

# Improving the safety of smoked fish in Mali

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This project aims to improve the safety and quality of smoked and dried fish products in Mali through the application of Codex Alimentarius standards and codes of practice. This is expected to improve these industries and have a favourable impact on the health of consumers and access to international markets.

The objectives of the project are to translate the results of a risk assessment into specific risk management actions, raise awareness among stakeholders, and build capacity on good manufacturing and hygiene practices.

## **STDF/PG/611**

### **Status**

On-going

### **Start Date**

12/01/2021

### **Project Value (US\$)**

\$855,825

### **STDF Contribution (US\$)**

\$765,825

### **Beneficiaries**

Mali

### **Implementing Entities**

Food and Agriculture Organization of the United Nations (FAO)

### **Background**

A previous project, the Total Diet Study, was implemented in Benin, Cameroon, Mali and Nigeria (MTF/RAF/487/STF) by the Food and Agriculture Organization in collaboration with World Health Organization and the Centre Pasteur (2014-2018). The project was financed by the STDF with the aim of identifying the risks associated with the presence of chemical substances in food consumed by the populations of the four countries. The salient results of the study showed that the smoked fish analysed in Bamako and Sikasso, Mali, contained high levels of pesticides (particularly chlorpyrifos).

These results represent a major public health concern for consumers and trade. Moreover, the fish also contained high levels of polycyclic aromatic hydrocarbons (PAHs), meaning that the sample populations are significantly exposed to carcinogenic substances. This is all the more critical as it has been proven that edible oils (including palm oil, cotton oil and shea butter) also contribute significantly to household exposure to PAHs.

### **Results**

#### **Implementation of analytical capacity building and a situational analysis**

One of the pillars of the solution to which the project is aimed at contributing to is Mali's capacity to locally and structurally monitor chemical contamination levels (pesticides and PAHs) in food. To achieve this, technical support is being provided to ensure the analytical competence of laboratories already equipped with analytical equipment. By leveraging this analytical capacity, laboratories are expected to produce data that supplements the risk assessment and help to pinpoint and understand the extent of the distribution of the contamination. These data are of vital importance to identify appropriate risk management levers.

## **Development of national strategies for the management of risks posed by pesticides and PAHs**

Resolving this sanitary and phytosanitary issue requires a multisectoral approach and ownership by competent national authorities. Based on the situational analysis, national stakeholders meet to decide together how to resolve the issue of contamination of smoked fish by PAHs and pesticides. The documents resulting from these consultations, which are validated by supervisory authorities, help to determine the roles and responsibilities of stakeholders. This approach is expected to allow for the justification of actions implemented within the framework, as well as those carried out by technical and financial partners, on the basis of a strategic document adopted by policymakers in Mali.

## **Development of training modules**

Training modules are being developed based on the qualification and validation of smoking tools, and their use to obtain products that fulfil the Codex and market criteria. The strengthening of the analytical tool during the first phase of the project is expected to ensure that smoking ovens provide a sustainable solution to the issue of post-capture conservation while complying with acceptable chemical contamination levels for health and trade.

## **Provision of community training in the use of improved smoking units**

The project is aimed at providing material for and training on the use of locally produced improved ovens for 10 fishing communities. The project focuses particularly, where possible, on women and young industry stakeholders. Furthermore, the experience acquired helps to improve training documents.

## **Promotion of products in accordance with Codex standards and codes of practice**

To have a sustainable impact on food safety and access to the international market in Mali, the project needs to capitalize on its achievements. To this end, the products improved are promoted to consumers through fairs and audio visual media, analyses of market opportunities, and a document on the approach taken and the lessons learned with a view to scaling up and potentially replicating such actions in other contexts.