Feed the Future Food Security Innovation Labs:
Collaborative Research Programs

INTSORMIL Research, Education and Outreach in East Africa

Feed the Future Food Security Innovation Labs: Collaborative Research Programs Council Meeting

Morogoro, Tanzania

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USAID FROM THE AMERICAN PEOPLE

INTSORMIL

University of Nebraska Lincoln

What You Will Hear

- Vision and Objectives
- Technical and regional areas of projects
- Participating US universities
- Projects in Tanzania and nearby
- ASARECA-INTSORMIL workshop
- INTSORMIL's legacy
- Future Sorghum and Millet Innovation Lab

Vision

- For the *Sorghum, Millet and Other Grains CRSP* (**INTSORMIL**) to intervene in the major sorghum and pearl millet producing countries in Africa and Central America to:
  - Improve food security
  - Enhance farm income
  - Improve economic activity

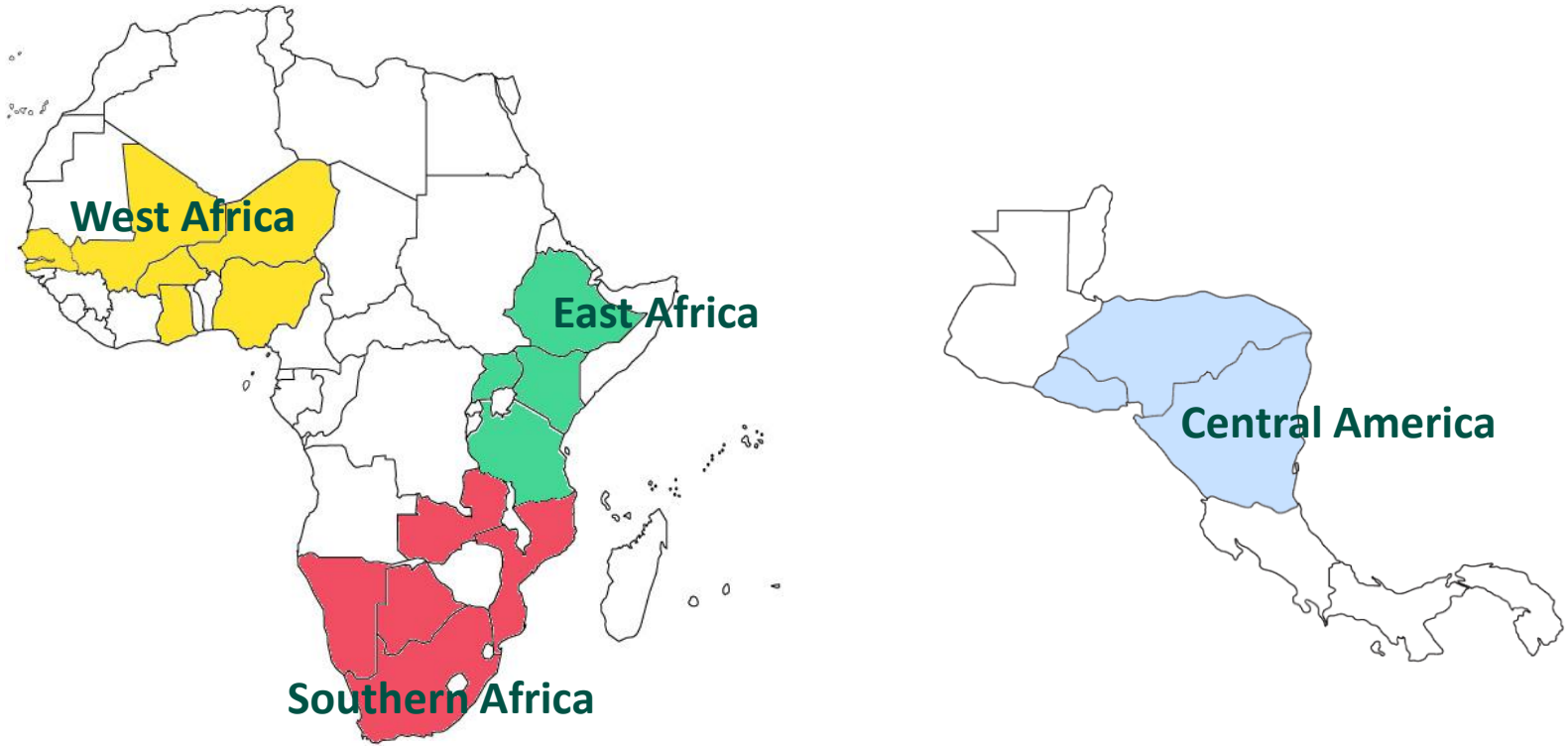
Major Objectives

- Facilitate the **growth** of the rapidly expanding **markets** for sorghum and pearl millet
- **Improve** the **food and nutritional quality** of sorghum and pearl millet to enhance marketability and consumer health
- **Increase** the **stability and yield level** of sorghum and pearl millet through crop, soil, and water **management** while maintaining or improving the natural resources of soil
- **Enhance** the **stability and yield** of sorghum and pearl millet though the use of **genetic** technologies
- **Enhance** global sorghum and pearl millet **genetic resources** and the conservation of biodiversity
- **Develop** effective **partnerships** with national and international agencies engaged in the improvement of sorghum and pearl millet production and the betterment of people dependent on these crops

Technical Focal Areas

- Soil and water (environmental considerations)
- Integrated pest management
- Nutrition and health
- Broadening market access
- Mitigating post-harvest constraints
- Enhancing productivity and livelihood in marginal areas
- Increasing income
- Improving food quality, processing and safety
- Biodiversity
- Biotechnology

INTSORMIL CRSP Regions



Participating U.S. Universities with USDA/ARS

University of Nebraska (ME)

Texas A&M University

Ohio State University

Purdue University

Kansas State University

West Texas A&M University

Kansas State University

Women's Group Training

Nzasa Women

AICT Majengo Women

Capacity Building

Since 2008, ten African scientists were supported for higher degrees with two PhD and two MS degrees in soil and water, three MS and one PhD degrees in agricultural economics, one MS degree in food science, and one PhD in plant breeding.

Technology Transfer

In Uganda in 2011-2012 about 2800 participants attended workshops; 160 soil advisors were trained; and approximately 680 t of seed were produced and marketed for two of the varieties released in 2011 by the seed company NASECO.

Social and Economic Studies

Value-supply chains including everything between a farmer planting and harvesting sorghum to a consumer buying and eating food products containing sorghum, and socioeconomic factors that might influence a farmer's decision to adopt technology developed by INTSORMIL research have been studied in Tanzania and Zambia.

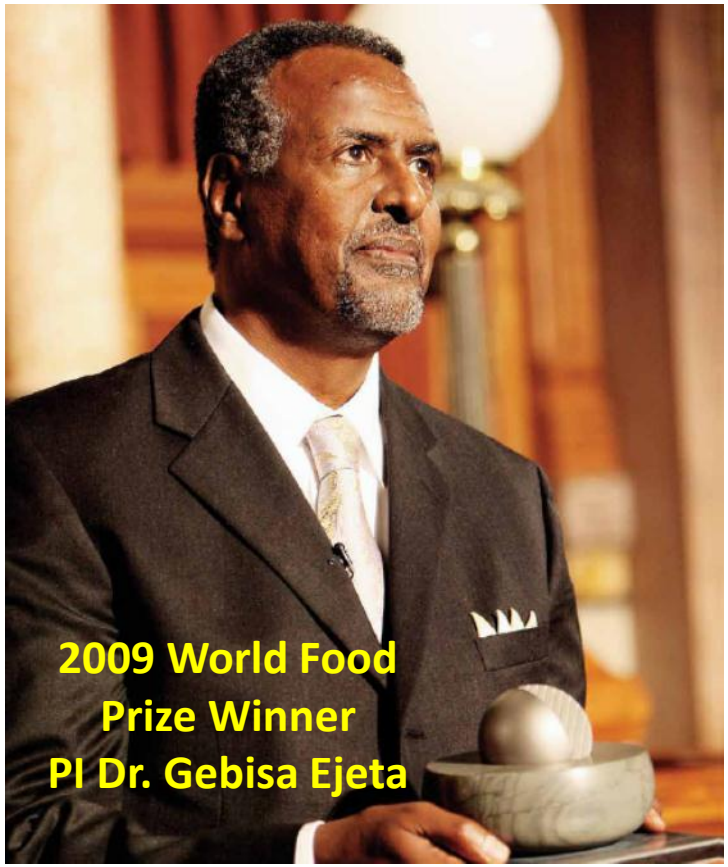
2012 ASARECA-INTSORMIL Regional Sorghum Research and Development Workshop

2012 Workshop Takeaways

65 participants developed logic models to address:

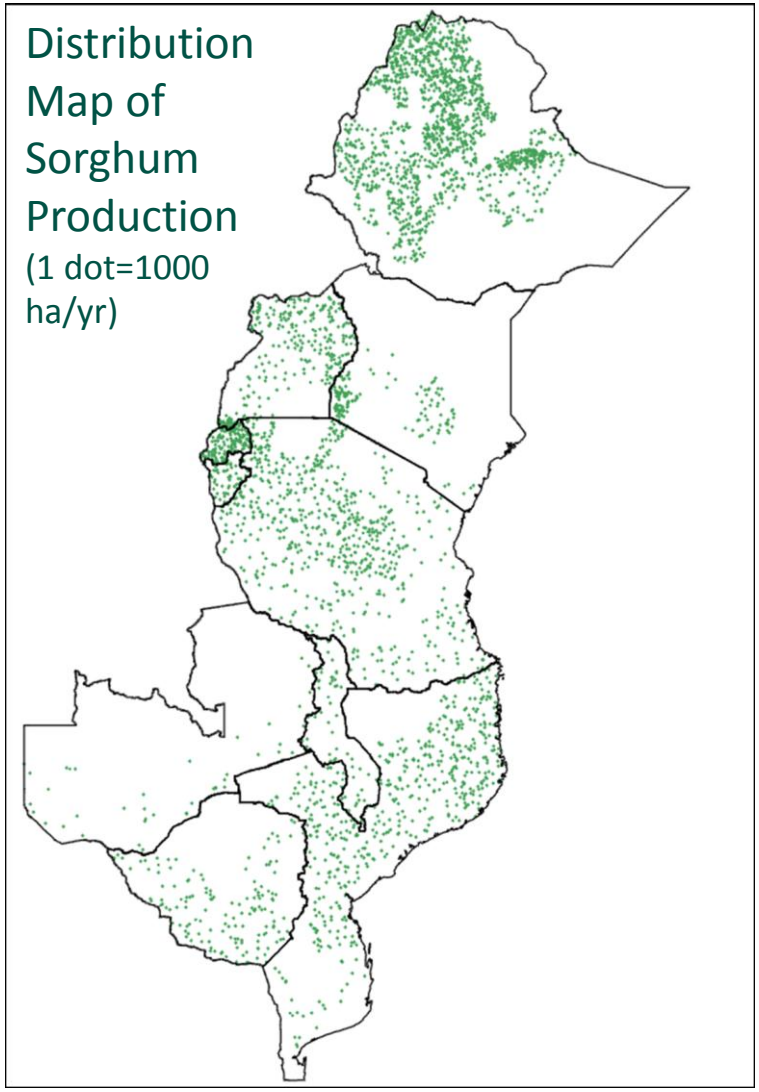
- Integrated soil fertility management for increased sorghum production
- Enhancement and improvement of access to sorghum germplasm with drought tolerance
- Stakeholder capacity enhanced with the use of participatory approaches for technology transfer
- Harvesting and post-harvest technologies for quality sorghum grain
- Promotion of linkages for improved market performance and of markets for diversified sorghum products

Success Stories



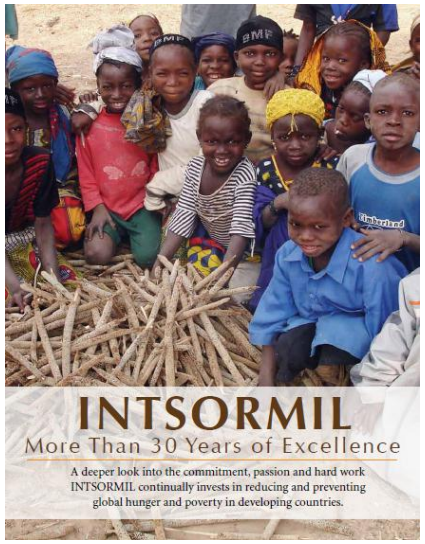
Despite INTSORMIL shutting down at end of March 2013, it has as a part of its legacy –

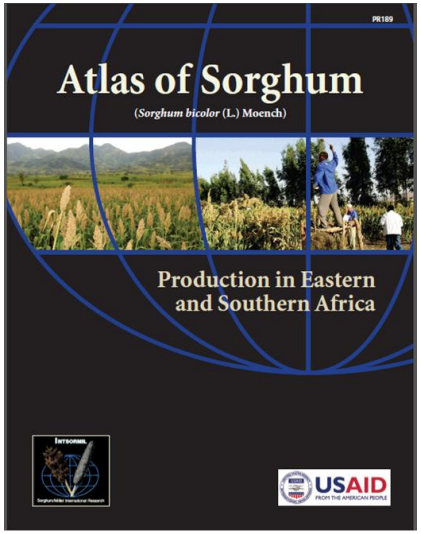
- ✓ About 1,200 graduate students trained by INTSORMIL scientists
- ✓ 21 collaborating countries in Africa and Central America
- ✓ Dozens of new sorghum lines introduced



Resources

Ethiopia, Tanzania, and Uganda produce about 88.5% of the eastern Africa sorghum production, excluding Sudan and South Sudan.





Future for Sorghum and Millet

- Proposals for ME for *Feed the Future Food Security Innovation Lab: Sorghum and Millet* due March 8, 2013
  - Likely have a Model 2 structure with demand-driven research portfolio
  - Targets: 2 or 3 countries of East and West Africa
  - Inquiry Areas: i) genetic enhancement, ii) production systems management, and iii) market development and value-added products including cross-cutting issues
  - Performance monitoring plan (PMP) with assessment of impact towards *Feed the Future* goals and objectives

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Thanks John for 32+ Good Years!