

**Research Grant Proposal - UoM**

**PROPOSAL COVER SHEET**

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| **Title of Project:** | UoM:  |
| **Duration of Project:** | In months |
| **Total Budget Requested** | PKR |
| **Theme of Proposed Research** | Basic ⬜ | Applied ⬜ |
| **Discipline of Proposed Research** | 1. Agriculture Sciences ⬜ 2. Arts & Humanities ⬜3. Biological and Health Sciences ⬜ 4. Management Sciences ⬜ 5. Education and Human Resources ⬜ 6. Engineering and Technology ⬜ 7. Mathematical and Physical Sciences ⬜ 8. Social, Behavioral and Economical Sciences ⬜ |

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| --- | --- |
| **Department Name** |  |
| **Principal Investigator** | Name |
| Position/Title |
| Department |
| Tel. # (Office/Mobile/Res) |
| Email |
| CNIC/Passport No. |

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| --- | --- |
| **Department Name** |  |
| **Details of Faculty 1**  | Name |
| Position/Title |
| Department |
| Tel. # (Office/Mobile/Res) |
| Email |
| CNIC/Passport No. |

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**II. EXECUTIVE SUMMARY**

The Executive Summary (limited to one page) provides an overview of the proposal and the proposed research project. The broad research objectives should be briefly described, as well as the activities to be undertaken to achieve the project goals. In case of basic research, scientific hypothesis should be identified on which proposed goal is based and if research is applied output in the form of a product or process, need or relationship to industry and end-user of the output/ product should be identified. Principal investigator is encouraged to make preliminary inquiries with the proposed end user and attach any certificate/ document in support of the proposed research. In addition, it should identify the roles of partners- academic and sectoral1 that will contribute to the success of the proposed project should be identified if any.

# **III. ACADEMIC AND SECTORAL COLLABORATIONS (IF ANY)**

**IV. PROJECT DESCRIPTION**

In this Section (maximum ten pages, including Tables and Figures), describe in detail the research plan for the proposed NRPU project.

**Problem Statement**: Describe accurately the problems to be addressed and/or opportunities to be pursued by the proposed project. Provide a brief survey of the relevant literature clearly highlighting the existing gaps and what new information will be added to the existing pool of knowledge and describe how the proposed project builds on prior research. In case of applied research, identify the industry in Pakistan which will get benefit from the process/product. Clearly justify how the proposed research will contribute to the national economy/social sector. The principal Investigator is encouraged to discuss the proposed research with the proposed beneficiary and attach supporting documentation.

**Methodology:** Describe the project design, conceptual framework, procedures, and analyses to be used to accomplish the specific aims of the project. The proposals should describe a methodology for determining the degree to which a project meets its objectives, both while the project is underway and at its conclusion. If relevant, include how the data will be collected, analyzed, and interpreted as well as any data-sharing plan. Describe any new methodology and its advantage over existing methodologies. Describe any novel concepts, approaches, tools, or technologies for the proposed activity. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. Describe proposed strategy for encouraging and ensuring the participation of women in the project. As part of this section, provide a tentative sequence or timetable for the project.

**Scope and objectives**: Specify the scope of the project accurately and list the specific aims of the project. It is important that the specific aims be compatible with the requested proposal duration. The proposal should demonstrate that a project's objectives are feasible to achieve within the requested project duration.

**Project Team, including partnerships**: Describe relevant prior efforts by applicants to address the problems identified. If you and/or your team have preliminary results, please discuss them. Illustrate how the proposed work will build upon existing expertise, if applicable. Proposals intended to improve the capacity of Pakistani institutions to support technology commercialization or industry competitiveness should also explain the role that industry representatives played in developing the proposal and articulate how the proposed project builds upon other measures undertaken by industry to improve competitiveness.

**Results statement**: Clearly and concisely state the final results expected from the activity. The ability of the project to positively impact the goal area should be obvious.

**Additional benefits:** Explain any other anticipated scientific, technological, or economic benefits that will accrue to country besides those already articulated in the Results Statement.

**Ethical considerations related to the proposed research (If Any):** The proposal should have a description of ethical considerations relating to the study. This section should document the issues that are likely to raise ethical concerns. It should also describe how the Principal Investigator is planning to address it and how he/she plans to obtain informed consent from the research participants (the informed consent process).

**V. PROJECT MANAGEMENT**

In this Section (maximum one page), describe the anticipated Project Management structure for the proposed project. An organogram may be employed.

Discuss how the Principal Investigator plans to motivate and incentivize collaborators – academic and sectoral - to fulfill their commitments to the research agenda. How will the research results, and challenges that emerge, be communicated to the Principal Investigators and the rest of the research team?

As the leader of the host institution, the University Vice-Chancellor has a crucial role in the success of the proposed project. What support will the university leadership provide to the proposed project?

**VI. IMPLEMENTATION TIMELINE**

The Implementation Timeline is designed to provide an overview of the planned research activities of the proposed project. For this purposed develop a Gant Chart to demonstrate how the project will proceed in a timely fashion. Then, in the Table below, identify up to five major tasks and deliverables planned for each year of the proposed project. In all aspects, disparate activities should link together to result in a coherent work plan that achieves the objectives of the proposed project.

In addition to the Gantt chart and the Table, this Section can include a narrative (maximum two pages) that provides further details on the Implementation Timeline.

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| **Bi-Annual ONE** |
| **Major Tasks and Deliverables** |
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| **Bi-Annual TWO** |
| **Major Tasks and Deliverables** |
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**VII. PHYSICAL RESOURCES AND FACILITIES**

In this Section (maximum two pages), describe the physical resources and facilities that are available to the proposed project. Be sure to comment on how these resources and facilities will enable the work plan of the proposed project to be accomplished. Please mention Equipment available for the research project in the host university/institution and which is not available.

This information is used to assess the capability of the organizational resources available to implement and/or develop your project. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical and Other). If appropriate, indicate their capacities, pertinent capabilities, relative proximity and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work.

In this Section, be sure to identify major anticipated equipment expenditures as part of the proposed project. Include preliminary cost estimates and a plan for maintenance costs both during the lifetime of the proposed project and after the project funding concludes

**VIII. SCIENTIFIC PERSONNEL**

In this section please provide the details of available of scientific personnel and required scientific personnel. (Engagement of research students is encouraged)

**IX. PRINCIPAL INVESTIGATOR’S AVAILED RESEARCH GRANT DETAILS (IF ANY)**

In this section PI will provide one-page summary of each research project completed, on-going or Submitted (to HEC or any other funding agency) as PI or Co-PI.)

In the table below please provide following information:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. # | Title of Project  | Initiation date | Completion date | Amount(s) awarded | Funding source(s) |

**X. RISK MANAGEMENT STRATEGY**

In this Section (maximum two pages), describe the Risk Management Strategy that will be employed by the proposed project.

Frist consider the potential risks that could imperil the progress and success of the proposed project, and describe the strategy and process that will be used to minimize and address these risks.

Second, describe the strategy that will be used to identify, mitigate and address those unexpected risks that emerge during the project lifetime.

In both contexts, discuss how the Principal Investigator will work together with the institutional leadership to implement the strategy.

**XI. LIST OF REFERENCES**

Proposals should follow accepted academic practice in citing references throughout the proposal. References should numbered sequentially, and listed separately as a required attachment to the proposal. References should be reported in a standard form, and include:  the names of all authors; the article and journal title; book title; volume and page numbers; and year of publication. If available, a Digital Object Identifier (DOI) may be provided.

1. **PROPOSED PROJECT BUDGET**

Complete the Budget Table provided below. Additional rows may be added in each category as required. Please refer to Budget Guidelines available on HEC Website for details of each budget head.

* For Major Equipment, identify the proposed equipment and the anticipated cost. Provide details in the narrative indicated below.
* Provide a broad description of the supplies that will be purchased.
* For Travel, provide details of anticipated travel in the narrative indicated below.
* For Other Costs, describe in some detail any other costs in the Budget narrative indicated below.

In addition to the Budget Sheet, this section can include a narrative (maximum two pages) that provides further details on the proposed budget.

# **XIII. REQUIRED ATTACHMENTS**

1. Ethical Certificate duly signed by Ethical Research Committee
2. Declaration Certificate duly singed and stamp by PI of research proposal, Director ORIC and Head of institute
3. Endorsement Form duly singed and stamp by PI and Co-PI of research proposal, Director ORIC and Head of institute
4. Curriculum Vitae of the following individuals:
	* Principal Investigators
	* Academic or sectoral collaborators who will contribute to the proposed project
	* The CVs should be of a standard form (maximum two pages) and include the following information:
		+ Full Name
		+ Position/Title
		+ Institution
		+ Professional Training/Education
		+ Chronological List of Positions
		+ List of up to five publications related to the proposed project, in standard citation format
		+ List of up to five activities related to the proposed project. These activities may include: current or previous grants; teaching; collaborations; leading workshops/conferences; consulting; etc.

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