

# **DRAFT OF ETHICAL, SCIENTIFIC MISCONDUCT AND CONFLICT OF INTEREST POLICY**



**NIGERIAN STORED PRODUCTS RESEARCH INSTITUTE  
NSPRI**

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## **EXECUTIVE SUMMARY**

This document provides a guideline and framework for Research Ethical Conduct as part of NSPRI's policies documentation. It serves as a reference for clarifying the position of the Institute on research ethical conduct not only as it relates staff to the Institute but also as the Institute relates in partnership and collaboration with other organizations. In compiling this policy document, the highest consideration has been given to align and comply with the essence of NSPRI's mandate and purpose as well as existing International and national policies on ethics, intellectual property, data protection rights, condition and scheme of service and federal public service rules and regulations.

### **1. Introduction**

The Nigerian Stored Products Research Institute (NSPRI) has grown in leaps and bounds since it was established in 1948 as West African Stored Products Research Unit (WASPRU). Similarly, its mandate has changed over the years from, assessing the quality of exportable crops from the West African region since it became Nigerian Stored Products Research Institute after the independence in 1960. Since then, ethical considerations with regards to human and animal rights have also evolved considerably.

The commitment of NSPRI to the advancement of post-harvest research is matched only by our dedication to upholding the highest standards of ethical conduct. As a pioneer in agricultural research within Nigeria, NSPRI recognizes the profound impact that ethical considerations have on the outcomes of our research endeavors and the well-being of the communities we serve.

The Ethical Review Committee was established on the 29<sup>th</sup> January, 2024 with the vision of ensuring compliance with international standards on research ethics, specifically that our post-harvest research activities will be conducted with the utmost integrity, respect for animal and individual rights, as well as consideration for societal implications. By meticulously assessing the ethical dimensions of each research proposal, the committee will be expected to play a pivotal role in aligning NSPRI's scientific advancements with ethical principles that reflect the values of our organization and the aspirations of our nation.

Through collaboration, expertise, and rigorous evaluation, the Ethical Review Committee will serve as the cornerstone of NSPRI's ethical framework. This framework is designed to facilitate groundbreaking research that not only advances scientific knowledge but also contributes

positively to the lives of Nigerian citizens. Our commitment extends beyond the laboratory; it encompasses the diverse cultural and social landscapes that make Nigeria unique. By fostering a culture of ethical research, NSPRI aims to build trust, nurture collaboration, and foster innovation that resonates within our communities and resonates throughout the world.

This manual outlines the operations, responsibilities, and principles that guide the Ethical Review Committee's work at NSPRI. It provides researchers, committee members, and stakeholders with a comprehensive understanding of the processes that ensure our research aligns with ethical standards, promoting transparency, accountability, and the well-being of all those affected by our work. As we embark on this collective journey to advance both science and ethics, NSPRI remains steadfast in its commitment to contributing to a brighter and more sustainable future for Nigeria and beyond.

By adhering to these guidelines and working in harmony with the Ethical Review Committee, we solidify our commitment to research that is not only scientifically rigorous but also morally principled, embodying the values that make NSPRI a beacon of excellence in the realm of post-harvest research.

### **1.1 Objectives of Ethical Review**

1. To guard/protect human participants, their dignity, rights and welfare.
2. To make sure that research is directed in a manner that assists welfare of persons, groups and/or civilization as a whole.
3. To inspect particular research events and schemes for their ethical reliability, considering issues such as the controlling risk, protection of privacy and the progression of informed consent.

### **1.2 Advantages of Ethical Review**

- i. Research ethics promote the aims of research.
- ii. It increases trust among the researcher and the respondent.
- iii. Adherence to ethical principles protect the dignity, rights and welfare of research participants.

- iv. Researchers can be held accountable and answerable for their actions.
- v. Ethics promote social and moral values.
- vi. Promotes the ambitions of research, such as understanding, veracity, and dodging of error.
- vii. Ethical standards uphold the values that are vital to cooperative work, such as belief, answerability, mutual respect, and impartiality.

## **2. Committee Composition and Structure**

The Ethical Review Committee in NSPRI is a diverse and multidisciplinary body entrusted with the critical responsibility of evaluating research proposals from an ethical standpoint. The committee is structured to encompass a range of expertise and perspectives, ensuring a comprehensive and balanced assessment of the ethical dimensions of post-harvest research.

### **2.1 Committee Members**

The committee is composed of members selected based on their expertise, experience, and dedication to ethical research practices. Membership comprises individuals from various disciplines.

### **2.2 Chairperson**

The chairperson of the Ethical Review Committee serves as a leader and coordinator of the committee's activities. This role involves guiding discussions, facilitating meetings, and fostering an environment of respectful dialogue. The chairperson is responsible for overseeing the overall functioning of the committee and ensuring that ethical considerations remain at the forefront of decision-making.

### **2.3 Secretary**

The secretary is a vital member of the committee responsible for administrative tasks, documentation, and ensuring effective communication among members. The secretary assists in organizing meetings, preparing agendas, recording minutes, and maintaining records of the committee's proceedings. The secretary also collaborates with the chairman to ensure that the committee's operations run smoothly.

## **2.4 Membership Roles and Expertise**

The committee's composition includes individuals with expertise in post-harvest research from the following departments:

- Durable Crops Research
- Perishable Crops Research
- Post- Harvest Engineering
- Research Outreach
- Administration

## **2.5 Selection and Appointment Process**

The selection and appointment of committee members is at the pleasure of the Executive Director. Individuals are invited to serve based on their demonstrated commitment to ethical research and their relevant expertise. Prospective members are evaluated for their ability to contribute meaningfully to ethical deliberations and to uphold NSPRI's ethical standards.

## **2.6 Diversity and Inclusivity**

NSPRI values diversity and recognizes that ethical considerations can be enriched by incorporating a wide range of perspectives. The committee strives to ensure representation from diverse cultural backgrounds, gender identities, and research specializations, fostering an environment where ethical review is comprehensive and inclusive.

## **2.7 Term Limits and Renewal**

Committee members serve renewable terms to ensure a mix of experienced and fresh perspectives. Renewal of membership is based on demonstrated commitment, active participation, and ongoing alignment with NSPRI's ethical principles.

## **2.8 Collaboration with Stakeholders**

The Ethical Review Committee collaborates with relevant stakeholders, including research teams, community representatives, and regulatory bodies, to ensure that the ethical review process is well-informed and aligned with the expectations of various stakeholders.

By maintaining a diverse and qualified committee, NSPRI endeavors to uphold the highest standards of ethical research, fostering responsible practices that contribute to the betterment of society.

### **3. Ethical Guidelines and Principles**

Ethical considerations form the cornerstone of all research activities conducted at NSPRI. Based on several established codes, the Ethical Review Committee plays a crucial role in upholding these principles, ensuring that research conducted at NSPRI is not only scientifically robust but also socially responsible and respectful of ethical norms.

The following ethical guidelines and principles will therefore serve as the foundation for the committee's evaluations:

#### **3.1 Respect for Human Dignity and Autonomy**

NSPRI is committed to respecting the inherent dignity and autonomy of all individuals involved in research. Researchers must obtain informed consent from participants, ensuring that they fully understand the purpose, procedures, risks, and benefits of the research. Special attention is given to individuals who may have limited autonomy, ensuring their rights are protected.

#### **3.2 The 3R's framework.**

The 3Rs of ethical research refer to a set of guiding principles aimed at promoting the responsible and ethical use of animals in research. These principles were developed to minimize harm to animals, reduce the number of animals used in research, and refine research practices to enhance animal welfare. The 3Rs framework is widely recognized and endorsed by scientific and regulatory bodies, and it serves as a foundation for ethical considerations in animal research.

The 3Rs stand for:

1. **Replacement:** This principle encourages researchers to find alternatives to using animals in experiments whenever possible. This could involve using non-animal methods such as computer simulations, in vitro models, or human tissue cultures. The goal is to replace animal experiments with methods that do not involve animals, thereby minimizing their use.

2. **Reduction:** The reduction principle emphasizes the importance of using the fewest number of animals necessary to obtain valid and reliable scientific results. This involves designing experiments in ways that maximize the information obtained from each animal and reduce the overall number of animals used.
3. **Refinement:** Refinement focuses on improving the conditions and techniques used in animal research to enhance animal welfare and minimize pain, distress, and suffering. This principle includes optimizing housing conditions, implementing pain relief measures, and refining experimental procedures to minimize discomfort.

The 3Rs framework encourages researchers to consider the ethical implications of their work and make conscious efforts to minimize harm to animals while still advancing scientific knowledge. By adhering to the 3Rs, researchers contribute to the ethical and responsible conduct of research involving animals and help strike a balance between scientific progress and animal welfare.

### **3.3 Beneficence and Non-Maleficence**

Research conducted at NSPRI must prioritize the well-being of participants and society at large. This involves maximizing benefits while minimizing potential harms. The committee evaluates the potential risks and benefits of each research project, weighing them against each other to ensure that the benefits outweigh any potential adverse effects.

### **3.4 Justice and Fairness**

NSPRI is committed to fairness in the distribution of research opportunities and benefits. The committee ensures that the selection of research participants is fair, avoiding any form of discrimination or exploitation. Additionally, research outcomes should contribute to the well-being of communities and populations that may be affected by the research.

### **3.5 Privacy and Confidentiality**

The privacy and confidentiality of research participants are paramount. Researchers are required to implement appropriate measures to protect participants' personal information and ensure that data collected remains confidential. This commitment extends to the storage, handling, and sharing of sensitive information.

### **3.6 Cultural Sensitivity and Community Engagement**



NSPRI recognizes the diverse cultural contexts within Nigeria. Researchers are expected to approach their work with cultural sensitivity, respecting local beliefs, practices, and traditions. The committee encourages researchers to engage with communities to understand their perspectives, involve them in decision-making, and ensure that research aligns with community values.

### **3.7 Environmental Responsibility**

Research projects at NSPRI should consider the environmental impact of their activities. Researchers are encouraged to minimize negative environmental consequences and promote sustainable practices. This principle aligns with NSPRI's commitment to responsible resource management and the long-term well-being of the environment.

### **3.8 Transparency and Integrity**

Researchers are expected to conduct their work with transparency and integrity, accurately representing their methods, findings, and conclusions. The committee ensures that researchers are forthcoming about potential conflicts of interest, financial support, and affiliations that could impact the objectivity of their work.

### **3.9 Compliance with Laws and Regulations**

NSPRI and its researchers must adhere to relevant local, national, and international laws, regulations, and ethical standards. The committee verifies that research projects meet legal requirements and ethical guidelines, while also considering the dynamic landscape of ethical considerations in research. By upholding these ethical guidelines and principles, NSPRI's Ethical Review Committee plays a vital role in ensuring that research conducted within our institute aligns with the highest standards of ethical conduct and contributes positively to Nigerian society.

#### **4. Submission and Review Process**

The submission and review process is a critical phase within the ethical framework of the Nigerian Stored Products Research Institute (NSPRI). This process ensures that all research proposals undergo rigorous scrutiny to uphold ethical standards, scientific validity, and societal relevance. By following a transparent and systematic procedure, NSPRI aims to promote responsible research practices and safeguard the interests of participants, communities, and stakeholders.

##### **4.1 Proposal Submission**

Researchers intending to conduct post-harvest research projects under the auspices of NSPRI are required to submit comprehensive research proposals to the Ethical Review Committee. These proposals should outline the research objectives, methodology, potential benefits, anticipated risks, and strategies for engaging with communities.

##### **4.2 Pre-Review Assessment**

Upon receipt, submitted proposals undergo a pre-review assessment to determine their alignment with NSPRI's ethical principles and policies. This preliminary assessment ensures that proposals meet basic criteria before advancing to the comprehensive ethical review process.

##### **4.3 Comprehensive Ethical Review**

Proposals that successfully pass the pre-review assessment move on to the comprehensive ethical review phase. The Ethical Review Committee meticulously evaluates each proposal based on ethical considerations, scientific rigor, and societal impact. Reviewers assess aspects such as:

- Informed consent procedures and participant protection
- Methodological conformity to 3R's
- Potential benefits/risks to individuals and communities
- Ethical implications and mitigation strategies for potential risks
- Cultural sensitivity and community engagement strategies
- Alignment with NSPRI's ethical guidelines and principles

#### **4.4 Timelines and Communication**

NSPRI places emphasis on timely ethical review to facilitate research planning. Researchers can expect clear communication about submission deadlines, review timelines, and any additional information required during the review process. The Ethical Review Committee strives to provide feedback and decisions promptly to support researchers' project planning.

#### **4.5 Review Outcomes**

Following the comprehensive ethical review, researchers are informed of the committee's decision, which may include one of the following outcomes:

- **Approval:** The proposal is approved for implementation, contingent on compliance with ethical recommendations and guidelines.
- **Conditional Approval:** The proposal is approved with specific conditions that must be addressed before implementation.
- **Revisions Required:** The proposal requires revisions based on ethical and methodological considerations. Resubmission for review is necessary.
- **Rejection:** The proposal does not meet the ethical standards and objectives of NSPRI and is not approved for implementation.

By adhering to a robust submission and review process, NSPRI's Ethical Review Committee ensures that all post-harvest research projects are conducted ethically, responsibly, and in alignment with the institute's mission and values.

### **5. Ethical Review Procedures**

Ethical review procedures lie at the core of NSPRI commitment to ethical excellence in post-harvest research. The Ethical Review Committee employs a systematic and rigorous approach to evaluate research proposals, ensuring that projects adhere to the highest ethical standards and contribute positively to the well-being of individuals and communities.

#### **5.1 Comprehensive Evaluation**

The Ethical Review Committee conducts a comprehensive evaluation of each research proposal to assess its ethical, scientific, and societal implications. This evaluation involves:

- Identifying potential ethical issues and concerns
- Analyzing the scientific conformity of the research design to ethics
- Assessing the potential benefits and risks to participants and communities
- Evaluating the methods for obtaining informed consent and protecting participants' rights
- Scrutinizing the cultural sensitivity and community engagement strategies
- Ensuring that the research aligns with NSPRI's ethical guidelines and principles

## **5.2 Ethical Deliberations**

Committee members engage in thorough ethical deliberations to ensure a well-rounded perspective on each proposal. Deliberations involve open discussions, critical analysis, and consideration of diverse viewpoints. The goal is to reach a consensus on the ethical acceptability of the research, while also addressing any potential ethical challenges.

## **5.3 Informed Decision-Making**

The Ethical Review Committee's decision-making process is based on a careful balance of ethical principles, and societal impact. Decisions are grounded in the principles of respect for autonomy, beneficence, non-maleficence, justice, and cultural sensitivity. The committee's collective expertise contributes to well-informed decisions that uphold ethical standards and contribute to responsible research practices.

## **5.4 Communication of Decisions**

NSPRI values transparent communication with researchers. The committee communicates its decisions to researchers in a clear and timely manner. For proposals that are approved, the committee provides guidance on ethical considerations, implementation, and any conditions that need to be met. If revisions are required, specific feedback is provided to guide researchers in addressing ethical and methodological concerns.

## **5.5 Ongoing Monitoring and Oversight**

The Ethical Review Committee's responsibility extends beyond the initial review. The committee ensures ongoing monitoring of approved research projects to ensure ethical compliance and participant protection throughout the research process. Researchers are encouraged to maintain open communication with the committee regarding project progress and any emerging ethical issues. By following comprehensive ethical review procedures, NSPRI's Ethical Review Committee contributes to the institute's commitment to ethical integrity, research excellence, and the advancement of post-harvest research that benefits Nigerian communities and beyond.

## **6. Informed Consent and Participant Protection**

Informed consent and participant protection are foundational principles that underpin all research activities conducted within the Nigerian Stored Products Research Institute (NSPRI). Recognizing the significance of safeguarding the rights and well-being of research participants, NSPRI places the utmost importance on obtaining informed consent and ensuring comprehensive participant protection.

### **6.1 Informed Consent Process**

The Ethical Review Committee requires that researchers adhere to a rigorous process of obtaining informed consent from all individuals participating in research projects. Informed consent involves providing participants with clear and understandable information about the research, its purpose, procedures, potential risks, benefits, and their rights. Researchers must ensure that participants have the capacity to provide voluntary and informed consent, free from coercion or undue influence.

### **6.2 Culturally Sensitive Communication**

NSPRI recognizes Nigeria's cultural diversity and the importance of communicating research information in culturally sensitive and accessible ways. Researchers are encouraged to communicate in languages and formats that participants understand, and to consider local norms and customs when seeking informed consent.

### **6.3 Protection of Vulnerable Participants**

The committee places special emphasis on protecting the rights and welfare of vulnerable participants, including children, the elderly, pregnant women, and individuals with limited

autonomy. Researchers are required to implement additional safeguards when involving vulnerable populations, ensuring that their participation is ethically justified and their well-being is prioritized.

#### **6.4 Confidentiality and Data Security**

Researchers must ensure the confidentiality of participants' personal information and research data. Adequate measures should be in place to protect participants' privacy, prevent unauthorized access, and secure data storage. Findings presented or published should not reveal participants' identities.

#### **6.5 Continuous Monitoring and Reporting**

NSPRI's commitment to participant protection extends beyond the initial informed consent process. Researchers are expected to continuously monitor participants' well-being throughout the research project. Any unexpected adverse events or emerging ethical concerns must be promptly reported to the Ethical Review Committee for appropriate action.

### **7. Monitoring and Compliance**

Monitoring and compliance mechanisms are essential to ensure that research projects approved by the Ethical Review Committee align with ethical standards and guidelines throughout their lifecycle. NSPRI places emphasis on continuous oversight to maintain the integrity of approved research and to address any potential deviations from ethical requirements.

#### **7.1 Ongoing Ethical Oversight**

Researchers are required to maintain regular communication with the Ethical Review Committee regarding project progress. The committee conducts periodic reviews to verify that research activities are being conducted in accordance with approved protocols and ethical guidelines.

#### **7.2 Reporting and Documentation**

Researchers are expected to provide regular updates on the status of their research projects, including any modifications to procedures, unforeseen challenges, or changes in participant enrollment. This reporting ensures transparency and allows the committee to address any emerging ethical concerns promptly.

### **7.3 Non-Compliance and Ethical Concerns**

In the event of non-compliance with ethical guidelines or the occurrence of ethical concerns, researchers must report such instances to the Ethical Review Committee immediately. The committee will assess the situation, recommend corrective actions, and, if necessary, consider suspension or termination of the research project.

### **7.4 Collaborative Approach**

Monitoring and compliance efforts are carried out collaboratively, involving researchers, the Ethical Review Committee, and other relevant stakeholders. This collaborative approach reinforces ethical accountability and contributes to the responsible conduct of research at NSPRI.

## **8. Ethical Review Committee Meetings**

Ethical Review Committee meetings play a crucial role in fostering dialogue, decision-making, and transparency within the ethical review process. These meetings provide a platform for committee members to collectively evaluate research proposals, discuss ethical considerations, and make informed recommendations.

### **8.1 Meeting Frequency and Schedule**

The Ethical Review Committee shall hold monthly meetings to review research proposals, monitor ongoing projects, and discuss emerging ethical issues. Where the operational pace of NSPRI demands it, emergency meetings may be scheduled by the Chairperson.

### **8.2 Agenda Preparation and Documentation**

Agendas for committee meetings are prepared in advance and include details of the proposals to be reviewed, ongoing projects, and any relevant ethical topics. Minutes of each meeting are documented to record discussions, decisions, and recommendations made by committee members.

### **8.3 Deliberations and Decision-Making**

Committee meetings facilitate open and informed deliberations among members. Discussions encompass ethical considerations, scientific validity, societal impact, and participant protection.

Decisions are reached through a consensus-based approach, with a focus on upholding ethical standards and ensuring the well-being of participants and communities.

#### **8.4 Transparency and Communication**

Transparency is a core value of NSPRI's Ethical Review Committee meetings. Researchers are provided with clear communication regarding the outcomes of the review process, along with recommendations, conditions, or required revisions. Transparency ensures that researchers understand the rationale behind decisions and can take appropriate actions based on feedback.

### **9. Reporting and Communication**

Effective reporting and communication are essential components of NSPRI's commitment to ethical research practices. Transparent and timely communication ensures that all stakeholders are well-informed about the ethical review process, decisions, and ongoing research activities.

#### **9.1 Communication Channels**

The Ethical Review Committee maintains open communication channels with researchers, stakeholders, and the wider NSPRI community. Regular updates, notifications of meetings, and dissemination of ethical guidelines contribute to a culture of ethical awareness and accountability.

#### **9.2 Decision Communication**

Researchers receive clear and comprehensive communication about the outcomes of ethical reviews. Decision letters provide feedback, recommendations, or conditions for approval. Transparent communication ensures that researchers understand the ethical considerations and expectations associated with their projects.

### **10. Research Ethics Workshops**

NSPRI organizes research ethics workshops, seminars, and training sessions for researchers and staff. These initiatives cover a range of topics, including informed consent, participant protection, data management, cultural sensitivity, and ethical considerations specific to post-harvest research.

#### **10.1 Committee Member Training**



Ethical Review Committee members receive continuous training to enhance their understanding of evolving ethical standards, regulatory changes, and best practices in ethical review. This training equips committee members to make well-informed and ethically sound decisions.

## **10.2 Researcher Orientation**

New researchers engaging with NSPRI undergo orientation sessions that emphasize the institute's ethical guidelines, procedures, and the role of the Ethical Review Committee. This orientation ensures that all researchers are aware of their ethical responsibilities from the outset.

## **11. Continuous Improvement**

NSPRI is dedicated to continuous improvement in ethical research practices. By periodically assessing and refining its ethical review processes, the institute strives to enhance participant protection, research quality, and ethical accountability.

### **11.1 Ethical Review Process Evaluation**

NSPRI regularly evaluates the effectiveness of its ethical review processes through feedback from researchers, committee members, and stakeholders. This evaluation enables the identification of areas for improvement and the implementation of refinements as needed.

### **11.2 Incorporating Feedback**

Feedback received from researchers, participants, and the Ethical Review Committee is considered invaluable. NSPRI uses this feedback to address challenges, enhance ethical guidance, and refine procedures, leading to more effective and ethical research practices.

## **12. Ethics Documentation and Record keeping**

Thorough and accurate documentation is integral to maintaining ethical integrity and transparency in all research activities conducted at NSPRI. Proper record keeping ensures accountability, traceability, and the ability to address ethical concerns and inquiries.

### **12.1 Documenting Ethical Reviews**

NSPRI maintains comprehensive records of all ethical review processes, including minutes of committee meetings, decision letters, recommendations, and communication with researchers. These records provide a documented history of ethical considerations and decisions.

## **12.2 Data Management and Privacy**

Ethics-related data, such as informed consent forms and participant information, are managed with utmost care and in accordance with data protection regulations. Strict data security measures are in place to safeguard the privacy of participants.

## **13. Scientific Misconduct**

Scientific misconduct refers to the violation of ethical standards and practices in the conduct of research activities. It includes actions that undermine the integrity of the scientific process, compromise reliability of research outcomes, and erode public trust in scientific endeavors. NSPRI is committed to detecting, addressing and preventing scientific misconduct to uphold the credibility and integrity of its research activities.

### **13.1 Definition**

- *Fabrication*: Falsification or invention of data, results, or experimental procedures.
- *Plagiarism*: Presenting someone else's work, ideas, or intellectual property as one's own without proper attribution.
- *Data Manipulation*: Selective or improper handling of research data to achieve desired results.
- *Authorship Misconduct*: Improper attribution of authorship, including ghostwriting or honorary authorship.
- *Duplicate Publication*: Submitting the same research findings to multiple journals without proper disclosure.

- *Extrapolation:* To infer values of a variable in an unobserved interval from values within an already observed interval.
- Publication of outdated data.
- Publication in predatory journals without peer review.
- Listing of non-existent journals

### **13.2 Reporting Mechanism**

The Committee needs to establish a clear and confidential mechanism for reporting suspected scientific misconduct.

- a) Researchers, staff, and stakeholders will be encouraged to report any concerns to the Ethical Review Committee.
- b) Whistleblower protection measures must be in place to safeguard individuals reporting in good faith.

### **13.3 Investigations and Sanctions**

Upon receiving a report of scientific misconduct, the Ethical Review Committee will initiate an impartial investigation. If the case of misconduct is substantiated, appropriate sanctions will be recommended, which may include retraction of publications, temporary suspension of research activities, or other disciplinary actions as deemed necessary.

### **13.4 Responsibilities of Researchers**

- Research work should be conducted with all sense of responsibility that can make the result reliable locally and globally.
- Acknowledgement of those that have done work related to the research before.
- Avoid plagiarism when writing their manuscripts for publications.
- There should be proper management of any approved research funds among team members
- Responsibilities should be shared among the team members when conducting research.

### **13.5 Education and Prevention**

The activities of the Ethical Review Committee will include the prioritization of education and awareness programs to prevent scientific misconduct. Researchers and staff will receive training on ethical research practices, proper data handling, and the consequences of misconduct. The goal is to foster a culture of integrity and responsibility in research.

## **14. Conflict of Interest**

Conflict of interest arises when an individual acts in such a manner that his/her personal interests or activities compromises or diminishes the objectives, profitability, effectiveness or intellectual property of NSPRI. With the expanded terms of reference, the Ethical Review Committee will also concern itself with managing conflicts of interest to maintain the integrity of NSPRI's research activities and protect its intellectual property. Proposal writing should be guided by the mandate of the institute and national need.

### **14.1 Conflict of Interest Scope**

- *Financial Interests:* Including, but not limited to, ownership of businesses, products, patents, or other financial activities that may conflict with the objectives, goodwill, effectiveness or intellectual property of NSPRI.
- *Personal Relationships:* Involving situations where personal relationships could influence decision-making or cause conflict with the objectives, goodwill, effectiveness or intellectual property of NSPRI.
- *Professional Advancement:* Addressing activities of individuals related to career advancement, promotions, or other professional benefits which compromise ethics, objectives, goodwill, effectiveness or intellectual property of NSPRI.
- *Institutional Conflicts:* Recognizing conflicts that may arise from institutional affiliations, obligations, or engagements that could impact the objectives, profitability, effectiveness or intellectual property of NSPRI.

### **14.2 Prohibition of Activities that contravene Institute's Mandate**

NSPRI explicitly prohibits individuals from engaging in activities that contravene Institute's Mandate. These include but is not limited to:

- Exploiting research findings and diverting research resources or opportunities that are not in the public domain for personal financial gain in such a way that the objectives, effectiveness or intellectual property of NSPRI are undermined or compromised.
- Leveraging institutional affiliations to obtain personal advantages that compromise research integrity or deprive NSPRI of its goodwill, objectives, effectiveness or intellectual property.

### **14.3 Disclosure Requirements**

All members of staff, contractors and relevant stakeholders are obligated to disclose any potential conflicts of interest. Disclosures should encompass financial interests, personal relationships, professional advancement, and institutional affiliations that may affect the objectives, effectiveness or intellectual property of NSPRI prior to specific assignments.

### **14.4 Reporting Violations**

A clear and confidential reporting mechanism will be established for individuals to report suspected violations related to conflicts of interest.

### **14.5 Evaluation and Management**

The Ethical Review Committee will carefully evaluate disclosed or reported conflicts of interest, with specific attention to activities that may contravene the institute's mandate. There should be plans to mitigate the impact of such conflicts disclosed or reported, including recusal from decision-making, transparent communication, and, if necessary, sanctions in alignment with NSPRI's policies.

### **14.6 Education, Awareness and Training**

NSPRI should prioritize education and awareness programs to ensure that individuals understand the implications of conflicts of interest. NSPRI recognizes the importance of ongoing training and education to foster a culture of ethical research and ensure that researchers, committee members, and stakeholders are equipped with the knowledge and skills needed for responsible conduct. Training initiatives emphasize the importance of maintaining institutional interests above personal interests.

## **15. Conclusion**

The Ethical Review Committee at the Nigerian Stored Products Research Institute (NSPRI) is steadfast in its commitment to uphold ethical standards and ensure the responsible conduct of post-harvest research. By explicitly addressing activities that contravene the institute's mandate, the committee hopes to strengthen its commitment to ethical conduct, research integrity, and the responsible advancement of knowledge within the post-harvest research domain. NSPRI advances its mission by adhering to rigorous ethical review processes, promoting participant protection, and fostering a culture of ethical awareness, while contributing to the well-being of individuals, communities, and the environment. Through collaborative efforts, transparent communication, continuous improvement, and unwavering dedication to ethical principles, NSPRI demonstrates its role as a responsible and ethical research institution, making meaningful contributions to sustainable agriculture, food security, and scientific progress.

## **16. Recommendations**

- i. The Institute should organize research ethics workshops, seminars, and training sessions for researchers on ethical considerations specific to post-harvest research.
- ii. Ethical Review Committee members should be continuously trained to enhance their understanding of evolving ethical standards, regulatory changes, and best practices in ethical review. This training will equip the committee members to make well-informed and ethically sound decisions.
- iii. New researchers engaging with NSPRI should undergo orientation sessions that emphasize the Institute's ethical guidelines, procedures, and the role of the Ethical Review Committee. This orientation will ensure that all researchers are aware of their ethical responsibilities from the outset.
- iv. Yearly subscription of plagiarism checker should be provided by the Institute.
- v. Researchers are required to submit comprehensive research proposals to the Ethical Review Committee. These proposals should outline the research objectives, methodology, potential benefits, anticipated risks, and strategies for engaging with communities.
- vi. Researchers are required to maintain regular communication with the Ethical Review Committee regarding the progress of their projects.



**NIGRIAN STORED PRODUCTS RESEARCH INSTITUTE,  
(Km 3 Asa-Dam Road, PMB 1489, Ilorin, Kwara State, Nigeria.)**

**Research Ethical Review Application**

The Chairperson,

I/We hereby apply to the NSPRI Research Ethics Committee for ethical review of my/our research protocol to be conducted within the territorial jurisdiction of your committee.

The details of the protocol are as follows:

1. Name of principal investigator.....
2. Age.....
3. Sex.....
4. Qualifications.....
5. Occupation.....
6. Address.....
7. Phone no.....Email.....
8. Names and particulars of other researchers

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9. Title of research work.....

10. Purpose of research.....

11. Institution or Community where the research will be conducted.....

.....

12. Proposed date of commencement of research project.....

13. Proposed duration of the research.....

Applicant's name.....

Signature/Date.....

Accompanying documents: The following documents must accompany this completed application form.

a) Detailed research proposal. The proposal must include the following:

- i) Title of Research work
- ii) Introduction/Background & literature review
- iii) Statement of problem
- iv) Purpose of research
- v) Aims/objectives of research
- vi) Methodology of the study
- vii) Procedure for data collection



- viii) Quality assurance (procedure to ensure the quality of data)
- ix) Method of obtaining informed consent where relevant
- x) Summary of ethical issues involved in the research
- xi) Consequences of the study for the local community, environment and participants
- xii) Results of earlier related studies, if any
- xiii) Dissemination of results of study (plans for the dissemination of results)
- xiv) Confidentiality & privacy (steps to ensure the confidentiality & privacy of participants)
- xv) Responsibility/litigation (how to deal with litigations which may result from the result of the research)
- xvi) Cost & sources of funding of the research

b) Curriculum vitae of Principal Researcher (1 copy)

c) Any other document for ethical review certification

**NOTE:**

1. Completed application form should reach the Secretary at least 6 weeks before the date of commencement of the research.
2. Amendment to the research proposal should be stated clearly giving reasons for such amendment and should reach the committee not later than 4 weeks to the commencement of the research.
3. The Committee verdict on the application will be ready on or before 3 weeks on receipt of completed application form or request for amendment or supplementary information.

**For Office use**

**Date Received.....**

**Approved/Not Approved.....**

**Other Remarks**.....



### **ETHICAL CLEARANCE CERTIFICATE**

Certificate Reference Number: \_\_\_\_\_

Project title:

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Principal Researcher:

On behalf of the Nigerian Stored Products Research Institute's Research (NSPRI) Ethical Committee, I hereby give ethical approval for the above-mentioned project. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that NSPRI ethical committee must be informed immediately of:

- ❖ Any change in the conditions or undertakings mentioned in the proposal.
- ❖ NSPRI ethical committee retains the right to Withdraw or amend this Ethical Clearance Certificate if any unethical practices are revealed or suspected
- ❖ The ethical committee can request access to any information or data at any time during the course or after completion of the project.

The Ethical Committee wishes you well in your research.

Yours sincerely,

Secretary, Research Ethical Committee

**COMMITTEE MEMBERS**

1. Dr. Idorenyin Nwaehujor - Chairperson
2. Dr. Alice Ajani - Member
3. Dr. Olufunmilayo Ajayi - Member
4. Dr. Olorunfemi Ilemaye - Member
5. Dr. Isaac Oyebamiji - Member
6. Engineer Johnson Ogunsua - Member
7. Mrs. Funmilayo Adewoye - Secretary

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Dr. Idorenyin Nwaehujor  
Chairperson

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Mrs. Funmilayo Adewoye  
Secretary