1. **INTRODUCTION**
This Policy mirrors the CGIAR Research Ethics Code, which forms a central part of the CGIAR Ethics Framework. The CGIAR Research Ethics Code was prepared in response to the CGIAR Internal Audit Function’s Review of Research Ethics Frameworks in CGIAR and serves as an overarching System-wide high-level code outlining standards of scientific research conduct and covers a wide range of issues pertaining to CGIAR research activities.

In the context of the One CGIAR and seeing the recent publication of the CGIAR Research Ethics Code with which the Alliance of Bioversity International and CIAT (hereafter “the Alliance”) must comply, and also seeing that the CGIAR Research Ethics Code is in line with the Alliance Code of Ethics and Conduct, which was approved by the Alliance Board in August 2020, the Alliance has decided to directly use the CGIAR Research Ethics Code to form its own Research Ethics Policy, integrating any missing elements specific to its own particular context. As such, starting from Section 4 below, the text from the CGIAR Research Ethics Code has been included integrally and references to the Alliance were integrated in the text to reinforce its adherence to the Code. Any additional provisions specific to the Alliance are included in specific subsections.

2. **PURPOSE**

The Alliance shares the mission of CGIAR: *Ending hunger by 2030 – through science to transform food, land and water systems in a climate crisis.* Moreover, to achieve its own **Vision** of food systems and landscapes that sustain the planet, drive prosperity, and nourish people, by delivering research-based solutions that harness agricultural biodiversity and sustainably transform food systems to improve people’s lives in a climate crisis, the Alliance strives to conduct its operations according to the highest ethical standards and create an environment that promotes the Alliance’s fundamental Values of integrity, sustainability, partnership, excellence and innovation, and diversity and inclusion.

Those involved in CGIAR and Alliance research activities have a significant obligation and responsibility to embody CGIAR’s Core Ethical Values as well as the Alliance fundamental Values. Their adherence to working in accordance with best practice ethical standards is fundamental to ensuring broad public trust and confidence in CGIAR and Alliance operations.

The purpose of this *Research Ethics Policy* (“Policy”) is to ensure that clear, achievable, and relevant standards of ethical conduct apply to all Alliance research.

This Policy may be complemented by additional policies, guidelines, and procedures, when appropriate, provided that these are consistent with this Policy.

3. **SCOPE**

This Policy is applicable to
• all individuals employed or otherwise contracted by the Alliance of Bioversity International and CIAT (for example, staff, consultants, secondees, students, visiting fellows, and scholars) who are involved in research activities of any kind, as well as
• individuals employed or contracted by Alliance partners who are involved in Alliance research programs or projects whose research is otherwise funded by the Alliance.

4. DEFINITIONS AND ACRONYMS

The below definitions are included in Annex I of the CGIAR Research Ethics Code. Any additional definitions specific to the Alliance are included in a sub-section below.

Animal welfare
The physical and mental state of an animal in relation to the conditions in which it lives and dies.

Assent
Permission given to participate in a research study where the individual is not able to legally consent. Such individuals can include minors and persons with diminished cognitive capacity. They may also dissent, which means they do not agree. Working with children or adults not capable of giving consent requires the consent of the parent or legal guardian and the assent of the subject.

Benefit
Something that promotes the well-being of an individual or group, or the public generally. A benefit for an individual in the context of CGIAR and the Alliance may include access to genetic resources, technology, water, land, and other resources that improve their livelihoods, food security, climate resilience, and economic and environmental sustainability. Payment for participation in a study is not considered a benefit of the study and often there is no guaranteed benefit of participation.

Beneficence
The principle that governs researchers, which ensures that the research maximizes benefits and minimizes harm to participants. This principle ensures that researchers have the welfare of the research participant as a goal of any research.

Confidentiality and personal data protection
The treatment of information, including personal data, that an individual has disclosed in a relationship of trust and with the expectation that it will not be divulged to others without permission in ways that are inconsistent with the understanding of the original disclosure.

Consent
The voluntary agreement of a person or group, based on adequate knowledge and understanding of relevant material, to participate in research. Informed consent is one possible result of informed choice; the other possibility is refusal. Oral consent may be used for persons who cannot read or feel uncomfortable signing forms for cultural reasons. In this case, a written text describing what will be told
to subjects when oral consent is necessary should be provided. Consent may be given only by individuals who have reached the legal age of consent (typically 18 years old).

**Cumulative burden**
The impact that repeated procedures, including handling, restraint, and recovery time, may have on an animal. Cumulative burden should be assessed in relation to an animal's lifetime experience. The lifetime experience of an animal includes all aspects of health, welfare, and care, along with the impact of all scientific procedures.

**Genetic engineering**
Genetic changes resulting from the application of modern biotechnology as defined in the Cartagena Protocol on Biosafety.

**Genome editing**
The use of molecular biology techniques to facilitate precise, efficient, and targeted modifications at genomic loci. These techniques include zinc-finger nucleases (ZFNs), transcription activator-like effector nucleases (TALENs), and type II clustered regularly interspaced short palindromic repeat (CRISPR)/CRISPR-associated protein 9 (Cas9).

**Harm**
Adverse effects to the interest or welfare of an individual, a group, or the public generally. Harm extends to physical harm, discomfort, anxiety, pain, and psychological disturbance and includes placing a person at social disadvantage.

**Humane endpoint**
The clear, predictable, and irreversible criteria that allow the early termination of a procedure before an animal experiences harm that is not authorized or scientifically justified.

**Human subject**
A living individual or a group of living individuals about whom a researcher obtains either (1) data through intervention or interaction with the individual or (2) identifiable private information.

**Intervention**
Physical procedures through which data are gathered and/or manipulations of the human subject or the human subject’s environment that are performed for research purposes.

**Justice**
The assurance that there is equal sharing of the burdens and benefits of research.

**Novel plant breeding techniques**
Methods that allow for the development of new plant varieties with desired traits by modifying the DNA of seed and plant cells. They are called “new” because these techniques have been developed only in the last decade and have evolved rapidly in recent years.
Personal data/personally identifiable information (PII)
Any information relating to any identified or identifiable natural person. An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to any identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, psychological, genetic, mental, economic, cultural, or social identity of that natural person.

Research
Any original investigation undertaken in order to gain knowledge and understanding. For example, a systematic study, including research for development, testing, and evaluation, designed to develop or contribute to generalizable knowledge. “CGIAR Research” is defined as “research carried out by the Centers and the CGIAR System Partners in support of the CGIAR Strategy and Results Framework.” Likewise, “Alliance Research” is defined as “research carried out by the Alliance and the Alliance partners in support of the Alliance Strategy.”

Research manager
The main researcher overseeing or conducting the research process.

Risk
An event or circumstance that may affect the achievement of objectives. A risk has a cause and effect.

Sentience
The awareness and cognitive ability necessary to experience feelings.

Traditional knowledge
Knowledge on the conservation and use of agricultural biodiversity that people have developed over time in a given community, based on experience and as a result of local culture and environmental conditions. Traditional knowledge is a dynamic; it evolves as it is transferred through generations.

Vulnerable people
Individuals with limited capacity to protect their own interests. They may have inadequate power, intelligence, education, resources, strength, or the required attributes to protect their own interests. Examples include illiterate farmers, unemployed or impoverished people, migrants, refugees, children and young people, the elderly, ethnic minorities, and women in a traditional patriarchal society.

3Rs
The three principles that aim to improve the ethics of animal experimental design: replacement, reduction, and refinement.

Alliance-specific definitions

European General Data Protection Regulation
The General Data Protection Regulation (GDPR) is a regulation in EU law on data protection and privacy in the European Union (EU) and the European Economic Area (EEA). It also addresses the transfer
of personal data outside the EU and EEA. The GDPR's primary aim is to give control to individuals over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU. Superseding the Data Protection Directive 95/46/EC, the regulation contains provisions and requirements related to the processing of personal data of individuals who are located in the EEA, and applies to any enterprise—regardless of its location and the data subjects' citizenship or residence—that is processing the personal information of individuals inside the EEA.¹ The Alliance must comply with this regulation.

Institutional Review Board
The Institutional Review Board (IRB) is an internal committee of the Alliance composed of researchers from different disciplines and with knowledge and experience related to research ethics. The primary role of the IRB is to ensure that Alliance research involving human subjects complies with international standards of ethical treatment and protection of human subjects, including the three core principles of respect for persons, beneficence, and justice, as stated and explained in the Belmont Report.

5. CORE ETHICAL VALUES

As described in the Alliance Code of Ethics and Conduct and drawing on the values of CGIAR, the Alliance values are

**Integrity:** We are honest, tell the truth, keep promises, admit mistakes, earn trust, and always act professionally by being accountable and transparent.

**Sustainability:** We plan responsibly for the long term, and are committed to environmental, social and economic food security, safety, and global prosperity.

**Partnership:** We value the diverse voices of our internal and external stakeholders, and seek all forms of engagement, collaboration, and teamwork.

**Excellence and innovation:** We strive for excellence by maintaining high standards of scientific rigor, actively encouraging innovation and creativity, and pursuing our interest in learning and discovery.

**Diversity and inclusion:** We value and embrace diversity and inclusion through proactive dialogue and inclusive behaviors, promote equity and fairness, avoiding all forms of discrimination, and promote human rights, including in the form of safe and respectful workplaces.

6. GENERAL STANDARDS

Alliance researchers must adhere to the principles outlined in the sections below, which mirror the CGIAR Research Ethics Code, and, in line with the Alliance Code of Ethics and Conduct, to the principles of “Honesty and integrity in research methods,” of “Objectivity and avoiding bias—conscious and unconscious,” of “Critical review of outcomes, including peer review publication,” of “Openness and transparency of research findings and methods, including publication of all results (positive and adverse),” of “Respect for authorship: plagiarism, attribution, and permission,” of “Respect for intellectual property: patents, trademarks, copyrights, and technology transfer for scientific inventions,” and of “Confidentiality and anonymity.” Any additional provisions specific to the Alliance are added in subsequent sub-sections.

6.1 Scientific quality and integrity

- Researchers must strive to conduct high-quality research that has clear developmental and practical value in relation to the CGIAR and Alliance missions. They must develop studies and research programs that are built on adequate prior knowledge and are scientifically sound, undertaking scientific activities only within the boundaries of their competence, based on their education, training, or work experience. Researchers must adhere to the highest possible technical standards that apply to their field of work.

- Researchers must strive for the highest reliability in the quality of research, including the design, methodology, analysis, and use of resources. They must do their utmost to ensure factual accuracy of data and research results and must not engage in research misconduct (falsification, fabrication, plagiarism, suppression, or purposeful misinterpretation of data or research results). They shall keep good records of scientific activities, such as data collection, research design, and correspondence with collaborators or journals, and shall adhere to the CGIAR Open Access and Data Management Policy and any other Alliance-related policies and guidelines in the management of data.

- Researchers shall promote the open exchange of ideas, research methods, data, and results, and their discussion, scrutiny, and debate, subject to any considerations of confidentiality and third-party rights. They shall ensure that their methodologies and findings are open for discussion and peer review. Researchers are independent and impartial in their communication with other researchers and open and honest to the public.

- Research managers must ensure that researchers under their supervision have the necessary resources to conduct scientific activities in line with required standards and ensure that the right capabilities and competences are assigned to research activities. Researchers must ensure that they have the necessary skills and resources to carry out research themselves or through collaboration with specialists in relevant fields. They recognize the need for ongoing education in order to remain competent and they use the appropriate scientific, professional, technical, and managerial resources needed to ensure competence in their work-related activities.

6.2 Reporting and dissemination of research results

- In accordance with the CGIAR Principles on the Management of Intellectual Assets and the Alliance Intellectual Assets and Intellectual Property Rights Policy, CGIAR and the Alliance regard the results of their
research and development activities as international public goods. CGIAR and the Alliance are committed to the widespread diffusion and use of research results to achieve the maximum possible access, scale, scope of impact, and sharing of benefits to benefit the poor, and particularly farmers, in developing countries. To facilitate this, researchers must ensure the prompt publication and dissemination of research results by the most appropriate means, subject to intellectual property, privacy, confidentiality, and contractual considerations. The management of research data must be done in accordance with the CGIAR Open Access and Data Management Policy, the CGIAR Open Access and Data Management Implementation Guidelines, and the CGIAR Principles on the Management of Intellectual Assets and any other related Alliance policies and guidelines such as the Alliance Intellectual Assets and Intellectual Property Rights Policy.

6.2.1 Responsibility of research findings

- Researchers must ensure that reporting results serve, and do not compromise, the initial goals and purpose of their research. Researchers must take particular care to state all relevant qualifications on the findings and interpretation of their research. Researchers must also disclose underlying assumptions, theories, methods, measures, and research designs that might bear upon findings and interpretations of their work. In presenting their work, researchers must report their findings fully and not omit relevant data.
- Consistent with the spirit of full disclosure of methods and analyses, once findings are publicly shared, researchers shall permit their open assessment and verification by other responsible researchers with appropriate safeguards, and, when applicable, protect the anonymity of research participants.
- If researchers discover significant errors in their publication or presentation of data, they must take reasonable steps to correct such errors in a correction, a retraction, published errata, or other public fora as appropriate.

6.2.2 Authorship credit

- Researchers must take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have contributed. They must ensure that principal authorship and other publication credits are based on the proportional scientific or professional contributions of the individuals involved, regardless of their status. Decisions on publication and authorship must be agreed jointly and communicated to all members of the research team.
- Researchers must fully credit the contributions of research partners, including non-professional partners such as farmers. Credits include co-authorship, which is strongly encouraged, and being named in acknowledgments. Authorship will not be allocated to honorary or guest authors (and those that do not fulfil criteria of authorship).
- Alliance researchers must comply with the Alliance Authorship Policy and any other related Alliance policies and guidelines.
6.2.3 Respect for intellectual property and confidentiality

- Researchers must honor patents, copyrights, and all other forms of intellectual property. Researchers must follow the terms of specific applicable licenses for the intellectual property accessed and used. Researchers must not use unpublished data, methods, or results without permission from the intellectual property owner.
- Researchers must clearly acknowledge all sources used in their research and obtain permission from any individuals if a significant amount of their work has been used in a publication. In their publications, presentations, training, practice, and service, all researchers must provide acknowledgment of, and reference to, the use of the work of others, even if the work is not quoted verbatim or paraphrased.
- Researchers must provide fair, prompt, and rigorous evaluations and respect confidentiality when reviewing the work of others. In all circumstances, researchers must not use or otherwise seek to gain from information or material received in a confidential context (such as knowledge obtained from reviewing a manuscript, serving on a proposal review panel, or reviewing budgetary information), unless they have authorization to do so, or until that information is otherwise made publicly available.
- In addition, Alliance researchers must adhere to the Alliance Intellectual Assets and Intellectual Property Rights Policy and any other Alliance policies or guidelines related to data privacy protection.

6.2.4 Funder acknowledgment

- All funders and sponsors of research must be acknowledged in accordance with the CGIAR Funder Acknowledgement Guidelines as well as any applicable instructions or terms provided by such funders and/or sponsors.

6.2.5 Accountability and transparency

- Researchers must ensure that any research undertaken complies with the agreements, terms, and conditions relating to their project and facilitate systematic and transparent tracking of outputs and impacts as per established procedures for performance management.
- Research managers and supporting operational units (such as Finance, Procurement, and Partnerships units) must adhere to appropriate, accountable, and transparent use of funding for research by ensuring compliance with the procedures that are in effect for the planning, monitoring, reporting, evaluation, and impact assessment of CGIAR and Alliance projects (including projects conducted by CGIAR or the Alliance alone and with partners).

6.3 Conflict of interest

The Alliance Code of Ethics and Conduct presents different situations where conflicts of interest can potentially happen, such as when receiving gifts, through outside activities, close personal relationship, political engagement, etc. The section below mirrors the CGIAR Research Ethics Code and gives some
more conceptual details related to what a conflict of interest is, roles and responsibilities in declaring a conflict of interest, and how to manage it.

6.3.1 Conflict of interest: concept

a) A conflict of interest arises in a situation where there are reasonable grounds to believe that a researcher’s

i. direct or indirect personal interest, including that of a closely associated third party such as a family member, in a matter, or

ii. duty owing to another organization outside the CGIAR System and the Alliance present a risk that a researcher’s professional judgment will, may, or may be perceived to be unduly influenced.

b) A conflict of interest may be actual (it exists), potential (it might develop into one), or perceived (it may be considered to exist by others).

c) Conflicts of interest may arise as a result of a researcher’s association with an organization external to the CGIAR System and the Alliance, or closely associated third parties (such as family members and/or professional associates) whose interests may conceivably conflict with those of one or more of the CGIAR entities, such as the Alliance, on a given issue.

d) In many situations, conflicts of interest will relate to financial interests or the potential for personal or professional advantage, but they may also arise by virtue of the potential a given situation or relationship presents for the undue exercise of influence.

e) In situations where researchers are required to address a conflict of objectives, they must be particularly vigilant when making decisions, ensuring these decisions are made with full objectivity and transparency. In making such decisions, researchers must take into account a range of factors and potential outcomes in determining the appropriate course of action to take, mindful of trade-offs that may need to be made in the process.

6.3.2 Declaring conflicts of interest

a) The onus is on each researcher to self-identify actual, potential, or perceived conflicts of interest, since only he/she has the detailed knowledge to do so.

b) Researchers must identify and declare conflicts of interest as and when they arise, in accordance with established operating procedures.

c) Researchers should actively seek advice from others to assist them in determining whether an actual, potential, or perceived conflict of interest might exist. Advice channels may include the CGIAR Chief Ethics Counsel, fellow researchers, ethics focal points, and legal counsel or focal points of a CGIAR entity. Researchers should remain open to indications of potential conflicts of interest from other individuals.
d) In line with the Alliance Code of Ethics and Conduct, researchers are encouraged to discuss any potential personal conflict with their supervisor, the Human Resources Policy and Employee Relations Unit, or the Legal Office.

6.3.3 Managing conflicts of interest

a) Once identified, a conflict of interest must be managed appropriately, in accordance with established operating procedures.

b) In determining the course of action to follow, the materiality of the interest and the likelihood that it will impair the objective and impartial exercise of judgment required of researchers must be duly assessed.

6.4 Working with research and development partners

- In delivering scientific innovations to achieve its mission, CGIAR and Alliance researchers collaborate with development partners, national agricultural research and extension services, and the private sector to achieve impact at scale. CGIAR’s Core Ethical Values, as well as the Alliance fundamental Values, reflect the importance of these partnerships by highlighting the value of the diverse voices of stakeholders and commitment to all forms of engagement, collaboration, and teamwork. There is therefore an ethical obligation on the part of researchers to treat their partners with respect, as equals in the joint activity, and with sensitivity to the cultural norms and values of partner countries.

- CGIAR’s Core Ethical Values, as well as the Alliance fundamental Values, must be clearly articulated to research and development partners, emphasizing CGIAR and the Alliance’s commitment to valuing and embracing diversity and inclusion, treating all stakeholders with respect and dignity, promoting equity, avoiding all forms of discrimination, and promoting human rights. When researchers encounter apparent discrepancies between the expectations of partners and the CGIAR mission and the Core Ethical Values, as well as the Alliance mission and its fundamental Values, they are encouraged to engage in dialogue with partners with the view to overcome any discrepancies and to seek external expert advice when necessary.

- Researchers must ensure transparency with regard to the objectives of the partnership, expectations related to the outputs and outcomes, and communication about research progress and uptake of research during the partnership. Researchers must engage in open dialogue with partners regarding their aspirations for collaboration and strive to ensure that CGIAR and Alliance research deliver on the goals agreed with partners.

- In relation to the outputs of partnerships, CGIAR and Alliance researchers must ensure that all participants of any collaboration, including local and external scientists and non-research specialists, have access to research results (for example, in the form of data and publications) and are appropriately credited, through authorship, contribution, or formal acknowledgment, as per the provisions in section 6.2.2 (Authorship credit).
7. SPECIFIC STANDARDS

In line with the Alliance Code of Ethics and Conduct and the principles of “Research participants and stakeholders protection” and of “Protection of the environment and genetic resources,” Alliance researchers must adhere to the principles outlined in the sections below, which mirror the CGIAR Research Ethics Code.

7.1 Research involving human subjects

- The provisions in this section apply to research involving people as subjects in research, whether in the form of surveys, interviews, focus group discussions, participant observations, multi-stakeholder dialogues, or participatory action and learning. For a full definition and examples, please refer to Annex 1.

- The procedures for approval of research involving human subjects shall be established as part of System-wide policies and services within the CGIAR Research Ethics Code. Alliance researchers must comply with Alliance procedures currently in place for what regards approval of research involving human subjects. (See section 8 on Implementation.)

- Researchers must ensure that all their research complies with international standards of ethical treatment and protection of human subjects, including the three core principles of respect for persons, beneficence, and justice, as stated and explained in the Belmont Report. All research plans must be implemented in compliance with national laws regarding research involving human subjects, including laws and regulations on personal data or personally identifiable information (PII) (see section 7.1.3 below on Confidentiality and personal data protection), and in accordance with relevant policies on personal data protection.

- In all its research activities, CGIAR and the Alliance must treat human participants with dignity and respect and have procedures in place to (i) obtain prior informed consent to ascertain that research is voluntary; (ii) protect the privacy of the individual or household, as applicable; and (iii) protect participants from any risk to which they may be exposed while participating in CGIAR and Alliance research.

- Researchers must make a non-arbitrary, systematic, and fair assessment of the possible harms and benefits of their research. This must include physical, psychological, legal, social, and economic harm and benefits accruing to individuals, families, and communities.

7.1.1 Selection of research participants

- The selection of participants shall be made on the basis of the objectives of the study, rather than on non-research interests. When the experimental design of research involving human subjects includes various groups, adequate selection methods and other specific technical standards relevant to the study must be used to obtain an impartial allocation of the participants in each group. Special attention must be paid to

---

2 Such policies are under development at the CGIAR level as well as at the Alliance level by the Technology Integration Department.
ensuring diverse representation from subject groups, including participation from women, men, and minority groups when possible and consistent with the objectives of the study.

- Research may require the involvement of marginalized or vulnerable people. Researchers shall not exclude vulnerable groups from studies based on the complications involved, but rather take measures to protect vulnerable individuals and groups adequately. For this, researchers must ensure that research plans minimize the possibility of coercion, undue influence, or manipulation, and maximize the likelihood of valid informed consent.

- Researchers must not offer excessive or inappropriate financial or other inducements to obtain the participation of research participants, particularly when this might coerce participation. Researchers may provide compensation to the extent that resources are available and appropriate.

7.1.2 Prior informed consent

a) Voluntary participation is a precondition for involving human subjects in research. Researchers must therefore obtain informed consent from participants by obtaining permission before data collection and/or an intervention (please refer to Annex 1).

b) Researchers must uphold the right of research participants to consent to, withdraw from, or refuse to take part in research. Participants must be made aware that their participation is voluntary and that they can withdraw at any time. No coercion or undue inducements shall be given by researchers or by those in authority acting for researchers. In undertaking research with vulnerable people, researchers must take care to ensure that the voluntary nature of the research is understood, and that consent is not coerced.

c) The standard informed consent process includes the provision of information about the research project and receipt, from each subject, of consent (written or verbal) to participate in a research project. Before undertaking research activities, researchers must ensure that research participants are fully informed about the nature, purpose, methods, and intended possible uses of the research; what their participation in the research entails; and any benefits, harm, or risks to them and others induced by the research. Please refer to Annex 1 for more details on the process of obtaining prior informed consent.

d) Researchers must also obtain informed consent from any person involved prior to recording audio or video or taking photographs and obtain permission to use the recorded materials (please refer to Annex 1 for a template), unless these activities involve naturalistic observations in public places and it

---

3 For example, illiterate farmers, children or youth, migrant populations, or displaced persons. For a full definition, please refer to Section 4.

4 In some behavioral experiments, it may be necessary for the true nature of the experiment to not be disclosed to participants. In such cases, after data collection is completed, the researchers are required to provide the true objectives and details of the study and must request permission from the human subjects to use the data for research.
is not reasonably anticipated that the recording will be used in a manner that could cause personal identification or harm.

7.1.3 Confidentiality and personal data protection

a) Research data must be handled in a way that protects the well-being of people by not harming their safety, dignity, or privacy. As far as research data involves PII, researchers must comply with the relevant policies on personal data protection.\(^5\)

b) CGIAR and the Alliance must protect the privacy of individuals and maintain the confidentiality of PII, which, alone or collected together, can lead to the identification of a particular person or household, such as

- a name and surname
- a home address
- an email address
- a phone or mobile number and the advertising identifier of the phone
- an identification card number, social security number, or similar ID
- location data including the location data function on a mobile phone
- geospatial coordinates of personal or household assets, including homesteads and fields owned and/or managed or used by subjects
- an Internet Protocol (IP) address or a cookie ID
- any other identifier that allows for the identification of a person or a small group of persons, including people’s images or voices
- nationality, religious beliefs, or any other personal identifier, when collected together with any of the above

\(^5\) Such policies are under development at the CGIAR level as well as at the Alliance level by the Technology Integration Department.

c) PII must not be released or made public in any manner as it is regarded as confidential by the laws and regulations of most countries. All data must be adequately protected during storage to prevent losses and to ensure that the identity of participants cannot be traced to the source by researchers analyzing the data. All PII (including records of interviews and informed consent forms) must be kept in a secure archive.

d) When research requires maintaining PII in databases or record systems, researchers must delete any variables that identify a particular person or household before the information is made publicly available. If PII is entered into databases or records systems available to persons without the prior consent of the relevant parties, researchers must protect anonymity by not including personal identifiers or by employing other techniques that mask or control the disclosure of individual
identities.\textsuperscript{6} PII data collected by CGIAR and the Alliance must not be shared with third parties without explicit permission from participants.

e) In addition, Alliance researchers must comply with the European General Data Protection Regulation (GDPR) and any related Alliance Personal Data and Privacy Protection Policy\textsuperscript{7} regarding the collection, handling, sharing, and storage of PII.

f) Researchers must comply with the standards for managing, storing, and sharing research data outlined in the CGIAR Open Access and Data Management Policy and the CGIAR Open Access and Data Management Implementation Guidelines and any other Alliance-related policies or guidelines. All non-confidential research data collected by researchers shall be made open according to the CGIAR Open Access and Data Management Policy and any other Alliance-related policies or guidelines.

7.1.4 Protection from risks

a) Researchers working with local communities or other stakeholders must be vigilant of the potential risks posed by research undertaken and any potential negative responses or unintended effects. CGIAR and Alliance researchers shall collaborate with local organizations with extensive experience and sound records in identifying and mitigating possible risks in a way that is culturally appropriate in a given context. Efforts are made to consult and collaborate with local women’s and minority groups to assist in identifying potential gender and diversity considerations in managing risks.

b) Researchers must take all possible steps to ensure the safety and security of themselves, partners, research participants, and other persons affected by their research. When conducting research, researchers must not encourage activities or behave in ways that are unhealthy or life-threatening to research participants or others. Similarly, they must avoid activities that may affect the reputation of those involved in the research. Researchers must suspend research immediately if they perceive that its continuation could be damaging to anyone involved.

c) If any group affected by research activities challenges the research team’s right to be in the community, attempts to prevent the research from being conducted, or threatens violence, researchers shall withdraw from the location and seek the assistance of partner institutions with the authority to resolve the dispute and discuss remedial options with the community. Communities or individuals at risk must be aware of whom to contact, and have their details, to discuss any issues that arise regarding their research.

7.2 Research involving animals

\textsuperscript{6} For tools and procedures for managing confidential research data, see, for example, the International Livestock Research Institute (ILRI) Policy Procedure on Disclosure of Confidential Research Data.

\textsuperscript{7} Such policies are under development by the Alliance Technology Integration Department.
7.2.1 Respect for animals must form the foundation for all decisions regarding animal care and use for scientific purposes for CGIAR and the Alliance and their researchers. CGIAR and the Alliance must aim to engender this same culture in collaboration with partners.

7.2.2 Animal ethics must serve as a moral and legal framework that is applied to evaluate whether proposed actions involving the use of animals should be performed. The consideration of animal ethics is required for any scientific procedure involving animals, observational studies where an animal’s behavior or habitat may be affected, or any other interactions with animals. It is unethical for researchers to conduct unnecessary or poorly designed animal experiments, even if the impact on animals is low.

7.2.3 Any new or ongoing research or teaching activity using animals must receive animal ethics approval. This applies to all vertebrate and some invertebrate species, including cephalopods and decapod crustaceans, and any bird, reptile, or mammal past the mid-point of gestation/incubation. Routine veterinary or agricultural practices do not need ethics approval. When evaluating environmental impacts (see section 7.4), this list of species should be broadened further to include all invertebrate species that are of importance, such as pollinators or any locally endangered species.

7.2.4 The 3Rs: Replace, reduce, and refine the use of animals in research

a) The fundamental principle guiding research and training involving animals is that animals can, and should, be used in research or teaching that may benefit humans, animals, or the environment, provided there is no acceptable non-animal alternative. This must apply to animals in laboratory, farm, and field settings where evaluation of the necessity of the activity and the appropriateness of the design is carried out prior to and during the use of animals in experiments or teaching. This may involve some evaluations being conducted after previous approvals have been granted.

b) When animals are used for scientific purposes, the internationally established principles of replacement, reduction, and refinement (the three Rs) should be taken into account:

- **Replacement** requires that, wherever possible, techniques that totally or partially replace the use of animals for scientific purposes must be sought.
- **Reduction** refers to the use of methods that enable researchers to obtain comparable levels of information from fewer animals or to obtain more information from the same number of animals.
- **Refinement** refers to the use of methods that prevent, alleviate, or minimize pain, suffering, distress, or lasting harm and/or enhance welfare for the animals used. Refinement includes the appropriate selection of relevant species with a lesser degree of structural and functional complexity in their nervous systems and a lesser apparent capacity for experiences that derive from this complexity.

c) When considering the 3Rs, and the ethical use of animals in research and training activities, CGIAR and the Alliance recognize that this includes animal acquisition, transport, husbandry, enrichment, preventive care (including pain relief), and end-of-study plans. End-of-study plans can range from re-homing to reuse or euthanasia and the consideration of the humane endpoint – the clear, predictable,
and irreversible criteria that allow for early termination of a procedure before an animal experiences harm that is not authorized or scientifically justified. An example of this is euthanasia as soon as an animal has been determined to be infected in a disease infection study, rather than waiting for the disease to cause suffering or mortality in the animal.

d) Acclimation of animals to research settings is a critical part of refinement and involves a consideration of the dietary, behavioral, social, and environmental needs of a species.

e) Coordination between projects is encouraged as part of reduction processes. For example, saving tissue from animals at the end of a trial for another experiment will save further animals from being used.

f) An assessment of the welfare impacts of, and cumulative effects on, an animal’s lifetime experience must be conducted when designing experiments. Frequent mild procedures will create a cumulative burden on animals. Experimental designs that increase the welfare impact on fewer individual animals are not appropriate when aiming to reduce animal numbers (for example, doubling the number of surgical procedures one animal undergoes so that another does not need to be used fails to consider the impact of the cumulative burden).

g) Good animal welfare and effective application of the 3Rs are contingent on technical ability and expertise. Therefore, only qualified personnel are authorized to handle and supervise the handling of animals in experiments or teaching. These ethical concepts apply to domesticated and wild animals.

7.2.5 Animal welfare and care

a) As well as the ethical considerations of research, the welfare of animals must be considered. Although related, these are two different concepts. Animal welfare is the physical and mental state of an animal in relation to the conditions in which it lives and dies. Animal welfare is based on the principle that an animal should be treated in a way that meets its biological, behavioral, and affective state needs, all of which contribute to a good quality of life for the animal. With regard to research quality, compromised welfare can also result in greater variability of data, inappropriate or “wrong” biological/clinical responses, data that cannot be reproduced/are incomplete, increased financial costs, and data that cannot be applied to other situations.

b) It is recommended that the Five Domains framework be used when assessing an animal’s needs and welfare. The Five Domains framework comprehensively describes the essential components of an animal’s quality of life: nutrition, environment, health, behavior, and mental state. It builds on the important aspects of the well-known Five Freedoms, while addressing some of their limitations. For

example, while the Five Freedoms describe an absence of negative experiences, they do not describe the positive experiences that are needed for an animal to have a life worth living.

c) For the welfare of animals, including fish, under the care of any CGIAR and Alliance research team, it is required that

- animals are sourced, bred, transported, used, and disposed of with procedures that are in line with international and national regulations, policies, and best practice
- temperature, humidity, and ventilation be controlled at the appropriate levels and monitored regularly
- lighting be appropriate to support normal physiological function and a system for monitoring noise and vibration be put in place
- housing and space allow for the normal physiological and behavioral needs of animals
- animals receive quality feed that will support their normal growth and development (deviation from this may be appropriate if it is a nutritional or related study)
- animals receive daily care from qualified personnel
- specifically, for fish, water quality parameters and life support systems be appropriate to the animal species

d) For research involving or affecting wild animals, awareness of the unique welfare and husbandry needs of individual wildlife species is required and must be adhered to. CGIAR and Alliance researchers must comply with the rules and requirements of agencies that have jurisdiction over wildlife.

Recognition of sentience:

e) CGIAR and Alliance researchers must recognize that animals have rights and an intrinsic sentient value that must be respected, especially the capacity to sense and express pain, suffering, distress, lasting harm, and even conscious natural behavior. Therefore, animals used in research and training must be treated humanely, with proper respect and care.

7.2.6 Implementing standards, guidelines, and best practice

a) CGIAR and the Alliance recognize that, in some countries, national regulations, standards, and guidelines on animal welfare may be lacking. There may be disparities between two countries (for example, between cross-border study sites or between donor and implementation countries). The World Organization for Animal Health (OIE) Guiding Principles for Animal Welfare, including Chapter 7.8 on Use of Animals in Research and Education, can be a useful guide to establish and apply minimum standards.

- All CGIAR and Alliance animal research activities and animal care must strive for best practice. Best practice animal care includes guaranteeing appropriate species-specific enclosures, feed, water, temperature, ventilation, lighting, and enrichment for animals involved in research (see section 7.2.5 on Animal welfare and care). It also includes appropriate animal handling, veterinary care, and pain relief. CGIAR and the Alliance recognize that, in cases of research using privately owned animals (for
example, farm livestock), the management practices of owners may not meet the best practice standards adhered to by CGIAR and Alliance researchers. In these circumstances, the research activity itself must still adhere to best practice standards and guidelines. Monitoring, reporting, and developing competencies are all essential components of animal ethics in research.

Monitoring:

b) Animals must be monitored and assessed at all stages of a project for signs of pain and distress, including deviations from normal behavior. Monitoring is essential to identify unexpected impacts and intervene quickly, to detect planned endpoints as early as possible, and to ensure that experimental plans remain on track. Appropriate monitoring protocols and mechanisms for feedback to the approving body must be developed and adhered to.

c) Many species used in CGIAR research, including fish, are prey species. This means that they have subtle pain signals and strong fear responses. Both of these must be considered when adapting animals to research settings, managing animals during the research process, and handling animals in field studies.

Reporting and continuous learning:

d) Animal welfare and ethics are continually changing as more research becomes available on how to best care for animals in research and non-research settings. CGIAR and the Alliance commit to the value of learning to improve both animal care and research practice. Annual and end-of-project reporting must be conducted to facilitate this. To be most useful, these should include information such as a summary of the project progress to date, the total and current number of animals used, and whether or not the project is meeting its objectives. End-of-project summaries and evaluations for completed projects should include animal care considerations.

Competency and standard operating procedures:

e) All people involved in the care and use of animals in a research project must be either competent in the procedure they perform or under the direct supervision of a person who is competent to perform the procedure. In order to ensure competency, standard operating procedures for these common activities are needed. This applies to monitoring and husbandry practices at all stages and sites of animal care and use. This also applies to collaborators from partner organizations.

7.3 Research involving modern biotechnology

7.3.1 Use of biotechnology

a) CGIAR engages in plant, animal, and fish breeding using next-generation breeding techniques to develop varieties that increase resilience to climate change and tolerance of or resistance to diseases and pests, and to provide better and more diverse nutrition and sustainable livelihoods. CGIAR and the Alliance recognize that the use of modern agricultural technologies is essential to provide increased
genetic gains and innovative breeding products to users. The responsible application of new breeding methods can contribute to increased effectiveness and faster plant and animal breeding that benefit societies. CGIAR and the Alliance study, develop, deploy, and monitor these technologies, as well as the products developed through them, in partnership with national research programs that guide variety improvements.

b) Modern biotechnology methods are in constant development and currently include genetic engineering, genome editing, and novel plant breeding techniques that are used to develop enhanced traits that may not be part of the species gene pool. They are also used to achieve greater efficiency relative to more traditional breeding techniques. In contrast to genetic engineering, genome editing and novel breeding techniques specifically edit DNA at precise, targeted genomic locations, similar to the process that occurs in conventional breeding, resulting in desirable genotypic and phenotypic changes without the introduction of foreign genetic material.

c) CGIAR and the Alliance are committed to developing products that are safe for humans, animals, and the environment. In doing so, researchers must undertake appropriate safety assessments of all new products introduced into CGIAR and Alliance breeding programs. CGIAR and the Alliance facilitate the development of multiple products using modern biotechnology methods with nutritionally enhanced and agriculturally important traits that have provided economic and environmental value to many producers around the world. These products have contributed to food security, climate resilience, and diminishing adverse environmental impacts, while also complementing other agricultural innovations.

d) CGIAR has a mandate to deliver plant and livestock improvements with the most benefits to partner countries and to facilitate capacity development to allow for the proper handling of genetic material. The Core Ethical Values of CGIAR, and the fundamental Values of the Alliance, apply to the process of transferring new plant varieties to partners and any necessary capacity development.

7.3.2 Sovereignty and safety

a) CGIAR and the Alliance recognize and respect the sovereignty of individual nations to determine if, when, and how innovative products will be used and provide the requisite technical support, as requested.

b) CGIAR and the Alliance work with partners to develop an integrated set of solutions for food and agriculture and support establishing proper decision-making processes. CGIAR and Alliance researchers must adhere to international and local rules and standards throughout the development life cycle. When developing products using modern biotechnology, researchers must provide evidence-based information to inform decisions by stakeholders within the boundaries of their explicit roles and scientific competencies.

The role of CGIAR and the Alliance in product development:

---

12 Definitions of these methods can be found in Section 4: Definitions and Acronyms.
a) Delivery of improved varieties developed using novel biotechnology must be done through a process that includes an assessment of the socioeconomic impacts of the introduction of novel traits, product development, safety assessments of introduced material and novel traits, the process of obtaining regulatory clearance, and the deployment of new products to farmers.

b) CGIAR and the Alliance’s focus is on the research and development stages. However, to fulfill the mandate of providing access to improved agricultural crop varieties to farmers, CGIAR and the Alliance are committed to providing helpful transparent information and data on newly developed products. CGIAR and the Alliance also contribute to developing and supporting the appropriate quality assurance and stewardship practices required by partners who are responsible for obtaining regulatory clearance and product deployment.

c) CGIAR and the Alliance must support the stewardship practices that apply to regulated, confined field trials during the development of new plant varieties. During product development, CGIAR and Alliance researchers must adopt principles and management practices for the responsible stewardship of agricultural biotechnologies, such as those established by Excellence Through Stewardship, a global nonprofit organization that provides best practices for agricultural biotechnology. CGIAR and Alliance partners that take up CGIAR and Alliance innovations must be provided with relevant documents, capacity development, and other types of scientific support to enable national partners to succeed in navigating the regulatory phase.

Policies and protocols:

d) CGIAR and the Alliance must advocate responsible development and use of conventional and innovative technologies. CGIAR and the Alliance recognize that safety assessments and protocols are required to protect human and animal health and the environment.

e) During the development and safety assessment of agricultural products using new technologies, CGIAR and the Alliance must abide by the regulations of host countries, international food safety standards, the guidelines developed by the Codex Alimentarius Commission, and the provisions of the Cartagena Biosafety Protocol. When working with national partners, CGIAR and Alliance researchers must assess the safety of products on a case-by-case basis and in compliance with national regulations and international best practices.

Public dialogue:

f) CGIAR and the Alliance recognize that, as with all innovations, civil society has many questions about products developed using novel biotechnology methods. Consistent with its mission, CGIAR and the Alliance will listen with respect to viewpoints on plant, animal, and fish improvements and contribute to informed debates with the appropriate expertise and evidence-based information.

g) CGIAR and the Alliance encourage discussion of the ethical and social implications of scientific developments in biotechnology.
h) CGIAR and Alliance researchers deliver innovation, capacity development, policy dialogue, and outreach activities related to biosafety issues. Furthermore, CGIAR and the Alliance develop scientific inputs on these issues for national and regional stakeholders, while actively participating in national and global dialogues on biosafety issues with governments, civil society organizations, the media, and policy dialogue forums.

7.3.3 Access to novel biotechnology products developed by CGIAR and the Alliance

a) CGIAR and the Alliance support equitable access to affordable, sustainable, high-quality, and appropriate agricultural modern biotechnologies for all.

Intellectual property rights:

b) In line with their role to develop, use, and share international public goods, CGIAR and the Alliance work with partners to secure access to operate with novel technologies in target countries, as well as to ensure equity in the benefits derived from them. For guidance on the sound management of intellectual assets and intellectual property rights, researchers must refer to the CGIAR Principles on the Management of Intellectual Property Assets and the CGIAR Implementation Guidelines for the CGIAR Principles on the Management of Intellectual Assets, as well as the Alliance Intellectual Assets and Intellectual Property Rights Policy.

Socioeconomic impacts from the use of modern technologies:

c) CGIAR and the Alliance partner with national institutions to develop varieties with new traits based on the identified needs of countries and regions. CGIAR and Alliance projects involving the use of novel biotechnology include socioeconomic analyses to elucidate potential impacts across society and identify the main adopters of new varieties or technologies (these may include, for example, small-scale farmers or environmental benefits).

7.4 Environmental impacts of research

a) Researchers must strive to promote social good and environmental sustainability and prevent or mitigate social and environmental harm through research, capacity development, and advocacy. CGIAR and Alliance research aims to increase the positive environmental impact it generates and continuously diminish its environmental footprint. Researchers must ensure the integration of nationally and internationally recognized sustainability practices in their research and internal operations.

b) Researchers must ensure that their research respects ecosystems, biodiversity, and natural resources when designing and conducting research. They must take the necessary steps to ensure that any
adverse effects of research are decreased to the greatest extent possible. Researchers must set up research protocols that avoid or reduce potential harm to their study sites and studied ecosystems.\textsuperscript{13}

c) Identification, monitoring, and reporting on environmental risks must be undertaken as part of risk assessments in proposed research at the design and approval stages.\textsuperscript{14} The process for this must be built into the CGIAR Performance and Results Management System.

d) All research activities must comply with the applicable environmental laws and regulations of host countries. Research must be guided by the relevant international frameworks, codes of conduct, and international conventions as they relate to the management and protection of the natural environment, including but not limited to

- the Stockholm Convention on Persistent Organic Pollutants
- the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- the International Code of Conduct on the Distribution and Use of Pesticides
- the Guidelines on Good Practice for Ground Application of Pesticides
- the Convention on Biological Diversity and its Cartagena Protocol on Biosafety and the Nagoya Protocol
- the Ramsar Convention on Wetlands

e) When sentient animals are involved, researchers must consider both environmental and animal welfare impacts. Sentient animals include all mammals, birds, reptiles, and fish, as well as cephalopods and decapod crustaceans. When research may alter the habitat and/or behavior of animals, animal ethics approval may also be required (see section 7.2). Wild species have very reactive fear responses, so the risk of behavioral disturbances from the presence of researchers is a genuine one. Activities that may indirectly impact wildlife include the introduction of chemicals into the environment, changing habitats, and lighting and noise disturbances. Even in situations where animals are not considered to be at risk of impact, these impacts must be considered as they may generate unexpected consequences and would thus be important to include as part of the risk assessment process.

7.5 Participatory research

\textsuperscript{13} Examples of activities with possible impacts on the environment and biodiversity include land clearing for cropping trials, introducing irrigation, fertilizer trials, or changing environmental flows, all of which can affect biodiversity, nutrient depletion, and water quality, among others.

\textsuperscript{14} The Center for International Forestry Research (CIFOR) Environmental and Social Management System (ESMS) and the CIFOR Project Appraisals and Risk Assessment Checklist provide examples of provisions that can be used for carrying out risk assessments. The International Water Management Institute (IWMI) Risk Mitigation Declaration for Possible Impacts on the Environment and Biodiversity is another resource that includes an Environmental Mitigation and Monitoring Plan (EMMP), based on United States Agency for International Development (USAID) procedures.
7.5.1 When participatory approaches are adopted, researchers must strive to involve farmers, communities, and other stakeholders in the design, management, implementation, analysis, and application of research to ensure that local needs and priorities are met. In such circumstances, researchers must support communities through capacity building, farmer information exchange, or other appropriate methods with the aim of ensuring quality research results for wider adoption.

7.5.2 Refraining from creating unrealistic expectations

a) In their engagement with communities and individuals, researchers must take care not to create unrealistic expectations among the people who participate in the research, either in terms of immediate material or non-material benefits or longer-term positive impacts. This is particularly the case when the interaction is framed as “action research,” which involves a joint process of learning between CGIAR and Alliance researchers and a group of people that specifically aims to achieve a social transformation for that group.

7.5.3 Respect for cultural norms and traditions

a) Researchers must respect the values, culture, and traditions of the communities they engage with. They must strive to have a sound understanding of the local context prior to interaction with communities and comply with any customs, protocols, and local laws. Researchers must be sensitive to the values and cultures of the groups being studied and how this may affect research participants’ understanding of the purpose and nature of research. Researchers have a responsibility not to impose external values, standards, or cultural norms on communities.

b) Researchers do engage in research that challenges certain norms, including gender inequities or patterns of decision-making and authority that reinforce poverty or social exclusion, but they must do so in ways that are grounded in an understanding of the local context and that respond to the goals and priorities that local groups deem legitimate.

7.5.4 Research involving traditional knowledge and technologies

a) Local communities and indigenous people who exchange traditional knowledge and technologies with CGIAR and the Alliance must be made fully aware of the research plan that uses this knowledge and technologies, and any dissemination plans that include this knowledge and/or technologies.

b) Acknowledgment, confidentiality, and anonymity must be discussed and adopted as situations require to ensure that the CGIAR and Alliance commitment to produce international public goods is not impeded while respecting the ownership of information or technology. This principle includes the recognition that indigenous people have prior proprietary rights and cultural responsibilities for the environment that they have traditionally inhabited or accessed and that they may wish to keep some information confidential.

7.6 Access to genetic resources
• As per Article 3 of the CGIAR Principles on the Management of Intellectual Assets, CGIAR and the Alliance must recognize the indispensable role of farmers, indigenous communities, agricultural professionals, and scientists in conserving and improving genetic resources.

• Researchers must observe the principles of the Convention on Biological Diversity (CBD) and its Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Nagoya Protocol). Researchers must ensure that they follow national policies, laws, and regulations on access and benefit-sharing when accessing and using genetic resources and their associated traditional knowledge.

• When accessing genetic resources and associated traditional knowledge, researchers must comply with processes and standards for obtaining prior informed consent as established in applicable national and subnational policies and laws, including those implementing the CBD, its Nagoya Protocol, and the International Treaty on Plant Genetic Resources for Food and Agriculture. The Guidelines on the Nagoya Protocol for CGIAR Research Centers provide guidance on complying with national access and benefit sharing (ABS) laws when accessing biological and genetic resources, including obtaining prior informed consent and arriving at mutually agreed terms.

• In countries where there are no implementing measures in place, researchers must proactively seek out ways to fulfil the spirit of these international agreements and, to the extent possible, work with the partner organizations in those countries, the national focal points on ABS, and the competent national authorities.

• For further guidance on fulfilling obligations when seeking to access and use traditional knowledge associated with genetic resources, researchers should refer to the Guidelines on the Nagoya Protocol for CGIAR Research Centers.

8. IMPLEMENTATION PROCEDURES

8.1 Arrangement for implementation

• The CGIAR Research Ethics Code will be publicly available on the CGIAR website.

• Implementation arrangements for the CGIAR Research Ethics Code will be developed in a companion document. Together, the CGIAR Code and the companion document on implementation will constitute CGIAR’s Policy on Research Ethics.

• Researchers who require guidance on the interpretation or implementation of the CGIAR Research Ethics Code may request the advice of the CGIAR Chief Ethics Counsel, ethics focal points, legal counsel, or focal points of a CGIAR entity.

Alliance additional provisions:
• The Alliance Research Ethics Policy will be made available to all Alliance staff.
• A specific mechanism is in place at the Alliance to ensure the protection of human subjects in research. All research involving human subjects must be reviewed and approved before its implementation by the Alliance Institutional Review Board (IRB).

• Companion documents related to the IRB review procedures will be developed and made available to Alliance researchers.

8.2 Reporting possible ethical misconduct

• Individuals who suspect, or may be aware of, possible violations of the CGlAR Research Ethics Code or of the Alliance Research Ethics Policy have a responsibility to immediately bring them to the attention of CGlAR or the Alliance in accordance with the applicable policies and procedures relating to whistleblowing.

• CGlAR and the Alliance must not tolerate retaliation against anyone who in good faith raises a concern or reports misconduct. However, knowingly reporting false information is contrary to this Code, and individuals who do so may be sanctioned accordingly.

• Alliance researchers shall consult the Alliance Code of Ethics and Conduct related to their obligations in reporting any potential ethics violations or concerns and shall rely on the Alliance Whistleblowing Policy, which aims to provide an avenue for employees to raise concerns and reassurance that they will be protected from reprisals or victimization for whistleblowing.

8.3 Addressing and managing ethical misconduct

• Ethical misconduct must be managed appropriately, in accordance with established operating procedures, to ensure due follow-up action as relevant and necessary.

• The assessment of potential ethical misconduct must reflect due process and will be strictly conducted on a confidential basis. Any remedial actions must be determined on a case-by-case basis, in accordance with the respective applicable procedures.

9. RELATED POLICIES/REFERENCES FOR MORE INFORMATION

CGlAR Research Ethics Code
CGlAR Principles on the Management of Intellectual Assets
CGlAR Implementation Guidelines for the CGlAR Principles on the Management of Intellectual Assets
CGlAR Open Access and Data Management Policy
Alliance Code of Ethics and Conduct
Alliance Whistleblowing Policy**
Alliance Intellectual Assets and Intellectual Property Rights Policy
Alliance Privacy Protection Policy**
Alliance Authorship Policy**
**Policies under development.**

10. POLICY AUTHORITY

This Policy is under the responsibility of Research and shall be approved by the Board of Trustees. It will be reviewed following any review of the CGIAR Research Ethics Code from which it is drawn. This Policy is effective as of the date of official issuance by 16 November 2020 (“Effective Date”). This Policy supersedes previous policies regarding this subject matter, and previous policies are considered rescinded.

11. VERSION CONTROL

<table>
<thead>
<tr>
<th>VERSION</th>
<th>DATE OF APPROVAL OF THE NEWEST VERSION</th>
<th>DESCRIPTION OF CHANGE</th>
<th>PREPARED BY</th>
</tr>
</thead>
</table>
| 00      | 2 November 2020                        | First Version Research Ethics Policy | Nicole R. Demers
|         |                                        |                        | Anton Eitzinger         |
|         |                                        |                        | Andy Jarvis            |
|         |                                        |                        | Isabel Lopez           |
|         |                                        |                        | Pricilla Marimo        |
|         |                                        |                        | Maya Rajasekharan      |

Reviewed by:  
Approved by:  

Executive Committee (ExCo)  
Whole Executive Committee on 2 November 2020

Julia Marton-Lefèvre  
Alliance Board Chair
ANNEX 1. RESEARCH INVOLVING HUMAN SUBJECTS

Research involving human subjects is defined as research undertaken about or on a living individual or a group of living individuals. It includes

- gathering data about humans
- using methods such as interviews, focus groups, questionnaires, ethnographies, and participant observations
- intervening with human subjects through experiments and manipulation of people or peoples’ environments
- observing or recording private behavior, including behavior that individuals have a reasonable expectation would not ordinarily be observed or recorded
- obtaining personally identifiable information (PII) on individuals, such as school records, names and/or domiciles, income, or identifiable information collected by another researcher or organization
- conducting studies on nutrition or similar topics through interacting or collecting any type of samples or data from human subjects
- influencing change or modification of current habits for the purpose of research

Prior informed consent

The language and documentation of prior informed consent, particularly the explanation of the research activity, its purpose, its duration, any experimental procedures, the risks, the benefits, and any alternatives, must be presented in a manner that is understandable to the population asked to participate. Participants must be provided with the opportunity to ask questions about the research. They need to be assured that their anonymity and confidentiality will be safeguarded, unless they explicitly agree to be identified.

The process of seeking consent must be context-specific, taking into consideration individual or community needs. Among other considerations, researchers shall consider power structures within communities and households to determine whether informed consent is required from community leaders and/or household heads.

Evidence of a completed prior informed consent process must be obtained in written form or through verbal consent in specific circumstances when written consent cannot be provided. In the case of visually impaired people or persons with limited ability to read and write, verbal consent must be obtained and documented. In such cases, the following must be observed:

i. Researchers must keep a record with sound evidence of the reason for the need to waive written consent. This could include evidence that the participants or their community express a preference for verbal consent versus written consent (such as a letter from a village leader or a community representative).

ii. The waiver will not affect the rights and welfare of the research participants.

---

15 Source: The International Maize and Wheat Improvement Center (CIMMYT) Ethics in Research Policy.
iii. Researchers must ensure that more than one researcher is present who can attest to, and sign to verify, consent. In the absence of this, a witness from the community can attest to, and sign to verify, consent.

iv. Research activities must not present more than minimal risks and involve procedures for which consent would not normally be obtained outside of the research context.

Research managers must ensure that individuals in charge of obtaining consent undergo specialized training on procedures for taking prospective participants through an informed consent process.

When a proposed participant is a minor aged 13 to 17 years who is possessed of sufficient understanding to grant informed consent but is precluded from granting such consent solely on the grounds of age, researchers must obtain assent from the minor in addition to permission from a parent or guardian.

In the case of children aged 12 years or younger, consent from a parent or guardian must be obtained. Although in many instances the consent of the mother is sought, there are settings or situations where the consent of the household head is required prior to securing that of the child’s mother, if she is not the household head.

No informed consent can include any exculpatory language through which the subject or the representative is made to waive or appear to waive any of the subject’s legal rights, or releases or appears to release the researchers, the sponsor, the institution, or its agents from liability for negligence.

Participant Information Sheet requirements

Human subjects involved in any CGIAR and Alliance research activity must have a clear understanding of the research purpose, their role, associated risks, and other implications before giving their prior informed consent to participate. Such understanding is achieved by conveying in the local language (or when applicable, dialect) the following information with a Participant Information Sheet (PIS):

- the aims of the study and the methods to be used
- the institutional affiliations
- the contact information of the researcher(s)
- the reason for or method of selection of a participant
- the geographical scope of the study
- the type of information that will be discussed and collected
- how the results will be reported and shared
- the treatment to be given to personal data
- the anticipated benefits for participants, their community, and society
- the anticipated risks and possible inconvenience for participants
- the time it will take to participate in the study
- foreseen compensation, if any
- the right to abstain from participating in, and to withdraw from the study at any time, without reprisals
- any additional element of informed consent as may be required by the nature of the project
Informed Consent Form

While consent forms may differ according to the project, they are required to include at least the following or similar statements:

- I have read and understood the Participant Information Sheet (PIS).
- I have been given the opportunity to ask questions and have had them answered to my satisfaction.
- I agree to take part in this project.
- I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.
- A statement that asks the participant to consent to procedures for handling any personal data collected (including, for example, statements on confidentiality and anonymization).
- A statement that asks the participant to consent to proposals for data storage, archiving, sharing, and re-use for future research.
- A statement that asks the participant to consent to any planned audio or visual recording, including photos (if relevant).

Image/Video/Audio Release Form

For researchers to use image, video, or audio recordings obtained as part of research activities, they must obtain written consent from the persons being recorded. A sample statement is provided below.

By signing this form, I confirm consent to photographs/videos/audio taken that show me

on (date): ____________________ at (location) ___________________________________

I grant (CGIAR entity/the Alliance) ___________________ and project partners the right to use images on websites or printed material, for non-commercial purposes only.

_______________________________________________________________________
Name                        Age (if above 18 years)

_______________________________________________________________________
Contact information (email, phone, or town/address)

---

16 Source: The International Rice Research Institute (IRRI) Informed Consent Guidelines.
17 Source: The International Water Management Institute (IWMI) IRB Guidelines for Audio, Video or Digital Recordings.
Signature                                                                    Date

IF SUBJECT IS UNDER 18 YEARS OF AGE:

I confirm that I am the legal guardian of the child named above and therefore may grant permission for this subject release on behalf of the child:

________________________________________________________________________
Name of Legal Guardian/Relationship to Child        Date/Signature of Guardian

WITNESS:

________________________________________________________________________
Name of Witness/Organization Affiliation              Date/Witness Signature