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## Food irradiation: for food preservation, towards a reduction of postharvest losses in Nigeria

**Halid S Adegbus**

Department of Biological Sciences, Kano Nigeria

This paper is a contributory information dissemination on the commercial usage of food irradiation for food preservation that may help to reducing postharvest losses of agricultural produce in Nigeria. Postharvest losses were found to cause a loss of about 13 million metric tons of agricultural crops in Nigeria, especially tomato of which about 0.7 million metric tons were found lost annually. Resulting from this was the annual economy loss of about 3.7 trillion and 72 billion Nigeria Naira, in respect of agricultural produce and especially of tomato. Food irradiation offers a better method of food preservation compare to the commonly used traditional and scientific methods, which though does not serve their replacement. Food irradiation was used to preserved yam, water yam, onions, sesame seeds and other crops without reported toxic effect and changing of nutritional values. The only one irradiation facility available in Nigeria is Gamma Irradiation Facility operated on Co-60 radioactive source, and currently under laboratory use. Putting the facility under commercial usage can help reducing postharvest losses of agricultural crops, thus strengthening food security for achieving sustainable development goal 2 (SDG 2) in Nigeria. This process may also stimulate agricultural productivity for gross domestic product (GDP), export and Nigeria currency

growth.

It is therefore recommended, for quick commercial operation of food irradiation, that positively adequate education about the technique is disseminated among relevant stakeholders, and that government should establish more irradiation facilities at strategic areas in Nigeria for easy access by both farmers and marketers of perishable food crops, and interested individuals.

### Biography

Halid Sheriff Adegbusi is a lecturer in the department of biological sciences at the Nigeria Police Academy Wudil Kano, Nigeria. He obtained a Doctor of Philosophy (Ph.D. degree) in nutritional science from the Universiti Putra Malaysia, Master of Science (MSc) and Bachelor of Technology (BTech.) in biochemistry from Bayero University, Kano and the Federal University of Technology Akure, Nigeria. He has research interest in the area of nutrition and health, which motivated his search for the correlation between food security and nutritional status among under-five children in Kusada local government area Katsina, Nigeria. Halid has his expertise in Nutrition assessment, Proximate analysis, and Formulation of complementary foods usually sourced from local ingredients. Halid has co-authored many articles in high impact journals such as Journal Science of Food Agriculture, Food Production, Processing and Nutrition, Current Opinion in Food Science and others.