

# Mechanized Processing and Value Addition for Fish Products

From Catch to Cuisine: Enhancing Fish Quality and Sustainability

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.



Smoking kiln suitable for processed fish products



**WorldFish**  
Bernadette Fregene

Technology from

[ProPAS](#)

Commodities

Fish

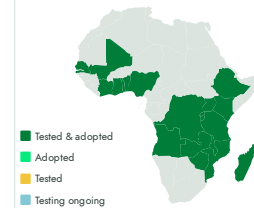
Sustainable Development Goals



Categories

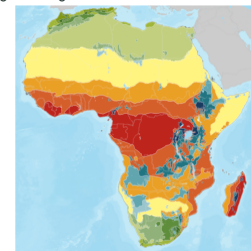
Transformation, Practices,  
Agri-food processing

Tested/adopted in



Where it can be used

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



Target groups

Processors

✓ 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.

## Key points to design your project

The Mechanized Processing and Value Addition for Fish Products technology enhances efficiency and sustainability in fish processing. To establish a fish processing operation, follow these steps:

- Develop a business plan and secure funding for equipment and premises.
- Train staff on safe and hygienic processing practices.
- Ensure a steady supply of fish for optimal facility operation.
- Access reliable utilities and fuel affordably.
- Market finished products to maintain cash flow.

**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 x 8 m with capacity of 850 kg fish per batch



Patent granted



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<https://taat.africa/vyt>

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