Block 1 Poster 10

NARITA hybrids for East Africa

RESEARCH PROGRAM ON Roots, Tubers and Bananas

CGIAR

NARITA hybrids

- High-yielding and disease-resistant hybrids related to a group of cooking and juice bananas called East African highland bananas (EAHB)
- Result of >20 years of joint breeding between NARO-Uganda and IITA
- EAHB are important food and cash crop for more than 30 million people in the region, but current yield gap is more than 90%
- NARITA hybrids produce bunch up to 2.5 times heavier than local checks, and yield up to 3 times more per ha
- NARITA cultivar factsheets: http://www.promusa.org/NARITA+hybrids

Left to right: 'NARITA 7', its female parent 1201K-1 and its female grandparent 'Nakawere'

Working with farmers during baseline study

Understanding end users

- Baseline study conducted in Uganda and Tanzania to better understand expected end users in terms of household structures, sources of income, existing cropping systems, banana production systems and varietal diversity
- Participatory rural appraisal tools used: intra-household survey, seasonal and daily calendar exercises, community wealth ranking exercise, banana trait preferences exercise
- ~1000 households visited, with 1325 respondents (628 men and 697 women) interviewed; ~100 focus group discussions (44 male only, 46 female only, 5 mixed groups) conducted
- Post-doc recruited to better understand gender roles and gender-differentiated trait preferences of different actors along EAHB value chain

Participatory testing and initial scaling

- Participatory approach to evaluate NARITAs in on-station researcher-managed 'mother trials' and on-farm choice-allocation 'baby trials' to fully capture end user needs and preferences, and criteria that they use for adoption or rejection of new banana cultivars
- Sensory evaluations, nutritional analysis and consumer preference analysis to complement NARITA profiles
- In addition, balanced-allocation baby trials in combination with crowdsourcing data collection piloted to maximize number of farms covered and introduce NARITA hybrids to a larger geographic area in Eastern Africa

Critical elements for scaling

- Crowdsourcing as a new approach to upscale farmer-participatory seed innovation - using mobile technology to engage farmers in massively evaluating and distributing new materials
- Understanding of key factors affecting adoption of technologies in target region, such as access to extension services and quality planting material by local seed systems
- Link up with relevant stakeholders involved in release, large-scale distribution and rapid dissemination of farmer-preferred cultivars

Adoption of NARITA hybrids

- Two NARITAs already formally released as new cultivars by NARO in 2010 → already being grown on 15% of banana farms in Uganda
- Adoption studies to document number and characteristics of farmers that have started growing NARITAs in study areas
- Comparison of adoption rates between farmers and communities that participated in the different types of trials and non-participants
- Preliminary assessment of the impact of NARITA hybrids on the livelihoods of adopters, compared to non-adopters

KEY PARTNERS FOR SCALING

- NARS: NARO-Uganda, ARI-Tanzania
- Regional and local governments, and policy makers to facilitate registration of hybrids and official release procedures
- Local seed systems: Biocrops-Uganda, CropBioScience-Tanzania
- National and international NGOs and extension agencies
- Farmer associations and farmers

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Poster authors: Inge Van den Bergh (Bioversity), Rony Swennen (IITA), Rhiannon Crichton (Bioversity), Noel Madalla (Bioversity), Pricilla Marimo (Bioversity), Jerome Kubiriba (NARO), Robooni Tumuhimbise (NARO), Wilson Asher Okurut (NARO), Cornel Massawe (ARI Horti-Tengeru), Grace Kindimba (ARI Horti-Tengeru), Daud Mbongi (ARI Uyole), Mgenzi Byabachwesi (ARI Maruku)
Contact: Inge Van den Bergh, Senior Scientist and ProMusa coordinator, i.vandenbergh@cgiar.org