



AIT
Thailand



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AIT – AFRICAN AQUACULTURE PROJECT Nigeria Strain Comparison (Tilapia & Catfish)

Asian Institute of Technology (AIT), Thailand

and
African Women Fish Processors Leaders Network (AWFISHNET)
Engaged with the
Bill & Melinda Gates Foundation

Location: KOROJA, KADUNA STATE, NIGERIA

Advancing



TOPIC :STATE OF FISH PROCESSING AND VALUE-ADDED ACTIVITIES IN NIGERIA

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Awfishnet Nigeria chapter

COMAHAFAT Workshop

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OUTLINE

- Introduction
- Overview of fish processing in Nigeria
- Women participation in fish processing
- Main activities in Fish processing
- Methods in fish processing
- Equipment used in Modern Processing
- Constraints and challenges
- Recommendation
- Conclusions

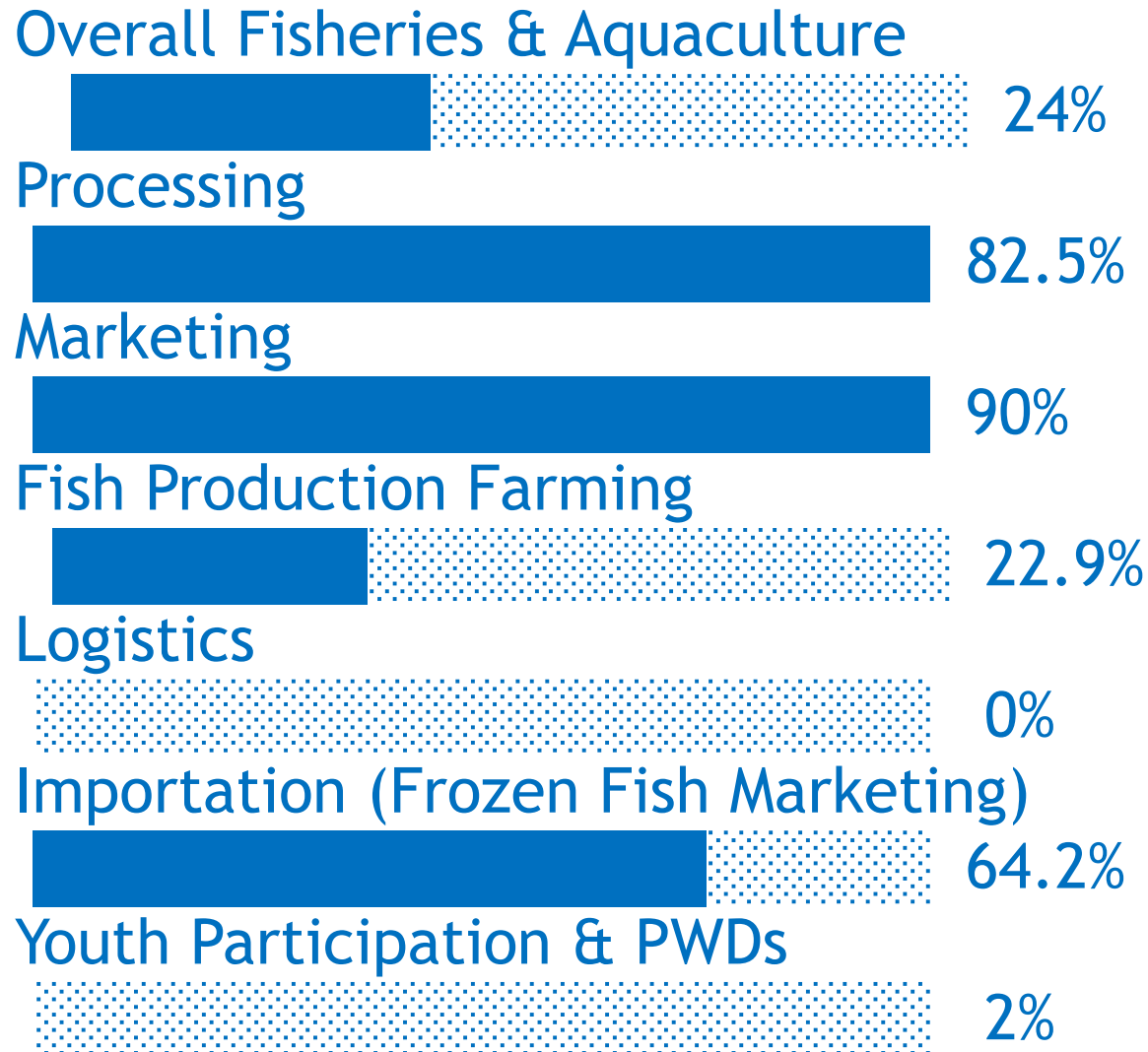


OVERVIEW OF FISH PROCESSING IN NIGERIA

- *Fish processing plays an important role in food security and livelihoods in Nigeria.*
- *Women are highly involved in fish processing and marketing activities across coastal and inland communities*
- *The sector supports household income, nutrition, and employment opportunities.*
- *Common fish species processed include catfish, tilapia, African swordfish scientifically referred to as *Gymnarchus Niloticus*, and Nile perch popularly called *Mangala* or *Giwan ruwa* in Nigeria*



Women Participation in Nigeria's Fisheries Value Chain (%)



MAIN ACTIVITIES CARRIED OUT BY WOMEN PROCESSORS

ACTIVITIES OF WOMEN IN FISH PROCESSING



1. Sorting and grading



2. Washing and cleaning



3. Gutting and dressing



4. Scaling and filleting



5. Cutting and portioning



6. Salting and brining



7. Smoking of fish



8. Sun drying



9. Fermentation / curing



10. Freezing and cold storage



11. Packaging and labeling



12. Quality control and food safety checks



13. Storage of processed products



14. Transportation and distribution



15. Marketing and sales

VALUE ADDITION ACTIVITIES



Fish powder



Fish flour



Fish sausage



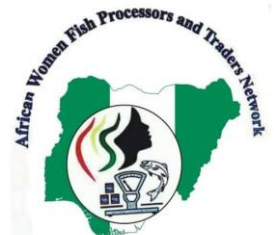
Fish nuggets



Fish oil



Ready-to-cook fish products



AWFISHNET
(NIGERIA)



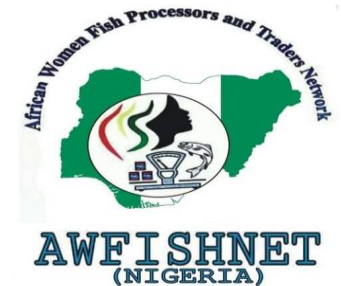
Different methods of Fish Processing

DIFFERENT METHODS OF FISH PROCESSING

<p>1. FRESH / CHILLED</p>  <p>Fish kept fresh on ice or in refrigerated conditions to maintain quality.</p>	<p>2. SALTING</p>  <p>Salt is applied to fish to remove moisture and inhibit spoilage microorganisms.</p>	<p>3. DRYING (SUN DRYING)</p>  <p>Fish is exposed to the sun to reduce moisture content and extend shelf life.</p>	<p>4. SMOKING</p>  <p>Fish is exposed to smoke and heat to cook, preserve and improve flavour and color.</p>	<p>5. FERMENTATION</p>  <p>Fish is allowed to ferment naturally to develop flavour and preserve it.</p>	<p>6. FREEZING</p>  <p>Fish is frozen at very low temperatures to preserve freshness for long periods.</p>
<p>7. BRINING</p>  <p>Fish is soaked in a salt solution (brine) to improve preservation and taste.</p>	<p>8. BOILING</p>  <p>Fish is cooked in boiling water to make it safe and easier to process or eat.</p>	<p>9. GRILLING</p>  <p>Fish is cooked over direct heat to improve flavour and make it ready to eat.</p>	<p>10. DEEP FRYING</p>  <p>Fish is fried in hot oil to cook it, improve taste and extend shelf life.</p>	<p>11. PICKLING</p>  <p>Fish is preserved in vinegar, salt and spices to improve flavour and storage life.</p>	<p>12. CANNING</p>  <p>Fish is cooked, sealed in cans and heat-processed to ensure long shelf life.</p>
<p>13. FISH POWDER</p>  <p>Dried fish is ground into fine powder used as a protein ingredient or supplement.</p>	<p>14. FISH FLOUR</p>  <p>Dried fish is milled into flour used in animal feed and food products.</p>	<p>15. FISH SAUSAGE</p>  <p>Minced fish is mixed with ingredients, seasoned and cooked or smoked.</p>	<p>16. FISH NUGGETS</p>  <p>Minced fish is shaped, breaded and cooked for a convenient protein snack.</p>	<p>17. FISH OIL EXTRACTION</p>  <p>Oil is extracted from fish for use in cooking, health products and industries.</p>	<p>18. READY-TO-COOK PRODUCTS</p>  <p>Fish is seasoned, marinated and packaged for easy and quick preparation.</p>



old and modern equipment USED



CONSTRAINTS AND CHALLENGES

Some of the major challenges include:

- * High cost of processing equipment.
- * Poor access to modern smoking kilns.
- * Inadequate storage and cold chain facilities.
- * Limited access to finance and loans
- * Policies guiding women in the fisheries sector.
- * Limited training on hygiene, packaging, and quality standards



NEEDS AND RECOMMENDATIONS

- * Support for more Capacity building and practical training for more women processors
- * Access to improved smoking and drying equipment for more women
- * More Improved storage facilities across the geopolitical zones.
- * Stronger support and partnerships with development partners and the government.





CONCLUSION

Fish processing and value addition play a vital role in improving food security, reducing post-harvest losses, increasing income generation, and creating employment opportunities, especially for women and youth in the fisheries sector. Through proper handling, modern processing techniques, packaging, and adherence to quality and export standards, fish products can gain higher market value and wider consumer acceptance

THANK YOU.

