



RSM2SNF

Research Supporting African MSMEs
To Provide Safe and Nutritious Food

PRACTICAL GUIDE TO SUPPORT INCREASED ACCESS TO SAFE FISH IN NIGERIA

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Introduction

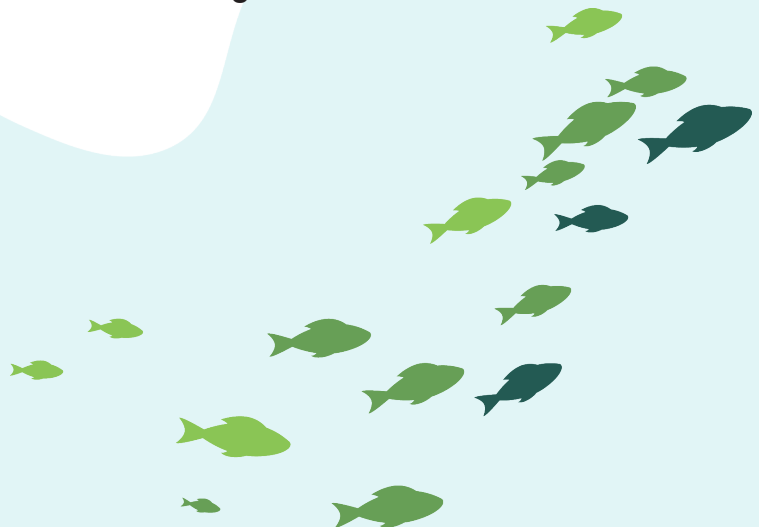
All along the supply chain for fish production in Nigeria, there is increasing concern about food safety. In 2022, RSM2SNF carried out a perception study in Nigeria to understand stakeholder perceptions about the country's food systems and particularly for the fish subsector.

This survey found evidence of a clear preference for efforts to bring down food prices rather than improve food safety. Initiatives such as monitoring of food system actors and the provision of hygiene-related infrastructure were given less priority. While the focus on food affordability is not surprising in a context of high food prices and low food security, the study highlighted the need for greater sensitization around the importance of food safety and hygiene, which is a pressing concern in Nigeria (Wineman and Liverpool-Tasie, 2022).

In 2022, RSM2SNF also conducted a reconnaissance (or "lay of the land") survey of the fish value chain in Nigeria¹. The rapid reconnaissance re-

vealed numerous challenges associated with food safety all along the fish value chain. The majority of these issues were not highlighted as concerns by the actors but were identified from the description of current practices and observed environments at the locations of operations. Thus, this reference guide has been developed to stimulate the inclusion of food safety practices and considerations in the policies of stakeholders along the fish value chains in Nigeria. Its use will improve the ability of stakeholders along these value chains to offer Nigerian consumers safe and nutritious food. All players in the supply chain have their roles to play as they share the common goal to **ensure safe and nutritious food at all segments of the chain.**

¹ The rapid reconnaissance was a systematic qualitative data collection from interviews with actors operating at different selected nodes of a value chains to understand their input sourcing, production and marketing strategies.



Production

(in the pond)



High stocking densities should be discouraged to reduce risk of cross-infection of pathogens.

Aquaculture facilities should not be close to animal husbandry because of possible contamination of pathogens from fecal origin.

Fish farms should not be in areas where they can be easily contaminated by chemical hazards (e.g. chemical manufacturing industries).

Do not feed fish with droppings directly from poultry without proper treatment.

Water used for fish farming should be clean and free from contaminants (e.g. treated water or clean water from a borehole).

Fish pond water should be changed regularly to maintain good quality and safety.

Domestic animals should not be allowed to move around fish ponds.

All equipment and utensils should be clean and regularly disinfected.

Feed for Aquaculture



Feed should be used before the prescribed expiry date.

Feed should be stored in a cool and dry environment to prevent mold growth.

Fish silage, when used as feed, should be properly cooked.

Feed compounded by farmers should not contain toxic chemicals.

Harvesting

The surfaces for handling harvested fish (areas/tables) should be clean, non-toxic, and smooth (e.g., stainless steel or plastic) to reduce the risk of contamination.

There should be adequate facilities for handling and washing of harvested fish with clean water.

Harvesting should be rapid to minimize the time that the fish is exposed to high temperatures.

All equipment for harvesting and holding fish should be cleaned and disinfected regularly.

Farmers should wash their hands before and after harvesting using clean water and detergent.

Birds, insects, and pests should not be present in the harvesting environment.



Transportation

Buckets/bowls for transportation of live fish should be easy to clean, free from contaminants and clean.

Buckets/bowls should be made of non-corrosive materials that will not transmit toxic substances into the fish.

To minimize deterioration, the live fish should be kept in cool and clean water or processed early.

Harvested fish should be transported to markets without undue delay.

Fish should not be transported with other products that can contaminate fish.



Market & Sales

Killed fish should be processed immediately to prevent contamination by microorganisms.

The table/surface for processing fish should be cleaned regularly and free of contamination.

The table/surface for processing should be covered with non-toxic material such as tiles or clean sacks.

