



Seed Equal – RTB Tools4SeedSystems



Chris Ojiewo

Seed Equal Initiative Lead under the One CGIAR
Action Area on Genetic Innovation

TOOLS4SEEDSYSTEMS:
WORKING TOWARDS RESILIENCE THROUGH ROOT,
TUBER AND BANANA CROPS IN HUMANITARIAN
SETTINGS.

Virtual training: 23 and 25 May 2023

CGIAR Genetic Innovation Initiatives: working tightly together, with partners, for broad-based impact



SIX CLOSELY INTEGRATED INITIATIVES

CO-DELIVERED WITH PARTNERS



WORKING ACROSS CGIAR'S
THREE ACTION AREAS

TO ACHIEVE SYSTEMS CHANGE
IN FIVE IMPACT AREAS



Nutrition, Health &
Food Security



Poverty Reduction,
Livelihoods & Jobs



Gender Equality, Youth
& Social Inclusion



Climate Adaptation &
Mitigation



Environmental Health
& Biodiversity

- Conserving accessions from 900 crop species
- 150 breeding programs across 16 crops
- 137 countries with 1000 partners



Seed Equal

Accelerate varietal turnover, quality seed use, and the realization of genetic gains in farmers' fields.

- ✿ Modernization of CGIAR's role in seed system development, particularly seed delivery
- ✿ Reducing the average varietal age
- ✿ Ensuring that breeding innovations reach the most disadvantaged

Builds on wide consultation since 2020

- CGIAR Seed System Community of Excellence
- CtEH Seeds Delivery Group Whitepaper (comparative advantage of the One CGIAR)
- One CGIAR- NARES- SRO Aide Memoir (June 2022)





Seed Equal Work Packages



- ▶▶ 1. Advancing Cereal Seed Systems
- ▶▶ 2. Advancing Grain Legume Seed Systems
- ▶▶ **3. Scaling the Delivery of Vegetatively Propagated Crop (VPC) Seed**
- ▶▶ 4. Tools to manage and monitor variety advancement and adoption
- ▶▶ 5. Evidence base for better seed policies
- ▶▶ 6. Strategies for last-mile delivery to disadvantaged groups, including women and youth

Seed Equal does not work on under-utilized crops, *in situ* conservation (and landraces): **Nature + (RAFS)**

WPI-3: Characterization, training, production research, advancement and hand-over of new varieties

Crop- archetype specific work and training on:

- Sustainable Early Generation Seed (EGS) production protocols and business models. NARS/ seed units/ foundation seed Cos. capacity building
- More effective germplasm exchange networks and expanded on-farm testing of candidate varieties.
- Research on seed demand creation and risk perception (inc. value-pricing)
- Seeds production research and lowering the cost and risk of seed production
- *Seed Tracker; Seed Cast, **RTB Seeds Toolbox**, SAH; TIBS micro-prop; rooted apical cuttings; de-tasseling techniques*

For emergency, SE could provide **technical assistance** and support on:

- choosing well-adapted and resilient varieties that are **fit-for-purpose** in a particular emergency context;
- rapid **seed production and multiplication systems**, technologies, and tools to make seed quickly available in emergency situations;
- rapid **testing and tracing strategies** for seed quality assurance and the prevention of inferior planting materials being supplied in emergency situations;
- **sanitary and phytosanitary support** to ensure disease and pest-free material is supplied;
- **rapid scale-up models** for credible/legitimate seed producers (including commercial, parastatal, and farmer-based producers) operating in emergency contexts;
- **seed distribution models** that appropriately leverage the participation of market actors public service providers, relief agencies, farmer-based organizations among others.



SE could strengthen design and implementation of **policy and practice** in seed emergency assistance through:

- **proper diagnosis** of the problems faced in different emergency contexts,
- **appropriate responses** to the problem (e.g., direct seed distribution; seed voucher; cash transfers; market and price interventions; seed production subsidies; social protection programs; multisectoral programs; or combinations of these response options),
- **rigorous evidence base on effective approaches** to seed emergency assistance
 - **developing tools**—including digital tools—to provide a rapid, near real-time understanding the effects of seed emergency assistance
 - **conducting better analysis** to understand the pathways through which seed emergency assistance affects outcomes of interest such as crop productivity, household livelihoods, and individual welfare

Functioning seed systems and seed-embedded technology will help drive adoption of improved varieties to build inclusion, future resilience and close yield gaps for smallholder farmers

Thank You!

