

# Fish processing types and preservation methods.

Christopher Mulanda Aura\*

Department of Fisheries Research, Kenya Marine and Fisheries Research Institute, Kisumu, Kenya

Accepted on 03 July, 2021

## About the Study

Fish processing is the process that is associated with fish and fish products between the times of the fish is caught or harvested and time of final products reached to customers. All aquatic organisms which are harvested for commercial purposes come under this category. Fish processing is done by artisan fishermen.

The fish which is caught cannot be kept for long time without freezing so we have to process the fish to preserve for long time.

## Steps in Fish Processing

Preliminary processing of fish usually consists of the following steps such as, scaling, cutting of fins and belly flaps, deheading, slicing of whole fish into small slices, evisceration, removing bones of fish, skinning, grinding of skinned fillets. Different types of tools such as Filleting knives, Weighing Scales, Scissors, Earthen pots, Scissors etc were used.

## Different Ways of Processing Fish

Based on type of fish, there are different ways of processing fish like Sun-Dried Fish, Boil-Dried Fish, Roast-Dried Fish, Smoked Fish.

### Sun-dried fish

Sun-dried fish is very popular and this type is used to process small fishes. The fish should be kept on reads-made drying rack and fish should be turned twice a day to dry evenly. To complete the process it takes approximately 3 to 4 days.

### Boil-dried fish

This type is used to process fishes like Usipa. Firstly, the fish should be boiled in water and then should be kept on the rack to be dried under the sun. It takes approximately 2 to 3 days to complete the process.

### Roast-dried fish

This type is used to process flat fish like Utaka, Mayani. The fish is allowed to dry for some hours and then roasted on steel pan to cook evenly on both sides. The fish are kept back to the rack to dry again for rest of the day. It takes approximately 1 to 2 days to complete the process.

### Smoked fish

This method is only way to process bigger fishes like Kampango, Chambo. Firstly the fish are allowed to dry for half a day and then put on oven using firewood overnight. This

process requires large amount of firewood when compared to other processing.

## Fish Preserving Methods

There are four basic methods used for preserving the final products of fish such as Heating, Freezing, Controlling water activity, Irradiating. These methods help to prevent fish from spoilage and degradation.

### Heating

Heating changes the quality and nutritional value of fish. Fish is heated during both the cooking and canning process. Fish is cooked to get changes in the texture and taste of the product and to kill disease causing microorganisms. Canning process is a sterilization technique that kills microorganisms that are already present on the fish, prevents further microbial contamination, and kills harmful enzymes.

### Freezing

Though we have different processing methods to preserve fish, only freezing can maintain the flavour and quality of fresh fish. Freezing to maximum extend reduces or breaks the biochemical reactions in fish flesh. In the absence of free water, enzymes cannot react to soften and spoil the flesh.

### Controlling water activity

This method stops the growth of microorganisms and reduces the chemical reactions that are harmful to the quality of the fish product. The control of water activity in fish is done by drying, adding chemicals or both.

### Irradiating

Irradiation offers a means of pasteurizing or sterilizing a variety of food products by radiation. This process is not accepted by many of the food industries.

## Conclusion

The aim of fish processing is to prevent the fish from enzymatic, bacterial, and chemical decomposition, and to maintain the fish to be fresh for longtime. Fish preserving methods helps to maintain fish fresh for longtime.

**Citation:** *Aura CM. Fish processing types and preservation methods. J Fish Res 2021;5(4):22-23.*

**\*Correspondence to**

Christopher Mulanda Aura  
Department of Fisheries Research Kenya  
Marine and Fisheries Research Institute  
Kisumu  
Kenya  
E-mail: [aumulndachr912@gmail.com](mailto:aumulndachr912@gmail.com)