

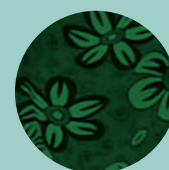
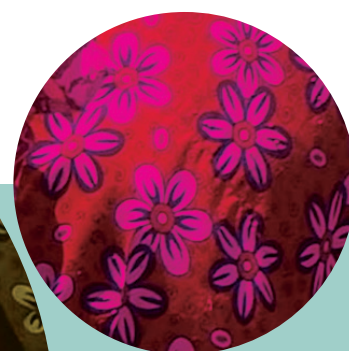
GENDER EQUITY AND INCLUSION BY RESEARCH TEAMS IN UGANDA

Preconditions and Success Factors

A SYNTHESIS CASE STUDY REPORT

Uganda National Council For Science and Technology

April 2025



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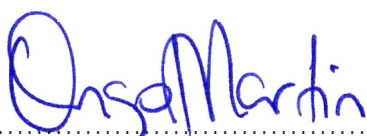
Foreword

Dear Readers,

As part of its continuous effort to promote gender equity and inclusivity in Science, Technology and Innovation (STI) the Uganda National Council for Science and Technology (UNCST) undertakes regular studies to ensure that the body of evidence can strengthen programming and organizational effectiveness in mainstreaming gender within Uganda's rapidly evolving STI system.

This Synthesis Report contributes to a better understanding of the context in which project implementation is undertaken from a gender perspective. The findings help inform future funding and support for gender and inclusivity in Uganda and improve the capacity for monitoring and evaluating gender and inclusivity in research projects. We hope you find the synthesis useful to further reflect and feed the learning into future thinking and practices to drive transformative change on gender equality and the inclusion of vulnerable groups in research and innovation.

We are grateful to everyone who contributed to this study and especially to the research team. Using the main findings and recommendations highlighted in this report, UNCST will continue its work on competence development for gender mainstreaming and gender equality in STI. We are confident that action based on good knowledge and skills will bring us closer to achieving gender equity and inclusivity in Uganda's evolving STI ecosystem.



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Martin Ongol (PhD)

Acting Executive Secretary

UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Abbreviations and Acronyms

CSO	Civil Society Organizations
EOC	Equal Opportunities Commission
GEI	Gender, Equity and Inclusivity
GERA	Gender Equity in Research Alliance
HSRC	Human Sciences Research Council of South Africa
INASP	International Network for Advancing Science and Policy
MGLSD	Ministry of Gender, Labour and Social Development
NGP	National Gender Policy
PPP	Public Private Partnerships
STEM	Science, Technology Engineering and Maths
STI	Science Technology and Innovation
UNCST	Uganda National Council for Science and Technology

Key Terms

Gender	Socially constructed roles – Masculinity/Femininity and how they relate to culture, role and identity
Gender equality	The equal rights, responsibilities and opportunities of women and men and girls and boys.
Women's Empowerment	Concerns their gaining power and control over their own lives, which involves the expansion of choice and the strengthening of voice through the transformation of power relations.
Gender Mainstreaming	The process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels.
Gender Action Plan/ Strategy (GAPS)	A range of strategies, activities, resources, gender capacity-building initiatives, targets, and indicators for ensuring that women, along with men, participate in and benefit from all components of the project or program.
Gender Analysis	A form of social analysis that requires the collection, analysis, and application of sex-disaggregated information. It is the process of considering the different impacts that a development project or program has on women and men, and on the economic and social relationships between them.
Gender capacity building	Strengthening the capacity of development workers to undertake social and gender analyses and to plan, implement, and monitor strategies and activities so that women may participate in and benefit equally with men from development projects and programs.
Gender Equality	This involves the removal of discrimination and structural inequalities in access to resources, opportunities, and services.
Gender equality results	Results achieved for women compared with men, such as women's participation in project activities, their access to project and other resources, and practical benefits for women.
Gender mainstreaming	Means that women's needs and perspectives are considered in all development planning and implementation, so that both women and men participate as decision makers and beneficiaries in all activities.
Gender-sensitive or gender-responsive	Women's needs and priorities have been considered, based on quality social and gender analyses, in an effort to ensure that they participate in and benefit equally from development activities

Acknowledgement

We would like to extend our heartfelt gratitude to all those who contributed to the successful completion of this gender-inclusive report under the Science Granting Councils Initiative (SGCI). Special thanks go to the dedicated team at the Uganda National Council for Science and Technology (UNCST)—Mr. Steven Sebbale (UNCST - Gender Lead), Ms. Noeline Basiime (UNCST - Monitoring and Evaluation) and Mr. Geoffrey Sempiri (SGCI Coordinator, Uganda)—for their unwavering support and coordination of this activity. We also acknowledge the invaluable contributions of the six project principal investigators—Dr. Bosco Chemayek, Dr. Geoffrey Ssepuyya, Prof. Charles Muyanja, Dr. Francis Omuja, Prof. Maud Kamatenesi Mugisha, and Dr. Deborah Ruth Amulen—whose rich insights on the gender imperatives in their projects was instrumental in showcasing how far we have come in gender integration within research projects. Furthermore, we are deeply appreciative of the funding and support from our partners, including, NORAD, IDRC, DFG, NRF, SIDA, and FCDO, without which this report would not have been possible. Their collective support has greatly enabled this report and has contributed to advancing gender inclusivity in research and innovation for socio-economic development.

Executive Summary

Background

The Science Granting Councils Initiative (SGCI) is a collaborative partnership involving seventeen (17) African national Science Councils, designed to strengthen the capacities of these Councils in order to support research and innovation that contribute to socio-economic development. The SGCI provides funding and resources to support initiatives across different domains of science, technology, and innovation. Gender is one of the major themes under the SGCI. Gender synthesis involves the systematic review and integration of gender-related findings across multiple projects to understand the impacts and outcomes of gender-focused interventions. In the context of STI, this means examining how gender dynamics influence and are influenced by scientific research, technological advancements, and innovation processes.

This Gender Synthesis was undertaken on six specific projects which had been identified owing to their geographical reach, their novelty and potential for commercialization of research products. This report examines how these projects have integrated gender considerations in their design, implementation, and expected outcomes. This report provides an in-depth analysis of gender integration aspects across six case study research projects funded by the International Development Research Centre (IDRC). The projects cover diverse sectors including essential oils, bakery, propolis, cricket farming, shea butter, and wheat production.

Methodology

Data was collected through detailed questionnaires completed by each project's team. The questionnaire covered various aspects of gender integration, including project design, leadership, participation, benefits, challenges, and outcomes. A comprehensive review of relevant documents related to the projects was undertaken to inform the development of the tools and interview schedules. Discussions with project stakeholders were undertaken to gather diverse perspectives on gender mainstreaming practices. One-on-one interviews were held with Principal Investigators and other key personnel to gain detailed insights into their gender mainstreaming strategies. On-site visits to project locations and laboratories were also undertaken to observe and engage directly with the implementation of gender-related activities. This multi-faceted approach ensured a thorough understanding of how gender is integrated into the projects by combining qualitative data from various sources and direct observations.

Summary of Findings

The analysis reveals varying degrees of gender consideration throughout the project lifecycle, from design to implementation and expected outcomes. While all projects showed some level of gender awareness, there were significant gaps in systematic gender integration, particularly in developing gender-specific targets, resource allocation, and collecting gender-disaggregated data. To achieve gender equality and women's empowerment in research projects, it's vital to consider how these initiatives impact both men and women, especially the most vulnerable. Key lessons from various projects, such as Maize bran bakery and shea butter, highlight the importance of youth involvement, financial support for women, and group organization to enhance participation. Gender integration requires capturing diverse interests, documenting gender aspects, and providing equal opportunities through targeted interventions. Recommendations for project teams include mainstreaming gender early in project design, gender capacity building, developing gender-specific targets, and allocating dedicated resources. Comprehensive gender analyses at project inception and gender-responsive monitoring and evaluation systems are essential. For UNCST, establishing clear gender mainstreaming guidelines, providing training, implementing robust M&E systems, conducting regular gender audits, and fostering a culture of gender sensitivity are critical steps to ensure effective gender integration and improved project outcomes.

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I - Setting the Scene

1.1 Background

The Uganda National Council for Science and Technology (UNCST) is a government agency mandated to facilitate and coordinate the development and implementation of policies and strategies for integrating science, technology, and innovation (STI) into national development. UNCST aims to promote scientific research, technological innovation, and the development of an STI-driven economy. UNCST's currently has four functions

1. Regulating all aspects of Science, Technology and Innovation
2. Monitoring and evaluation of STI activities and compliance with STI regulations.
3. Translating STI policies into regulations and standards to guide the operation of the entire STI system.
4. Homing of science professional institutions and continuing professional development.

The Science Granting Councils Initiative (SGCI) is a collaborative partnership involving various African national Science Councils, designed to strengthen the capacities of these Councils in order to support research and innovation that contribute to socio-economic development. The SGCI provides funding and resources to support initiatives across different domains of Science, Technology, and Innovation. Gender synthesis involves the systematic review and integration of gender-related findings across multiple projects to understand the impacts and outcomes of gender-focused interventions. In the context of STI, this means examining how gender dynamics influence and are influenced by scientific research, technological advancements, and innovation processes. This Synthesis Report covers six key projects funded under the SGCI, each implemented across different domains of science, technology, and innovation. The report provides insights into how these projects address gender issues and their contributions to gender equality in Uganda.

1.2 Legal and Policy framework for Gender

Uganda has made significant strides in creating a policy and regulatory framework to address gender inequality. The 1995 Constitution of Uganda provides a strong legal framework for gender equality, with specific articles promoting

women's rights and prohibiting discrimination based on sex. In 2007, the country developed the National Gender Policy (2007) which aims at guiding the integration of gender concerns into development processes and outlines strategies to reduce gender inequalities and enhance the status of women. In 2007, the government also established the Equal Opportunities Commission Act (2007) one of whose mandates is to eliminate discrimination and promote equal opportunities for all genders. Uganda has also made several strides in mainstreaming gender narratives at institutional level. The establishment of the Ministry of Gender, Labour and Social Development (MGLSD) to integrate gender issues within the overall government frameworks, including policy formulation, budgeting, implementation, and coordination was a clear signal of government's intentionality with respect to mainstreaming gender within the broader governmental systems. Moreover, the active work of several Civil Society Organizations (CSOs) on gender equality as further strengthened this criticality of gender in regular institutional processes. Uganda's gender policies and progress align with global and regional frameworks, including Goal 5 of the Sustainable Development Goals (SDGs) which aims to achieve gender equality and empower all women and girls. In addition, Uganda is a signatory of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and is strongly aligned to the African Union's Agenda 2063 which Emphasizes gender equality and women's empowerment as key pillars for development.

BOX 1: LEGAL AND REGULATORY FRAMEWORKS FOR MAINSTREAMING GENDER

- The Constitution of the Republic of Uganda (Article 32 (1))
- The Uganda Gender Policy, 2007
- The National Science and Technology Policy, 2009
- The Employment Act, 2006
- The Equal Opportunities Act of 2007
- The Public Finance Management Act (PFMA) of 2015
- Uganda National Council of Science and Technology Act, 2009
- The Persons with Disabilities Act, 2019
- The Building Control Act, 2013
- Uganda National Youth Action Plan (2016)
- National Policy on Disability (2006)
- National Policy for Older Persons (2009)

1.3 Mainstreaming Gender in Research

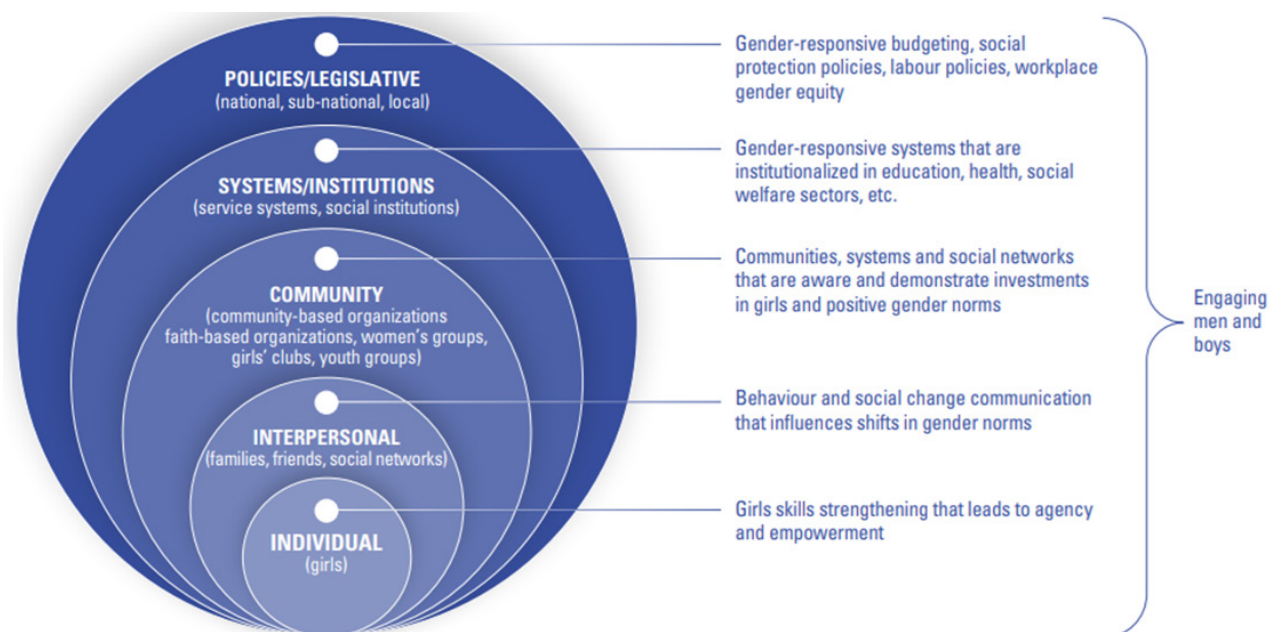
Mainstreaming gender in research projects involves systematically integrating gender perspectives at all stages of research – from conceptualization (or initial planning) and design to implementation, analysis, and dissemination of findings. This approach ensures that gender biases are addressed, and both men's and women's experiences and needs are adequately considered. The ultimate goal is to achieve more equitable and inclusive outcomes that contribute to gender equality. This also includes engendering project objectives and sex-disaggregated data; and, Project Monitoring and Evaluation. Mainstreaming gender in research projects is essential for producing inclusive and equitable outcomes that address the needs of all genders. By adopting gender-sensitive research designs, collecting and analyzing sex-disaggregated data, building researcher capacity, and implementing supportive institutional policies, research projects can significantly contribute to gender equality.

The role of gender in research can be traced back to the role of gender in Science, Technology and Innovation (STI) or more specifically, the engagement of women in Science, Technology Engineering and Maths (STEM). The National Gender Policy (2007) outlined strategies to promote gender equality in all sectors, including education and STEM with a view of addressing gender disparities by integrating gender perspectives into national development plans and sectoral policies. The enactment of the Science, Technology, and Innovation (STI) Policy (2009) made provisions for promoting gender equality in STEM fields, encouraging the participation of women and girls in science and technology education, and supporting female scientists and innovators. Subsequent to this, the Education Sector Strategic Plan (2017-2020) emphasized gender equity in education, aiming to increase the participation of girls in STEM subjects through scholarships, mentorship programs, and improved learning environments. Institutionally, several programs have been launched to strengthen participation and build lasting partnerships with previously fringe actors within Uganda's STI system. The UNCST has been instrumental in promoting gender mainstreaming in research and innovation through its granting system and in the direct promotion of Gendered Innovations in Science and Engineering. With support from International

Network for Advancing Science and Policy (INASP), the UNCST established the first Gender Research Alliance (GERA) which provided the first platform for gendered engagement within Uganda's research system. This platform brought together research actors in gender and provided an inclusive platform for engagement and knowledge sharing for researchers, grants managers, university lecturers, policy analysts etc.

1.3.1 Gender Transformative Approaches (GTAs) in STI

These approaches are essential for fostering progressive change in the STI sector. To strive towards sustainable development resulting from gender-inclusive STI, it is critical to identify the root causes that underlie unequal gender norms and relations and aim to actively challenge these power structures to be more equitable. With this definition, GTAs differ from and are complementary to gender aware and responsive approaches. GTAs take the many social, cultural and economic factors such as poverty, power sharing, violence, care-giving burdens, and family roles into account. All of these are gendered and call for extra consideration when developing STI projects which shall make a positive difference. Transformative approaches go beyond the past focus in gender analysis on "gaps" and beyond simply adding women to the projects. "Structural change" is the keyword to gender-transformative programming. Empowering women and girls and promoting positions of social and political influence for them is an intrinsic part of this. Men and boys are actively involved as allies and agents of change. Evidence shows that gender transformation is possible, but can also be long term, is often generational, and needs sustained investments over time to change individual agency; gender roles, norms, and power dynamics; as well as legislative and institutional structures. This would involve a combined action across scales—from the individual level through to the level of communities, and through systems (Figure 1)

Figure 1: Gender Transformative Programming

Source: Adapted from UNFPA, UNICEF and UN Women, 2020

1.4 Mainstreaming Gender in Research Projects

Mainstreaming gender in research projects involves systematically integrating gender perspectives at all stages of research – from conceptualization (or initial planning) and design to implementation, analysis, and dissemination of findings. This approach ensures that gender biases are addressed, and both men's and women's experiences and needs are adequately considered. The ultimate goal is to achieve more equitable and inclusive outcomes that contribute to gender equality. This also includes engendering project objectives and sex-disaggregated data; and, Project Monitoring and Evaluation. Mainstreaming gender in research projects is essential for producing inclusive and equitable outcomes that address the needs of all genders. By adopting gender-sensitive research designs, collecting and analyzing sex-disaggregated data, building researcher capacity, and implementing supportive institutional policies, research projects can significantly contribute to gender equality.

BOX 2: WHY MAINSTREAM GENDER IN PROJECTS

1. It promotes gender equality and social inclusion. Without understanding how different genders may be impacted, project activities could inadvertently reinforce existing gender inequalities or discrimination. An analysis helps design projects to be inclusive and equitable.
2. It enhances project effectiveness. If constraints and needs of different gender groups aren't considered, activities may not achieve intended results for entire populations. Gender analysis identifies ways to improve project relevance and effectiveness.
3. It supports sustainable outcomes. Women and men have diverse roles that give them unique knowledge on issues like natural resource use. Factoring in these perspectives leads to more sustainable policies and plans.
4. It leverages full participation. Understanding gender dynamics highlights opportunities for participation and leadership by often marginalized groups in decision-making. This enhances commitment and ownership for better results.

1.5 Project Management at UNCST

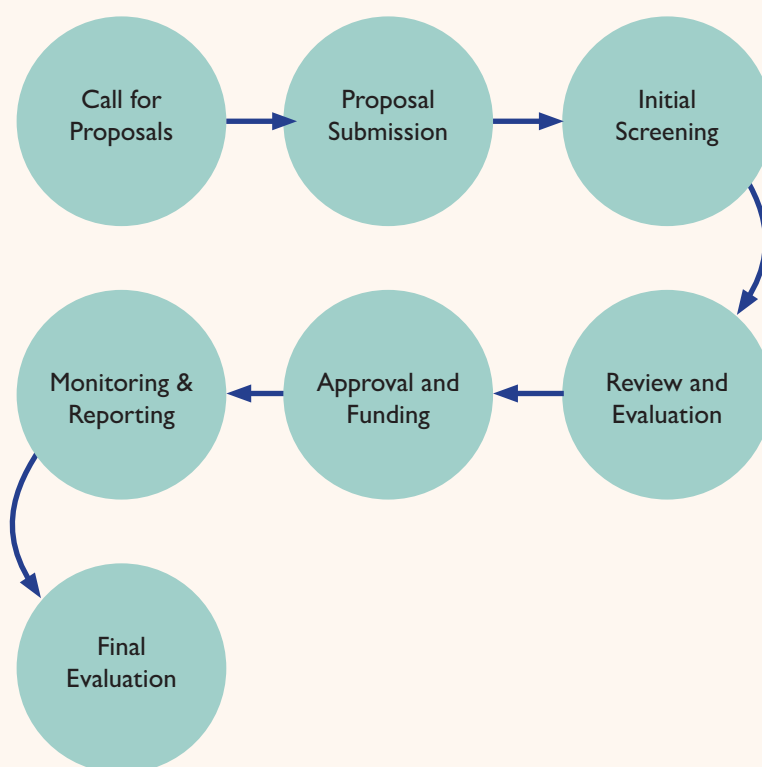
Project management at the Uganda National Council for Science and Technology (UNCST) involves the systematic planning, execution, monitoring, and evaluation of research and innovation projects to advance scientific and technological development in Uganda. The UNCST employs a structured approach to ensure projects align with national priorities and deliver measurable impacts. This includes defining clear objectives, allocating resources efficiently, managing risks, and engaging stakeholders effectively. Through robust project management practices, the UNCST supports the implementation of policies that foster a conducive environment for scientific research, innovation, and sustainable development in Uganda. Recognizing the importance of gender equity in achieving sustainable development goals, UNCST strives to integrate gender considerations throughout the project cycle for all the initiatives that it supports.

1.5.1 Grants Management at UNCST

The UNCST manages grants to support research, innovation, and the integration of science and technology into national development strategies. This includes enhancing the capacity of Ugandan researchers and institutions to conduct high-quality research and innovation activities. UNCST established a robust Grants Management System (GMS) that provides a framework for integrating gender in its research granting processes. From the Call for Proposals Stage up to Project completion, the integration of gender is a central imperative. Six projects were funded by IDRC under the SGCI Program. In order to ensure diversity in terms of project focus, geographic location, target beneficiaries, and thematic areas were primary considerations for the selection for award. The UNCST Grants Management Process is a structured and comprehensive system designed to ensure the effective allocation and utilization of grant funds. It begins with a call for proposals, inviting submissions from eligible applicants. Once proposals are submitted, they undergo an initial screening to check for eligibility and completeness. Eligible proposals are then reviewed and evaluated in detail. Successful proposals are approved and awarded funding. Funded projects are closely monitored, with regular progress reports required to ensure accountability and transparency. Finally, a thorough evaluation is conducted upon project

completion, accompanied by the submission of final reports to assess outcomes and impact. This meticulous process ensures that grant funds are used efficiently and achieve their intended objectives

Figure 2: Granting Cycle at UNCST



1.6 Purpose of the Synthesis Report

The purpose of this Synthesis Report is to analyze how gender considerations were addressed throughout the implementation timeframe of the selected projects. The report establishes how effective gender mainstreaming was undertaken within the project and the knowledge and capacity gaps in doing so. Ultimately, the challenge of optimizing project funding is that investment in projects does not leave any vulnerable group behind. As such, the report provides an in-depth appraisal of the collective experiences during project implementation and help identify key lessons that can inform future project policy. The report assesses the effectiveness of UNCST's strategies in promoting gender equity and identify areas for further improvement. By examining project design, implementation, and monitoring practices, the report generates valuable insights to inform future UNCST initiatives and contribute to a more inclusive science and technology landscape in Uganda.

Figure 3: The gender equity continuum

1.7 Objectives of the Synthesis Report

This report examines the gender dimension of six recently completed projects supported by the IDRC through the UNCST. These projects covered diverse areas such as agricultural productivity (wheat production), alternative protein sources (cricket feed), quality standards in food industries (bakery and confectionery), commercialization of natural products (Shea butter and essential oils), and health product development (propolis powder and tea bags). This synthesis is premised on these specific objectives:

- Undertake an assessment of Gender Integration across all the six projects. This was to establish whether gender considerations were incorporated into the various stages of the project cycle, including design, implementation, and monitoring.
- To evaluate the positive and negative impact of the project on women and other vulnerable groups
- To establish how the project enhanced the state of social inclusion within the communities where it was being implemented
- To establish the unintended gender impacts (positive and negative) that the project might have caused or influenced to happen

1.8 Structure of the Report

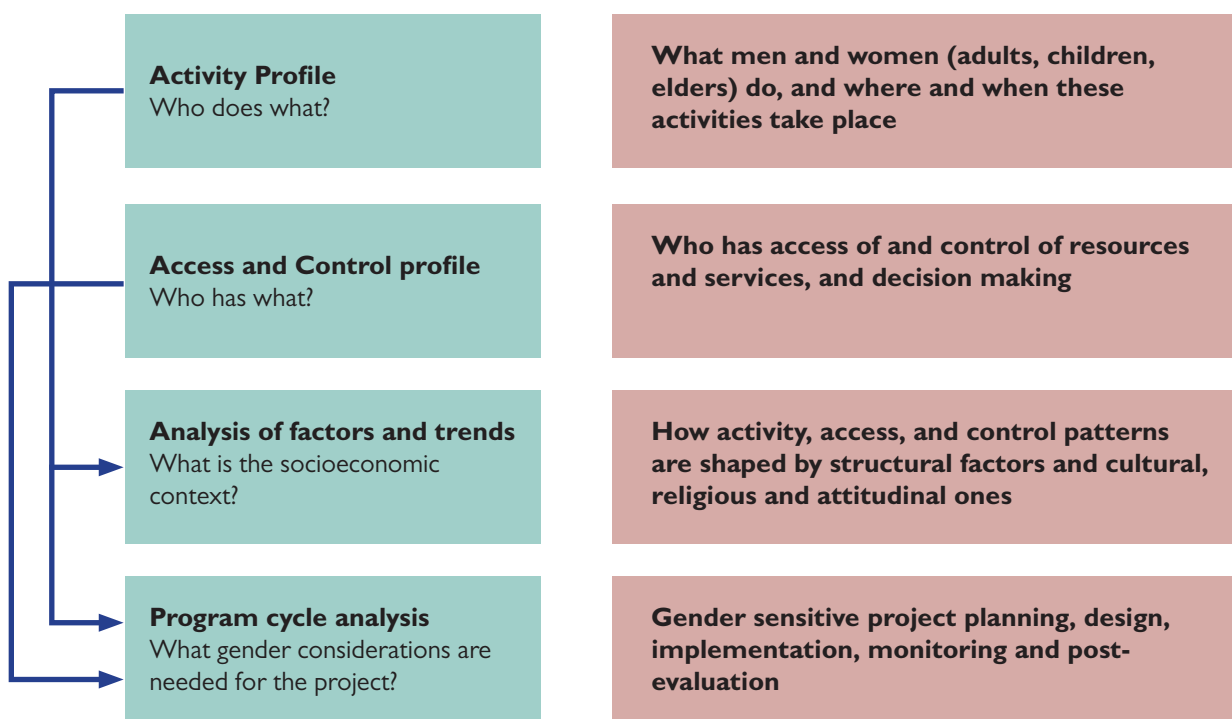
This report is organized into five chapters, each contributing to a comprehensive understanding of gender equality in research granting and project implementation in Uganda. Chapter One provides an overview of the current state of gender equality in Uganda, with a particular focus on its integration within research granting mechanisms at the Uganda National Council for Science and Technology (UNCST). It also establishes the importance of gender equity as a determinant of critical project outcomes. Chapter Two presents a summary of the projects reviewed in this study, including their objectives, team compositions, and implementation modalities. It highlights how gender was considered in the design and execution of these projects. Chapter Three outlines the methodology employed in conducting the study. It details the data collection tools, analysis techniques, and the overall approach used to assess gender integration across the selected projects. Chapter Four presents the key findings of the review. It identifies patterns, gaps, and best practices in gender integration and highlights critical interventions that influence project outcomes. The chapter also assesses how gender considerations were embedded across different stages of the project implementation roadmap. Chapter Five provides a synthesis of the key lessons learned from the study and offers practical recommendations to strengthen gender mainstreaming in research and innovation projects moving forward.

2 - The Projects: An Overview

2.1 Introduction

Under this research granting window, six (6) Public Private Partnership (PPP) research projects were funded with the overarching goal of improving the productivity and competitiveness within the manufacturing sector through research based solutions. The projects were engaged in developing products with commercial potential, standardize and optimize production processes and build new market-led strategic partnerships for scaling and sustainability. Generally, the projects demonstrated impressive results and provided new value chains in the different product lines across the different products. Developing a gender equity rubric for projects presents unique challenges, particularly because most projects are time-bound and structured with predefined outcomes. Integrating gender considerations into such frameworks requires deliberate and context-sensitive planning. Firstly, gender must be explicitly postulated within the project design—clearly outlining which activities are influenced by gender dynamics, and how roles and responsibilities may differ across gender lines. Understanding who does what, and why, is foundational to equitable project implementation. Secondly, a detailed access and control profile is essential. This involves assessing who has access to resources, information, and opportunities within the project, and who ultimately controls them. Without this analysis, gender disparities may go unnoticed and unaddressed. Thirdly, the socio-cultural context in which a project operates must be thoroughly examined. Social norms, beliefs, power relations, and institutional practices can either enable or constrain gender equity. These contextual realities directly and indirectly influence project outcomes and must inform both design and execution. Finally, a robust program cycle analysis is critical. This means identifying key stages within the project lifecycle where gender considerations should be emphasized—from needs assessment and planning, through implementation, monitoring, and evaluation. Understanding when and where gender imperatives need to be integrated enhances the likelihood of achieving transformative and sustainable results.

Figure 4: Thematic Handles of Mainstreaming Gender in Projects



2.2 The Projects

The projects funded by the SGCI in this round encompassed a range of innovative initiatives aimed at enhancing various sectors within Uganda. Some of the projects focused on boosting production and productivity through science-based innovations. Other projects aimed at piloting the production, value-addition and distribution of affordable food products while others aimed at identifying standards and addressing gaps within emerging sectors. Each project was also structured to collaborate with a Private Sector Partner under a PPP arrangement. Each of the projects received a grant averaging about 108 Million Uganda shillings as shown below.

Table 1: Project Details under the SGCI-I Grants

	Principle Investigator	Project Pet name	Name of Project	Budget
1	Dr. Bosco Chemayek	"Wheat"	Increasing wheat production and productivity through science-based knowledge and innovations for a competitive wheat manufacturing value chain in Uganda	109,000,000
2	Dr. Geoffrey Ssepuuya	"Cricket"	Piloting the production and distribution of low-cost protein and micro-nutrient rich cricket feed from food waste in Kampala	108,990,000
3	Prof. Charles Muyanja	"Maiza Bran"	Identification of standards and gaps in the bakery and Confectionery Industries	109,000,000
4	Dr. Francis Omujal	"Shea Bitter"	Fractionation of Ugandan Shea butter into commercial Shea stearin and Shea Olein for industrial food and cosmetic application	109,000,000
5	Prof. Maud Kamatenesi Mugisha	"Essential Oils"	Essential Oil crops commercialization for sustainable public health products development and rational promotion	109,000,000
6	Dr Deborah Ruth Amulen	"Propolis"	Commercialization of Propolis Powder and Infused Tea bags for Improved Health and Income in Uganda	129,962,832

2.3 Summary of the Projects under review

1. Increasing Wheat Production and Productivity through Science-Based Knowledge and Innovations for a Competitive Wheat Manufacturing Value Chain in Uganda

AWARD NUMBER:
UNCST/SGCI-II/2021/006

This project aims to enhance wheat production and productivity in Uganda by leveraging science-based knowledge and innovative practices. By introducing advanced agricultural techniques, improving seed

quality, and optimizing farming practices, the project seeks to build a competitive wheat manufacturing value chain. This initiative focuses on empowering farmers with the necessary skills and tools to increase yield, improve crop quality, and ultimately support the growth of Uganda's wheat industry. This project was implemented between July 2021 and June 2023 and was hosted at the Buginyanya Zonal Agricultural Research and Development Institute.

Project Team

Name	Gender
Bosco Chemayek	M
Charles Baguma	M
Arthur Wasukira	M
Lawrence Owere	M
Elizabeth Khakasa	F
Robert Gidoi	M

2. Piloting the Production and Distribution of Low-Cost Protein and Micro-Nutrient Rich Cricket Feed from Food Waste in Kampala, Uganda.

AWARD NUMBER:
UNCST/ SGCI-II/2021/002

This project explored sustainable solutions for food waste management by converting food waste into low-cost, protein-rich cricket feed. By piloting the production and distribution of this nutrient-dense feed, the initiative aimed at addressing both food security and waste reduction in Kampala. The project also promoted the use of crickets as a viable protein source, contributing to nutritional improvements and economic opportunities for local communities. This project was implemented between May 2021 and April 2023. The host institution was Uganda Christian University (UCU). The project undertook food waste market size survey and developed a processing protocol that successfully converts selected food waste to cricket feed. The project also developed four recipes and also recruited students at both Bachelors and Master level. The project employed several youths to conduct project research and development activities such as field and laboratory rearing experiments, food waste collection and processing, and cost benefit analysis of food waste processing and cricket rearing using the developed feed (how many?)

Project Team:

Name	Gender
Dr. Geoffrey Ssepuuya	M
Mr. Patrick Mulondo	M
Ms. Elsie Nsiyona	F
Dr. Paul Nampala	M
Ms. Alowo Jane	F

3. Identification of Standards and Gaps in the Bakery and Confectionery Industries

AWARD NUMBER:
UNCST/SGCI-II/2021/001

Bakery and confectionery products have remained important in the economy of the country and consumption is increasing due to their taste, convenience and it has a big market share. To take advantage of the large market many small scale bakery and confectionery establishments have cropped up. However, there is a safety concern with respect to the products they produce. Some bakery and confectionery establishments have been implicated in food borne illnesses involving *Salmonella* spp, *Listeria monocytogenes*, *Staphylococcus aureus* and *Bacillus cereus*. In January 21, 2020 UNBS imposed bans on some Bakeries for not complying with the mandatory standards. These bans further exposed the limited application of food safety standards and guidelines with respect to food hygiene with the sector. There is a low level of awareness about standards and their application in the production of safe bakery and confectionery products. This may be attributed to the technical complexity of standards. A presentation on the aspects of standards and their formulation were dealt with.

4. Fractionation of Ugandan Shea Butter into Commercial Shea Stearin and Shea Olein for Industrial Food and Cosmetic Application

AWARD NUMBER:
UNCST/SGCI-II/2021/003

This project involved the fractionation of Ugandan Shea butter to produce Shea stearin and Shea olein, which are valuable for industrial food and cosmetic applications. By developing efficient fractionation techniques and creating high-quality products, the initiative aims to tap into lucrative markets, enhance the value of Shea butter, and provide economic benefits to local producers. The project also focused on ensuring sustainable sourcing and processing practices. The project run from May 2021 to April 2023 and was hosted at the Natural Chemotherapeutics Research Institute (NaCRI). The project aimed at determining the most appropriate and efficient fractionation technology for shea Butter; formulating high value food and cosmetic products from the Shea olein and shea stearin fractions and assessing the marketability of the formulated food and cosmetic products.

Project Team:

Name	Gender
Dr. Francis Omuja	M
Assoc Prof . JBL Okullo	M
Mr. Moses S. Agwaya (Researcher)	M
Ms. Irene Kirabo (Researcher / Quality control)	F
Ms. Sheila Natukunda (Researcher- sensory evaluation of products)	F

5. Essential Oil Crops Commercialization for Sustainable Public Health Products Development and Rational Promotion:
AWARD NUMBER: UNCST/SGCI -II 2021/005

This project seeks to commercialize essential oil crops in Uganda, focusing on their use in developing sustainable public health products. By promoting the cultivation and processing of essential oil crops, the initiative aimed at creating value-added products such as insect repellents, antiseptics, and aromatherapy oils. The project emphasized sustainable practices and aimed to improve public health while providing economic opportunities for farmers and small-scale producers. This project was implemented between September 2022 and January 2023 and was hosted at the Bishop Stuart University in Mbarara. The project aimed at the commercialization of aromatic crops; *Cymbopogon citratus* D.C Stapf (Lemon grass), *Salvia rosmarinus* Spenn (Rosemary) and *Eucalyptus citriodora* Hook (Lemon eucalyptus) and Lavender. The overall aim was to enhance establishment of Out-growers scheme and commercialization of essential oil based innovations and public health products through public-private partnerships (PPP). Farmers and processors were trained in product development at the Ethnobiology laboratory and in the formulating herbal teas from rosemary, lemon grass and other aromatic crops, herbal jelly and soap manufacturing and value addition to essential oil based floral water including its use in manufacturing Kombutchas, liquid detergents and cough syrups.

Project Team:

Name	Gender
Prof. Maud Kamatenesi Mugisha,	F
Prof. George William Bazirake	M
Dr. Patience Tugume	F
Mr. Waisindye Noah	M
Dr Savina Asiimwe	F

6. Commercialization of Propolis Powder and Infused Tea Bags for Improved Health and Income in Uganda
AWARD NUMBER: UNCST/SGCI -II 2021/004

Demand for propolis as a natural drug is increasing in the international markets. Uganda is one the country strategically positioned to tap into this market potential, however, whereas the country is estimated to generate between 325 to 870 tonnes annually generating between USD 1.3 to 3.5 million in annual revenue. Farmers are still struggling to generate the products and are not even aware of this enormous potential. This study sought to address this gap through commercialization of propolis powder and infused tea bag for increased income of locals. A total grant of 129, 962, 832 Ugandan shillings was granted to Makerere University RTC team to generate information on quality and safety of propolis, fabricate at least two equipment's, document and advance toward IP registration, create a mini cottage for propolis powder and create awareness within community of the opportunity.

Project Team:

Name	Gender
Dr Deborah Ruth Amulen	F
Dr. Patrick Vudriko	M
Mr Dickson Biryomumaisho	M
Ms Akong Rebecca	F

2.4 Private Sector Partners

Funded under the Science Granting Councils Initiative (SGCI), these projects were designed to drive socio-economic development and public health improvement through strategic partnerships with the private sector, facilitating commercialization, scaling, and capacity building. These Public Private Partnerships (PPPs) were aimed at enhancing socio-economic development by leveraging private sector expertise and resources. The projects focused on facilitating the commercialization of innovations, scaling successful solutions, and building capacity within the sector. Table 2 below provides a partnership profile of the funded projects.

Table 2: PPP Profile of Funded Projects

Principle Investigator	Industry Partner	Host Institution
Bosco Chemayek	Uganda Manufacturers Association	Buginyanya Zonal Agricultural Research and Development Institute
Maud Kamatenesi	Afri-Banana Products Limited	Bishop Stuart University (BSU),
Geoffrey Ssepunya	PKM Reliable Enterprises Limited	Uganda Christian University (UCU)
Francis Omuja	Nilo Beauty Products Limited	National Chemotherapeutic Laboratories
Deborah Ruth Amulen	Uganda National Beekeeping Development Organization (TUNADO)	Makerere University
Charles Muyanja	- Hot Loaf Bakery, - Jovay School of Cookery, - Nakku Food Safety Consults Limited	Makerere University



3 - Methodology

Introduction

Gender mainstreaming is a globally recognized strategy for achieving gender equality. Integrating a gender perspective into research projects ensures that both men's and women's needs are considered, fostering inclusive innovation and development. This framework guided the synthesis of gender mainstreaming within projects funded by research Councils, emphasizing the need for comprehensive gender analysis, stakeholder engagement, and institutional support.

Theoretical Approach

This review was informed by three theoretical models:

a. Gender and Development (GAD) Theory:

This theory emphasizes the importance of understanding the roles, needs, and contributions of both men and women in development processes (Moser, 1993). This is underlined by the nuanced social relations and power dynamics that create and sustain gender inequalities, even within scientific settings (Kabeer, 1994). The different gender roles within projects can shape the kind of outcomes and results that the project seeks to achieve.

b. Intersectionality Theory:

This theory highlights how various social identities intersect to create unique experiences of oppression and privilege (Crenshaw, 1989). In this manner, gender mainstreaming within research projects does not treat women or men as homogeneous groups but considers diversity within these groups. This is reflected in the type of role they play in the project, the tasks they undertake and the contribution they bring to delivering the project outcomes.

c. Institutional Theory:

This examines how institutions, policies, and practices influence the implementation of gender mainstreaming (March & Olsen, 1989). All these projects were hosted in particular institutions which had attendant gender imperatives that implicitly shape what they can or cannot do. North (1990) stresses that institutional support is important for capacity building for sustainable gender integration. Strengthening the capacity of research institutions is key for the sustainable integration of gender perspectives within projects.

Data Collection

a. Case studies and stories of change

Under the case studies approach, the study aimed at developing insights into the current state of gender equality and inclusivity and to identify potential strategies for addressing gaps and challenges. This helped provide valuable insights into how to design effective research funding programs in promoting gender and inclusivity in research system strengthening in Uganda.

b. Desk Review

This approach involved collecting and analyzing data from multiple sources such as the project documents, reports, and interviews with principal investigators of the funded projects to gain a comprehensive understanding of the case. The Review team reviewed project proposals, reports, publications, and other relevant documents relating to the project in order to extract gender-related information and indicators. This review also looked at gender mainstreaming in science, technology, and innovation (STI), as well as relevant policies, guidelines, and frameworks in Uganda. This review provided a theoretical foundation that informed the development of the gender synthesis framework and the development of the questionnaires.

c. Key Informant Interviews

The review conducted semi-structured interviews with project coordinators, researchers, stakeholders, and beneficiaries to gather insights into gender considerations, challenges, and successes.

d. Focus Group Discussions (FGDs)

These were organized with project participants, including women, men, and marginalized groups, to explore their experiences, perceptions, and recommendations regarding gender dynamics within the projects

e. Field/Site Visits

Field or site visits were undertaken to obtain firsthand observations and insights into how projects are executed on the ground. During these visits, evaluation team engaged directly with project staff, beneficiaries, and other stakeholders to: Observe the practical application of gender mainstreaming strategies; Validate information provided in reports



and documents and to provide a deeper understanding of the project's context, outcomes, and impact.

Data Analysis

Data analysis for this survey was undertaken using thematic analysis of qualitative data from interviews, focus groups, and observations to identify recurring themes, insights, and narratives related to gender mainstreaming. The analysis helped to measure the effectiveness of gender mainstreaming strategies, assess their impact on project outcomes, and identify areas for improvement.

Limitations of the Review

The review encountered several challenges ranging from limited or incomplete data which restricted the depth and breadth of the analysis. The historical data collected from the projects was not gender-disaggregated, making it difficult to track the impact of the project on wider societal outcomes. Findings from the reviewed projects might not be applicable to other contexts or regions. This is because the surveyed projects were implemented within certain contexts and had specific objectives.

4 - Gender

Integration in the Project Cycle

4.1 Introduction

Gender integration in the research project cycle is a critical approach that ensures gender perspectives are systematically incorporated at every stage of the project, from conception to completion. During the planning phase, a comprehensive gender analysis is conducted to identify and address gender-specific needs, roles, and impacts, ensuring that project goals and methodologies are inclusive and equitable. In the implementation phase, strategies such as participatory approaches and gender-responsive interventions are employed to actively engage both men and women, fostering equal opportunities and benefits. Monitoring and evaluation processes should be designed with gender-sensitive indicators to assess the project's impact on different genders, enabling continuous learning and adaptation. Institutional support, including gender sensitization and capacity building for the project team, is vital to maintain focus on gender equality. By embedding gender considerations throughout the research project cycle, projects can effectively contribute to reducing gender disparities and promoting inclusive development outcomes. The following section is an a review of the state of gender integration across the projects supported under SGCI I.

4.1 Gender Integration in Project Design

Analyzing the project objectives reveals varying degrees of explicit gender integration. While some projects explicitly address gender disparities in access to and benefits from commercialized products, others may benefit from a more nuanced gender lens. It is crucial to ensure that gender considerations are embedded in project planning and execution.

The Shea Butter project notably stated that gender was considered only to a small extent:

“Yes to a small extent but the design of the project was not based on gender but the general purpose of the products to the public” - Shea Butter Project

The Wheat Project was more intentional in its approach:

“Gender was a major consideration in our project – especially in the Participatory Variety Selection (PVS) stage. We approached gender from a breeding perspective, taking note of the peculiar roles of men and women in the wheat value chain and the context prevailing in the wheat-growing communities – Wheat Project

In contrast, the Cricket project showed a more comprehensive approach:

“The PI of the project was motivated by the desire to improve the malnutrition rates of children in his home area... Most of the homesteads were headed by women and youth whose meager incomes could not afford to take care of children.” - Cricket Project

4.1.1 Methods of Gender Integration in Project Design

Methods of gender integration in project design encompass a range of strategies and practices aimed at ensuring that gender considerations are embedded at every stage of the project lifecycle. One method is undertaking a comprehensive gender analysis by examining the different roles, needs, and impacts on men and women within the project's context. Similarly, engaging both men and women in participatory planning processes to gather diverse perspectives and foster ownership of the project outcomes. This can facilitate gender-responsive and the training of staff on gender issues to further support the mainstreaming of gender throughout the project. In this study, the different projects integrated gender differently in their project design. The Essential Oils project adopted an inclusive approach, ensuring the participation of different categories of people, while the Maize Bran Bakery project focused on creating products that benefit all gender groups. The Propolis initiative was sensitive to the cultural, social, economic, and political factors that influence gender roles, ensuring a holistic approach to inclusion. In the Cricket project, the focus was on addressing malnutrition and empowering women and youth, highlighting both nutritional and gender empowerment goals. The Shea Butter initiative incorporated gender considerations into leadership design, promoting equity in decision-making roles. Meanwhile, the Wheat project emphasized the inclusion of both men and women in the process of variety selection, ensuring that the preferences and needs of all



genders are considered in agricultural innovation. Together, these approaches illustrate a nuanced understanding of gender dynamics, tailored to the specific goals and contexts of each project. Table 3 summarizes these findings.

Table 3: Project Design and Gender Approach

Project	Approach to integration of Gender
Essential Oils:	Inclusive approach to different categories of people
Maize Bran Bakery:	Focus on products beneficial to all gender groups
Propolis:	Consideration of cultural, social, economic, and political factors
Cricket:	Addressing malnutrition and empowering women and youth
Shea Butter	Gender consideration in leadership design
Wheat:	Inclusion of men and women in variety selection

The Cricket project stood out for its targeted approach:

“He then came up with an idea to raise awareness and teach people (especially women and youth, how to rear crickets, widen their income base, get a cheaper variety sources of proteins to feed children for proper brain development.” - Cricket Project

Several projects noted that gender aspects were not emphasized (in the project design) from the beginning, leading to limited consideration of gender throughout the project. In otherwords, gender was not a primary requirement.

“The project did not take gender aspects into serious consideration because it was not emphasized at the beginning. The project has no data /reports on gender disaggregation within the project. If it was a requirement from the beginning, or if they had been informed, they would have considered and fully incorporated gender aspects on all project activities.”

- Wheat Project

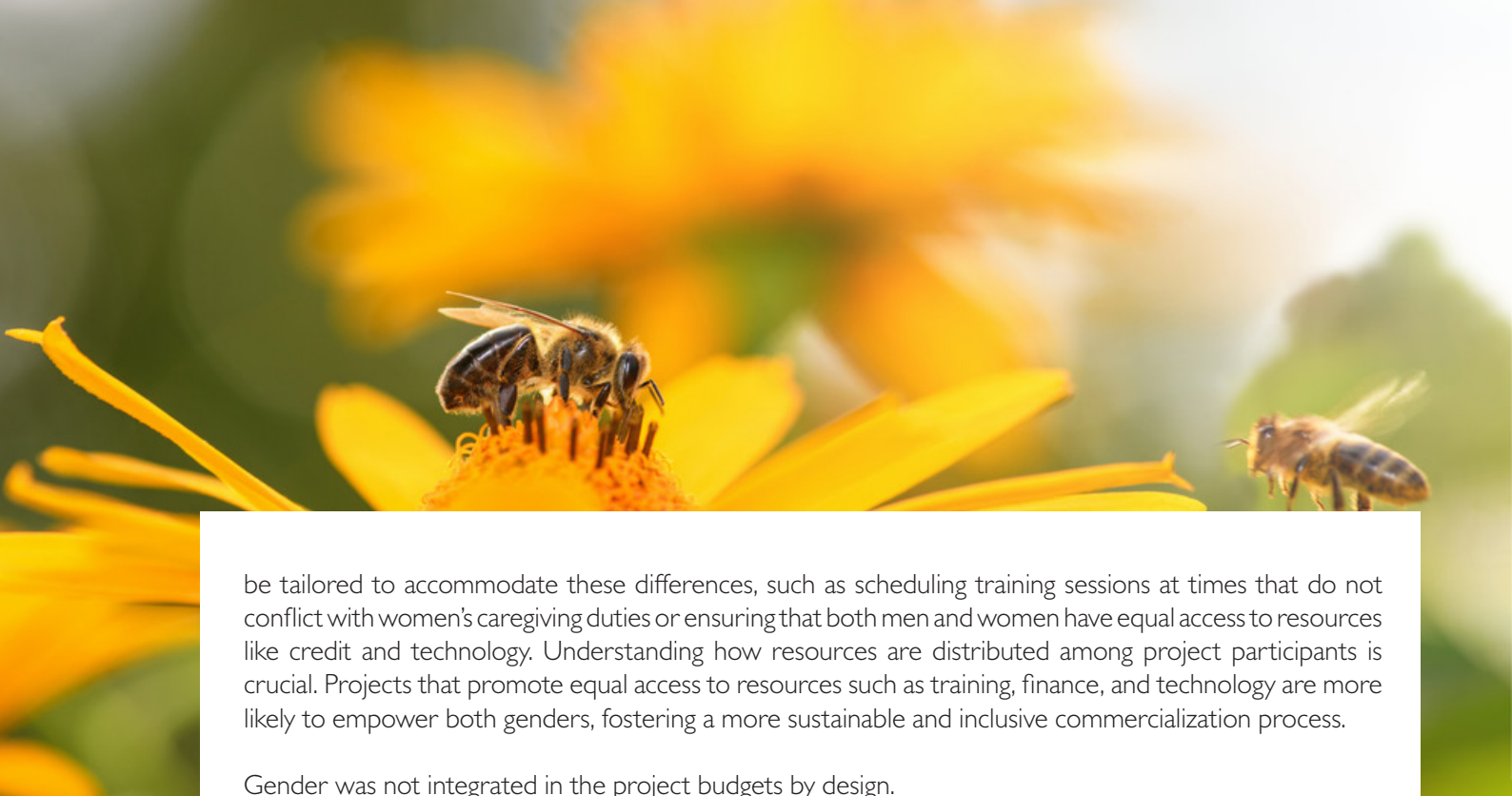
For some projects, gender was not integrated in the project budgets by design.

The budget template that we receive does not explicitly ask the applicant to integrate gender in its activities. These activities are therefore never budgeted for – Shea Oil Project

This highlights the critical importance of emphasizing gender integration from the initial stages of project conceptualization and proposal development.

4.1.2 Design of Activities to Meet Specific Needs of Women and Men

Designing activities to meet the specific needs of women and men involves a careful and inclusive approach that recognizes and addresses gender-specific challenges and opportunities. Activities must



be tailored to accommodate these differences, such as scheduling training sessions at times that do not conflict with women’s caregiving duties or ensuring that both men and women have equal access to resources like credit and technology. Understanding how resources are distributed among project participants is crucial. Projects that promote equal access to resources such as training, finance, and technology are more likely to empower both genders, fostering a more sustainable and inclusive commercialization process.

Gender was not integrated in the project budgets by design.

Wheat is generally male dominated. The crop doesn’t need manual weeding and is more of a cash crop. Planting is done by oxen (often belonging to men) while weeding is done using herbicides (purchased by men). Women come in during harvest time for winnowing while men do the “beating” of the wheat. - Wheat Project

Engaging both genders in the planning and decision-making processes ensures their voices and needs are reflected in the project design. In this study, all projects claimed to design activities that benefit both men and women, but the approach varied. As shown in Table 2, various projects had implemented distinct activities to address gender-specific needs, tailoring their efforts to meet the unique requirements of different groups. The Essential Oils project prioritized medicinal benefits that cater to all genders, ensuring inclusive health outcomes. The Maize Bran Bakery initiative emphasized the creation of employment opportunities and access to products, which directly benefits both men and women. In the Wheat project, the focus is on developing high-yielding varieties that are beneficial to both genders, ensuring equitable access to agricultural advancements. The Cricket project specifically targeted women and youth, addressing malnutrition and empowering these vulnerable groups. Similarly, the Shea Butter project focused on delivering medicinal benefits to all categories of people, ensuring that gender was considered in the distribution of health-related resources. Collectively, these activities showcase a commitment to meeting gender-specific needs through targeted interventions across different sectors.

Table 4: Project Design and Gender Approach

Project	Activities to meet Gender Specific Needs
Essential Oils:	Focus on medicinal benefits for all
Maize Bran Bakery:	Benefits in terms of employment and access to products
Wheat	Development of high-yielding varieties beneficial to both genders
Cricket	Focus on Women and youth, addressing malnutrition
Shea Butter	Medicinal benefits for all categories of people

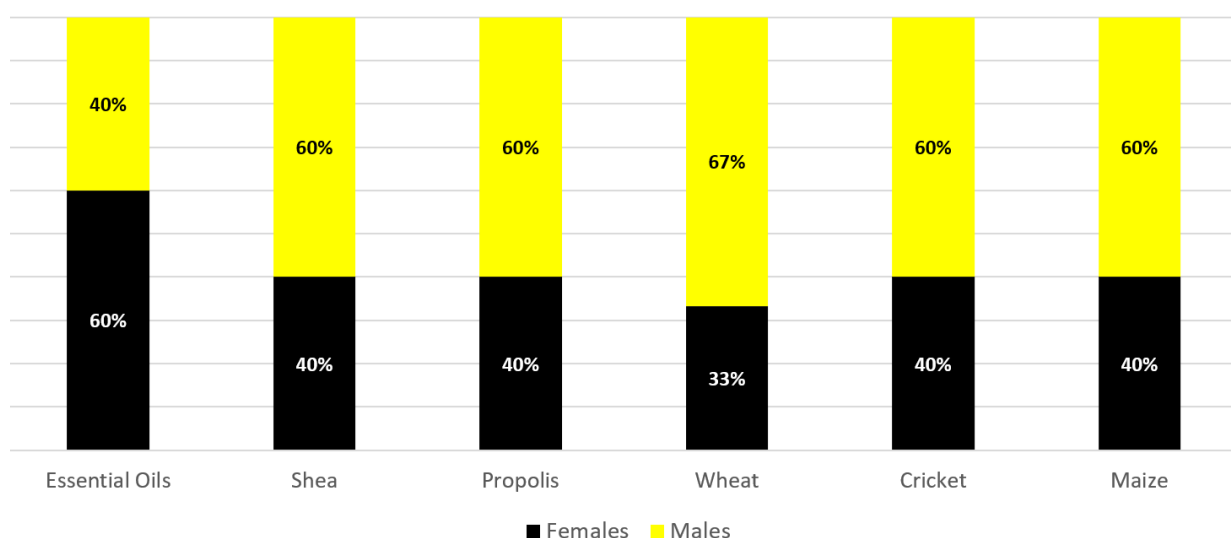
The Wheat project’s approach is noteworthy:

“The project endeavored to develop the best wheat variety that could suit the interests of both men and women in their different lines of interest” - Wheat Project

4.2 Gender Balance in Project Leadership

Gender balance in project leadership is vital for fostering diverse perspectives and equitable decision-making. When leadership teams are gender-balanced, they are more likely to consider and address the needs and interests of all stakeholders, resulting in more inclusive and effective project outcomes. Gender balance also helps to challenge and change traditional power dynamics, promoting a culture of equality and respect. By ensuring that both men and women are represented in leadership roles, projects can harness a broader range of skills, experiences, and viewpoints, ultimately leading to better problem-solving and innovation.

Figure 5: Gender in Project Leadership: A Snapshot



The gender balance in project leadership varied, with the Essential Oils project being the only one with more women than men in leadership roles. The Wheat project had the lowest proportion of women:

“The project was led by 4 males and 2 females. It was difficult to get females experienced in this area and willing to work from that area” - Wheat Project

This highlights the challenge of achieving gender balance in sectors where women are traditionally under-represented. It is also critical to think about that underlying question: **“Why is inclusion of women in projects low?”**

4.2.1 Participation of Women/Girls in Project Activities

The participation of women and girls in project activities is crucial for achieving inclusive and sustainable development outcomes. When women and girls actively engage in project planning, implementation, and evaluation, their unique perspectives and needs are better addressed, leading to more relevant and effective interventions. Research has shown that projects with high female

participation often experience improved performance and greater community acceptance (World Bank, 2018). Moreover, involving women and girls fosters their empowerment, enhances their skills and capacities, and promotes gender equality within the community (UN Women, 2020). Ensuring their participation not only contributes to the success of the project but also helps to break down barriers to women’s full involvement in social, economic, and political spheres. By prioritizing the inclusion of women and girls in all project activities, we can create more equitable and resilient communities. However, the inclusion of men or women at specific points of the value chain is also subject to specific nuance.

“Men are interested in the yield of wheat while women are more focused on whether the quality of the wheat” - Wheat Project

Assessing the gender balance among project participants and leadership is essential. This includes examining the composition of project teams, boards, and decision-making bodies. Projects that demonstrate a commitment to gender diversity are more likely to contribute to equitable outcomes. In this survey, all projects reported women’s participation, but the nature of participation varied based on the project focus.

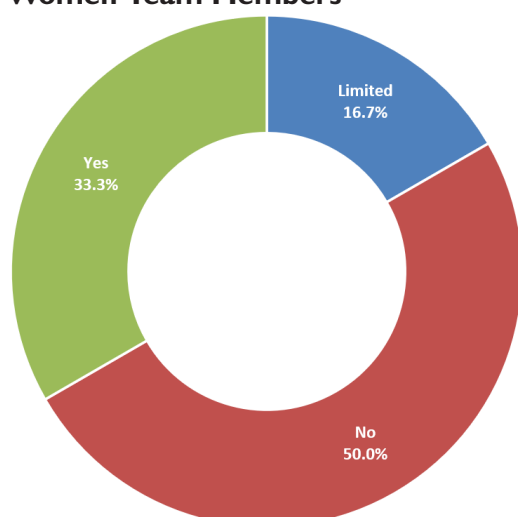
Table 5: Participation of Women / Girls in selected projects

Project	Participation of Women/ Girls
Essential Oils:	"The women/girls are involved in planting, weeding and harvesting. They are also involved in marketing of essential oils; they run and manage shops for these oils."
Maize Bran Bakery:	"They have participated in project training activities and have gained knowledge and skills in all aspects of the bread and cake standards."
Cricket	"The women/girls have become serious cricket farmers and supply crickets to the project."
Wheat	"The women have participated in the selection of the wheat variety best suited for their activities like production of bread, mandazi etc."

The diversity of roles demonstrates the potential for women's involvement across various aspects of agricultural and food production projects.

4.2.2 Access to Project Resources

Access to project resources is a fundamental aspect of ensuring the success and sustainability of development initiatives. Equitable access to resources such as funding, training, information, and technology empowers all stakeholders, particularly marginalized groups, to fully participate and benefit from the project. When resources are distributed fairly, it helps to bridge gaps between different community members, fostering inclusivity and enhancing the overall impact of the project. Lack of access to these resources can perpetuate existing inequalities and hinder the achievement of project goals. Therefore, it is crucial to implement strategies that ensure transparent and fair allocation of resources, enabling everyone, especially those traditionally excluded, to contribute to and benefit from the project. This approach not only promotes social equity but also maximizes the project's effectiveness and reach.

Figure 6: Access to Project Resources for Women Team Members


The Cricket project stood out for providing direct financial benefits:

"Yes, the cricket farmers supplied crickets to the project and were paid. The girls also got money for data collection from the project" - Cricket Project

However, institutional policies sometimes limited access. Achieving meaningful gender integration in research projects requires more than project-level interventions—it demands deliberate, institution-wide commitment and structural support. Institutions play a critical role in setting the tone, priorities, and systems that shape how gender is addressed throughout the research lifecycle. This includes developing clear gender policies, allocating dedicated resources, building internal capacity, and embedding gender considerations into research approval, monitoring, and evaluation processes. The six projects were implemented within institutions that could have influenced gender-responsive practices. It is imperative that institutions which play host to research projects have a necessary gender framework to sustainably manage and execute projects.

"No, because the institutional policy does not allow this" - Shea Butter Project

This highlights the need for institutional-level changes to support gender integration in research projects.

4.3 Gender Integration in Project Formulation

Gender integration in project formulation is a critical process that ensures gender perspectives are considered from the very beginning of project development. This involves conducting a gender



analysis to understand the different needs, roles, and impacts on men and women within the project context. The findings from this analysis guide the formulation of gender-sensitive goals, objectives, and activities that address specific gender disparities and promote equality. Including gender-responsive indicators in the project's monitoring and evaluation framework allows for the tracking of progress toward gender equality outcomes. Moreover, engaging both men and women in participatory planning processes ensures their voices and concerns are reflected in the project design. By integrating gender considerations at the formulation stage, projects are better equipped to create inclusive, effective, and sustainable solutions that benefit all members of the community.

“Gender as something that we met as we went along. Considerations were made in some phases of the project and not others. For instance, gender was considered in data collection but was not an issue during the laboratory work” – Cricket Project

For the Shea Project, the issue was slightly different.

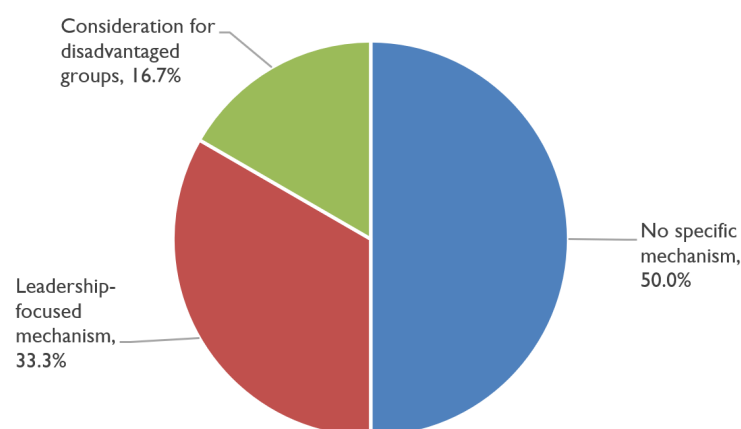
We were so taken up in the technical aspects of the project. Gender was an afterthought” – Shea Project

4.3.1 Mechanisms for Gender Representation

Mechanisms for gender representation in projects are vital to ensure equitable participation and consideration of both women's and men's perspectives throughout the project lifecycle.

Establishing gender quotas or targets for leadership and decision-making roles helps ensure balanced representation. Conducting gender-responsive consultations and stakeholder engagement activities facilitates the inclusion of diverse perspectives, addressing the needs and priorities of both women and men. Regular gender training and capacity-building for project staff and stakeholders enhances their ability to implement gender-responsive approaches. Additionally, establishing accessible feedback and grievance mechanisms allows for continuous improvement and accountability in promoting gender representation. These mechanisms collectively create an inclusive environment that actively pursues and sustains gender equality.

Figure 7: Mechanisms for Gender-Balanced Representation



Only half of the projects reported having mechanisms to ensure gender-balanced representation:

Different projects have implemented targeted activities to ensure the participation of women and girls. The Essential Oils project set a goal of 60% women in leadership positions, emphasizing gender equity in decision-making roles. The Propolis initiative ensured that at least 40% of leadership positions were held by women, promoting female representation in project governance. In the Cricket project, special considerations were given to disadvantaged groups, including women and youth, ensuring that they have access to opportunities and resources. These efforts demonstrate a commitment to empowering women and girls through leadership and inclusion, fostering gender equality across different sectors.

Table 6: Participation of Women / Girls in selected projects

Project	Participation of Women/ Girls
Essential Oils	60% women target in leadership
Propolis	40% women in leadership
Cricket	Considerations given to disadvantaged people

The absence of systematic mechanisms in half the projects indicates a need for more structured approaches to ensuring gender balance.

4.3.2 Gender-Specific Challenges in Project Formulation

Gender-specific challenges in project formulation encompass a range of issues that can hinder the equitable inclusion and consideration of both women's and men's needs and perspectives. One significant challenge is the lack of gender-disaggregated data, which is essential for understanding the distinct roles, responsibilities, and constraints faced by different genders. Cultural and social norms can also pose challenges, as they may limit women's participation in decision-making processes or restrict their access to project benefits. Addressing these challenges requires deliberate strategies, such as capacity-building for project teams on gender issues, ensuring gender-balanced participation in planning stages, and securing commitment from all stakeholders to prioritize gender equality from the outset. In this study, most projects reported no gender-specific challenges during formulation, with the exception of the Propolis project:

“During project formulation, the project team did not take into account the bureaucracy and politics in public institutions. They only focused on the scientific aspects of the project, and this caused stand offs from the university administration.” - Propolis Project

This highlights the need to consider institutional and structural challenges that hinder the seamless integration of gender in project implementation efforts.

4.4 Tracking Gender Imperatives in Project Implementation

Tracking gender imperatives in a project is crucial for ensuring that gender equality goals are met and maintained throughout the project lifecycle. Engaging stakeholders in feedback processes, including women and men from the community, provides valuable insights into the effectiveness of gender integration and identifies any emerging issues. Regular gender audits and evaluations can assess compliance with gender equality commitments and the overall impact on gender dynamics within the project context. By systematically tracking gender imperatives, projects can make informed decisions to enhance gender equity and ensure that both women and men benefit equitably from project interventions. **None of the projects developed gender-specific targets or performance indicators.** This represents a significant gap in gender mainstreaming across all projects.

4.4.1 Risk Mitigation in Project Implementation

Risk mitigation in project implementation, viewed through a gender lens, involves identifying and addressing gender-specific risks that may hinder project success and equitable outcomes. This begins with a comprehensive gender analysis to pinpoint potential risks faced by women and men, such as unequal access to resources, differing levels of participation, and potential impacts on gender relations. Regular gender-sensitive monitoring and evaluation can help detect emerging risks and allow for timely interventions. Engaging both women and men in risk assessment and management processes ensures diverse perspectives are considered, leading to more robust and inclusive risk mitigation strategies. By integrating a gender lens into risk mitigation efforts, projects can enhance resilience, promote gender equality, and ensure more

sustainable and effective outcomes. In this study, most projects did not explicitly consider adverse impacts or risks affecting equal participation. The Wheat project's approach is worth noting:

“The project endeavored to develop the best wheat variety that could suit the interests of both men and women in their different lines of interest” - Wheat Project

However, this falls short of a comprehensive risk assessment. While risk mitigation is an essential component of project implementation, its effectiveness is limited without a comprehensive risk assessment conducted at the planning stage. Without fully identifying and analyzing potential risks—especially those related to gender and inclusivity—projects may overlook critical vulnerabilities, leading to unintended consequences and missed opportunities for course correction. Therefore, moving beyond reactive mitigation toward proactive, inclusive, and systematic risk assessment is crucial for enhancing project resilience, accountability, and impact.

4.4.2 Resource Allocation for Gender Equality Activities

Resource allocation for gender equality in project activities is a critical step in ensuring that both women and men benefit equitably from development initiatives. This involves dedicating specific funds and resources to activities that address gender disparities and promote equality. Gender-responsive budgeting ensures that financial resources are allocated to support gender-sensitive programs, such as women's leadership training, entrepreneurship opportunities for women, and initiatives aimed at reducing gender-based violence. By intentionally allocating resources to promote gender equality, projects can create an enabling environment where both women and men can thrive, ultimately leading to more inclusive and sustainable development outcomes. In this study, none of the projects allocated specific financial resources for gender equality and women's empowerment activities. The common reason was the lack of budget allocation from the beginning:

“No allocation of resources was considered for any gender group because it was not budgeted for at the beginning and budget line items are fixed” - Shea Butter Project

This highlights the need for gender considerations in the initial budgeting process.

4.4.3 Equal Participation in Project Activities

Equitable gender participation in project activities is essential for fostering inclusive development and sustainable outcomes. Ensuring equal involvement of women and men in decision-making processes, leadership roles, and project implementation not only enhances the effectiveness of interventions but also promotes social equity and empowerment. By implementing strategies such as gender-responsive recruitment, training, and capacity-building initiatives, projects can create environments where both women and men contribute meaningfully and have equal access to opportunities and resources (OECD, 2021). In this study, different projects implemented different approaches to ensuring equal participation. Different projects had implemented targeted activities to promote gender inclusion and participation. The Essential Oils, Propolis, Maize Bran Bakery, and Shea Butter projects had all reported efforts to ensure the participation of both genders, striving for balanced involvement in their initiatives. The Wheat project took a more deliberate approach by promoting open participation, encouraging both men and women to engage in the project actively. In contrast, the Cricket project specifically targeted women, particularly focusing on their empowerment and addressing malnutrition issues that affect them disproportionately. Collectively, these projects demonstrated a commitment to fostering gender inclusion, either through equal participation efforts or targeted empowerment, based on the needs and goals of each initiative.

Table 7: Participation in Project Activities

Project	Participation in Project Activities
Essential Oils:	Reported efforts to ensure participation of both genders
Propolis	Reported efforts to ensure participation of both genders
Cricket	Mostly targeted women
Maize Bran Bakery,	Reported efforts to ensure participation of both genders
Shea Butter	Reported efforts to ensure participation of both genders
Wheat	Deliberate effort, open participation

The Wheat project's approach raises questions about the effectiveness of non-targeted strategies:

“There was no deliberate effort to ensure equal participation of both men and women. whoever showed interest and willingness to join, was incorporated in the project activities” - Wheat Project

4.4.4 Consultation with Women's Groups

All projects reported some level of consultation with women or mixed gender groups, but the depth and specificity of these consultations varied as shown in Table 3.

Table 8: Participation of Women / Girls in selected projects

Project	Participation of Women/ Girls
Essential Oils:	Consulted various women's groups and associations
Maize Bran Bakery:	Consulted women in bakery business
Cricket:	Consulted women, youth, and cricket farmers
Wheat:	Consulted mixed farmer groups, no explicit women's group
Shea Butter	General consultations, not gender-specific

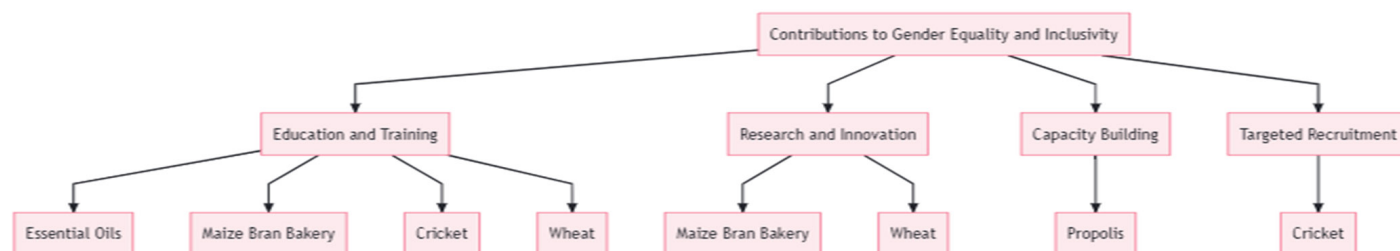
The diversity of roles demonstrates the potential for women's involvement across various aspects of agricultural and food production projects.

The Cricket project's approach was particularly comprehensive:

“The project consulted women, youth, and cricket farmers in that area. The PI interacted with women on the children feeding habits and priorities available to curb the high rates of malnutrition in the area.” - Cricket Project

4.4.5 Gender Integration in Project Implementation

The nexus between project implementation and gender mainstreaming has become a strong theme for effectively calibrating the delivery of key project outcomes for both large, medium and small scale projects. This is shaped by the notion that in order to effectively implement project activities, it is critical that women and men equally access project resources and services, equally participate in project activities and decision-making processes, and equally benefit from training or other capacity building activities offered by the project. As shown in Figure 8, all projects reported contributing to gender equality and inclusivity, but the approaches varied:

Figure 8: Modalities of Gender Equality and Inclusivity in Project Implementation

The Wheat project's approach combined research and education:

“Through Research and Innovation, the project had diverse teams that brought different and experiences and expertise to problem-solving, leading to more innovative solutions in the wheat value chain. ... Education and Outreach: The project incorporated educational components, such as workshops, outreach programs, and educational trainings and inspired boys and girls to pursue careers in wheat production” - Wheat Project

4.4.6 Gender-Specific Challenges in Implementation

Gender-specific challenges during project implementation often manifest in various forms that impact the equitable realization of project goals. Gender-based discrimination and stereotypes within project settings can also hinder women's ability to effectively engage in decision-making processes and leadership roles. Moreover, the burden of unpaid care work and household responsibilities often falls disproportionately on women, limiting their time and energy to participate fully in project activities. Addressing these challenges requires proactive measures, including the implementation of gender-sensitive policies and practices, promoting inclusive participation and leadership opportunities for women, and providing tailored support to mitigate the barriers they face. By recognizing and addressing these gender-specific challenges during implementation, projects can foster more inclusive and sustainable outcomes that benefit all members of the community. Different projects encountered unique challenges in their efforts to ensure the participation of women and girls. In the Propolis project, one of the key challenges was related to the Principal Investigator (PI) being a young career woman, which could have influenced perceptions of leadership or access to resources. The Maize Bran Bakery project also faced low interest from men in the bakery business, highlighting a gender imbalance in participation that may reflect broader social norms or preferences. In the Shea Butter project, delays in output delivery from female team members have posed challenges, potentially due to competing responsibilities or resource constraints. These experiences underscore the need for adaptive strategies to overcome gender-specific barriers and enhance participation in each context.

Table 9: Gender-specific challenges during Project Implementation

Project	Participation of Women/ Girls
Propolis	Challenges related to the PI being a young career woman
Maize Bran Bakery:	Low interest from men in bakery business
Shea Butter	Delays in output delivery from female team members

The Shea Butter project's challenge highlights broader societal issues:

“The females on the project team had delays in delivery of their outputs due to socio economic demands and some of their activities were not finalized on time” - Shea Butter Project

4.5 Gender-Responsive Capacity Building

Gender-responsive capacity building is essential for fostering inclusive and effective development initiatives that address the diverse needs and capabilities of both women and men. This approach involves designing

training and skill-building programs that are tailored to the specific contexts and challenges faced by different genders. By integrating gender analysis into capacity-building initiatives, organizations can identify and address barriers that hinder women's full participation and leadership in project activities. Moreover, gender-responsive capacity building goes beyond traditional skill development by promoting awareness of gender norms, stereotypes, and biases that affect roles and responsibilities within communities. By empowering individuals with the knowledge and skills to challenge and change these dynamics, gender-responsive capacity building contributes to sustainable development and promotes gender equality at all levels of project implementation. In this project, **none of the projects reported undertaking specific capacity building activities to ensure gender-responsive implementation or continued gender integration after the project ends.** This represents another significant gap in sustainable gender mainstreaming efforts.

The Shea Butter project's made some capacity building inroads with non-traditional vulnerable groups
"The project trained refugees to use shea for cosmetics. Three trainings were undertaken in Bidi Bidi Refugee Camp while one was undertaken in Moyo"

4.6 Gender Monitoring and Evaluation

Project monitoring and evaluation ensures that women and men equally participate in monitoring and evaluation activities and decision-making processes and data is collected on women and men so that gender impacts are tracked to assess if the project equally benefits women and men.

4.6.1 Gender Analysis and Establishment of a Baseline

Establishing a baseline, which includes collecting gender-disaggregated data and indicators at the outset of a project, serves as a benchmark against which progress

can be measured. It helps identify existing gender gaps and inequalities that need to be addressed and provides a basis for monitoring changes over time. This data-driven approach enables projects to track the impact of interventions on gender equality outcomes and adjust strategies as necessary to ensure equitable benefits for women and men. In this review, none of the projects conducted a comprehensive gender analysis or established a baseline for gender issues. This represents a significant missed opportunity for understanding and addressing gender dynamics within the project contexts.

4.6.2 Monitoring of Gender Inequalities

None of the projects actively monitored gender inequalities or incorporated remedial actions during implementation. This lack of ongoing gender monitoring is a critical gap in the projects' approaches to gender integration.

4.6.3 Reporting on Gender Mainstreaming

A consistent observation across all the projects reviewed is the absence of gender-specific reporting, which points to a deeper, systemic gap in the integration of a gender consciousness within project monitoring and evaluation frameworks. Despite varying levels of awareness and informal efforts to address gender dynamics during implementation, the lack of structured documentation and gender-disaggregated data significantly limits the ability to track progress, identify challenges, or demonstrate impact from a gender perspective. **None of the projects regularly reported on gender mainstreaming or included gender as a specific criterion in mid-term reviews, assessments, or audits.** This uniform lack of gender-specific reporting across all projects indicates a systemic gap in gender integration practices.

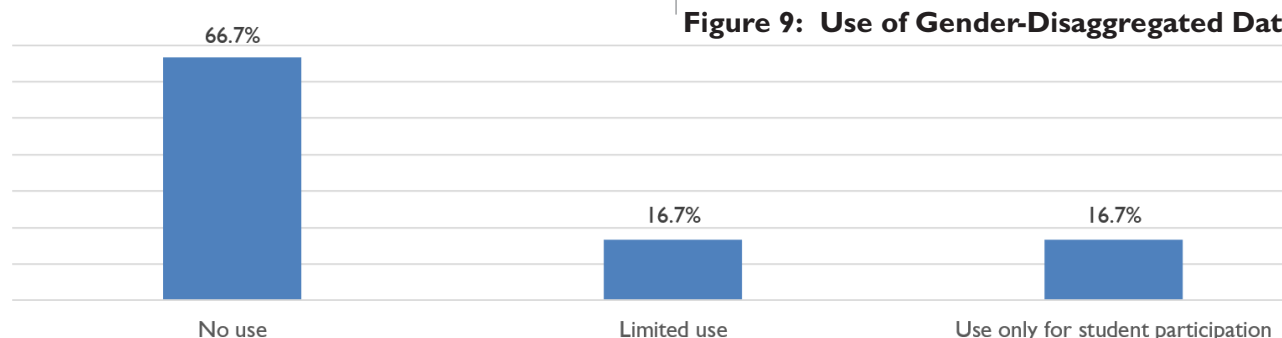


Figure 9: Use of Gender-Disaggregated Data

4.6.4 Participation in Monitoring and Evaluation Processes

All six projects provided no response to how they ensured women and men were able to participate in monitoring and/or evaluation processes. This silence on gender-inclusive M&E practices is concerning and suggests a lack of consideration for gender perspectives in project evaluation opportunities for learning.

4.6.5 Disaggregation of Project Participant Data

Most projects did not use gender-disaggregated data to identify needs and impacts. The Propolis project reported some use, while the Wheat project only had such data for student participation. This lack of gender-disaggregated data collection and analysis is a significant barrier to understanding and addressing gender-specific needs and impacts.

Table 10: Project Impact

Project	Stakeholders
Essential Oils Cricket Shea Butter Wheat	Farmers
Essential Oils Cricket Maize Bran Bakery Wheat	Processors
Essential Oils Shea butter Wheat	Buyers/Consumers
Maize Bran Bakery Wheat	Private Sector
Cricket	Government agencies

4.7 Project Impact on Livelihoods and Economic Empowerment

An analysis of the impact of commercialization projects on livelihoods reveals both positive and negative effects. Positive impacts include enhanced income and employment opportunities for women, particularly in sectors traditionally dominated by men. However, challenges such as the persistence of gender stereotypes in certain industries may hinder broader inclusivity.

The diversity of stakeholders reflects the broad impact of these projects across various sectors of the economy.

4.7.1 Measures for Diverse and Inclusive Participation

Most projects did not report specific measures to ensure diverse and inclusive participation. The Cricket project stood out with detailed future:

“Gender is now emphasized in all aspects of project activities going forward. The data collection tools developed are gender sensitive and, the project will produce gender -disaggregated data. The project has recruited a female member of the project team to guide and advise on all gender aspects within the project. The gender focal point has been established and all gender aspects will be taken care of.” - Cricket Project

This proactive approach could serve as a model for other projects to enhance their gender integration efforts.

4.7.2 Specific Impacts on Women

The impact of projects on participants' profitability can be substantial, particularly when initiatives are designed with a focus on capacity building, resource accessibility, and market linkage. Projects that provide training and skills development enable participants to enhance their productivity and efficiency, leading to higher-quality outputs and increased competitiveness. Access to improved technologies and innovations further boosts productivity, reducing costs and increasing yields. By facilitating connections to broader markets and supply chains, participants can secure better prices and expand their customer base. Additionally, projects that foster strong networks and partnerships create opportunities for collaboration and resource sharing, amplifying individual gains. Comprehensive support, including financial literacy and business management training, equips participants with the knowledge and tools to manage their operations more effectively, ultimately leading to increased profitability and economic sustainability.

The Cricket project was informed by such a question:

“How do you enable people do this profitably and widen their income base?” - Cricket Project

The reported impacts on women varied. Different projects experienced varying levels of impact. The Propolis, Essential Oils, Shea Butter, and Cricket projects all reported positive outcomes, particularly in income generation and skill development, contributing to economic empowerment and capacity building.

for participants. These projects successfully implemented activities that directly benefited the livelihoods and abilities of those involved. In contrast, the Maize Bran Bakery and Wheat projects had not yet realized their full impacts, as they are still in the commercialization phase. These projects, once commercialized, are expected to generate similar positive outcomes in terms of income and skills, but their full potential is yet to be unlocked.

Table 11: Project Impact

Project	Impacts
Propolis	Reported positive impacts including income generation and skill development
Essential Oils	Reported positive impacts including income generation and skill development
Maize Bran Bakery:	Impacts not yet realized due to pending commercialization
Shea Butter	Reported positive impacts including income generation and skill development
Cricket	Reported positive impacts including income generation and skill development
Wheat	Impacts not yet realized due to pending commercialization

The Cricket project reported particularly positive impacts:

“Yes, the project created awareness about the profitability of cricket farming and most women have joined the business. Women have earned income from crickets and improved their livelihoods, feeding of children on proteins has increased in the area” - Cricket Project

4.7.3 Contribution to Income Generation, Resource Access, or Asset Ownership

Most of the projects reported some contribution to income generation for women, but data on resource access and asset ownership was limited. There was an intentionality within the projects to help or contribute to the economic transformation of the livelihoods within the different communities of practice.

“The driving question was: “How do we enable people rear crickets more profitably to widen their income base” - Cricket Project

The Shea Butter project noted:

“Yes, the women generate income from the sale of shea butter products” - Shea Butter Project

The Essential Oil Project

The project has contributed to other value chains. For instance, women in Kiruhura are using aromatic crops in Ghee; essential oils are also being used for both recreation and medical purposes / massage and healing of fractures.

The Propolis Project

All students that were trained in the project have been employed both in either industry or research institutions. The capacity building component of the project was successfully undertaken and has helped transform lives for both the project team and the beneficiaries.

However, the Wheat and Maize Bran Bakery projects noted that these benefits are yet to be realized pending commercialization.

4.7.4 Unforeseen Consequences and Negative Impacts

Most projects reported no unforeseen negative impacts on women's well-being or workloads. The Shea Butter project noted a minor issue:

“The negative comment coming from women consumers of the project is that the product darkens their skins” - Shea Butter Project

4.7.5 Unintended Effects on Gender and Inclusion

While the projects were often designed with specific objectives and planned outcomes, they also often produce unintended effects—positive or negative—that influence gender dynamics and broader inclusion parameters in unforeseen ways. These effects may arise at various stages of the project lifecycle and can significantly shape the lived experiences of beneficiaries, especially women and other marginalized groups. This section critically audits and examines these unintended outcomes to uncover hidden impacts, surface overlooked dynamics, and provide a more holistic understanding of how the project interfaces with gender equality and inclusivity.

Some projects reported positive unintended effects:

- **Wheat:** Increased government interest in wheat production, strengthened relationships in the value chain
- **Cricket:** Increased interest in waste sorting, women willing to be project ambassadors
- **Essential Oils:** The increased participation of communities in the planting of essential oils plants reduced the acreage available for arable agriculture and grazing. In addition, the planting of lemon grass on the slopes of the mountain, also contributed to reduction in the level of soil erosion.
- **Shea Oil:** Some of the products being developed in this project are being adulterated by some stakeholders. Further support is required for standardizing and enforcement of quality standards.

The project has also resulted into spinoff activities as a result of specific outcomes.

Table 12: Project Impact in selected

Project	Impacts
Essential Oil	The project has been invited to a national initiative at the National Museum on cataloguing Uganda's medicinal plants
Propolis	The project activities have resulted into further support with United States Agency for International Development (USAID). This has given the project more visibility and opened more intensive knowledge networks with local and international partners.
Shea Oil	Mild May Hospital has adopted the shea oil in its therapy of HIV/AIDS patients. The medicinal properties of shea oil are being put to use in other sectors.
Wheat	Government picked up on the results of the project (wheat varieties that can grow in low-lying areas). Candidate lines from the project have been tried in Karamoja where they were found to do well. Funding from African Development Bank (ADB) has been secured to fast track the commercialization of these new varieties.

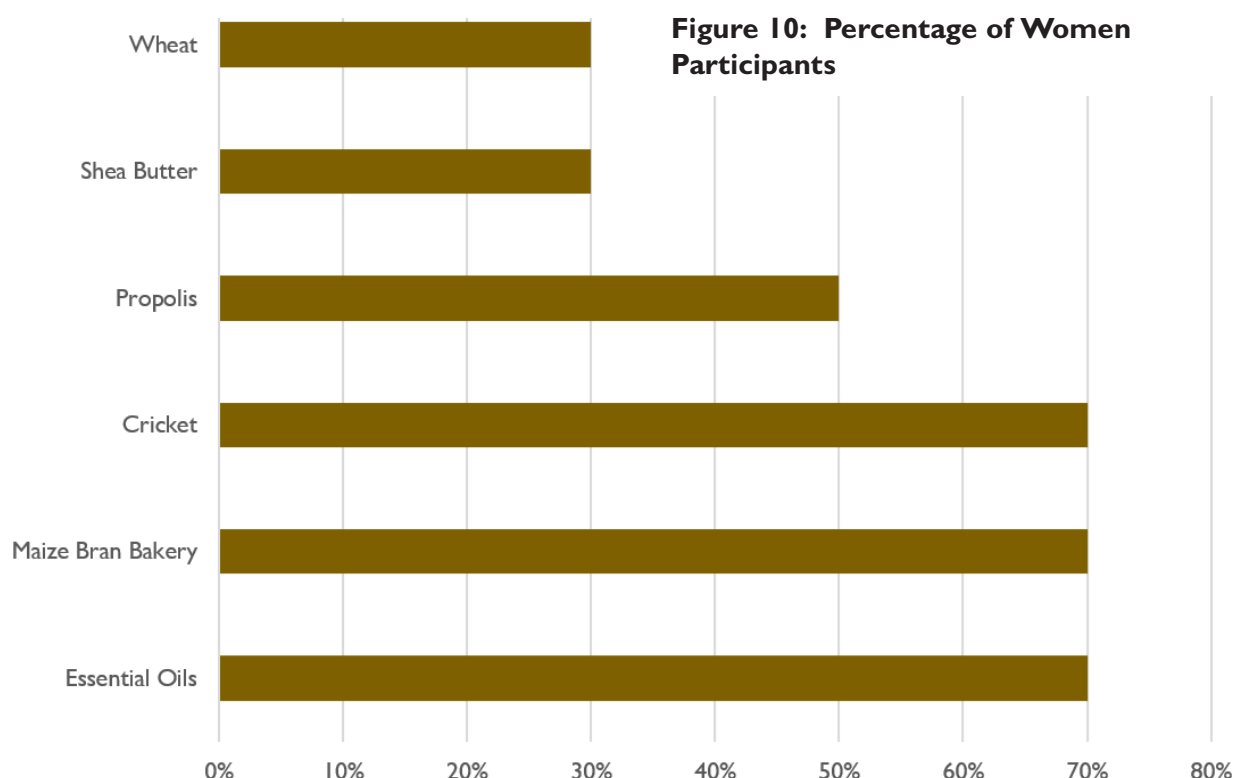
However, some challenges were also noted:

“The girls/women could not engage in waste collection and transportation because they could not manage the mode of transport used (tricycle)” - Cricket Project

This highlights the importance of considering gender-specific challenges in project design and implementation.

4.7.6 Gender-Related Capacity Building Activities

Most projects did not conduct gender-specific capacity building activities. Training activities were generally focused on project-specific skills and knowledge, without explicit gender considerations.



The percentage of women participants (researchers, students, etc.) varied from 30% to 70% across projects as shown. The Essential Oils, Maize Bran Bakery, and Cricket projects had the highest women participation at 70%, while Shea Butter and Wheat had the lowest at 30%.

4.7.7 Impact on Women-Specific Training Opportunities

Most projects did not provide training opportunities specifically for women. The Cricket project was an exception:

“Yes, the women were trained in cricket farming and processing. They were also trained on alternative cheaper sources of protein available for Children’s feeding” - Cricket Project

This highlights a general lack of targeted capacity building for women across the projects.

4.7.8 Main Benefits for Women and Girls

The reported benefits for women and girls varied across projects:

Table 13: Project benefits

Project	Impacts
Propolis	Various benefits
Essential Oils	Knowledge, skills, and income from product manufacturing and sales Knowledge and skills from training
Maize Bran Bakery:	Knowledge and skills from training
Shea Butter	Product benefits and income from sales
Cricket	Increased income and improved child nutrition
Wheat	Potential benefits from varieties catering to women’s interests (not yet realized)

The Cricket project's impact on child nutrition highlights the broader societal benefits of women's empowerment:

“When women are empowered to earn income, they focus on their children in terms of feeding, clothing, medical care and education. In turn, the nation gets better and well-developed citizens.” - Cricket Project

4.7.9 Differential Benefits for Women/Girls vs Men/Boys

Projects reported some differences in how men and women benefited, particularly in economic activities, skill development, and agricultural focus. In the Shea Butter Project, women and girls primarily benefited through product use and sales. For the Cricket and Essential Oil Projects, the benefits were mainly derived from increased income generation. In contrast, men and boys were more involved in production and operational aspects, especially within the Essential Oils Project. Skill development, especially processing skills was a benefit for women and girls participating in the Essential Oils Project, while men developed more technical skills in the same project. In agriculture, men and boys benefited most in the Wheat Project which was mainly through their participation in high-yield crops. These differences highlight gender-specific roles and interests across the projects, with women leaning more toward product processing and sales, and men focusing on production and technical operations.

Benefit Category	Women/Girls	Men/Boys
Economic Activities	• Product Use and Sales (Shea Butter) • Income Generation (Cricket, Essential Oils)	• Production and Operations (Essential Oils)
Skill Development	• Skills in Processing (Essential Oils)	• Technical Skills (Essential Oils)
Agricultural Focus		• High-Yield Crop Interest (Wheat)

*“The new varieties developed by the project offer the attributes that women are interested and offer best agronomic performance qualities: early maturing, high yield potential and are of medium height”
- Wheat Project*

4.7.10 Intersectionality in Project Impacts

Gender intersectionality in project implementation for projects underlines the need to consider the diverse and interconnected social identities that influence individuals' experiences and outcomes. Recognizing that gender does not operate in isolation, but intersects with other factors such as race, ethnicity, socioeconomic status, age, and disability, ensures that projects are inclusive and equitable. During implementation, strategies must be designed to address the unique challenges faced by different groups, ensuring that interventions do not inadvertently reinforce existing inequalities. This involves actively engaging marginalized groups in the planning and decision-making processes, tailoring interventions to meet their specific needs, and monitoring the impacts on various intersecting identities. By applying an intersectional lens, research projects can more effectively address the complex realities of beneficiaries, leading to more nuanced and impactful outcomes that promote social justice and equity. In this project, the intersecting identities were apparent even within the project team. The Propolis project's encountered intersectionality in a unique manner:

“Intersectionality was reflected in the Principal Investigator who was an Female Early Career Scientist. This presented unique challenges and opportunities with regard to maneuvering the administrative aspects of project management within the university and with the project team- Propolis project

Other projects had other modes of considering intersectionality. For instance, for the Cricket project

We tried to have a gender balanced team from the onset. However, our recruitment of students considered students from disadvantaged backgrounds or who were talented but had some challenges with tuition fees. Our advert also specifically encouraged women and disadvantaged groups to apply.” - Maize project

BOX 2: INCOME FROM CRICKETS

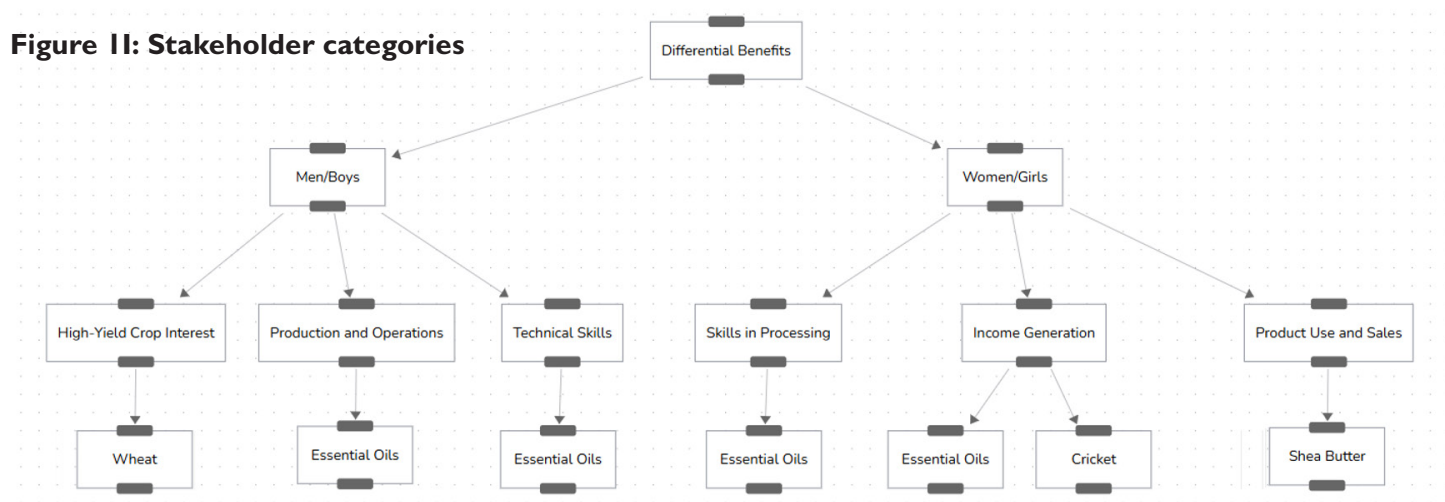
In the heart of a bustling village in Masaka, Aisha, a dedicated mother of two sons, found herself facing a significant challenge. With limited income and opportunities, she was determined to improve her family's situation. When a new project introduced cricket farming as a sustainable livelihood option, Aisha saw it as a beacon of hope.

Initially, the process was daunting. Aisha and her sons, Juma and Hassan, knew little about cricket farming but were eager to learn. They attended training sessions organized by the project, which taught them about the nutritional benefits of crickets and the techniques for breeding and harvesting them. With new skills in hand, the family set up a small cricket farm in their backyard. Their journey was marked by hard work and perseverance. They meticulously followed the guidelines for feeding, maintaining hygiene, and monitoring the cricket colonies. The initial weeks were challenging as they faced setbacks with pest infestations and equipment failures. However, their

commitment never wavered. They adapted their strategies, sought advice from local experts, and gradually saw improvements.

After three months of relentless effort, Aisha and her sons achieved a remarkable milestone. They had successfully collected 50 kilograms of crickets, surpassing their initial expectations. This achievement was not only a testament to their hard work but also a turning point in their lives. The income from selling the crickets provided Aisha with the financial stability she had longed for, enabling her to invest in her children's education and improve their living conditions. The success story of Aisha and her sons became a source of inspiration in their village. Their journey demonstrated how determination, combined with the right support and knowledge, could transform lives. The family's newfound success in cricket farming not only improved their economic situation but also strengthened their bond, proving that with resilience and collaboration, remarkable change is possible.

Figure 11: Stakeholder categories



“The men are interested in high yielding and generating high income while the women are interested in medium type that is good for their wheat businesses. All these interests were taken care of by the project.” - Wheat Project This underscores the importance of considering diverse needs and interests in project design and implementation.

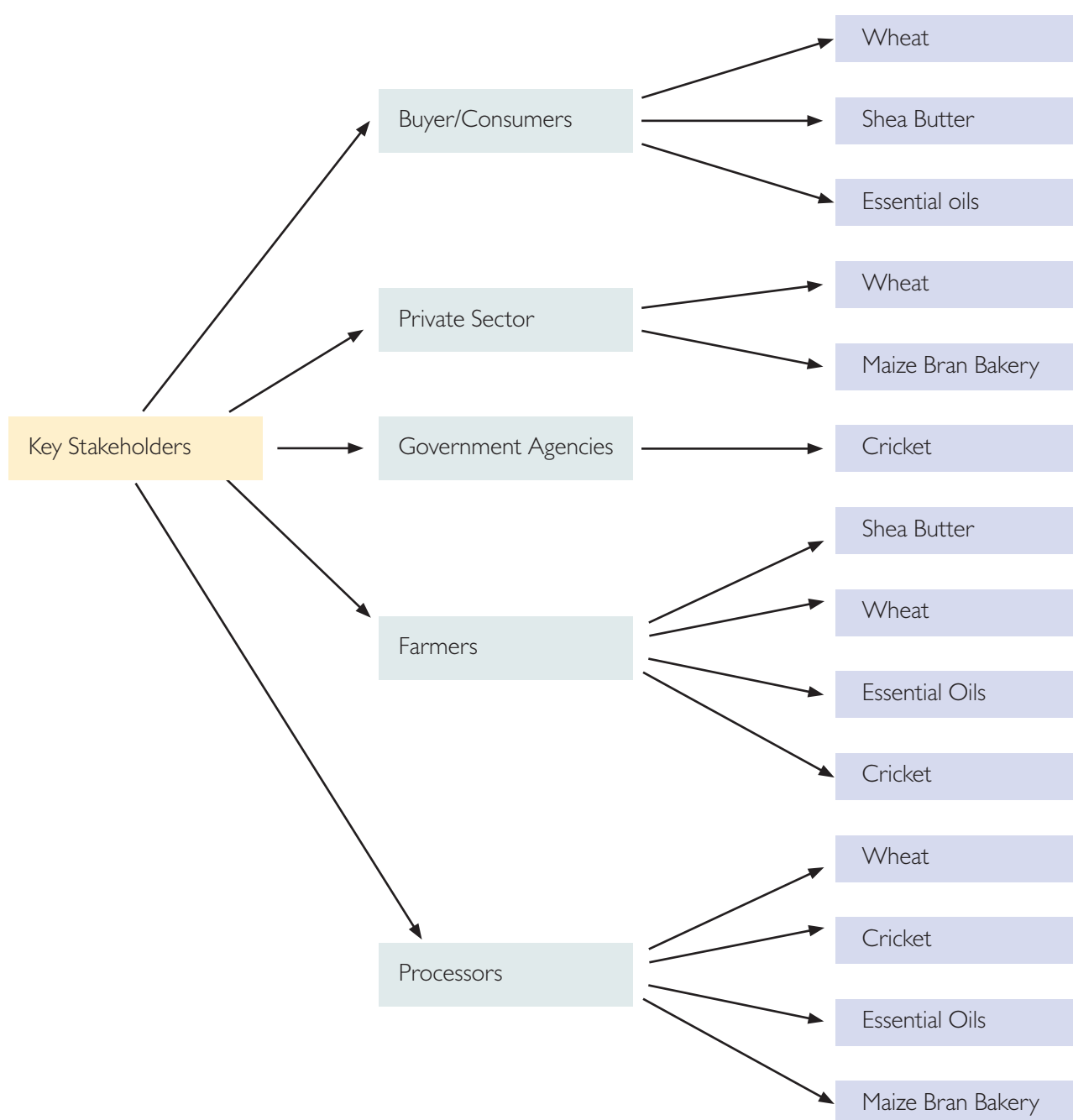
4.8 Project Stakeholder Engagement

Stakeholder engagement is essential for effective gender mainstreaming in projects, as it ensures that diverse perspectives and needs are incorporated into project design and implementation. By actively involving a range of stakeholders—such as community members, gender advocates, and representatives of marginalized groups—projects can gain valuable insights into the specific challenges and opportunities related to gender.

This participatory approach fosters inclusivity and ownership, allowing stakeholders to influence decision-making and contribute to the development of gender-responsive strategies. Engaging stakeholders through consultations, workshops, and feedback mechanisms helps to identify and address gender inequalities, ensuring that interventions are relevant and equitable. Additionally, ongoing engagement promotes accountability and adaptive management, as projects can adjust their strategies based on stakeholder input to better address gender disparities and enhance overall impact.

“Stakeholder engagement is based on willingness. Not gender” – Cricket Project

Different projects had different stakeholders. However, often, because the projects are scientific in nature, gender representation may not be reflected in randomized processes.





5 - Lessons and Recommendations

5.1 Lessons Learned on Gender Equality and Women's Empowerment

It is crucial to understand how a research project might influence the role and status of men and women, especially the most vulnerable, who are at high risk. Recognizing the intersectionality of gender with other social identities such as age, geography, and socioeconomic status is crucial to achieve the desired impacts of research projects. Thus, addressing gender issues in a project means targeting the needs and priorities of men and women and analyzing their access to and control over the productive resources and decision-making power. This section looks at the key lessons and recommendations emerging from this Synthesis Report.

The projects revealed several important lessons learned across different initiatives. The Maize bran bakery project underscored the importance of youth involvement, demonstrating a strong interest among young people in the bakery business and highlighting the need for targeted awareness campaigns to further engage this demographic. In the Shea butter Project, a key lesson was the significant interest shown by women in pursuing the business, along with the crucial need for financial support to help them grow and sustain their operations. The Cricket farming project emphasized the positive impact of women's empowerment on child welfare, showing how economic participation by women can directly benefit their families. Additionally, the project highlighted the importance of engaging youth in such initiatives, suggesting a broader role for young people in sustainable income-generating activities.

Table 14: Lessons Learned by Project

Project	Lessons Learned
Maize Bran Bakery:	Lessons on youth involvement, interest in bakery business, and the need for awareness campaigns.
Shea Butter	Highlighted women's interest in shea butter business and the need for financial support.
Cricket	Emphasized the impact of women's empowerment on child welfare and the importance of youth engagement.

The Shea Butter project's response was particularly insightful:

"Women are increasingly getting interested in shear butter and if organized in groups, they can benefit a lot from shear butter. Women need seed capital to participate in shear butter business because the men are outcompeting them in the sale of shear butter products. Women should organize in groups and given soft loans for this business"
- Shea Butter Project

This suggests a need for targeted financial support and group organization to enhance women's participation in certain sectors.

5.1.1 Lessons Learned on Gender Integration

a. The Importance of Capturing Diverse Interests to Ensure Product Acceptability

Projects need to actively involve a diverse range of stakeholders from the outset. This includes women, men, youth, and marginalized groups to ensure that their needs, preferences, and concerns are adequately represented in project design and implementation. Design products and services that cater to the specific needs of different groups. For example, in agricultural projects, consider the distinct roles and challenges faced by men and women farmers and develop interventions that address these differences. The need for documentation of gender aspects throughout the project

- b. It is critical that projects undertake a comprehensive gender analysis at the project's inception to identify gender-specific needs, roles, and impacts.** This analysis can be used to inform project planning and implementation. This can inform the project team on when, how and which sex-disaggregated data needs to be collected throughout the project lifecycle. Regularly update and report on this data to track progress and inform decision-making. Continuous Monitoring and Reporting:
- c. The Value of Providing Equal Opportunities for All Groups**
To ensure that project beneficiaries have equal access to resources, training, and opportunities. The projects need to develop targeted interventions to support underrepresented groups, such as scholarships for women, accessibility accommodations, or tailored capacity-building programs. The projects should also support the creation of peer networks and mentoring programs to enhance the confidence and capabilities of underrepresented groups. The Wheat project emphasized:

“Gender indicators should be developed at project design and should be closely monitored. A specific budget for gender should be incorporated within the project budget. Gender capacity building and sensitization should be conducted for project members” - Wheat Project

5.2 Recommendations for Project Teams

The recommendations for the six projects focus on enhancing engagement, support, and impact. For the **Propolis** project, it is recommended to explore the various benefits in greater detail to better understand its full potential for both participants and the community. The **Essential Oils** project should focus on providing technical training to both men and women, while also expanding income-generation opportunities for women involved in product sales. In the **Maize Bran Bakery** project, increased awareness campaigns and youth involvement are essential to sustain interest in the bakery business. For the **Shea Butter** project, financial support is critical to help women scale their operations and achieve greater economic empowerment. The **Cricket Farming** project should continue empowering women, given its positive impact on child welfare,

and promote more youth participation. Lastly, for the **Wheat** project, attention should be given to developing wheat varieties that cater to women's agricultural interests, ensuring that their needs are considered in future agricultural initiatives. These recommendations aim to foster inclusivity, skill development, and financial sustainability across all projects. Specific recommendations relate to the following:

- a. Mainstream Gender Early in Project Design**
To achieve gender equality and women's empowerment, gender issues need to be addressed at the beginning of the project and throughout the project cycle. Monitoring and evaluating potential gender impacts must also be considered, as well as taking corrective measures, if needed, during project implementation, in order to leave no one behind.
- b. Gender Capacity building**
This Synthesis Report underscores the importance of integrating a gender perspective into product commercialization projects funded by UNCST. By doing so, these initiatives can contribute to a more inclusive and equitable development process, ultimately fostering sustainable economic growth.
- c. Developing and Implementing Gender-Specific Targets and Indicators**
Establishing clear, quantifiable goals focused on gender equality is crucial for tracking progress. These targets might include increasing the number of women participating in training programs, ensuring equal access to resources and opportunities, or achieving specific outcomes related to women's empowerment. Indicators should be developed to measure progress towards these targets. For instance, tracking the percentage of women in leadership roles within the project, or measuring changes in income levels for women as a result of the project. Regularly reviewing and updating these targets and indicators ensures they remain relevant and aligned with both project goals and broader gender equality objectives.
- d. Allocating dedicated resources for gender-related activities:**
Gender-specific initiatives require adequate funding and human resources to be effective.

This includes budgeting for activities like gender training sessions, community outreach programs focused on women, and resources to support female participation in project activities. Hiring gender specialists or consultants can provide the expertise needed to integrate gender considerations throughout the project lifecycle.

e. Conducting Comprehensive Gender analyses at Project Inception:

At the start of a project, conducting a thorough gender analysis helps identify the distinct needs, challenges, and opportunities for men and women. This analysis should include data collection, stakeholder consultations, and a review of existing gender norms and dynamics. The findings from the gender analysis should inform project design and implementation, ensuring that interventions are tailored to address gender-specific issues and promote equality. Revisiting the gender analysis periodically throughout the project can help adapt strategies as needed based on changing circumstances and new insights.

f. Implementing Gender-Responsive Monitoring and Evaluation Systems:

Monitoring and evaluation (M&E) systems should be designed to capture gender-specific data and outcomes. Collecting sex-disaggregated data enables a deeper understanding of how different groups are affected by the project and helps in identifying any unintended gender disparities. Regularly reviewing M&E data and incorporating feedback from beneficiaries can inform ongoing project adjustments and improvements, ensuring that gender equality goals are being met.

g. Emphasizing Gender Integration in Project Proposals and Initial Planning Stages

Integrating gender considerations from the very beginning of project planning ensures that gender equality is a fundamental component of the project design. This involves explicitly addressing gender issues in project proposals, setting gender-specific objectives, and outlining strategies to achieve them. Engaging stakeholders, including women and gender experts, during the planning stages can provide valuable insights and ensure that diverse perspectives are considered. This proactive approach helps to avoid gender-blind projects

and ensures that gender equality is prioritized throughout the project lifecycle.

5.3 Recommendations for UNCST

This Synthesis Reports also presents some key recommendations for gender inclusivity in project management. As a research Grants Management entity under the Science Granting Councils Initiative, the Uganda National Council for Science and Technology (UNCST) can ensure the effective implementation and monitoring of gender mainstreaming efforts. These recommendations aim to enhance gender equality and improve the overall impact of funded projects. Broadly, the UNCST should strengthen monitoring and evaluation frameworks across all projects to ensure that lessons learned, and best practices are identified and applied. This will help track progress and address challenges in real time. By promoting gender-inclusive policies, UNCST will encourage equal opportunities for women and men in training, leadership roles, and economic activities, ensuring that both groups benefit from project interventions. Facilitating access to financial resources, particularly for women-led businesses such as shea butter and essential oils, through partnerships with financial institutions and grants can enhance scaling efforts. UNCST should engage youth more actively by creating programs that highlight the potential of projects like maize bran bakery and cricket farming, encouraging this demographic to participate in these income-generating activities. By promoting inter-project learning and collaboration, UNCST can enable projects to share knowledge, experiences, and resources that could benefit others, ultimately creating a more cohesive and successful portfolio of initiatives. These recommendations would strengthen UNCST's role in guiding and supporting the projects for long-term sustainability and impact. Other specific recommendations relate to the following

- a. Establish Clear Gender Mainstreaming Guidelines:** UNCST needs to develop and disseminate comprehensive guidelines for integrating gender considerations into project proposals, implementation, and evaluation. Ensure that all funded projects align with these guidelines. Right from the call, the projects should be guided on what the quotas are for effective and intentional inclusivity in project design.

b. Provide Training and Capacity Building:

UNCST needs to organize regular training sessions for project managers and teams on gender mainstreaming principles, techniques, and best practices. This can include workshops, webinars, and online courses. A training on gender inclusion is part of the standard inception meeting for all projects at UNCST.

c. Implement Robust Monitoring and Evaluation Systems:

UNCST is developing and enforcing gender-responsive M&E frameworks that include specific gender indicators. Ensure that projects collect sex-disaggregated data and report on gender-specific outcomes regularly. Projects should be supported right from the onset to integrate gender aspects in the project implementation roadmap.

d. Conduct Regular Gender Audits:

UNCST has to periodically assess the gender sensitivity and impact of funded projects through gender audits. Use these audits to identify gaps and areas for improvement, and to inform future funding decisions.

e. Foster a Culture of Gender Sensitivity:

UNCST needs to further promote a culture of gender sensitivity among funded projects. This

can include recognizing and rewarding projects that demonstrate significant progress in gender equality and creating platforms for sharing successful gender integration practices. A scoring on gender inclusion could be introduced to enable projects to intentionally mainstream gender in their project implementation activities.

The diverse range of projects overseen by UNCST has demonstrated significant potential in empowering communities, particularly women and youth, through knowledge, skills development, and income generation. Each project, from Propolis production to Cricket farming, has offered unique insights into addressing local needs and fostering sustainable livelihoods. However, the success of these initiatives hinges on continued support, particularly in areas such as financial empowerment, gender inclusivity, and youth engagement. It is crucial for UNCST to strengthen its role in monitoring, providing resources, and encouraging collaboration among projects to maximize their impact. With the right support and strategic oversight, these projects have demonstrated that gender considerations remain at the heart of long-term and impactful socioeconomic transformation in the communities they serve.

6 - References

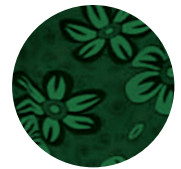
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