“FOOD SAFETY MANAGEMENT SYSTEMS IN AGRICULTURE- THE REGULATORY CONTROLS / HARMONIZATION OF NIGERIAN STANDARD WITH GLOBAL STANDARDS. WHAT YOU SHOULD KNOW.”

A PAPER PRESENTED BY MRS OGOCHUKWU MAINASARA

AT A WORKSHOP “AWARENESS ON FOOD SAFETY MANAGEMENT SYSTEM”

ON 24TH- 25TH APRIL, 2014
NAFDAC MANDATE

NAFDAC was established by Decree 15 of 1993 as amended and now Act Cap NI Laws of the Federation of Nigeria (LFN) 2004, to regulate and control the manufacture, importation, exportation, distribution, sale and use of foods, drugs, cosmetics, medical devices, chemicals, packaged water/drinks and detergent referred to as regulated products.
INTRODUCTION

Food Safety is a growing concern for consumers and professionals in the Food Service and Food Processing Industries across the globe.

The prevalence of food poisoning, diseases and illness across the food chain makes proper monitoring, regulation and legislations inevitable. Communication (between the farmers, manufacturers, regulators) along the food chain is essential to ensure that all relevant food safety hazards are identified and adequately controlled at each step within the food chain.

Hence, the role of NAFDAC as a regulatory Agency that safeguard public Health cannot be over emphasized in the overall processes of protecting the food supply from both local and international contamination including preventive measures, surveillance, incident reporting and control.
WHAT IS FOOD SAFETY

- Food Safety is the assurance that food would not harm the consumer when it is prepared or eaten according to its intended use. It can be defined as food that will not harm the consumer as long as intended use guidelines are followed when it is prepared or eaten. Conversely, food is potentially harmful whenever it has been exposed to hazardous agents and intended use guidelines have not been followed.

- Good Hygienic practices starts from the primary production locations i.e. from the farm cattle ranches, milking room, fish farms, rivers and streams, semi processing activities at cottage industries etc. This is because if we refuse to adopt best practices the industrial demands for our agricultural products may be affected.
FOOD SAFETY MANAGEMENT SYSTEM

- An organization’s systematic approach to control food safety hazards in order to ensure that food is safe at the time of human consumption.

The elements include programs, plans, policies, procedures, practices, processes, goals, objectives, methods, controls, roles, responsibilities and relationships.

A food safety management system is often one part of a larger management system.
OBJECTIVES OF FOOD SAFETY MANAGEMENT SYSTEM IN AGRICULTURE

- FSMS help government to give guidance to food chains about the expected safety of food products.
- FSMS helps food chains to design their food production and food safety management system such that there is compliance with this expectation.
- It also help for statistical knowledge of prevalence of food borne diseases through systematic data collection for effective disease control.
FOOD SAFETY MANAGEMENT SYSTEMS IN AGRICULTURE

- Hazard Analysis Critical Control Point (HACCP) as well as Good Agricultural Practices (GAP), Good Hygienic Practices (GHP) and Good Manufacturing Practices (GMP) are preventive measures on which food safety objectives are based.
HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP)

- HACCP is a food safety management system that focuses on critical operation where control is essential in the food handling process.
- HACCP can be defined as a system which identifies, evaluates and controls hazard which are significant for food safety.
- HACCP can be applied throughout the food chain and the application and its principles are necessary for proper control within the food chain.
- Identifying the critical control point (CCP) and critical limit where hazards are domicile and also using appropriate methodological ways of eliminating them are of most paramount and important.
FOOD SAFETY HAZARD

- An agent or condition that could potentially cause an adverse human health effect. Agents are either in or on food and can be biological, chemical or physical.

- In order to ensure safety of food either for consumption or for industrial usage, there are established safety standards for contaminants. The contaminants may be physical (e.g. stones, sands, strands of hair, metal shreds, etc.) ; chemical (e.g. heavy metals, mercury, lead, arsenic, copper, etc.); toxins (e.g. aflatoxins, fumonisin, hydrocyanic acids, etc.); radionuclides (e.g. strontium, plutonium, radium, etc); microbiological (e.g. bacteria, virus, fungi and moulds, etc.).
CONTROL OF FOOD HAZARDS

- Food business operators should control food hazards through the application of quality control systems such as GAP, GHP, GMP, HACCP etc.

- They should:

  - Identify any steps in their operations which are critical to the safety of food.
  - Implement effective control procedures at those steps.
  - Monitor control procedures to ensure their continuous effectiveness.
  - Review control procedures periodically and whenever the operations change.
World agriculture in the twenty first century is faced with three main challenges.

- To improve food security, rural livelihood and income
- To satisfy the necessary and diversified demands for safe food and other products
- To conserve and protect natural resource.

These challenges can be tackled in part through the use of Good Agricultural Practice (GAP) approach.

**Definition** - “Good Agricultural practices are practices that address environmental, economic and social sustainability for on-farm processes and result in safe and quality food and non-food agricultural products”.

THE FOUR PILLARS OF GAP ARE:

- Economic Viability
- Environmental sustainability
- Social acceptability
- Food Safety and quality

These are included in most private and public sector standards but the scope which they actually cover varies widely.

The concept of Good Agricultural practices mainly serve as a reference tool for deciding at each step in the production process or practices and the outcomes that are environmentally sustainable and socially acceptable.

The implementation of GAP should therefore contribute to sustainable Agriculture and rural development.
COMPONENTS OF GOOD AGRICULTURAL PRACTICE

- Soil
- Water
- Crop and Fodder Production
- Crop Protection
- Animal production
- Animal health and welfare
- Harvest and on-farm processing and storage
- Energy and water Management
- Human welfare, Health & Safety
- Wildlife and landscape
- Farm Business Management.
GOOD AGRICULTURAL PRACTICE CONTD...

- The United States Department of Agriculture-Agriculture Marketing Services (USDA-AMS) currently operates an audit/certification program to verify that farms use good Agricultural Practice and/or Good handling practice.

- In 2009, USDA-AMS participated in the GAP Harmonization initiative which “harmonized” 14 of the major North American GAP audit standard which in 2011 resulted in the release and implementation of the produce GAPS Harmonised Food Safety Standards.
AVAILABLE FOOD SAFETY SYSTEMS IN NIGERIA.

- Nigeria is a member of key international bodies (FAO and WHO) that monitor and advise on international best practices in food production and protection of public health.
- Nigeria is also a member of their subsidiary bodies which sets standards on food safety, animal and plant health and safety. The subsidiary bodies are:
  - Codex Alimentarius Commission (CAC) through National Codex Committee made up of NAFDAC, SON, FMOH, FMT&I, FMARD, AFBTE etc
  - International Plant Protection Convention (IPPC) through National Agricultural Quarantine Services
  - World Organization for Animal Health (OIE) through Federal Department of livestock
- These technical government bodies are the national repository for Standards and Technical Regulations for Safety of Agricultural & Food products and trade protocols.
- They are the bodies internationally recognized as the competent authorities for the safety of their respective mandated products or services.
NAFDAC in collaboration with USFDA has mandated inspections of factories/companies that intend to export their product to the United State of America through AGOA-African Growth Opportunity Act and the newly introduced Food Safety Modernization Act (FSMA) which was signed into law on January 4, 2011 by the U.S Government.

The FSMA is aimed at a significant increase in the number of routine surveillance in foreign inspections for products that are imported into U.S.A. Such products that has nuts, seeds, spices, e. t. c.

The Inspections are meant to cast a wide global food safety net focused on prevention and enhancing consumer protection by emphasizing identification of potential food safety problems before products reach their final destination in the United States.

Area of emphasis lies on growth/harvest, pack, process, manufacture or otherwise handle, hold or ship food that is destined for the U.S.A.

Hence NAFDAC using this opportunity decided to undertake inspections of local industries that wish to export their product not only to USA but also to Europe and other African Countries.
In Nigeria, NAFDAC is the chair of the general purposes sub-committee Codex contact point. Codex is an international standards setting body that is made up of WHO and Food Agricultural Organisation (FAO). The function of Codex is to come up with international food standards to ensure safe food from farm to fork.

A Codex electronic working group led by Australia and co-chaired by Nigeria (NAFDAC) met on the code of practice on reduction of Hydrogen Cyanide in cassava. This has been accepted and ratified by the commission meeting. This is an achievement for Nigeria.
COLLABORATIONS CONTD...

- Sorghum, we are the leading producers of sorghum. A lot of products contain sorghum, with this code of practice, we will be able to reduce mycotoxins which are carcinogens.
- We are collaborating with United States Department of Agriculture (USDA) and USAID on training and collaboration.
- We are working with USDA on the causes of rejection of some of the products we export. We are also part of the WTO/STDF project steering group on Sesame seed and shea butter and the Nigeria Export Promotion Council is implementing this project in Nigeria.
- The focus of this project is to develop these products for export, to improve their quality so there will be no incidence of aflatoxin and other contaminants to the products.
NAFDAC ROLE IN PRODUCT REGISTRATION

- Before a packaged product could be termed ‘safe’ for public consumption and export, it must undergo a process of registration with the Agency.
- LOCAL REGISTRATION PROCESS
  - The applicant shall be required to apply in writing for the registration of such products
  - Assessment of application for correctness
  - Issuance of payment advice for payment of Application fee
  - Issuance of application form and format
  - Return of Completed application form
  - Request for Inspection for Good Manufacturing Practice (GMP) of production environment, personnel and facilities.
  - Products are sampled and sent to the laboratory for evaluation
  - Collection of Lab results and reports
  - Preparation of briefs on the products in the form to be presented to the Product Registration Approval Committee
  - Meeting of the members of the committee for consideration of the briefs on the product.
  - Decision of Committee communicated to the applicant as appropriate which may include issuance of Product Registration Certificate, License, with the payment of the stipulated fees.
PRODUCTS FOR EXPORT

- Applicant shall apply to the DG NAFDAC Abuja and copy the Director ports Inspection Directorate NAFDAC Yaba-Lagos. The above application should be submitted three weeks prior to the date of intended exportation.

- The applicant shall indicate the following
  - Name of Exporter/ Manufacturing or Warehouse address
  - Product intended for export (quantity/Net weight, pack size, Batch number, Expiry date and Manufacturing Date)
  - Consignee’s name and address

- The applicant shall present photocopies of the following
  - Registration Certificate with Export Promotion Council
  - Shipping documents
  - Nigerian Export Proceeds form (NXP forms)
  - Proforma Invoice
  - Phytosanitary Certificate (from plant quarantine)
  - Export order
  - Quality specification by the importing countries
  - Agrochemicals used in growing and storage of commodity
  - Packing list
  - Inspecting and Sampling

- On the receipt of the application inspection is conducted by the agency at the company’s establishment for sampling of the food commodities for laboratory analysis. A health certificate will be issued by NAFDAC if the report of inspection and result of the laboratory analysis are found to be satisfactory.
Distinguished guests, in consonance with the economic transformation Agenda, NAFDAC recently effected major restructuring with respect to food safety. A new directorate was created namely: Food Safety and Applied Nutrition (FSAN) Directorate. It has 7 divisions which are Food Safety and Codex Division, Food Policy and Regulation Division, Food Education and Communication Division, Nutrition Labelling and Dietary Suppliments Division, Food Evaluation Division, Programmes, Int’l $ Inter-govt Affairs, Abuja and Food Inspection Division.

Therefore traders, primary producers, food processors, investors, professionals etc are encouraged to avail themselves of these services in relation to issues highlighted in this presentation.

In summary this paper had highlighted safety demand aspect of food production for domestic consumption, industrial usage and international trade, carefully stating and making known Food Safety Standards already in place and those being nurtured to assist every genuine stakeholder in the food chain to improve their quality so that there will be no incidence of Aflatoxins and other contaminants to the products.
Thank you for Your Kind Attention.
Mrs. Ogochukwu Mainasara
Director (FSAN) NAFDAC