

Feed the Future Innovation Lab for Collaborative Research on Sorghum and Millet

REQUEST FOR CONCEPT NOTE:

Innovative scientific research to address constraints in the West African pearl millet value chain

CALENDAR

Activity	Date
Date of issuance of request for concept note	October 22, 2018
Deadline for receipt of concept notes	November 28, 2018
Review and selection of concept notes promoted to full proposals	Late December, 2018

This request for a concept notes is issued by the Management Entity of the Feed the Future Food Innovation Lab for Collaborative Research on Sorghum and Millet based at Kansas State University. The Sorghum and Millet Innovation Lab (SMIL) is funded by the U.S. Agency for International Development under cooperative agreement AID-OAA-A-13-00047.

The K-State SMIL management entity office is located at Kansas State University, College of Agriculture, Waters Hall 148, Manhattan, Kansas 66506.

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INTRODUCTION

BACKGROUND

Kansas State University was awarded a five-year extension to its cooperative agreement to serve as the management entity of the **Feed the Future Innovation Lab for Collaborative Research on Sorghum and Millet**. The Sorghum and Millet Innovation Lab is now inviting concept notes on research topics, combined with human and institutional capacity building, with a specific focus on pearl millet in West Africa. Research may focus on pearl millet in Senegal and Niger and have associated activities in other West African nations subject to the limits described in this document. Project activities may be proposed from two years to four and one-half years (until July 20, 2023). Following evaluation of the concept notes, full proposals will be requested from a short-list of applicants.

The research portfolio will support regional- and country-focused approaches where projects respond to national needs and engage scientists, practitioners and the private sector in interdisciplinary collaboration. A pearl millet convening was held in Senegal in September 2018 with presentations by researchers and end-users. A synthetic report was written to summarize findings. Presentations and the reports are available at http://www.k-state.edu/smil/whatwedo/pearl_millet/index.html. Projects are encouraged to respond to priorities developed during the

convening. The prioritization report is found at: http://www.k-state.edu/smil/opportunities/Pearl_Millet_Prioritization_Report_2018_WA_Regional_Convening.pdf.

TECHNICAL AREAS OF INQUIRY ON PEARL MILLET AND GEOGRAPHICAL FOCUS

The Sorghum and Millet Innovation Lab is seeking concept notes in the areas of genetic enhancement, production systems management and value-addition and should integrate cross-cutting themes of gender, the environment and nutrition where applicable. Research on genetic enhancement of pearl millet may be of a global nature as long as it is relevant and has application to the focal countries of Niger and Senegal. Research in the other areas of inquiry must be relevant to Senegal and Niger with potential spillovers to Burkina Faso and Mali.

Genetic Enhancement of Pearl Millet

The genetic enhancement area of inquiry encourages research to improve the yield potential, stress tolerance, resilience and quality of pearl millet through genetics, varietal development and physiology research. All focus nations have expressed a need to develop breeding programs to enhance end-use traits for added-value products.

Production Systems Management of Pearl Millet

The production systems management area regroups activities in several disciplines in an integrated approach towards sustainable intensification of pearl millet farming systems. Interdisciplinary efforts are required to develop profitable integrated soil fertility, crop and resource, pest (insects, weeds such as *Striga*), and disease management strategies. This requires understanding genotype, phenotype, environment plus management relationships and the economic consequences of strategies to maximize beneficial interactions. Integrated crop management (whether it be for weeds, insects, diseases, water, soil or a combination of factors) must be evaluated for its impact upon the demand for labor and other production inputs to ensure that these options improve household welfare. The financial costs and benefits of these management systems must also be assessed to determine whether these practices generate a higher financial return to farmers.

Development of Added-value Products and Market Development

Market development and added-value products research will be important to generate broad-based benefits for millet producers. Identifying the potential market opportunities for these products may be investigated in this area of inquiry and requires specialists in several areas including consumer economics, grain and milling science, food scientists and technologists, business development experts and entrepreneurs. Investigators are encouraged to incorporate a “value-chain” perspective into projects.

Research in this area of inquiry must also take into consideration other areas of the value chain. Many human, behavioral and social factors affect the direction of genetic enhancement (e.g. ensuring compatibility of varieties with producer and consumer demand), production systems management (e.g. farm economics, gendered costs and benefits, anthropogenic impacts on the environment) and market development and added-value products research. Understanding farmer demand for production inputs, including demand for improved seed and services, is a researchable topic.

CROSS-CUTTING THEMES

The environment and nutrition themes should be incorporated where applicable and gender issues must be addressed in all projects. USAID policy requires that gender issues be addressed in all funded projects. Concept notes should present a brief gender inclusion strategy and how gender considerations will be addressed in the overall project planning and implementation. Specific mention of how other cross-cutting themes will be integrated into the overall design of the implementation strategies is desirable.

PROJECT FUNDING

Approximately US\$ 2.5 million is available through July 22, 2023 for all projects. Projects will begin in 2019.

CONCEPT NOTE INFORMATION

ELIGIBILITY

The Feed the Future Innovation Lab for Collaborative Research on Sorghum and Millet, funded by the Bureau of Food Security, USAID, is authorized under Title XII of the Foreign Assistance Act of 1961 (as amended). U.S. colleges/universities (as defined under Section 296-d) are invited to submit concept notes as lead institutions for a project involving a consortium of collaborating host country and public and private U.S. research institutions. In particular, qualified minority-serving institutions are encouraged to submit pre-proposals, including but not limited to, Historically Black Colleges and Universities, Predominantly Black Institutions, Hispanic Serving Institutions, Tribal Colleges and Universities, and Asian American Native Alaskan and Pacific Islander Serving Institutions.

Concept notes are also encouraged from non-U.S. colleges/universities, the public and private sectors including not-for-profit and nongovernmental organizations. If these proposals are not linked with a U.S. institution, the proposal must still address human and institutional capacity development.

IMPORTANCE OF HUMAN RESOURCE AND INSTITUTIONAL CAPACITY DEVELOPMENT

Human and institutional capacity building (HICD) continues to be a core objective and concept notes should indicate how this will be strengthened. There should be a demonstration of meaningful collaboration in research and training between a lead institution and one or more host country institutions (public research institutions, universities, NGOs, etc.). Other partners such as U.S. universities and public and private sector research institutions (research hospitals, USDA/ARS, etc.) may also be subcontracted. Collaboration with multiple host country institutions is encouraged.

FORMAT

Concept notes must be in English with narrative portions prepared in MS Word with Times New Roman font size 11 and single line spacing. The summary budget tables for must be prepared in Microsoft Excel utilizing the template provided at: www.k-state.edu/smil/opportunities/Concept_Note_Summary_Budget_2018.xlsx. Page size should be 8 ½ x 11" with 1" margins.

SUBMISSION DEADLINE

Concept notes should be submitted by **November 28, 2018** using the web link at <https://rfx.piestar.com/smil/65>.

FORMAT AND EVALUATION OF CONCEPT NOTES

FORMAT OF CONCEPT NOTES

Each concept note should be no more than five (5) pages and cover the areas listed below. Literatures cited, two-page CVs of lead investigators and a one-page budget justification are required but do not count towards the five-page limit of the concept note. The summary budget template is available at: www.k-state.edu/smil/opportunities/Concept_Note_Summary_Budget_2018.xlsx.

1. **Introduction and Objectives:** Describe the key challenge you intend to focus upon and in which area(s) of inquiry. This section should provide the background to the challenge and a condensed literature review plus a concise description of why this challenge is important to the targeted country or countries.
2. **Testable Hypotheses:** What are the testable hypotheses that your project will investigate and how do these hypotheses relate to your project objective?
3. **Research Strategy:** This section should describe your research approach and methods and how linkages will be made across disciplines. This section might also include a discussion of the capacity to conduct this research in the target nation(s). Sufficient detail must be provided to assess the likelihood of success over the limited duration to the project.
4. **Human and Institutional Capacity Development Strategy:** This section requires addressing the nature of the collaboration with host country institutions, the division of responsibilities and a brief plan for human resources development through short- and long-term training.

Appendices

5. Literature cited and short two-page CVs of lead investigators (does not count towards page totals)
6. Summary Budget: This can be completed using the MS Excel template found: www.k-state.edu/smil/opportunities/Concept_Note_Summary_Budget_2018.xlsx. Evaluation will consider the relationship between the proposed research project (as described in the research strategy and hypotheses sections) and the budget request. Leveraging of additional support from other public and private sources (i.e. other grants, endowments, in-kind contributions) to broaden the scope of research and capacity building activities is viewed positively. A one-page budget justification is required and does not count towards the five page limit of the concept note. A full detailed budget with primary investigator and host country breakdown by year will be required at a full proposal stage.

EVALUATION CRITERIA

The following criteria will be used by the External Advisory Board (EAB) of the Sorghum and Millet Innovation Lab to evaluate each concept note. The EAB is composed of peer scientists with no conflicts of interest. The Director of the Sorghum and Millet Innovation Lab and the EAB, in consultation with USAID's Agreement Officer's Representative (AOR), will make final selection of concept note projects for which full proposals will be requested.

Criteria for evaluation	Weight
Objectives	30%
Testable Hypotheses	20%
Research Strategy	25%
Human and Institutional Capacity Development	15%
Alignment with Regional/country Objectives	5%
Summary Budget and Justification	5%

SUBMISSION OF CONCEPT NOTES

Concept notes should be submitted online at <https://rfx.piestar.com/smil/65> using the proposal submission interface. This interface requires entry of basic information about the proposal and uploading the concept note plus the budget template. If the applicant is unable to access the web interface, the cover data, concept note with appendices and budget should be sent to smilrfa@k-state.edu.