

**Feed the Future Innovation Lab for Livestock Systems  
Institute of Food and Agricultural Sciences, University of Florida**

**Request for Applications for Research and Capacity Building in  
Burkina Faso and Niger. RFA No. AID-OAA-L-15-00003-LSIL-03**

**Important dates<sup>1</sup>**

Release date	April 14, 2017
Deadline for submission of written questions <sup>2</sup>	April 24, 2017
Date for posting of responses to written questions	April 26, 2017
Webinar to discuss additional questions	April 28, 2017
Deadline for submission of Reach <sup>3</sup> grant concept notes	May 14, 2017
Deadline for submission of selected Reach grant concept notes as full proposals	June 30, 2017
Deadline for submission of Focus <sup>4</sup> grant proposals	May 26, 2017

Notes:

<sup>1</sup> All concept notes or proposals must be submitted before 11:59:59 PM Eastern Daylight Time (EDT) on the date indicated above. Please submit your concept note or proposal well before the deadline to avoid last minute problems or technical issues with the submission. The Livestock Systems Innovation Lab will not accept proposals submitted after the deadline.

<sup>2</sup> In order to maintain the integrity of the competitive process, *faculty or staff of the Livestock Systems Innovation Lab will only provide written answers to written inquiries about the RFA that are submitted to [livestock-lab@ufl.edu](mailto:livestock-lab@ufl.edu) by the deadline of April 24, 2017 indicated above. Please note that USAID staff, including Mission staff, will be unable to advise or provide information to potential applicants that will be used in preparing a proposal.* Therefore, applicants are advised not to contact University of Florida faculty or staff, USAID Missions staff, or any other USAID staff members regarding this Request for Applications (RFA), except to submit written questions to the Livestock Systems Innovation Lab by the stated deadline. Information on the relevant USAID Mission strategies and programs can be accessed at the following websites: (1) Sahel Regional Office (SRO): <https://www.usaid.gov/node/46296/our-work>; (2) Burkina Faso: <https://www.usaid.gov/burkina-faso>; (3) Niger: <https://www.usaid.gov/niger>. Applicants who submit concept notes that are selected for development into full proposals will be able to submit further written questions on the full proposals.

<sup>3</sup> Reach grants are longer term, large grants for projects lasting up to three years, two months with budgets of up to \$850,000. In exceptional, well-justified cases up to \$1,000,000 may be awarded. The funding limit for Reach grant proposals that involve two target countries (Burkina Faso *and* Niger) is \$1,250,000.

<sup>4</sup> Focus grants are smaller grants for proof of concept studies or research for development bridging studies providing immediate or near-term (within one year) impact. These projects will last for 3 months to a year with budgets of up to \$150,000. The funding limit for Focus grants that involve two countries (Burkina Faso *and* Niger) is \$200,000.

Institutions can submit more than one Reach or Focus grant proposal and individuals can be involved in more than one proposal. See page 9 for more details on both types of grants.

The Livestock Systems Innovation Lab does not currently plan to issue another RFA for Burkina Faso and Niger nor is another one planned for Cambodia, Nepal, Rwanda or Ethiopia.

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## ACRONYMS

AOI	Area of Inquiry
ASF	Animal-source Foods
BIFAD	Board for International Food and Agricultural Development
CCT	Cross-cutting Theme
CDC	Centers for Disease Control and Prevention
CIAT	International Center for Tropical Agriculture
CFR	Code of Federal Regulations
CGIAR	Consultative Group for International Agricultural Research
CV	Curriculum vitae
DALY	Disability Adjusted Life Years
DUNS	Data Universal Numbering System
EMMP	Environmental Monitoring and Mitigation
EDT	Eastern Daylight Time
FAO	Food and Agriculture Organization of the United Nations
FASO	Families Achieving Sustainable Outcomes project
FBD	Food Borne Disease
FMD	Foot and Mouth Disease
FTE	Full-time Equivalent
GHSA	Global Health Security Agenda
HACCP	Hazard Analysis and Critical Control Points
HICD	Human and Institutional Capacity Development
HPAI	Highly Pathogenic Avian Influenza
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFAS	Institute of Food and Agricultural Sciences
IITA	International Institute of Tropical Agriculture
IL	Innovation Lab
ILRI	International Livestock Research Institute
LSIL	Feed the Future Innovation Lab for Livestock System, aka Livestock Systems Innovation Lab
ME	Management Entity
M&E	Monitoring and Evaluation
NGO	Non-governmental Organization
OIE	World Organisation for Animal Health
PI	Principal Investigator
PPR	Peste des Petits Ruminants
PRAPS	Regional Sahel Pastoralism Support Project
REGIS-ER	Resilience and Economic Growth in the Sahel –Enhanced Resilience
REGIS-AG	Resilience and Economic Growth in the Sahel – Accelerated Growth
RFA	Request for Applications
RISE	Resilience in the Sahel Enhanced
RVF	Rift Valley Fever

SAREL	Sahel Resilience Learning Project
SDN	Specially Designated Nationals
SE LEVER	SoutEnir L'investissement dans L'Elevage pour la Vie Economique Rurale (Sustain Investment in Livestock for Rural Economy)
SRO	Sahel Regional Office
TB	Tuberculosis
UF	University of Florida
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VIM	Victory Against Malnutrition
WFP	World Food Program
WHO	World Health Organization

## INTRODUCTION

Malnutrition costs up to US \$3.5 trillion annually (FAO, 2013) and stunting is considered the best available summary measure of chronic malnutrition (Semba et al., 2016). Stunting affects one in four children under five worldwide (159 million in 2014; UNICEF/WHO/World Bank, 2015), reducing their growth as well as their health, welfare, cognitive development, academic performance, and future earning potential (Grantham-McGregor et al., 2007). It is most prevalent in South Asia and Sub-Saharan Africa (Black et al., 2008), where it affects 35-37% of children. The stunting rates for Burkina Faso and Niger, the focal countries for this Request for Applications (RFA), are quite high (32.9 and 43%, respectively; UNICEF/WHO/World Bank, 2015). Stunting can cause nearly irreversible brain damage in children by age two (World Food Program, 2016), and it condemns them to a lifetime of underachievement and under performance (Thurow, 2016).

Animal-source foods (ASF) provide more and higher quality protein than plants, as well as important bioavailable micronutrients including iron, zinc, calcium, and vitamins A, C, and B<sub>12</sub>, which are often deficient among poor and vulnerable populations (Van Horn, 2010). Consequently, increased ASF consumption can increase the growth, nutritional status, psychomotor functions, cognitive development, and health of children, particularly infants under the age of two (Neumann et al., 2007; Van Horn, 2010). Consequently, various international organizations now emphasize the importance of diet diversification strategies that include increased ASF consumption as a priority or cornerstone (e.g., Shoham and Duffield, 2009; WHO, not dated).

Livestock research for development is necessary for sustainable intensification of livestock production, economic growth, improved household nutrition and incomes, food security, and enhanced competitiveness of smallholder livestock systems. However, such smallholder systems often have low profitability and productivity due to poor quality and seasonal availability of feeds, poor genetics, low culling rates, high incidences of infectious and food-borne diseases, and poor market access or engagement. Furthermore, high costs and various cultural and socioeconomic factors prevent ASF from being sufficiently consumed by the poor, particularly by children and women who critically need them for growth as well as pregnancy and lactation, respectively (Good, 2009). Continuation of such trends will threaten the livelihoods, welfare, and existence of vulnerable livestock-producing households.

These features also characterize the situation in the USAID target zones in Burkina Faso and Niger. These zones were selected due to their high levels of poverty, marginalization, water scarcity, weak governance, and gender inequality. The USAID-funded baseline (SAREL, 2015) showed that, of all the household heads surveyed, over 80% work in agriculture, and 85% had never attended school. Additionally, one third of all households surveyed are below the extreme poverty line. Stunting prevalence among children under 5 in the focal areas was 49.3% (Niger) and 36.2% (Burkina Faso), with less than half of women characterized as “empowered,” using the Women’s Empowerment in Agriculture Index (WEAI). In all, 92% of households had experienced a shock in the past 5 years, and 90% of them reported a focus on getting more food and money as means to recover from shocks. The agropastoral and pastoral populations in these target zones in general have limited livestock herds and although they buy and sell their agricultural produce and livestock in markets, most have few resources to purchase inputs for increased productivity and little market power to ensure fair prices. In these countries, animals may be in pens or on the open range depending on the time of the year and sedentary livestock owners and migratory herders are commonly connected through age-old mutually beneficial arrangements. These include those in which migratory herders take the animals of the sedentary owners to graze in the open range, or the manure contracts through which grazing of crop residues is allowed in exchange for manure left by the animals of migratory herders, or those involving buying and selling milk and cereals. Many of these arrangements are changing because of agricultural expansion and intensification, and increased human and livestock populations. To be effective,

research will therefore need to consider how these patterns of production and marketing impact and interact with proposed interventions, technologies and practices.

The United States Agency for International Development (USAID) awarded the University of Florida (UF) Institute of Food and Agricultural Sciences (IFAS) funds to establish the Feed the Future Innovation Lab for Livestock Systems (LSIL) and to act as its Management Entity (ME) in October 2015. This five-year Leader with Associates Cooperative Agreement Award No. AID-OAA-L-15-00003 supports USAID's agricultural research and capacity building work under Feed the Future, the U.S. Government's global hunger and food security initiative. The International Livestock Research Institute (ILRI), with its wealth of research experience in developing countries, is the UF/IFAS partner in LSIL.

The University of Florida and ILRI make up the ME of the LSIL that will fund and manage a global research for development program with country-focused research and capacity building projects, which are implemented through a combination of competitive and non-competitive research subawards or sub-contracts.

***This RFA focuses on Burkina Faso and Niger.*** The research for development priorities for these two countries were developed during country-specific stakeholder consultations (see Appendix 1 for the stakeholder list) between May and October 2016. Although country priorities are presented separately in this RFA, proposals that involve studies in or are relevant to both countries will be preferred.

## FEED THE FUTURE INNOVATION LAB FOR LIVESTOCK SYSTEMS

### Vision and Objectives

The vision of the LSIL is to increase livestock productivity, marketing, and ASF consumption through the sustainable intensification of livestock systems in order to improve nutrition, health, and incomes of vulnerable people, especially those of women and children, in the target countries (Ethiopia, Rwanda, Burkina Faso, Niger, Cambodia, and Nepal). This will be achieved through sustainable intensification of smallholder livestock production systems through research, technology application, capacity building, and knowledge generation.

The objectives of the LSIL are to:

- Support the development of innovations and the adaptation of existing strategies and technologies, as well as the associated human and institutional capacity, to enhance the productivity and profitability of ASF value chains and the preservation, consumption, and safety of ASF.
- Promote an enabling and inclusive environment and the associated human and institutional capacity that ensures the ASF value chains are positioned to meet the increasing demand for nutritious and safe ASF and to increase the incomes of the vulnerable.

### Approach

The LSIL will achieve its vision and objectives through an integrated approach that accomplishes the following:

1. Identifies and prioritizes critical ASF production and marketing constraints and opportunities, with particular attention to those that would increase farmer access to inputs for improved health and productivity in specific livestock value chains in an integrated, participatory, and gender-informed manner;
2. Employs multidisciplinary, integrated research for development to provide location-appropriate feed, forage, genetics, and health technologies as well as improved, evidence-based marketing strategies and methods that will increase production, consumption, and sales of ASF in an environmentally sustainable manner;
3. Adopts a multidisciplinary, One-Health approach, which emphasizes that the health of people is connected to that of animals and the environment, and recognizes that numerous infectious diseases in humans are spread from animals <sup>1</sup>;
4. Increases adaptation of livestock systems to climate change;
5. Increases income generation by the vulnerable and their nutritional status, particularly of women and children;
6. Integrates human nutrition and behavior change into ASF production and marketing efforts; and
7. Builds on current and previous USAID and non-USAID-funded projects and activities and leverages their data and findings.

The subawards that will be selected in response to this RFA will form an integral component of the LSIL's strategy for achieving its vision. Although country priorities are presented separately in this RFA,

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<sup>1</sup> According to Centers for Disease Control and Prevention (CDC): "One Health recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines working locally, nationally, and globally-to achieve the best health for people, animals, and our environment. A One Health approach is important because 6 out of every 10 infectious diseases in humans are spread from animals." (CDC, 2017).



proposals that involve studies in or are relevant to both countries will be preferred.

## Types of Grants

The following types of grants will be funded:

- (1) **LSIL Reach Grants:** These are longer term, large grants for projects lasting up to three years, 2 months starting on August 1, 2017 with budgets of up to \$850,000. In exceptional cases Reach grants can be up to \$1,000,000 provided the need for additional funds is adequately justified. The funding limit for Reach grant proposals that involve two target countries (Burkina Faso *and* Niger) is \$1,250,000. Reach grants will commonly involve multiple partners and employ an integrated, interdisciplinary approach involving both research and extension (Human and Institutional Capacity Development, HICD) components; however, the primary focus should be on research. All four Cross-cutting Themes (CCT) described below must be addressed in Reach grant proposals, but at least one should be addressed thoroughly. Reach grants are awarded through a two-step process involving submission of a concept note followed by a full proposal.
- (2) **LSIL Focus Grants:** These are shorter term, smaller grants for projects lasting from three months to one year. The Focus grants are for proof of concept or research for development bridging studies on research that will yield near-term (within one year) beneficial impacts. They must lead to clear outputs and outcomes that can be scaled out in the short term. All four CCTs described below must be addressed in the Focus grant proposals, and at least one should be addressed thoroughly. Focus grants are not meant for preliminary studies that will lead to larger grants. Rather, Focus grants should focus on proof of concept studies and hence they should be followed by development efforts. The budget for such grants will be up to \$150,000, with adequate justification. The funding limit for Focus grants focused on two target countries (Burkina Faso *and* Niger) is \$200,000. These grants can focus on research or HICD or a combination of both efforts. Proposals that focus on HICD should also address and incorporate the other three CCTs, and those on research should address all four. Focus grants are awarded through a one-step process involving only submission of a proposal.

The LSIL ME reserves the right to ask applicants to make changes to the budgets, scope, timing, and locations of proposed activities or to combine proposals. Applicant responses to such requests will be considered during the selection process.

## Cross-cutting Themes

The LSIL CCTs described below are fundamental to the work of the LSIL as they are the means by which the outputs, outcomes, and impacts of research for development efforts will be sustained beyond the life of the LSIL. Consequently, all Reach and Focus grant proposals must frame and plan the intended work in a manner that convincingly integrates the four CCTs discussed below in the research.

### (1) Role of Gender in Livestock Systems Research

*This CCT ensures that the pivotal roles of women in household nutrition and livestock production are recognized, considered, and accounted for in all LSIL programs.*

It is widely recognized that women are significant actors in crop-livestock and pastoralist systems. Research insights into gender roles and responsibilities along livestock value chains are often poorly

integrated into development planning and practice (Farnworth and Colverson, 2015). For instance, little is known about how gender relations at household and community levels affect women and men's access to resources for livestock production and their relative benefits from value chain development. Livestock value chains are different than crop value chains in that the level of daily care is much higher during the animal's life and when livestock products are processed and marketed. At each step, women and men tend to be involved in different ways with different levels of authority and responsibilities (Kristjanson et al., 2010). Importantly, women often do not own the means of production (land, capital, feed resources) and may not be allowed to market livestock products, yet they may be central to livestock care and management as well as to feeding their families. They also have limited access to agricultural extension and rural advisory services, which could help to improve overall productivity if they are appropriately delivered and accessed (Manfre et al., 2013).

Addressing gender issues throughout all aspects of livestock production, marketing, and consumption will ensure equitable access to resources and benefits. Empowering women alongside men as decision-makers is central to poverty reduction, as it is recognized that increasing a woman's income will benefit the overall family's health and nutritional outcomes (Duflo and Udry, 2004). Additionally, increasing access to ASF to improve the nutrition of women, children, and families requires considerable understanding of gender roles and norms that may hinder such access.

*Research activities must properly integrate gender analyses and incorporate a gender equity lens in deciding which technologies or practices to evaluate, adapt, and/or implement and report on their effects on men, women, boys, and girls. Research activities should carefully consider labor implications for women of the technologies and practices that are being developed as well as accommodations for women's participation in trainings and research activities. Additionally, tools such as the [Women's Empowerment in Agriculture Index \(WEAI\)](#) and its modifications for use among livestock holders should be employed to identify opportunities to increase gender equity within households and communities and ultimately improve ASF consumption patterns.*

## (2) Human and Institutional Capacity Development (HICD)

*This CCT strives to ensure the development of the professional capacity of scientists, technicians, students, and organizations or institutions for efficient leadership and administration. This will include trainings for value chain actors, target country students, and scientists, and development of institutional capacities.*

Several reports from USAID partners and programs (e.g., Board for International Food and Agricultural Development [BIFAD], 2014) note that individual training alone is not sufficient to improve national research systems and that research and extension systems must be strengthened. Four principal areas of focus emphasized by BIFAD (2014) include: (1) strengthening institutional capacity and partnerships to advance impact pathways; (2) strengthening access to U.S. higher education systems by students from Feed the Future countries; (3) enhancing collaboration between developing country universities, U.S. universities, and other public/private sector institutions; and (4) building developing country access to U.S. technology.

Subaward projects will provide short- and long-term training and other opportunities for professional development of individuals as well as support to institutions and organizations with relevant livestock expertise. The approach to HICD will be based on the assumption that both the capacities of individuals and institutions are interrelated and long-term, sustainable change cannot occur without addressing both. The Reach and Focus grant subaward HICD activities need to target at least one of four themes:

1. Developing research capacity: focus will be on strengthening research institutions and

researchers to be innovative and problem-oriented, capable of working with all value chain actors.

2. Developing extension and education capacity: focus will be on developing links between research and livestock extension agents, animal health workers, public health workers, and educators, along with their institutions so that they will have the necessary skills to interact with and support producer households, diagnose problems and diseases, integrate gender and human nutrition, and propose and further develop interventions, including those based on information technology.
3. Developing institutional capacity for policy development and implementation: focus will be on building policy-making institutions and policy makers who understand the importance of evidence-based policy making and the multi-faceted nature of livestock systems, know where and how to access information, and how to build additional avenues for generating necessary information for improving food security and human nutrition.
4. Developing capacity of the private sector, including producers: focus will be on developing a cadre of companies and individuals able to add value to, ensure food safety and its access, and provide services and inputs for the sector.

All subaward HICD activities must be planned, delivered, and evaluated in ways that address and consider gender equity and cultural issues.

### (3) Human Health and Nutrition

*The subaward projects should be designed to directly or indirectly improve the nutritional status and health of vulnerable households and livestock producers, especially pregnant and lactating women and children.*

Growth in the agricultural sector has caused greater reduction in nutritional stunting than economic growth in the non-agricultural sector (Webb and Block, 2012). Poor nutrition has direct negative impacts on household productivity, education levels, and income-earning potential. Thus, good nutrition is essential for sustainable economic growth (Bhutta, 2013). Livestock holders are more likely than their non-holding counterparts to consume ASF because of their proximity to the nutrient-rich ASF (FAO, 2009). Notably, adequate ASF consumption may prevent and reduce high levels of stunting (Darapheak et al., 2013). For example, eggs, meat and milk are good sources of protein, various vitamins, and trace minerals, which are essential for early childhood development. Eggs and milk are particularly suitable in cases where smallholders can only afford to purchase or keep small amounts of animal source-foods for improving the nutrition of children or pregnant or lactating women. The important role that livestock systems have on human nutrition must be the main undercurrent in all research conducted by LSIL subaward projects.

There are three pathways to how livestock affects human nutrition and health. First, although nearly two-thirds of poor, rural families are livestock holders, most of them continue to be net purchasers of ASF. Yet, consumption of these foods may nutritionally and economically buffer families through the dry season when grain availability is limited and costly. Second, while some households may exclusively raise livestock for the purpose of sales and income generation, others sell animal products, or keep some livestock for occasional sale in times of need (Kitalyi et al., 2005). Although income may not directly affect nutrition, it can modify decision-making processes (which are often gendered); these indirect effects can have an important impact on human nutrition. Finally, when income is controlled by women, the funds are more likely to benefit the family, particularly children, through purchase (or production) of food and greater attention to healthcare (Smith et al., 2003). In addition, female ownership or co-ownership of livestock is associated with a greater intake of ASF and improved child outcomes than male

ownership (Jin and Iannotti, 2014).

Through each of these three pathways, which contribute to a complex web of relationships, the livestock system ultimately affects nutrient intake and health status, the immediate determinants of human nutrition. Therefore, potential impacts of subaward projects on household and population nutrition must be clearly articulated, deliberate, and measurable.

#### (4) Resilience

*All subaward projects in Burkina Faso and Niger should build resilience, i.e., “the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth” (USAID, 2012).*

Building resilience is an important strategy in USAID’s efforts among vulnerable populations, and the LSIL’s efforts in Burkina Faso and Niger take place within USAID’s resilience framework. Originating from a need to take action in the face of continuous poverty coupled with recurrent environmental and political crises in certain parts of the world, the resilience framework has as its explicit focus the capacity of the populations to be ready for and cope with such crises. At the heart of the resilience framework is increased collaboration between relief and development, towards building resilience, through three types of efforts:

1. Improving adaptive capacity through diverse means, including economic opportunities, livelihood strategies, nutrition and health services, environment, water, sanitation and management, and access to education.
2. Reducing risk through various tools and approaches, such as risk assessment and early warning systems, as well as social safety nets and financial protection.
3. Improving social and economic conditions of vulnerable populations.

Subaward projects should integrate the resilience perspective in their design through incorporation of approaches and methods focusing on at least one of the three efforts described above.

#### **Areas of Inquiry**

The LSIL’s research and development efforts will be implemented through the following four Areas of Inquiry (AOIs). A general description of the LSIL AOIs and the associated approaches are included below; the AOI-specific priorities for Burkina Faso and Niger are presented on pages 23-27 of this RFA and Appendix 4.

##### (1) Animal-source Food (ASF) Production and Marketing

*Subaward projects focusing on this AOI should employ a multidisciplinary, integrated approach to develop two or more of the following for Reach grants and one or more for Focus grants:*

- *Location-appropriate animal nutrition, genetic, lactation, reproduction, management, or ASF-processing or preservation technologies; or*
- *Improved marketing practices that will enhance livestock production and ASF consumption.*

A large percentage of the human populations in the LSIL target countries are involved in agriculture, particularly in mixed crop-livestock systems where livestock production is considered secondary to crop production. In the focal countries, livestock productivity, processing, and marketing are often suboptimal

because of challenging climatic conditions that cause periodic feed scarcity, limited knowledge about improved practices, difficult access to or high cost of inputs, and lack of important information such as market prices for ASF. Further, along the various ASF product value chains, inefficiencies exist because of poor infrastructure, limited transport, or inadequate refrigeration. These often result in increased costs, which make ASF products less accessible, especially to vulnerable groups. Therefore, innovative approaches and technologies, including range management techniques and technologies, and strategic collaborations among animal production and health professionals, policy makers, researchers, educators, and other stakeholders are needed to tackle the diverse challenges associated with livestock food systems in the target countries.

Subaward projects will need to support and strengthen existing HICD efforts on production and marketing, where appropriate. Multidisciplinary research and HICD should be employed to significantly enhance the various ASF value chains and to strengthen public and private sector animal health service actors and organizations. Focus grant proposals should address one or more of the items listed under the following three specific goals and Reach grant proposals should address two or more:

1. Increasing the quantity and quality of livestock feeds, and improving feed safety and preservation;
2. Improving the genetic merit, reproductive performance, management, housing, transportation, and marketing of livestock; and
3. Improving the marketing, transportation, processing, preservation, and nutritional value of livestock products.

The diverse cultural and gender dynamics related to ASF production and marketing need to be explored and accounted for to ensure the development of appropriately targeted research to areas of highest impact. Across these areas, support for enabling policy development as well as improved implementation of the existing policies will be paramount.

## (2) Livestock Disease Management and Food Safety

*Subaward projects focusing on this AOI will implement projects to:*

- *Improve surveillance;*
- *Reduce animal and human disease burdens, and increase ASF safety; and*
- *Support, strengthen, and expand existing One-Health research and training platforms and projects.*

The threat and actual spread of diseases can have direct, widespread, and severe repercussions on the productivity, profitability, and existence of livestock systems, the marketability of ASF, the nutrition, health, and incomes of vulnerable livestock holders, and the export of livestock and livestock products. Public health services in the target countries are struggling to control, let alone prevent, the spread of human diseases. Mandates are overwhelming relative to available resources as livestock numbers grow and infectious and zoonotic diseases spread. Therefore, One-Health and other innovative approaches and technologies and strategic collaborations between human, animal health, and environment professionals, policy makers, researchers, educators, and other stakeholders are needed to tackle the diverse disease pressures associated with livestock systems in the target countries. These include diseases affecting livestock, zoonoses, food-borne diseases associated with ASF consumption, environmental enteropathy, antimicrobial resistance, and chemical and veterinary drug residues in ASF.

Subaward projects will, where appropriate, need to support and strengthen existing regional One-Health research and training initiatives as well as those on livestock disease management and ASF safety. Multidisciplinary research and HICD should be employed to significantly reduce the burden of prioritized

animal and zoonotic or foodborne diseases among livestock, farmers, and their families and communities and strengthen public and private sector health service actors and organizations. Specific goals will include:

1. Improving surveillance for priority animal and zoonotic pathogens;
2. Improving animal disease control practices;
3. Improving ASF safety (e.g., reducing pathogens and undesirable residues in meat and milk);
4. Reducing spread of zoonotic diseases from livestock to humans;
5. Reducing environmental enteropathy; and
6. Improving access to services and inputs.

Subaward projects will need to improve host country stakeholder capacities with respect to one or more of the six goals stated above and address cultural and gender dynamics and policy development, as discussed under AOI 1- ASF Production and Marketing.

### (3) Enabling Policies for Livestock

*Subaward projects focusing on this AOI will facilitate development and support implementation of policies that enhance the production, marketing, and consumption of ASF. Efforts will focus on:*

- *Improving the availability of quality livestock inputs, services, and markets;*
- *Risk management; and*
- *Other areas.*

The design, implementation, and adoption of appropriate policies are fundamental to the success of the livestock sector. The following issues, among others, figure prominently in the local, country, or regional livestock policy agendas of target countries: productivity, input and ASF product regulation, animal nutrition, risk management, animal and human health, trade, gender issues, and, importantly, user rights relating to land and water resources. A coherent and comprehensive policy framework must address each of these elements, while considering the many institutional and thematic dimensions relevant to the livestock sector within the geographic area of interest. Furthermore, livestock policy must account for the fact that the livestock value chains consists of many actors with differing incentives, constraints, and power, but that the majority of smallholder livestock producers have limited power to affect policies in their societies. In addition, the livestock value chains are currently characterized by changes in demand, driven by income growth and urbanization, as well as by changes in resource availability, for example due to climate change. These factors need to be considered in the policy process.

Subaward projects in the Enabling Policies for Livestock AOI should focus on policy analysis (not advocacy) and will consider the following elements:

1. Multiple levels of existing policies, from subnational to regional and higher levels, each with its own set of policy makers, which may not always be in harmony. Examples include local land and water use agreements, national sanitary regulations, and regional regulations on trade, such as those of the Economic Community of West African States (ECOWAS).
2. High degree of variability in the existence and implementation of policies. In some countries, robust national livestock policy frameworks exist but they are lacking in others. Even when they exist, much remains to be done to ensure they are implemented.
3. Some of the target countries are experiencing conflict and instability and/or are recovering from major disasters. Policy efforts need to take these factors into account and build resilience, i.e., ability to mitigate, adapt to, and recover from shocks and stresses, in a manner that reduces chronic vulnerability and facilitates inclusive growth.

Subaward projects focusing on this AOI need to be consistent with and contribute to policy efforts, as outlined in the [Feed the Future Guide](#), which defines seven priority policy focus areas, each of which includes policy issues relevant to livestock systems. The subaward projects will provide the supporting data for evidence-based policy-making and strengthen the livestock sector within target countries, while being aligned with the policy priorities of their governments and USAID.

#### (4) Future Livestock Systems

*Subaward projects focusing on this AOI will support efforts in other AOIs by examining:*

- *Implications of,*
- *Challenges to, and*
- *Impacts of introduced technologies and policies, in the context of changes in climate, demographics, agriculture, markets, conflict, and infrastructure.*

Subaward projects focusing on this AOI should seek to ease the transition from traditional livestock systems currently struggling to address the increased demand for ASF, to systems that create more equitable wealth, food security, and nutrition. The modeling and analytical tools used in the Future Systems AOI will guide and analyze relevant research and policy efforts of the Livestock Systems Innovation Lab by determining (1) what is needed to reduce vulnerability, improve nutrition, and increase incomes; (2) what policies, practices, and technologies will help to make this happen; (3) which policies, practices, and technologies can most effectively be implemented; and (4) what impacts a growing livestock sector will have on local economies, the environment, and animal and public health. The Future Livestock Systems studies will evaluate technologies and inform management scenarios and will develop useful models for the future.

The Future Systems approach will combine modeling and geospatial analysis of local (or country) development scenarios in regional settings. Cornerstones of this approach will include the following:

1. Focus on constraints and opportunities in the target countries within a regional framework, given their embeddedness in the latter through markets, climate, livestock movements, and politics. These factors impact demand and supply, prices, spread of diseases, and hence they influence the enabling environment for the livestock sector.
2. Focus on livestock productivity and markets, crop production, natural resources, wildlife, the environment, human and animal nutrition, food safety, and human and animal diseases — from biophysical and socioeconomic perspectives within the policy context.
3. Focus on purpose-driven modeling and analysis to support sustainable intensification of existing livestock systems to transform the increasing demand for ASF into opportunities that benefit the poor. The aim should be to increase net human consumption of ASF and resilience rather than livestock production and increased access to inputs by livestock producers.
4. Focus on understanding and alleviating risk along the value chain. Typically, the poor are less able and willing to take risks. Therefore, it is critical to reduce inherent risks in the value chain, particularly those at the most important leverage points to enhance adoption of technologies and services that enhance livestock productivity and ASF consumption.
5. Strong focus on human and institutional capacity building with national researchers, policy makers, private sector leaders, and other ASF stakeholders that lead or are involved in decision-making or in informing discussions and processes.

Subaward projects focusing on this AOI will use diverse tools, including mechanistic models, to analyze country-specific and localized vulnerabilities to projected future trends. Such tools should also be used to

examine impacts of scaling of introduced technologies and potential effects of intensifying livestock systems on externalities like the environment and disease transmission.

All subaward research projects must complement existing USAID projects.

### **Theory of Change**

Livestock productivity and ASF safety are relatively low in developing countries, especially those in East and West Africa and Asia. Consequently, livestock and ASF from such countries are not competitive on the international market. Several barriers to ASF production and consumption in these regions that constrain the income, health, and nutrition of livestock holders and consumers were outlined in Thornton (2010). In the past, these have included human population growth, income growth and urbanization, whereas in the future, production will increasingly be affected by competition for natural resources, competition between food and feed uses, as well as by the need to operate in a carbon-constrained economy. Research and development are vital to sustainably intensify livestock production and marketing and ASF consumption in these regions and to improve the competitiveness of the smallholder livestock systems. Across the livestock sector in the target countries, current capacities, technologies, practices, and policies are inadequate to respond to the opportunities created by the recent increasing demand for ASF, due to rapid growth in populations, income, and urbanization. Smallholder livestock producers are particularly vulnerable in these locations and require technical assistance and enabling policies to overcome these barriers. Furthermore, livestock-producing households continue to have low ASF consumption rates, particularly by the young children and women who need them most. As new livestock productivity-enhancing approaches are developed, emphasis should be on increasing knowledge and encouraging favorable attitudes that result in behavior change and adoption of improved strategies and technologies (Rogers, 2003).

To address these constraints, all LSIL research and HICD efforts must connect to a fundamental pathway linking livestock production to income generation and human nutrition, while empowering women. The impact pathway includes engagement of country-specific Innovation Platforms in prioritizing constraints to livestock production in the country and reviewing the progress of funded subawards and other projects. Innovation Platforms are multi-stakeholder information and knowledge sharing platforms for integrating the views of the public sector, USAID and other donors, academia, research institutions, the private sector, and non-governmental organizations (NGOs). In addition to the national Innovation Platform, sub-national Innovation Platforms may be established in areas where they will enhance the LSIL's progress. Collaborative efforts of the LSIL ME, Innovation Platforms, and subaward projects will contribute to the Feed the Future initiative, which aims to reduce global poverty and hunger through inclusive agriculture sector growth and improved nutritional status of the poor. As one of the projects under this initiative, the LSIL aims to increase the understanding of the evolving livestock-based food systems and their roles in human nutrition and health in the target resilience zones of influence. This new understanding will be used to identify, develop, and/or adapt appropriate strategies and relevant innovations and policies to increase ASF production, marketing, and consumption and to reduce adverse environmental impacts of livestock systems. In addition, the new information will be used to reduce constraints faced by women engaged in the livestock food systems and to promote sustainable improvements in incomes and nutrition of livestock holders and consumers. The LSIL research will also enhance human and institutional capacities to further develop and use the new or adapted strategies and innovations beyond the life of the projects. The sum of these efforts will contribute to reducing global poverty and hunger through accelerated growth in the agriculture sector and improved nutrition, while increasing the knowledge and technology base within the livestock sector.

The progress of the Theory of Change will be regularly evaluated and the results will be used to enhance



and fine-tune achievement of the LSIL's goals. An important consideration for this Theory of Change is the sustainability of the impacts of the LSIL beyond the life of the program and developing strategies for adoption of innovations that are validated via the subaward projects or LSIL's other activities.

*Note: Subaward applications should not propose a Theory of Change. Rather, they should describe how the proposed work will contribute to the LSIL's Theory of Change.*

## **Eligibility**

This competition is open to any qualified research, educational, governmental, private sector, or non-profit institution that either has or that collaborates with an organization that has a Data Universal Numbering System (DUNS) and is registered in the System for Award Management (<https://www.sam.gov/portal/SAM/>). To obtain information about how to obtain DUNS or SAM numbers please check the following links: For DUNS <https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html>; and for SAM - <https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html>.

All recipients and subrecipients must be able to maintain accounting controls in accordance with 2 CFR 200 (available at: <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=75429d03caa7a9f0c3ccb4ffee319ce&mc=true&n=pt2.1.200&r=PART&ty=HTML>). Non-U.S. institutions must have accounting controls in place to meet the requirements of USAID ADS 303 (available at: <https://www.usaid.gov/sites/default/files/documents/1868/303.pdf>). Review of these standards should be done by the applicant prior to submission for review.

The status of eligible organizations must be verifiable against the U.S. Department of Treasury Office of Foreign Assets Control List of Specially Designated Nationals (SDNs) and Blocked Persons and the United Nations Security Designation List, in accordance with 2 CFR 25.110 (<https://www.gpo.gov/fdsys/granule/CFR-2013-title2-vol1/CFR-2013-title2-vol1-sec25-110>).

We strongly encourage participation by U.S. Minority Serving Institutions. These include, but are 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.

## **Lead Institution and Collaborator Roles**

For proposals selected for funding, the University of Florida will establish a subaward with the lead institution in the applying consortium, which will coordinate all activities in the host country including execution of appropriate agreements with all collaborating partners. The lead institution is responsible for implementing the project, monitoring progress, ensuring compliance with LSIL and USAID rules and guidelines, managing funds appropriately, collating and presenting results, and submitting progress and final reports. The lead institution will be responsible for fulfilling all USAID requirements and submitting data and reports to the ME. This includes responsibilities related to Monitoring and Evaluation (M&E), Open Data Management, Knowledge Sharing, and Environmental Monitoring and Mitigation (EMMP) measures. The lead institution will also need to ensure compliance with the Branding Strategy and Marking Plan of the LSIL. The ME will provide oversight to the lead institution and through it to its subawardees on matters that are technical (e.g., by giving feedback on work plans and progress reports, by monitoring ongoing field and other activities), administrative (e.g., verifying quality of reporting), and financial (e.g., reviewing financial reports, giving approvals for procurement and travel).

## Consortia

*A key requirement of all proposals is collaboration between a research agency or university in the target country and a research institution or university in a foreign country.*

If the Principal Investigator (PI) is based in a country other than the target country, at least one partner from the target country must be a co-PI (i.e. not just a collaborator). If the PI is from a target country, at least one partner from a non-target country must be a co-PI (i.e. not just a collaborator). Examples of non-target country partners include U.S. or European universities, regional research institutions, Feed the Future Innovation Labs [ILs] (e.g. Nutrition IL, Sustainable Intensification IL, Sorghum and Millet IL, Legume IL, Policy IL, etc.), international agricultural research centers (e.g. Consultative Group for International Agricultural Research [CGIAR], including ILRI, International Center for Tropical Agriculture [CIAT], International Crops Research Institute for the Semi-Arid Tropics [ICRISAT], and International Institute of Tropical Agriculture [IITA]), research institutions in other countries, and development community partners, particularly those in the private sector or NGO community. Note that West Africa Productivity Program Centers of Excellence are considered target country institutions. Partnership with extension and advisory services, as well as the private sector, are strongly encouraged.

This requirement is to ensure mutually beneficial partnerships, to build the capacity of target country partners and ensure that they can access the latest scientific information, and to facilitate development of location or context appropriate, scientifically, and statistically robust research for development proposals. In addition, collaboration with the private sector or NGOs is strongly encouraged to ensure proper consideration of the development phase that will follow the research from the outset. This will ensure carefully formulated plans for scaling and adoption of validated best bet technologies and services in ways that are sustained well after the life of the subaward.

*International organizations with an office or branch in the target country are not considered target country partners.*

Proposals should clearly identify the respective roles, responsibilities, and activities of collaborating partners in the Management Plan by including a detailed description of each key personnel using the form in Appendix 2. The respective budget allocations and budget justification narrative for each collaborating partner should also be described using the template in Appendices 3a or 3b. All subaward projects must comply with USAID, LSIL, and their own institutional rules governing the use of human subjects and animals for research purposes. An external evaluation of the LSIL is anticipated during 2018-2019. Lead and collaborating institutions are required to cooperate and facilitate the work of the evaluators.

## Requirements

All subaward projects need to implement specific activities that:

- (1) **Support USAID Mission objectives and activities:** All activities should be supportive of and, where appropriate, embedded into the USAID Mission and U.S. government-funded Resilience in the Sahel Enhanced (RISE) initiative, conducted as part of the Global Resiliency Partnership and managed by the Sahel Regional Office.<sup>2</sup> Three programs of RISE are ongoing in Burkina Faso and Niger: Resilience and Economic Growth in the Sahel –Enhanced Resilience (REGIS-ER), Resilience and Economic Growth in the Sahel – Accelerated Growth (REGIS-AG), and the Sahel Resilience Learning Project (SAREL). During the research phase, the subaward projects should coordinate

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<sup>2</sup> In Burkina Faso, World Food Program (WFP) and United Nations Children’s Fund (UNICEF) are USAID partners of RISE.

efforts with the resilience coordinators based in USAID Missions in Burkina Faso and Niger, and, including after the award, seek collaboration with organizations and projects suggested by USAID in the country. Associated USAID-funded efforts include Victory Against Malnutrition (VIM) and the Families Achieving Sustainable Outcomes (FASO) projects in Burkina Faso, and Programme d'Appui à la Sécurité Alimentaire des Ménages - Tanadin Abincin Iyali (PASAM-TAI), Sawki, and Livelihoods, Agriculture and Health Interventions in Africa (LAHIA) projects in Niger. Subaward projects should contribute to reduction of vulnerability and foster inclusive growth in the zones where the resilience efforts take place and should occur at least partially within them. These zones include Est, Sahel, and Centre-Nord regions in Burkina Faso, and Tillabéri, Maradi, and Zinder regions in Niger. This is important to ensure synergy, avoid unnecessary duplication of efforts, and leverage and increase the scope and impacts of the existing USAID Mission and U.S. government-funded projects. Although country priorities are presented separately in this RFA, proposals that involve studies in or are relevant to both countries will be preferred. Proposal timelines should include the following to demonstrate support for USAID projects: (1) Proactive outreach to USAID implementing partners at the beginning of the project and periodically thereafter to discuss and plan collaboration opportunities; (2) Attendance at USAID implementing partners meetings; (3) Presentation of research updates as well as development implications of the research at annual Innovation Platform meetings; and (4) Submission of a final report summarizing development implications of the research. Information on the resilience zones and activities can be accessed at <https://www.usaid.gov/node/46296/our-work>.

- (2) **Are aligned with country strategies:** All activities should also be aligned with the target country government's existing livestock policies and, when appropriate, support additional enabling policies for ASF production and consumption. Please refer to Tables 3 and 4 and Appendix 4 for specific country policies. Proposed activities should complement, involve collaboration with, and/or leverage the work of other relevant projects to avoid unnecessary duplication. Proposals that involve studies in or are relevant to both Niger and Burkina Faso will be preferred.
- (3) **Involve true collaborative partnerships:** True, meaningful partnerships with shared visions, responsibilities, and decision-making are central to the LSIL approach (see Consortia on page 18). The project teams must involve partnerships between relevant and appropriate target and foreign country research organizations/universities. In addition, all subaward projects should maintain collaborative relationships with relevant Ministries.
- (4) **Have an explicit, rigorous research design and approach:** This includes clearly stated hypotheses, objectives, experimental designs, and analytical methods (including describing or providing references for proposed methods). In addition, explicit descriptions and convincing justifications are required for the sampling approach, number of experimental units or replicates (a power analysis should be used for this purpose), and the statistical analysis approach.
- (5) **Integrate Cross-cutting Themes (CCTs):** All Reach and Focus projects should clearly integrate the CCTs (pages 9-12) including resilience. Proposals need to state explicitly how human nutrition, gender, HICD, and increasing resilience will be incorporated into the research for development plans. Priority will be given to projects which explicitly link livestock production improvements to increased consumption of ASF.
- (6) **Clearly complement pertinent, past, and ongoing U.S. and focal country government-funded efforts:** To avoid duplication and to build mutually beneficial collaborations and information exchanges, the proposals need to consider past and ongoing efforts, including the World Bank-funded Regional Sahel Pastoralism Support Project (PRAPS), the Global Health Security Agenda

(GHSA), and the Gates Foundation-funded SoutEnir L'investissement dans L'Elevage pour la Vie Economique Rurale (SE LEVER; Sustain Investment in Livestock for Rural Economies) project.

- (7) **Integrate efforts across several AOIs, when appropriate:** *This requirement is for Reach grants.* For instance, to improve milk quality and safety, proposals may involve efforts in the (1) Animal-Source Food Production and Marketing AOI to assess and address management deficiencies that reduce milk quality and safety, (2) Livestock Disease Management and Food Safety AOI to assess and devise strategies to reduce pathogens or residues at different stages in the production to consumption continuum, and (3) Future Livestock Systems modeling to assess evolving climatic, disease, and/or demographic trends and their impacts on the value chain as animal populations increase and trade expands.

As discussed above, researchers are expected to actively participate in LSIL Innovation Platform meetings that take place in Burkina Faso and Niger (see page 16).

A summary of Reach and Focus grant requirements and recommended practices are stated below in Tables 1 and 2, respectively.

**Table 1.** Reach grant requirements and recommendations.

<b>Area</b>	<b>Requirement</b>	<b>Recommendation</b>
Partnerships	Involve collaborative research and HICD endeavors between host country institutions and U.S.-based or other appropriate international institutions or universities	Involve all ASF sub-sectors as partners, especially the private sector
	Develop true partnerships based on shared vision, resources, and efforts	Integrate a holistic approach from research to extension, including field practice
	Support resilience objectives of the USAID efforts conducted as part of the RISE initiative	Partner with USAID-funded projects or other U.S. government activities
Research approach	Integrate the four CCTs including resilience in the research	Incorporate all CCTs including resilience in research designs and examine their interrelatedness
	Focus research on one or more of the three pathways to improve human nutrition <sup>1</sup> as well as human health and incomes by increasing the quantity and quality of human-consumable animal products	Focus on one of the three pathways to improve human nutrition and issues related to consumer behavior
	Employ an interdisciplinary research approach by integrating several AOIs	Partner or collaborate with target country extension and advisory services
	Use appropriate statistical designs and include a power analysis to justify the number of replicates or experimental units in experiments	
	Proposals focusing on Livestock Disease Management and/or Food Safety should use One Health <sup>2</sup> and Food Systems approaches to address the interactions between human, environmental, and animal health and to ensure nutritional benefits for the vulnerable	
	Pursue sustainable climate-smart, livestock, or ASF improvement technologies that promote resilience to climate change and reduce greenhouse gas	
	Research is focused on priorities of either Burkina Faso or Niger and is at least partly located in or will benefit the zones where USAID is active	Research is focused on priorities of both Burkina Faso and Niger and is located in areas where USAID is active in both countries.
Implementation modalities	Participate in and present research findings at multi-stakeholder Innovation Platforms in the target country	Participate in wider networks beyond the Innovation Platforms in the target country for knowledge and data sharing and development impact

<sup>1</sup> The pathways are food production, income generation, and women’s empowerment (Good, 2009). See page 11 for more information.

<sup>2</sup> According to Centers for Disease Control and Prevention (CDC): “One Health recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines-working locally, nationally, and globally-to achieve the best health for people, animals, and our environment. A One Health approach is important because 6 out of every 10 infectious diseases in humans are spread from animals” (CDC, 2017).

**Table 2.** Focus grant requirements and recommendations.

<b>Area</b>	<b>Requirement</b>	<b>Recommendation</b>
Partnerships	Involve collaborative research and/or HICD endeavors between host country institutions and U.S.-based or other appropriate international institutions or universities	Involve all ASF sub-sectors as partners especially the private sector
	Develop true partnerships based on a shared vision and shared resources and efforts	Integrate a holistic approach from research to extension, including field practice
	Support resilience objectives of the USAID efforts conducted as part of the RISE initiative	Partner with USAID-funded projects or other U.S. government activities
Research approach	Involve at least one AOI	Employ an interdisciplinary research approach by integrating several AOIs where appropriate
	Integrate one CCT firmly in the project design and contribute to others	Integrate all CCTs firmly in the project design
	Use appropriate statistical designs and include a power analysis to justify the number of replicates or experimental units in experiments	Partner or collaborate with target country extension and advisory services
	Proposals focusing on Livestock Disease Management and or Food Safety should use One Health <sup>1</sup> and Food Systems approaches to address the interactions between human, environmental, and animal health and to ensure nutritional benefits for the vulnerable	
	Pursue sustainable climate-smart, livestock, or ASF improvement technologies that promote resilience to climate change and reduce greenhouse gas emissions	
	Focus research on the priorities of either Burkina Faso or Niger, with research to benefit the zones where USAID is active, and at least partially take place in those zones.	Focus research on priorities relevant to both Burkina Faso or Niger, with research taking place in one to two countries
Implementation modalities	Participate in and present research findings at multi-stakeholder Innovation Platforms in the target country	Participate in wider networks beyond the Innovation Platforms in the target country for knowledge and data sharing and development impact

<sup>1</sup> According to Centers for Disease Control and Prevention (CDC): “One Health recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines-working locally, nationally, and globally-to achieve the best health for people, animals, and our environment. A One Health approach is important because 6 out of every 10 infectious diseases in humans are spread from animals” (CDC, 2017).

## **PRIORITIES**

Tables 3 and 4 on the pages that follow describe the specific priorities developed during the multi-stakeholder Innovation Platform meetings in Burkina Faso and Niger. *All research and HICD efforts proposed should focus on addressing one or more of these priorities in the context of improving resilience and mitigating the associated risks.* More details about the priorities are provided in Appendix 4. These priorities should be considered in the context of the general descriptions of the AOIs on pages 12-15.

*When relevant, research should consider issues relevant to consumption, including (1) development of products that are appropriate to resource-poor consumers in terms of quantity, affordability, shelf life, and potential to improve nutritional outcomes, and (2) strategies that will overcome sociocultural constraints and elicit behavior changes that will result in increased ASF consumption. Although country priorities are presented separately in this RFA, proposals that involve studies in or are relevant to both countries will be preferred.*

### **Priorities in Burkina Faso**

All proposed interventions in Burkina Faso should fall under the Politique Nationale de Développement Durable de l'Élevage au Burkina Faso (2010 – 2025), Plan National de Développement Économique et Social (PNDES; 2016-2020), the upcoming Programme National du Secteur Rural (PNSR) II and the Plan National de Développement Sanitaire (2011-2020). Research efforts involving pertinent resource issues need to also consider the 2009 Land Tenure Law and the different policy instruments governing pastoral corridors. Interventions should also support activities from the USAID Mission and U.S.-government funded Resilience in the Sahel Enhanced (RISE) project.

The AOI-specific priorities in Burkina Faso are presented in Table 3. *Although country priorities are presented separately in this RFA, proposals that involve studies in or are relevant to both countries will be preferred.* To the extent possible, issues involving the economic and environmental sustainability of the interventions and gender should be emphasized in the design of the research and capacity building interventions. Particular attention should be paid to how research results can be scaled and sustained by the private sector.

**Table 3.** AOI-specific research for development priorities for Burkina Faso.

<b>Burkina Faso</b>
<b>ASF Production and Marketing AOI</b>
<p><b>Top priorities:</b></p> <ul style="list-style-type: none"> <li>• <b>Evaluate feed and water quality, safety, and quantity, and their use in animal feeding.</b> Lack of good quality feed and water are the most important constraints to livestock sector development in Burkina Faso. The quality and safety of the commonly used feed and water resources are not well known, nor is there knowledge about the quantities available in various zones and localities. There is therefore a need to evaluate the current feed and water resources and their use in current livestock systems, including by considering the quantities, qualities, and safety. In addition, for feeds, information is needed on feed production costs and profitability, market characteristics, value chain structure, and ways to add value.</li> <li>• <b>Support development of systems for improving quality and traceability of meat, milk, and eggs.</b> Current production practices of meat, milk, and eggs constrain quality. Inputs, including veterinary products and feed, are of unknown quality and can have great impacts on quality of the final products. Animal management practices, hygiene, handling, and processing practices of the products all have important impacts on quality. Focus should be on development of systems that improve ASF quality through high quality feeds and veterinary products and good management. These systems should ideally involve traceability to allow for value addition from the management investments. Economic and social aspects of the technologies should be considered as well as how they can be sustained and scaled by the private sector.</li> </ul> <p><b>Additional priority:</b></p> <ul style="list-style-type: none"> <li>• <b>Improve quality of crop residues and agro-industrial byproducts and improve production of natural and cultivated fodder.</b> The quality of animal feeds used in Burkina Faso is generally considered low, although there is little data available on this issue. Fodder and feed quality should be improved through development of dual-purpose and drought-tolerant varieties and improved processing methods, as well as by developing ways to increase access to quality forage seeds for intercropping with agricultural crops or for improving pastures. Research should also consider production costs and profitability, market characteristics, value chain structure, ways to add value, and commercial sector linkages and service provision.</li> </ul>
<b>Livestock Disease Management and Food Safety AOI</b>
<p><b>Top priorities:</b></p> <ul style="list-style-type: none"> <li>• <b>Improve knowledge of Tuberculosis and Brucellosis at the national level, to inform development of control strategies.</b> There is some evidence that Tuberculosis (TB) and Brucellosis are present in peri-urban production units around Ouagadougou, but no national data is available. Improving knowledge on the presence and load of the pathogens causing TB and Brucellosis would contribute to the development of mitigation and control strategies. Emphasis should also be given to building capacity of private sector veterinarians and Community Animal Health Workers (CAHWs).</li> <li>• <b>Evaluate the quality of veterinary medicines and identify entry points for microbial resistance and residues in ASF.</b> Such efforts will assist with developing effective strategies for utilization of veterinary medicines. One should note that there is currently no in-country testing capacity for drug quality, anti-microbial resistance, and residues. At this moment, the risk from these factors is unknown but they could potentially represent a public health risk. Emphasis should also be given to building capacity of private sector veterinarians and CAHWs.</li> </ul> <p><b>Additional priority:</b></p> <ul style="list-style-type: none"> <li>• <b>Improve poultry management systems to reduce zoonotic diseases among children and pregnant and breastfeeding women.</b> Backyard and semi-intensive poultry rearing is gaining popularity in Burkina Faso, but little attention has been paid to the potential negative impacts of zoonotic pathogens associated with poultry that can be transmitted through their droppings. Infection with some of these pathogens can have long term, negative effects on the nutritional status of children due to persistence of the infections they cause.</li> </ul>



### Enabling Policies and Future Systems AOIs

**Top priorities:**

- **Support development of quality standards and norms in livestock systems.** Across the value chain, quality standards and norms in livestock systems are lacking or are not implemented, hence the quality and safety of the final ASF products is commonly unknown. This lack of quality standards and norms also prevents exploitation of the premium that could be obtained by selling higher-quality products in domestic and foreign markets. Research is therefore needed to advance the development of such standards and norms, including ways to incentivize their adoption.
- **Develop ways to improve resource access in relation to conflict management, land use, etc.** Conflicts over diminishing resources for livestock production, particularly land and water, are worsening. There is therefore a need to have a more detailed understanding of resource access, profitability of land use within and between different groups using the land (e.g., agriculturalists, pastoralists), and conflict issues, including their relationship with violent extremism, with a view to develop institutional mechanisms and models for ensuring and improving access to these resources and effective ways to prevent and manage conflicts they cause.

## Priorities for Niger

All proposed interventions in Niger should be aligned with the Strategy of the High Commission Initiative 3N (HC3N) on Food and Nutritional Security and the Strategy for Sustainable Livestock Development (SDDEL 2013-2035) developed by the Ministry of Agriculture and Livestock. Interventions should also support activities of the USAID Mission and the U.S. government-funded Resilience in the Sahel Enhanced (RISE) project.

The AOI-specific priorities in Niger are presented in Table 4. *Although country priorities are presented separately in this RFA, proposals that involve studies in or are relevant to both countries will be preferred.* To the extent possible, issues involving the economic and environmental sustainability of the interventions and household economy should be emphasized in the design of the research and capacity building interventions, and particular attention should be paid to how research results can be scaled and sustained by the private sector.

**Table 4.** AOI-specific research for development priorities for Niger.

<b>Niger</b>
<b>ASF Production and Marketing AOI</b>
<p><b>Top priorities:</b></p> <ul style="list-style-type: none"> <li>• <b>Improve access to and quality of feed and fodder.</b> Due to limited use of forage conservation and fodder quality enhancement techniques, there is considerable seasonal variability in the availability and quality of feed and fodder originating both from Niger’s mainly rain-fed cropping systems and from rangeland. This also has negative impacts on other species and is of particular concern for cattle as it significantly reduces the availability of milk, a culturally and nutritionally significant part of the diet of many Nigeriens. In addition to agronomic and animal nutrition aspects, research should consider production costs and profitability, market characteristics, value chain structure, value addition, and potential for scaling and sustenance of proposed technologies and approaches by the private sector.</li> <li>• <b>Improve the quantity and the quality of meat and milk.</b> The reliance on unimproved grazing lands and poor quality forages and feeds, as well as traditional livestock breeds, constrain meat and milk production in Niger. Although small ruminant fattening is increasingly practiced, most animals have fluctuating growth patterns due to the inconsistent feed supply throughout the year, which also causes significant variations in the price and quality of meat and milk. To meet the growing demand for meat and milk, there is a need to improve the supply and quality of Nigerien meat and milk. The animal science focused research should consider production costs and profitability, market characteristics, value chain structure, inefficiencies, value addition, and potential for scaling and sustenance of proposed technologies and approaches by the private sector.</li> </ul> <p><b>Additional priority:</b></p> <ul style="list-style-type: none"> <li>• <b>Ensure the preservation and efficient use of crop residues.</b> The quality of crop residues in Niger is often inherently low and it declines further due to delayed harvesting and poor harvest and post-harvest management. Research is needed on effective strategies for improving the quality and preservation of crop residues. These could include research on biological, physical, or chemical treatments or on breeding to develop improved dual-purpose varieties for animal and human consumption such as those with high stover digestibility or protein content. The animal science-focused research should consider production costs and profitability, market characteristics, value chain structure, inefficiencies, value addition and potential for scaling and sustenance of proposed technologies, and approaches by the private sector.</li> </ul>

### Livestock Disease Management and Food Safety AOI

#### Top priorities:

- **Improve understanding of the most common diseases in small ruminants.** Small ruminants in Niger are frequently owned by women and their milk is commonly consumed in rural households, particularly by children and by certain ethnic groups. Understanding morbidity and mortality of these diseases will help improve animal survival and increase milk availability at the household level. The focus should include, but not be limited to, epidemiology, circulating serotypes, and economic impact of such diseases as Peste des Petits Ruminants (PPR), Pasteurellosis, and Sheep pox. Emphasis should also be given to building capacity of private sector veterinarians and CAHW.
- **Develop understanding of the main zoonotic diseases in Niger.** Diverse diseases affect both humans and animals in Niger, but knowledge is lacking on their prevalence and impacts. Important diseases for which the knowledge base should be increased include TB/Brucellosis, Rift Valley Fever (RVF), Newcastle Disease, and Highly Pathogenic Avian Influenza (HPAI H5N1). Emphasis should also be given on building capacity of veterinarians in the private sector and CAHWs.

#### Additional priority:

- **Help develop and strengthen a national food safety system and address environmental enteropathy.** An improved food safety system will help manage food safety of local and imported target ASF products and identify associated risks and hazards. The system should consider the entire value chain and address food safety issues at the household level. The interventions should consider food safety capacity strengthening along the meat and milk value chains. Where appropriate, environmental enteropathy should also be addressed.

### Enabling Policies and Future Systems AOIs

#### Top priorities:

- **Analyze the efficacy and impacts of existing policies affecting livestock.** In the past 20 years in Niger there have been successive policies on livestock, each with somewhat different emphases. An analysis of their implementation and impacts on the livestock sector is needed to guide future policy-making processes. In particular, research is needed to develop the evidence base needed for policy makers to enact or implement policies that will strengthen the livestock sector.
- **Analyze the transformation of livestock systems.** Nigerien livestock systems are undergoing a profound process of transformation, including, among others, the increasing conflict between nomadic livestock rearing and crop production, monetarization of complementary services, increasing pressure on grazing lands and corridors, and climate change and resource degradation. This analysis should include an assessment of the profitability of land use (both within groups and between different groups which use land (e.g., pastoralists, agriculturalists) and whether and how this transformation is contributing to violent extremism and violent conflicts over resource use. An analysis of the processes and impacts should be done, with a view to guide future policy development processes in Niger.

#### Additional priority:

- **Support “One health”<sup>1</sup> policies.** Despite the great need, there is a relative scarcity of efforts in One Health in Niger, including at the policy level. Research should be conducted to aid policy processes by analyzing areas of need as well as sustainable and effective approaches for One Health implementation in Niger.

<sup>1</sup> According to Centers for Disease Control and Prevention (CDC): “One Health recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines-working locally, nationally, and globally-to achieve the best health for people, animals, and our environment. A One Health approach is important because 6 out of every 10 infectious diseases in humans are spread from animals” (CDC, 2017).

## GUIDELINES

### Reach Grant Concept Notes

Concept notes are required only for Reach grants and they should be no more than seven pages in length, excluding the cover sheet, references, and appendices. They must be prepared in English in Microsoft Word with Times New Roman font size 11, single spacing, and one-inch margins. The name of the lead institution and page numbers should be indicated in the header on each page. The summary budget tables must be prepared in Microsoft Excel using the template in Appendix 3a. Table 5 shows the required outline for concept notes.

**Table 5.** Outline of Reach grant Concept Notes.

Section	Description
Title page	Project title, PI, co-PI(s), and collaborator(s) names, titles, departments, institutions, addresses, email addresses, and phone and fax numbers Type of project (Reach grant concept note) Duration of the project Total budget requested
Narrative	Background and context (describe previous research on the topic and the rationale for the proposed work) Justification for geographic focus area(s), including reasons why research is focusing on one or two countries Research hypothesis and objectives Research design and methods (see page 19) HICD approach (see page 11) Leverage of existing USAID, U.S. government, and other efforts and plans for acquiring additional investments Development goals and scaling potential and plans <i>Please note: CCTs should be integrated across these sections and should not form a separate section</i>
Management plan	Qualifications, roles, and responsibilities of team members, including a staffing plan
Work plan	Work plan timeline of activities in each quarter for the life of the project
References	Use the Journal of Animal Science style to format references
Preliminary budget	Use the Excel “Budget template for concept notes” (Appendix 3a)
<b>Appendices</b>	
PI qualifications	Curriculum vitae (CV) of the PI (2 pages maximum). <i>Use the enclosed template for CVs (Appendix 5)</i>
Letters of support or intent	Letters of support or intent from collaborating institutions (including co-PI institution; any letters must not exceed two pages)
Conflict of interest	Complete the enclosed Conflict of Interest form for key personnel (Appendix 6)

### Focus and Reach Grant Full Proposals

Full proposals are submitted by:

- (1) All Focus grant applicants. These proposals should be 15 pages long excluding the cover sheet, Table of Contents, Executive Summary, references, and appendices.
- (2) Reach grant applicants whose concept notes are shortlisted. These proposals should be 20 pages long excluding the cover sheet, Table of Contents, Executive Summary, references, and appendices.

Formatting requirements for full proposals are identical to those for concept notes. They must be prepared in English in Microsoft Word with Times New Roman font size 11, single spacing, and one-inch margins. The name of the lead institution and page numbers should be indicated in the header on each page. The summary budget tables must be prepared in Microsoft Excel using the template in Appendix 3b.

Full proposal sections for Reach and Focus grants are described in the table below. Please note that proposals that do not follow the format given in the table may be rejected. The PIs of the shortlisted Reach and Focus grants will be requested to submit an Open Data Plan.

**Table 6.** Outline of Reach or Focus grant full proposals.

Section	Description
Title page	Project title, PI, co-PI(s), and collaborator(s) names, titles, departments, institutions, addresses, email addresses, and phone and fax numbers Type of project (Reach/Focus) Duration of the project Total budget requested
Table of Contents	
Acronyms	
Executive Summary	One page (does not count toward the page limit for full proposals)
Technical Approach	Background and context (describe previous research on the topic and the rationale for the proposed work) Justification for geographic focus area(s), including reasons why research is focusing on one or two countries Research hypothesis and objectives Research design, plans, and methods (including experimental design, layout, and plans, justification of experimental units, and statistical analysis approach) (see page 19) HICD approach (see page 11) Leverage of existing USAID, U.S. government, and other efforts and plans for acquiring additional investments Development goals and scaling potential and plans <i>Please note: CCTs should be integrated across these sections and should not form a separate section</i>
Management plan	Lead institution and collaborators Qualifications, roles, and responsibilities of each member of the consortium, including a staffing plan (for key personnel and other project staff) Anticipated problems and how they will be addressed
Work plan	Detailed work plan timeline of activities in each quarter for the life of the project
Monitoring and evaluation plan	<u>For full Reach grant proposals:</u> <ol style="list-style-type: none"> <li>1. A Theory of Change that fits within the LSIL’s Theory of Change. This should include a narrative with graphics</li> <li>2. Description of the proposed data collection for baselines and performance monitoring and evaluation. Be sure to describe how the project and its activities will be evaluated for impact</li> <li>3. Results framework including indicators and proposed targets. Use appropriate Feed the Future and LSIL indicators, as presented in the LSIL Performance Monitoring Plan, in addition to other project-specific indicators. Use <i>the template in Appendix 7, and include it in your proposal as an appendix</i></li> </ol> <u>**Focus grant proposals, only complete numbers 2 and 3 above.</u>
References	Use the Journal of Animal Science style to format references

Budget	See instructions below. Use the attached “Budget template” in Excel (Appendix 3b).
Budget narrative	Provide a detailed budget narrative that is clear and thorough so that costs can be easily verified
<b><i>Appendices:</i></b>	
EMMP template	Complete the enclosed environmental monitoring and mitigation plan (EMMP) template (Appendix 8)
Results Framework	Results Framework template (Appendix 7)
PI qualifications	CV of the PI (2 pages maximum). <i>Use the enclosed template for CVs (Appendix 5)</i>
Collaborator qualifications and support letters	CVs for all key personnel, including Co-PIs. Maximum of 2 pages each. <i>Use the enclosed template for CV (Appendix 5)</i> Letters of support from co-PI and collaborator institutions, any letters must not exceed two pages
Conflict of interest	Complete the enclosed Conflict of Interest form (Appendix 6) for key personnel
Current and pending support	Complete the enclosed Current and Pending Support forms for key personnel (Appendix 9)
Capability statement	Describe five relevant projects by the implementing team, including a minimum of three by the lead institution that illustrate the capability of the team
Knowledge Sharing Plan	For Reach grants: Indicate how you plan to share knowledge generated in the host country and outside. For Focus grants: No Knowledge Sharing Plan should be submitted with the Focus grant proposals, but instead, the Plans will be submitted after the Focus grants awards have been made.

## Other Provisions

Collaborating partners may be contractors or subrecipients, and should be aware of the distinction between procurement contracts (acquisition) and subawards (assistance). Contracts are subject to 2 CFR 200.318-326 (<http://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1.4.31&rgn=div7>) and the USAID standard provision entitled "USAID Eligibility Rules for Goods and Services" (<https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=260c5b7cc4cf7639856f204d96e3515f&rgn=div5&view=text&node=22%3A1.0.2.22.25&idno=22>) in 22 CFR 228 in the procurement and long-term lease (as defined in 22 CFR 228.01 of goods and services with USAID funds. Subawards are subject to 2 CFR 200 ([http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl)), 2 CFR 700 and the USAID standard provision entitled "Applicability of 2 CFR 200 and 2 CFR 700" (<https://www.usaid.gov/sites/default/files/documents/1868/303maa.pdf>).

The lead and partner subaward recipient's contractors and subcontractors at all tiers must meet USAID's supplier nationality requirements. In procurement and long-term lease of goods and services, the lead and partner subaward recipients have to comply with USAID's Rules for Procurement of Commodities and Services Financed by USAID in 22 CFR 228 (<http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=22:1.0.2.22.25>) in the procurement and long-term lease (as defined in 22 CFR 228.01 available at: <https://www.gpo.gov/fdsys/granule/CFR-2003-title22-vol1/CFR-2003-title22-vol1-sec228-01/content-detail.html>) of goods and services with USAID funds. These rules govern the source of USAID-financed commodities and the nationality of suppliers of USAID-financed commodities and services, which must be in a country that is included in the authorized geographic code for this project. These rules do not apply to procurement or long-term lease of goods and services with cost-sharing or program income funds.

It is USAID policy that no profit (i.e., any amount in excess of allowable direct and indirect costs) is payable under the prime award or under any subaward (i.e., sub-grants and sub-cooperative agreements, but excluding procurement contracts). However, profit is payable by the prime recipient or a sub-recipient to a contractor/vendor if the recipient or sub-recipient is procuring goods or services in furtherance of the program being supported by the award or subaward. The following website contains additional information: <http://www.usaid.gov/ads/policy/300/303sai>.

For the subaward(s) resulting from this solicitation, the authorized Geographic Code is 937. This includes all but "restricted commodities" and other special cases. Geographic Codes are described in 22 CFR (<http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=22:1.0.2.22.25>) and the Internal Mandatory References to Chapter 310 of USAID's Automated Directives System (ADS 310; <https://www.usaid.gov/ads/policy/300/310>) entitled "List of Developing Countries", "List of Advanced Developing Countries", and "List of Prohibited Source Countries." Special rules apply to RESTRICTED COMMODITIES and are described in ADS 312.3.3 (<https://www.usaid.gov/sites/default/files/documents/1876/312.pdf>).

Exchange students and visitors funded through subawards need to adhere to USAID policies concerning visa compliance for exchange visitors (ADS 252; available at: <https://www.usaid.gov/ads/policy/200/252>) and participant training and exchanges for capacity development (ADS 253; available at: <https://www.usaid.gov/ads/policy/200/253>).

## Budget

The proposal budget and budget narrative must be submitted in the 2010 or earlier versions of MS Excel and MS Word, respectively, and must use Times New Roman font in 10-point or larger size. For Reach grants, the maximum allowable budget variance between the concept note and full proposal is 5%.

At least 50% of the total budget amount (including direct and indirect costs) must be spent in the target country. The budget and budget narrative must include the following:

- **Direct salaries and wages:** Include names (if known) and positions of individuals for each position proposed. Salaries should be budgeted in the units in which they are paid. For example, if an organization pays its employees in monthly rates, then the unit of measure in the budget should be the month and the applicant must use the rate per month for each employee. Salary increases can be adjusted to allow for inflation. Salaries include only wages paid to employees of the direct subaward recipient. All other costs for personnel of partners should be included as contractors, consultants, or subawardees, as appropriate.
- **Fringe:** Include any employment benefits that employees of the direct subaward recipient paid from this project will receive. These may include health insurance, unemployment benefits, education benefits, etc. Benefits should be calculated based on the standard employment benefits offered by the organization and should follow the minimum requirements mandated by law.
- **Travel, transportation, and per diem:** Follow the USAID standard provisions “Travel and International Air Transportation” and “Ocean Shipment of Goods.” Describe the itinerary including dates, estimated airfare, class of travel, and any transportation-related expenses. For each trip, include location, number of days, and the daily rate. Include lodging and subsistence costs in accordance with your institution’s established policies and practice. It should be noted that the applied rate cannot exceed the U.S. Government per diem rate schedules as per GSA rate for domestic/U.S.-based travel (<https://www.gsa.gov/portal/content/104877>) and foreign ([https://aoprals.state.gov/content.asp?content\\_id=184&menu\\_id=78](https://aoprals.state.gov/content.asp?content_id=184&menu_id=78)). Also include miscellaneous travel expenses such as ground transportation, shuttle/transfers, etc. Distinguish between domestic (U.S.) and international travel.
  - For Reach grants, include the cost of travel for the PI to the LSIL annual general meeting (1 trip every year, use Nepal as a reference) and to the in-country Innovation Platform meetings (1 trip every year, to Burkina Faso or Niger).
  - For Focus grants, include 1 trip to the LSIL annual general meeting and 1 trip to the Innovation Platform meeting in Burkina Faso or Niger. For budgeting purposes for the LSIL annual general meeting, use Nepal as a reference for costs.
- **Equipment:** Provide a detailed budget breakdown for purchases of durable and expendable equipment, including type, quantity, unit price, and total cost. Durable equipment is defined as any item valued US \$5,000 or more with an expected life of one year or more, whereas expendable equipment are items valued at less than US \$5,000 with an expected life of one year or less. All costs for durable equipment must be determined through formal price quotes and the applicant must be ready to provide these quotes to UF upon request.
- **Consultants:** Include names and titles of proposed individuals (if known), number of units (hours, days) for each person, proposed unit rate, and total consultant costs.
- **Overseas allowances:** Follow your institution’s established policies and practices for overseas allowances (excluding per diem and shipping/storage allowances, which should be listed under “Travel, Transportation, and Per Diem”).
- **Other direct costs:** Include costs for branding and marking, mitigation of environmental impacts, M&E data collection and management, communications, postage, passport/visas, medical



exams/immunization (for international travel), medical evacuation insurance, expendable supplies and materials, lab tests, field inputs, publication costs, etc. Provide the basis for each estimate, including type, quantity, unit price, etc. as applicable. Costs for mitigation of environmental impacts and M&E data collection and management are the responsibility of the subawardee and associated costs should be included in the project budget. In this section, also include:

- Trainings, seminars, workshops or stakeholder meeting costs: These refer to all of the costs incurred for organizing and conducting training events, workshops, seminars, or stakeholder meetings, including travel, number of attendees, location, etc.
- Tuition: Tuition is allowed as outlined and described in 2 CFR 200 ([http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl)).
- Subaward: If the proposed work includes subrecipients, a detailed line item budget breakdown for each of such subrecipients should be included in addition to including the lump sum in the prime budget. Applicants are encouraged to use the detailed line item budget template (Appendix 3b) to calculate the subrecipients' expenses. The subrecipient's budget must be accompanied with a detailed budget narrative.
- Contracts: If your proposed work includes service contracts, include them separately in the budget.
- Indirect cost (overhead or general and administrative costs): U.S. institutions may recover their full federally negotiated indirect cost rate (a copy of the current F&A agreement should be attached). U.S. institutions and foreign entities with no federally-negotiated rate may claim 10% de minimis indirect cost rate as defined in 2 CFR 200.414(f) ([http://www.ecfr.gov/cgi-bin/text-idx?SID=66ad9926201ac07047230192cc79c6a1&mc=true&node=se2.1.200\\_1414&rgn=div8](http://www.ecfr.gov/cgi-bin/text-idx?SID=66ad9926201ac07047230192cc79c6a1&mc=true&node=se2.1.200_1414&rgn=div8)). Describe the type of indirect rate applied.

All proposed grant activity costs must be allowable within the normal operating practices of the applicant and should be in accordance with their written policies and procedures. All line items must be clearly explained in the budget narrative with enough detail to allow UF to determine if the cost is allowable under the USAID award including 2 CFR 200, 2 CFR 700 or USAID ADS303 or ADS308 as appropriate. Budgeted amounts must also be supported by a justification and the applicant must be able to provide supporting documents if requested.

*Important*: No funding should be requested for acquisition, construction, alteration, refurbishment, or repairs (including dredging and excavation) of buildings or other vertical structures in the budget.

## **Submission**

All Concept Notes, Full Proposals, and all supporting documents must be submitted in English via Piestar Proposals (<https://proposals.piestar.com/opportunities/livestock>). To submit, you will need to create an account at <https://proposals.piestar.com/register> and follow the detailed submission instructions. If you have technical difficulties with your submission, click on "Help" within Piestar Proposals. Concept notes, proposals, and supporting documents (i.e. budgets, supporting letters, etc.) that are submitted via e-mail will not be accepted.

## Questions

In order to maintain the integrity of the competitive process, faculty, or staff of the Livestock Systems Innovation Lab will only provide written answers to written inquiries about the RFA that are submitted to the e-mail address [livestock-lab@ufl.edu](mailto:livestock-lab@ufl.edu) by the deadline indicated in the table on the first page of this RFA. Please note that USAID staff, including Mission staff, will be unable to advise or provide information to potential applicants that will be used in preparing a proposal.

Questions or concerns about the technical content or budget should be written and emailed to [livestock-lab@ufl.edu](mailto:livestock-lab@ufl.edu) by 11:59:59pm EDT before April 24, 2017, using the subject line “Questions for LSIL RFA.” Sensitive or proprietary information should not be included in the questions. Please note that all questions and answers will be posted in English online on April 26, 2017 on the website from which this RFA was accessed as an amendment to this RFA, without indicating the source of the question. To maintain fairness and competitiveness, the LSIL will be unable to answer questions received after the above deadline.

## CONCEPT NOTE AND FULL PROPOSAL EVALUATION AND APPROVALS

The concept notes and full proposals will be:

- Screened by the LSIL ME to ensure completeness of the application;
- Evaluated by the Technical Evaluation Panel for the research approach, quality of the science, experimental design, etc.;
- Assessed by the LSIL ME for alignment with the guidelines outlined in this RFA;
- Assessed by the LSIL External Advisory Board, for programmatic alignment. The Board will jointly select projects to be funded with USAID Washington DC;
- Selected projects will be assessed by the country governments, for alignment with country priorities and assessed for alignment with Feed the Future goals and other aspects, by USAID Washington DC and Country Missions.

### Evaluation Criteria – Reach Grant Concept Notes:

- Technical Approach (80 points)
  - Justification for the selected focal region(s) for the project (5 points)
  - Innovation, scientific quality, experimental design, and soundness of the approach (45 points)
  - Integration of cross-cutting themes (15 points)
  - Likelihood of scaling, widespread adoption, and sustainability to ensure lasting development impact (15 points)
- Team qualifications, experience, and past performance (10 points)
- Management Approach (10 points)
  - Complementarity with existing USAID and non-USAID funded projects and activities (5 points)
  - Alignment with stated country-specific priorities for Burkina Faso or Niger (5 points)

### Evaluation Criteria – Full Reach and Focus Grant Proposals:

- Technical Approach (65 points)
  - Justification for the selected focal region(s) of the project in the country (5 points)

- Innovation, scientific quality, experimental design, and soundness of the approach (35 points)
- Integration of cross-cutting themes (15 points)
- Likelihood of scaling, widespread adoption, and sustainability to ensure lasting development impact (10 points)
- Team qualifications, experience, and past performance (10 points)
- Management Approach (15 points)
  - Complementarity with existing USAID and non-USAID funded projects and activities (5 points)
  - Alignment with stated country-specific priorities for Burkina Faso or Niger (5 points)
  - Monitoring, evaluation, and impact plan (5 points)
- Budget (10 points)
  - Proposed costs will be evaluated for reasonableness, effectiveness, realism, fairness, necessity, allowability, and allocability (10 points).

## **ADDITIONAL MATERIALS FOR CONCEPT NOTE AND PROPOSAL DEVELOPMENT**

### **USAID Materials**

- ENCAP Factsheet. Environmental monitoring and mitigation plans.  
<http://www.usaidgems.org/Workshops/Bangkok2013Materials/ENCAPFactsheet.pdf>
- Feed the Future handbook of indicators.  
<https://www.feedthefuture.gov/resource/feed-future-handbook-indicator-definitions>
- Feed the Future results framework.  
<https://www.feedthefuture.gov/resource/feed-future-results-framework>

### **LSIL Country Briefs for Burkina Faso and Niger**

Country-specific reports on certain AOIs and CCTs that may provide additional helpful information for the development of proposals will be posted online on the website on which this RFA was posted.

## REFERENCES

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## **APPENDIX LIST**

Appendix 1. Stakeholder list

Appendix 2. Key personnel

Appendix 3a. Budget template for concept notes

Appendix 3b. Budget template for full proposals

Appendix 4. Description of the priorities for Burkina Faso and Niger

Appendix 5. Template for CV

Appendix 6. Conflict of Interest form

Appendix 7. Results framework, indicators, and proposed targets

Appendix 8. EMMP template

Appendix 9. Current and pending support