Regenerative Agriculture for Climate Resilient Farms and Value Chains

Match is optional for this funding opportunity

Key Dates

Pre-Application Open: January 18, 2023 at 12:00pm ET

Pre-Applications Due: February 22, 2023 by 5:00pm ET

NOTE: An approved pre-application with an invitation to submit a full application is required for submission.

Full Application Invitation: March 29, 2023

Full Applications Due: May 24, 2023 by 5:00 PM ET

Award Notification: Summer 2023

Anticipated Project Start Date: Fall 2023

In partnership with [PepsiCo](#), the [AgMission](#)™ initiative, co-created by the [Foundation for Food & Agriculture Research](#) (FFAR) and the [World Farmers' Organisation](#), is launching a funding opportunity for research to accelerate the adoption of Climate-Smart Agriculture (CSA) and improve climate resiliency of farms and food value chains for commodity crops in North America, Australia, Europe or South Africa. AgMission and PepsiCo invite applications to develop paired research and practice implementation projects that identify opportunities for increased adoption of climate resilient practices and document the impact on key physical and economic variables at the farm level. Specifically, this opportunity seeks to identify practices that promote climate resilience and align with regenerative agriculture goals, including building soil health and fertility, reducing greenhouse gas (GHG) emissions, and/or increasing soil organic carbon. Additional regenerative co-benefits of practice adoption may include reducing fertilizer loss to watersheds and increasing biodiversity on working lands. AgMission seeks to award meritorious applications that include both increased implementation of CSA practices on working farms and contribute to scientific understanding of the impact of climate resilience in agricultural production for future food security. Matching funds for this opportunity are provided by AgMission Founding Partner PepsiCo.

Program Priorities and Requirements:

AgMission seeks projects that identify and demonstrate best practices for enhancing the resilience of agricultural systems to climate change, including extreme weather events.

Research should test the use of CSA practices to develop climate resilience to specific potential future climate impacts, while monitoring for any impact on GHG emissions and include a comparison of the CSA practice system to alternative practice systems representing current or historical management in the region. Projects that both drive adoption by producers new to the practice and document the impact of CSA practices on farm economic and/or environmental resilience, including GHG emissions impacts, will be prioritized.

Proposals should focus on agricultural systems that include at least one of: corn, wheat, oats, canola, soy or sugar beets in North America, Australia, Europe or South Africa. The practices or method to identify appropriate practices to be implemented and/or evaluated should be clearly detailed. These practices should be selected to reduce the potential harm of climate change impacts to crop yield and quality, including impacts from increasing temperatures and extreme weather events made more frequent by climate change. We anticipate the selection of practices will form one objective of the research project. Projects should explore questions related to whether and how regenerative practices enhance resiliency to climate impacts. This may include analyses and comparison of previous adoption within a region and/or evaluating the future impacts on the role of regenerative practices in contributing to the resiliency of farms to extreme events and/or other methods and project design.

Successful projects will:

- Collaborate with farmers and agricultural value chain stakeholders in the region of interest and incorporate stakeholder perspectives, questions and concerns in the project design.

- Emphasize close collaboration between researchers and implementor organizations with a track record of direct engagement with farmers to ensure the project generates in-field impact as well as valid research.

- Test strategies and make recommendations on how to effectively increase adoption of regenerative practices with a community of agricultural producers.

- Include monitoring and/or estimation of the GHG impact from the adoption of climate resilient practices and demonstrate increased adoption of CSA practices across the region of study.

- Evaluate the impact of the selected CSA practices on crop yield, crop quality and future security of food supply from the study region.

- Document both the economic and environmental impact of the practices on farm level resiliency.

Projects are encouraged to identify effective methods of engaging with stakeholder communities to further drive adoption of CSA practices across the landscape, and to include a wide range of

farmer demographics in implementation and outreach efforts.

Investigators invited to submit a full application will have access to a Climate Risk Dashboard developed by CGIAR centers that translates climate modeling projections into crop impacts and identifies effective adaptation practices by region. A [webinar](#) describing this tool will be held on January 26, 2023 at 10 am US eastern time. Applicants may also identify alternative existing science-based resources (e.g. USDA Climate Hubs, IPCC reports, University Extension resources, prior research) to inform selection of climate adaptation practices appropriate to building resilience in the crop system of study.

The agricultural producer community should be included in project planning and practice identification stages of the project to ensure relevant experience and producer needs are accounted for. Projects may focus on areas where there has been historically high adoption of these practices to evaluate the longer-term impact on farm resiliency. Alternatively, projects may focus on increasing adoption of practices in a region where they are not yet common. If necessary, projects may include a research and stakeholder engagement process or pull from existing research to identify and/or develop CSA practices for specific anticipated climate impacts.

Targeted outcomes from this research program include the following: generating insights on how documenting climate resiliency can drive increased rates of practice adoption; understanding the benefits at the farm level of early adoption of adaptation practices; evaluating the scale and scope of adaptation needed to ensure resilient food production across supply regions; understanding the GHG impacts of practices implemented for resiliency; and increasing the acreage adopting CSA practices.

Eligibility

AgMission welcomes applications from domestic and international project implementers, higher education institutions, non-profit and for-profit organizations and US government-affiliated research agencies. Collaborative multi-institution applications are encouraged.

Any individual(s) with the skills, knowledge and resources necessary to carry out the proposed research as Program Director(s)/Principal Investigator(s) may apply to the program through their home institution or organization.

Funding Availability and Award Information

At the discretion of the AgMission Executive Committee, we will award up to $6 million in grants through this program with individual projects not to exceed $1.5 million over three years. Successful projects will receive annual disbursements. This RFA seeks proposals that combine practice implementation with scientific research; up to 50% of the budget may be directed towards efforts to increase implementation of adaptation practices with agricultural producers.

Key budget considerations are noted below, and additional budgetary guidelines can be found on our [website](#).

- **Matching Funds are optional for this funding opportunity** but forming collaborative partnerships that provide additional funding/match is encouraged.

These partners may include but are not limited to the private sector, non-profits, commodity and trade groups, state governments and others that do not traditionally work in agriculture.

- **A maximum of 10% of the total award may be used for indirect costs.** FFAR's indirect cost allotment is not an indirect cost rate applied to the total modified direct costs; instead, it is an overall allotment from the Total Funds Request, also known as the Total Project Costs. This requirement means that 90% of the requested funds must go directly to the proposed research.

- **Reasonable budgets work in favor of the applicant**. Budgets that are not commensurate with proposed work or poorly justified will likely negatively affect the application's overall evaluation.

Application Components

Applicants must submit the pre-application using FFAR'S Grant Management System. All information provided will be treated as confidential. The most innovative and cutting-edge projects with significant potential for advancing FFAR's mission will be invited to submit a full application. **Applicants must submit a pre-application to be invited to submit a full application.**

Pre-Application Components
- Grantee (Organization) Information
    - Geographic location (city, state, congressional district) of the applicant organization.
- Program Director or Principal Investigator (name, contact information, demographics, etc.)
- Co-Investigator/s – (if applicable) name(s), affiliation, and expertise
- Key project personnel – (if applicable), please upload a table including the name, institution, expertise, role, email, and phone number of any other Co-Investigators and/or Key Personnel in addition to the three individuals listed in the online application. Table should be uploaded in the Attachment section of the online application.
- Project title (*up to 250 characters*)
- Key Research Areas
- Project timeline
    - Proposed project start date
- Project description
    - How will the project address the challenge of climate resilience and mitigation in agriculture? (*up to 500 words*)
    - What innovative outcomes will the project generate? Describe how the project will address food supply or agricultural sustainability challenges (*up to 500 words*)
    - Why is AgMission ideally positioned to fund this project? (*up to 100 words*)
    - How will the project directly support regenerative agricultural practice implementation efforts? (*Up to 500 words*)
- Budget
    - Total budget request (*FFAR funds + matching funds*)
    - Total FFAR funding request

- o   Total matching funds (*optiona*l)
- Matching Funding partners (if applicable):

Full Application Components

Only applicants with an approved pre-application will be invited to submit a full application.

Required components
- Grantee (Organization) Information
  - Geographic location (city, state, congressional district) of the applicant organization.
  - Program Director or Principal Investigator (name, affiliation, contact information)
  - Key project personnel – name(s), affiliation, and expertise
  - Project title (*up to 250 characters*)
  - <u>Key Research Areas</u>
  - Geographic location (city, state, congressional district) where the proposed research will be conducted.
  - Project abstract (*up to 500 words*)
  - Why is AgMission ideally suited to fund this project? *(up to 100 words)*
  - Goals and objectives (*up to 500 words*)
  - Project description and strategies (*up to 5000 words*)
  - Anticipated outcomes or outputs (*up to 1000 words*)
  - Data management plan (*up to 500 words*)
  - Barriers to adoption of the research outcome(s) (*Note: FFAR strongly encourages applicants to address social and economic factors in the project design, evaluation processes, and outcomes, where applicable.*) (*up to 500 words*)
  - Proposed budget (up to $1,500,000 for up to 3 years; FFAR limits indirect costs to 10% of total award)
    - o   Key project personnel summary – name(s), affiliation, and project role
    - o   Total FFAR funding request (including indirect costs)
    - o   Total matching funds (including indirect costs)
    - o   Budget narrative: Provide a brief overview of the budget by objective in parallel to the approach outlined in the 'project's description. Address costs related to personnel, equipment and facilities, and analytics. (*up to 500 words*)
  - o   Matching Funding partners (if applicable)
  - o   Organization Assurances (if applicable)

- **Required Attachments:** Failure to provide these attachments will disqualify the application.
    - o   Project Description and strategies: **This should be identical to the Project Description provided under the Required Components section of the Full Proposal** but may include graphics, figures, equations, and tables. (*up to 5000 words)*
    - o   References Cited: up to five pages of references cited, which will not count toward the word limit.
    - o   <u>Budget Form</u>

- [PI and Key Personnel Biosketch](): five-page limit per individual listed as PI or key personnel in the project
  - Project timeline (by year)
  - Current and Pending Support Form: complete for everyone listed as PI or Key personnel on the project

- **Optional attachments:** Applicants can upload any of the following as a single PDF document.
  - Matching Fund Verification Letter(s), if applicable
  - Five (5)-slide summary or description of the project
  - Letters of Support: Applicants can provide letters of support for the proposed project, especially from matching funders.
  - Graphics, Figures, Equations and Tables not included in the Project Description: Applicants may upload a PDF document with graphics, figures, tables or a list of equations to support the research program plan. *(Five-page limit).*

How to Apply

Pre-applications and invited full proposals must be submitted by the deadline date through FFAR's online application Grant Management System. Applications submitted outside of this System will not be considered.

To start a **new** application, please click [here](). If you are a new user, register for an account by clicking "Create Account" button located under the email address field on the left side of the home page. Once you log in, you may begin working on your application. Please be sure to save your work often by clicking on "Save and Finish Later." To access a saved application, please do so through your [Grant Management Account]().

Only pre- applications and invited full proposals submitted by the deadline through FFAR's Grant Management System will be accepted and considered eligible for evaluation. To be fair to all applicants, FFAR will not grant extensions to applicants who missed the deadlines posted in the Key Dates section.

Additional Information

Review Process

Pre-Application Review: Submitted pre-applications undergo an internal peer review by experts from AgMission partners, including FFAR, the World Farmers' Organisation, PepsiCo and others, to assess each project's relevance to the RFA, and whether the application demonstrates the potential to meet the evaluation criteria and alignment with AgMission program priorities. The most innovative and cutting-edge projects with significant potential for advancing FFAR's mission will be invited to submit a full application. ***Applicants must submit a pre-application to be eligible to submit a full application.***

Full Application Review: Full proposals undergo a two-tiered review process. First, a panel of three to six external peer reviewers assesses the technical merit and feasibility of the proposal. Then an advisory committee, including program sponsors, considers the reviewer comments to

evaluate which proposals fit best with program objectives.

All external reviewers must agree to and adhere to the terms outlined in 'FFAR's Conflict of Interest Policy and Non-Disclosure Agreement. FFAR makes reasonable efforts to ensure that applications are not assigned to reviewers with a potential conflict with the applicant, institution or project personnel. Reviewers with a conflict of interest are recused from evaluating or participating in the related discussions. Each stage of the review is conducted confidentially, and as such, FFAR is responsible for protecting the confidentiality of the contents of the applications.

Evaluation Criteria

All proposals will be screened for relevance, accuracy, completeness and compliance with FFAR policies. Pre-applications must demonstrate the potential to meet the evaluation criteria. A central tenet of AgMission is that research involving agricultural practices should be co-created with producers. Projects must include a planning component that includes outreach and engagement with relevant farmers.

Full proposals then will be evaluated on the following criteria:

Novelty, Innovation and Effectiveness (20%)
- Does the proposed project innovatively explore how to drive farmers' or landowners' adoption of regenerative practices by strategically integrating social and biophysical sciences?
- Does the proposal clearly demonstrate that the research has not been done elsewhere?
- Has the applicant demonstrated that the implementation approach is effective at achieving practice adoption by agricultural producers?

Technical Merit and Feasibility (30%)
- Does the proposal clearly outline the aims and objectives?
- Does the proposal include appropriately thorough, tractable and feasible methods?
- Has the principal investigator assembled a qualified research and implementor team with access to appropriate technical support?
- Does the proposal present a tractable timeline and budget?
- Does the proposal include adequate risk evaluation and a mitigation plan?
- Does the proposal include an adequate data management plan with a commitment to FAIR data principles?
- Does the proposal clearly demonstrate alignment between practice implementation and research design?
- Does the proposal contain a sufficiently flexible design to be able to respond to changing realities on the ground?

Impacts and Outcomes (30%)
- Is the project likely to increase agriculture resilience in the crop system of focus?
- Does the applicant plan to advance opportunities for practice implementation developed in their research?
- Does the proposal adequately describe the impact and applied relevance of the research?

- o Does the proposal emphasize scalability and present a plan for disseminating the project outcomes?
- o Does the project identify how they will monitor resulting GHG impacts in practice adoption?
- o Does the proposed project provide training for the next generation of scientists?
- o Does the proposal include an outreach plan to make results available to a broader community, including historically underserved communities and Minority Serving Institutions?

Investigator (20%)
- o Are the PI and their team well suited to perform the research?
- o Is the effort committed sufficient to perform the proposed research?
- o Will this research project serve as a platform for advancing implementation?
- o Do the PI and their team have institutional and outside organization support essential to the proposed project?
- o Does the project team have a track record of successfully engaging with farmers to accelerate adoption of regenerative agricultural practices?
- o Does the project team have local knowledge of the region of the proposed work? Do they have a sound understanding of the local context?

Award Administration

Selection Notice: Following the full application review process, the principal investigator and the authorized organization representative listed on the project will be officially notified by email of the status of the application. If an application is selected for funding, FFAR reserves the right to request additional or clarifying information for any necessary reason. Potential grantees are free to accept or reject the Grant Agreement as offered.

Intent to Fund Notification: FFAR notifies applicants of their awards through email. The notice does not constitute an award or obligate funding from FFAR until there is a fully executed Grant Agreement. FFAR encourages applicants to review a sample Grant Agreement before applying to ensure they know the terms under which grants are offered.

Post-award Management

Annual Reporting Requirements: After FFAR confers a grant, the grantee must provide annual scientific and financial progress reports. The report should include 1) activities carried out under the grant relative to the anticipated timeline presented in the grant application, 2) planned vs. actual budget expenditures, and 3) match verification. The report also should highlight project accomplishments. Additional reporting of the level of adaptation practice adoption may be requested on a sub annual timeframe. Awardees will be provided with access to the required online forms.

Final Report Requirements: Within 90 days of completing the project, the grantee shall provide a final project report. This report should address the project objectives outlined in the original grant application, describe any modifications to the project objectives and scope, present the results and interpretation, describe the final project accomplishments, and include a final project accounting of all grant funds.

Scientific Integrity: FFAR strives to advance knowledge and the application of science to

address challenges related to food supply and sustainable agriculture. 'FFAR's ability to pursue its mission depends on the integrity of the funded science projects and programs. All FFAR grants must be conducted with the highest standards of scientific integrity.

Contact Information

For questions related to the online submission system, please contact FFAR's Grant Management team at grants@foundationfar.org.

For AgMission Initiative programmatic questions, please contact Allison Thomson, Scientific Program Director at athomson@foundationfar.org.

FFAR strives to respond to inquiries within two business days, but our response time depends on the volume of questions received and the complexity of the questions asked. Please note that we do not monitor mailboxes on evenings, weekends or federal holidays.