

DOST Form 2 (for Basic/Applied Research) DETAILED RESEARCH & DEVELOPMENT PROJECT PROPOSAL

| (1) PROJECT | PROFILE | | | | | |
|----------------------------------|---------------------|---------------------------|--------------------------|---------------------|------------------|-------------|
| Program Title: | | | | | | |
| Project Title: Project Leader | /Cov: | | | | | |
| | n (number of m | onthe): | | | | |
| Project Start | | onins). | | | | |
| Project Start Project End I | | | | | | |
| | | I Iniversity-College | -Institute, Departme | ent/Organization of | Company): | |
| | | | cipality, District, Prov | | Company). | |
| , tadiooo, i olop | TIOTIO/T GX/EITIGII | (Barangay, Warne | ipality, Diotriot, 1 10 | vinoc, region). | | |
| (2) COOPERA | TING AGENCY | /IES (Name/s an | d Address/es) | | | |
| | | | | | | |
| | | | | | | |
| | IMPLEMENTA | | | | AU INIIOIDAL ITX | I = . = |
| IMPLEMEN | COUNTRY | REGION | PROVINCE | DISTRICT | MUNICIPALITY | BARANGAY |
| TATION | | | | | | |
| SITES NO. | | | | | | |
| 1. 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
| <u> </u> | | | | | 1 | |
| | | | | | | |
| (4) TYPE OF F | RESEARCH | | | | & PROGRAM | (based on |
| Basi | C | | HNRDA 20 | 17-2022) | | |
| Appl | ied | | | | atic and Natura | |
| | | | | | | |
| | | | | lealth | | |
| | | | | riority Topic: _ | | |
| | | | Ir | naustry, Energy | and Emerging | recnnology |
| | | | | Sector: | eduction and CI | imata |
| | | | | Change Adapta | | IIIIale |
| | | | | Basic Research | | |
| | | | | Sector: | | |
| | | | | | | |
| | evelopment Go | oal (SDG) | | | | |
| Addressed | | | | | | |
| (a) E)/EQUEN | E OLIMANA DV | | | | | |
| (6) EXECUTIV | E SUMMARY (n | ot to exceed 200 v | words) | | | |
| (7) INTRODUC | CTION | | | | | |
| | NALE/SIGNIFI | CANCE (not to | avaged 200 words) | | | |
| ` ' | | | · | , | | |
| (7.2) SCIEN (7.3) OBJE | | HEURETICAL | FRAMEWORK | \ | | |
| General: | CIIVES | | | | | |
| Specific: | | | | | | |
| | | | | | | |
| | | _ | | | | |
| (8) REVIEW O | F LITERATURE | = | | | | |
| | | | | | | |
| (9) METHODO | LOGY | | | | | |
| | | | | | | |
| (40) TEQUINO | 007.004011 | . | | | | |
| (10) LECHNOI | LOGY ROADMA | AP (if applicable) | (use the attached s | heet) | | |
| (11) EXPECTE | D OUTPUTS (6 | 6Ps) | | | | |
| | | | | | | |
| (12) POTENTI | AL OUTCOMES | <u> </u> | | | | |
| (12)1012111 | L COLOUIL | - | | | | |
| (13) POTENTIA | AL IMPACTS (2 | 2ls) | | | | |
| | • | · | · | · | | · |

| le) | | | | | | | |
|----------------------|-------------------------------------|----------------|----------------------------|------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| GAD) S | COR | E (refe | r to the at | tached GAI | O check | list) | |
| | | | | | | | |
| ONS RIS | SK M | IANA | GEMEN | T PLAN | (List po | ossible risks ar | nd assumptions in |
| | | | | | | | |
| | | | | | | | |
| | Percent Time Devoted to the Project | | Responsibilities | | | | |
| | | , | | | | | |
| | | | | | | | |
| ENCY | | | | | | | |
| PS | | | MOOE | | EO | | Total |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| EING H | ANDI | LED E | BY THE | PROJEC | CT LE | | (number) |
| Title of the Project | | Funding Agency | | | Involvement in the Project | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| NTS (Plea | ase ref | fer to p | age 2 for | the additior | nal nece | essary docume | ents.) |
| | GAD) S ONS RI SENCY | Pero Devo F | Percent Devoted to Project | Percent Time Devoted to the Project EING HANDLED BY THE Funding | Percent Time Devoted to the Project BENCY PS MOOE Funding Agency | Percent Time Devoted to the Project BENCY PS MOOE Funding Agency | Percent Time Devoted to the Project PS MOOE EO EING HANDLED BY THE PROJECT LEADER: Involve |

I hereby certify the truth of the foregoing and have no pending financial and/or technical obligations from the DOST and its attached Agencies. I further certify that the programs/projects being handled is within the prescribed number as stipulated in the DOST-GIA Guidelines. Any willful omission/false statement shall be a basis of disapproval and cancellation of the project.

| | SUBMITTED BY (Project Leader) | ENDORSED BY (Head of the Agency) |
|-------------------|-------------------------------|----------------------------------|
| Signature | | |
| Printed Name | | |
| Designation/Title | | |
| Date | | |

Note: See guidelines/definitions at the back.

DOST Form 2 (for Basic/Applied Research) DETAILED R & D PROJECT PROPOSAL

I. General Instruction: Submit through the DOST Project Management Information System (DPMIS), http://dpmis.dost.gov.ph, the detailed R&D proposal for the component project together with the detailed proposal of the whole Program, project workplan, line-item budget (LIB), 1-page curriculum vitae of the Project Leader, and Certificate of Incorporation or DTI Registration (if applicable) and other applicable supporting documents required under item II.23 below. Also, submit four (4) copies of the proposal together with its supporting documents. Use Arial font, 11 font size.

II. Operational Definition of Terms:

1. Title- the identification of the Program and the component projects.

Project- refers to the basic unit in the investigation of specific S&T problem/s with predetermined objective/s to be accomplished within a specific time frame.

Project Leader- refers to a project's principal researcher/implementer.

Project Duration- refers to the grant period or timeframe that covers the approved start and completion dates of the project, and the number of months the project will be implemented.

Implementing Agency- the primary organization involved in the execution of a program/project which can be a public or private entity

- **2. Cooperating Agency/ies-** refers to the agency/ies that support/s the project by participating in its implementation as collaborator, co-grantor, committed adopter of resulting technology, or potential investor in technology development or through other similar means.
- **3. Site/s of Implementation** location/s where the project will be conducted. Indicate the barangay, municipality, district, province, region, and country.
- 4. Type of Research- indicates whether the project is basic or applied.

Basic research- is an experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular or specific application or use in view.

Applied research- is an investigation undertaken in order to utilize data/information gathered from fundamental/basic researches or to acquire new knowledge directed primarily towards a specific practical aim or objective with direct benefit to society.

5. R&D Priority Area and Program- based on the Harmonized National R&D Agenda 2017-2022, indicates which R&D agenda the project can be categorized in: Agriculture, Aquaculture and Natural Resources; Health; Industry, Energy, and Emerging Technology; Disaster Risk Reduction and Climate Change Adaptation; and Basic Research. Indicate also the specific Commodity/Sector, whether crops, livestock, forestry, agricultural resources or socio-economics; fisheries or aquatic resources; biotechnical, pharmaceutical, or health services; biotechnology, information technology, material science, photonics or space technology; industry, energy, utilities or infrastructure.

Sustainable Development Goal (SDG) Addressed- indicates which among the 17 SDGs adopted by the United Nations Members States are addressed by the project

- 6. Executive Summary- briefly discusses what the whole proposal is about
- **7. Introduction** a formally written declaration of the project and its idea and context to explain the goals and objectives to be reached and other relevant information that explains the need for the project and aims to describe the amount of work planned for implementation; refers to a simple explanation or depiction of the project that can be used as communication material.
 - 7.1. Rationale- brief analysis of the problems identified related to the project

Significance- refers to the alignment to national S&T priorities, strategic relevance to national development and sensitivity to Philippine political context, culture, tradition and gender and development.

7.2. Scientific Basis- other scientific findings, conclusions or assumptions used as justification for the research

Theoretical Framework- the structure that summarizes concepts and theories that serve as basis for the data analysis and interpretation of the research data.

- **7.3. Objectives-** statements of the general and specific purposes to address the problem areas of the project.
- **8. Review of Literature** refers to the following: (a) related researches that have been conducted, state-of-the-art or current technologies from which the project will take off; (b) scientific/technical merit; (c) results of related research conducted by the same Project Leader, if any; (d) Prior Art Search, and; (e) other relevant materials.
- **9. Methodology** discusses the following: (a) variables or parameters to be measured and evaluated or analyzed; (b) treatments to be used and their layout; (c) experimental procedures and design; (d) statistical analysis; (e) evaluation method and observations to be made, strategies for implementation (Conceptual/Analytical framework).
- **10. Technology Roadmap** (if applicable)- a visual document that communicates the plan for technology. It is a flexible planning technique to support strategic and long-range planning by matching short- and long-term goals to specific technology solutions.
- **11. Expected Outputs (6Ps)-** deliverables of the project based on the 6Ps metrics (Publication, Patent/Intellectual Property, Product, People Service, Place and Partnership, and Policy).

Publication- published aspect of the research, or the whole of it, in a scientific journal or conference proceeding for peer review, or in a popular form.

Patent/Intellectual Property- proprietary invention or scientific process for potential future profit. Product- invention with a potential for commercialization.

People Service- people or groups of people, who receive technical knowledge and training.

Place and Partnership- linkage forged because of the study.

Policy- science-based policy crafted and adopted by the government or academe as a result of the study.

12. Potential Outcomes- refer to the result that the proponent hopes to deliver three (3) years after the successful completion of the project.

13. Potential Impacts

Social Impact- refers to the effect or influence of the project to the reinforcement of social ties and building of local communities.

Economic Impact- refers to the effect or influence of the project to the commercialization of its products and services, improvement of the competitiveness of the private sector, and local, regional, and national economic development.

- **14. Target Beneficiaries** refers to groups/persons who will be positively affected by the conduct of the project.
- **15. Sustainability plan-** refers to the continuity of the project or how it shall be operated amidst financial, social, and environmental risks.
- **16. Gender and Development (GAD) Score** refers to the result of accomplishing GAD checklists (for project monitoring and evaluation/project management and implementation) to highlight the contribution of the project in the achievement of the objectives of Republic Act 7192, "Women in Development and Nation Building Act," interpreted as gender-responsive, gender-sensitive, has promising GAD concepts, or GAD is invisible.
- 17. Limitations of the Project- refer to restrictions or constraints in the conduct of the project.
- **18. Risk** refers to an uncertain event or condition that its occurrence has a negative effect on the project. **Assumption** refers to an event or circumstance that its occurrence will lead to the success of the project.
- **19. Literature Cited-** an alphabetical list of reference materials (books, journals and others) reviewed. Use standard system for citation.
- **20. Personnel Requirement** details on the position of personnel to be involved in the project, percent time devoted to the project, and responsibilities.
- **21.** Budget By Implementing Agency- personnel services (PS), maintenance and other operating expenses (MOOE), and equipment outlay (EO) requirement of the project by implementing agency for Year 1 and for the whole duration of the project. Please refer to the DOST-GIA Guidelines for the details (Section IX.B of DOST Administrative Order (A.O.) 011, s. 2020).

- a. PS- total requirement for wages, salaries, honoraria, additional hire and other personnel benefits.
- b. **MOOE** total requirement for supplies and materials, travel expenses, communication, and other services.
 - c. EO- total requirement for facilities and equipment needed by the Program.
- **22.** Other Ongoing Projects Being Handled By the Project Leader- list of ongoing projects being handled by the Project Leader funded by the DOST-GIA Program and other sources, and the accompanying responsibilities relevant to the project.
- **23.** Other supporting documents required- as stated in Section VII of DOST A.O. No. 011, Series of 2020 Revised Guidelines for the Grants-in-Aid Program:
 - a. Detailed breakdown of the required fund assistance to indicate the counterpart of the proponent and other fund sources including letter/s of commitment from the implementing, collaborating and coordinating agency/entity/ies;¹
 - b. A counterpart fund, in kind and/or in cash, shall be required from the implementing agency/entity as one of the application requirements. All projects must have a minimum of 15% counterpart contribution except for projects involving public good;¹
 - c. Curriculum Vitae or Personal Data Sheet (PDS) of Project Leader and other coresearchers/implementers. The service record may be requested if needed;¹
 - d. Clearance from the DOST or the Funding Agency (e.g., DOST Councils) on previously funded completed projects handled by the Project Leader;¹
 - e. Approval from the institution's ethics review board for research involving human subjects or in the case of animal subjects, approval from the Bureau of Animal Industry (BAI) (for PCAARRD-and PCHRD-monitored projects);
 - f. Clearance from the DOST Biosafety Committee (DOST-BC) shall be required for research proposals involving the use of GMOs under contained use (i.e., experiments done in laboratories, screen house, green house). For projects other than contained use, they shall be referred to the appropriate agency. The DOST Sectoral Councils, after determination as to whether or not the proposal has biosafety implications, shall endorse the same to the DOST-BC in accordance with the prescribed format under Annex 3 of the Philippine Biosafety Guidelines for Contained Use of Genetically Modified Organisms (series of 2014) (if applicable); and
 - g. For the private non-profit/non-government/people's organizations and startups:
 - Up-to-date Securities and Exchange Commission (SEC) registration, or Department of Trade and Industry (DTI) registration, or Cooperative Development Authority (CDA) registration certificate, or other authenticated copy of latest Articles of Cooperation and other related legal documents;
 - ii. Co-signers Statement (if applicable);
 - iii. Copy of latest Income Tax Return;
 - iv. Mayor's permit where the business is located;
 - v. Audited Financial Statements for the past three (3) years preceding the date of project implementation or in case of those with operation of less than 3 years, for the years in operation and proof of previous implementation of similar projects (or in the case of startups, at least for one (1) year);
 - vi. Document showing that NGO/PO has equity to 20 percent of the total project cost, which shall be in the form of labor, land for the project site, facilities, equipment and the like, to be used in the project;
 - vii. Disclosure of other related business, if any;
 - viii. List and/or photographs of similar projects previously completed, if any, indicating the source of funds for implementation;
 - ix. Sworn affidavit of secretary of the NGO/PO that none of its incorporators, organizers, directors or officers is an agent of or related by consanguinity or affinity up to the fourth civil degree to the official of the agency authorized to process and/or approved the proposed MOA, and release of funds;
 - h. For CSOs, compliance to regulations as required by the General Appropriations Act (GAA) pertaining to fund transfers to Civil Society Organizations (CSOs); and
 - For foundations, DOST certification as accredited by the Science and Technology Foundation Unit

III. Criteria for Evaluation:

A. Criteria for Evaluating Proposals

¹ required of all proposals

| Criterion | Definition |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relevance or Significance | Aligned to national S&T priorities, strategic relevance to national development and sensitivity to Philippine political context, culture, tradition and gender and development |
| Technical / Scientific Merit | Sound scientific basis to generate new knowledge or apply existing knowledge in an innovative manner |
| Budget Appropriateness | The proposed budget is commensurate to the proposed work plan and deliverables. |
| Competence of Proponent | Proponent's expertise is relevant to the proposal and with proven competence to implement, manage and complete R&D programs/projects within the approved duration and budget. |

B. Governing Council / Board and EXECOM's Evaluation Criteria

| Criteria | Indicators | | |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|
| A. Soundness of Proposal (20%) | R&D addresses relevant sectoral need (applicable to pressing concern) | | |
| | Solution provided is most effective (compared to other proposed solutions) | 5 | |
| | Proposed budget is reasonable (project is not expensive vis-a-vis output) | 5 | |
| | Work plan is doable in a given timeframe | 5 | |
| B. Suitability of Output (30%) | R&D output is cost-effective (cost is competitive in relation to new or existing products or process) | | |
| | Has identified partners to adopt the technology (with letter of support from the head of the company) | 5 | |
| | Output can be commercialized (through an existing manufacturer, spin-off or start-up company) | 5 | |
| | R&D utilization is timely (output should not be overtaken by other solutions) | 5 | |
| C. Significance of Outcome (30%) | Economic: increase in productivity, increase in income, new jobs generated, high return of investment (ROI) | 5 | |
| | Social: working partnerships established, training opportunities provided, policies adopted, increased access to basic services (i.e., food, health, education); political, cultural, gender sensitivity and inclusivity | 5 | |
| | Environment: enhanced environmental health standards, no adverse effect to the environment | 5 | |
| | Sustainability: sustainability mechanisms established in terms of institutional, financial and human resources capability (submission of a new proposal to sustain a completed or ongoing proposal does not constitute sustainability of the project) | 5 | |
| D. Competence of Proponent (20%) | Proponent's expertise aligned with the proposal | 5 | |
| | Collaboration with relevant agencies and/or industry partners | 5 | |
| | Thorough understanding of the proposal's deliverables | 5 | |
| | DOST has good experience with the proponent | 5 | |

C. Additional Criteria on Gender and Development (GAD)