

West Africa Community of Practice



Project Partners

AMSP — Fuma Gakiya — Moribeen

National Ag Research Center Farmer Organization

Nutrition for Agriculture: Food Processing 2009-2017

START HERE

Results show that:

high acceptability scores.

characteristics for dakoua.

beverage (Toukoudi) in Maradi.

Understanding local contexts and knowledge around feeding practices and food availability

Sorghum and pearl millet are major staple foods for smallholder farm families in West Africa where malnutrition is common. 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 commonly consumed diets. More efficiency in processing flours facilitates the production of these formulations for both home consumption and sale.

 Value heterogeneity: build on & enhance diversity

Research and promotion of

post-harvest technologies

and value-added products for

better nutrition

51 fortified formulations (with various percentages of

millet/legume incorporation) were developed and tested

• Millet incorporated with cowpea and peanut received

• Tigernut was the most preferred legume in dakoua cake.

Texture and taste are the most important quality

• There are significance differences (P<0.05) among

extruded millet foods samples. Consumers preferred

extruded foods from decorticated grains compared to

those from whole grains. Acceptability scores for extruded

thick porridges (tuwo) in Tera were higher and with less

variability than those of couscous (dambou) in Falwel, and

and are being optimized at the rural project sites.



Training of rural families

2011: 15 associations (15-30 members each) of woman processors received training in food safety, hygiene, micronutrient powder fortification, packaging, and marketing of processed sorghum and millet foods.

2016-2017 in Niger: 29 more villages were trained by lead women already experienced in food innovation dynamic

Support next generation of **AEI** researchers

> A PhD student, Fatimata Diarra, who collaborated with the Anbeiigi project on whole grain sorghum flours, went on to get a position at INRAN have she graduated and works on this project.

-- • Enhance quality through capacity

strengthening

More diversified and nutritious food production throughout the year

2013-2014: **4 processing sub-centers** were established/equipped in Burkina Faso (1) and Niger (3i). The centers in Niger received milling machines, electrical and wood roasters, and dryers and operational resources. Equipment installed in Burkina Faso include steamers and roasters.

2017:. Six (4 in Niger and 2 in Burkina Faso) food types (flour, agglomerated, pasta-like, porridge, baked foods and enriched foods for better nutrition) were developed and market-tested by rural women groups.

2014-2017: More than 100 rural households/day/site are benefiting from grain milling, threshing, and processing equipment at the sub-rural processors' incubation centers. Many of the users are part of women processor groups.



Respect for indigenous culture and knowledge

Connect to other institutions and initiatives •---

Create markets for nutritious foods

Influence policies and practices around ag-nutrition interventions

2016: 4 government rural community healths centers in Niger are affiliated to food innovation centers to develop and promote nutritional/fortified foods products

2017: 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.



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 grains supply from smallholder farmers.



COLLABORATIVE CROP RESEARCH PROGRAM

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