# IMPROVING FOOD SECURITY AND HOUSEHOLD INCOMES IN TANZANIA THROUGH DROUGHT TOLERANT QUALITY PROTEIN MAIZE (QPM)

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## Technology/tool description

- Traditional maize has poor protein quality, being deficient in essential amino acids
- Quality protein maize (QPM) is biofortified with elevated levels of essential amino acids
- Adoption of QPM is an attractive option to improve dietary quality for communities dependent on maize-based diets
- One limiting factor to the widespread adoption of QPM is the poor adaptability of commercially available varieties to drought-stressed environments

## SIAF-Based benefits

- High yield performance
- Higher economic benefits
- Good adaptation to stress environments

## Extent of gendered capacity building and scaling

- During validation trials, selected farmers were engaged in participatory approach from land preparation through all field management operations including good agronomic management practices, harvesting. This provided capacity to the farmers how to raise a good crop.
- The farmers engaged included male and female farmers
- Field days were organized to raise awareness of the new hybrids and allow farmers appreciate the benefits of the new hybrids especially on tolerance to drought and yield benefits

## Lessons learned

- Good variety alone does not produce desirable yield, therefore good variety performance can be achieved if good agronomic management practices and good natural resource management (soil and water conservation practices) are applied, particularly in the semi-arid areas like Kongwa and Kiteto that require special attention on soil and water conservation

## Challenges and gaps

- Availability of the released drought tolerant QPM in the market will depend on investment by Meru Agro Tours & Consultants to produce certified seed and sell through the various retail market outlets
- Maintenance of the parents of the QPM hybrids requires technical support from the research institutions like Tanzania Agricultural Research Institute (TARI) or International Maize and Wheat Improvement Centre (CIMMYT) to keep purity
- QPM seed looks the same as regular maize seed therefore farmers will need to take extra care when buying QPM seed as they can easily be tricked buying

## Deliverables

- Two QMP hybrids, **CZH132019Q** and **CZH132003Q**, available with Meru Agro Tours and Consultants Co. ready for commercialization

We thank farmers and local partners in Africa RISING sites for their contributions to this work. We also acknowledge the support of all donors which globally support the work of the CGIAR and its partners through their contributions.