NSPRI FOOD SAFETY POLICY
(2024 – 2030)

NSPRI FOOD SAFETY POLICY (NSPRI-FSP)

2024 – 2030

OF THE

NIGERIAN STORED PRODUCTS RESEARCH INSTITUTE (NSPRI)

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EXECUTIVE SUMMARY

Nigeria's food safety regulations are inadequate, leading to high outbreaks and low foreign food consumption. The NSPRI Food Safety Policy (NSPRI-FSP) aims to establish a modern, efficient National Food Safety System by addressing food processing, storage, and distribution issues. The policy was developed through discussions with stakeholders, ensuring the safety and quality of food products. NSPRI is committed to maintaining strict standards in all aspects of business operations, including distribution, processing, and storage. Staff are trained in proper food handling procedures and regularly inspect and audit facilities to ensure compliance with food safety laws. Adhering to this policy will protect the health and welfare of stakeholders and staff, as well as the organization's future prosperity and reputation.

The policy document is outlined in four sections: Section One gives a background on the subject matter, food safety laws and regulatory bodies, NSPRI-FSP Organogram, overall goals and objectives, the scope, and mission; Section Two describes food safety policy issues to be addressed by the developed NSPRI-FSP; Section Three outlines the policy; Section Four highlights the strategy for implementation of the policy and spells out the role of management, staff, government, and stakeholders in strengthening institutional capacity for food safety, the timeline for implementation of the NSPRI-FSP and the Deliverables.

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<div align="center">**SECTION ONE**</div>

1.0   INTRODUCTION

1.1   Background Information

Food safety is an important aspect of public health that covers a wide range of practices and regulations to prevent foodborne illnesses and ensure the safety of food for consumption (IFPRI, 2023). Food safety issues in Nigeria are numerous and complex, encompassing various factors that impact the safety and quality of food products and produce. These issues will continue to emerge, largely because of changes in food production and supply; from farm to postharvest, processing and exports.

In ensuring that food is safe, various stakeholders, such as governments, regulatory bodies, research institutions, food producers, retailers, and consumers, must work in tandem to maintain the integrity and quality of the food supply (FAO, 2023). While recognizing that food safety is a shared responsibility among multiple stakeholders, unsafe food and failure to properly address food safety issues undermines public confidence in a country's food safety system. Food safety related issues affect environmental, animal and human health as shown in Figure 1.

Furthermore, food safety plays an integral role in achieving the Sustainable Development Goals (SDGs,) which are unlikely to be attained without adequate, safe and healthy food (WHO, 2022). Moreover, sufficient, safe and nutritious foods are identified as relevant to all SDGs further reaffirming the interdependence between health, nutrition, food safety and food security.

The role of agricultural institutions in ensuring food safety is of paramount importance; hence, the Nigerian Stored Products Research Institute (NSPRI) under the supervision of Agricultural Research Council of Nigeria (ARCN) in the Federal Ministry of Agriculture and food Security was established in 1948 to assess the quality of exportable crops from Nigeria, Ghana, Sierra Leone, and Gambia to the United Kingdom during the colonial era.

The mandate of the Institute stipulates that it shall carry out research into bulk storage problems of export commodities, improvement and maintenance of the quality of local food crops such as livestock and fisheries, fruits and vegetables, oil seed crops, cereals and pulses, root and tuber crops and any other local commodity under storage. The Institute also

carries out special studies on stored product pests, mycotoxin surveys, pesticide formulations and residue.

NSPRI`s mission statement which is aimed at reducing postharvest losses by ensuring the quality, safety and availability of Agricultural produce can be achieved by mitigating the threats to food safety, especially from biological, chemical hazards, and poor storage of agricultural commodities. The Institute has developed proven processes and technologies for the preservation of various agricultural commodities which are suitable for Small and Medium Enterprises (SMEs) and household-level.

To achieve the desired outcomes, all interests and food safety concerns must be addressed through the development of a policy document. A food safety policy provide a basis for the establishment of national food safety objectives and as well as guidance for application to specific sectors of the food continuum (production, processing, storage, transportation and marketing).

In most countries within the West Africa Region, food safety policies are inadequate due to various reasons including lack of clarity, poor enforcement and monitoring. Hence, as a research institute for stored agricultural commodities, there is need for the formulation of a food safety policy that will address food safety issues. The development and implementation of this policy would facilitate reduction in the burden of food borne diseases and post-harvest losses.

Figure 1: Food safety risks and Health Effects

1.2 Statement of the Policy

1.2.1 NSPRI Food Safety Policy (NSPRI-FSP) Mission

To provide safe food through utilization of proven technologies from farm to table using safety control systems that is grounded on a risk-based approach and sound scientific principles.

1.2.2 NSPRI Food Safety Policy Goal and Objectives

1.2.3 NSPRI-FSP Goal

The overall goal of the **NSPRI-FSP** is to establish an institutional framework that will consolidate existing food safety and control systems especially as it relates to post-harvest issues and ensure the attainment of food safety standards through utilization of NSPRI technologies as well as promote food trade that meets both local and international standards.

1.2.4 NSPRI-FSP Objectives

Specifically, this policy intends to;

i.   Promote availability, accessibility and consumption of safe, wholesome and nutritious foods.

ii.   Strengthen human resource development and research in food safety.

iii. Boost institutional capacity for food safety risk analysis.

iv.   Establish a national food safety communication mechanism among stakeholders.

v.   Strengthen mechanisms for validation, inspection, certification and self-assessment on food safety practices along the value chain.

vi.   Implement standard quality control measures to maintain product integrity.

1.2.5 NSPRI Food Safety Organogram

The Nigerian Food safety organogram of NSPRI captures the various technical department and the different programmes (see Figure 2).

1.3 Food Safety Laws and Regulatory Bodies in Nigeria

Food safety laws and regulatory bodies are essential components of the food industry as they are important in ensuring safety and quality of food commodities (IFPRI, 2023).

Some of the food safety laws in Nigeria:

i. Food, Drugs & Related Products Act Cap F33 Laws of the Federal Republic of Nigeria (LFN), 2004.

ii. National Agency for Food and Drugs Administration (Act CAP N1 Laws of the Federal Republic of Nigeria, 2004).

iii. Counterfeit & Fake Drugs and Unwholesome Processed Foods (Miscellaneous Provisions) Act Cap C34 LFN 2004.

iv. Food and Drug Act No 35 of 1974 (now Food and Drug Act Cap F32 Laws of the Federal Republic of Nigeria, 2004).

v. Public Health Ordinance Cap 165 of 1958;

vi. Standards Organization of Nigeria Decree No. 56 of 1971.

vii. Other bylaws enacted by Local Government Areas in the country.

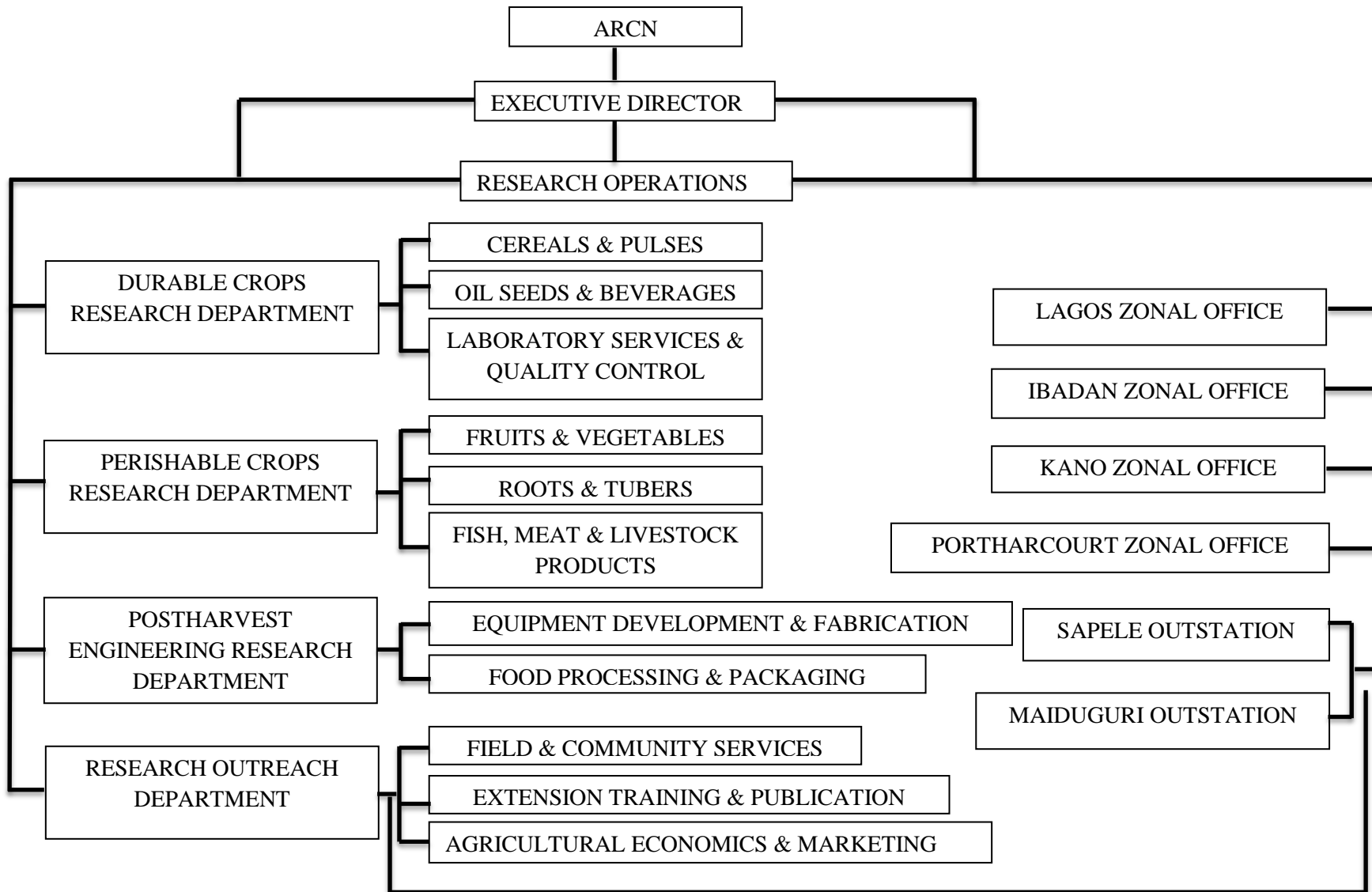*Figure 2: NSPRI Food Safety Organogram*

2.0   BOUNDARIES OF NSPRI-FSP

2.1   Scope of NSPRI-FSP

The NSPRI-FSP covers food safety aspects along the food chain continuum. It includes all public and private entities involved in the technical, operational, scientific, and management aspects of food safety control systems.

This policy applies to all activities conducted within the Nigerian Stored Products Research Institute including research, development, processing, and storage of food products. It encompasses;

i.   Compliance with relevant local, national and international regulations and standards governing food safety.

ii.   Risk assessment and management to identify potential hazards associated with stored food products and its environment.

iii. Technologies maintenance in accordance with best practices.

iv.   Personnel training and education.

v.   Quality control and assurance in food safety practices.

vi.   Communication and transparency regarding food safety matters.

vii. Responsibility and accountability of all personnel and stakeholders in charge of upholding the NSPRI-FSP.

2.2   Food Safety Policy Issues to Be Addressed

In implementing an effective food safety policy, gaps and limitations in the prevalent food systems must be taken into consideration. This policy will therefore address the following:

i.   Risk assessment of food safety and quality (harvest and postharvest surveillance, ISO certified food laboratory and residues monitoring programme).

ii.   Integration of safety, quality, and security of food and its nutrition.

iii. Consumer awareness and education.

iv.   Food safety research and training, growth and development in Nigeria.

v.   The role of individuals, staff, management, and other stakeholders in the implementation of the policy will be outlined.

vi.   Monitoring and evaluation of food safety control systems

vii. Implementation of Hazard Analysis and Critical Control Point (HACCP).

viii. Compliance with international standards and global best practices.

ix. Use and misuse of agricultural chemicals, pesticides and improper food handling and preparation.

x. Inability to use standard/ food grade materials for design and construction of food equipment/facilities.

xi. Process Contamination, poor hygiene practices and food fraud.

2.3 NSPRI Food Safety Policy

The developed NSPRI food safety policy will not only improve food security but also reduce postharvest losses and enhance the nation's economy through sustainable import and export trade. This policy aims to:

i. Comply with food safety standards and codes of practice for compliance and prevention of food safety issues.

ii. Ensure the implementation of Hazard Analysis and Critical Control Point (HACPP), Threat Assessment and Critical Points across food value chain.

iii. Strengthen the linkage between sustainable food production, nutrition, and health.

iv. Prevent inappropriate use of chemicals, pesticides, poor processing and storage of agricultural produce through utilization and adoption of NSPRIs-proven technologies.

v. Comply with the industry's best standards in infrastructure development and fabrication of NSPRI Technologies.

vi. Improving food safety and sanitation standards.

vii. Build capacity and enhance capability in training, education and research on food safety.

viii. Strengthen NSPRI's capacity for food safety risk analysis.

ix. Improve information and communication systems for food safety.

x. Advocate for policy and regulations that support food safety in stored products including standards for storage facilities, appropriate packaging and enforcement mechanism.

xi. Collaborate with relevant government agencies, industry partners, and international organizations on best practices in food safety.

xii.   Promote the adoption of NSPRI-proven technologies and innovation in processing and storage facilities to improve traceability of stored products and produce.

xiii.   Provide training and educational programmes for stakeholders on best practices for maintaining food safety during commodities handling.

xiv.   Establish monitoring and evaluation team to improve staff conduct on food safety measures.

3.0   ROLES AND STRATEGY FOR IMPLEMENTATION OF NSPRI-FSP

3.1   Strengthening Institutional Capacity for Food Safety: The Role of Management

i.   Develop Human Capacity in food safety system along the food supply chain.

ii.   Promote continuing education for existing food safety handlers and other stakeholders.

iii.   Build capacity of quality control program of the institute to cut across all the departments.

iv.   Collaborate with relevant institutions, professional and regulatory bodies on food safety.

v.   Establish and implement NSPRI Strategic "Farm-to-Table" monitoring and evaluation system and create a mechanism for periodic data collation and mapping.

vi.   Build the capacity of NSPRI laboratories through procurement of modern equipment's needed for food safety analyses.

vii.   Provide sustainable and adequate funding for food Safety Programmes.

viii. Appoint and strengthen food safety team.

3.2   Strengthening Institutional Capacity for Food Safety: The Role of Staff

i.   Execution of research projects on risk assessment and food safety issues as it concerns agricultural commodities.

ii.   Development of research efforts geared at the implementation of systemic approach to food safety through Hazard Analysis and Critical Control Point (HACCP).

iii.   Compliance with Good Manufacturing Practices (GMP), Good Agricultural Practices (GAP), and Standard Operative Procedure (SOP) in ensuring food safety.

iv.   Implementation of quality control and assurance measures to monitor safety and quality of stored food products.

3.3   Strengthening Institutional Capacity for Food Safety: The Role of Stakeholders

Stakeholders play crucial roles in the development, implementation, and enforcement of food safety policies. Their involvement will ensure that this policy is effective, practical, and responsive to the needs of all parties involved. The stakeholders include farmers, producers, food processors, food product manufacturers, retailers, consumers, research

institutions, Non-Governmental Organizations (NGOs), food related certification bodies among others. The key roles of these stakeholders include:

i.   Advocating for strong food safety regulations.

ii.   Provision of insights, expertise, and feedback on potential impact of the policy.

iii. Adherence to food safety regulations in ensuring the safety of food along the supply chain.

iv.   Monitoring compliance with food safety policies and enforcing regulations.

v.   Educating consumers, food handlers, and industry partners about food safety practices and regulations.

3.4   Strengthening Institutional Capacity for Food Safety: The Role of Government

i.   Provision of budgetary support for institutional and technical development in line with National Food safety.

ii.   Enforce laws that will mandate citizenry to adhere strictly to food safety policy.

4.0 OPERATIONALIZING NSPRI-FSP

4.1 Ensuring Compliance with NSPRI-FSP

Monitoring and evaluation of the implementation of the policy will be the responsibility of the NSPRI-FSP Team. The roles of the NSPRI-FSP Team include:

    i. Implementation of the policy within three (3) months of its adoption.

    ii. Collaboration with all stakeholders to fast-track the implementation of the policy.

    iii. Monitoring and evaluation programs to track progress made in food safety practices in the Institute, State, and National level at regular intervals.

    iv. Detection and identification of non-compliance including where and how they occurred shall be statistically evaluated.

    v. Develop mechanisms for periodic monitoring and documentation on realisation of specific indicators as it relates to food safety and security.

    vi. Meeting of the NSPRI-FSP Team and other stakeholders shall be convened annually by the Institute for a broad review of the ME reports.

4.2 Timeline for Implementation and Review of NSPRI-FSP

The Food Safety Policy will be implemented over a seven (7) year period from 2024 to 2030 with defined roles and responsibilities of various stakeholders as mentioned above. The document will be reviewed once a year, to effect any significant changes or issues that affect food safety.

SECTION FIVE

5.0   CONCLUSION

Adoption and implementation of NSPRI-FSP will promote the availability, accessibility and consumption of safe, wholesome and nutritious foods. This will be achieved by adhering to the principles and practice of food safety management systems, and ensuring full compliance to all HACCP by all stakeholders involved in the production, storage, processing, transportation and distribution of agricultural produce. The policy will also strengthen human resource development and research in food safety whilst maintaining product integrity and boosting food security at all levels.

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