

# Affordable Fish Feed Production Formulation and Pelleting of Low-Cost Feeds



Feed formulation before (left) and after dry extrusion (right)

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Empowering Aquaculture with Affordable Feeds

The technology “Formulation and Pelleting of Low-Cost Feeds” aims to reduce the cost of fish feeds in Sub-Saharan Africa, where fish farms spend about 60-70% of their budget on imported feed. It promotes the use of local resources to produce quality, cost-effective and balanced fish feeds. This innovation could enhance the profitability and sustainability of fish farming businesses.

This technology is **TAAT1 validated**.
 
**8·8**

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

Gender assessment **4**

Climate impact **7**

### Problem

- Fish farming in Sub-Saharan Africa is costly due to expensive feeds.
- A large part of the cost is for imported feed ingredients.
- Simple, unprocessed grains used in feeds lead to poor nutrient transfer and pollution.
- High costs and inefficiencies limit the profitability of fish farming.

### Solution

- The technology makes affordable fish feeds using local products.
- Pelleted feeds improve nutrient transfer and reduce pollution.
- Pellets are easier to store and transport, reducing costs.
- The technology allows feed customization for different fish species.

### Key points to design your project

The “Formulation and Pelleting of Low-Cost Feeds” technology enables local production of affordable fish feeds in Sub-Saharan Africa, contributing to several SDGs. Implementation involves organizing raw ingredients, selecting a site, procuring equipment, packaging, marketing, and contracting. It requires understanding of fish species’ nutrient requirements, local feed ingredients, and feed formulation. The technology can be combined with other aquaculture technologies and requires collaboration with key partners like research institutions, local farmers, and government agencies.

Cost: **\$\$\$ 1,200 USD**  
Production of 1 ton

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**85,000 USD**  
Equipment of production

Technology originally documented by  
**ProPAS**

Commodities  
**Fish**

Sustainable Development Goals

Categories  
Production, Inputs, Fertilizer

Tested/adopted in

■ Tested & adopted  
■ Adopted  
■ Tested

Where it can be used

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

Target groups  
**Breeders**



## Affordable Fish Feed Production

<https://e-catalogs.taatafrica.org/gov/technologies/affordable-fish-feed-production-formulation-and-pelleting-of-low-cost-feeds>

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