Mechanized Processing and Value Addition for Fish Products

From Catch to Cuisine: Enhancing Fish Quality and Sustainability

Smoking kiln suitable for processed fish products

This technology is a fish processing and preservation method involving the use of equipment such as solar tent dryers and smoking kilns. Solar dryers offer a low-cost alternative to refrigeration, and smoking kilns utilize smoke to kill microorganisms while drying the fish.

WorldFish
Bernadette Fregene

This technology is TAAT1 validated.

8·7

Scaling readiness: idea maturity 8/9; level of use 7/9

Gender assessment 4

Climate impact 7

Problem

- Post-Harvest Losses, significant post-harvest losses occur due to bacterial activity and oxidation.
- High ambient temperatures in many regions accelerate the spoilage of fish,
- The availability of mechanized equipment and maintenance might pose challenges, particularly in resource-constrained areas.
- Traditional smoking kilns may consume significant energy and time.

Solution

- Fish processing and preservation technologies extend the shelf life of highly perishable fish, reducing post-harvest losses.
- These methods improve the palatability, taste, and nutritional value of fish products, enhancing their market acceptance.
- Solar tent dryers and smoking kilns are cost-effective and widely used, eliminating the need for refrigeration during transport and storage.

1500 USD
Handheld electric fish scaler

1,000 USD
Filleting equipment

2,500 USD
Equipment for skinning and deboning 10 to 20 fish/minute

2,000 USD
A greenhouse-style solar dryer 15 m × 8 m with capacity of 850 kg fish per batch

IP
Patent granted

Technology originally documented by

ProPAS

Commodities

Fish

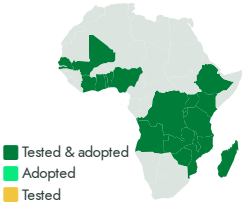
Sustainable Development Goals

2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
5 GENDER EQUALITY
12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Categories

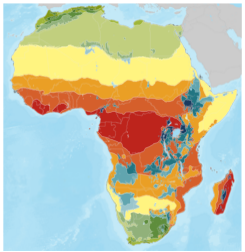
Transformation, Practices,
Agri-food processing

Tested/adopted in



Where it can be used

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



Target groups

Processors