Advantages of using a smoking kiln

1. Low construction cost, using clay bricks.
2. Long lasting (can last for 5 years).
3. Low wood-fuel consumption with little waste of smoke and heat (these can be controlled with the stoke-hole cover).
4. Easy to operate and easy to regulate temperature.
5. Allows for large capacity (with stackable trays).
6. The product produced is not brittle and has an attractive yellowish brown color.

Figure 7: Golden browned fish smoked on a smoking kiln

Reference
FAO (1970). Food Research Institute of Accra Ghana. Rome Italy

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HOW TO CONSTRUCT A FISH SMOKING KILN
Introduction

As interest increases in fish production, fish farming is on the rise as more fish is produced in ponds, cages and tanks. However not all fish can be sold out and consumed at the same time, in addition to this, different consumers show different preference. Some individuals tend to prefer smoked fish to fresh and fried fish. Apart from satisfying the different consumer preferences, fish smoking is important because it increases the self life of fish, thereby reducing post harvest losses. It also adds value to the fish and in this way the farmer can fetch more money from farmed products.

Although the technology has been around for several years amongst the fishing communities, it is not well known amongst fish farmers. There is need to bring fish farmers on board to know how to construct the smoking kiln through the steps outlined below.

Step one

Dig out a 1 ft deep foundation in the space you are planning to construct the kiln. The foundation should be rectangular, measuring 1.1 m X 0.5m (Figure 1).

Step two

Using clay bricks and mortar, construct a 90° wall, 1.0m high, to form and enclosure. Ensure that there is space left for the firewood (the stokehole) at the front of the enclosure (Figure 2).

Step three

Construct a wooded rectangular frame with handles, with a metallic mesh in the inner space of the frame (Figure 4). This is done by joining strong wooden pieces (3 x 4 inches) inch wide) in a rectangular shape (110 cm X 40 cm), and placing a spotted rectangular shaped wire mesh with as illustrated below (Figure 4).

Step four

The wooden frame is placed onto the constructed smoking kiln to fit exactly onto the top (Figure 5).

![Figure 2: Construction of brick wall](image1)

![Figure 3: Plastered brick wall](image2)

![Figure 4: A Wooden frame with handles and mesh](image3)

![Figure 5: Wooden frame fitted onto the smoking kiln](image4)

![Figure 6: Samples of wooden frames](image5)