

# OFSP: Orange-Fleshed Sweet Potato (High provitamin A)

Orange Sweetness, Nutrient Richness, and Farmer's Success - Embrace OFSP!

Orange Fleshed Sweet Potato (OFSP) is a biofortified crop rich in beta-carotene, particularly in comparison to light-colored flesh cultivars. Upon consumption, the beta-carotene converts into vitamin A, enhancing nutrition and supplementing diets. OFSP holds significant potential for improving food and nutritional security throughout Africa.



**International Potato Center (CIP)**  
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Technology from

ProPAS

Commodities

Sweet Potato

Sustainable Development Goals



Categories

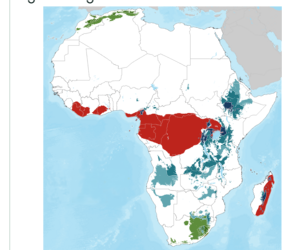
Production, Improved varieties, Yield improvement, Quality improvement

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers, Seed companies

✓ This technology is **TAAT1 validated**.

Scaling readiness: idea maturity 8/9; level of use 9/9

📄 Project adoption **1**

Technology integrated in the IsDB Root and Tuber project, in Benin.

Inclusion assessment **5**

Climate impact **6** **1**

## Problem

- Widespread vitamin A deficiency contributes to malnourishment,
- Traditional sweet potato varieties yield only 3-7 tons per hectare, resulting in limited food availability and income for farmers.
- The lack of diverse and nutrient-rich crops hampers overall nutrition, posing a challenge to addressing dietary deficiencies and promoting sustainable agriculture.

## Solution

- It addresses vitamin A deficiency by providing a rich source of this essential nutrient, promoting better health and nutrition.
- OFSP's improved varieties yield 25 tons per hectare, significantly surpassing traditional varieties, thereby enhancing food security and increasing farmers' income.
- OFSP offers a versatile and nutrient-rich crop, diversifying nutrient sources and contributing to overall nutrition, promoting a sustainable and healthier agricultural ecosystem.

## Key points to design your program

Orange-Fleshed Sweet Potato (OFSP) can be integrated into food security, nutrition, health, women's economic empowerment, and value chain development programs to improve nutrition, reduce vitamin A deficiency, increase farmer incomes, and strengthen resilient food systems. Its adoption contributes to SDGs 1, 2, 3, and 5.

To integrate this technology into your project, plan and budget for the following activities and prerequisites:

- Facilitate access to improved OFSP planting materials and production support services.
- Build partnerships with CIP, research institutes, extension services, processors, cooperatives, and private sector actors.
- Train farmers and entrepreneurs on production, seed multiplication, processing, and value addition.
- Promote women's and youth participation and the consumption of OFSP-based products.
- Monitor nutrition outcomes, adoption rates, yields, incomes, and market access.

**200 kg** vines for 1 acre (0.3 hectare)      **25 tons** per hectare      **IP** Open source / open access

