____
Branch/Campus: _____
Name of Researchers: _____
Date Started: _____

Title of Research:
_____

_____
(Period Covered in the Report)

A. Highlights of Accomplishments:

1) Brief Introduction
2) Highlights of activities, procedures/methodologies used to accomplish the tasks
3) Enumerate major accomplishments (citing the data gathered and other findings)
4) Specify how previous comments are integrated to achieve results based on the objectives

Period Covered	Target Activities for the Period	Actual Accomplishment	Remarks

B. Problems/Constraints Met
List all the problems/difficulties and other constraints encountered in accomplishing the activities set within the period under review.

C. Budgetary status
Provide information on the status of the project's budget as of the period under review

Prepared by: _____
Researcher/s

Appendix 7
Approval Sheet of Student Manuscript (form)

This student research entitled "_____" prepared and submitted by _____, has been examined and accepted.

_____
Adviser

Approved by the Examination Committee

_____
Member

_____ _____
Member Member

Date of Proposal Defense: _____ Rating: _____

Date of Final Defense: _____ Rating: _____

Accepted and Approved in partial fulfillment of the requirements for the degree _____.

_____
Department Chairman

Noted:

_____
Executive Dean

Appendix 8
American Psychological Association (APA) Format
for Completed Undergraduate and Graduate Thesis adapted for MPSPC

CHAPTER I: INTRODUCTION

Background of the Study

- Describes the problem situation in general terms and demonstrates logical continuity between relevant works and the present study.
- Cites pertinent data from existing documents or findings, methodological issues, conclusions, and recommendations from previous studies that shape and portray the problem situation.
- Gives a firm sense of the need and practical importance of the study.

Theoretical /Conceptual Framework and Research Paradigm

- Discusses the merits of the theories/concepts that legitimize the:
  - validity of the research questions
  - meanings of the variables in the study, the measurements employed, and the design adopted - analytic and interpretive approaches used
- Depicts and briefly explains the conceptual blueprint that serves as the roadmap of the study either in the form of a:
  - Causal Paradigm
  - IPO (Input-Process-Output) Paradigm
  - Operational Paradigm (Process Flowchart)

Statement of Problems and Hypotheses

- Articulates the general problem and its logical components in the form of specific research questions.
- States the corresponding research hypothesis after each research question

Note:

In the APA format, the following parts no longer appear as independent sections of Chapter 1:

- ***Scope and Delimitations: the coverage, respondents, methods, measurement and analytic tools including their limitations are already evident in Chapter II (Methods)***
- ***Significance of the Study: this is already integrated in the Background of the Study***
- ***Definition of Terms is done: (1) within the text as they are used in the study for the first time; or (2) as content footnotes (to supplement or amplify substantive information)***

Likewise, the narrative "product" of the Review of Related Literature no longer appears as a separate chapter of the study. As a "process", the result of literature review is interwoven into the Background of the Study and Theoretical Framework in Chapter I and in the Discussion of Findings in Chapter III.

CHAPTER II: METHODOLOGY

Research Design

 This section describes in detail how the study was conducted to enable the reader to evaluate the appropriateness of the methods and the reliability and the validity of the results of the study. The introductory portion of the chapter identifies and describes the design used in the study to be followed by:

Population and Locale of the Study:

- Includes answers to such questions as to who participated in the study? How many participants were there? How were they selected? If any participant did not complete the data gathering tool or procedure, give the number of these and the reasons they did not continue
- Describes the major demographic characteristics of the population or sample in terms of the variables of the study

Data Gathering Tools

- Describes briefly the apparatus or instrument used in data gathering
- In cases where the instrument is a questionnaire, describes also the instrumentation process in terms of:
    - How the instrument was generated?
    - How the instrument was modified to adapt to the peculiar demographic characteristics of respondents in the case of an adopted instrument
    - What measures were used
    - Parts of the instrument
    - How the instrument was validated or tested for reliability?

Data Gathering Procedure

- Discusses what the researcher did to collect data and summarizes each step in the execution of the data collection phase, including the instructions given to the participants, the randomization, counterbalancing, and other control features in the design.
    - Brief statements about essential parameters (i.e. scope and limitations or delimitations) can be included in the respective subsections where they are deemed necessary to be noted.

Treatment of Data

- Identifies and briefly describes the descriptive and analytic tools used to treat the data gathered

CHAPTER III: RESULTS AND DISCUSSION

This section presents the results and discusses the findings per problem. The themes in the headings and sub-headings of this section are stated in a one-to-one correspondence with the logic of the research questions.

Results
- Describes the summarized or statistically treated data that is presented in a tabular or graphical form
- Describes trends, patterns, differentials, characterizations, emerging themes, and categorizations observed in the data (this is the for the analysis of descriptive data)
- Describe the behavior of variables from computed statistical indices (this is for the analysis of statistical data)

- Articulate the main results or findings from the analysis of data providing sufficient detail to legitimize arriving at a conclusion

Discussion

Interprets the findings in terms of meanings and implications relative to the postulated hypotheses

- The interpretation can cite relevant related literature and/or studies to search for the broader meaning of the answers to the research questions. This search has two major aspects: First, the effort to establish continuity in social research through linking the results of one study with those of another; and second, interpretation leads to establishing explanatory concepts (Sellitz and Jahoda, 1971).
- This discussion can take place of the review of related literature (in the old format). Unlike, however, in the former format, now the reviews are more relevant and directed to the results of the present study and no longer just a historical review.
- Similarities and differences between the results and the work of others should clarify and/or to confirm the hypotheses;
- In the discussion, take note of the following guide questions:
- How did the study help or resolve the problems?
- What important implications can be drawn from the study?

CHAPTER IV: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- Answers each stated research question in the form of a generalization derived from the analysis and interpretation of findings. The conclusion should have sufficient strength to serve as the foundation for theory-building

Recommendations

- Prescribes concrete and doable interventions that address, alleviate or arrest the problem situation.

Note

1. The Abstract of the thesis ought to be included in the copy to be evaluated and defended. It consists of concise statements (more or less 150-250 words) of: • what the study is all about, • the methodology, • the most important findings.

2. Introductory Materials for the thesis/research proper:

• Title page • Endorsement • Approval sheet • Acknowledgment (optional but usual) • Table of Contents • List of Appendices, Tables, Figures • Thesis Abstract

Appendix 9
Sample Title Page for Thesis Proposal

INDIGENOUS ENGINEERING WORKS OF BONTOC TRIBES RELATIVE TO RIPRAP AND IRRIGATION STRUCTURES

A Thesis Proposal Presented to the
faculty of the College of Engineering

In Partial Fulfilment of the Requirements for
the Degree Bachelor of Science in Civil Engineering

Submitted by:

Geodetic Civil Electrical Jr. May
2018

Appendix 10
Sample Title Page for Thesis

INDIGENOUS ENGINEERING WORKS OF BONTOC TRIBES RELATIVE TO RIPRAP AND IRRIGATION STRUCTURES

A Thesis Presented
to the faculty of the College of Engineering

In Partial Fulfilment of the Requirements for
the Degree Bachelor of Science in Civil Engineering

Submitted by:

Geodetic Civil Electrical Jr.
May 2018

Appendix 11
Sample Acceptance Sheet for Thesis Proposal

ACCEPTANCE SHEET

In partial fulfilment of the requirements for the degree of BACHELOR OF SCIENCE IN CIVIL ENGINEERING, this thesis proposal entitled, INDIGENOUS ENGINEERING WORKS OF BONTOC TRIBES RELATIVE TO RIPRAP AND IRRIGATION STRUCTURES, has been prepared and submitted by GEODETIC CIVIL ELECTRICAL JR. and is hereby endorsed for approval.

_____
Adviser

This is to certify that the thesis proposal submitted by GEODETIC CIVIL ELECTRICAL JR. has been approved and accepted by the Thesis Panel Review January 20, 2018.

_____
Chairperson

_____ _____
Member Member

Noted:

_____
Dean, College of Engineering

Appendix 12
Sample Endorsement Sheet for Thesis Defense

ENDORSEMENT

This thesis entitled, INDIGENOUS ENGINEERING WORKS OF BONTOC TRIBES RELATIVE TO RIPRAP AND IRRIGATION STRUCTURES, prepared and submitted by GEODETIC CIVIL ELECTRICAL JR, in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN CIVIL ENGINEERING, has been examined and is recommended for acceptance and approval for Oral Examination.

This is to certify further that GEODETIC CIVIL ELECTRICAL JR. is ready for Oral Examination

_____
Adviser

==========

This is to certify that the thesis entitled, INDIGENOUS ENGINEERING WORKS OF BONTOC TRIBES RELATIVE TO RIPRAP AND IRRIGATION STRUCTURES, prepared and submitted by GEODETIC CIVIL ELECTRICAL JR, is recommended for Oral Examination

_____
Chairperson

_____ _____
Member Member

Noted by:

_____
Dean, College of Engineering

Appendix 13
Sample Approval Sheet for Defensed Thesis

APPROVAL SHEET

Approved by the Committee on Oral Examination with a grade of 90.5% on January 20, 2018.

_____
Chairperson

_____ _____
Member Member

Accepted and approved in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN CIVIL ENGINEERING

_____
Dean, College of Engineering

(To be included in this page in the case of a Master's Thesis)

This is to certify that GEODETIC CIVIL ELECTRICAL JR has completed all academic requirements and PASSED the Comprehensive Examination on December 12, 2017 for the degree of MASTER OF SCIENCE IN CIVIL ENGINEERING

_____
Graduate Program Coordinator
College of Engineering

Appendix 14
INTELLECTUAL PROPERTY RIGHTS UNDERTAKING

KNOW ALL MEN BY THESE PRESENTS:

I, _____, of legal age, single/married in consideration of my employment or contract or affiliation with MPSPC, having sworn to in accordance with law, undertake:

1. To comply with the MPSPC Intellectual Property Rights Policy and Guidelines.
2. To disclose promptly to MPSPC any intellectual property or proprietary information, which I may solely or jointly with others discover, generate or create in the performance of regular duties, or with the use of MPSPC funds, facilities, or services.
3. To do and to perform all acts and all things necessary to ensure that MPSPC is able to exercise its ownership, protect and commercialize the intellectual property or proprietary information.

I further understand that during my employment, contract or affiliation with MPSPC, I may use or have access to any Proprietary information or any intellectual property of MPSPC. As to these, I undertake:

1. To use them only in the performance of my duties to MPSPC; and
2. To use them in confidence and to employ all reasonable precautions to assure that they are not disclosed to unauthorized persons or used in an unauthorized manner, both during my employment, contract or affiliation, and for a period of five (5) years after my employment, contract or affiliation with MPSPC.

IN WITNESS WHEREOF, I have voluntarily and freely signed this undertaking this _____day of _____20____, at _____.

Full Name and Signature

Subscribed and sworn to before me this _____ day of _____, 20____ at _____the affiant having exhibited his Community Tax Certificate No. _____issued on _____at _____.

Notary Public

Appendix 15

EXAMPLE OF AN INTELLECTUAL PROPERTY DISCLOSURE FORM

No. _____

Date: _____

1. Name of person submitting the Form
2. Received by (MPSPC IPR Committee and RDU)
3. Name(s) of Inventor (for Patent of Utility Models)
4. Name of the Invention
5. Description of the Invention (characteristics)
6. Drawings necessary for the understanding of the invention
7. One or more claims of the inventions
8. An abstract of the invention
9. All other pertinent documents
10. Sponsor or funding Agency
11. Disclosure or publication of the invention
12. Other relevant information
13. All inventors are to sign this disclosure in the space below

Inventors:	Signature:	Date:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Appendix 16
WAIVER

(Of Copyright Ownership Format from IPO Phil)

KNOW ALL MEN BY THESE PRESENTS:

I, _____, of legal age, married, with residence and postal address at _____after being duly sworn in accordance with law hereby depose and say:

1. That I am the creator/author of the work entitled _____, subject of the application for copyright filed for and in behalf of _____;

2. That I am waiving my right as creator/author of said work in favor of _____and I hereby expressly agree that the copyright registration certificate therefore be issued in favor of _____.

IN WITNESS WHEREOF, I have hereunto set our hands this _____day of _____, _____, in Manila, Philippines.

CONFORME:

By:

_____ _____

Affiant

SUBSCRIBED AND SWORN to before me this _____day of _____, _____in _____, affiant exhibiting to me his Community Tax Certificate No. _____ issued on _____ at _____, _____.

NOTARY PUBLIC

Doc No :
Page No. : Book No. :
Series of :

Appendix 17
(This form is to be attached to the subject for copyright)

PUBLISHED AND DISTRIBUTED BY:
WISEMAN'S BOOKS TRADING, INC.

ISBN:

(At the back page of this page)

TITLE

AUTHOR

Appendix 18
EVALUATOR/S' FORM
(Used for the Agency In-House Review)

NARRDS form No. 4
CY _____
For Use of Evaluators

NATIONAL AGRICULTURE AND RESOURCES RESEARCH AND DEVELOPMENT SYSTEM
AGENCY IN-HOUSE REVIEW/COMMODITY REVIEW
COMMODITY STATUS REPORT

1. Research Title: _____
2. Presenter/Researcher/s:
3. Implementing Agency:
4. Duration (Definite Date):
5. Objectives:
    a.
    b.
    c.
6. Status of technology (Pls. encircle letter and specify the probability of success and ceiling level of adoption of technology)
    a. For dissemination
    b. For adaptation
    c. For verification
    d. Potential technology
    e. Information for dissemination
7. Recommendation/s during the last review and/or field evaluation/action taken.

RECOMMENDATIONS	ACTION TAKEN

8. Remarks/Recommendation of evaluators (Current Review/Field Evaluation)

Name of Evaluator: _____
Signature: _____
Date:

Appendix 19

SUMMARY OUTPUT REGIONAL SECTORAL/COMMODITY REVIEW CY _____

Agency: _____

Venue: _____

Program/Project/Study Title	Researcher/s	COMMENTS/REMARKS/SUGGESTIONS

Appendix 20
NARDS Form 7

NATIONAL AGRICULTURE AND RESOURCES RESEARCH AND DEVELOPMENT SYSTEM
c/o PCARRD, Los Baños, Laguna

TECHNOLOGY/SIGNIFICANT INFORMATION

Name of Technology/Information: _____

_____

Name of Researcher: _____
Agency: _____
Designation: _____

Status of Technology:

2.1 Development Status

_____ Commercialized
_____ Feasibility Study
_____ ID
_____ Lab Model
_____ Patented
_____ Pilot Plant
_____ Prototype
_____
_____
TA _____
TD _____

TP TV

2.2 Recommended Status:

_____ Patent for Sale
_____ Training
_____ Technical Assistance
_____ Know-how
_____ Consultancy
_____ Sub-contracting
_____ Joint Venture

Year Reported/Developed: _____

Commodity:

GROUP INDIVIDUAL SPECIFIC

_____Agricultural Ecosystem _____

_____Agricultural Engineering
_____Agroforestry and MPTS
_____Applied Rural Sociology
_____Aquaculture Research
_____Bamboo and Rattan
_____Corn and other Cereal Grains
_____Environment and Management
_____Fruit Crops
_____Industrial Crops
_____Minor Forest Plants
_____Ornamental and Medicinal Plants
_____Poultry
_____Protected Areas and Wildlife
_____Rice
_____Ruminants
_____Swine
_____Vegetables, Legumes and Root crops
_____Wood Production Forest

Possible Areas of Application:

1.1 Region: _____ Province: _____ Municipal: _____

Specific Sites:

Brief Description of the Technology:

Significance:

Socio-economic Analysis

Production costs: Payback Period:

ROI:

IRR:

BCR:

Cost of Establishment in a hectare basis:

ACTIVITIES	COST PER YEAR

Beneficiaries:

Conditional Factors to be Considered in Technology Application

8.1 Production Technology

Environmental Conditions

Soil

Type:

pH:

OM:

Others:

Climate:

Topography:

_____level or nearly level (0-3%) _gently sloping (3-8%)

_____gently sloping to undulating (8-15%) _____

undulating to moderately steep (15-25%) _____

moderately steep to steep (25-40%)

_____steep to very steep (40-60%) _____very steep (>60%)

Ecological/development zones:

_____lowland rain fed _____coastal zone _ lowland irrigated

_____freshwater ___upland plain (cultivated) _____forest _____

hilly land (cultivated) _____grassland ____savannah

_____degraded land (surface mine areas) _____others: _____

_____

Solar radiation: _____

Temperature range for the crop: _____

Distribution of rainfall:

Monthly: _____

Daily: _____

8.2. Postharvest/Processing Technology:

Temperature: _____ Relative humidity: _____

Packaging Materials: _____

_____

_____

Others: _____

_____

8.3. Drying Requirements:

Temperature: _____ Relative humidity: _____

Packaging Materials: _____

_____

_____

Others: _____

_____

8.4. Other Requirements:

Dysfunctional Consequences of Technology
Misuse of Technology:

Negative Spill-over Effects:

Limitations:

Procedures:

Materials/Inputs Required:

Quantity	**Unit**	**Description**

Manpower Required:

Quantity	**Position**

Support System Requirements:

Sources of Technology

RDMIS Code: _____

If none:

Title: _____

Implementing Agency: _____

Researchers: _____

Contact Person:

Name: _____

Agency: _____

Designation: _____

Illustrations:

Policy Implication:

Remarks/Additional Information Available:

References Used:

Recommendations:

Appendix 21

Format for Student Research Forum Entries and Guidelines

To provide uniformity of format, all research entries should be laid out in booklet form which should contain the following parts:

a) Title Page
The title page includes the title of the research, researcher(s), the department and the date of the conduct of the activity (forum).

b) Introduction
- The Rationale of the Study *(maximum of 500 words)*
- Conceptual Framework
- Problems or objectives (General and Specific)
- Scope and Delimitations

c) Research Methodology

Descriptive Research	**Experimental Research**
Research Design	Experimental Design
Locale and Population of the Study	Treatments and Subjects
Instrumentation/Data Gathering Tools	Detailed Procedures
Data Gathering Procedures	Data Gathering Procedures and Data to be Gathered
Statistical Tools or Statistical Treatment of Data	Statistical Tools or Statistical Treatment of Data

d) Results, Findings and Discussions
- Interpretation of result and findings
- Analysis of data and presentation through e.g. diagrams/graphs/charts/tables e) Conclusions

General statements answering the formulated problems or objectives

f) Recommendations
Discusses future actions and suggestions for further research

g) References
List of books and other references used to prepare the research paper. The reference list does not need to be separated according to type of source materials.

Guidelines for Poster Making

Poster is a graphically-based approach in presenting a research to generate active discussion. Hence, it should be concise and comprehensive, attractive and well-organized.

The poster should try to give the viewer one or two important conclusions to take away from the session. The following specific points may help in planning/preparing the poster.
Size. Use a standard 30"x40" (76 cm x 102 cm) tarpaulin (portrait-orientation not landscape).

Title and Author. The title should contain a maximum of 18 words, if possible. The title should be typed in capital letters, bold, preferably using the Arial font, size 72 (minimum). (Please do not use script type of fonts). The full name and address of the author(s) should be written/placed at the back of the poster.

Colors. Use not more than three (3) colors. Good 2-color combinations are black on white, black on yellow and black on pink, dark red on white, dark blue on yellow. Dark type on a light background is easier to read.

Illustrations. Photograph and graph should be at least 5"x7" (13cm x 18cm) size. Captions and labels on diagrams and graphs should be readable from 2 yards (2 meters) away and not to be cluttered with unnecessary details.

Organization. The design should flow sequentially from one part to the next. Numbers or letters may be used to help the eye move from one item to another item in the correct order; left to right or top to bottom. Do not clutter with either text or artwork.

Content. The poster should contain the following information: brief rationale, methodology, findings/results, conclusions and recommendations. Preferably the text should be typed using the Arial Font, size 26 (minimum).

Guidelines for PowerPoint Presentation

1. PowerPoint presentation should be ten (10) minutes only plus five (5) minutes time for critiquing. Only one participant shall be allowed to present the research.
2. Contents of the presentation should be limited to the following: title, rationale/conceptual framework, problems, results and findings, and conclusions and recommendations. Text used in the presentation should be limited to the Sans Sera fonts with a fonts size of 28 in all of the slides. Please do not use script type of fonts.

The Student Research Forum shall be guided by the following criteria in determining the "Best Paper," "Best Presenter," and "Best Poster" awards.

Table 8. Criteria for Best Paper

Criteria		Percentage
1. Creativity, Originality, Quality of Work		30%
▪ Rationale/State of the Art (to include analysis of the problem)	10%	
▪ Clear and Comprehensive Objectives	5%	
▪ Conceptual/Analytical Framework/Methodology	15%	
Significance of Findings		40%
▪ Contribution to New Knowledge/S&T Advancement	10%	
▪ Workable and practical recommendations	5%	
▪ Relevance and responsiveness of research to current issues and concerns as well as national and regional thrusts	20%	
▪ Adequate data to support conclusions	5%	
Manuscript Write-up		30%
▪ Accuracy	10%	
▪ Style	10%	
▪ Cogency and Logic	10%	
	TOTAL	**100%**

Table 9. Best Presenter

Criteria	Percentage
1. Clear and thorough discussion of the research work	30%
2. Ability to answer questions	20%
3. Effectiveness and clarity of audio-visual aid	20%
4. Self-confidence, enthusiasm and stage presence of the presenter	15%
TOTAL	**100%**

Table 10. Best Poster

Criteria	Percentage
1. Poster speaks of the research as a whole	25%
2. Orderly and effective presentation of research highlights	25%
3. Conformity of poster to required physical specification	25%
4. Attractiveness of poster	25%
TOTAL	**100%**


Research & Development and Extension
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