Evaluation of Traditional and Solar Fish Drying Systems Towards Enhancing Fish Storage and Preservation in Nigeria (Abeokuta Local Governments as Case Study)

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Abstract

This study evaluates the traditional and solar fish drying systems in Nigeria. The results reveal that traditional methods still remain the predominant fish processing and drying methods employed in the country. The study also discusses the advantages of using direct application of solar thermal energy employing some means of collecting solar radiation with the result that elevated temperatures and, in turn, lower relative humidity is achieved for drying fish in developing countries, like Nigeria. The use of solar dryer is an important step toward improving the traditional fish drying technology. Solar dryers can produce well-dried and dust free products. The contact between fish and flies which is virtually impossible to eliminate under traditional technique of fish smoking could be considerably eliminated if solar dryer are used. Three different types of solar dryers for drying fish were reviewed. Emphasis is based on the product quality and the economics of a suitable choice of design of the dryer, for improved drying of the important local fish species; over the local traditional sun-drying and smoking methods in Nigeria.