

## MULTI-FUNDER INITIATIVE

## Canadian International Food Security Research Fund (CIFSrf)

### West African farmers boost yields and profits with less fertilizer

More than 50,000 farmers in Nigeria and Benin are helping another 200,000 farmers learn how to use less fertilizer to produce higher yields and better quality vegetables. Simple agronomic practices have shown to increase incomes 30-90% and reduce fertilizer costs by 22% for thousands of West African farmers, primarily women.

### A greener and more productive way

Poor rural women in West Africa generally rely on indigenous vegetables loaded with key vitamins and minerals to complement their families' diet. But poor soil fertility, land degradation, and water scarcity have conspired to keep yields and quality low. Finding ways to increase the production and consumption of underutilized, yet highly nutritious, vegetables could go a long way in improving livelihoods in the region.

More than five years of laboratory studies and field trials have produced farmer-friendly and affordable solutions. In Benin, rain-water harvesting techniques and micro-dosing — which uses less fertilizer than traditional practices — helped more than 10,000 farmers achieve equally beneficial results with other crops, despite degraded soils. In Nigeria, more than 1,000 farmers increased their yields and doubled their incomes by using improved farming practices.

### Strengthening links with industry

Researchers are now combining these innovations to bring improved practices to farmers through demonstration trials, outreach efforts, support, and training for seed producers and marketers. They will also help establish local committees to focus on productivity, marketing, and processing. At least 20 private sector partners and government agencies will work with communities to build small and medium vegetable and fertilizer businesses. Stronger linkages will also be established between the private sector, women-led cooperatives, and youth entrepreneurs.

The project supports Nigeria's Agricultural Transformation Agenda and the National Food Security Program in Benin.

### Expected Results

- Expand innovative farming practices to more than 250,000 male and female farmers (60% women)
- Double the incomes of at least one million farmers throughout the vegetable value chains
- Double production of indigenous vegetables
- Establish and register at least 51 women vegetable marketers cooperative groups and 20 cooperative seed producers groups
- Establish and nurture youth groups in 10 secondary schools per district to develop profitable vegetable businesses
- Increase household consumption of indigenous vegetables among participating families by at least 40%
- Develop new products such as cookies, dried leaves, and preserves to add value to the vegetables in the food chain

### LEAD RESEARCHERS

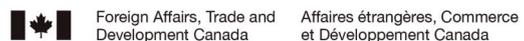
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