TARGET COUNTRIES

SMIL Annual Review Meeting

March 21 – 25, 2022
57% of research funds were directly transferred to our in-country national partners

67% of the SMIL total funds are allocated to Research
PRODUCT LIFE CYCLE FRAMEWORK

PHASE 1
Under Research

PHASE 2
Under Field Testing

PHASE 3
Made Available for Uptake

PHASE 4
Demonstrated Uptake

STAGE 1
Product Profile

STAGE 2
Discovery

STAGE 3
Proof of Concept

STAGE 4
Validation

STAGE 5
Selection

STAGE 6
Release

STAGE 7
Comm. Intro.

STAGE 8
Growth

STAGE 9
Maturity

STAGE 10
Decline
# Seed Product Pipeline

## Phase 1: Under Research
- **GA Breeding Platforms**
  - Systems / Processes
  - Product Profiles 5 – 10 Yr
- **Gene Discovery & Marker Technology**
  - Heat & Drought Tolerance
  - Stay Green
  - Anthracnose Resistance
  - Striga Resistance
  - SCA Resistance
  - Midge Resistance
  - Protein Digestibility
- **Forage Quality**
  - Dedicated & M.Purpose
- **Food Product**
  - Designer Starches & Protein Dig
  - Milling & Processing

## Phase 2: Under Field Testing
- **High Yield / Grain Mold Resistance**
  - ISRA-S-692-400,300-1, 300-2
  - ISRA-S-692-269, 270-2, 26, 319
- **High Protein Digestibility**
  - ISRA-S-745-1, 2, 8, 38, 40, 48
- **H. Yield Multip. SCA Resistant - Haiti**
- **Striga / Drought Resistance**
  - Mota Maradi x SRN39
  - MDK x (SRN39), (L153-5)
- **Forage Quality**
  - bmr6 x (Macia x MR732)
  - bmr6 x (Macia x Sepon82), (Macia x Macia)
  - bmr6 x (CE-151-262-A1 x CE-151-262-A1)
  - bmr6 x (CSM x Wassa)
  - El mota x Tx630 bbm12 x El mota
  - Sepon82 x Redlan bmr6 x Sepon82
  - Sepon82 x Wheatland bmr12 x Sepon82
- **K-6090, 7148, 7150, 7410, 7411, 9187, 19007, 19026, 19020, 19021 (hybrids)**
- **Tiouma X Souna3**
  - SOSAT-C88 x ICRTABI
  - SOSAT-C88 x EX Borno
  - SOSAT-C88 x Tiouma

## Phase 3: Made Available for
- **ESH 4 & 5 (hybrid)**
- **Guta**
- **Salam (OPV-LM)**
- **TAAW (hybrid)**

## Phase 4: Demonstrated Uptake
- **SCA Resistant Germplasm RTx3410/3428**
- **Merera**
- **Payenne**
- **Golobé**
- **Faourou**
- **Darou**
- **Nganda**
- **Nguninthe**
- **SL-28, 169, 423, Thialack 2**
- **Chackti, GB 8735, Gawane**

## End-User Continuous Feedback
- **Discovery**
- **Sorghum**
- **Millet**
TRANSFER & COMMERCIALIZATION

PHASE 1
Under Research

PHASE 2
Under Field Testing

PHASE 3
Made Available for Uptake

PHASE 4
Demonstrated Uptake

END-USER CONTINUOUS FEEDBACK

Private Seed System
- Private Seed Companies
- Engagement PPB
- “First Mile & Last Mile”
- Field Plot & Farmer Showcasing
- Technical Backstopping

Public Seed System
- National Seed Enterprise
- Regional Seed Enterprise

Community-Based Seed System
- Farmer Association Networks
- Engagement PPB
- “First Mile & Last Mile”
- Skills Transfer Seed Multiplication and Maintenance
PRODUCTION SYSTEMS

**PHASE 1**
Under Research

**PHASE 2**
Under Field Testing

**PHASE 3**
Made Available for Uptake

**PHASE 4**
Demonstrated Uptake

**END-USER CONTINUOUS FEEDBACK**

- **Planting Technology**
  - Seed Ball Local Production
  - Dry Seeding / Planting Technology

- **Delivery Science**
  - Women’s Empowerment
  - Large Farmer to Farmer (1,000’s) Technology Transfer
  - Sociological Factors
  - Transfer Methodology & Principles
  - Training & No. Repeat Visits
  - Other NGO / Program Based Replication Potentials

- **Dedicated Forage**
  - Melkam Variety x High+ Planting Density
  - Manual and Mechanical Chopping

**Planting Technology**
- Seed Ball Local Household Level Production
- “Dry Seeding” / Planting Technology

**Crop Protection - Millet Head Miner**
- Integrated Pest Management Approach
- Household Rearing and Strategic Release (Naturally Occurring Predatory Wasps)

**Sorghum**

**Millet**
COUNTRY PRESENTATIONS

Ethiopia
Niger
Senegal

USAID Reactions & Recommendations

Q&A Session