



## External Mid-Term Review of Africa RISING East/Southern Africa Project (Tanzania and Malawi only)

### 1 Background

#### 1.1 Africa RISING Program ([www.africa-rising.net](http://www.africa-rising.net))

As part of the Feed the Future Initiative, the United States Agency for International Development (USAID) is supporting an innovative multi-stakeholder agricultural research program, the Africa Research in Sustainable Intensification for the Next Generation (Africa RISING). The program's main objective is to identify and validate scalable options for sustainable intensification of key African cereal-based farming systems to increase food production and improve livelihoods of smallholder farmers and at the same time conserve or improve the natural resource base.

Africa RISING is a five-year research program with three regional projects launched in 2011. It brings together a wide range of research and development partners from the CGIAR and the national agricultural research and extension systems, farmers, input and output dealers, and policy makers to develop management practices and technology combinations to better integrate crops (cereals, legumes and vegetables), livestock (including poultry), trees and shrubs in mixed-farming systems with the aim of improving whole-farm productivity, nutrition, and incomes of small-farm families without degrading the environment. It will also develop innovations that effectively link farmers to markets and input suppliers.

The three projects are:

- Sustainable intensification of crop-livestock mixed farming systems in the Guinea-Sudan-Savanna Zone of West Africa – led by the International Institute of Tropical Agriculture (IITA),
- Sustainable intensification of crop-livestock integrated farming systems in the Ethiopian highlands – led by the International Livestock Research Institute (ILRI), and
- Sustainable intensification of cereal-legume-livestock integrated farming systems in East and Southern Africa – led by IITA.

The International Food Policy Research Institute (IFPRI) is responsible for monitoring, evaluation, and impact assessment across all three projects.

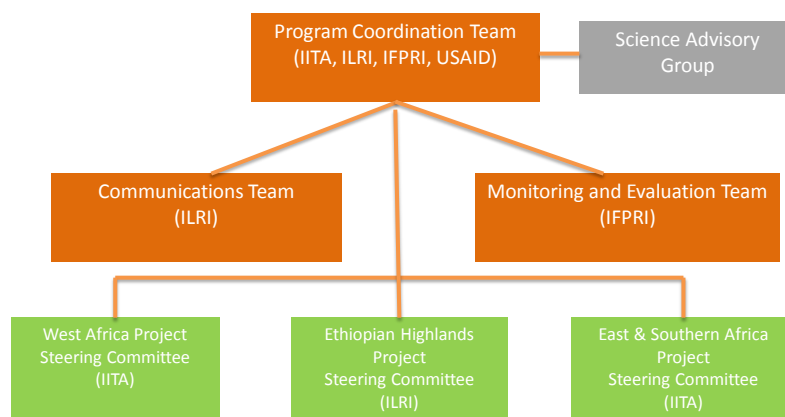
The program is organized around three research outputs that are logically linked in time and space, namely:

1. Situation Analysis and Program-wide Synthesis
2. Integrated Systems Improvement
3. Scaling and Delivery of Integrated Innovation

The first research output covers the activities necessary to ensure that best bet or best-fit technological interventions address farmers' priority constraints and to develop program-wide synthesis related to the lessons learnt across the three projects. Research Output 2 is delivered via a broad approach of participatory technology identification, adaptation and effective combination aiming at farming systems improvement in terms of productivity, income, and natural resource management. Research Output 3 consists of the development of approaches for scaling out systems innovations to similar development domains.

The Africa RISING research approach with its research outputs follows largely the research approach of the Humidtropics CRP. Africa RISING is mapped under Humidtropics, however, the East and Southern Africa and the West Africa projects are currently not within the geographical focus of Humidtropics' first phase which is focusing on the humid tropical zones in Africa and not the moist savannahs. The Africa RISING intervention sites in Mali fall within the geographical scope of the Dryland Systems CRP and the research is therefore also reported by the Africa RISING partner ICRISAT to the Drylands Systems CRP.

## 1.2 Africa RISING Program Structure



## 1.3 Africa RISING East and Southern Project

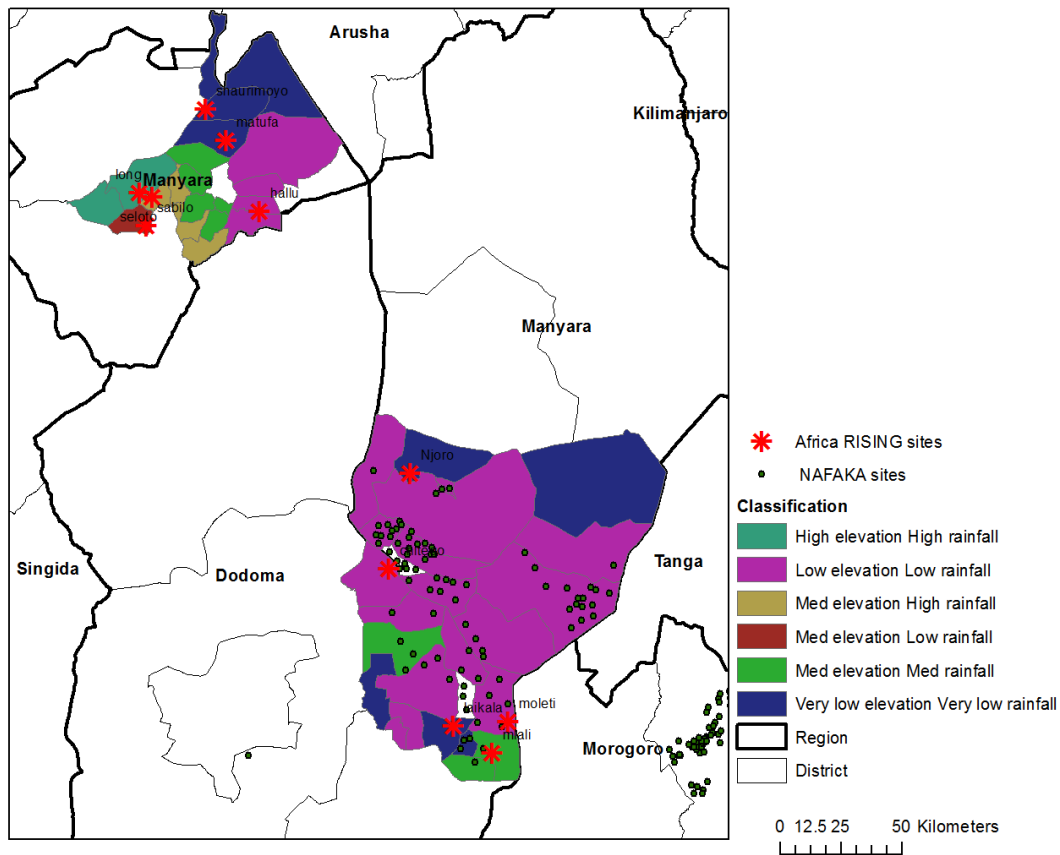
In Tanzania, activities are being implemented in two broadly different agroecological environments that define specific agricultural potentials: (i) the sub-humid areas of Babati District (currently 6 villages) and (ii) the semi-arid area stretching across Kongwa and Kiteto Districts (currently 5 villages). Each village has a minimum of 200 households.

In Kiteto, farming of annual crops is the most important livelihood activity for smallholder households, with an average planted area of 3.6ha per household, followed by livestock keeping (30% of the rural households). Despite sub-optimal conditions, maize is the dominant crop grown in Kiteto District. Other major crops are sorghum, sunflower, beans and pigeon peas. Farming is entirely rainfed. Soil erosion is a widespread problem.

Similarly in Kongwa, the mainstay of the majority of the population is crop farming, sometimes in combination with livestock. Major crops grown are maize, sorghum, sunflower, groundnut, millet and tomatoes. Soil erosion occurs widely. The district has a distinct rural character, with few urban areas. The markets along the Dodoma-Morogoro/Dar es Salaam road, cutting through the center of the district, are however lively, particularly the “international” market in Kibaigwa, which is a major crop/cereal market for Tanzania.

Babati District, in recent history, attracted people from different parts of Tanzania – and even beyond – because of the availability of fertile land. The shifting landscape and growing conditions allow a wealth of different crops to be planted, ranging from maize and rice to sorghum, sunflower, beans, pigeon peas, sesame, potatoes, chickpeas and cotton. Pressure on arable land is high with

planted land of about 1.3ha per household. A large number of farms (38%) experience soil erosion. Cattle are the dominant livestock followed by goats, sheep and pigs.

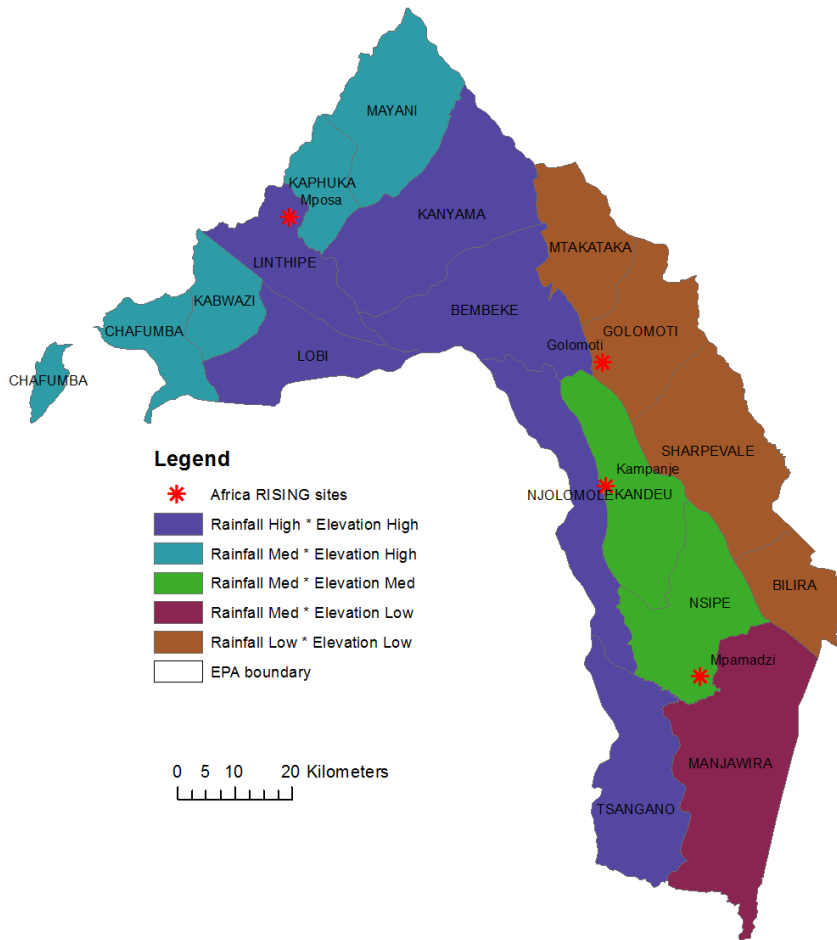


Africa RISING intervention villages in Tanzania

Key constraints to higher agricultural productivity include poor soil fertility, limited access to improved seeds, climate variability, pest and diseases, low mechanization, weak research-farmer linkages, insufficient knowledge about healthy human nutrition, inadequate agro-processing, and poor markets. In livestock production, the challenges include unavailability of improved breeds and better pasture and fodder species, overstocking, pests and diseases, conflicts between livestock keepers and farmers, and wildlife-livestock conflicts.

In Malawi, activities are ongoing in a total of 25 villages in four Sections in Dedza and Ntcheu Districts, representing agro-ecologies ranging from semi-arid to sub-humid. Maize-based production systems dominate both districts which have unimodal rainfall from November to April. Farm sizes range from 0.5 to 1.5ha, characterized by crops growing on ridges. Soil fertility is generally low. Farmers do not own significant livestock numbers to produce adequate manure for soil fertility replenishment.

Poverty, food insecurity and malnutrition are common in the area as a result of low agricultural productivity and over-reliance on low-protein staple crops. Constraints to agricultural productivity include inadequate and outdated extension messages, variable rainfall and degraded soils.



Sections in Malawi with Africa RISING intervention villages

The project brings together a wide range of national and international research institutions, extension systems, farmers, input and output dealers, and policy makers. The activities are implemented on-farm and on-station, are researcher or farmer managed. Though taking place at the plot or field levels, results and outputs should be suitable for extrapolation to larger scales and other recommendation domains.

In both countries, the project address these constraints over time in a participatory and stepwise approach, allowing sequencing and targeting of technologies according to farm types to continually enhance farm-level outcomes.

With research being the focus of the project, wide adoption and scaling out of sustainable intensification I innovations will be achieved through close collaboration with development partners in their areas of intervention where they can integrate Africa RISING research findings into their programs.

## 2 Purpose of the review

At this early stage of the project (third field season is ongoing) the focus of this review is on assessing the conformity of the implemented work with the research framework developed at the program level, evaluating how the project is fostering learning by the stakeholders in view of achieving the expected outputs, and proposing recommendations to rectify, if necessary, any shortcomings. The review will identify weak but important research areas, examine the relevance of

existing partnerships for the implementation of the activities, and evaluate the appropriateness of available human resources to implement the project. The review team will pay particular attention to farmer-level learning and explore whether the project has considered adequately learning experiences from past programs in the intervention areas. It will also review the current management structure at project and program level and its implications on the research program. Identification of data gaps and issues of data handling and sharing among partners will also be part of the review. As IFPRI is in charge of impact monitoring, the contribution of its activities and results to the project's research agenda will also be evaluated.

The results of the review will allow the Africa RISING management, the chief scientist, and key partners to make necessary adjustments before the next field season and feed into the planning of a next project phase.

### 3 Key evaluation questions

- What progress has been made towards the Africa RISING program objectives and expected outcomes? What can realistically be achieved within the given time frame?
- How relevant and feasible is the current field research approach to achieve the three research outputs and the outcomes?
- To which extent has the project built on experiences of past projects in the intervention areas in terms of farmer-level learning? How can this be improved?
- Which data gaps do exist and need provision of scientific evidence for achieving the three research outputs and the outcomes? How can they be addressed?
- Which issues exist around data management and how can they be addressed?
- Which research areas are missing or need to be strengthened (economics, gender, scaling approaches, communication...)? How can the gaps be filled?
- How adequate are the available human resources to the successful implementation of the project? Which expertise needs to be strengthened or added?
- Are the current research and development partnerships adequate for a successful project?
- How effective is the collaboration, coordination, and working relationship among key partners?
- How relevant is the program and project management structure in terms of enhancing the implementation of the ESA project?
- Which lessons have been learned by each key partner so far?
- To which extent is the project contributing to the Humidtropics and Dryland CRPs?
- How should the research be further developed in a next phase?

### 4 Evaluation methodology

It is envisaged that the review team will employ a mixed-methods-approach to ensure that the findings will respond to the purpose of the review and answer the key evaluation questions.

The approach will include but may not be limited to:

- **Document Reviews:** not only of selected project documents held at the coordination office but also materials assembled by the partners (e.g., baseline data, research protocols, data analysis documents, etc ), since the start of the project
- **Key Informant Interviews:** Researchers of Africa RISING in ESA, Africa RISING management and governance staff (selected Steering Committee and PCT members), IITA DDG-R and DDG-Partnerships, IITA directors for East and Southern Africa, NRM and Humidtropics, USAID Washington, USAID missions in Tanzania and Malawi

- **Focus Group Discussions:** with R4D platform members and with farmer groups that should benefit from the project
- **Stakeholder Analysis:** will be used to determine the effectiveness of partnerships and institutional collaborations forged between IITA and partners
- **Field visits:** to project sites in Tanzania and Malawi

## 5 Evaluation team composition

The review team shall consist of 3 persons with different technical expertise. Core expertise required is:

- Farming systems research in Africa
- Social science (socio-economics, social geography, gender )
- Managing multi-partner agricultural research projects
- Monitoring and evaluation of complex agricultural research projects
- One member should have livestock expertise in East/Southern Africa

## 6 Review period

- Document reviews: late January/early February 2015, 4 days
- Key informant telephone interviews: early February 2015, 1 day
- Travels to Malawi and Tanzania to meet with key informants and field visits: 23 February to 16 March 2015 (22 days, detailed schedule will be worked out by Africa RISING management)
- De-briefing report writing, 1 day
- De-briefing in Malawi; 1 day
- Draft Report writing: early April 2015, 4 days
- Final Report writing: end April 2015, 2 days
- International travel days: 2

## 7 Logistics

The Africa RISING ESA Coordinator, Chief Scientist and Malawi Research Coordinator will be responsible for all logistics.

## 8 Deliverables

Based on the above stated purpose and key evaluation questions the review team will submit the following deliverables:

- a short written report on its findings (not more than 5 pages) for the debriefing meeting; this report shall focus on issues posed by this ToR
- a draft report of not more than 50 pages on its detailed findings and recommendations (to be checked by the Africa RISING team for factual correctness)
- a final report of not more than 50 pages

## 9 Required documents

Program framework  
 Technical donor reports  
 Publications

links to wiki and web site  
Project document with regional log frame  
Action site proposals/work plans  
List of key partners  
Baseline survey instrument and data (IFPRI)  
Project mapping Tool (IFPRI)  
Farming Systems Analysis reports by WUR  
Minutes of PCT, Steering Committee and Science Advisory Group meetings  
Etc.