Seed Equal – RTB
Tools4SeedSystems

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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

- 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)
WP1-3: 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.