Local cereal fortification with indigenous legumes (cowpea, groundnut, Bambara groundnut), which are generally richer in protein, minerals and vitamins (e.g., iron, zinc, vitamins A and D), can be a means to remediate micronutrient deficiencies in common diets. This project builds on previous work conducted by the team in cooperation with rural and urban processing units owned by women. This project strengthens local cereal and legume processing and diversifies uses of local grains.

For more information see: https://www.ccrp.org/grants/grain-processing-iv/

Research and promotion of post-harvest technologies and value-added products for better nutrition

2019: The innovated millet/legume flour formulas developed by the project were compared with food aid maize-soy blends in Niger. The innovated formulas had a more viscous texture and 10 times greater storage values than the control samples. Sixteen mothers from 4 different locations who had purchased and fed the innovated millet/legume formulas reported that they were more efficient, preferable, and accessible than the food aid maize-soy blend.

About 500g per week of innovated formula was enough to relieve malnourished children. The required duration of the treatment varies from 4-12 weeks depending on location and the severity of the malnutrition.

Create markets for nutritious foods

2016: Local market for grain-based foods was developed.

2017: Women groups have started to generate incomes from marketing of cereal and legume-based foods and are now demanding more consistent grain supply from smallholder farmers.

ETC, a grain-based processing enterprise (lead by a woman) was awarded financial support from UKAID for a 3-year project to scale-up. The project will use about 300 tons of cereal and legume grain for Year 1, benefiting ~300 farmers at project sites and, at end of Year 3, 1,025 farmers (2/3 men, 1/3 women) with a total benefit of USD ~375,000.

Inclusive networks

Rural women innovators invite, and sometimes pay for, other women from peripheral villages (10-30 km from center) to travel and receive similar training in processing, nutrition, safety, and leadership. This dissemination of knowledge can extend to 5-35 neighboring villages depending on the location.

Influence policies and practices around ag-nutrition interventions

2016: 4 government rural community health centers in Niger are affiliated with food innovation centers to develop and promote nutritious/fortified food products.