

UNIT 5: NEGOTIATING ACCESS AND RESEARCH ETHICS

Learning Outcomes

By the end of this unit, you should be able to:

- Highlight the Issues associated with gaining access.
- Explain the strategies to gain physical and cognitive access to appropriate data.
- Explain the meaning of research ethics and why you should act ethically.
- Highlight the ethical issues at different stages of the research process.

5.1 Introduction

Negotiating access and research ethics are critical components of any research project. Access refers to the ability to enter a particular social setting or community to conduct research. Access can take many forms, including physical access to a location or population and cognitive access to a community's beliefs, values, and language. Gaining access can be challenging, and it often requires the researcher to navigate a variety of social, political, and ethical considerations.

Research ethics refers to the principles and standards that guide ethical research practice. These principles include the protection of research participants, the integrity and accuracy of research data, and the fair and responsible use of research findings. Conducting ethical research requires researchers to adhere to a set of ethical guidelines and be mindful of their research's potential impacts on the people and communities they study.

In this unit, we will explore the issues associated with gaining access to research settings and the strategies researchers can use to gain physical and cognitive access to appropriate data. We will also discuss the importance of research ethics and the ethical issues that arise at different stages of the research process. By the end of this unit, you should have a better understanding of the challenges and ethical considerations involved in conducting research, as well as the strategies and guidelines that can help you navigate these challenges ethically and responsibly.

5.2 Issues Associated With Gaining Access

5.2.1 Definition of access

Access refers to the ability to enter a particular social setting or community to conduct research. In agriculture-related research, access can take many forms, including physical access to agricultural sites or populations and cognitive access to the agricultural community's beliefs, values, and language (Elliott & Settles, 2017).

5.2.2 Types of access

Researchers may need to negotiate several types of access in agriculture-related research. These include:

- i. Physical access: This refers to the ability to physically enter and conduct research in a particular agricultural site, such as a farm, agricultural research station, or plant breeding facility (Jiggins & Röling, 2003).
- ii. Cognitive access refers to the ability to understand and communicate with agricultural community members and gain insight into their beliefs, values, and practices. Cognitive access can be particularly challenging in agriculture-related research, as researchers may need to navigate cultural differences and language barriers in order to gain a deep understanding of the community they are studying (Pretty, 1995).

5.2.3 Challenges associated with gaining access

Gaining access to agriculture-related research can be challenging, and it often requires the researcher to navigate a variety of social, political, and ethical considerations. Some common challenges associated with gaining access to agriculture-related research include the following:

- **Gatekeepers:** Individuals or organisations that control access to research sites or populations in many agricultural communities. These gatekeepers may be reluctant to grant access to researchers, particularly if they perceive the research to be potentially harmful or disruptive to the community (Smith & Haddad, 2015).
- **Ethical considerations:** Conducting research in agricultural communities raises various ethical considerations, including issues related to informed consent, confidentiality, and participant welfare. Researchers must be mindful of these ethical considerations and ensure their research is conducted ethically and responsibly (Shalaby & Hossain, 2019).
- **Logistical issues:** Conducting research in agricultural communities can be logistically challenging, mainly if the research involves travel to remote or difficult-to-access areas. Researchers must be prepared to navigate these logistical challenges and ensure that their research is conducted safely and sustainably (Minkler, 2017).

By understanding the challenges associated with gaining access to agriculture-related research, researchers can develop strategies to overcome them and conduct their research responsibly and respectfully. This may involve building relationships with gatekeepers and community members, developing effective communication strategies, and prioritising ethical considerations throughout the research process.

5.3 Strategies to Gain Physical and Cognitive Access to Appropriate Data

Gaining access to appropriate data is a critical step in conducting agriculture-related research. Researchers must be able to gain physical and cognitive access to their research site or community to collect the data they need. This section will discuss some strategies for gaining physical and cognitive access to appropriate data in agricultural research.

5.3.1 Physical access strategies

- i. **Networking:** Researchers can gain physical access to agricultural communities by networking with individuals or organisations that have existing relationships with those communities. For example, researchers may collaborate with local NGOs or government agencies to gain access to research sites. By building relationships with these organisations, researchers can establish credibility and trust with the agricultural community that facilitates access to research sites (Tait & Ritchie, 2004).
- ii. **Building relationships** with community members is another effective way to gain physical access to agricultural sites. Researchers can build relationships by attending community events, volunteering with local organisations, or participating in cultural activities. By demonstrating a commitment to the community, researchers can build trust and establish a rapport with community members that facilitate access to research sites (Campbell & Quincy, 2013).
- iii. **Using intermediaries:** Researchers can also use intermediaries, such as translators or research assistants, to gain physical access to agricultural sites. These intermediaries can help researchers navigate cultural differences and language barriers and facilitate communication with community members (Cole, Nyirenda & Fazal, 2016).

5.3.2 Cognitive access strategies

- i. **Learning the language and culture:** To gain cognitive access to agricultural communities, researchers must be able to communicate effectively with community members. This may require learning the local language and culture, as well as gaining an understanding of the

community's values and beliefs. By demonstrating an understanding and respect for the community's culture, researchers can build trust and establish a rapport with community members, facilitating access to research sites (Breitborde & Switzer, 2016).

- ii. **Establishing rapport and trust:** Building rapport and trust with community members is critical for gaining cognitive access to agricultural communities. Researchers can establish rapport by actively listening to community members, demonstrating empathy, and showing a genuine interest in their experiences and perspectives. By building trust, researchers can gain insights into the community's beliefs and practices, which can inform their research (Davis, 2019). These strategies can help researchers build strong relationships with agricultural communities, navigate cultural differences and language barriers, and conduct research respectfully and responsibly. By implementing these strategies, researchers can increase their chances of gaining physical and cognitive access to appropriate data in agriculture-related research.

5.4 Research Ethics and Why You Should Act Ethically In Agriculture Research

Elliot and Settles (2017) state that research ethics are critical to conducting responsible and trustworthy agricultural research. This section will define research ethics and discuss why acting ethically in agriculture research is essential.

5.4.1 Definition of research ethics

Research ethics are the principles and standards that guide the conduct of research. These principles are designed to protect the rights and welfare of research participants, ensure that data collection and analysis are conducted in a transparent and unbiased manner, and promote public trust in research (Resnik et al., 2015).

5.4.2 Importance of research ethics in agriculture research

- **Protecting research participants:** Research ethics are essential in agriculture research because they help to protect the rights and welfare of research participants, including farmers, agricultural workers, and rural communities. This includes ensuring that participants are fully informed about the research, its potential risks and benefits, and providing informed consent to participate in the study (Srinivasan, 2014).
- **Ensuring data validity and reliability:** Research ethics are also crucial for ensuring data collection and analysis are conducted rigorously and unbiasedly. This includes maintaining the confidentiality of research participants and ensuring that data is collected using valid and reliable methods (O'Rourke & Crowley, 2013).
- **Promoting public trust in research:** Finally, research ethics are essential for promoting public trust in agriculture research. By conducting research ethically and responsibly, researchers can help establish credibility and trust with research participants, the scientific community, and the general public (Elliott & Settles, 2017).

5.5 Ethical Issues at Different Stages of the Research Process

By acting ethically in agriculture research, researchers can ensure that they conduct their research in a responsible and trustworthy manner. This includes protecting the rights and welfare of research participants, maintaining the validity and reliability of data, and promoting public trust in research.

5.5.1 Ethical considerations during the planning stage

The planning stage of agricultural research is critical to ensuring ethical conduct throughout the research process. At this stage, researchers must consider several ethical issues, including:

- **Choosing research questions:** Researchers must ensure that their research questions are scientifically valid and relevant to the research setting. They must also consider their research's potential social and environmental impact and ensure it is conducted with integrity and transparency.
- **Selecting participants:** Researchers must ensure that their participant selection process is fair and unbiased and that participants are not exploited or harmed. Researchers should also consider the potential power dynamics between themselves and their participants and take steps to mitigate any potential harm.
- **Obtaining informed consent:** Researchers must obtain informed consent from participants before involving them in the study. This means that participants must be fully informed about the study's purpose, procedures, risks, and benefits and must give their voluntary consent to participate. Researchers must also ensure that participants have the right to withdraw from the study at any time.

Here are some examples of ethical considerations during the planning stage of agricultural research:

- **Choosing research questions:** When choosing research questions for an agricultural study in Zambia, researchers should consider their research's potential social and environmental impact. For example, if the research introduces a new crop variety, researchers should consider the potential impact on local biodiversity and traditional farming practices. They should also consider how the research could benefit local farmers and contribute to sustainable agriculture in the region.
- **Selecting participants:** When selecting participants for an agricultural study in Zambia, researchers should ensure that their selection process is fair and unbiased. They should also consider the potential power dynamics between themselves and their participants, mainly if the research involves vulnerable groups such as smallholder farmers or women. Researchers should take steps to mitigate any potential harm, such as ensuring that participants have the right to withdraw from the study at any time.
- **Obtaining informed consent:** Researchers should obtain informed consent from participants before involving them in the study. In the Zambian context, this may involve working with community leaders and translators to ensure that participants fully understand the purpose and procedures of the study. Researchers should also ensure that participants know their rights and the potential risks and benefits of participating in the study.

To ensure ethical conduct during the planning stage of agricultural research in Zambia, researchers should consult with relevant stakeholders, including community members, farmers, and policymakers. They should also adhere to relevant regulations and guidelines, such as those provided by the National Biosafety Authority, the Ministry of Agriculture, and the Zambia National Farmers' Union. By taking these steps, researchers can ensure that their research is respectful and responsive and contributes to sustainable agricultural development in Zambia.

5.5.2 Ethical considerations during the data collection stage

During the data collection stage of research, researchers must consider ethical principles and guidelines to ensure that their research is conducted respectfully and responsibly. Ethical considerations during this stage include:

- **Protecting participant confidentiality:** Researchers should take measures to protect the confidentiality of study participants during the data collection stage. This may involve using pseudonyms or codes to identify participants or taking other measures to ensure that participants' personal information is undisclosed to unauthorised parties. Researchers should also ensure that data is securely stored and that only authorised personnel can access it.
- **Minimising harm or discomfort:** Researchers should take steps to minimise any potential harm or discomfort to study participants during the data collection stage. This may involve using non-invasive data collection methods, such as surveys or interviews, rather than more invasive methods, like biometric data collection. Researchers should also ensure that participants know their right to withdraw from the study if they feel uncomfortable or their safety is at risk.
- **Ensuring informed consent:** Researchers should obtain informed consent from study participants before collecting data. This involves informing participants about the purpose of the study, the data collection methods, and any potential risks or benefits associated with participation. Participants should also be informed of their right to withdraw from the study at any time.
- **Ensuring equitable treatment:** Researchers should ensure that all participants are treated equitably during the data collection stage, regardless of their demographic or socio-economic characteristics. This may involve ensuring that data is collected from a representative population sample or that participants are not discriminated against based on gender, age, or other characteristics.
- **Ensuring cultural sensitivity:** Researchers should be sensitive to local cultural norms and practices when collecting data. This may involve working with local partners or stakeholders who better understand the cultural context or taking steps to ensure that the data collection methods are culturally appropriate.

Here are some examples of ethical considerations during the data collection stage of agricultural research:

- **Protecting participant confidentiality:** In a study investigating the use of pesticides in Zambian agriculture, researchers may use pseudonyms or codes to identify participants and ensure that their personal information is not disclosed to unauthorised parties. To protect participants' confidentiality, researchers should also ensure that data is securely stored and that only authorised personnel can access it.
- **Minimising harm or discomfort:** In a study investigating the impact of climate change on crop yields in Zambia, researchers may use non-invasive data collection methods like surveys or interviews rather than more invasive methods like taking soil samples. They may also ensure that participants know their right to withdraw from the study at any time if they feel uncomfortable or their safety is at risk.
- **Ensuring informed consent:** In a study investigating the nutritional status of pregnant women in Zambia, researchers may inform participants about the purpose of the study, the data collection methods, and any potential risks or benefits associated with participation. They may also ensure that participants understand their right to withdraw from the study at any time.
- **Ensuring equitable treatment:** In a study investigating the impact of agricultural policies on small-scale farmers in Zambia, researchers may ensure that data is collected from a representative sample of the population, including farmers from different regions and with different levels of education and income. They may also ensure that participants are not discriminated against based on gender, age, or other characteristics.

- **Ensuring cultural sensitivity:** Researchers may work with local partners or stakeholders who better understand the cultural context in a study investigating traditional agricultural practices in Zambia. They may also take steps to ensure that the data collection methods are culturally appropriate, for example, by using local languages and ensuring that the questions are relevant to local customs and practices.

5.5.3 Ethical considerations during the analysis and reporting stage

Ethical considerations during the research analysis and reporting stage refer to the researchers' responsibility to accurately analyse and report their findings in a transparent and unbiased manner. This stage is crucial in ensuring that research results are reliable and valid and that other researchers can replicate them. Here are some ethical considerations during the analysis and reporting stage of research:

- **Ensuring data accuracy:** Researchers should ensure that their data analysis is accurate and based on sound statistical methods. They should also correct any errors or inaccuracies before reporting their findings. This may involve conducting multiple analyses or seeking input from other experts to ensure the validity of the data.
- **Avoiding plagiarism:** Researchers should ensure they appropriately credit the sources used in their analysis and reporting. This involves citing sources accurately and avoiding plagiarism, including self-plagiarism.
- **Maintaining confidentiality:** Researchers should ensure that the confidentiality of study participants is maintained during the analysis and reporting stage. This may involve removing personally identifiable information from the data and reporting only aggregate results.
- **Reporting negative findings:** Researchers should report both positive and negative findings from their study. This ensures that the research is transparent and that other researchers can learn from the results.
- **Avoid selective reporting:** Researchers should avoid selectively reporting findings that support their hypothesis or preconceived notions. This can result in biased reporting and can mislead the scientific community.

Here are some examples of ethical considerations during the data analysis and reporting stage of agricultural research:

- **Ensuring data accuracy:** A researcher conducting a study on the impact of climate change on crop yields in Zambia should ensure that the data collected is accurate and relevant to the study. They should also use appropriate statistical methods to analyse the data to ensure the accuracy of the findings.
- **Avoiding plagiarism:** A student writing a research paper on using genetically modified crops in Zambia should ensure that they credit all the sources they used in their research, including data and information gathered from previous studies, government reports, and other sources.
- **Maintaining confidentiality:** A researcher conducting a study on the impact of pesticides on farmers' health in Zambia should ensure that the participant's personal information is kept confidential by removing any identifying information from the data collected.
- **Reporting negative findings:** A researcher conducting a study on the effectiveness of a new farming technique in Zambia should report both positive and negative findings. They should report any challenges faced during the implementation of the technique and its limitations to provide a comprehensive picture of its effectiveness.
- **Avoiding selective reporting:** A researcher conducting a study on the benefits of organic farming in Zambia should avoid selectively reporting findings that support the benefits of

organic farming while ignoring its limitations. They should report all the data collected, including the benefits and limitations of organic farming in Zambia.

By following these ethical considerations, agricultural researchers in Zambia can ensure that their research is conducted in a transparent, unbiased, and trustworthy manner, thereby contributing to the development of sustainable agriculture and improving the livelihoods of farmers and communities in Zambia.

5.6 Conclusion

In conclusion, negotiating access and research ethics are critical to conducting ethical and meaningful agricultural research. Access refers to gaining permission and entry into research settings, which can be challenging due to logistical, ethical, and interpersonal factors. To gain physical and cognitive access to appropriate data, researchers should use strategies such as networking, building relationships, and learning the language and culture of the research setting.

On the other hand, research ethics refers to the moral principles that guide research practices. Acting ethically is essential to protecting research participants, ensuring data validity and reliability, and promoting public trust in research. To ensure ethical conduct, researchers should adhere to relevant regulations, obtain informed consent, protect participant confidentiality, avoid plagiarism, and report their findings accurately. Ethical issues can arise at different stages of the research process, including during the planning, data collection, analysis and reporting stages.

In summary, ethical and meaningful agricultural research requires researchers to negotiate access to research settings and adhere to research ethics principles. By doing so, researchers can conduct respectful, transparent, and scientifically valid research while contributing to society's greater good.

5.4.1 Recap of key points

To summarise, this unit has covered the following key points:

- Negotiating access is an essential component of agricultural research, as it refers to gaining permission and entry into research settings.
- Strategies to gain physical and cognitive access to appropriate data include networking, building relationships, learning the language and culture of the research setting, and using intermediaries.
- Ethical conduct is essential to protecting research participants, ensuring data validity and reliability, and promoting public trust in research.
- Ethical issues can arise at different stages of the research process, including during the planning, data collection, analysis and reporting stages.
- To ensure ethical conduct, researchers should adhere to relevant regulations, obtain informed consent, protect participant confidentiality, avoid plagiarism, and report their findings accurately.

Self-check questions

1. **Negotiating access and research ethics in agriculture research in Zambia**
 - a. What are some of the ethical considerations in agriculture research in Zambia?
 - b. What are some strategies for negotiating access to appropriate data in agriculture research in Zambia?
 - c. Why is it important to act ethically in agriculture research in Zambia?

2. **Gaining access to appropriate data in agriculture research in Zambia**
 - a. What is the definition of access in agriculture research in Zambia?
 - b. What are some of the types of access that researchers may need to gain in agriculture research in Zambia?
 - c. What are some challenges associated with accessing appropriate data in agriculture research in Zambia?

3. **Strategies to gain physical and cognitive access to appropriate data in agriculture research in Zambia**
 - a. What physical access strategies can researchers use to gain access to agricultural communities in Zambia?
 - b. What cognitive access strategies can researchers use to gain access to agricultural communities in Zambia?
 - c. How can intermediaries be used to facilitate access to appropriate data in agriculture research in Zambia?

4. **Research ethics in agriculture research in Zambia**
 - a. What is the definition of research ethics in agriculture research in Zambia?
 - b. Why is it important to act ethically in agriculture research in Zambia?
 - c. How can research ethics be promoted in agriculture research in Zambia?

5. **Ethical issues at different stages of the research process in agriculture research in Zambia**
 - a. What are some ethical considerations that researchers need to take into account during the planning stage of agriculture research in Zambia?
 - b. What are some ethical considerations that researchers need to take into account during the data collection stage of agriculture research in Zambia?
 - c. What are some ethical considerations that researchers need to take into account during the analysis and reporting stage of agriculture research in Zambia?

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Self-check answers

1. Negotiating access and research ethics in agriculture research in Zambia

- a. Some ethical considerations in agriculture research in Zambia include:
- Respect for the rights, dignity, and privacy of research participants and their communities
 - Ensuring that research benefits are distributed equitably among all stakeholders.
 - Ensuring that research does not harm the environment or exacerbate existing social and economic inequalities.
 - Obtaining informed consent from research participants and ensuring they fully understand the nature of the research and their participation.
 - Maintaining confidentiality and protecting sensitive data
 - Ensuring that research is conducted transparently and openly and that results are disseminated widely and accessible to all stakeholders.
- b. **Strategies for negotiating access to appropriate data in agriculture research in Zambia may include:**

- Building relationships and trust with local communities and stakeholders
 - Engaging with community leaders and gatekeepers to gain access to research sites and participants.
 - Providing incentives or benefits to research participants to encourage their participation.
 - Developing a clear and transparent research plan that outlines the research's purpose, methods, and benefits.
 - Working with local partners and collaborators to help navigate cultural and linguistic barriers and ensure that research is conducted in an ethical and culturally sensitive manner.
- c. It is vital to act ethically in agriculture research in Zambia because failure to do so can harm research participants and their communities, damage trust and relationships, and undermine the credibility and validity of research findings. Ethical research practices promote transparency, trust, and accountability and help to ensure that research benefits are shared equitably among all stakeholders.

2. Gaining access to appropriate data in agriculture research in Zambia

- a. Access to agriculture research in Zambia refers to the ability of researchers to collect, analyse, and use data related to agriculture and rural development in Zambia.
- b. Types of Access that researchers may need to gain in agriculture research in Zambia include:
- Physical access to research sites, including farms, markets, and rural communities
 - Access to agricultural data sources, such as government statistics, survey data, and research reports
 - Access to research participants and stakeholders, including farmers, agricultural extension workers, and policymakers.
- c. Challenges associated with gaining access to appropriate data in agriculture research in Zambia may include:
- Limited availability and accessibility of data, particularly in rural areas
 - Cultural and linguistic barriers that may make it challenging to communicate with local communities and stakeholders
 - Political and economic factors that may limit access to data or make it difficult to work with specific groups or individuals
 - Concerns about confidentiality and data security, particularly concerning sensitive or proprietary information.

3. Strategies to gain physical and cognitive access to appropriate data in agriculture research in Zambia

- a. Physical access strategies that researchers can use to gain access to agricultural communities in Zambia may include:
- Building relationships with community leaders and gatekeepers to gain access to research sites and participants.
 - Conducting outreach and awareness-raising activities to engage with potential research participants and stakeholders.
 - Developing partnerships and collaborations with local organizations and institutions that can facilitate access to research sites and participants.
- b. Cognitive access strategies that researchers can use to gain access to agricultural communities in Zambia may include:

- Conducting ethnographic or participatory research that involves spending extended periods in rural communities to gain a deep understanding of local cultures, practices, and beliefs.
 - Using local languages and cultural references to help build trust and rapport with research participants.
 - Engaging with local researchers and experts to help interpret data and navigate cultural and linguistic barriers.
- c. How intermediaries can be used to facilitate access to appropriate data in agriculture research in Zambia
- Intermediaries such as local NGOs, community-based organizations, and government agencies can facilitate access to appropriate data in agriculture research in Zambia by acting as a bridge between researchers and local communities and stakeholders.
 - Intermediaries can provide valuable insights into local contexts, cultures, and practices, identify key stakeholders and decision-makers, and provide guidance on effective engagement strategies.
 - Intermediaries can ensure that research activities align with local priorities and needs, provide feedback on study design and data collection methods, and build trust and credibility with local communities.
 - Working closely with intermediaries can help researchers develop more nuanced and context-specific research approaches, ensure ethical and inclusive practices, and consider the needs and perspectives of local stakeholders throughout the research process.

4. Strategies to gain physical and cognitive access to appropriate data in agriculture research in Zambia

- a. Physical access strategies that researchers can use to gain access to agricultural communities in Zambia include building relationships with local leaders, NGOs or other community-based organizations, attending community meetings and events, and using participatory research methods. Researchers can also consider staying in the community for an extended period to build trust and better understand the local context.
- b. Researchers can use cognitive access strategies to gain access to Zambia's agricultural communities, including learning the local language, customs, and beliefs, using culturally appropriate research methods, and involving community members in the research process. Researchers can also use storytelling and other narrative methods to engage with the community and understand their perspectives and experiences.
- c. Intermediaries can facilitate access to appropriate data in agriculture research in Zambia by acting as a bridge between researchers and the community. Intermediaries can be local NGOs, community-based organizations, or individuals with strong ties to the community. They can help researchers navigate local customs, norms, and power dynamics and facilitate communication and trust-building between researchers and the community.

5. Research ethics in agriculture research in Zambia

- a. Research ethics in agriculture research in Zambia refers to the principles and standards that govern the conduct of research involving human subjects, animals, or the environment. This includes issues such as informed consent, confidentiality, data sharing, and the use of appropriate research methods.

- b. It is essential to act ethically in agriculture research in Zambia because unethical research can harm human subjects, animals, or the environment and erode trust between researchers and the community. Unethical research can also undermine the validity and reliability of research findings and damage the reputation of the research institution or funder.
- c. Research ethics can be promoted in agriculture research in Zambia through various means, including training researchers in ethical conduct, establishing ethical review committees, involving community members in the research process, and ensuring that research is conducted in compliance with national and international ethical standards.

6. Ethical issues at different stages of the research process in agriculture research in Zambia

- a. Ethical considerations that researchers need to consider during the planning stage of agriculture research in Zambia include ensuring that the research question is relevant and essential to the community, obtaining informed consent from human subjects, protecting the confidentiality of participants, and ensuring that the research is conducted in an ethical and culturally sensitive manner.
- b. Ethical considerations that researchers need to consider during the data collection stage of agriculture research in Zambia include ensuring that human subjects are treated with respect and dignity, minimizing the risk of harm or discomfort to participants, protecting the confidentiality of participants, and ensuring that the research is conducted in an ethical and culturally sensitive manner.
- c. Ethical considerations that researchers need to consider during the analysis and reporting stage of agriculture research in Zambia include ensuring that the data is analyzed and reported in a transparent and unbiased manner, protecting the confidentiality of participants, ensuring that the research is conducted in an ethical and culturally sensitive manner, and sharing the results of the research with the community in a clear and accessible manner.