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Research Article

Actualization of 2030 sdg through of sanitary health improvement of foodstuffs in ika local government areas of delta state

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Abstract

This paper discusses achieving 2030 SDG-2 through improving the sanitary condition of foodstuffs marketed in Ika South and Ika North East Local Government Areas of Delta State. Two hundred and sixty respondents were used for the study. The survey design was used for this research, and a stratified random sampling technique was used to select 260 respondents comprising 70 men and 140 women who were in full-time business and 50 farmers. A questionnaire was used to elicit information from respondents. Four research questions were raised. The data were analyzed using mean and standard deviation. Seven causes of unsanitary conditions of foodstuffs marketed were identified. Six ways of improving the marketing of agricultural products were recognized, and eight ways of improving the sanitary conditions of foodstuffs marketed were suggested. Also, five benefits to be derived for improving the sanitary conditions of foodstuffs marketed to ensure food safety were listed.

Keywords: Sanitary health, Survey, Sampling techniques, Foodstuffs.

INTRODUCTION

Food and agriculture are at the heart of civilization and prosperity. Yet, agriculture faces multiple challenges: a world population expected to grow to 9 billion by 2050, a smaller rural labour force, soil quality degradation, climate change, food wastage, water scarcity, biofuel production, and changing lifestyles leading to urbanization and more protein-intensive diets. Furthermore, agricultural productivity increases would ensure food security for everyone only if access to safe, nutritious, and sufficient food is secured. The growing pressure on global food systems constitutes a critical development challenge and creates an increased risk for businesses, governments, communities and the environment (Kibret & Abera, 2012).

Food is the essential need required for the existence and growth of man. According to Abraham (2004), food is "one of the psychological needs" required to maintain the body in a state of equilibrium. Food should be made available in a good sanitary condition in the market at any given time for purchase by the masses. It should be kept in a good environment to avoid contamination (Wambui, 2017). Examples of foodstuffs that can be contaminated are vegetables and fruits, meat and meat substitutes group, bread and cereals, and milk and milk products, among others. Some of these food products are seasonal in nature and are highly perishable (Al-Shabib, 2016).

At harvest periods, the markets are filled up with them. As a result, the farmer will be ready to sell at a giveaway price. When processed into other products, some food products do not pass through the necessary hygienic process. Due to illiteracy, the farmer may lack the required orientation to produce or process these farm products. Therefore, they rely on their own knowledge to give maximum output that could be toxic to human health (Jonesken, 2010).

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When foodstuffs are grown in an unhygienic environment, it will lead to contamination of the foodstuffs which can cause an outbreak of diseases (World Health Organization, 2015).

Food safety is a critical problem in developed and developing nations for people, food companies, and food control officials (Osaili et al, 2018; Smigic et al, 2016). Food-borne diseases (FBD) are associated with outbreaks, threaten global public health security, and have an international concern (Adesokan et al, 2015). Food safety is a growing public health issue (Osimani et al, 2013). FBD is responsible for significant morbidity and mortality rates (Gizaw et al, 2014). The worldwide incidence and financial expenses of food-borne diseases are hard to determine (Meleko et al, 2015). However, reports estimate that 2.1 million individuals die yearly from food-borne diseases (Meleko et al, 2015).

According to the WHO, FBDs in developing nations are serious because of bad hygienic food handling methods, bad understanding and absence of infrastructure (Fasanmi et al, 2018). This is due to poor food handling and sanitation practices, inadequate food safety laws, weak regulatory systems, lack of financial resources, etc. (Meleko et al, 2015). Evidence revealed that around 70% of diarrhoea cases were attributed to food-borne routes in developing countries. Like other developing countries, Ethiopia's burden of food-borne diseases is growing (Ali & Immanuel, 2017).

Approximately 10 to 20% of FBD outbreaks are because of contamination due to food handlers' poor food handling practices (Girma, 2015). The absence of well-maintained and proper food handling practices in mass catering establishments can harm human health (Meleko et al, 2015).

Good personal hygiene and food handling practices are essential for preventing the transmission of pathogens from food handlers to consumers (Gizaw et al, 2014). Close to 75% of food-borne illness outbreaks are attributed to food handlers' lack of safe food handling practices in food service establishments (Gizaw et al, 2014). Food handlers strictly adhere to food safety principles throughout the process (Asmawi et al, 2018).

A high expansion of food establishments is observed in the country, including Gondar city. But ensuring safe food service has been one of the major challenges and concerns for producers, consumers and public health officials (Manes, 2013). Studies revealed that lack of basic sanitary facilities/infrastructures, poor knowledge and practice of hygiene and sanitation among food handlers in food service establishments, and negligence in safe food handling are significant reasons for poor food safety practice in food establishments (Kumie et al, 2006).

Therefore, this paper investigates how to improve the sanitary conditions of foodstuffs marketed in Ika South and Ika North East Local Government Area of Delta State (Mendedo, 2017).

Research Questions

1. What causes unsanitary conditions of foodstuffs marketed in Ika South and Ika North Local Government Areas of Delta State?
2. What are the ways of improving the marketing of agricultural products to ensure their proper sanitary conditions?
3. How do you improve the sanitary conditions of foodstuffs marketed to ensure food safety?
4. What benefits can be derived from improving the sanitary conditions of foodstuffs marketed to ensure food safety?

METHODOLOGY

Research design

A survey research design was used for the study. The study was carried out in Ika South and Ika North East Local Government Areas of Delta State. This consisted of full-time market men and women trading on foodstuffs and some producers who sometimes market their agricultural produce.

Sample and sampling technique

A stratified random sampling technique was used to select 260 respondents comprising 70 men, 140 women and 50 farmers from the following 18 markets in the localities under study. Ewuru, Ozanogogo, Oki, Agbor-Obi, Ekuku-Agbor, Abavo (Oyoko), Alihagwu, Alifekede and Boji-Boji Agbor (Baleke) for Ika South Local Government Area and Umunede, Igbodo, Owa-Alero, Ute-Opku, Mbiri, Owerre-Oubor, Ute-Ugbeje, Owa-Ofie and Boji Owa (Garrage) for Ika North East Local Government Area of Delta State.

Instrument for data collection

The instrument for the study was a questionnaire. The questionnaire was divided into two parts (A and B). Part A sought information on the respondents' bio-data, while B was made up of questionnaire items. Items in the questionnaire were developed from the literature review based on the research questions. The questionnaire consisted of 26 items, and each item was assigned a 4-point Likert response scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), as well as numerical values of 4,3,2 and 1, respectively.

Validation and reliability of the instrument

Three lecturers of the school of Vocational and Technical Education, College of Education, Agbor, subjected the instrument to face validation. A reliability coefficient of 0.78 was obtained.

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Data collection and analysis

Three hundred (300) copies of the questionnaire were distributed to the respondents by hand with the help of six trained research assistants. An interpretation was made for the respondents who could not read and answer the questions. Two hundred and sixty (260) copies were completed correctly and returned. The data collected were analyzed using mean and standard deviation. A mean of 2.50 was used as a cut-off point for the decision rule for each item. Any items with a mean of 2.50 and above were judged accepted, while less than 2.50 were rejected.

RESULT AND DISCUSSION

The data presented in table 1 revealed that items 1-6 were accepted as the causes of unsanitary conditions of foodstuff marketed. The respondents, however, rejected item number 7 as one of the causes. Each mean accepted was above the cut-off point of 2.50. the mean ranged from 2.53 to 3.26 and the standard deviation ranged from 1.07 to 1.19. Item number 7 was below the cut-off point and is therefore rejected. The use of excessive pesticides, rodenticides, and other chemicals on agricultural food products will bring problems to consumers in which the family will be greatly downtrodden and it will be costly to get them back again to good health. This is the view pointy of Igba (2003).

The data presented in table 2 & 3 revealed that all items had mean scores of about 2.50 on a point Likert scale used for this study. They were all therefore accepted. The mean scores ranged from 2.95 to 3.25, and the standard deviation of the means was from 0.94 to 1.64, showing the closeness of the response to the mean on each item. This is in agreement with the finding of Bob (1986), who agrees that if capital is made available at any time, anywhere, things will change hands. The data showed that all items had mean scores above 2.50 on the rating scale used for this research. They were all therefore accepted. The mean scores ranged from 1.64 to 1.83, showing the closeness of the responses to the mean on each item.

Proper personal and food hygiene is in line with the view of Ricketts (1993) that appropriate personal and food hygiene practices are attempts to protect the health and pocket of the consumer. Table 4 shows the mean ratings and standard deviations of the benefits of improving the sanitary conditions of foodstuffs marketed to ensure food safety. The data indicates that all the items from numbers 1-5 were accepted. The mean of each item was above the cut-off point of 2.50. The mean ranged from 2.65 to 3.70, while the standard deviation ranged from 1.37 to 1.75. This indicates that the respondents were not far away from one other, in their opinion.

The less incidence of food poisoning outbreak supports the views of Thekoronye & Ngoddy (1985) that when any poison, harmful substance or contaminant are eliminated or prevented from food material, the shelf life of the food products and the consumers are elongated. Higher demand for goods due to the sound health of the consumers supports the opinion of Ogbene (2006) that good health is the responsibility of every individual. She stated that a healthy individual should be able to get along with himself, get along with others and adjust to changing situations, including the demand for food and rest.

The poor production, processing, storage, transport, handling and sale of foods may create health dangers for

Table 1: Mean ratings and standard deviation of the causes of unsanitary conditions of foodstuffs marketed in Ika North East Local Government Area of Delta State.

S/N	Causes	Mean (X)	Standard Deviation (SD)	Remark
1	Excessive use of pesticides, rodenticides and other chemicals on agricultural products.	2.56	1.19	Accepted
2	Agriculture products are mainly transported on old rickety and dirty vehicles.	2.63	1.15	Accepted
3	Long distant travels on bad roads cause spoilage and deterioration of food for sale	2.76	1.07	Accepted
4	Low sales in the local markets lead to wastage of foodstuffs.	3.26	1.14	Accepted
5	Little knowledge about food preservation.			Accepted
6	Luck of education	2.60	1.18	Accepted
7	Poor marketing system of agricultural products	2.40	1.10	Rejected

Table 2: Improving the marketing of agricultural products to ensure their proper sanitary conditions.

S/N	Improving the marketing of agricultural products	Mean (X)	Standard Deviation (SD)	Remark
1	Adequate financing through credit facilities, loans, grants, and others.	2.96	1.09	Accepted
2	Basic adult education is necessary.	2.95	1.03	Accepted
3	Markets should be appropriately sited or located.	3.25	1.64	Accepted
4	Ensuring quality marketing by branding and granting of farm products.	3.16	1.02	Accepted
5	Maintaining food hygiene to ensure food safety and higher price of products.	3.20	0.95	Accepted
6	Provision of social amenities in the markets such as pipe-borne water, electricity and others.	3.02	0.94	Accepted

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Table 3: Improving sanitary conditions of foodstuffs marketed to ensure food safety.

S/N	Improving sanitary condition	Mean (X)	Standard Deviation (SD)	Remark
1	Proper personal and food hygiene.	3.35	1.82	Accepted
2	Markets should not be sited close to dump sites.	3.15	1.76	Accepted
3	They should be good solid waste management in place.	2.70	1.64	Accepted
4	Proper refuse and sewage disposal.	2.90	1.70	Accepted
5	Involvement of sanitary market inspectors	3.35	1.83	Accepted
6	Health education.	2.95	1.72	Accepted
7.	Good water supply system.	2.85	1.63	Accepted
8.	Market stalls are needed.	3.30	1.82	Accepted

Table 4: Mean rating and standard deviations of the benefits to be derived from improving the sanitary conditions of foodstuffs marketed to food safety.

S/N	Benefits	Mean (X)	Standard Deviation (SD)	Remark
1	There will be less incidence of food poisoning outbreaks.	2.98	1.68	Accepted
2	Higher demand for goods due to good health of consumers.	2.65	1.37	Accepted
3	Higher quality foodstuffs will be on sale for purchase by consumers.	3.70	1.75	Accepted
4	More money will come to the producers and sellers as they offer the best quality products for sales.	2.95	1.57	Accepted
5	Consumers will have peace of mind and satisfaction as they get the best quality product for their scarce resources (money).	3.48	1.70	Accepted

consumers. No poisonous or harmful substance should exist in any food item to be sold. The foodstuffs should not contain any filthy, disgusting, rotten of, or diseased substance. Human waste as a means of fertilizer in our farms should be discouraged. All relevant food premises such as abattoirs, slaughter slabs, bakeries and so on should be inspected. There is a need to use the appropriate food preparation and preservation method to avoid waste or deterioration of the foodstuffs.

Food hygiene will ensure the safety of the foodstuffs marketed in these markets. Food hygiene ensures that foodstuffs that have changed their natural odour, colour, texture and physical properties should not be sold or purchased. Food hygiene ensures that illness and diseases resulting from food poisoning is prevented. Food poisoning results from eating contaminated food due to the presence of poisoning chemicals of various sorts and the presence of bacteria. Therefore, foodstuffs that have gone bad or been infected in some way should not be sold in the market (Nwaokocha, 2007).

Improving the marketing of agricultural products to ensure their proper sanitary conditions is necessary. This, therefore, calls for basic adult education for farmers, adequate financing through credit facilities, loans and grants, provision of social amenities in the markets such as pipe-borne water, and electricity, among others.

Improving the sanitary conditions of foodstuffs marketed to ensure food safety involves proper personal and food hygiene, proper refuse and sewage disposal and the involvement of sanitary market inspectors to ensure that rules and regulations are maintained in the market.

There are many benefits of improving the sanitary conditions of foodstuffs traded in these localities. Among them are:

1. Food poisoning will be reduced, leading to the improvement of consumers' health; as a result reduction in the rate of illness and diseases.
2. Higher demand for goods on the part of consumers due to sound health.
3. Higher quality foodstuffs will be purchased in the markets.
4. More money for the producers and sales as they offer the best quality products for sale.
5. Consumers will have peace of mind and satisfaction as they get the best for their money.

CONCLUSION

One of the causes of unsanitary conditions of foodstuffs marketed in this study is a lack of education among marketers and farmers. Therefore, primary adult education for wholesome foods, better quality food products and disease-free food products for the food health of all better-nourished citizens for the year 20:2020.

RECOMMENDATIONS

1. The authorities need to create awareness about the sanitary condition of foodstuffs, especially the sanitary officers assigned to these markets.
2. The sanitary officers should be corrupt-free and do their work effectively by calling a spade to a spade.

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3. The sanitary officers should plan programmes for her people on handling foodstuffs to avoid contamination through regular health talks, film shows and even drama.
4. Sanitary conditions of foodstuffs in the school curriculum and at home will help to create early awareness of the importance of sanitary conditions of foodstuffs.
5. The government should provide the necessary human and material resources to make this improvement work as a driving factor for the growth of this economy.

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