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## **TRAINING NEEDS FOR FUMIGATION OF STORED PRODUCTS IN CENTRAL AFRICA**

MISPA MOUEN

*Littoral Cameroon National President of COSADER (Association of NGOs for Food Security and Rural Development)*

### **The need**

It is well known that in Africa in general and in the sub-region of Central Africa in particular, there is a need to promote stock-piling of durable food reserves in order to ensure food security and food aid at national, sub-regional or regional levels should this become necessary. In Central Africa and especially in Cameroon, the need is now felt more than ever to train pest control operators, particularly fumigators, as agriculture in these countries begins to move from subsistence farming to intensive cultivation, with crops being directed towards sub-regional and international markets.

### **The objectives**

This paper provides a background to these training needs and presents our training program. There is emphasis on the necessity of imparting a sound knowledge of pests and the utilization of fumigants, and pesticides, as well as the principles of fumigation, and other factors related to pest infestation and control. To combat food pests is a specialization that requires professionals. Those who are selected for this profession should first of all be trained in the properties of chemicals and in the use pesticides so as to ensure first of all, their own safety. Second, warehouse managers in charge of quality control of stored commodities must be aware of chemical residues, the nature and importance of such residues, factors determining the accumulation of residues and fumigant dosage methods for the treated commodities.

### **The urgency**

Ignorance of this technology is largely because, so far, fumigation has been limited to export crops such as coffee and cocoa, which are fumigated according to instructions of the importing European countries. Until now, local products have not been taken into consideration. The FAO has shown that Central Africa is exploiting only 30% of its food resources and is subject to severe post harvest losses of 30-40% for fruits and vegetables, 25-30% for tuber crops, and 15-20% for cereals. This

absence of professionalism and ignorance of the principles of fumigation and fumigant toxicity during application, are the reasons that led the author to propose the elaboration of a training program on fumigation in the sub-region of Central Africa in general and in Cameroon in particular.

### **The scope**

The proposed subjects for such a training program are as follows: (i) Integrated approach to stored product management; (ii) Principles of fumigation; (iii) Fumigant detection and analysis; (iv) Security measures and protection; (v) Properties of fumigants; (vi) The biology of stored-product insects and pest identification; (vii) Chemical composition of plants and food commodities to be treated; (viii)- Practical aspects (the trainees, according to their level of competence will participate at various fumigations.) (ix) Demonstrations (storage methods, equipment used, bio-assays using test insects). In conclusion this is one of the most important measures that could contribute to solving the serious difficulties related to food security in this sub-region.