Chapter I

ORGANIZATIONAL STRUCTURE OF THE RDET DEPARTMENT

Figure #1 shows the organizational structure of University RDET Department. The structure reflects how work is divided among officials and managers and how positions and offices or units are delineated and related to one another. The relationship and work assignments of the various stakeholders in the RDET Department are briefly described in the succeeding sections.

A. Board of Regents

The highest body of the University RDET structure is **the Board of Regents (BOR)** which is the policy-making body of the University. The BOR approves the direction that the University RDET Department should take and assures the accountability of the officers and staff of the department in discharging their responsibilities. The *Board* sets the RDET policies, future plans, major programs and projects, annual budgets, major budgetary commitments. Key RDET appointments are deliberated on and decided by the *Board*. It is also an appeal forum to and balances the powers of the officers over the staff of the RDET department.

B. University President

The President is the Chief Executive Officer of the University system whose powers and duties are specified in P.D. 1436 and 1437 as amended by RA 8292. Supporting him in the RDET structure is the University Research and Development, Extension and Training Council.

The overall RDET Program is headed by the President where he executes University RDET policies and guidelines approved by the BOR.

C. University Research and Development Extension and Training Council

In Addition to the Academic Council (ACO) and Administrative Council (ADCO) of the University, the University Research and Development, Extension and Training Council (URDETC) is created to serve as the policy-determining body and clearing house of the University as far as RDET is concerned.

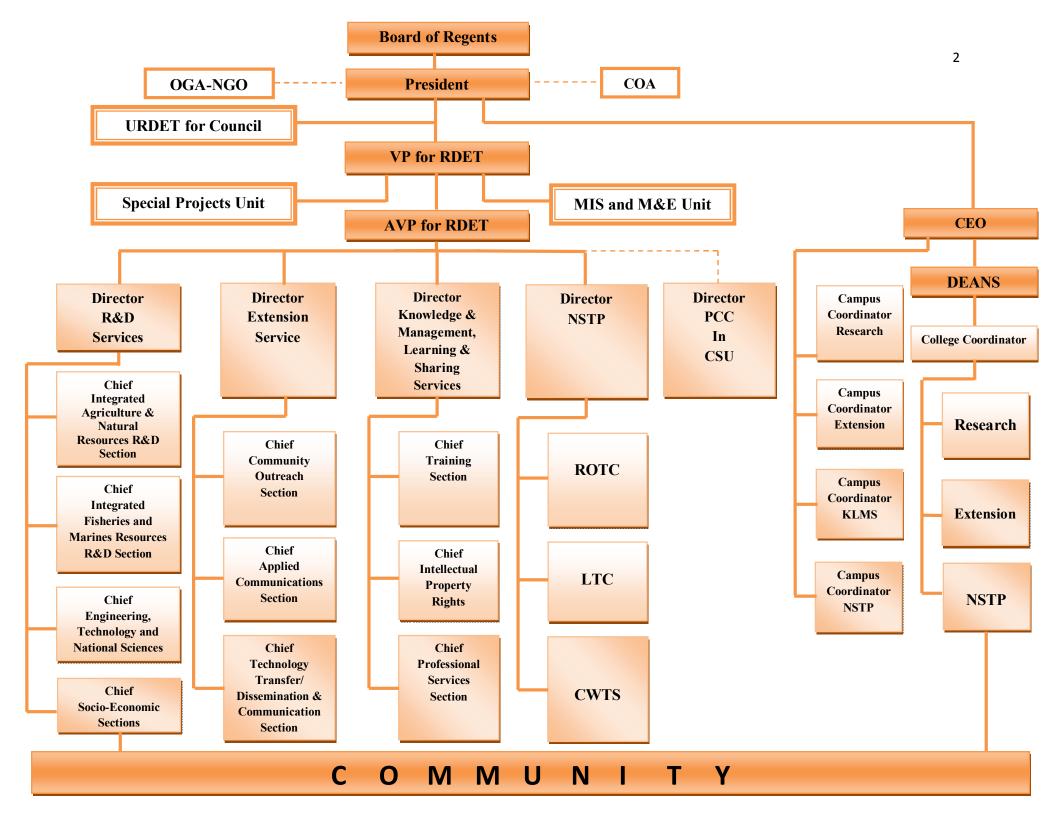


Figure 1. Organizational Structure of the University RDET Department

1. Function of the URDET Council

The functions of the Council are as follows:

- a. To assist the President through the VP for RDET in the formulation of University policies, rules and regulations relative to knowledge and technology generation, R&D results utilization, policy research and advocacy, and RDET governance and accountability;
- b. To provide advice to the University Directors of RDET in the formulation of the University RDE framework, programs/plans and projects, including the short listing of proposals for priority funding;
- c. To assess, screen, monitor and evaluate all proposals, on-going and completed RDET programs and projects in the University, including undergraduate and graduate theses/research problems;
- d. To monitor and evaluate (M&E) University RDET programs and projects; and
- e. To perform other functions as may be directed by the President.

2. Composition of the URDET Council

The URDET Council is composed of the following:

- a. University President, Chair;
- b. University Vice President for RDET, Vice Chair;
- c. University Assistant Vice President for RDET
- d. University Vice President for Academic and Related Affairs, member;
- e. University Vice President for Administration and Finance;
- f. Campus Executive Officers;
- g. College Deans;
- h. Campus Coordinators for RDET; and
- i. College Coordinators for RDET

The University RDERT Council shall be backstopped by a Technical Working Committee (TWC) to formulate and recommend guidelines and policies to the Council relative to the overall RDET programs, projects and activities. The committee shall be based on the research discipline or research commodity

The Vice President for RDET shall be responsible in convening the concerned committee as the need arises.

D. Vice President for RDET

The Vice President for RDET shall be under the direct supervision of the Office of the President and shall have the following duties and responsibilities:

- 1. Provide leadership in the development of a well organized University-wide RDET agenda and programs;
- 2. Introduce innovative approaches to improve governance thereby increasing overall efficiency of the University RDET system;
- 3. Ensure dissemination and utility of research findings;
- 4. Oversee the establishment of long-term mutually enriching research and development linkages/relationships between the University and other academic/research institutions, departments, schools;
- 5. Source out funds for manpower development and acquisition of scientific and information technologies facilities;
- 6. Introduce innovative approaches to facilitate access among stakeholders, planners, and other clientele to RDET information and knowledge outputs;
- 7. Coordinate with other University programs and/or related agencies for inter program/agency complementation for efficient mediation of resources; and
- 8. Perform other related tasks as directed.

E. Assistant Vice President for RDET

- 1. Assist the VP for RDET in planning and implementing RDET Program;
- 2. Does other functions deemed important upon instruction of the VP for RDET.

The following sections/centres are directly under and/or attached to the Office of the VP for RDET:

- Research and Development;
- Extension and Training;
- Knowledge and Technology Management;
- RDET Management Information System (MIS) and Monitoring and Evaluation (M&E) Unit; and
- Special programs/projects Unit.

Research and Development Services

The Research and Development Services is composed of the Integrated Agriculture and Natural Resources R&D and the Advance Science and Technology R&D Units. Its functions are the following:

- a. Formulate and recommend a well-organized and directed program of the University R&D;
- b. Provide leadership and direction in the development, evaluation, and institutional-level management of the Department of Research;
- c. Spearhead the development of policies relating to the conduct of research and research enhancement program;
- d. Prepare and administer the budget for the Department of Research;
- e. Make recommendation on all personnel actions within the department of research;
- f. Review and provide signature approval of all proposals for external funding routed through the Department of Research;
- g. Coordinate with other University programs and/or related agencies for program/agency complementation and efficient mediation of resources; and
- h. Perform other related tasks as directed.

Extension and Training Services

The Extension and Training Services is composed of the following section: (a) Community Outreach; (b) Applied Communications; and (c) Technology Transfer/Dissemination and Utilization.

Its functions are the following:

- a. Formulate and recommend a well-organized and directed program of the University Extension program;
- Assist the different units of the University (e..g.; campuses, colleges and offices and other agencies outside the institution) in cultivating social responsibility among the members of the CSU community;

- c. Oversee the development of social awareness in the CSU community through active participation in programs and projects;
- d. Spearhead the harnessing of the potentials, strengthening the capabilities and developing the competencies of the target partner communities;
- e. Enhance the transfer of research and development results in response to the priority needs of the target partner community;
- f. Empower people through the promotion of community-based organization;
- g. Promote equal access to information and services through deliberate social marketing strategies and innovative and sustained advocacy;
- h. Serve as linkage between CSU and the community;
- i. Conduct special community development programs and projects;
- j. Conduct training, seminars, fora, symposia and conferences on skills and technology promotion and utilization, specially along the fields of (a) livelihood opportunities; (b) community organizing (CO) and community development (CD); and (c) other concerns for human development;
- k. Promote/market research and development results, especially those developed by the University through: (a) demonstration activities; (b) pilot and pre-tests of skills and technologies; (c) distribution and production of development materials such as pamphlets, leaflets modules, magazines; and (d) other forms of development communication techniques;
- 1. Conduct special community development programs and projects;
- m. Implement extension cum research activities aimed to improve extension research delivery;
- Document, assess, monitor and evaluate outreach activities for comprehensive data management and analysis as well as for input to re-planning;
- o. Coordinate with other University program and/or related agencies for program/agency complementation and efficient mediation of resources; and
- p. Perform other related tasks as directed.

Knowledge and Technology Management and Services

The Knowledge and Technology Management and Services are composed of the following sections: (a) Training (b) Intellectual Property Rights Office; and (c) Professional Services. Its functions are its follows:

- a. Formulate and recommend a well-organized and directed program of the University knowledge and technology programs;
- b. Maintain and/or co-manage the community extension and outreach convergence facility (center)to serve as venue for community training and education and other related activities;
- Collect, store, and disseminate knowledge to help employees work smarter, reduce duplication, and ultimately produce more innovative products and services that meet the needs of the University clients;
- d. Achieve best practices and lessons learned and make better use of information stored in data bases:
- e. Identify technologies generated, inventions, and software¢s developed ready for copyright/patent;
- f. Ensure that technologies generated, inventions, and software¢s developed by the University scientists/researchers/other personnel are given copyrights and/or patents;
- g. Spearhead the conduct of trainings/workshops that will contribute to the resource generation program of the University;
- h. Lead University personnel in advertising/offering of technical assistance to other government agencies, Pos, NGOs, private organizations, or individual clients;
- i. Establish (in coordination with the Business Affairs Office) a compensation package for the University personnel involved in professional services/technical assistance; and
- j. Perform other related tasks as directed.

RDET Management Information System And Monitoring and Evaluation Unit

Directly under the Office of the Vice President, this unit serves as the University repository of data related to RDET activities. Its functions are the following:

- a. Provide processed information that are useful in the rational planning and decision-making for RDET management and operations;
- b. Plan, develop and maintain RDET information system for the University;
- c. Train MIS members in campuses on electronic data processing and maintenance of information technology (IT) facilities and equipment;
- d. Monitor RDET programs/projects/resources (proposed, on-going, and completed researches; abstract bibliographies of completed researches; technologies generated, validated, verified, pilot tested and commercialized; and manpower, equipment and infrastructure).

Through its computer-based monitoring system, the unit shall quickly provide data/information to various clients such as research managers, planners, evaluators, researchers, extension workers, faculty members, students, support staff, farmers and fisher folks, among others.

Special Program/Projects Unit

Directly under the Office of the VP for RDET, the functions of the Special Program/Project Unit are as follows:

- a. Provide technical and discipline-based support services to help the VP for RDET in linking the RDET Department with the research and development, extension and training departments of partner institutions or other agencies;
- Facilitate the packaging of RDET program/project proposals and feasibility studies for submission to prospective local and foreign funding agencies;

- c. Create more innovative, effective and efficient operational processes in integrating the RDET activities of various campuses of the University; and
- d. Perform other functions as may be called for by the VP for RDET or higher University officials.

Chapter II

BASIC CONCEPTS, GUIDELINES AND PROCEDURES

I. Basic Concepts

1. Definition of basic concepts

The following terms are to be understood and interpreted as used in this operation manual.

- Research is a systematic, objective and critical investigation of available information directed at the search for new knowledge or its advancement including its practical applications.
- Development is a systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to producing new materials, products or devices, to installing new processes, systems and services, and improving substantially those already produced or installed.
- Extension is a series of embedded communicative interventions that are meant, among others, to develop and/or induce innovations. Often times, it is referred to as the process of developing and delivering education programs that seek to expand or extend the various work of the University beyond its campuses and into the neighbouring communities. In the agriculture, forestry and natural resources sector, it is loosely referred to as R&D utilization.
- Training refers to a planned and organized activity designed to acquire the necessary competencies in terms of knowledge, skills, attitudes and values.
- Social science researches are researches conducted to seek understanding
 of social behaviours and relationships of individual members in and to
 society and generally regarded as including researches in sociology,
 psychology, anthropology, economics, political science, history and
 related disciplines given their relevance for development.
- Education research refers to high quality research that nourishes the degree level teaching-learning in HEI environments. It is intended to

generate new knowledge needed to improve policies, including the implementation and administration of higher education institutions, for the advancement of higher education.

• Technical research, which are generally referred to as commodity researches conducted in the areas of agriculture, forestry, energy, environment, natural resources, engineering, cutting-edge fields and related disciplines intended to generate technologies to address the research priorities for prosperity, economic growth and development, and social well-being.

2. Categories of Research and Extension

Research in the University may be classified according to:

- Purpose
- Who leads in the implementation
- Functional responsibilities in the research-extension continuum
- Fund source

a. Broad Categories of Research According to Purpose

In general, research program in the University consist of three broad categories as follows:

- Research to nourish the quality of the teaching-learning environment
- Research to develop the inquisitive and critical thinking of students
- Research to transcend the boundaries of knowledge particularly in addressing the needs of target clientele

b. Categories of Research Depending on Who Takes the Lead in Implementation

- Faculty/staff research generally to enrich instruction
- Faculty/staff research to generate database for policy formulation, planning and programming of programs and projects, including technology development
- Student research to develop inquisitive and critical thinking

c. Research Classification According to Functional Responsibilities in the Research Extension Continuum

- Basic research
- Applied research
- Development research
- Pilot testing
- Technology promotion/commercialization
- 1) Basic research is an experimental or theoretical work undertaken to acquire new knowledge of the underlying foundations or phenomena and observable facts without any particular or specific application or use in mind.
- 2) Applied research is an investigation undertaken in order to acquire new knowledge directed primarily toward a specific aim or objective.
- 3) Development research is a systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to producing new materials or devices, to installing new processes, system and services thereby improving substantially those already produced or installed.
- 4) Pilot testing is an innovative work to confirm and demonstrate the feasibility and actually using a technology; gauging end-user¢s reaction to introduction of improved technologies and identifying potential problems related to wider dissemination, utilization and adoption so that these can be fed back to researchers.
- 5) Technology promotion/commercialization is an activity involving application of technologies on a commercial scale by an identified entrepreneur or user primarily to increase income/profits and productivity.

d. Categories of Research According to Fund Source

By funding source, research support in the University from two sources:

- Internally funded research
- Externally funded research

1. Internally Funded Researches

Internally funded researches are researches conducted with funding coming from CSU either through the General Appropriation Act (GAA or Fund 101), or from income (Fund 164).

2. Externally Funded Researches

Externally funded researches are researches conducted through funding support from external sources (other than GAA and income such as PCARRD-DOST, DA-BAR, CHED, NEDA, etc.)

II. RDET Policy Guidelines

1. Guidelines for Strategic Planning and Priority Setting of RDET Programs and Projects

CSU is a large institution of higher learning. Its research and extension thrusts and directions are geared towards nourishing degree level learning-teaching for the continued growth and development of higher education in all campuses of CSU while at the same time promote the frontiers of knowledge by seeking new technologies towards the alleviation of the socio-economic condition CSUøs target clienteles within its sphere of influence, most especially, the SMALLHOLD CAGAYANOS.

Owing to the very limited financial resources of the University particularly for R&D and extension as compared to instruction, RDET programs and projects must be implemented effectively and efficiently. To ensure success in its implementation factors that will determine its intended outcomes must be thoroughly identified and established. This calls for an objective planning and programming of its activities to minimize the occurrence of undesirable and unpredictable events that would likely derail program/project/activity implementation. Hence, the needs for an appropriate and rigid planning framework.

a. The Planning Framework

1) Environmental scanning of the service Area of the University

Based on the formulated vision, mission, goals and objectives of the University which must be articulated and understood by its various stakeholders to include the governing board, faculty and support staff, students, farmers and various groups of clientele, across sectors of the society, the first and fundamental step in the planning process is the holistic scanning of the University & service areas.

The power of the interdisciplinary, or multidisciplinary or transdisciplinary research approaches shall be explored and implemented where several researchers should

look at a common problem, adopt a common framework, and relate the findings of one discipline to the other. However, it is advisable to concentrate more on determining the potentials of the service areas in terms of economic growth and development and how these growth and development objectives and processes can be interwoven into the major functions of the University particularly along the generation, advancement, dissemination and transfer of knowledge or technology, as desired.

The environmental scanning processes and procedures will be done as follows:

- Reviewing the institutional research mandates of CSU and local development plans of the target municipalities;
- Gathering of data of the various sectors in the locality, including the industries, their products, marketing systems, other industry services and levels of competitiveness;
- Assessing the involvement of other development agencies in the development process and in the rural economy to complement intervention activities rather than duplicate them; and
- Determining possible researchable areas and other extension modalities
 that could be implemented through participatory planning processes
 involving experts from the various disciplines, those responsible in their
 implementation, the members of the Board of Regents, middle-level
 managers, faculty members and support staff, students and other
 stakeholders.

2) Matching of institutional strengths And resources with the economic Potential of the service areas

From the results of the assessment activities, there is a need to match the University's strengths and resources, in terms of manpower capability of their knowledge, skills and entrepreneurial spirits and other support services, with the economic potentialities of the service area. Where the institutional strengths cannot match up with the economic potentialities of the service area, the help of the national/regional government will be sought.

3) Niching and clustering of RDET Programs and projects

With the very meager resources of the University, there is a need to develop RDET programs and projects that are focused on a limited number of niches with potential impacts. These niches, however, should be defined in terms of priority areas

where the University has a comparative advantage over other research institutions. This is necessary in order not to spread thinly the meagre resources of the University.

Moreover, while faculty members of the University have their own research interests and disciplines, they must be able to work together by clustering their disciplines using interdisciplinary, multidisciplinary or transdisciplinary approaches to achieve even greater impacts.

4) Management of research And development centers

Research Centers are usually long-term as compared to research programs which may have three to five years in time frame. The University has seven (7) research centers and few of these centers have barely scratched the surface of their contribution to the overall goals of the University.

Comparable with RDET programs, the RDET centers shall be under the administrative jurisdiction of the various RDET Directors who shall be responsible for coordination of planning, funding, monitoring and evaluation of the centers. The center shall operate with research or extension faculty/staff from various academic departments who shall be de-loaded from their teaching responsibilities so that important research and extension projects or studies can be implemented.

However, for centers that can attract considerable funding from government and external donors, they may be managed in a semi-autonomous manner when a relatively large academic faculty and staff from departments are involved through their appointments as affiliate staff of the centers.

No duplication of RDET staff and RDET facilities between and among RDET centers, academic departments and other RDET units shall be maintained in order not to weaken programs on instruction by drawing away senior teaching staff from these academic departments.

5) Conformation of RDET programs and projects With the national, regional and institutional Research agenda

In its attempt to enhance research productivity in higher education, CHED has set the general policies, directions, initiatives and priority areas for research and research related programs (NHERA-2 2009-2018).;Since the research areas are products of experts from the various disciplines to include institutional leaders, senior researchers and

representatives from funding institutions, the University RDET program and projects shall be anchored on these agenda in the planning process, to include site-specific research areas along key disciplines that provide solutions to institutional (teaching learning environment) as well as local community problems.

6) Major steps in developing the RDET Plans/Programs/Projects/Activities

RDET programs are generally considered as consisting of interrelated and complementary projects usually implemented using the multidisciplinary or transdisciplinary approach to meet established goals within specific time frames. They are usually broken down into projects that consist of interrelated studies also designed to meet predetermined objectives within a specific time frame.

The major steps:

• Identification of strong RDET leaders

The development of RDET programs in the University starts with the identification of RDET leaders with the necessary competencies in terms of knowledge, skills, values and attitudes.

• Creation of an Ad Hoc Committee

This will be followed by creating an Ad Hoc Committee preferably of five members from the various disciplines who shall craft the common research framework.

Appointment of experts to review And package proposal

Experts from the University Experts Pool shall then be sought to review the RDET program proposal after which RDET program proposal shall be packaged first-class by providing all the needed information for donor support.

• Invitation of prospective fund donors

Prospective donors shall be invited for a visit and briefing about the program The same process shall also be sought for sponsor-driven program proposals.

b. The RDET Planning Process

Through the input coming from the various RDET departments, sections and colleges in campuses, the expected output in the planning process is the tentative Strategic RDET Plan which shall be prepared by the TWC of the URDET Council and presented to the URDET Council and key stakeholders. After incorporation of suggestions and corresponding revision by the TWC, the Plan will be presented to the Board of Regents for final approval and the same shall be multiplied and disseminated to all departments/units, colleges and campuses.

The RDET Strategic Plan shall then be translated into four (4)-year Medium Term RDET Plans called Work Plans, specifying among other things, the sequence of RDET events to be pursued in the research-extension continuum. To ensure commitment and full support in implementing the Plans, it is important that all those who are directly and indirectly involved in the execution of the Plans, its programs and activities, to include the CEOs, Deans, Directors of RDET Centers, University RDET Directors, Budget Officer, the collaborating institutions and possibly, donor agencies, should be present in crafting the 4 ó Year Work Plans.

Once the Work Plans are crafted, they shall be presented to the Panel of Experts from the University at four levels:

- Panel of Experts in higher education to include Student Support Services to review the Work Plan for social science, education and student research cluster;
- Panel of Experts for technical research along agriculture, forestry, environment, engineering, health, information technology and related disciplines;
- Panel of Experts along knowledge and technology management; and utilization; and
- Panel of Experts along technology dissemination, transfer and dissemination.

After presentation to the Panel of Experts at all levels and the necessary corrections and refinements were properly made, the same shall be finalized and presented to the Board of Regents for final approval.

c. Implementing the RDET Plans

The Strategic RDET Plan, the Medium-Term RDET Work Plan and the Annual RDRET Action Plan shall be translated into Operational Action Plan in the Campuses or RDET centers. From this Operation Plan, an RDET Employee Work Plan shall be developed on a semestral basis divided into five months.

The Employee Work Plan will be the basis of monitoring and evaluation of the RDET employees in meeting the goals and objectives of the strategic plan, medium-term plan and action plan.

The progress in meeting the goals and objectives of the plans at various levels should be fed to the RDET Coordinators of the different campuses/colleges on a monthly basis and to the University RDET Directors on a semestral basis. Among other considerations, the monitoring and evaluation plan should be able to assess the inputs, activities and processes, outcomes, effects and possibly, initial impacts against the defined objectives.

2. Guidelines on the preparation Of RDET Proposals

A research proposal is any organized written presentation of a planned research activity aimed at achieving a defined objective. It may be prepared as an initiative of the proponent alone, or as a result of solicitation by donor/funding agencies, or as an initiative of the higher management for planning or decision-making purposes.

RDET proposals are prepared to enable the proponent/s to thoroughly analyze and understand the research problem and determine the feasibility of conducting the proposed activity. At times, proposals are prepared to win the appreciation or support of donor agencies and provide as guide of project implementers in monitoring and/or evaluating how far the execution of the project has been executed or implemented.

Good research project proposals should have the following component parts:

- Program/Project Title
- Name & address of proponents
- Implementing and cooperating agency /ies
- R&D station
- Site of implementation Classification of R&D
- Sector/Commodity

- Discipline
- Significance of the project
- Project objectives
- Review of literature
- Methodology
- Timetable of planned activities (Work Plan)
- Project duration
- Expected output
- Target beneficiaries
- Personnel requirement
- Literature cited
- Estimated budget
- Capsule *curriculum vitae* of proponent/s

a. Program/Project Title

The RDET program or project title introduces the project to the reader. It identifies the program and the project components and reflects the main purpose of the proposal. It gives the reader the idea on what the researcher proposes to do.

The goal in making the title is to describe the coverage of the RDET proposal and reflects its contents. As such, it should be short, easy to remember, and can easily be indexed and retrieved. It must contain a few words that adequately describe the contents of the paper and it should clearly embody the focus of the proposal.

In developing the title, the proponent should make a listing of all the most important proposed findings or data to be generated, cluster them using one word if possible, and then compose them to form a clear and an eye-catching informative title. Avoid using unnecessary words such as: effects, evaluation, study, experiment, trials, observations, results, test, factors, analysis, etc. as read in many titles.

In agriculture, forestry, environment, natural resources and related research, the common and scientific names (in *italics*) of relative uncommon crops or trees should be included in the titles.

The length of the title should not exceed 12 words but a shorter title is better. Avoid using technical terminologies, acronyms, non-standard symbols and abbreviations.

Note that materials with confusing titles may lose the opportunity to be read by an unrelenting reader.

b. Name and Address of Proponent

This item consists of the name, designation, address, telephone, and fax numbers, and email addresses of the proponent/s. The proponent is usually the designated project leader and is the one in-charge to take the lead in project implementation.

c. Implementing and Cooperating Agency/ies

In this item, the implementing and cooperating agency/ies should be indicated, identifying the lead and collaborating agencies. By lead agency, it means the agency which has the full authority over the execution or implementation of the research project. Cooperating agencies are agencies participating in the RDET development work.

d. RDET Centers

RDET Center refers to the campus where the RDET activity will actually be conducted.

e. Site of Implementation

Site of Implementation refers to the specific location where the RDET activity will be conducted. Generally, the municipality, district, province and region are indicated.

f. Classification of RDET

RDET classification refers to either the program or project is pure research or developmental. The research project may either be classified as basic research, applied research or development research.

g. Sector/Commodity

Sector/Commodity indicates whether the RDET activity is psychology, sociology, anthropology, economics, political science, crops, livestock, forestry, agricultural resources management or socio-economic; fisheries or aquatic resources; biotechnical, pharmaceutical or health services; biotechnology, information and communications technology, material science, photonics or space technology; industry, energy, utilities or infrastructure.

h. Discipline

By discipline, it refers to the specific field to be studied e.g., social science, education, plant breeding, taxonomy, communicable or degenerative diseases, drug formulation, maternal or child health, process, food and feed, metals and engineering, etc.

i. Significance of the Project

Significance of the project refers to the statement of the problem which should be discussed by giving information on what exactly is the problem, how long it is become a problem, the situation how the problem was encountered and the negative consequence of the problem if not acted upon.

Previous works or reviews relevant to the problem may also be cited in the significance of the project. If this is the case, the significance of the project should also include what the research is all about and what is its role in relation to other works and show how the research activity will extend over or supersede the results of earlier researches.

In most technical researches, the significance of the project tells something about the context of the project, that is, how the research project forms part of the overall body of knowledge in the discipline, sector or commodity.

In many development-oriented research projects, the significance of the project should also include the justification of the research expenditures vis-a-vis potential benefits to be derived, utilization of the expected results, outcomes or outputs, impact of the information or technology to be generated on the current body of knowledge and the target users/beneficiaries or stakeholders at the institutional, municipal, provincial, regional and national, if not global levels.

For R&D projects aligned with the mandates of DOST-PCARRD most particularly along the NSTA 2020, the DOST 8-Point Agenda, the Integrated S&T Agenda for the AFNR, and the NHERA of CHED, the research outputs should be explicitly stated and discussed specifically on how they will be utilized and disseminated.

j. Project Objectives

The project objectives state what the research project is expected to achieve and why it was to be undertaken. Many proponents suggest that the articulation of the

objectives should use the SMART guide. By SMART, we refer to the proposed objectives to be Specific, Measurable, Attainable, Relevant and Time bound.

Where the research project have many related studies all of which lead to a common goal, it is preferable to have a general objective which is a statement of the general purpose of the research. The specific objectives are crafted from the general objective to address the problem areas as stated in the significance of the project.

The project objectives should be clear enough as to what the proposal intends to accomplish or achieve and must be attainable within the timeframe and the required resources, not what he/she intends to do. They should be very simple, specific and narrow enough to permit objective measurement under reasonable conditions.

k. Review of Literature

In several research proposals, the Review of Literature has been considered by many evaluators as the õweakest linkö in the development of proposals.

The Review of Literature briefly synthesizes past and current research findings and the recommendations on the problem being investigated. It generally presents and discusses what has been done about the problem. It also shows the State of the Art and knowledge about the subject of investigation to which the proposal is built on and will take off.

The literature reviews to be presented in the proposal should be within the last five to 10 years from which the project proposal will take off should likewise be discussed.

The literature review in the proposal likewise ensures that there will be no duplication of research works and guarantees that all the researchable areas shall be covered.

Note the Review of Literature is a series of references that will strengthen the position of the researcher in his/her research work. Hence, only those reviews that will substantially strengthen the research position of the researcher should be included in the review.

The following guidelines should be followed in organizing the Review of Literature:

- Make an outline of the topics to be presented;
- Classify the pertinent abstract of the reviewed literature into topics;

- Interrelate or group similar findings;
- Compare or contrast findings for appropriate;
- Use the Review of Literature to clarify, augment, support or contradict the idea;
- Present one idea per paragraph;
- Do not include a literature not relevant to the problem;
- Provide smooth transitions by using such words as on the other hando, oneverthelesso, oin additiono, oin contrasto, etc.;
- Avoid so many reviewed articles on the same subject;
- Limit and avoid complementary papers by the same author;
- Cite results but not tabulated data;
- State research findings in your words;
- Cite word for word by enclosing them in quotation marks; and
- Acknowledge sources of sentences or sections lifted from text or articles, and other vividly striking expressions.

l. Methodology

The Methodology generally describes the way the research work is carried out and what equipment and materials are to be used in the process. It is geared towards providing answers to the research questions as stated in the significance of the project and the objectives as set. The measurement of the expected outputs that the project will produce the set of indicators and expected values should also be included in the methodology.

As in many technical researches involving experiments, the methodology should show appropriate treatment used, the experimental layout, and appropriate statistical design and analysis systems. Discussion on how the data shall be generated, how frequent the measurement should be taken and how the collected data will be processed and reported is also discussed in the methodology.

The research methodology generally includes four major components as follow:

- Theoretical/Conceptual Framework and log frames
- Sampling Procedure;
- Methods of Data Collection; and
- Methods of Data Analysis.

1) Theoretical/Conceptual Framework/log frame

The Theoretical Framework is a set of interrelated concepts that guides a researcher on the things that he/she wants to measure and the statistical relationships he/she is looking for.

Generally used in social science R&D, the Conceptual Framework is equivalent to in the other sciences. It shows how the problem is viewed and how the proposed interventions will lead to the solutions of the problem under study. The Review of Literature should guide the researcher in contextualizing the problem and identifyi9ng the variables to be look into.

Usually illustrated using a diagram and accompanied by a textual explanation, the framework contains both the dependent and independent variables and how these variables are related or interrelated. It guides the researcher on how to analyze the data and the methodology to use. Note that not all projects need a Conceptual Framework.

The log frame is a tabular description of the logical sequence of events to implement the research project. Generally, it provides the general idea or overview of the entire elements of the project in terms of the goals, purposes, expected outputs and activities. Linked together in a logical sequence, these elements of the log frame are usually measured in terms of verifiable indicators, means of verifying them and important assumptions.

2) Sampling Procedure

Sampling consists of measuring portions of a population and from the measured sampling units, obtaining estimates that are considered representative of the parent population. While a complete enumeration is desirable, sampling is being done to save on time and resources.

One of the fundamental concepts in sampling that that researcher should consider is the sampling intensity which is the ratio of the sampling units for a given probability and allowed sampling error to the population or universe to which estimates are being obtained.

Depending on the degree of homogeneity or heterogeneity of the population and the degree of required accuracy, the sample size is determined using either simple random sampling, stratified random sampling or simply, systematic sampling. The researcher should be able to find the relative strengths of the most appropriate sampling techniques to be used in the research.

3) Methods of Data Collection

The Method of Data Collection provides answers to the nature and extent of data to be collected, how the researcher proposes to collect them and how the data should be processed to be providing the necessary information for analysis.

Note that the information to be generated for analysis should be limited but large enough to enable the proponent to be confident that the data collected is trustworthy and serves the needs of the research. They may be obtained from the field in terms of experiments or through the use of personal interviews, interview schedules or questionnaires in case of social research.

4) Methods of Data Analysis

Data analysis is the process of transforming the collected data into useful information. In many research works, data analysis involves three major steps: *data* preparation, descriptive statistics and inferential statistics.

Data Preparation

Data preparation involves the checking of the collected data for accuracy, data encoding or data entry into an appropriate computer, transforming the data into desired structure, and developing a database that integrates the various data into usable forms.

Descriptive statistics

By descriptive statistics, it refers to description of the basic features of the data for the study. Simply describing what the data is all about, descriptive statistics generally provides simple summaries about the collected data and includes tables, graphs, charts, scanned photographs or line drawings which are collectively termed as diagrams.

The diagrams are very essential part of the many researches as they give a great deal of information more easily than text and therefore readily acceptable by the reader especially when they are visually attractive. Note that diagrams should only show the most relevant or important information.

Inferential statistics

In many researches, the analysis extends beyond the data collected and their descriptions especially when we want to establish models and investigate hypothesis/es.

By inferential statistics, the proponents try to infer from a given sample data what the population really is or make probability statements of that the differences between groups is a very dependable judgement or had simply happened by chance. Hence, we use inferential statistics to make inferences about the data to the general conditions and these are linked to specific research questions or hypothesis that was formulated in the significance of the project.

Note that it is important to present simple data in order not to confuse the readers and where conditions do not warrant, the details of the data may be provided in the appendices.

5) Timetable of planned activities

The timetable of planned activities is usually presented using a Gantt chart illustrating the chronology of events or sequence of activities to be conducted. It generally provides answers on the expected time of completion of the activities as planned and the delivery of the desired outputs.

The various activities of the research should be properly planned in order not to delay completion. Following the plan is absolutely necessary but it should be flexible enough to allow for adjustments or revisions without substantially altering the delivery of outputs within the bounds of reasonable time.

6) Project Duration

The project duration usually indicates the number of months or years the project shall be accomplished based on the timetable of the planned activities.

7) Expected Output

The expected output indicates the specific products, processes or services, information or technologies which the project is expected to produce. Defined in terms of the social, economic and related measures, these outputs should be explicitly determined in terms of how they are being generated and realized through time.

In addition, the process on how the outputs should be promoted, utilized and commercialized should also be thoroughly explained in the expected output. The expected output statements in the proposal should be simple and measurable.

8) Target Beneficiaries

The target beneficiaries of the project should be specified. They should be defined in terms of how the expected outcomes, effects and impacts of the project are being utilized.

9) Personnel Requirement

By personnel requirement, we refer to the people or personnel who should be involved in the project. They should be knowledgeable and skilful enough to do the research work.

10) Literature Cited

The Literature Cited is an actually a chronological list of reading materials referred to in the project. The list should include books, periodicals, research reports, theses or dissertations, proceedings, articles, or papers presented in various fora.

The purpose of citing the references is to allow the readers to follow through the research work and compare them to the conclusions that the researcher has drawn from the research. The references should never be thought of as a method for the readers to think that the researcher has read enough.

For books, the proponent should be able to give the name author/s, year, edition, publisher and location. For articles in journals, the proponent should be able to give the name of the authors, year, and name of publication, volume and page numbers. Note that if the proponent cannot possibly give these details, then probably, he does not have a proper reference. For web-based publications, the same basic principles should be applied is in citing printed works.

Note that literature citations in peer-reviewed journals are more convincing than non-reviewed materials. The use of pictures are acceptable, however, permission should be sought from the author.

11) Estimated Budget

The estimated budget is an estimate of the financial requirements in carrying out the objectives of the research. It should be reasonable enough and consistent with the work plan. The budgets statements should be worked out in a manner that they should indicate the sources and the time they are available and they should be broken down according to the period of disbursements.

12) Capsule Curriculum Vitae of Proponents

The *Curriculum vitae* is a one page information sheet indicating among others the qualification and relevant experiences of the proponent/s in relation to the research work. It generally gives information on the nature of the researchergs specialization and his/her ability to conduct the project being proposed.

3. Guidelines on the Evaluation, Screening And Approval of RDET Proposals

The evaluation and screening of research proposals shall conform to the policies and guidelines set by CHED (NHERA 2), PCARRD-DOST, DA and other relevant agencies. All CSU funded researches shall fall within the flagship commodities to be identified under the *University Integrated Research and Development and Extension Plan* (IRDEP) as mandated by the *National Agriculture and Resources Research and Development Network* (NARRDN).

a. Faculty/Staff Research and Extension

The Office of the *Vice President for Research and Development, Extension Training* (VPRDET) facilitates the development, approval and funding of RDET proposals through an efficient system of processing. The following section explains in detail the processes and procedures in developing RDET proposals.

Call for RDET proposals from CSU *Basic Research Program* (BRP) and *External Funding Agencies* (EFSs) may come anytime during the year. Generally, research proponents prepare proposals in accordance with the thrusts, directions, and goals and objectives of the funding agencies.

1) Institutionally Funded Proposals

The **VPRDET** calls for submission of basic (institutionally funded) RDET proposals every quarter of the year. The deadlines for submission are as follows:

- First week of January;
- First week of April
- First week of July; and
- First week of October.

For the schedules of evaluations of submitted proposals, they shall be conducted as follows:

1st Quarter
 2nd Quarter
 3rd Quarter
 4th Quarter
 1st Week of May
 1st Week of August
 1st Week of November

All proposals shall follow the Guidelines and Format as will be prescribed.

The flow of basic RDET proposal processing for internally funded projects is presented below (Figure 2).

2) Research Under External Funding

Some agencies such as CHED, DA-BAR, DA, DOST, DOST-PCARRD, etc., require the initial submission of RDET capsule proposals and when the proposals are considered for funding, the proponents are requested to submit detailed proposals.

The flow of research proposal processing for external funding agencies particularly for PCARRD-DOST is presented below (Figure 3):

VPRDET

 Issues call on all campuses/units for RDET proposals for external funding through the RDET Directors.

Proponent

o Following the format of the external funding agency, submits capsule proposals to the College/School/Institute/Unit.

Proponent

 Submits detailed RDET proposal to the VPRDET through the University Directors for RDET.

URDETC

Approve RDET proposal

In addition to the above flow, the following processes shall also be followed particularly for DOST-PCARRD funding request.

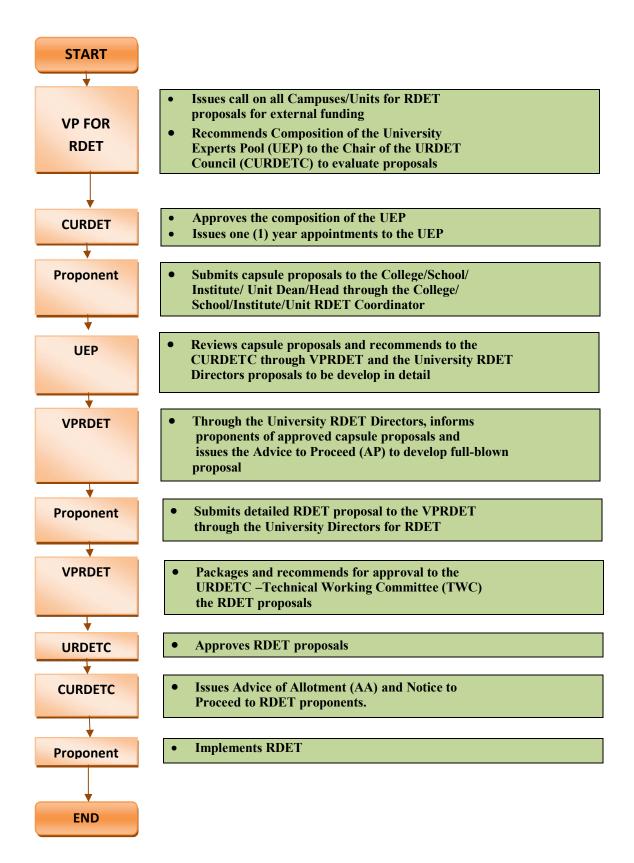


Figure 2. Flow of basic research proposal processing for internally funded projects.

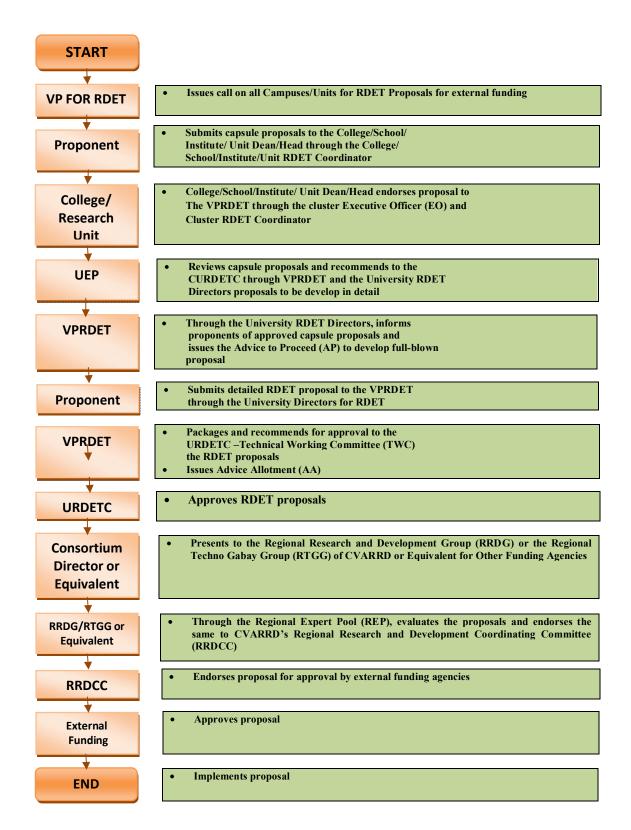


Figure 3. Flow of basic research proposal processing for internally funded projects.

Consortium Director (CD)

 Depending upon type, the RDET proposals shall be presented either to the Regional Research and Development Group (RRDG) or the Regional Techno Gabay Group (RTGG) of the Cagayan Valley Agriculture and Resources Research and Development (CVARRD).

RRDG or RTGG

o Through the Regional Expert Pool (REP), evaluates the proposals and endorses the same to CVARRDøs Regional Research Development Coordinating Committee (RRDCC).

RRDCC

- o Endorses proposal for approval by external funding agencies
- External Funding Agency
- Approves proposal
- Proponent
- Implements proposal

3) Criteria for evaluating faculty/ Staff research proposals

The following criteria shall be used in evaluating research proposals:

Evaluation Ratings

- 100 % Criterion is **fully met** with RDET proposal elements at level of excellence that provides a model for others.
- Very relevant RDET program/project/study.
- Well defined mechanisms to ensure adoption.
- O Demonstrate **best practice** that makes the proposal a model for others.

- **75%** Criterion is met to a **great extent** with most elements demonstrating good practice.
 - Very relevant RDET program/project/study.
 - Well defined mechanisms to ensure adoption.
 - o Demonstrate **good practice** in most aspects
- **50%** Criterion is met in **most respects** but improvement is needed to overcome weakness of elements.
- **25%** Criterion is met in **some respects** but much improvement is needed.
- **0%** Criterion is not met.

b. Student Research, both undergraduate and graduate

Research of student submitted for undergraduate, Masterøs or Doctorate degrees shall be governed by the following policies:

1) Responsibilities of the head of department/College

- Ensures that there is discussion with each student about the research projects that may be embarked on within the department/school/institute/college, before admitting a student to thesis work;
- After consultation with the student, recommends to the Dean the appointment of a member of the academic staff as Thesis Adviser;
- After consultation with the Thesis Adviser, appoints two or more members of the Advisory Committee to support the Thesis Adviser;
- Ensures that each student written research proposal is forwarded regularly as prescribed, to the Dean;
- Resolves any dispute between student and any of his/her members of the Advisory Committee;
- Ensures that the Department/School/Institute publishes guidelines for thesis students.

2) Responsibilities of the Thesis Adviser

- a) Gives guidance about the nature of research and the standard expected output, including planning of the research program, literature sources, any relevant health and safety requirements, and relevant ethical rules;
- b) Holds of regular formal meetings with the student to take stock of progress;
- c) Being accessible to the student when the student needs advice;
- d) Coordinates the activities of the other members of the Advisory Committee and ensures that their comments are received and conveyed to the student:
- e) Oversees the writing of the research proposal and progress reports;
- f) Gives detailed advice on the necessary completion dates of successive stages of the work to keep track on agreed timelines;
- g) Informs the student as to the adequacy of thesis work and provides advice of what is needed:
- h) Provides formal written reports on the studentos progress; and
- i) Encourages the student to submit work for publication and presentation to seminars/research fora.

3) Responsibilities of the Other members Of the Advisory Committee

a) Advisory Committee Member

- o Being one of the committee members representing the student minor field, he/she serves as co-adviser of the thesis student;
- Assist the Thesis Adviser in the planning and implementation of the research program, literature sources, any relevant health and safety requirements, and relevant ethical rules; and
- o Being accessible to the student when the student needs advice.

b) Commodity/non-commodity area specialist

- o Represents the URDET Council in the Advisory Committee of the student;
- o In coordination with the Thesis Adviser and the other members of the Advisory Committee representing the studentøs minor field, assesses the status of the proposed research of the student;

- Coordinates with the Thesis Adviser in the identification of the priority research area of the student which should be in line with either the national, regional and institutional research and development agenda;
- O Assist the Thesis Adviser in the planning and implementation of the research program, literature sources, any relevant health and safety requirements, and relevant ethical rules; and
- o Being accessible to the student when the student needs advice.

c) Responsibilities of the student

- Becomes familiar with the general regulations and guidelines relevant to thesis preparation and completion;
- Discusses with the Thesis Adviser the comments of the other members of the Advisory Committee and agree to schedules/timelines;
- Maintains progress of work in accordance with schedules;
- Provides written progress report to the Thesis Adviser and responds to the Thesis Adviserøs comments on progress; and
- o Takes the initiatives in raising problems or difficulties relevant to the conduct of the research work.

4. Guidelines on implementing RDET Programs and Projects

a. Developing and Executing Legal Agreements

Once a research proposal, either internally or externally funded, is approved for implementation, A *Memorandum of Agreement/Memorandum of Understanding* (MOA/MOU) between the proponent and the University and/or the funding agency is prepared. The draft MOA/MOU shall be referred to both parties for comments and sent to the CSU Legal Office for review.

As soon as the review by the Legal Office is done, the MOA/MOU will be sent back to the proponent and the University and/or funding agency for further comments. After revision shall have been made, the URDETC and/or Chair of the RRDCC and the parties sign the MOA/MOU. After the MOA/MOU is notarized, copies shall be provided to signing parties.

After the MOA/MOU is approved, the Chair of URDETC and/or the RRCCC Chair shall issue the *Notice to Proceed* (NP) to implement the project copy furnished the

Offices of the VPRDET, University RDET Director concerned and the Chair of URDETC and RDECC Chair.

b. Hiring and Appointing Project Personnel

Before any project is to be implemented, the VPRDET through the concerned University RDET Director should assign Project Leaders and Staff to implement the approved projects. Only permanent faculty/research staff is allowed to be assigned as Project Leader. Substitutes or contractual employees are not allowed to lead projects. Appointment papers of Project Leaders/Staff shall be signed by the President upon the endorsement of VP-RDET in accordance with the duration of the project.

If contract leaders are needed by the project, the Project Leader should make the necessary request to the VPRDET through the concerned University RDET Director, Campus RDET Coordinators, Dean of College or Head of Unit and College/Unit RDET Coordinators. The duration of the contract is limited to three (3) months only and can be renewed for another three (3) months with a gap of one (1) week each renewal period.

c. Purchasing Project Supplies and Equipment

Purchase of project equipment, supplies and materials shall be implemented following the public bidding system and the guidelines set by the University & Bids and Awards Committee (BAC).

Purchase of the following items is covered by the Annual Procurement Plan:

- Computers, peripherals, software and related supplies.
- Tools, instrument, equipment and machines.
- Crop and animal production and processing units.
- Laboratory chemicals, medicine supplies.
- Construction and hardware supplies including labor, and other services.

d. Change in Date of Implementation

The start and end of any RDET project shall be based on the terms and conditions set in the MOA/MOU. However, implementation may be reset depending on the release of funds, issuance of the Notice to proceed and other circumstances such as favourable climate, cropping season, availability of labor and other justifiable reason.

The funding agency and other RDET units in the University should be informed by the Project Leaders explaining in detail the circumstances of the delay or movements of dates of implementing the project.

e. Realignment/Reprogramming of Budget

Project leaders are advised to strictly follow the *line-item budget* (LIB) as programmed. However, transfer of funds from one line-item budget to another item or from one budget to the other within the line-item budget may be allowed within 30-33 percent of the budget, provide funds are available and request for transfer has been approved through channels.

For request of transfer of more than 33 percent of the approved budget, the VPRDET shall make the necessary recommendation of the request of approval by the funding agency or University in consideration of the following conditions:

- Transfer of funds (major) from equipment to maintenance and operating expenses (MOE) or personnel services (PS); and
- Request for additional project personnel.

f. Audited Financial Report

A *Quarterly Audited Financial Report* (**AFR**) shall be prepared and submitted to the VPR and the funding agency by the CSU Accounting Department indicating the expenditures and the remaining balance of the project for the period under consideration. However, Project Leaders may request for an updated AFR as deemed necessary.

g. Transferring Project Leadership

Project leadership may be transferred from one leader to the other upon request or incapacity of the incumbent, or where management sees it necessary.

Through channels, the VPRDET approves the request of transfer and submits such request and approval to the funding agency, where appropriate, together with the resume or bio-data of the new project leader.

h. Use of Unobligated Balances

Unobligated Balances (UB) or unexpended funds from the previous year may be used for the same line item budget and for other necessary items subject to the approval of the VPRDET through channels and the approval of the funding agency, or where appropriate, while awaiting the next release of the budget allotment.

i. Request for Program/Project Extension

Request for extension, renewal, or termination of projects are made through the VPRDET which should be substantiated by a written request, evaluation results and annual reports.

The request for extension, renewal, or termination of research projects indicating the status of fund used shall be deliberated on during the regular conduct of Agency In-House Review (AIHR).

j. Request for Bridging/Emergency Funds

In extreme cases, researchers may be allowed to tap other funds while waiting for the release of budget for the project subject to the approval of the VPRDET through channels.

The tapping of such funds shall be only granted to pay the unpaid salaries of project personnel and purchase of equipment. The amount, however, must be replenished soon as the budget for the proposed project has been released.

k. Processing and Releasing Project Funds

Upon the finalization of the MOA/MU, the funding agency for externally funded researches issues the check of the funds of the approved project. Upon receipt of the check, the VPRDET gets an account code from the CSU Accounting Department and deposits the check to the CSU Cash Department where the department issues and furnishes a receipt to the funding agency. For internally funded projects, the same process shall be followed, i.e., for the VPRDET to secure an account code from the CSU Accounting Department before funds are processed and released to the researchers. An *Advice of Sub-Allotment* (ASA) is prepared by the VPRDET, copies of which are furnished to the following:

- Proponent (original copy);
- Accounting Division;
- Internal Audit Office; and
- Funding agency, where appropriate.

The research will be released on a per quarter basis and expenses for the operation of the project should be disbursed by the proponent in accordance with the ASA and subject to existing accounting and auditing rules and regulations of the University.

5. Guidelines on the Appointment Of the University Expert Pool (UEP)

a. Importance of the UEP

A *University Expert Pool* (**UEP**) shall be created to:

- 1) Provide expert advice and services in translating the Universityøs Plans/Programs into specific activities and output(s);
- 2) Provide expert advice in the formulation, packaging, monitoring and evaluation (M&E) of S&T programs/projects;
- 3) Act as reviewer/evaluator during RDET program reviews, pre-agency inhouse reviews, agency in-house reviews, field visits, and other related M&E activities of on-going projects;
- 4) Act as resource person during symposia, workshops, techno-for a, field days and other conductive meetings;
- 5) Assess relative contribution of RDET projects and activities towards achievements of goals and expected outputs;
- 6) Provide expert advice in the preparation and packaging of RDET proposals and IEC materials; and
- 7) Perform other tasks that may be request/assigned by the VPRDET from time to time.

b. Operationalization of the UEP

- 1) The UEP shall be composed of commodity experts and specialists in their field of endeavours;
- 2) Upon the recommendation of the VPRDET, the composition of the UEP for the following year shall be approved by the OP during the 4thQuarter of the preceding year. The members of UEP may be renewed or changed depending on their performance and availability;
- 3) The OP shall issue the appointment of the members of the UEP selected to do a specific activity;
- 4) An activity/task (e.g., RDET proposal packaging) shall be undertaken by only 4-5 experts from the UEP;
- 5) The expert should be able to finish the work with output(s) required within the time duration specified in their terms of reference but not to exceed three (3) months for each activity;
- 6) The UEP may be utilized by all groups (R&D, Extension, KTS)depending on the tasks required and the UEP membersøexpertise/specialization; and
- 7) Depending upon need, the UEP may include experts from other institutions and regions in the composition of the UEP.

6. RDET Workload Guidelines

In order to rationalize the functions of the faculty members and research staff in the RDET Department, a workload scheme is hereby proposed to serve as a guide in assigning research and extension loads as well as other related duties.

a. Faculty

Faculty members who are appointed Assistant Professors and up are expected to carry a regular or a minimum research or extension workload.

The granting of Equivalent Teaching Load (ETL) will be based on the following guidelines:

- 1. Equivalent Teaching Load (ETL) shall only be granted for research/extension program/project duly approved by the University Research and Extension upon the recommendation of Technical Working Groups (TWG).
- 2. Designated officials with an ETL of 9 and above who will conduct research shall be granted additional research ETL of a maximum of 6 units.
- **3.** ETL shall be granted to researchers with Institutional funding.
- **4.** Externally funded researches shall not be entitled to ETL. However, honorarium may be received by the proponent unless expressly indicated in the Memorandum of Agreement (MOA) between the funding agency and the University.
- 5. ETLs for faculty members may be used for de-loading him/her from actual teaching loads subject to the endorsement of the Dean concerned and deliberation by the URDETC. The purpose of referring to the URDETC is to determine the technical competence of the faculty.
 - A) Best research and development paper-completed and ongoing researches presented during the Annual Research In-House Review and Evaluation of the University shall all be evaluated for this award. However it is not necessary that there must always be a winner every year for there is a cut off score to qualify for the award. A cash prize which shall be determined and a plaque shall be given. The source of fund for this award shall come from the University Research Fund. The citation will be awarded during the Annual General Assembly of CSU. The guidelines are presented in Attachment I.
 - B) Best Poster which shall be made open to all faculty and staff engaged in research and selected during the agency in-house review.
 - C) Faculty members with Quality Chosen Research works shall be given privilege to present papers during conferences/symposia outside the University.

GRANTING OF CREDITS OR HONORARIA

- 1. The grant of honorarium or service credits to faculty members is an incentive or reward system used by the University to motivate its faculty members to actively engage in research and extension in their respective professional fields.
- 2. An honorarium is a payment for the services rendered by government personnel performing activities or discharging duties in addition to or over and above their regular functions and payment of services of personnel with expertise or professional standing in recognition of his broad and superior knowledge and specific fields provided that the total honorarium granted in any given year shall in no case exceed 50% of his annual salary.
- **3.** The grant of honorarium shall be given to:
 - **a.** All regular and part-time faculty members who are involved in research;
 - **b.** All faculty members who are engaged in research and such research assignment are performed outside his/her regular work load.
 - **c.** Faculty members who undertake researches that are approved by University Research Technical and Evaluation Committee (URTEC).
 - **d.** Faculty members who conduct full blown research only and not action research.
 - e. Faculty members who conduct researches that do not have external funding.
- **4.** The faculty members may have the option to choose either service credits or honoraria in the conduct of a full blown research.
- 5. One full blown research is equivalent to a three-unit to six-unit workload (54-108 hours per semester) depending upon the final decision of the URTEC which has the power to evaluate and approve the research. This holds true for the different roles of positions that the faculty occupies in the research project such as Project Leader, Asst. Project Leader, Data Manager, & Research Assistant
- **6.** Faculty members shall conduct at most two (2) research extension projects per year and shall be paid based on the approved duration of the research by the URTEC.
- 7. Any faculty member who does not complete the research based on the approved date of completion shall payback the amount received or for those who obtained service credits shall be cancelled.
- **8.** Researchers who are granted the extension for completing their research beyond the approved duration shall not be entitled to additional honoraria or equivalent credit except under justifiable circumstances.
- **9.** Credits or honorarium shall be made only based on actual performance of work of the researcher as certified by the Director for Research upon the recommendation of the College Dean. An accomplishment report must be submitted by the researcher as supporting document in claiming the honoraria or credits.

- 10. No faculty shall be entitled to receive honoraria or its equivalent credit in more than one project within a program or in more than one study within a project. In cases where the researcher is assigned in more than one project/study within each program/project, he/she shall receive only the higher rate.
- 11. The grant of service credits or honoraria shall be governed by a Service Contract/Memorandum of Agreement by the CSU management headed by the President and VP for Research and Extension and the faculty researcher. The Service Contract shall be executed by these parties before the faculty conducts the research.

1) Research and Extension

For every approved research/extension of at least one (1) semester duration, below is a matrix of ETL allocation.

Level	Equivalent Teaching Load (ETL)	
International/national		
 Program Leader (at least 2-3 projects Project Leader (at least 2-3 studies) Study Leader (one study) 	12.0 9.0 3.0	
Regional/National		
Program LeaderProject LeaderStudy Leader	9.0 6.0 3.0	
College-Based/Institutional (local)		
Program LeaderProject LeaderStudy Leader	6.0 4.0 3.0	
Commodity Research Evaluator	0.3/evaluation not to exceed 1.0	

The scope of research can be categorized as follows:

• Research and Extension Program

A research/extension program is a large, comprehensive and usually requiring an interdisciplinary approach to meet established goals within a specific time frame. It is usually divided into several research projects.

• Research/Extension Project

A research project is the basic unit in the investigation of a particular researchable problem with predetermined objectives to be accomplished within a specific time frame. It generally embraces a number of related problems within a given discipline and is made up of a number of studies.

Study

A study is an investigation designed to provide solutions to specific problems or to achieve a very specific objective. It has a principal investigator.

Research/Extension ETL shall have the following provisions:

- Faculty members assigned/detailed in the Research Department shall have at least 25% of the official working time of 40 hours or 9 hours of actual teaching load;
- Researches not completed within the timeframe as indicated in the approved research proposal without valid reasons will no longer be credited and should be reflected in the PES;
- A detailed accomplishment/progress report in the prescribed format shall be required to support claims for ETC;
- For team research/extension a proportionate credit unit depending on the degree of involvement shall be given to each member;
- For researches where the researcher/s receive/s honorarium, credit unit will be given for purpose of determining workload but not included in the computation of **excess load**;
- College-based researches must be reviewed and recommended by the College Research Coordinator, endorsed by the College Dean and Campus Research Director and approved by the VPRDET;

- Researches funded by other agencies shall be covered by a Memorandum of Agreement (MOA) or its equivalent between CSU and the funding agency; and
- The maximum workload for research is nine (9) ETL per week.

b) Extension

For participation in the implementation of college-based or institutional extension programs/activities as defined or specified in the approved extension proposal, corresponding credit units shall be given as follows:

- One (1) credit unit for every 18 hours of involvement but not to exceed six (6) credit units or a maximum of 108 hours per academic term. Proportionate units will be given to lesser hours of involvement.
- Extension ETL will be given, subject to the following:
 - Faculty Members assigned/detailed in the Extension Department will have at least 25% of the official time of 40 hours per week or 10 hours of actual teaching load;
 - An approved extension program/project proposal is necessary before any extension claim will be credited. College-based extension should be evaluated and recommended by the College Extension Coordinator, endorsed by the College Dean by the Campus Executive Officer and approved by the VPRDET;
 - A detailed progress/completion report in the prescribed format, reviewed and recommended by the College Extension Coordinator, endorsed by the Dean and the Campus Extension Director and approved by the VPRDET must support claims for extension ETL. The Extension Director must be Judicious in approving/certifying extension reports.
 - Credit unit will be given to faculty members who receive honorarium for their involvement/participation in extension projects, programs or activities for purpose of determining workload but not included in the computation of excess load pay.
 - The extension project/activity should not be a part or a requirement for an academic subject although students can ride on existing extension program/project for their practicum.
 - The maximum workload for extension is six (6) ETL per week.

b. Research and Extension Staff

In order to rationalize the functions of regular extension and research and extension staff assigned in various research and extension departments of the University, a workload scheme has to be established to serve as a guide in assigning research and extension loads as well as other related duties.

Research and extension staff is expected to carry a regular minimum workload. The following guidelines shall govern the workloads of regular research and extension staff of the University:

- 1) The Official Working Hours (OWH) for all regular research and extension staff shall be 40 hours per week.
- 2) The regular research and extension workload equivalent (**REWE**) for all research and extension staffs will be based on existing policies on regular workload.
- 3) A Program Leader is one who directly plans, organizes, supervises the overall activities of the research and extension program and is directly responsible for the conduct of at least one of the projects under said program.

The number of programs to be handled by a Program Leader shall not exceed two (2) programs at a time.

The number of projects to be handled by a Project Leader shall not exceed two (2) projects at a time. However, in case of researches or undertakings with limited number of experts, the Project Leader may be allowed to handle a maximum of four (4) projects at a time provided that his/her track record shall be evaluated by the VPRDET through the recommendation of the RDET Directors.

A research and extension Project Leader shall be allowed to handle a maximum of four (4) projects at a time.

c. De-loading of faculty for RDET

To rationalize the co-equality of the three major functions of instruction, research and extension at CSU, faculty members shall be entitled for de-loading as provided in NBC # 461, to wit:

Rank	Workload (FTE)	Total FTE
	Instruction	RDE
_		
Instructor	Full	Optional
Assistant Professor	Full	Optional
Associate Professor	70%	30%
Professor	50%	50%
College Professor	40%	60%
University Professor	30%	70%

The above deloading scheme of faculty members shall be the guide in assigning teaching loads as well as for research and extension which shall be based on approved project proposals.

7. Guidelines on the Provision of RDET Incentives

a. Externally Funded Projects

Researchers/extension workers receive honoraria based on the budget approved by the funding institution.

b. Internally Funded Project (funded by the University)

Researchers/Extension Project or other special projects that shall be funded by the University shall adopt existing schemes of compensation provided by the DOST and DBM whichever is applicable.

c. Evaluation of Research/Extension Proposals

Honorarium/compensation for the services of experts will be based existing schemes provided by the DOST or DBM whichever is applicable

d. Student Thesis/Special Research Problem

Faculty members who are assigned as Thesis advisers and members of the Advisory Committee or Special Problem Advisers of undergraduate and graduate students shall be given incentives subject to the recommendation of the URDETC and the approval of the Presidents.

1)	Graduate thesis	
	• Thesis Adviser	/student advisee
	Advisory Committee Member	(not to exceed five advisees) /student advisee (not to exceed ten advisees)
2)	Graduate special problem	/student advisee (not to exceed five
3)	Undergraduate thesis	advisees)
	Thesis Adviser	/student advisee (not to exceed seven advisees)
	Advisory Committee Member	/student advisee (not to exceed 15 advisees) Special Problem Adviser
4)	Undergraduate special Problem adviser	/student advisee (not to exceed seven advisees)
	e. Other Forms of RDET Incentives	
		6.11

Other forms of cash incentives shall be given as follows:

1) Agency In-House Review

Cash incentives shall be given to researchers/extension workers with projects/studies adjudged as by the President upon the recommendation of the UREDC.

- a) Agriculture, Forestry and Natural Resources (AFNR)
 - Best Paper (Research Category)
 - o First
 - o Second

- o Third
- Best Paper (Development Category)
 - o First
 - o Second
 - o Third
- b) Socio-Economic/Education Research
 - First
 - Second
 - Third

2) Research publications

The granting of incentives for published research and scientific or scholarly works in referred journals and books of all faculty members and staff shall be provided. The following scheme and guidelines shall be followed:

Monetary Incentives for Authors of Scientific Publications and Books

Cash incentives to authors who are able to publish research in national or international referred journal or published books shall be given. The incentives are envisioned to encourage the publication of research, scientific, scholarly works and books by faculty and staff members other than incentives provided such as ETL and the self-fulfilment the authors gets from publications of his work. The incentives shall come from the University at the R & D special fund.

The incentives shall be as follows:

For refereed Journal

Publications	Local (within the Philippines)	International
Scientific Research,	215,000.00	20,000.00
Scholarly work,		
chapter of a book		
Books published		
Single Author	₹25,000.00	230,000.00
Co-Author	215,000.00	215,000.00

For non-refereed Journal

Publications	Local (within the Philippines)	International
Scientific Research,	25,000.00	210,000.00
Scholarly work,		
chapter of a book		
Books published		
Single Author	☑3,000.00	25,000.00
Co-Author	№2,500.00	23,000.00

Policies

- All faculty members and staff of the University are eligible for the award.
- In case of co-authorship, the award shall be divided equally among the number of authors if the authors are all from CSU.
- Only articles published in refereed journals listed in the Institute of the Scientific Information (ISI) shall qualify for the award.
- For book publications, internationally recognized book publishers include Oxford, Cambridge, MacMillan, Blackwell,
 - Rout ledge, Hard-court, Brace and Co. And Garland.
- Author/s of publications shall be given the award as often as possible as there are published materials.
- Author/s applying for the award must send two copies of the publication to the VPRDET soon as the research material get published.
- Should the publication be withdrawn by the publisher due to valid reasons such as plagiarism or other forms of unethical acts like illegal use of data, the author/s shall refund the whole amount granted without prejudice to the application of other forms of University sanctions.

3) Support for paper presentation in national And international conferences

In support to paper presentations in national and international conferences, the following incentives shall be awarded to the presenters:

- Registration Fee
- Round trip Economy Fair (Cost-Sharing)

In as much as the written composition, packaging and presentation of new knowledge is a significant and crucial as the content itself, certain fundamental skills

need to be sharpened to align with the dynamic utilities and scientific and academic demands in R&D. Hence, all RDE paper presentations either locally or abroad shall be screened or evaluated by the Staff Development Committee/Board at all levels for the recommendation of the VP for RDET and final approval by the University President.

The granting of incentives for winning oral and poster paper presentations of all faculty members and staff shall be provided. The following scheme and guidelines shall be followed:

Scope of Presentation

	Local	Regional	National	International
	(Institutional)	(Php)	(Php)	(Php)
Oral				
First	10, 000.00	25, 000.00	20, 000.00	30, 000.00
Second	5, 000.00	10, 000.00	15, 000.00	20, 000.00
Third	2, 000.00	5, 000.00	10, 000.00	10, 000.00
Poster				
First	10, 000.00	15, 000.00	20, 000.00	30, 000.00
Second	5, 000.00	10, 000.00	15, 000.00	20, 000.00
Third	2, 000.00	5, 000.00	5, 000.00	10, 000.00

8. Guidelines on Financial Management of RDET Funds

a. Annual Budget Preparations

Institutional research and development and extension programs, projects and activities are funded through the Research and Extension annual allocations of the University as provided for in the General Appropriations Act (GAA). These fund allocations shall be exclusively and strictly be spent for the purpose they have been allocated. *Graduate and undergraduate* theses and special problems of students may be funded from University funds if these are within the scope of the approved institutional research thrusts and directions subject to the recommendations by the Dean, University Research Director and VP for RDET and approval of the President.

1) Emergency allocation of RDET funds

Emergency RDET funds shall be allocated for the conduct of researches and extension activities in response to urgent call of emergencies which are beneficial to the University. Finding for such purpose shall also be made available to provide incentives to researchers, pool of experts and consultants who may be tapped to render expert services.

2) Fund sourcing for RDET programs and projects

Due to meagre financial resources of the University, a more aggressive sourcing of funds from local or foreign research institutions and other funding organizations shall be given major concern by the RDET Department. This is necessary to provide essential RDET services to target clients.

Where appropriate, legislations to create an equitable counterpart funding for RDET activities from the local governments should be pursued. This is especially true along the areas of technology generation and dissemination/commercialization to address prosperity, economic growth and development and social well-being.

Funds generated from outside/external funding either through project proposals or simply donations grants-in-aid, commissioned projects/studies, 20% of the fund must be allocated for administrative cost. Administrative cost covers electric/water bills and services of administrative staff involved in processing papers/coordinators consultants/supervisory services.

The partnership agreements, including funding support, with the private sector to include private Universities and Colleges, shall also be explored to enhance complementation of RDET programs and projects and save on costs.

As a *general rule*, all approved research/extension program/projects/studies, with funding from CSU or outside source shall be covered with MOA and shall be directly under the supervision of the Vice President for Research and Extension.

b. Budgeting

1) Budget preparation and allocation

A budget preparation for RDET programs, projects and activities shall be done one year in advance, usually late December or early January when the Department of Budget and Management (DBM) issues a call. The annual budget preparation plan is made to translate the strategic RDET plan into operational plans.

An annual allocation of at least, five (5) percent of the total budget of the University shall be allocated for RDET, the bulk of which is allotted to personal services.

2) Budget allocation from income for RDET programs and projects

On top of the GAA, at least ten percent (10%) of the University income generated from tuition and other fees is also allotted to supplement the funds for RDET operations. These funds shall specifically be allotted for the implementation of institutionally approved RDET programs, projects and activities, incentives for research, extension and training personnel;, winning best papers for RDET during agency in-house reviews, support to student theses/special problems under special cases, research publication, and support for paper presentations in international conferences, and related programs, projects and activities.

A policies and guidelines for cooperation, coordination, co-financing and budgeting of interphase activities to bridge the functional gaps in and among research and development, extension and knowledge management services shall be developed.

3) Participative and transparent budgeting

Budgeting for RDET programs and projects should be participatory and transparent following the general budget planning pathway that should start from the departments to the colleges, campuses, and University Budget Management Office.

c. Accounting and Auditing

1) Auditing manual for research/extension operations

For accounting and auditing procedures, the *Accounting and Auditing Manual for Research Operation* (**AAMRO**) Book 1 shall be strictly enforced.

RDET funds are generally handled by the Central Administration and Books of Accounts shall be kept by the Accounting Division. However, a separate book of accounts shall be kept by the Office of VP for RDET and Director concerned. At the end of the month, the two books of accounts shall be tallied for a more effective financial management. A copy of the NCA shall be furnished to the Offices of the Vice President for RDET and Directors for information and monitoring purposes. In addition, the RDET Coordinators of campuses/colleges should be able to keep tract of the total collections and disbursements of RDET funds from income.

2) Continuing appropriation for RDET funds

Pursuant to DBM issuance dated February 10, 1992, fund allocations for RDET shall be treated as continuing appropriations with the condition that the unutilized funds for the said activities at the end of the year of release shall be valid only up to the end of the month of the ensuing year and the disbursement there from shall be subject to usual accounting and auditing rules and regulations.

3) Bookkeeping

For RDE projects internally funded, the Finance Division will take care of the bookkeeping.

For special projects, the bookkeeper of the Office of the Vice President for RDET shall handle such funds, subject to accounting and auditing rules and regulations.

4) Accounting of RDET Resources

The RDET Department shall follow appropriate government circulars governing the proper monitoring and evaluation, recording and reporting of RDET assets such as crops, animals, fishery products, forestry products, buildings, laboratories, equipment, tools, etc. produced or acquired by the University either through its regular or special RDET programs and projects.

5) Types of Purchases

5.1. *Emergency Purchase*. This is a system of procurement done through direct requisition or order by offices without public bidding but based on canvass of prices of atleast three bona: fide dealers. (Sec. 476, NAAM)

A supplier is deemed bona fide and reputance if it satisfies the following criteria:

- 1. Duly licensed and registered with appropriate authority;
- 2. Not õblacklistedö by any government agency at the time of canvass; and
- 3. In business for at least six (6) months (COA) Circular # 85-55 (A)

Additional supporting documents

- 1. Certification of the emergency purchase;
- 2. Reasonableness of the price contracted; and
- 3. Statement that it was the lowest obtainable at the time of purchase or order.

- **5.2.** *Negotiated Purchase.* This type of purchase is make when the requisitioned article is sold by exclusive dealer, publisher, or manufacturer having no subdealers selling at a lower price and no suitable substitute can be obtained elsewhere at a more advantageous price to the government. This is made under the following conditions:
- a. After public bidding has been conducted and the offer has met specifications, terms and conditions, as advertised;
- b. Where the things to be purchased are õcriticalö in nature and are not available in the open market, such as radar equipment; and
- c. Where the committee on awards, on the basis of past experience, believers that a public bidding may not bring good results.
- **5.3.** *Purchase through Public Bidding.* Contracts for public service or for furnishing supplies, materials and equipment to the government or any of its branches, subdivision, agencies or instrumentalities shall be renewed to enter into through public bidding.
- **5.4.** *Open Market Purchase/Over-The-Counter Purchase.* Books, papers, periodicals, documents and other semi-expendable materials for library use or for the use of researchers maybe purchased without canvass. They shall be classified as supply if the individual cost is not more than \$\mathbb{D}\$1,000.

The approved line-item budget of the project serves as the basic guideline for budgeting operational expenses.

6) Procedure for the Purchase of Supplies and Equipment

All office supplies and materials for projects shall be purchase or withdrawn from the Supply Office in accordance with the approved Requisition and Issue Voucher (RIV).

Purchase made outside for a single item amounting to \$\mathbb{2}1,000\$ or more requires the following:

- 1. Three canvasses of the supply/material from different sources;
- 2. Property inspection report from the Supply Officer; and
- 3. Original copy of the dealer invoice showing the quantity, description of the articles, unit and total value; and/or official receipts.

The Project leader first of all prepares a requisition, with contains the desired specifications of the equipment and the quantity of the item. At least three (3) suppliers

are invited to submit their quotations, which the bidding committee studies. Purchase negotiations are handled by the purchasing Section/Supply Office.

The Supply Officer inspects all purchased equipment. A Memorandum Receipt (MR) to signify the Project Leader® responsibility over the equipment receipted to him. Equipment purchased for the project is considered Property of the University and must be surrendered by the Project Leaders upon completion of their respective projects. The Supply Officer is authorized to retrieve the equipment.

7) Claims for Per Diems, Transportation and Other operating Expenses

Travelling Expense

This accounts includes expenses incurred in the movement of persons employed in the government, such as transportation, subsistence, lodging and travel per diems; hiring of guides or patrol; railroad, airline and steamship fares; tips, transfer, etc. of persons while travelling outside official station; charter of boats, launches, automobiles, etc.; non commutable transportation allowances, road tolls, parking fees, and all other similar expenses. Not included in this account are supplies used in the operation.

a. Travelling Allowances

- 1) The travelling allowances of government officials and employees shall be inclusive of per diems, daily allowances, incidental transportation, and other related expenses while in the field. The allowance rates shall be in accordance with existing rates and do not5 require receipts.
- 2) A full travelling allowance shall be allowed only in case of absence from the permanent Official station because of official business for one full day.
- 3) In case where such absence is for less than a full day, only the corresponding fractional part of the allowance shall be allowed. For this purpose, the travelling allowance is thus generally divided into four units corresponding to breakfast, lunch, dinner and lodging, as described hereunder.

Breakfast ó When leaving the permanent official station before or returning thereto after 7:00 p.m.

Lunch ó When leaving the permanent official station before or returning after 12:00 noon.

Dinner ó When leaving the permanent official station before or returning thereto after 7:00 p.m.

Lodging - When leaving the permanent official station before or returning after 12:00 noon.

b. Transportation Expense

Transportation expense for travels between cities/municipalities may be charged separately. A certification of appearance signed by the visited party must be submitted along with the liquidation, certificate of travel completed, actual itinerary of travel, and copy of approved travel order.

Unsettled travel funds shall be the accountability of the project staff and the Project Leader. *No further travel funds/request shall be approved and released unless previous ones are settled first.*

8) Cash Advances/Reimbursement

Project Leaders are entitled to withdraw cash advance to cover project expenses. A surety bond approved by the Bureau of Treasury is required for cash advances \$\mathbb{Z}2,000\$ and above. No further cash advances shall be allowed unless previous cash advance is fully liquidated.

Other project staff or project Leaders may also use their personal funds to travel or to purchase needed materials. Such expenses may be reimbursed by following standard procedures, provided that they do not exceed the approved line-item-budget.

9. Guidelines on Manpower and Physical Resources Development

a. Human Resources

The manpower and research and extension facilities development program is based on the concept of Minimum Resource Requirements for RDET Capability in the National Agriculture and Resource Research and Development Network (NARRDN).

The basic minimum requirements for manpower and research facilities (equipment and infrastructure) facilitate the evaluation of research capability and needs and become the bases for building up or upgrading RDET capability. This program would enable CSU RDET to attain or surpass these minimum requirements in higher level of regional excellence.

b. Physical Resources

A similar development program for RDET facilities shall be adopted. Whenever deemed justifiable, sophisticated research equipment, especially those electrically or electronically-operated and necessitating periodic calibration should be kept in a Central Laboratory.

For infrastructure facilities which are obviously non-transferable, a different approach based on individual research station requirements has to be adopted.

10. Guidelines on Technology Transfer And Commercialization

It is a policy of the University to share knowledge and technologies among government and other institutions to ensure that scientific and technological developments are accessible to a wider range of users who can further develop, share or exploit the knowledge (for socioeconomic or technical database) for policy formulation and technologies for developing new products, processes, materials or services.

The following guidelines shall be adopted in technology transfer and commercialization:

- *Test against maturity indicators* passing piloting stage, stability or industry standards and risk assessment evaluation;
- *Test against viability indicators* ó social acceptability, technical feasibility, economic viability, environmental soundness and political acceptability;
- Technology promotion through publicity and other appropriate communication strategies such as technology forum and other fora;
- Publication in referred R&D journals, R&D highlights, etc.;
- Tapping of conduits or channels for technology transfer and commercialization like the University Business Affairs Office (UBAO) as venue for:
 - Developing the criteria of commercializing the technologies generated in the University;
 - Module development form crops, livestock, forestry, and environment, etc.; and
 - Income generating projects that complement the three major thrusts of the University;
- Tapping of Technology Development Centers like Land Bank of the Philippines, TLRC

11. Guidelines on RDET Publications

One of the fundamental roles of CSU in the dissemination of RDET results is the responsibility in providing a well written, concise, technically correct, and easy to read research report. Although, many find report writing to be a difficult task, researchers and

extension workers in the University should be able to demonstrate good writing skills because the results of RDET activities is as successful as the writer/s and the corresponding reports that shall accrue from them.

The print and multimedia RDET publications and other publications of CSU are the public face of the institution and they have significance influence on both public and private preparations. RDET books, papers or results of original research works such as technical papers and notes, scholarly journals, journals of information, newsletters, booklets, reports, poster, training manuals, modules, brochures and any RDET writings, printed materials intended to be transmitted and communicated by means of any device or process, including the use of the web, shall be regulated using acceptable standards of style.

All faculty researchers, administrative and support personnel and students who would like to publish their scientific RDET works in any of the University R&D Journals and Journal of Information of campuses shall be governed by the policies and guidelines on publications.

a. Editorial Board

The CSU Research and Development and Extension Journal and the RDET journal of other campuses are the official journals of the CSU. To shape the environment of the scientific journals such that the integrities of publications are upheld, the Editorial Board of the journals shall be chaired and co-chaired by the University President and the Vice President for RDET, respectively, with the concerned RDET Directors Campus Executive officers as member.

The Editorial Staff shall fundamentally consists of the following:

- Editor-in-Chief;
- Sectoral Associate Editors corresponding to the sectoral concerns in the proposed publication;
- Circulation Manager;
- Lay-out artists;
- Cover Design Artists; and
- Encoders.

As a group, the Editorial Board shall provide guidance for the direction of the publication and should meet on a regular basis to discuss and review the contents of the journals. They shall have responsibilities towards:

- **a)** The authors as they provide the guidelines in the preparation and submission of the manuscripts;
- **b)** CSU as owner of the publications; and
- c) The readers to advance information the benefit of the public.

The selection of the Editor-in Chief is very critical to the Editorial Board. Reporting directly to the Editorial Board, he/she oversees the publications Editorial Staff and makes the necessary recommendations to improve dissemination of the scientific journal and have complete authority over editorial contents within the defined scope of the scientific journal. He/she should possess a general scientific knowledge of the areas covered in the journal; have the skill in the art of writing, editing and critical assessment; and established policies and procedures in the submission, processing, evaluation and consequently publication of the scientific journal.

b. Peer Reviewers

Peer review is deemed necessary to ascertain the quality of research outputs. In fact, the scientific and academic advancements of academic and research institutions and scientists are based on peer-reviewed publications. Unknown to each other, the peer reviewers shall be selected through invitations from research institutions/agencies other than the author(s). Except for the statistician as member of the panel of reviewers, the expertise of the other reviewers should closely and neatly match the topics in the manuscripts to be reviewed. The reviewers shall have responsibilities towards:

- 1) The authors by providing a written and unbiased feedback on the scientific merits of the work, its conciseness, clarity and relevance, and the maintenance of confidentiality in the review process;
- 2) The editorial staff by providing informative, thoughtful, constructive and fair criticisms with respect to the originality and scientific merits of the research work, including the standards of the research journals; and
- 3) The readers by protecting them from flawed researches that cannot be validated and ensuring that the article citations are all relevant works of other scientists.

c. Timeliness of Publication

Research outputs and information must always be published as soon as possible. Since it usually takes several months in the revise-and-submit cycles before the manuscripts get finally published in the journal, the Editors should be responsible for

timeliness in manuscript submission, providing prompt responses and decisions related to the journal, and acceptance of the published articles.

d. Joint Authorship of Publications

Only those who have substantially contributed or made an important contribution to the research work should be listed as authors. By õsubstantial or important contributionö, we refer to the conceptualization, overall design, implementation, completion and writing the research work. To avoid administrative complexities, joint authorship resulting from the contribution from various people should be stipulated in the research contract or agreement before hand.

The test for the claim of joint authorship is the ability of any of the named authors to take responsibility for the publication.

Relevant to the issue of who gets the senior authorship, usually the first named in the manuscript. It would be logical and fair that he/she the one who thought of the project, decided on the methods, implemented the project and completed the writing of the research work should be the senior author or the first named author.

e. Research Misconduct

All authors submitting manuscript for publications in the various R&DET journals in the University shall observe research misconduct such as the following:

- Unethical treatment of research subjects;
- Fabrication of research data;
- Falsification of research data; and
- Plagiarism

By unethical treatment of research subjects, it applies to obligation of the researchers relevant to the subjects of the study, whether human or animals, particularly adherence to ethical standards in experimentation such as care and use of human beings and animals. On the other hand, fabrication and falsification of research data refers to the invention, recording, or reporting of fraudulent data. Fabrication and falsification constitute the most serious forms of misconduct in research as they result in scientific record that do not accurately reflect observe truth.

Plagiarism is a form of piracy which is defined as the appropriation of ideas, data or methods without adequate permission or acknowledgement from the owners.

f. Submission of manuscripts for journal Publications

The following style guide shall be strictly followed in submitting manuscripts for journal publications:

1) Minimum number of characters

The minimum number of characters in the publication shall be 30,000.

2) Minimum total of words

The minimum total number of words in the publication shall be 5,000.

3) General requirements

Articles qualified to be published should only be the results of studies approved to be implemented by the Office of the VP for RDET and presented during annual agency in-house reviews.

4) Manuscripts

Manuscript should be submitted in three hard copies and one electronic copy. Number all pages except the first page. Observe the following content format:

- Title
- Author/s
- Abstract
- Keywords
- Introduction
- Methodology
- Results and Discussion
- Conclusion and Recommendation
- References Cited

5) Units of measure

Use measurements and weights and the decimal system rather than fractions. The International Unit System should be adopted. Use measurement symbol if attached to a numeric value; otherwise, spell-out measurement.

The month is spelled out when used alone. Use the % sign with numerals; otherwise, spell out percent or percentage. Use recognized symbols for chemical elements. Other abbreviations and acronyms may be used if already identified for the first time in articles.

6) Title

A good title briefly identifies the subject, indicates the purpose of the study and contains key words. The common names of crops should also be used where possible. The length of the title should not exceed 12 words.

7) Abstract

The abstract must be completely self-explanatory. It must include the reasons for conducting the study, objectives, method used, results and conclusion. The abstract should be considered to be capable of õstanding aloneö that could also be published separately. A good length for an abstract is 300 words.

8) References

References should be arranged alphabetically by senior author. They should include names of all authors, complete title, publication, volume number and inclusive pages.

9) Parenthetic Citations

References cited within the text should appear in parenthesis in this format: author surname/organization abbreviation and year published.

10) Tables and figures

The numbering of tables and figures should be in separate consecutive order. Insert each table or figure right after its textual discussion.

11) Reporting time and dates

Use the 24 hours time system with four digits. Dates are reported with day of the month first, then month, followed by the year (e.g., 08 Aug2009).

12) Abbreviations and symbols

Do not begin a sentence with an abbreviation. Months accompanied by day and year are abbreviated using the first three letters except May, June and July.

Where appropriate and for the purpose of promoting and enhancing the research productivity of HEIøs the policy guidelines for the CHED Accreditation of Research Journals (Appendix_) shall be followed.

12. Guidelines on Research and Development Extension and Training Continuum

The research and development ó extension and training is a continuum which is extremely important to obtain a direct impact on instruction and resource generation for one and the target clientele on the other.

The following policy guidelines provide a very meaningful research and development-extension and training linkage:

- a. Sharing of vision, mission, goals and objectives by defining the roles and responsibilities in the research and development-extension and training continuum, including human resources particularly the hiring of a Subject Matter Specialist trained not only for information dissemination but also for technology adoption, technology integration and technology packaging and training.
- **b.** Joint planning of research and development and extension and training programs and projects in view of the separation of research and extension organizations (separates Research And Development Director from Directors of Research Centers and Director for Extension with each having different research and extension programs/project, staff and budget);
- **c.** Funding of interphase or overlapping functions of research and extension particularly along technology adaption, technology integration and technology packaging and training;
- **d.** Providing incentives for expanded responsibilities of researchers and extension workers:
- **e.** Improvement of communication and collaboration among researchers, extension agents, farmers and farmer ó leaders and support services; and improving communication and collaboration with the faculty and support staff, students, industry, clientele and the private sector.

13. Scientific Career System

Established within the Civil Service pursuant to Executive Order No. 784 dated 17 March 1982 and further reinforced by Section 4 of R.A. 8439 titled, õMagna Carta for Scientists, Engineers, Researchers and other Science and Technology Personnel in Government,ö the *Scientific Career System* (SCS) shall be implemented to establish a system of recruitment, career progression, recognition and reward of scientists in the public service, as a means of developing a pool of highly qualified and productive scientific personnel in the University.

As mandated, the University shall give priority to research and development, invention and innovation, and their utilization; and to science and technology education, training and services and shall support indigenous, appropriate, and self-reliant scientific and technological capabilities and their applications to the country productive systems and national life.

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

- Scientist I to IV: Completion of Masterøs Degree in the appropriate field of science and ten (10) years of productive scholarship and professional R&D work or a doctorate degree and five (5) years of productive scholarship and professional R&D work.
 - Scientist I ó must garner at least 50 points in scientific productivity (of productive scholarship and professional R&D work) measured in terms of:
- 1. Scientific findings, technologies, discoveries, inventions, major research paper, book articles, etc.; and
- **2.** Acceptance of scientific findings, inventions, discoveries and technologies as evidenced by citations of publications.
 - Scientist II must garner at least 60 points in scientific productivity
 - Scientist III must garner at least 70 points in scientific productivity
 - Scientist IV must garner at least 80 points in scientific productivity
 - Scientist V ó completion of doctorate degree in appropriate fields of science and ten (10) years of productive scholarship and professional R&D work beyond the doctorate degree. He/she must garner at least 90 points in scientific productivity.

Conferment of the ranks requires that the scientist-applicant is given the minimum point score for the rank by each of the raters.

In case of awards to Filipino scientists by internationally recognized award giving bodies, the *Scientific Career Council* (SCC) by unanimous agreement, may confer a rank to the scientific personnel.

The compensation rates of the scientists, fringe benefits and allowance in the SCS shall be in accordance with existing laws. The University shall pay the salary, allowances and fringe benefits of the scientist.

After being conferred the SCS rank, the scientist is entitled to receive the salary grade corresponding to the rank as follows:

•	Scientist I	-	SG 26
•	Scientist II	-	SG 27
•	Scientist III	-	SG 28
•	Scientist IV	-	SG 29
•	Scientist V	_	SG 30

14. Guidelines on Professional Chair Program

In recognition of the competence of the CSU faculty and staff for excellence in their chosen fields of specialization, a Professional Chair Program shall be implemented by giving Professorial Chair Awards to deserving faculty members and staff.

The priority focus and objectives of the award shall be along the areas of food security and poverty alleviation and sustainable resource management

a. Criteria

The awardees must meet the following criteria:

- Must be a Ph.D. degree holder in the field of priority focus of the Award;
- Must hold an academic rank of Assistant Professor or higher;
- Must have proven excellence in his academic and research work performances along his field of specialization with the priority thrusts of the granting agency; and
- Must be officially endorsed by his peers, immediate supervisor/s, academic community and the University.

b. Terms of Reference

The following are the Terms of Reference of the Awardees:

- Must teach at least one (1) graduate course in his/her area of specialization during the year of the award;
- Deliver at least one (1) public lecture on the subject of his research during the period of the award at RDET & Research Forum;
- Submit a hard and soft copy of the public lectures to the RDET Department, CSU; and
- The Award shall be approved by the Board of Regents through the recommendations of the VP for RDET and the President of the University; and
- A copy of curriculum vitae and two copies of colored photo must be submitted to the Secretariat.

c. Remuneration

The Awardees shall receive a lump sum amount in Philippine Peso, the payment arrangements of which shall be determined by the VP for RDET but in no case shall payment be received before the delivery of the public lecture.

15. Guidelines on Consultancy Services

In recognition of the competence of the CSU faculty and staff to render consultancy services in various disciplines and in line with the University's commitment to provide relevant and responsive research and extension programs and expertise to various sectors, including the communities, in their cultural, social, economic and development needs, and generation of sufficient resources to support its various quality programs, the University adopts the following general policy guidelines governing consultancy services:

- **a.** Faculty members and staff with proven track record to provide consultancy services and with a position of at least Assistant Professor shall be eligible for consultancy services when needed;
- **b.** Application for consultancy services should indicate strong justification to include the program of activities and expected outputs. The approval of the application for consultancy services shall be duly endorsed by the concerned Dean who shall certify that the faculty/staff services in his/her

- college could be temporarily dispensed with and that there are other capable staff to take over the duties and responsibilities of the applicant;
- **c.** Upon approval of the application, the consultant shall sign a contract with the University and comply with other requirements stipulated in the contract and other applicable laws;
- **d.** Faculty member/staff granted to provide consultancy services shall be required to submit a quarterly progress report of his/her consultancy engagement with the corresponding output for the period and shall submit his/her final output upon completion of the consultancy services which should not exceed a period of one (1) year;
- **e.** Applicants for consultancy services shall not be engaged in any other forms of employment or consultancy and similar activities while on such engagement outside the consultancy agreement;
- **f.** The applicant and the University shall enter into a consultancy agreement with the firm or the receiving agency specifying among other things the following:
- 1) Consultancy relationship specifying the best efforts to perform the services such that the results are satisfactory to the consultant, the University and the receiving agency;
- 2) Fees in consideration for the services to be provided by the consultant and other obligations during the term of agreement;
- 3) Allowable expenses involved in relation to the services to be provided;
- 4) Term and termination specifying the period of consultancy agreement in terms of start and completion date;
- 5) Method of provision of services;
- 6) Consultancy benefits and indemnification;
- 7) Supervision of consultant@s services;
- 8) Confidentiality agreements;
- **9)** Conflict resolution;
- 10) Severability;
- 11) Arbitration; and
- 12) Legal counsel.

16. Guidelines on Visiting Research Fellowship

Visiting Research Fellows may be allowed for a period of ten (10) months to promote collaboration and expertise sharing between CSU and other higher education institutions and to develop the research capability of faculty members.

A MOA shall be executed between CSU and the admitting HEI specifying among other things, the responsibilities of the parties, benefits of the institution, and other fellowship arrangements.

17. Guidelines on Balik-Scientist Program

To strengthen the scientific and technological capabilities of CSU, to promote information exchange, accelerate the flow of new technologies into the country and stimulate the development of new and strategically important technologies that are vital to national development, science and technology experts of Filipino descent are allowed to visit the University under the DOST Balik-Scientist Program for short term consultancy and if feasible, consider returning permanently to work in the University.

Priority areas for the program shall include alternative energy/fuel, biotechnology, information and communication technology, medical/health sciences, environment and related areas/climate change, law, public affairs and governance.

18. Guidelines for the Use of the Concept of CSW for Major Decisions in RDET Programs and Projects

There are instances that major decisions in RDET shall be made requiring substantial documents for thorough study and analysis. Through the Office of the President, Task Forces or Committees may be created for the purpose. This management system is termed *Completed Staff Work* (CSW).

The usual process of work is for the RDET Task Force or Committee to gather all the necessary data and information and make a thorough study about them. CSW reports are then generated and clear rational decisions are made for the final decision of management.

Chapter III

INTELLECTUAL PROPERTY POLICY AND GUIDELINES

Treasuring the substantial creativity, innovativeness and intellectual contribution of the faculty, research and support staff, and students in the creation of intellectual property, the University adopts the following policy guidelines on intellectual property.

Article I Policy Statement

As a higher education institution (HEI) tasked to develop quality human resources, researches and technologies for people empowerment, global competitiveness and sustainable development, CSU encourages technological innovations, creations and inventions by researchers and faculty members. Pursuant to this, CSU-Owned technologies, creations and inventions when granted rights under existing intellectual property regimes, shall be made available for public use consistent with CSUs mandate to transfer and disseminate appropriate technologies, except for valid reasons that would prevent such case. In all cases, public access to CSU intellectual property rights is subject to rights of innovators, creators and inventors.

Article II General Guidelines

Section 1. Purpose of these Guidelines

To provide implementing rules and regulations on the Policy of Intellectual Property.

Section 2. Interpretation

The Intellectual Property Code (**IP Code**) of the Philippines (Republic Act No. 8293), the Plant Variety Protection Act of 2002 (RA No. 9168), the Agriculture and Fishery Modernization Act (RA 8435), the Philippine Fisheries Code of 1998 (RA 8550), the wildlife Act (RA 9147); Indigenous People Rights Act (IPRA Law), the Inventor's and Invention Incentives Act (RA 7459);

The Manga Carta for Scientists, Engineers, Researchers and other Science and Technology Personnel in Government (RA 8439); the Administrative Code of 1987 (EO 292) and the respective charters of agencies under CSU; and other relevant laws and their

corresponding amendments, implementing rules and regulations are deemed written into the Guidelines. In case of conflict in the interpretation of its provisions, these guidelines shall be interpreted in favour of the CSU inventor, author, breeder, or other holders of IPR.

Section 3. Coverage and Scope

1. Coverage

All official employees of CSU and those of its attached Centers of Excellence, and Centers of Development but not limited to the following, are covered by these guidelines.

- Regular (plantillia)staff and faculty members whether in permanent, temporary (detail or secondment) status, and casuals;
- Personnel under contract service, special appointments, or designation whether on a
 full-time or part-time basis including service or professional contractors, consultants,
 and postgraduates fellows, visiting scientists, those on sabbatical, project and study
 leaders, trainees, students, and others; and
- Collaborators or partners whether in the national or international research and development network, other agencies and organizations whether public or private.

2. Scope

Intellectual property derived from CSU directed, assisted, commissioned, or contracted research and development projects.

Section 4. Definition of Terms

- 1. "Assignee" refers to natural or judicial person to whom the rights, title to an interest in IP or proprietary information has been assigned by the inventor, creator, or breeder to CSU through an undertaking or any other legal instrument;
- **2.** "Assignment" refers to the act of assigning all the rights, title to an interest in intellectual property or proprietary information by the inventor, creator, or breeder to CSU through an undertaking or any other legal instrument;
- **3.** "Assisted research" refers to any R&D activity supported in kind, wholly or partly, by CSU and/or agency undertaken by any person, or entity, private or public other than the CSU:
- **4.** "Commercialization of intellectual property" refers to the deliberate effort to generate intellectual property for specific markets or commercial purposes and

- commercializing then through formal technology transfer arrangement as provided for in the IP Code.
- **5.** "Contracted research" refers to any R&D activity supported financially and/or in kind, wholly or partly, by CSU and/or agency undertaken by any person, or entity, private or public other than the CSU;
- **6. "Directed research"** refers to any R&D activity undertaken by staff members of CSU and/or agency using CSU funds and resources.
- 7. "Generation of intellectual property" means the conduct of basis and applied researches focused in obtaining new knowledge and the production of new or improved technologies, products and processes.
- **8.** "Holder" refers to a natural or judicial person who owns the rights to an IP at any given time.
- 9. "Intellectual property" or "intellectual property rights" is used interchangeably in these Guidelines. These terms refers to intellectual property or intellectual property rights that are relevant to CSU and/or agency such as: a) plant variety protection or plant breeders' rights; b) copyright and related rights; c) patents, utility models and industrial design; and d) other intellectual property rights such as but not limited to: 1)trademarks and service marks; 2) geographic indications; 3) layout-designs (topographies) of integrated circuits; and 4) protection of undisclosed information.
- 10. "Inventor", "Author", "Creator", or "Breeder" refers to the natural person who made substantial creative and intellectual contribution to the creation of the intellectual property be in an invention, a copyright, or a variety. Substantial creative and intelligent contributions include the conceptualization ad planning of any activity resulting in the creation and expression of the intellectual property or proprietary information.
- 11. "Other income" refers to income from activities other than normal business operation, such as investment interest, foreign exchange gains, rent incomes, and profit from the sale of non-inventory assets.
- 12. "Proprietary information" refers to information or data relating to technologies, creative works, discoveries, products and processes and improvements thereto, trade secrets, formula, ideas, varieties, lines, breeding materials, parental, which may not be formally protected through registration, but shall, nevertheless, be properly documented and recorded for protection. It includes all scientific, business or financial information relating to CSU, its R&DET centers, programs, divisions, units and in the future, subsidiaries or affiliates or their respective businesses.
- **13. "Protection of intellectual property"** refers to the act of formally registering intellectual property with appropriate agencies to gain vested rights thereto, and, where registration is not required, the act of documenting the transfer of intellectual property or proprietary information to individuals or organizations for proper documentation and monitoring.

- **14. "Royalty"** refers to payment made for the use of property, especially a patent, copyrighted work, franchise, or natural resource. The amount is usually a percentage of revenues obtained through its use.
- **15. "Technology Transfer Arrangement"** as defined in the IP Code, refers to contracts or agreements involving the transfer or 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 proprietary information.
- **16. "Third Party"** refers to someone other than the principals directly involved in a transaction or agreement.

Section 5. Obligations of those covered by these guidelines

Aside from the duty to invent, create or breed, those covered by these guidelines whether individuals or colleges/centers where applicable shall have the following obligations:

- 1. Execute in favor of CSU colleges/centers, an Intellectual Property Undertaking containing the following minimum provisions:
- **a.** To comply with the CSU intellectual property policy and its guidelines;
- **b.** To disclose promptly to CSU any intellectual properly, which may be solely, or jointly discovered or generated with others in the performance of their regular duties, or with the use of CSU agency funds, facilities or services;
- **c.** To perform all acts necessary to assist CSU in protecting and commercializing the intellectual property;
- **d.** To use the intellectual property or proprietary information only in the performance of their duties to CSU; and
- **e.** 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 their employment or contract and for a period of five (5) years after their employment or contract with CSU;
- **2.** Disclose to the CSU at least twelve (12) months prior to sale, offer, publication, presentation or communication to the public of any information on any intellectual property or proprietary information, through the Intellectual Property Disclosure from (Annex õBö).
- **3.** Ensure that all *Memorandum of Agreements* (**MOAs**) entered into by CSU, which may generate any intellectual property or proprietary information, shall contain the following clauses:

õAny intellectual property or proprietary information in the course of and as a result of the implementation of this agreement such as, but not limited to discoveries, inventions, varieties, works, database, information, reports, articles, research papers, research notebooks or records, tri-media presentations, and other project outputs, shall be subject to the CSU 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.ö

- **4.** Ensure that the use of any intellectual property or proprietary information by a third party shall be covered by a Material Agreement or a License Agreement.
- 5. Disclose any consulting or business engagement using any information on intellectual property or any proprietary information owned by CSU. Ensure that any arrangement involving intellectual property or proprietary information with any third party is authorized.

Article III CSU-IPR Office

Section 1. Creation of CSU IP Unit

There is hereby created a central CSU IP Unit shall be responsible for the overall management, planning, implementing, monitoring of intellectual property, and evaluation of IP-related activities of the university/department.

Section 2. Powers and Functions

The CSU-IP Unit shall have the following powers and functions:

- 1. To provide oversight supervision, guidance and capacity-building on the IP Units of CSU, including but not limited to IP audit, preparation, filing, and prosecutions of applications for legal protection; and in handling technology transfer agreements;
- 2. To lead in the preparation, filing, and prosecution of IP registration;
- 3. To lead CSU in negotiating technology transfer arrangement such as but not limited to licensing agreements;
- 4. To collect royalties resulting from technology transfer arrangements and to manage and disburse the same in accordance with these guidelines;
- 5. To lead the CSU in contested proceedings affecting IPR of these agencies in coordination with their respective statutory counsels; and

6. To perform other functions to accomplish the purpose and objectives of these IP policy and these guidelines.

Section 3. Funds of CSU-IP Unit

For its initial operation, CSU shall allocate funds from its General Appropriations for the operation of the Unit. The unit shall be there to operate through grants, endowments, royalties, and other internal and external funding sources received by it and kept on a separate account under an authorized government depository bank. The Unit shall disburse its fund in accordance with these guidelines and the existing government accounting and auditing rules and regulations.

Article IV Plant Variety Protection

Subject to the provisions of the Plant Variety Protection Act of 2002 (Republic Act No. 9168), the following guidelines shall govern plant variety protection or plant breeders right at CSU;

Section 1. Ownership of Plant Breeders' rights

CSU shall have ownership of the new variety, which is bred, or discovered and developed by those covered by these guidelines, and those commissioned by it to do the breeding, or discovering and developing a new variety. If the CSU staff or the person commissioned by CSU breeds discovers and develops a new variety together with two or more persons, all of them shall be named in the application for plant variety protection to be filed by CSU.

- **Section 2.** Plant variety protection shall be sought and maintained by CSU for those varieties with high commercial potential. Protection shall be sought before any testing or commercial release of the new variety.
- **Section 3.** If it is necessary to immediately disseminate the new variety for the benefit of the farmers, CSU may enter into exclusive licensing agreements with the private sectors, provided the exclusive licensing agreement is done with transparency and competitiveness through a public building and will also bring about lower prices of seed of the new variety for the farmers.
- **Section 4.** A new variety, whether propagating or harvested material shall not be sold, offered for sale or disposed off to others, by or with the consent of the breeder, for purposes of exploitation of the variety more than a year before the date of the filing for an application for plant variety protection.

Section 5. Germplasm may be provided by CSU to interested parties, provided the transfer of said germplasm is covered by a material transfer agreement.

Article V Copyright and Related Rights

Subject to the Law on Copyright of the Intellectual Property Code of the Philippines, the following guidelines shall govern copyright and related rights at CSU

Section 1. Ownership and Assignment of Copyright

CSU as an agency of the government of the Philippines, cannot hold copyright but serves its rights to require prior approval if its work is exploited for commercial purposes. However, it shall authorize its authors to individually/collectively hold copyright, if the same is generated as part of regular duties, with the use of funds, facilities, or services, and due to involvement with CSU and/or agency. The author shall assign copyrighted works to CSU.

Section 2. Copyright to outputs of collaborative works by CSU with other institutions shall be governed by these guidelines and the stipulations in the agreement.

Section 3. Determination of authorship in cases of collaborative efforts among authors.

- 1. Joint ownership resulting from contributions from different persons shall be determined as follows:
- **a.** By stipulation in the research contract;
- **b.** By application of the law on joint and/or sole ownership; and
- **c.** Through dispute resolution arbitrated by the IP Unit Head of CSU.

Section 4. Terms and Conditions of Use of Institutional Works

- CSU users shall be covered by the undertaking to be executed by them prior to or during their employment or contract with CSU. They are automatically authorized to use CSU institutional works provided that the materials are properly cited and attributed.
- 2. Third party users shall be covered by a separate agreement including but not limited to the following terms and conditions.
- The agreement applies both to the user requesting the use of the material and the employer or organization for those programs the materials shall be used. The agreement takes effect once the works are obtained.

- The user must agree to a processing fee and the terms of payment as specified in the agreement. Fees, as determined by CSU, shall include but not limited to service charge, production fee, processing and handling fee and shipping fee, if necessary.
- All materials obtained from CSU strictly limited to the listed restrictions in the agreement or others as specified by CSU.
- The period of use of the materials shall be specified by CSU and shall be stipulated in the agreement. Renewals or extensions in the use of the works shall be at the sole discretion of CSU.
- Agreement shall be terminated or cancelled upon failure to comply with the restriction specified in the agreement.
- Media assets such as photos, graphics, and Power Point presentations can be copied, printed, or downloaded for purposes of integrating the assets into their own multimedia programs or for other research, educational or non-commercial purposes provided that they are properly attributed and cited. Copies of the programs shall be furnished to CSU for validation free of charge.
- Any alteration in publications such as news articles, books, bulletin, reports and artistic and literary works are not allowed. However, alterations for the purpose of improving the clarity, enhancing color, and cropping to maximize space, may be allowed by the CSU.
- The publications may not be used to infringe the copyright of any individual or organization. Users must ensure that the works will not be used for any unlawful, obscene, defamatory, or libellous acts. The user is liable for any damage caused to CSU and may enforce payment of such damages under applicable laws

Section 5. Terms and Conditions of Use of Database or Information Systems

Databases or information systems which are unique forms of derivative works shall be governed by the following guidelines:

- 1. Prior approval from the CSU shall be required for any use of database or information systems;
- **2.** A user shall not extract or re-utilize a database or contents thereof without prior approval of CSU or the copyright owner.
- **3.** The user shall not distribute copies of the database or contents thereof to third parties without authority from CSU.
- **4.** A user shall properly attribute or cite CSU or author when using the database or content thereof for communication to the public.

Section 6. Credit and Copyright Notice

Any public display or distribution of media assets and databases requires the userto place a copyright notice, photo credit or any form of acknowledgement at the end of its work.

Section 7. Confidentiality

Information that is proprietary or confidential in nature shall be covered by a confidentiality agreement before any use thereof by third parties.

Article VI Patents, Utility Models and Industrial Designs

Subject to the law on patents, utility models and industrial designs as contained in Part II of the IP Code of the Philippines, the following guidelines shall govern patents, utility models and industrial designs at CSU.

Section 1. Ownership

CSU shall have ownership of patents or utility models and industrial design in any of the following instances:

- **a.** If commissioned by CSU;
- **b.** If provided for in the contract to generate an IP;
- **c.** If the inventor made the invention in the course of his contract with CSU;
- **d.** If the invention is the result of the performance of the inventor regularly assigned duties, unless there is an agreement, expressed or implied, to the country.
- **1.2.** The CSU employees or all those covered by these guidelines, shall own the invention, utility model, or industrial design generated outside of his/her regular duties even if the employees uses the time, facilities, and materials of the CSU, subject to other existing laws, rules, and regulations on the use of government time, facilities, and materials.
- **1.3.** The right of collaborators/external partners shall be based on the stipulations in the agreement between CSU and their partners.

Article VII Other Intellectual Property Rights

The IP Code and its implementing rules and regulations shall govern the following other intellectual property rights: a) trademarks and service marks or trade names; b) geographic indications; c) lay-out designs (topographies) of integrated circuits;

and d) protection of undisclosed information. Proprietary information as defined in these guidelines falls under the category of other intellectual property rights.

Section1. The ownership of other intellectual property rights shall be determined by any of the following:

- 1. By laws;
- 2. By contract;
- **3.** By employment; and
- 4. By any other legal instrument.

Article VIII Royalties and Benefits

Section1. Based on the IP Code and the Magna Carta for S&T workers, inventors shall receive a percentage share of royalties and other benefits generated from their commercialized IPs subject to the following terms and conditions:

1.1 Royalties shall only be in the form of cash, and shall be allocated as follows:

• For CSU ó owned IP : 40% (Inventor)

60% (CSU); and

For IPs owned by holders

Assigned to CSU : 60% (Inventor)

40% (CSU)

- 1.2 The manner of payment of royalties shall be mutually agreed upon the parties;
- 1.3 Percentage share from the royalties shall be collected from the proceeds of one (1) intellectual property. If there is more than one (1) related intellectual property licensed, the royalty shall be calculated for each and apportioned as stipulated in the contract. When there is more than one CSU inventors involved, the share shall be divided equally, unless there is a written agreement to the contrary;
- 1.4 The CSU inventor personal share survive termination of affiliation with CSU and in the event of death, shall accrue to his/her heirs, assignees, or successors-in-interest, in accordance with existing laws; 1.5 Awards, prizes, honoraria and the like received by CSU inventors primarily as recognition for achievement in the generation of the intellectual property shall not be considered royalty.
 - **Section 2.** In case of inability to locate the CSU inventor or his/her heirs within ten (10) years from the last publication of these notices in a newspaper of general

circulation, his/her royalty percentage share including interest shall be deemed waived in favour of CSU.

- **Section 3.** Where there is a reasonable basis for believing that the royalty amounts may be refunded, or that others may have claim to such amounts, the payment thereof shall be deferred until the matter is resolved.
- **Section 4.** Any person who has legal grounds for receiving any royalty, but who does not receive it, shall submit a claim in writing to the CSU or CSU IP Unit.
- **Section 5.** Other incomes derived from the research shall not be considered royalty.

Section 6. Collection of Royalty

The CSU IP Office shall collect and disburse any royalty resulting from commercialization of IP.

Article IX Conflict Resolution

- **Section 1.** In case of conflict arising from any of the provisions of this policy, the parties may agree to result to mediation to settle the dispute with the assistance of the CSU IP Office. The decision is appealable to the President of CSU whose decision shall be final.
- **Section 2.** If the parties are not amenable to mediation, the parties may avail any remedy provided for by existing laws, rules, and regulations.

Article X Transitory Provisions

- **Section 1.** The party shall apply to existing agreements between CSU and any third party, with potential to generate intellectual property, subject to the conformity of the latter.
- **Section 2.** If an existing agreement is renewed, revised or amended after the CSU policy takes effect, the amended or new agreement shall conform to this policy, or shall automatically be under the operative provisions of this policy.

Article XI Effectivity

This policy shall be effective upon publication in the national Administrative Register, or the Official Gazette, or in a newspaper or general circulation or whichever is more economical.

Chapter IV

MONITORING AND EVALUATION OF RDET PERFORMANCE: EFFECTS OUTCOMES AND IMPACTS

Unlike in teaching performance, the evaluation of RDET performance is quite difficult to evaluate due to the complexity of RDET programs, the period of evaluation as RDET extends for more than one semester, and the variation of RDET according to RDET category.

Though the performances of the RDET staff in the RDET Departments are complicated, Figure 4 provides the framework of the various program elements and the environment of RDET for M&E. A closer look at this framework shall prove helpful.

Like any other program, the management of RDET has four major elements: (1) program aspirations and identification of needs; (2) program inputs and activities; (3) program results; and (4) program monitoring and evaluation.

1. Program Aspirations and Identification of needs

Comparable with any RDET oriented institutions, the development of RDET programs at CSU emanates from CSU aspirations, vision and mission, guiding principles and policies, current state of affairs and goals and objectives.

Aspirations, vision and mission, guiding principles and policies and goals and objectives answer what the research institution wants of its RDET programs.

The current state of affairs reflects the current situation and condition of the CSU in terms of the various factors that affect it and how the institution can satisfy the needs of the program. However, the institutionsø aspirations and needs are vertically integrated and they range from CSUøs RDET dreams and ambitions.

Based on the goals and objectives which are guided by some institutional principles and policies, the current state of the institution RDET programs, current and expected RDET requirements and availability of financial resources, specific RDET programs and activities are quantified and determined.

2. Program Inputs

RDET program inputs consist of the manpower and the other resources that are needed for the purpose of attaining the RDET program objectives while RDET program activities are actions undertaken in order to execute and implement the program plans.

3. Program Results

The results of the RDET program can be classified into three major categories: (a) program outputs, (b) program effects, and (c) program impacts.

Program outputs are the physical outcomes produced by the program and measurements of services provided. Program effects are the direct and immediate consequences of the program.

Program impacts are the changes in the environment as may be brought about by the program.

4. Program Monitoring and Evaluation

`Program monitoring and evaluation has something to do with the examination of the various program components or elements to determine as objectively as possible the relevance, efficiency and effectiveness of the RDET programs in the context of the program objectives. Several approaches towards this end include the evaluation of the University Directors, colleagues and peers, clients and external evaluators.

Of the very interesting elements of evaluation in the RDET programs are the intermediate impacts of results in terms of the project goals and objectives which are reflective of the performances of the RDET program/project faculty, staff and other support personnel.

5. External Environment

As in the case of other development programs, the RDET programs do not operate in a vacuum or is it limited to the academic environment, or to ecological ones, or to politico-administrative factors; instead it combines these and other factors which it seeks to influence and which influence it. These set of factors is termed the õRDET program environment.ö

Project Monitoring and Evaluation

For relatively long-term research programs which are generally interdisciplinary, multidisciplinary or transdisciplinary in approach especially in R&D Centers, coordination in terms of planning and programming, monitoring and evaluation shall be done at three levels:

- Project Leader Level
- Program Leader or Center Director/Leader Level
- Director of Research Level

For short to medium-term research projects, coordination monitoring and evaluation shall be done at two levels:

- Project Leader Level
- Director of Research Level

All research projects whether institutionally or externally funded shall be financially and technically monitored and evaluated. The system of evaluation consists of three parts: ex-ante evaluation, on-vjivo evaluation and ex-post evaluation.

The ex-ante evaluation system shall be undertaken before the project is implemented. It starts with the review and evaluation of RDET project proposal prepared by the proponents.

For project finances, the CSU Accounting Department shall conduct financial monitoring and provide information on the status of projects funds to the VPRDET. The VPRDET shall also monitor the assignment of project personnel ó project leaders, research staff and labourers, including requests and advice for sub-allotments and other pertinent documents related to the project.

Project leaders and research staff shall be required to submit periodic reports using appropriate monitoring and evaluation forms.

All on-going, completed and RDET proposals whether internally and externally funded shall be evaluated through presentations during the pre in-house (for proposals) and agency in-house reviews (for ongoing and completed projects) to determine how far the activities in the project have progressed and how much further the activities shall be carried to accomplish the objectives.

Both the formative and summative type of evaluation shall be conducted. The former is aimed at improving a project while the letter is conducted to provide information for summary judgement of the project. Based on the findings of the evaluation, the project may be recommended for renewal or extension, or termination.

For completed projects, the Project Leaders and staff are also required to submit a terminal report of the project within thirty (30) days after completion after which they are required to present the results in an appropriate research forum.

All on-going programs, projects and/or researchers whether internally or externally funded not presented during the scheduled agency-in-house review shall be deemed terminated.

Schedule of Reviews

The evaluation of an on-going CSU research projects whether internally or externally funded is conducted once a year preferably at the end of the Summer Season. The *Project Monitoring and Evaluation Section* (**PMES**) of RDET shall coordinate the review with the CSU campuses and funding agencies (for externally funded projects).

The quarterly evaluation of RDET proposals for internal funding shall also be coordinated by the PMES.

Other Relevant Instrument and Policies relative to Performance Evaluation shall be factored in, such as:

- 1. PRAISE
- 2. Performance-based Budgeting
- 3. Normative Financing
- 4. ACCREDITATION
- 5. SUC LEVELLING

Specific Implementing Guidelines for each of the Instruments and Policies have to be applied in the actual conduct of performance evaluation for faculty members or non-teaching personnel involved in Research and Extension.

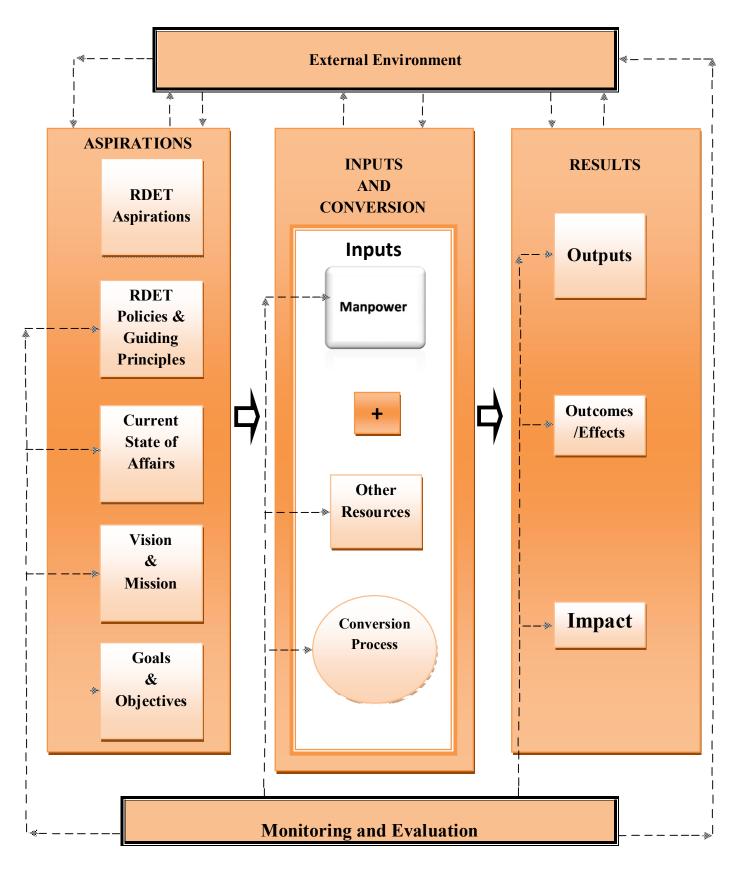


Figure 4. Framework of the various program elements and the environment of RDET.