



गण्डकी प्रदेश विज्ञान तथा प्रविधि प्रतिष्ठान

पोखरा

लागत साझेदारी सम्बन्धी सूचना

(सूचना प्रकाशन मिति: २०७९/०५/१५)

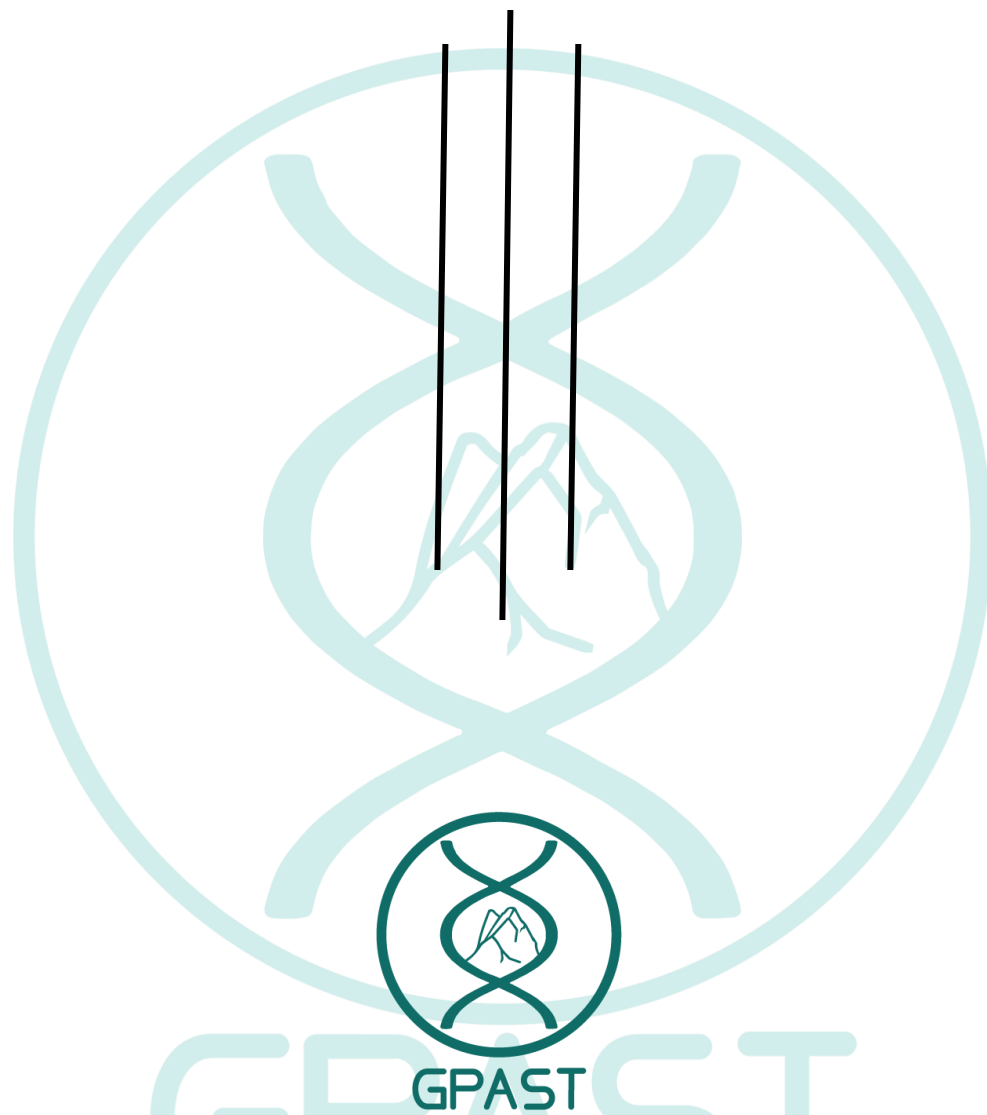
"वैज्ञानिक अनुसन्धान प्रवर्द्धनका लागि लागत साझेदारी मापदण्ड, २०७८" बमोजिम यस प्रतिष्ठानको वार्षिक बजेट तथा स्वीकृत कार्यक्रम बमोजिम यस प्रतिष्ठान सँगको लागत साझेदारीमा **औद्योगिक उत्पादनको अनुसन्धान तथा विकास (R&D, Prototype/Model/Design)** गर्नको लागि योग्यता पुगेका वैज्ञानिक खोज/अनुसन्धान/अध्ययनमा संलग्न संघ, संस्था तथा विज्ञान अध्यापन हुने अध्ययन संस्थानहरूले आवश्यक कागजातसहित यो सूचना प्रकाशन भएको मितिले ३० (तीस) दिनभित्र यस प्रतिष्ठानमा आवेदन दिनुहुन यो सूचना प्रकाशन गरिएको छ ।

थप जानकारीको लागि प्रतिष्ठानको Email : info.gpast@gandaki.gov.np,

Website : <http://gpast.gandaki.gov.np/> वा ९८५६०८६८४६ मा सम्पर्क गर्न सकिनेछ ।

Scientific Research Promotion Collaboration Program

Terms of References (TOR)



**Gandaki Province Academy of Science and
Technology**

Pokhara

The logo for GPAST (Gandaki Province Academy of Science and Technology) is a large, light blue watermark in the background. It consists of a circle containing a stylized 'X' shape formed by two curved lines. Below the circle, the letters 'GPAST' are written in a large, bold, sans-serif font.

Activity Summary:

Program Name : Scientific Research Promotion Collaboration Program

Activity Title: Industrial Production Research and development

Implementation Office: Gandaki Province Academy of Science and Technology, Pokhara

Total Estimated cost: Rs. 25,00,000/- including VAT and income tax

Starting Date: Immediately after the Work order

Completion Date: Jestha 15 of 2080 (there will be no extension)

Target: Prototype/Model/Design and R&D of Industrial Product.

Background :

Gandaki Province Academy of Science and Technology is an autonomous governmental organization established in 2076 by the Gandaki Province Government to promote the Sciences and bring about development, prosperity and improved service delivery by introducing science-based solutions to economic, social and environmental aspects of the development. The academy aims to advance STI, including Biotechnology, Pharmaceuticals, Nutraceuticals, IT, Artificial Intelligences, Environment, Conservation, Climate Change, Health, Life Sciences, Natural Sciences, Mathematics, Engineering, Sustainable Agriculture, Tourism and Energy. The academy is committed to advancing the natural and developmental agenda of the Province. As an important government organization, it involves relevant government institutions, ministries, universities and other organizations to achieve its goals and advise the government on evidence-based policymaking.

To achieve its goals, the academy wishes to actively engage researchers and research institutions in all of the academy's scientific works. Furthermore, it aims to enhance scientific research on areas of particular importance with the active participation of scholars from all disciplines within Gandaki Province.

Through the financial and technical collaboration on research with individual researchers and private sectors academy plans to coordinate activities of various agencies and institutions, governmental as well as non-governmental, engaged in research and development. For maintaining uniformity and transparency in financial and technical collaboration Gandaki Province Academy of Science and Technology has approved '**Collaboration for Scientific Research promotion Criteria, 2078**'.

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Objectives of the Program

The General objectives of this program as a part of the GPAST's research program is to:

- Promote and support local researchers in Gandaki Province.
- Technologies development as a solution to address issues in Nepal.
- Develop an industrial product and technology.
- Raise the research capacity of researchers and research institutions.
- Promote research collaboration among different stakeholders.

The Specific objectives of this program are to prepare :

- Develop Data, designs, figures, prototypes, models, and standardization of industrial products, along with the factory designs of low-cost portable machinery
- Standardization of traditional technology, production and industrial products.

Available Research Project/Programs

Industrial product development thematic Project/Programs in accordance with annual programs of GPAST for Fiscal Year 2079/80 has been selected for scientific research collaboration with individual researchers and research institutions.

Scope of Research Project / Responsibilities

- Space to be provided/selected by the principal institution (applicant's host).
- Suppose a part of the project is to be carried out in another institution. In that case, it has to be mentioned in the proposal, and any changes/deviations made during the research should be notified to the academy.
- Priority will be given to the PI from academia, who proposes to provide either Bachelor's or master's thesis projects (individual or group).

Budget plan

- 50% of the grant can be used to purchase specific equipment.
- 15% of the project should be used to buy consumable chemicals, reagents and machinery equipment/parts required for the project.

- 20 % of the budget can be spent on Human resources (priorities will be given to proposal where the host institution supports the human resource and provide space to carry out the research work)
- 10% of the project can be used for the inception/presentation seminar, report preparation, publication, and dissemination.
- 5% for safety and waste management.
- The current expenditure cost can be transferred to capital expenditure in consultation with the academy but not the other way around.

Selection Criteria

Following Considerations will be made while selecting the proposal according to the **Collaboration for Scientific Research promotion Criteria, 2078**. The template provided by the academy should be used for applying the proposal.

1. Infrastructural capacity

- Relevance of researcher's background (qualification and ongoing research) with proposed project.
- Infrastructure available for the research project, including laboratory, machineries and equipment.

2. Technical ability

- Ongoing involvement in research activities related to the proposed project
- Human resource available

3. External collaboration

4. organizational capacity (Ongoing research activity)

5. Research Plan.

The following criteria will be considered for the evaluation of the research proposal.

- Commercial potential to lead to a marketable product, process, or service
- Innovativeness & differentiation (technology, business model)
- Scalability (including technology, dissemination possibilities, Impact & Sustainability)

List of the documents to be attached with the proposal:

1. Cover letter

2. Bio-data / CV of professional team members and resource persons with supporting staffs.
3. Research Plan
4. Registration certificate with renew and PAN/VAT (if applicable)
5. Audit reports and vat clearance letter (if applicable)
6. Acceptance letter from Collaborating partner organizations indicating total contribution.
7. List of ongoing projects
8. other relevant documents , if any

Team Composition

For completing the assigned tasks, the research team shall include the following personnel with academic qualifications and professional experience.

S.No	Researchers	Qualification	Experience	Remarks
	Team Leader			
	Supporting Staffs			

Evaluation

Draft Report should be sent before Jestha 15 to Evaluation Committee through GPA ST. The selection committee will form an evaluation committee from the scientists listed in the scientific committee of GPAST for evaluation subjectively. The evaluation committee might give suggestions and feedback in the final presentation, if needed. The final Report should be sent to the evaluation committee within 1st of Asar (There is no provision for an extension of the deadline).

Evaluation will be done on a merit basis by the selection committee based on criteria set by the 'Collaboration for Scientific Research promotion Criteria, 2078'. The selection committee holds the right to form sub-criteria of evaluation criteria and Sub committee for expert consultation during the evaluation process. Furthermore, the selection committee may appoint scientists from the GPAST Scientific committee and Scientists of GPAST (Laboratory) for the Evaluation of the Research Plan subject to rule 13 (5) of the Criteria 2078 according to subjective expertise.

A maximum collaboration grant of 10 lakhs will be provided with a minimum of 20% of the total proposed budget to be contributed by collaborating organization.

GPAST holds the right to provide full or partial grants to the proposed project. Marks obtained from the Evaluation and the Number of grants to be provided will be considered while deciding the percentage of the grants to be provided.

Time Schedule

The project duration is six months from the date of the contract signing. The following table gives the indicated time for executing the activities mentioned in the ToR. The Researcher shall prepare and submit the following reports to the Client within the prescribed time

S.N	Reports	Duration	No. of Copy	Minimum Contents of the Report
1	Inception Report	2 months after the contract sign	1	Detailed work plan, methodology, conceptual plans

2	Midterm Report	Two months after submission of the inception report	1	Preliminary conceptual design with detailed methodology.
3	Draft Report	1 Month after Mid Term Report	1	With Results
3	Final Report	2 week after submission of draft report.	3	Final Document as per TOR with one copy Color Print including 3 sets with the digital copy.

Mode of Payment

This is a contract for the delivery of a defined set of outputs. Payments are made at percentages of the total contract value based on the researcher's satisfactorily achieving the key milestones. Payments will be made after the submission of the Researcher's invoices according to the following schedule:

- 30% of the contract amount after submission of the Inception Report
- Up to 80% in the purchase of equipment on a Running Bills basis.
- The remaining 20% of the contract amount upon acceptance of the Final Report. *(This amount is subjected to the final evaluation of the project. Evaluation committee may recommend to release full or certain percentage of this amount according to the evaluation criteria set by the committee)*

Expected outputs

Concrete, technically sound, implementable, complete, and acceptable five hard and electronic copies of the research report with sufficient data, designs, figures, prototypes and models with factory designs, etc. shall be submitted by the Team leader.

Proposal Template

Topic/ Title		
Researcher/Team Leader	Name	
	Organization	
	State	
	Mobile no.	
	E-mail	
Key Words		
Project Period		
Total Budget		
<u>Abstract</u> <i>(within 300 words)</i>		

1. Infrastructural Capacity

1.1 Relevance of researcher’s background (background and ongoing research) with the proposed project.

**Attach Supporting Documents*

1.2 Infrastructure Available for the research project, including laboratory, machinery, and equipment.

**Attach Supporting Documents*

2. Technical Capacity

2.1 Ongoing involvement in research activities related to the proposed project

**Attach Supporting Documents*

2.2 Human resources available

**Attach Supporting Documents*

3. Collaboration (financial & technical)

**Attach Supporting Documents*

4. Organizational capacity (ongoing research activity)

**Attach Supporting Documents*

5. Research Plan (as per template; see below)

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Research Plan Template

(For the evaluation purpose in accordance with the Clause no. 13 (5) of Collaboration for Scientific Research promotion Criteria, 2078)

1 Overview

1.1 Background

1.1.1 Problem

- Focus on the issues of economic, social and, environmental in Nepal. The problems that you would like to solve.
- Explain the problems you would like to solve.

1.1.2 Solution

- Describe the existing methods to solve the problem and explain how you will solve the problem.

1.2 Final Product

1.2.1 Product Concept

- Describe clearly the products you will develop.
- Explain what technology you will develop, how you will develop this technology and what are its uses
- The primary target customer should be included.
- Write down whether the technology already exists or is in the development phase on the market. And describe how your products will differ from what is in the market.

1.2.2 Final Product Design

- Describe the features, including pictures, drawings, function, raw materials, etc. technical specifications should be included.
- Sketches, diagrams, and tables can be used to describe the final products.

1.3 Resource

1.3.1 Technology

- Does your team have the core technology? If yes, describe the core technology of the products briefly and if not, describe how you will have the core technology

1.3.2 Competitiveness

- Describe the resources you currently possess for this project.
- Explain how you will take advantage of your current resources to compete with your rivals.

2 Technology

2.1 Technical Standard

2.1.1 Item's Technical Process of Development, Technical Trend, and Prospect

- Find out what technical standards and trends are related to the developed product.

2.1.2 Industrial Property Right

- Check the patent situation, including background patents and the potential for new patents.

2.2 Creativity and Practicability

2.2.1 Differentiation Factors and Strong Point

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2.2.2 Technical Solution Plan (Technology and Business)

- Define the core technology to be provided to promote commercialization. And describe the skills needed to achieve commercialization
- Will the proposed product meet current and/or emerging standards?

2.3 Technology Possession (Relative Technologies)

2.3.1 Intellectual Property Rights and Patent

- Make a list of intellectual property rights and patents. Also include whether your team owns or has Patents, copyrights, and trademarks that can be applied to the products and services

2.3.2 Research Background and Career

- Please note only the background and career associated with product development.

2.4 Beneficiaries

2.4.1 Target Beneficiaries

- Identify your target and general beneficiaries.
- You can find the customer needs from the current limitations of the products. For example, current limitations could include: high cost, sub-optimal performance, lack of attention to specific market opportunities, e.g., poor suitability to high-or-low-end markets, size, compatibility, nonconformance to standards, etc.

3 Social Impact

3.1 Environmental and Social Impact

3.2 Expectations from Social Impact

- There are several ways you can create a social impact through the business.
 - Environment, Health, Energy, Employment, Education, Human Rights, etc.

4 Research Action Plan

4.1 The Project Goal and objective

4.1.1 The Project Goal

4.1.2 Technology Development Objectives

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4.2 Strategies

4.2.1 Product Development

4.2.2 Prototype Testing

4.2.3 Human Resources

4.3 Implementation Schedule

- Project Flow Chart
 - Maximum 6 months

4.4 Team Building and Organization

4.4.1 Team Structure

- Describe the role and work of the team.

4.4.2 Institution

- Name
- Facilities and equipment to support the project

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5 Financial Information

5.1 The total budget plan including external collaboration (if applicable) and contribution.

S.No	Components	Unit	Rate	GPAST Contribution	Institution Contribution	Remarks
	Machinery					
	Equipments					
	Human Resource					
					
					
					
Total						



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