

Current Research

- i. Development of solar dryers and solar drying of freshwater fish species in the Northern arid zones of Nigeria

The efficacy of Conventional Solar Dryer (CSD) and Hybrid Solar Dryer (HSD) were tested over sun drying of some common fresh water fish species in this zone. Preliminary studies have been carried out in the Maiduguri/Lake Chad area. It has been established that the Hybrid solar dryer (HSD) is the best. What is left is the fabrication of the Hybrid solar dryers (HSD) at a reasonable cost that can be affordable to local fish farmers in the zone. This should be completed in the next 12 months

- ii. Quality control and assessment of imported frozen fish species

In Nigeria monitoring of imported frozen fish quality, assessment/standards is only limited to the point of entry (Lagos and Port Harcourt) using Oyo State as a case study assessment of this frozen fish in terms of distribution, storage and handling to the point of sale were carried out in 4 ADP zones of Oyo State (Oyo, Ogbomoso, Shaki and Ibadan/Ibarapa zones) using the major outlets (the wholesalers and retailers). Oyo zone was found to be the best in terms of storage, hygiene, handling and keeping qualities/presentation to the point of sale while Ogbomoso was the worst. What is left is creating awareness on maintaining standard quality procedures through revisitation of all the zones concerned and monitoring quality standards adhered to.

- iii. Preservation and value addition to hot-smoked fresh water fish species using local indigenous preservatives.

It is the desire of this study to extend the shelf-life of hot smoked *Clarias gariepinus* using indigenous preservatives (Salt, lime and pepper) at single and combined levels for whole and gutted fish using hard wood *Tectonia grandis*. Using sensory and non-sensory (chemical methods – TVB, FFA and peroxide value. The three combined treatments (salt, pepper and lime) were the best preserved. The hard wood used also imparted phenolic preservative effect on the fish coupled with low moisture and best proximate composition, while the lime products were best. What is left is establishing for how long can the shelf life last if the product shelf life is to be extended beyond 3 months.