

REQUEST FOR PROPOSAL

Exploring the potential and opportunities for India to become a global manufacturing hub for smart protein processing equipment

Issue Date: February 4, 2025

Pre-Proposal Question and Intent to Bid Deadline: March 3, 2025

Proposal Deadline: March 10, 2025

Primary Contact: Aakashraj Bhople, indiacollab@gfi.org

DESCRIPTION: Through this Request for Proposals (RFP), the Good Food Institute (GFI) India seeks proposals from qualified research and consultancy firms to explore the potential and opportunities for India to become a global manufacturing hub for smart protein processing equipment (specifically plant-based protein processing equipment) and provide strategic recommendations for producing cost-effective equipment locally. This initiative aims to address the high capital and operational costs of plant-based protein processing equipment and understand the major barriers to the scale-up and profitability for the smart protein sector in India. The project will focus on equipment like extruders, separators, and drying systems essential for the plant-based protein sector, aiming to reduce overall processing costs by leveraging India's natural resources, trained workforce, and supportive government policies. The project must be completed within six (6) months from the date of the formal awarding of the contract and will be fully funded by GFI India.

The maximum estimated cost for this project **is up to ₹35,00,000** (inclusive of taxes and expenses).

REQUIREMENTS: Solicitation documents (including any/all Addenda issued by GFI India) will be provided via email by the Primary Contact listed above. Proposals must be sent via email to the Primary Contact listed above by the due date and time specified. No hard copy submissions. Late proposals will not be accepted.

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RFP INSTRUCTIONS

- 1) **PRE-PROPOSAL INFORMATION:** In preparing proposals, Respondents are advised to rely solely upon the contents of this Request for Proposal (RFP), its accompanying documents, and any written clarifications or Addenda issued by the Primary Contact listed on the cover page of this RFP. If any changes are made to this RFP document by any party other than GFI India, the original RFP document and associated Addenda in GFI India's files shall take precedence.
- 2) **QUESTIONS AND CLARIFICATIONS:** If a Respondent finds a discrepancy, error, or omission in the RFP package or requires any written clarification thereto, the Respondent may notify the Primary Contact listed on the cover of this RFP.
- 3) **MODIFICATIONS/ADDENDA:** Clarifications, modifications, or amendments may be made to this RFP at the sole discretion of GFI India. Any and all Addenda issued by GFI India will be sent via email to those Respondents that submit a timely Letter of Intent to Bid. It is the responsibility of the Respondent to obtain the available Addenda and acknowledge them on the Proposal Form of this RFP. Failure to acknowledge Addenda may result in the proposal being deemed non-responsive and rejected without further evaluation.
- 4) **PROPOSAL SUBMISSION:**
 - a) Proposals must be submitted via email to the Primary Contact by 5:00 pm IST, March 10, 2025. Late proposals will not be accepted.
 - b) A single PDF file is preferred for submission. However, multiple PDF files are acceptable if a single PDF exceeds the attachment size limits.
 - c) Submission of a proposal establishes a conclusive presumption that the Respondent is thoroughly familiar with this RFP and that the Respondent understands and agrees to abide by the stipulations and requirements contained herein.
 - d) Respondents who have worked for GFI India in the past are not exempt from submitting required documents or meeting other requirements listed in this RFP.
 - e) All costs incurred in preparing and presenting the proposal are the Respondent's sole responsibility. No pre-proposal costs will be reimbursed. All documentation submitted with the proposal will become the property of GFI India.
 - f) All submitted proposals must remain valid for a minimum of ninety (90) days from the final submission date.
 - g) Proposals must be submitted on company letterhead.
 - h) Proposals must be signed by an authorized signatory of the Respondent. Each signature represents a binding commitment of the Respondent to provide the goods and/or services offered if they are awarded the contract.
- 5) **WITHDRAWAL:** Proposals may be withdrawn prior to the proposal deadline. Proposals may not be withdrawn after that deadline.
- 6) **REJECTION:** GFI India reserves the right to reject any/all proposals or to accept or reject any proposal in part and to waive any minor irregularity in proposals received if it is determined by the Primary Contact to be in the best interest of GFI India.

- 7) **CONTRACT AWARD:** GFI India reserves the right to award by item, group, or total proposal to one (1) or more Respondents, a group of Respondents, or a combination, whichever is in the best interest of the execution of the project to the optimum quality-to-cost ratio. The successful Respondent(s) will be notified of GFI India's intent to award the contract at the earliest possible date.

STATEMENT OF WORK

1) BACKGROUND AND PURPOSE: The high costs of procuring and operating processing equipment for smart proteins (specifically plant-based proteins), are significant barriers to the growth and profitability of the alternative protein sector globally. Given India's abundant natural resources (such as steel, coal, aluminium, and copper), a skilled workforce, and supportive government policies for capital goods manufacturing, the country is well-positioned to manufacture this equipment locally.

This project aims to analyse the current manufacturing capabilities in India for plant-based protein processing equipment and provide strategic recommendations to manufacture cost-effective equipment, thereby reducing overall processing costs for plant-based protein ingredients and products.

2) CORE OBJECTIVES

- Conduct a comprehensive analysis of the current manufacturing capabilities in India for plant-based protein processing equipment, focusing on extruders, separators, and drying systems.
- Identify gaps in existing capabilities and explore opportunities for producing cost-effective plant-based protein processing equipment locally.
- Assess the interest, readiness and bottlenecks of global and local equipment manufacturers to participate in the Indian plant-based protein processing equipment manufacturing sector.
- Develop detailed actionable recommendations for government and corporate stakeholders, outlining the potential benefits of supporting this sector and making recommendations for creating a favourable manufacturing environment.

3) SCOPE AND DESCRIPTION OF WORK:

The project will prioritise the development and improvement of key processing equipment specifically for plant-based protein ingredients and products with a focus will be on extruders, separators, and drying systems, which are crucial for the sector.

- Extruders:** Essential for texturising plant proteins to mimic animal protein textures. The goal is to reduce the cost of twin-screw and high-moisture extruders, which are currently expensive and have limited local manufacturers.
- Separators:** Includes filters, air classifiers, decanters, and centrifuges for purifying and isolating protein extracts. The aim is to localise the production of components currently imported, such as filtration membranes.

- iii) **Drying Systems:** Spray dryers, flash dryers, fluidised bed dryers, and freeze dryers are critical for making powdered protein isolates and concentrates, extending shelf life, and improving the convenience of storage and transport.

Other food processing machinery, such as reactors, mixers, blenders, and packaging machines, are not included in the scope due to the existing strong local manufacturing presence.

DETAILED DESCRIPTION OF WORK:

Informed by the initial tasks of mapping the landscape and engaging stakeholders, a thorough analysis of India's current manufacturing capabilities for plant-based protein processing equipment must be conducted. This will involve the following key activities (not necessarily in the sequence as listed below):

1. Review of current manufacturing capabilities
 - Task: Detailed review of current facilities/companies in India that have suitable traits/capacities/expertise for manufacturing plant-based protein processing equipment, specifically extruders, separators, and drying systems.
 - Outcomes:
 - Identification of facilities/companies capable of producing the targeted equipment.
 - Analysis of their existing capabilities, including production capacity, technological expertise, and resource availability.
 - Documentation of the geographical distribution of these facilities.
2. Identification of technological and operational gaps
 - Task: Identify and document the technological bottlenecks and operational gaps that prevent existing facilities from manufacturing high-quality plant-based protein processing equipment cost-effectively.
 - Outcomes:
 - List of specific technological and operational gaps.
 - Analysis of the feasibility of overcoming these gaps with existing resources and capabilities.
 - Recommendations for technological upgrades or process improvements needed to fill these gaps.
3. Assessment of stakeholder interest and readiness
 - Task: Assess the interest, readiness, and challenges of global and local equipment manufacturers to have plant-based protein-related equipment manufactured in India.
 - Outcomes:
 - Evaluation of the level of interest and potential commitment from manufacturers.
 - Identification of potential partners and collaborators within the sector.
 - Discussion on feasible models for local manufacturing—considering cost, resource requirements, partnership types (such as JV), and timelines.

4. Analysis of economic and policy environment
 - Task: Analysis of the economic and policy environment in India that supports the manufacturing of plant-based protein processing equipment.
 - Outcomes:
 - Analysis of current government policies, incentives, and initiatives that support capital goods manufacturing.
 - Review of the economic benefits of local manufacturing, including cost savings and potential job creation.
 - Recommendations for additional policy measures to enhance the manufacturing environment for plant-based proteins
5. Technical data compilation
 - Task: Gather technical data on the required equipment and conduct a feasibility study for local manufacturing.
 - Outcomes:
 - Technical specifications for extruders, separators, and drying systems required to cater to the global plant protein industry.
 - A note on innovative design opportunities to improve the versatility and adaptability of above mentioned equipment for applications in the plant-based sector and allied food processing industry.
6. Development of strategic recommendations based on analysis of data collected
 - Task: Develop strategic recommendations for the government, corporate stakeholders, and scientists/engineers in academic and research institutes to harness indigenous design capabilities and support the manufacturing environment for plant-based protein processing equipment in India.
 - Outcomes:
 - Comprehensive strategic recommendations across policy, businesses, and R&D.
 - Action plan outlining steps to implement the recommendations.
7. Final report and presentation
 - Task: Compile all findings, analyses, and recommendations into a final report and prepare a presentation to communicate the results to stakeholders.

4) PROPOSED FINAL DELIVERABLES:

1. **Inception report:** An 8-10 page document outlining the study design, data collection and analysis methods, and a work plan along with timelines.
2. **Interim report:** A 15-20 page report providing preliminary findings, progress updates, or any course correction.
3. **Final report:** A 45-50 page final report, including all data, analyses, and recommendations corresponding to the detailed work description shared.

4. **Raw data:** The consultant must share all raw data (qualitative and quantitative), information collection templates, etc. generated over the course of the project.
5. **Presentation:** Slide deck(s) for presenting the findings to government and corporate stakeholders.

5) TIMELINE AND BUDGET

GFI India’s maximum estimated cost for the project is **INR 35,00,000**. Cost competitiveness within this budget to be submitted as the financial proposal will be an important factor in the scoring assessment during the evaluation.

We seek to begin the project in April 2025 and anticipate it to last for **six months**. This does not include the additional time required for the consultancy to participate in a webinar after the report is published (approximately 4–8 weeks after the work is completed).

The following project phases are guidelines for the release of payment:

Milestone	Timeline	Payment (subject to approval of the deliverable)
Formal awarding and acceptance of the contract	On contract signing	10 percent of the total contract amount
Inception report: Study design, methodology and work plan	3 weeks after date of contract signing	—
Interim report with preliminary findings and updates	16 weeks after the date of contract signing	30 percent of the total contract amount
Final report submission along with presentation	24 weeks after date of contract signing	60 percent of the total contract amount

6) EVALUATION CRITERIA AND SUBMISSION REQUIREMENTS

1. **EVALUATION:** Proposals will be evaluated on merit and completeness by an Evaluation Team. Proposals will be evaluated using the following criteria:
 - Qualifications, experience, and expertise of the consultant **(20 percent)**
 - Technical proposal **(50 percent)**
 - Financial proposal **(30 percent)**

The Evaluation Team may consider the past performance of the Respondent on other contracts with GFI India (if any). GFI India reserves the right to conduct additional due diligence as deemed necessary and may require the submission of additional information at its sole discretion.

2. **GENERAL PROPOSAL REQUIREMENTS:**

- **Electronic proposal:** Send proposals by email to the **Primary Contact mentioned on page one** of this RFP by *insert date*. Late proposals will not be accepted.
- **Proposal format:** It is preferred that proposals are assembled in the order of *specific proposal requirements* listed below. Applicants may submit one single PDF file only.

3. **SPECIFIC PROPOSAL REQUIREMENTS:** Failure to include a complete response to each of the following items, which are specific to proposal responsiveness and to the RFP's Evaluation Criteria, may result in the proposal being deemed non-responsive:

- **Technical proposal:** Project plan that responds to the scope of work with discussion on study design and methodology proposed. Also, provide a detailed timeline, including intermediate milestones, that shows the Respondent's ability to work within the timeline specified. This will account for 50 percent weightage during proposal evaluation.
- **Financial proposal:** Provide a detailed budget breakdown for the entire study, including personnel costs, travel expenses, data collection, analysis, reporting, and any other relevant expenses. As mentioned earlier, cost competitiveness within the provided maximum estimated cost of \$40,000 will account for 30 percent of proposal evaluation.
- **Qualifications, experience, and expertise:**
 - A sample of previous work, ideally related to the food machinery manufacturing or allied sectors.
 - A brief profile of the organisation along with a list of project team members who would be significantly involved, including their CVs, areas of expertise, and proposed roles.
 - Any additional subcontractors that may be used to complete the assignment.
 - References from previous clients.

ABOUT THE GOOD FOOD INSTITUTE INDIA

The Good Food Institute India (GFI India) is the leading organisation and expert convening body for India's emerging smart protein sector. As part of an international network of organisations across the U.S., Brazil, Europe, Israel, Japan, and APAC, we are on a mission to build a secure, sustainable, and equitable global food system for all. Working alongside scientists, businesses, and policymakers, GFI India's team focuses on making alternative proteins delicious, affordable, and accessible. Leveraging India's unique strengths—indigenous crops and agrarian economy, low-cost technologies and infrastructure, abundant talent pool, and biomanufacturing prowess—we are pioneering an ecosystem that can put smart protein on every plate.

By 2050, the world's population will reach 10 billion, nearly a sixth of whom will be Indian. This population growth, combined with rising incomes and urbanisation, is fuelling the demand for protein. Meeting this demand primarily with conventional animal products poses significant risks, further exacerbating environmental degradation and resource depletion, including deforestation, water scarcity, biodiversity loss, and a rise in anthropogenic greenhouse gas emissions.

India's agricultural biodiversity with crops such as pulses, legumes, and oilseeds, as well as abundant coastline with access to resources such as seaweed and algae, have the potential to offer high-value inputs for the global alternative protein industry. By diversifying agriculture toward these climate-positive crops and leveraging cutting-edge technologies, GFI India is unlocking opportunities to scale sustainable protein production while supporting rural workforce development, agriculture resilience, and an economic boost resilience for farmers.

In building the smart protein sector in India from the ground up—through science, business, and policy initiatives that are engaging academia, industry, and government—we are establishing a model for its growth in the global south. Our team of experts provides critical advisory support, drives high-impact research, and builds networks across the smart protein value chain to accelerate innovation and position India at the forefront of the sector.

Our strategy includes advancing public funding for R&D, supporting the techno-commercialisation of smart protein innovation, and promoting a progressive regulatory environment. With one of the world's largest working-age populations, India stands to become a leading hub for talent, training, and innovation in smart protein with the potential to cultivate a high-margin agribusiness sector that benefits millions. At GFI India, we envision a future where smart protein products taste as good as, cost as much or less than, and are as accessible as conventional animal proteins, transforming the food system toward a more just and sustainable model.

CONTACT INFORMATION

If you have questions about your submission or any other pre-bid queries, please contact Aakashraj Bhople (indiacollab@gfi.org)