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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Model Improved Fishing Smoking Stove Exhibition - Production of Model Stoves

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SNV:	http://www.snvworld.org/en/countries/ghana
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ACRONYMS

CEWEFIA	Central and Western Region Fishmongers Improvement Association
CRC	Coastal Resource Center
DAA	Development Action Association
DQF	Daasgift Quality Foundation
FtF	Feed the Future
HM	Hen Mpoano
MOFAD	Ministry of Fisheries and Aquaculture Development
NGOs	Non-Governmental Organizations
SFMP	Sustainable Fisheries Management Project
SNV	Netherlands Development Organization
URI	University of Rhode Island
USAID	United States Agency for International Development

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1.0 INTRODUCTION

In Ghana, fish is preserved in many ways such as smoking, frying, drying, salting and icing. Fish smoking on the other hand is a major traditional way of preserving fish from going bad. Smoked fish is a delicacy in most Ghanaian communities. Over the years, fish processors have used the traditional chorkor smoker which has a base made of mud and is rectangular in shape with a number of netted trays. Research has shown that the chorkor smoker causes more harm than good to both users and consumers as a whole. The smoke emitted from the Chorkor smoker causes respiratory illnesses. The Chorkor stove uses lots of firewood and during the interchanging of trays, stress is caused users who are continually exposed to heat and smoke. All these threaten the health of the processors, and consumers as well. There is therefore a need to impact fish processors with a change in behavior to adapt to a new technology in the use of improved fish smoking stoves.

The Morrison stove was introduced to fish processors earlier on; but the Ahotor was discovered later to possess an efficient combustion level which makes it emit less smoke. There has been an attempt to communicate with fish processors on the benefits of using improved fish smoking stoves which emit less smoke, and can be used without stress. The communication therefore needed to be backed with action; which is providing miniature improved fish smoking stoves at the interim center to enable users better understand the usage of the stove and its components.

As part of the objectives of the DAA Fisheries Training Center to improve upon the livelihood of fish processors and also produce healthy fish and fish products into the market, it was decided to build an improved fish smoking stove at the center which will be used for training purposes; in order to improve the knowledge on the improved smoking stoves and benefits thereof. The initial plan was to make miniatures of the stoves for the center but for training purposes it was decided that the single unit Morrison stove at the center be retrofitted to Ahotor oven since there was not enough space at the interim center.

1.1 Why the retrofit?

The Ahotor oven emits less smoke because of the existence of a fat collector which collects fat and water from the fish; and prevents the fish oils from falling into the fire to blacken the fish with smoke laden with toxic substances.

The Ahotor oven also uses less fuel as compared to the Morrison and other local stoves.

1.2 Objectives

The objectives were to:

- Help improve knowledge of trainee's/fish processors on improved fish smoking ovens.
- To create awareness on the Ahotor oven to fish processors in the Greater Accra Region
- Practically demonstrate the use of the Ahotor oven.
- Train users on the benefits.

1.3 Expected outcomes

Expected outcomes include:

- Lessons learnt from the use of the improved fish smoking oven.
- Future arrangements by trainees to have a change in behavior and adapt the usage of the improved fish smoking oven.

2.0 PHOTOS

Figure 1 Picture of a single unit Ahotor oven.

Figure 2 Testing of Ahotor oven

It was demonstrated that the fuel consumption when using the Ahotor oven was very low as compared to the Morrison. Fish processors testified that the fuel wood used in the Ahotor oven was relatively low as compared to other ovens, while the oven still heated enough to cook the fish.

Figure 3: Fish processors using Ahotor stove to smoke fish

3.0 CONCLUSIONS

The retrofitted stove has been used in smoking fish a number of times during many training held for fish processors. The fish processors expressed a preference to the retrofit due to less smoke emission from the Ahotor oven, thus making it user friendly and convenient.