Africa RISING in West Africa: Some phase I achievements

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Research Outputs

1. Situation analysis (RO1)

2. Integrated systems improvement (RO2)

3. Technology delivery and scaling (RO3)

Cross-cutting: Capacity building
Situation analysis

RO1.1 Functional partnerships

RO1.2 Baseline and situational analysis

1. Farming systems were analyzed
2. Integrated crop-livestock systems were reviewed
3. Household nutrition and food safety issues were documented
4. Ruminant feed resources and feed markets analyzed
5. Rural poultry and pig production systems were characterized
6. Cereal-legume-vegetable cropping systems were analyzed
Defining farm type - Ghana

- **Type 1**: Female-headed households with low to medium endowments
- **Type 2**: Young, medium-endowed households
- **Type 3**: Medium to highly endowed households with cattle
- **Type 4**: High yield households with high endowments
Integrated systems improvement

1. Improved varieties were identified and disseminated
   1. Cereals – maize, sorghum hybrids
   2. Legumes – groundnut, early and dual-purpose cowpea
   3. Vegetables – okra, Roselle, tomato and pepper

2. Cropping systems were tested and disseminated
   1. Cowpea – variety, planting date and spraying regimes
   2. Soybean – variety, inorganic fertilizer, Rhizobium
   3. Maize – extra-early, early, medium N fertilizer
   4. Maize-legume rotations and intercrops
   5. Hybrid maize-erect cowpea intercrops
   6. Integrated maize-sheep/goat cropping
Testing cropping and management practices
Integrated systems improvement

RO2.1. Approaches and strategies for sustainable natural resources management

1. Participatory approaches to document and validate local conventions in Mali
2. Approaches to establish and characterize watersheds
3. Soil and water conservation method were identified and tested

RO2.2 Options to improve food storage and manage mycotoxin

1. Storage methods to reduce post-harvest losses in cowpea and maize.
2. Aflatoxin management – two aflasafe products (GH01 and GH02) were identified and evaluated in Ghana.
Post-harvest storage and aflatoxin management
Integrated systems improvement

RO2.3 Improved livestock feeding, health and housing management systems were developed

1. Improved housing for poultry – domestic chicken
2. Artificial brooding of Guinea fowls
3. Improved feeding and health management of village sheep and goat flocks
Livestock production systems
Technology delivery and scaling

RO3.1. Approaches to demonstrate, deliver and scale-out technologies and practices

1. ‘Community-based Technology Parks’
2. ‘Mother-baby trials’
3. Farmers’ Field Days
4. Partnership with USAID mission funded projects in Mali
5. Videos – Fighting Striaga video which was translated into 6 Northern Ghanaian languages and 5000 DVD produced and distributed.
Capacity building

- Kwame Nkrumah U S&T
- U for Development Studies
- U of Ghana

Students funded

- MSc
- PhD
Publications

1. Peer reviewed journals – 18*

2. Workshop proceedings - 1

3. Booklets – 5 (Community analysis, child nutrition, nutrition guidelines, rural poultry, soils,).
Thank You

Africa Research in Sustainable Intensification for the Next Generation

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