University of Vermont | Food Systems Research Institute

Sustainability Metrics Project RFP

Introduction

History and Context

The University of Vermont has been a leader in the emerging field of food systems research for more than fifteen years. UVM's Food Systems Research Institute (FSRI), established in 2019, was a result of early investment and focus by UVM leadership, who submitted a request for a congressionally mandated allocation for food systems research funding that was granted in 2019. Since then, the USDA-ARS has made a long-term commitment to food systems research by investing in a Food Systems Research Unit (FSRU) housed on campus—the first of its kind.

The FSRI's Agreement with USDA-ARS specifies that a key goal of the FSRI is to develop an intellectual framework to study food systems over time. As part of that framework, the institute seeks to identify research questions and develop collaborations to address these questions with UVM faculty. The FSRI launched the Sustainability Metrics Project in 2023, in which a collection of diverse research teams, each focused on a distinct aspect of the Northeast regional food system, tested a preliminary framework of metrics for measuring regional food system sustainability. The 3-year term of this initiative is coming to an end, and the FSRI has decided to invite proposals for a second round of Sustainability Metrics projects.

Round Two of the Sustainability Metrics Project

For this second round, the FSRI is interested in teams who will use the Sustainability Metrics framework to develop a replicable set of methods for investigating regional food system sustainability and whose research during the project will contribute to an open-source Sustainability Metrics dataset. To ensure the measurement of all five dimensions of sustainability without over-burdening teams, we do not require any one team to measure indicators from all five dimensions. Rather, we are soliciting two kinds of research teams, each of which will have different responsibilities. The first set of teams will measure Environmental, Economic, and Production indicators in one of three production systems relevant to the Northeast regional food system: Maple Syrup, Dairy, or

Diversified Vegetable Production. The second set of teams will focus on one of two underdeveloped dimensions of sustainability: Human-Health or Social.

Collaboration is integral to the goals of the Sustainability Metrics project. As such, research teams are expected to work closely together. Each production system team will work with both the Human-Health and Social teams, who will in turn be expected to collaborate with all production system teams. Some examples of collaboration might include co-developing survey questions and instruments, sharing baseline demographic and economic questions, leveraging datasets from other teams in secondary or joint analyses, and interpreting results from the perspectives of different dimensions.

Production system teams will work to evaluate the sustainability of the system across multiple locations defined by the teams and identify which of framework indicators are driving (or primarily responsible for) the sustainability outcome. Each production system team should aim to measure all the indicators in the Economic and Environmental dimensions as well as a system-appropriate measure of yield and 2-3 additional production indicators of your choosing. Note: these additional production indicators do not have to come from the Sustainability Metrics Production Dimension indicator list—teams may "create their own" if necessary. Conversely, no new Environmental or Economic indicators will be permitted. If a team anticipates being unable to measure all 23 indicators, they will be expected to communicate which ones they will not measure and justify the decision.

The Social and Human-Health Teams will work to select an appropriate set of indicators and metrics (with justification) to describe the dimension and to measure its sustainability.

Data Management Expectations

An essential part of collaboration is effectively managing data. The FSRI is committed to making findings and datasets from the Sustainability Metrics project open and FAIR to the appropriate extent. This includes making raw data available to other researchers in the Sustainability Metrics project as well as sharing de-identified data publicly by the end of the grant period.

To make this possible, the FSRI expects funded projects to plan ahead for data sharing. This includes collaborating on common demographic forms, timelines for data collection, and accounting for the time it will take to de-identify data. In the case of human-subject studies, information sheets and consent forms should

describe how the data will be shared both among FSRI researchers and with the public. See example language here.

Data sharing among FSRI teams will be managed through the SM Repository, which contains IRB-approved protocols for contributions and withdrawals. PIs will be expected to read and agree to these terms. Data Management and Sharing Plans for individual studies should reflect the plans described above, include the Sustainability Metrics Repository in the Data Sharing section, and avoid data destruction dates unless there is clear reason.

Proposal Description

Project Description

Proposed System and Measurements

The following should be included in all proposals:

1. A description of the production system or dimension of sustainability on which your proposed research will focus.
2. A definition of what sustainability means for your production system or dimension in the context of food systems.
3. 2-3 specific research questions you will investigate.
4. A specific and thorough explanation of how your research will measure sustainability in your dimension or production system.
5. A description of the proposed outputs of your research.
6. A timeline for the three-year project period which includes major activities and deliverables.

Data Collection and Assessment

Successful proposals will produce data that achieves both team-specific goals as well as the goals of the broader Sustainability Metrics project. Proposals should include the following information on data collection plans:

- A description of procedures for sampling, data collection, and cleaning
- A proposal for how data collection efforts can be coordinated among teams
- Expected challenges and contingency plans to ensure project goals are achieved

Data Analysis and Harmonization

Submissions should show evidence that their analytic methods are compatible with their data collection plan and appropriate to answer their research questions. Proposals should include:

- Expected data types, formats, amounts, and how or whether they align with existing ontologies
- Proposed analytic methods, why they are appropriate, and how they will answer the project-specific research questions

Impact/Outcome

Your proposal should clearly state what your team hopes to have achieved after three years of research. Be clear about what you will have learned, who might benefit from these learnings, and how you will share your findings with non-academics.

Team Structure

The FSRI is guided by the principles of transdisciplinary and cross-functional work and is committed to inclusive dialogue and working alongside communities. Submissions should include a thorough description of a team structure which satisfies these requirements by including:

- A description of the main members of the team and their specific roles, including that of PIs, co-PIs (if applicable), and a postdoc.
- For production system teams: an explanation of how you will engage with the Social and/or Human-Health teams with specific examples, such as those provided in the introduction.
- For Social and Human-Health teams: an explanation of how you will engage with the production system teams.
- The names of your intended community partners and how you will engage with them throughout the research process.

Budget and Justification

All reasonable research expenses are allowable under this RFP, except tuition and fees and stipends for Graduate students. Budgets may request no more than USD 654,000 for the project duration, inclusive of two years of post-doctorate funding.

There is no overhead included in these requested costs. All budgets must utilize the SPA-approved budget template and be reviewed by a SPA pre-award specialist prior to submission.

Salary: Principal investigators, co-PIs and key personnel may include both academic and summer salary in these proposals. Minimum academic salaries must be met before PIs and co-PIs can take summer salary. Minimum and maximum salaries are per proposal; individuals may be listed as key personnel or co-PI on multiple proposals but may only be PI on one proposal.

Minimum salaries that must be included for all UVM faculty and staff are:

- 6% for academic year for 9-month lead PIs, 4% for 12-month lead PIs
- 3% for academic year 9-month co-PIs, 1% for 12-month co-PIs
- 1% for academic year 9- and 12-month key personnel with UVM

A maximum of one month of summer salary can be included for any individual.

Postdoctoral fellows: Funding for two years of a postdoctoral fellow must be included in the budget, with an estimated minimum annual salary of USD 62,232. Postdoctoral fellow salaries should also include appropriate fringe rates and will be adjusted based on the individual hired and their relevant experience. Note that an optional 3rd year of funding may be available to postdocs of projects in good standing.

Equipment: All equipment requests should follow UVM policy, and include price quotes, as relevant for equipment over price thresholds detailed by UVM: https://www.uvm.edu/finance/ufs/quotes-and-bids.

Other expenses: All other expenses, including materials and supplies, travel, computer services, human subject (s) costs and consultant/lab services (including for community partners) should be detailed in the budget justification. Compensation for community partners for participation within research projects is required; this can occur through a variety of mechanisms and should follow university protocols relevant to how partners will participate in the project (e.g. as human subjects, as farm advisors, etc.).

Subawards: In some cases, subawards may be necessary depending on the nature of community partner relationships. These will be allowed on a case-by-case basis. Please contact Matthew Annis if you are interested in a subaward.

Non allowable expenses: graduate student stipends, tuition and fees.

Assessment Criteria

The proposals will be reviewed against the following criteria:

- **Intellectual merit:** the proposal demonstrates strong scientific understanding and a capacity to make significant contributions to the field. The rigor of the proposed method(s) and the ability to implement the approach.
- **Comprehensive data management:** the proposal shows evidence of preemptive planning for FAIR-first data products that can integrate with other teams across dimensions and scales of analysis.
- **Project expertise within the team:** the extent to which the project personnel have the relevant expertise and background to accomplish the project.
- **Clear plan for collaboration with other teams**: the proposed research plan demonstrates understanding of the importance of collaboration and includes specific examples of collaborative activities.
- **Realistic timeline with clear deliverables:** the timeline and deliverables display strong project management competency.
- **Feasible budgets:** the proposed budget is realistic and efficient.
- **Value of outcomes and contribution to FSRI goals:** the proposed outputs of the research yield actionable insights for stakeholders and clearly benefit the FSRI's Sustainability Metrics project goals.

Submission Logistics

Proposals are due by January 2nd, 2026, at 11:59 PM. They may be submitted only through the InfoReady platform. Proposals should be between 10 and 15 double-spaced pages in length. References do not count towards the page limit.
Please include two-page CVs for all PIs and co-PIs named in the proposal with your submission. CVs do not count towards the page limit.