

Mechanized Processing and Value Addition for Fish Products

From Catch to Cuisine: Enhancing Fish Quality and Sustainability



WorldFish
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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.

This technology is **TAAT1 validated**.

8·7

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

Gender assessment **4**

 Climate impact **7**

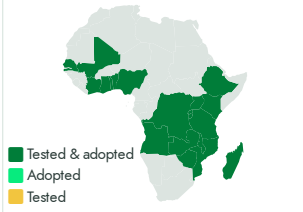
Technology originally documented by
ProPAS

Commodities
Fish

Sustainable Development Goals

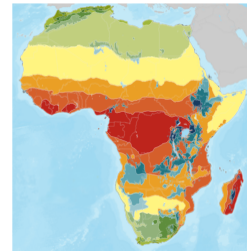
Categories
Transformation, Practices,
Agri-food processing

Tested/adopted in



Where it can be used

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



Target groups
Processors

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	2,500 USD	2,000 USD	IP
Filleting equipment	Equipment for skinning and deboning 10 to 20 fish/minute	A greenhouse-style solar dryer 15 m x 8 m with capacity of 850 kg fish per batch	Patent granted