

**DOST Form 3**

**NON-R&D PROJECT PROPOSAL**

**(Technology Transfer, S&T Promotion and Linkages, Policy Advocacy,**

**Provision of S&T Services, Human Resource Development and Capacity-Building)**

**I. PROJECT PROFILE**

| **(1) Program Title:** Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Mindanao  **Project Title:** Project 1. Regional Intellectual Property and Technology Business Management (IP-TBM) in  Western Mindanao  Project 1-A. Enhancement of Intellectual Property and Technology Business Management (IP-TBM) in  Western Mindanao through the RAISE Program | | | | |
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| **(2) Project Leader/Sex:** Arvic S. Francisco / Male  **Agency:** Western Mindanao State University  **Address/Telephone/Fax/Email:** WMSU Research Building, Baliwasan, Zamboanga City /  [arvic.francisco@wmsu.edu.ph](mailto:arvic.francisco@wmsu.edu.ph) | | | | |
| **(3) Cooperating Agency/ies** (Name/s and Address/es)**:**  J.H. Cerilles State College (JHCSC) – San Miguel, Zamboanga del Sur  Jose Rizal Memorial State University (JRMSU) – Dapitan, Zamboanga del Norte  Philippine Rubber Research Institute (PRRI) – Ipil, Zamboanga Sibugay  Zamboanga State College of Marine Sciences and Technology (ZSCMST) – Rio Hondo, Zamboanga City | | | | |
| **(4) Implementing Agency**: Western Mindanao State University – IPU-ITSO  **Address/Telephone/Fax/Email:** WMSU ITSO Office, Research Building, Baliwasan, Zamboanga City/  [arvic.francisco@wmsu.edu.ph](mailto:arvic.francisco@wmsu.edu.ph)  **Base Station:** WMSU ITS Office, Research Building, Baliwasan, Zamboanga City  **Other Implementation Site (s):** Zamboanga Sibugay, Zamboanga del Norte, Zamboanga del Sur | | | | |
| **(5) Project Duration** (number of months): 24  **Project Start Date:** July 1, 2023  **Project End Date:** June 30, 2025 | | | | |
| **(6) Total Project Cost:** Php4,270,400.00 (indicate Counterpart Funds; use Form 4 for the Line-Item Budget) | | | | |
| **Implementing Agency/ies** | **PS** | **MOOE** | **EO** | **Total** |
| 1. Requested Fund | 2,150,400.00 | 2,040,000.00 | 80,000.00 | 4,270,400.00 |
| 1. Counterpart Fund | 591,943.20 | 85,000.00 |  | 676,943.20 |
| **TOTAL** | 2,742,343.20 | 2,125,000.00 | 80,000.00 | 4,947,343.20 |
| **Sustainable Development Goal (SDG) Addressed:**  SDG 8 – Decent work and Economic Growth  SDG 9. Industry, Innovation, and Infrastructure | | | | |

**II. PROJECT SUMMARY**

| **(7) Executive Summary** (not to exceed 200 words)  Intellectual Property - Technology Business Management (IP-TBM) project under the RAISE Program is a strategic management framework that helps CMIs and HEIs effectively manage their intellectual property (IP) assets and align them with the organization's business objectives. IP-TBM integrates IP management with overall business strategy, ensuring that CMIs and HEIs maximize the value of their IP and use it to drive growth and competitiveness.  IP-TBM involves a range of activities, including IP portfolio management, IP licensing and commercialization, IP risk management, and IP valuation. By effectively managing these activities, CMIs and HEIs can identify opportunities for innovation, protect their IP assets, and use them to create value for their stakeholders.  IP-TBM also involves developing a culture of innovation within the organization, encouraging faculty members and researchers to generate and share ideas, and providing them with the resources and support needed to turn those ideas into valuable IP assets.  IP-TBM is important for CMIs and HEIs because this is where innovation and intellectual property are critical to success. By effectively managing IP assets and aligning them with business objectives, CMIs and HEIs can drive growth, increase competitiveness, and create long-term value for stakeholders.  Strategically, IP-TBM provides a structured approach to managing intellectual property that helps CMIs and HEIs achieve their strategic goals and create value for their stakeholders. |
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| **(8) Introduction** (Not to exceed 15 pages)  Republic Act (RA) 10055, also known as the Technology Transfer Act of 2009, is a Philippine law that promotes and facilitates the transfer, dissemination, and commercialization of technology and intellectual property (IP) from research and development (R&D) institutions to industry for the benefit of society. The technology transfer Act helps CMIs and HEIs help establish the promotion of the innovation ecosystem. The Act provides a framework for promoting innovation by encouraging the transfer of technology and IP from R&D institutions, CMIs and HEIs in the region to strengthen the linkages and partnership with the industry. This can lead to the development of new products, services, and technologies that can benefit society and drive economic growth.  Furthermore, the Act establishes policies and guidelines for the protection of intellectual property rights, including patents, trademarks, and copyrights. This helps to ensure that inventors and creators of the CMIs and HEIs are properly compensated for their work, while also promoting the dissemination of technology and knowledge. With University Board Resolution no. 42-8 series 2021 approving the adoption of the policy on technology transfer protocol of Western Mindanao State University provides a framework for the University in the commercialization of technology and IP development. This also helps to create new businesses and industries, and can also help to generate revenue for the University through its income generation, which can be reinvested in further research and development. Moreover, Board Resolution No.6-1 series of 2017, a resolution approving Western Mindanao State University Intellectual Property Policy Manual is an important document that outlines an organization's policies and procedures related to the management and protection of its intellectual property assets. Intellectual property includes patents, trademarks, copyrights, trade secrets, and other intangible assets that are valuable to an organization.  Moreover, through the institutionalization of the Technology Business Incubation Unit (TBIU) of the University based on the Board Resolution no. 126 Series of 2017 which encourages collaboration between industry, R&D institutions, CMIs and other stakeholders which can lead to the development of new technologies, products, and services. This can help to drive economic growth, create jobs, and promote the development of new industries.  Overall, the Technology Transfer Act is essential because it provides a framework for promoting innovation, protecting intellectual property, fostering collaboration between industry, CMIs, HEIs and other stakeholders promoting technology commercialization, and building capacity for technology transfer. By promoting the transfer of technology and knowledge from R&D institutions to industry, the Act can help to drive economic growth, create jobs, and improve the quality of life for people in the Philippines.  **Rationale/Significance** (Not to exceed 300 words)  The Western Mindanao State University is privileged to be one of the grantees of the DOST-PCAARRD funded IP-TBM Project which was implemented last July 16, 2018, and is set to end on December 31, 2020. In the two years of its implementation, the following accomplishments are noted: an inventory of IP assets, the first that was done in WMSU, four (4) IP Echo Seminar, 1 Technology Commercialization Seminar which focused on Technology Pitching, 1 Technology Promotion activity dubbed as Agritech Expo 2019, 5 brochures/IEC Materials, 5 patent and 3 UM applications, and 1 revised IP Policy Manual and Technology Transfer Protocol which is already subject to BOR approval. The IP-TBM marker was also launched last March 4, 2020, a move to initiate the full institutionalization of the IP-TBM project and hopefully, the establishment of an IP-TBM office in WMSU. The proponent believes that there is a need to further enhance and intensify the Intellectual property and technology business management operations in the University. With the recent plan to establish a NICER on native chicken in the University, even more there is a need to intensify the use of patent information and conduct patent mining activities; thus, this proposal is submitted.  The WMSU IP-TBM Phase II: Patent Mining for Native Chicken which was also funded by DOST-PCAARRD which is expected to end on March 31, 2023, plays important role in the process of searching, analyzing, and extracting information from patent databases to identify patterns, trends, and opportunities for innovation. The rationale behind patent mining is to gain insights into technological advancements, emerging markets, and potential competitors. The development of a patent landscape involves work processes for helping technical decision makers make smarter decisions faster and include analytical processes that transform disaggregated technological information into relevant strategic knowledge about your competitor’s or a subject’s technical position, size of efforts and trends. The raw information provided by PLRs can be turned into useful information for analysis and strategic planning.  Currently, with the WMSU IP-TBM Patent Mining Project this helps us strengthen intellectual property and enables WMSU-IP-TBM identify gaps in our intellectual property portfolio and develop strategies to fill those gaps. By acquiring patents or licensing them this can strengthen our intellectual property portfolio and protect our innovations from infringement. Project is a strategic decision that can provide valuable information for strategic decision-making. By understanding the patent landscape, WMSU can make informed decisions about where to invest resources and which technologies to pursue.  The RAISE Program will strengthen and expand the network among CMIs in the region on technology transfer and commercialization in the region. This also facilitates discovery of market trends that can help CMIs and HEIs identify emerging markets and consumer trends. Lastly, this will help identify a new technological gap which is an important tool for CMIs to strengthen the innovative ecosystem in the region that will further spur the economic growth.  **Objectives** (General and Specific):  Regional IP-TBM  General Objective:  To establish the Regional IP-TBM in Western Mindanao to intensify the technology commercialization activities of participating CMIs.  Specific Objectives:   1. Enhance and operationalize the IP-TBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IP-TBM; and 5. Manage the IP-TBM network in the region     WMSU IP-TBM  General Objective:  To strengthen the capacities of institutional Intellectual Property and Technology Business Management (IP-TBM) Operations of the University.  Specific Objectives:   1. Harness and strengthen the capacities of WMSU-IP-TBM; 2. Enhance the technology promotion and commercialization activities of WMSU-IP-TBM; 3. Strengthen linkages with industry and community stakeholders to enhance activities on intellectual property management and technology commercialization; and 4. Provide support in the development of the IP-TBM Real-time Monitoring System.   **Methodology**  The establishment of a regional IP-TBM in the region will help facilitate the commercialization of technologies generated in the AANR sectors in region 9. Project 1 for the regional intellectual property and technology management will provide Institutional arrangement orientation and collaboration to other CMIs in Zamboanga Peninsula and other stakeholders; conduct of Policy review and IP audit; Training, mentorship, IP protection; Branding, technology promotion and advocacies, and manage business networks, partnership and institutionalization. The implementation of the project is expected to impact society in terms of technologies commercialized, jobs and income generated, products available at lower cost and the facilitation of R.A.10055.   1. ***Strengthen Existing WMSU-IPTBM through Institutional Arrangement and Collaborations with the Regional IP-TBM***   WMSU Research Center established some guidelines on R&D cash incentives for intellectual property protection through Board Resolution No. 68 series of 2016 that created a sustainable framework for managing the technology portfolio of the University. It involves creating a sustainable framework for managing technology that aligns with the organization's goals and objectives. Furthermore, it helps the organization achieve its goals and objectives more effectively and efficiently.  The following steps has taken into consideration in our efforts to institutionalize the IP-TBM project:   1. Establish a governance structure: Create a governance structure that defines roles, responsibilities, and decision-making processes related to the IP-TBM project. 2. Identify key stakeholders: Identify key stakeholders who will be responsible for implementing and using the IP-TBM framework, including IT leaders, business leaders, and technology vendors. 3. Develop a communication plan: Develop a communication plan to keep stakeholders informed of the project's progress, benefits, and outcomes. 4. Define metrics and measurement: Define metrics and measurement tools to evaluate the success of the IP-TBM project and determine if it's meeting the organization's goals.   ***2. Pre-Implementation Phase***  The pre-implementation phase involves the following activities: Kick-off and commitment meeting among PCAARRD and the heads of CMIs involved in the program;Meeting with training providers as potential partner for the training component;Discussion with TAPI regarding technology commercialization issues and concerns;Submission of letter of intent by the CMIs signifying their interest to join the RAISE program andMOA preparation, signing. ***3. Implementation Phase***   1. Field visits will be conducted by the program implementing team to observe CMIs operations. The number of research projects completed and IPR (filed and registered) will be gathered. 2. Establishment and Operationalization of IP-TBMs 3. Letters of Commitment will be secured from the agency heads indicating assignment of regular staff to man the project, the provision of office space, commitment to allow the IP-TBM’s staff to attend the long duration training planned for this project and institutionalizing the IP-TBMs within the agency.   The creation of IP-TBM Team on the identified CMI partners and should at least have the following staff:   1. 1 – IP-TBM Regional Project Leader 2. 4 – IP-TBM Sub Project Leaders (4 CMIs) 3. 1 – Science Research Specialists 4. 1 – Project Assistant III 5. 1 – Project Staff Level III (Regional) 6. 1 – Project Staff Level II (WMSU Existing) 7. 5 – Project Support Staff   Total of 14 personnel that are involved in the regional and WMSU existing IP-TBM.  The identified CMI partners will be responsible for hiring or designating the IP-TBM’s team for their institution. The program will provide for the honorarium of the IP-TBM’s Manager and the salary of one technical staff member. The agency, on the other hand, should provide a counterpart for the salary of 5 administrative personnel.  The existing facility of CMIs will be assessed based on the need of the IP-TBM. One (1) unit laptop with accessories will be requested to continuously provide the needed service to the researchers/inventors of their respective SUC/RDI:  Likewise, MOOE such as supplies and materials, communication, representation, training expense, subscription expense for the Derwent Innovation software (needed for prior art searches), travel, repair and maintenance, professional services and other MOOE (filing fees) will be provided to the CMIs IP-TBM. In the implementation phase these are the different activities that identified CMIs partner will undergo, to wit:  ***4. Policy Review and IP Inventory and TRL Assessment***  **4.1. Policy Review**  Intellectual property policies can have a significant impact on the ability of the institution to innovate. By reviewing policies, institutions can identify areas where changes can be made to encourage innovation and protect the rights of innovators. Furthermore, Intellectual property policies can also impact internal operations of the CMIs. By reviewing policies, CMIs can identify areas where changes can be made to improve internal operations related to intellectual property. Policy review on intellectual property is important for ensuring compliance with laws and regulations, protecting valuable assets, encouraging innovation, enhancing licensing and commercialization opportunities, and improving internal operations. By regularly reviewing intellectual property policies, companies can ensure that they are effectively managing and protecting their intellectual property assets.  **4.2. IP Inventory**  The purpose of an IP inventory is to identify and document all of the company's intellectual property assets, including the ownership, status, and value of each asset. This information is crucial for managing and protecting the company's intellectual property assets and for making informed business decisions. IP inventory is an important tool for managing and protecting a company's intellectual property assets. By documenting all of the company's IP assets and understanding their value, companies can make informed decisions about their IP assets and ensure that they are being managed and protected effectively. IP Inventory includes the following:   1. Identifying all IP assets 2. Managing IP assets 3. Valuing IP assets 4. Protecting IP assets   **4.3. TRL Assessment**  This includes the assessment of the Technology Readiness Level (TRL) of the CMI’s. Technology Readiness Level (TRL) is a system that assesses the maturity level of a technology or innovation. It is a scale ranging from 1 to 9, where 1 is the lowest level of technological maturity. TRL is used to determine the level of investment, development, and testing required to bring a technology to market. TRL can be used to assess the potential impact of a technology in the market. It helps in identifying the areas where the technology could be most useful and the potential applications that could be developed. This information is critical for investors and entrepreneurs, as it helps them to identify business opportunities and potential markets.  Furthermore, these are the identified technologies generated by the University through research and development. The TRL level will be assessed externally to determine the path to technology transfer and commercialization. The TRL path can be used to guide the development of a technology, from the earliest stages of research and development to its commercialization. The path helps to identify the key milestones and challenges in the development process, and it provides a framework for assessing the maturity of a technology at each stage of development. By using the TRL path, organizations can make informed decisions about technology investments, and they can evaluate the readiness of a technology for commercialization.  The technology generated by the CMIs for technology transfer and commercialization are listed below:  **Table 1. Technologies Generated by Region IX CMIs for Extension, Deployment, and Commercialization**   | CMI | Technology | TRL Level | Technology Transfer Pathway | IP Protection | | --- | --- | --- | --- | --- | | WMSU | 1. Oyster Mushroom Production | 9 | Extension | - | | 2. ZamPen Native Chicken Production | 9 | Extension | - | | 3. Vermicast Production | 9 | Extension | - | | 4. Lettuce Production | 9 | Extension | - | | 5. Itik-Pinas Production | 9 | Extension | - | | 6. Method of Preparing Charcoal Briquette from Dried Mango Leaves (DML) | 3 | Extension | UM | | 7. Composition of Charcoal Briquette from Dried Mango Leaves (DML) | 3 | Commercialization | UM | | 8. Zampen Native Chicken (Pianggang) | 5 | Commercialization | UM (pending) | | 9. Decorticator Machine | 4 | Commercialization | UM | | 10. Composition of Ready-to-fry Hash Brown made from Breadnut seeds | 4 | Commercialization | UM | | 11. Process of Producing Ready-to-fry Hash Brown made from Breadnut seeds | 4 | Commercialization | UM | | 12. Food Dehydrator | 4 | Commercialization | UM | | 13. Medium Density Chicken Feather Fiberboard Overlaid with Maguim Veneers | 4 | Commercialization | UM | | ZSCMST | 1. Tannia Chips | 4 | Extension | - | | 2. Enhanced Aquaponics | 9 | Extension | - | | 3. Instant Squash-Moringa Soup | 4 | Commercialization | UM (Application) | | PRRI | 1. Rubber Tree Rain Guard Technology | 4 | Commercialization | UM (Application) | | 2. Soil Conservation Pits Technology | 6 | Extension | - | | JRSMU | 1. Solar-Powered Knapsack Sprayer | 4 | Extension | - | | 2. SAFitek-Coco Dehusker | 4 | Commercialization | UM | | 3. Impact-type Coconut Splitter | 4 | Commercialization | UM (Application) | | 4. Double Dangled Layer Native Chicken Defeathering Machine | 4 | Commercialization | UM (Application) | | JHCSC | 1. ZamPen Native Chicken Production | 9 | Extension | - | | 2. ZamPen Native Chicken Dewormers and supplements | 6 | Commercialization | UM (Application) | | 3. Adlai Technology as Organic Fertilizer | 4 | Commercialization | UM (Application) | | 4. Sweet corn technology | 4 | Commercialization | UM (Application) |   **4.4 Review of institutional IP policies will be done to ensure conformance to RA 10055.**  Technology Transfer Protocols (TTP) will be established to serve as general guidelines for technology transfer. CMIs will develop protocol or policy in commercializing technologies. The Philippine Technology Transfer Act of 2009, together with the DOST IP Policy, will also serve as their reference in preparing the TTP. The CMIs will advocate for the approval and implementation of the institutional IP policies and TTPs.  ***5. IP Audit***  The IP audit will be conducted to determine the types and number of IPs generated that can be included in IP protection and commercialization activities. The CMIs will submit an Inventory of IP assets.  ***6. Training/Mentorship Capacity Building***  The IP-TBM team will be capacitated on IP management and business development/technology commercialization through the conduct of the 12-module training workshop (Figure 1) for selected technology transfer officers (2 per agency) which will consist of 2 sets of training – 1) the Intellectual Property Master Class, and 2) the Technology Commercialization Mentorship Series. Both sets of training will consist of 6 modules that will be conducted for 18 days spread over 6 months (3 days/month). The IP Master Class will demonstrate the whole patent application flow through hands-on prior art searches, actual claim drafting, filing application, substantive examination request, responding to Formality Examination Reports (FER) up to the administration of a mock exam for patent agent aspirants. The Technology Commercialization Mentorship Series will equip the trainees with the different pre-commercialization business processes, technology pitching, negotiation, and commercialization strategies. The trainees are expected to file patent or utility model applications during the training, while prosecution of these applications will be done through mentorship by the trainers.  A training provider that will match the expertise needed will be approached to handle the IP Management training through a government-to-government contract of service. If this is not workable, public bidding will be conducted. For the business development/technology commercialization training qualified training providers/a pool of experts will be tapped to conduct the mentorship series. Contracting will be through public bidding. The series of training will be conducted at the DPITC, PCAARRD, Los Baños, Laguna.  In the second year of implementation, the IP-TBM’s team will also be exposed to IP/Technology Commercialization training/conferences outside the country. PCAARRD, in coordination with FPRDI and IPOPHL, will look for possible training providers preferably in a country where IP management and technology commercialization activities are well entrenched and practiced.    **Figure 1. 12-Module Training Workshop on Intellectual Property Management and Technology Business Management**  ***7. Business Pitching / Networking Activities***  Business pitching is a crucial aspect of entrepreneurship and the process of bringing a new product or service to market. Moreover, business pitching is a critical aspect of entrepreneurship that can help to attract investors, generate interest, establish credibility, refine your business strategy, and secure partnerships. By honing your pitching skills and crafting compelling and effective pitches, you can increase your chances of success and bring your ideas to life. This activity includes the following benefits:   * 1. A good pitch can help to generate interest in your product or service from potential customers, partners, and other stakeholders.   2. A well-crafted pitch can help to attract potential investors who are interested in funding your business   3. Preparing a pitch requires you to think critically about your business strategy and identify key areas that need improvement.   ***8. Branding / Technology Promotion /Advocacies / IP Caravan***  To promote the technologies developed by the CMIs, networking cum product promotion activities will be conducted or participated by each CMI partner. Attendance to the NSTW, PCAARRD SiPAG FIESTA, DOST Technology Transfer Day etc. will also be encouraged. Potential technology adopters as well as other collaborators and stakeholders will be invited to attend the said activity. It is expected that the technologies developed would be able to reach the target adopters. Investment primers and flyers/leaflets of the commerciable technologies will be made to serve as the promotional materials. Also on the second year, each IP-TBM’s will conduct an echo seminar/training for at least 20 researchers to further disseminate the learnings generated from this project. The IP-TBM staff will serve as resource persons to these echo-seminars.  ***9. Manage Business Network / Partnerships and Institutionalization***  ***9.1. Manage Business Network / Partnerships***  Exploratory meetings with potential business partners such as but not limited to business groups, marketing and traders’ groups will be conducted. Since the IP-TBM will be targeting the private sector as potential takers of the technologies that they will promote, this partnership will be fully explored to fast-track commercialization of PCAARRD-supported technologies in the identified CMI partners. Linkages and partnership with the industries, private sector, and other stakeholders. Collaboration with the private sectors, industries, local government units and associations will be made as partners and or prospective adopters of the commerciable technologies generated by the participating agencies. Inter-personal visit and dialogue to the target partners and prospective adopters will be conducted.   * 1. ***IP-TBMs’ Institutionalization***   To sustain its operation, it is expected that after the two-year assistance to IP-TBMs, the management of the participating agencies should allocate funds for the operation of the office. The activities of IP-TBM should be continuously conducted even after the completion of the project. The program team will spearhead the conduct of a Commitment Meeting on Year 2 to discuss the sustainability plans of participating agencies. Prior to the commitment meeting, each participating agencies will craft their sustainability plans, The commitment meeting among agency heads will discuss the sustainability of the IP-TBM operations through the internal support of the agencies which can be through but not limited to regular funding, staff designation and policy support, and in the long run, influx of external grants through Public-Private-Partnerships.  ***Facilitate the Creation of RAISE Advisory Council***  The RAISE Advisory Council shall be composed of the following:   1. WMSU President – Chair (Base of Regional IP-TBM, KMH, ATBI, KMH) 2. DOST-PCAARRD Executive Director – Vice-Chair 3. JHCSC President – Member 4. PRRI Director – Member 5. ZSCMST President – Member 6. JRMSU President – Member 7. DOST-9 Regional Director – Member 8. DTI-9 Regional Director – Member 9. Office of the City Agriculturist – Member 10. DA-9 Regional Director – Member 11. WESMAARRDEC Director – Member 12. Chair of the Philippine of Chamber of Commerce and Industry – Zamboanga City / Pagadian/ Dipolog – Members 13. ATBI / IP-TBM Regional Management – Secretariat   The Regional IP-TBM Advisory Council will be organized in accordance with the revised provision in the operational manual to provide advice and guidance to the IP-TBM Program and management. The eight-member Council will set the direction in terms of Policy making on the operations of Regional IP-TBM.  ***10. Pre-Commercialization***  Pre-commercialization activities for IP involve a range of activities from evaluating the IP and developing a prototype to securing funding and protecting the IP. By effectively managing these activities, businesses can increase the likelihood of success when bringing a product or service based on the IP to market. Pre-commercialization of intellectual property (IP) involves activities that take place before a product or service based on the IP is brought to market. Here are some key activities involved in pre-commercialization of IP:  **10.1. IP Evaluation**  Before bringing an idea to market, it is important to evaluate the IP to determine its potential value and identify any potential barriers to commercialization.  **10.2. Market Analysis**  Conducting market research can help to identify potential customers and competitors and determine whether there is a market demand for the product or service based on the IP.  **10.3. Prototyping**  Developing a prototype can help to refine the product or service and demonstrate its functionality to potential investors and customers. The TRL should be between 6-7.  **10.4. Business Planning**  Developing a business plan can help to identify the resources and funding needed to bring the product or service to market, as well as establish a timeline and roadmap for commercialization.  **10.5. IP Protection**  It is important to secure and protect the IP through patents, trademarks, and copyrights to prevent infringement by competitors.  **10.6. Industry Partner for Possible Funding Sources**  Identifying potential partners, such as manufacturers, distributors, or investors, can help to bring the product or service to market more efficiently and effectively.  ***11. RTMS Content Build-up and Updating***  Real-time monitoring systems (RTMS) are essential for businesses looking to improve their decision-making, increase efficiency, enhance customer service, manage risks, and gain a competitive advantage. By leveraging real-time monitoring systems, companies can gain valuable insights into their operations and make more informed decisions that drive growth and success. With RTMS, it can provide up-to-date data to our stakeholders. This RTSM helps improve decision-making. Real-time monitoring systems provide up-to-date information on key performance indicators (KPIs) such as sales, production, and inventory levels. This allows decision-makers to make informed decisions quickly and proactively address issues as they arise. IP-TBM will closely coordinate with the Knowledge Management Team to help in the updating of the data in the system.  **Expected Outputs (6Ps):**   | **6Ps** | **Y1** | **Y2** | | --- | --- | --- | | PUBLICATIONS | | | | 5 IECs | 2 | 3 | | PATENTS | | | | 10 IP Applications (UM & Patent only) | 4 | 6 | | 5 Copyright (IECs) | 2 | 5 | | PRODUCTS | | | | 10 PAS Reports | 4 | 6 | | 1 IPs & technologies inventory updated | 1 |  | | 1 inventory of knowledge resources prepared and updated | 1 |  | | 1 CMI communication plan developed & implemented | 1 |  | | 1 Tech Commplan developed & implemented | 1 |  | | 1 technology with pre-comm reports |  | 1 | | 2 technologies pitched | 1 | 1 | | 1 Technology Commercialized |  | 1 | | PEOPLE SERVICES | | | | 2 CMI staff trained in national IPMC | 10 |  | | 2 CMI staff trained in national ABMC | 10 |  | | 2 CMI staff trained in national TCMS | 10 |  | | 2 CMI staff trained in national TPMS | 10 |  | | 2 CMI staff attended reg'l IP Audit & Inventory Workshop | 10 |  | | 2 CMI staff attended reg'l IP Policy/Tech Trans Protocol review | 10 |  | | 2 CMI staff attended reg'l CommPlan Workshop | 10 |  | | 1 Institutional echo seminar conducted |  | 1 | | Trained 8 staff on echo seminars |  | 8 | | Participate to content build-up of RTMS |  |  | | PLACES AND PARTNERSHIPS | | | | 1 Commitment Letter for the national trainings | 1 |  | | 1 partnership agreement w/Business/Trade Institutions |  | 1 | | 1 Commercialization Agreement |  | 1 |   **Potential Outcomes:**  The potential outcomes for an IP-TBM project are to strengthen the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations in selected CMIs to intensify technology commercialization activities. Here are some potential outcomes that could result from an IP-TBM project:   * + - 1. Improved IP management of the CMIs. One of the primary outcomes of an IP-TBM project is improved management of intellectual property assets. This can include better tracking and monitoring of IP assets, more effective enforcement of IP rights, and increased collaboration and communication among stakeholders.       2. Enhanced innovation and creativity ecosystem in the region: An IP-TBM project can also lead to enhanced innovation and creativity among inventors and innovators. By providing them with the tools and resources to protect and monetize their IP assets, inventors and innovators may be incentivized to develop new technologies and create new products.       3. Positive impact on society: By promoting innovation, encouraging entrepreneurship, and fostering economic growth, an IP-TBM project can have a positive impact on society as a whole.   Strategically, IP-TBM project can lead to numerous positive outcomes for CMIs HEI researchers, inventors, investors, and society as a whole. By promoting innovation, protecting intellectual property, and driving economic growth, an IP-TBM project can help to create a more prosperous and innovative future.  **Potential Impacts (2Is):**  **Social Impact**  Intellectual Property-Technology Transfer Business Management (IP-TBM) can have a significant social impact. IP-TBM refers to policies and strategies aimed at managing the barriers that can arise in the transfer of technology due to intellectual property rights. IP is a critical incentive for innovation and creativity, which in turn is one of the keys to the success of the Sustainable Development Goals (SDGs). Furthermore, IP-TBM can help to address global challenges on agricultural sustainability by facilitating the transfer of technology and knowledge to developing countries. This can help to build local innovation capacity and support economic development in these regions.  **Economic Impact**  Innovation is a key driver of economic growth, and IP-TBM can help to foster innovation by providing a mechanism for the commercialization of new technologies. This can lead to the development of new products and services that create new markets and increase productivity, ultimately contributing to economic growth. Furthermore in the perspective of existing IP-TBM in the university this existing IP-TBM is also currently attending to the patent prosecutions/responding to formality examination reports (FERs) / substantive examination reports (SERs) of previously filed IP applications if the SUC will hire a patent agent, this would cost at least P10,000 per correspondence, hence, another savings generated for the SUC. In addition, IP-TBM can also have a positive impact on the public sector by providing governments with new technologies and knowledge. The transfer of technology from research institutions to industry partners can lead to the creation of new businesses and the expansion of existing ones. This can create new job opportunities and help to drive local economic development. Thus, the project will generate income from licensing fees, upfront fee, etc. for commercialization agreements.  **Discussion** on the results of related project handled by the same proponent (if any):  **Target Beneficiaries:**  The target beneficiaries of this project are the following:   * IP-TBM Personnel * Partner CMIs * Faculty Researchers * Students’ researchers * Technology Adopters/Entrepreneurs   IP-TBM project can provide numerous benefits to our partner CMIs and other stakeholders, including inventors, investors, customers, consumers, and society. By effectively managing their IP assets, technology businesses can protect their innovations, generate revenue, and stay ahead of the competition. IP-TBM projects can provide numerous benefits to businesses, inventors, investors, governments, and society, and are an important tool for promoting innovation, protecting intellectual property, and driving economic growth.  **Sustainability Plan:**  The sustainability of Intellectual Property-Technology Business Incubation (IP-TBI) is important as it directly impacts the success of start-ups and entrepreneurs who rely on these programs to develop and commercialize their ideas. The sustainability of IP-TBI programs is crucial for the success of start-ups and entrepreneurs who rely on them to bring their ideas to market. By providing sustainable funding, access to resources, business incubation facilities, effective IP management, and measuring success, IP-TBI programs can create a supportive ecosystem for innovation and entrepreneurship, driving economic growth and development. Here are some key factors that contribute to the sustainability of IP-TBI:   1. Funding Sources: Sustainable funding is essential to the long-term success of IP-TBI programs. Funding can come from a variety of sources, including government grants, private investors, and corporate partnerships. 2. Access to resources: IP-TBI programs must provide entrepreneurs with access to a range of resources, including mentorship, networking opportunities, and access to funding. This ensures that entrepreneurs have the support they need to bring their ideas to market and succeed. 3. Business incubation facilities: The availability of business incubation facilities is important for the sustainability of IP-TBI programs. These facilities provide entrepreneurs with affordable office space, equipment, and other resources needed to start and grow their businesses. 4. IP management: Effective management of intellectual property is crucial to the sustainability of IP-TBI programs. This involves developing strategies to protect and commercialize intellectual property, as well as managing licensing agreements and collaborations with industry partners. 5. Measuring success: Measuring the success of IP-TBI programs is important to ensure their sustainability. This involves tracking key performance indicators, such as the number of startups launched, funding raised, and jobs created.   **Gender and Development (GAD) Score** (refer to the GAD checklist): **8.49**  Proposed project is gender sensitive.  **Literature Cited:**   1. Zachary, L.J. (2005). *Creating a Mentoring Culture: The Organization’s Guide*. San Francisco: Jossey-Bass. 2. WIPO Internal Bureau (1997). *Introduction to Commercialization of Inventions and Research Results*. WIPO National Workshops on Assessment and Valuation of Inventions and Research Results for Technology Transfer and Commercialization. |
| **(9) Workplan** (Please see attached DOST Form 5A. Project Workplan) |
| **(10) Project Management**     | TERMS OF REFERENCE FOR PERSONNEL INVOLVED IN THE PROJECT | | | | | --- | --- | --- | --- | | PROJECT STAFF | PERIOD OF  ENGAGEMENT | ROLES AND  RESPONSIBILITIES | DELIVERABLES | | Project Leader 1 – Regional IPTBM | 24 months | * Supervises and provides direction to IP-TBM activities * Assures alignment of IP-TBM activities to Regional RAISE mandated roles * Crafts and presents policies related to IP-TBM operations to Council * Recommends hiring/designation of IP-TBM personnel/staff * Links with other agencies and stakeholders * Prepares PCAARRD and other required reports | * 1 Reg’l list of Priority R&D Areas/commodity prepared and updated * 1 Reg’l technology and IP inventory prepared and updated * 1 Regional Sustainability Plan * 1 Consolidated regional report (IPs filed, tech commercialized, etc.) | | Project Leader CMIs | 24 months | * Oversee project operation, ensuring that all deliverables will be met * Spearhead in conducting IP and TT related activities * Take lead in the conduct of Agribusiness Masterclass * Coordinate with project consultant/mentors * Monitor progress of the project * Assures alignment of IP-TBM activities to Regional RAISE mandated roles | * CMI Staff trained/attended the national IPMC * Trained # CMI Staff on IP Audit & Inventory Workshop * Trained # CMI Staff on Policy/TTP Review * PAS Reports | | Project Staff II | 24 months | * Helps the project leaders in the implementation of strategic plan for RAISE Program * Coordinates with Project leaders and help facilities on the implementation of the project activities * Conducts evaluation and monitoring activities of their respective project activities * Provides technical and logistics support for the smooth implementation of the project * Assists the Project Leader in the conduct of activities * Links with other partner-agencies or organizations for the sustainability of the project | * technology with pre-comm reports * technologies pitched * communication plan developed & implemented * IPs & technologies inventory updated | | SRA I | 24 months | * Provide support to the operation of the IP-TBMs. * Collect/Extract data from the IP database as needed. * Prepare accomplishment reports, relevant communications and maintain required office files. * Assist in providing IP services to host institution, IP-TBMs customers and stakeholders. * Identify commercial strategies for transferring technologies to industry/technology adopter. * Assist in negotiating appropriate licensing contracts with potential technology adopter in coordination with the SUC/RDI management and legal expert/s. | * 10 IP Applications (UM & Patent only) * 5 Copyright (IECs) * partnership agreement w/Business/Trade Institutions | | Project Support Staff |  | * Prepares financial reports * Provides administrative support to RAISE management | * Financial Report * Financial Statement * Assist in the Procurement Process | |

**III. OTHER SUPPORTING DOCUMENTS REQUIRED** (Please refer to page 2 for the additional necessary documents.)