

ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE
DEPARTMENT OF PROJECT MANAGEMENT

**The Effect of Stakeholder Engagement on the
Implementation of FAO's Agricultural Development
Projects: Empirical Evidence from the Amhara Region in
Ethiopia**

**A Thesis Submitted in Partial Fulfillment of the Requirement for
the Award of
Degree of Master of Arts in Project Management**

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STATEMENT OF DECLARATION

I, hereby, declare that this study entitled – **The Effect of Stakeholder Engagement on the Implementation of FAO's Agricultural Development Projects: Empirical Evidence from the Amhara Region in Ethiopia** is submitted in partial fulfilment of the requirement for Degree of Master's in project management with the guidance and support of the thesis advisor. This study is my original work and it has not been presented for any degree or diploma program in this or any other university/institution, and that all source of materials used have been dully acknowledged.

Declared by: Rediet Solomon Gelete

Signature _____

Date _____

LETTER OF CERTIFICATE

This is to certify that this research project, undertaken by Rediet Solomon Gelete – The Effect of Stakeholder Engagement on the Implementation of FAO's Agricultural Development Projects: Empirical Evidence from the Amhara Region in Ethiopia is his own original work and it has not been submitted to any institution.

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Approval by Board of Examiners

Members of the Board of Examiners approve that this research project entitled – The Effect of Stakeholder Engagement on the Implementation of FAO's Agricultural Development Projects: Empirical Evidence from the Amhara Region in Ethiopia undertaken by Rediet Solomon Gelete fulfills the requirements for the Degree of Master of Arts in Project Management and is acceptable with regards to the standards and regulations of the University.

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ABSTRACT

Agriculture is the primary source of income in Ethiopia. It contributes significantly to the country's GDP. This research paper investigated the impact of stakeholder engagement on implementing agricultural development projects conducted by the Food and Agriculture Organization (FAO) in the Amhara Region of Ethiopia. The study employed a mixed methods approach combining quantitative and qualitative research methods to evaluate the level of stakeholder engagement, assess the extent of project implementation, identify the factors influencing stakeholder engagement, and explore the challenges faced during project implementation. The results revealed that higher stakeholder engagement positively contributed to the successful implementation of agricultural development projects. The study provides empirical evidence on the importance of stakeholder engagement and offers insights for policymakers, project managers, and stakeholders to improve engagement practices and achieve better project outcomes.

Keywords: *stakeholder engagement, implementation, agricultural development projects, Amhara Region, Ethiopia.*

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LIST OF ACRONYMS AND ABBREVIATIONS

FAO: FOOD AND AGRICULTURE ORGANIZATION

GDP: GROSS DOMESTIC PRODUCT

NGO: NON-GOVERNMENTAL ORGANIZATION

SDGS: SUSTAINABLE DEVELOPMENT GOALS

CBPR: COMMUNITY BASED PARTICIPATORY RESEARCH

SPSS: STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

Ethiopia's economy relies heavily on agriculture, contributing to the nation's GDP and employing a sizable workforce. The Food and Agriculture Organization (FAO) carries out agricultural development initiatives throughout Ethiopia, especially in the Amhara area, to increase the productivity of the agricultural sector. Despite implementing these initiatives, the agriculture industry faces several difficulties, including low productivity and restricted access to markets and financing. The absence of stakeholder involvement in the delivery of these initiatives may be one cause causing these difficulties.

The various types of stakeholder involvement are vital for ensuring that a project adequately considers the needs and interests of all stakeholders. Stakeholder consultation involves seeking input from stakeholders during the projects' planning stages. On the other hand, stakeholder communication is ongoing throughout the implementation and evaluation phases. Stakeholder collaboration entails stakeholders working together to achieve shared and reasonable goals. Lastly, stakeholder participation encourages stakeholders to actively engage in the project design, planning, implementation, or evaluation processes. It is worth noting that these modes of involvement are not mutually exclusive; utilizing multiple types of participation for a single project is often beneficial.

Stakeholder involvement ensures that the requirements and interests of all stakeholders are taken into account, making it a crucial part of project implementation. The benefits of stakeholder participation in project outcomes, including higher project success rates and higher stakeholder satisfaction, have been examined in several contexts (Bryson, 2018; Karner et al., 2019; Schmeer, 2019). However, little research has been done on how stakeholder involvement affects the implementation of FAO agricultural development initiatives in the Amhara region.

This project stands out due to its focus on the Amhara Region in Ethiopia and its specific aim to assess the effect of stakeholder engagement on project implementation in the context of FAO agricultural development initiatives. Examining the role of stakeholder collaboration, communication, consultation, and participation provides a comprehensive understanding of how these factors influence the success of farm projects in a specific region (Bryson, 2018). Stakeholder

collaboration, consultation, communication, and participation are distinct yet interconnected aspects of stakeholder engagement.

1.2. Background of the Organization

The Food and Agriculture Organization (FAO) is a specialized organization within the United Nations that focuses on global initiatives to combat hunger, improve nutrition, and support sustainable agriculture. Since 1975, the FAO has been actively involved in Ethiopia, providing technical advice and assistance to the government and other stakeholders in order to advance food security and sustainable agricultural practices (Food and Agriculture Organization, n.d.).

Ethiopia faces significant challenges in terms of food security and agricultural development. The country's large rural population heavily relies on agriculture for their livelihoods, but frequent droughts and other environmental issues pose a threat to their food security. Additionally, the agricultural industry in Ethiopia grapples with low productivity, limited access to markets, and inadequate infrastructure (Central Intelligence Agency, 2022).

To tackle these issues, the FAO in Ethiopia implements various programs and initiatives that align with the government's efforts. The organization offers technical assistance to enhance agricultural productivity and improve the livelihoods of rural communities. It also promotes sustainable land use practices and supports the development of climate-resilient agriculture. Furthermore, the FAO works towards improving access to markets and credit for smallholder farmers (Food and Agriculture Organization, n.d.).

Collaboration and engagement with various stakeholders are crucial to the FAO's work in Ethiopia. The organization closely cooperates with civil society organizations, academia, and the private sector to foster multi-stakeholder partnerships in the agriculture sector. By promoting such collaborations, the FAO aims to enhance the effectiveness and impact of its initiatives (Food and Agriculture Organization, n.d.).

The FAO's efforts in Ethiopia are guided by the Sustainable Development Goals (SDGs), with particular emphasis on Goal 2. This goal strives to eradicate hunger, achieve food security, improve nutrition, and promote sustainable agriculture. By aligning its work with the SDGs, the FAO contributes to Ethiopia's broader development objectives (Food and Agriculture Organization, n.d.; United Nations, 2015).

FAO's presence in Ethiopia since 1975 has been instrumental in addressing food security and agricultural challenges. Through technical assistance, promotion of sustainable practices, and collaboration with stakeholders, the FAO supports the Ethiopian government's endeavors to combat hunger, enhance nutrition, and ensure sustainable agriculture in the country (Food and Agriculture Organization, n.d.).

1.3. Statement of the Problem

The Amhara Region in Ethiopia, being predominantly agricultural, faces various challenges in agricultural development, including low productivity, limited access to modern farming techniques, and inadequate infrastructure. While the Food and Agriculture Organization (FAO) has been implementing agricultural development projects in the region, the extent to which stakeholder engagement influences project implementation remains unclear (Debu et al. (2019). This research project seeks to address this gap by examining the impact of stakeholder engagement on the success of FAO's agricultural development projects in the Amhara Region.

The study aims to identify the role and significance of stakeholders, such as farmers, farmer organizations, government agencies, NGOs, and international organizations, in enhancing project design, capacity building, ownership, resource mobilization, and monitoring and evaluation (Tufa et al. 2021). By examining the difficulties and restrictions related to stakeholder involvement, this study tries to give policymakers new information. And development practitioners to foster more effective and inclusive regional agricultural development approaches.

1.4. Research Objective

The main objective of this study was to examine the effect of stakeholder engagement on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.

Specific research Objective

1. To examine the effect of stakeholder consultation on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.
2. To examine the effect of stakeholder collaboration on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.
3. To examine the effect of stakeholder participation on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.

4. To examine the effect of stakeholder communication on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.

1.5. Research Question

The main research question of this Study: How does stakeholder engagement affect the implementation of FAO's agricultural development projects in the Amhara region in Ethiopia?

Sub-Research Questions:

- i. How does stakeholder consultation affect the implementation of FAO's agricultural development projects in the Amhara region in Ethiopia?
- ii. How does stakeholder collaboration affect the implementation of FAO's agricultural development projects in the Amhara region in Ethiopia?
- iii. How does stakeholder participation affect the implementation of FAO's agricultural development projects in the Amhara region in Ethiopia?
- iv. How does stakeholder communication affect the implementation of FAO's agricultural development projects in the Amhara region in Ethiopia?

Based on the generated questionnaire, a 5-point Likert scale was used for this research. The response options for each Question range from 1 (Strongly Disagree) to 5 (Strongly Agree).

1.6. Significance of the Study

The significance of this study lies in its potential to contribute to the existing literature on the impact of climate change on food security in Ethiopia. The study focused on analyzing Ethiopia's current food insecurity situation, particularly concerning the agricultural sector, which is the mainstay of the Ethiopian economy. The study's findings can help policy makers and other stakeholders design and implement appropriate interventions to mitigate the adverse effects of climate change on food security in Ethiopia. The study also contributes to the theoretical understanding of the relationship between climate change, agricultural productivity, and food security. Therefore, the study has both practical and theoretical significance. The study is significant because it can also provide a model for future research in similar contexts, especially in sub-Saharan African countries.

Another significance of this study is that it seeks to explore how stakeholder involvement impacts the implementation of FAOs' agricultural development initiatives in the Amhara region. The primary aim is to establish a clear definition for stakeholder involvement while examining different types that

have proven effective at enhancing the outcomes of these FAO-led initiatives within Amhara's agriculture industry. Furthermore, measures towards motivating stakeholders' increased participation will be investigated alongside efforts to foster better collaboration between these influential parties and FAO. Finally, a comprehensive framework outlining practical strategies for engaging with stakeholders throughout agricultural projects undertaken specifically within the Amhara region will be presented.

This research project holds significant implications for agricultural development in the Amhara Region of Ethiopia. By examining the impact of stakeholder engagement on project implementation, the Study aims to contribute to understanding practical strategies and approaches for sustainable agricultural development. The findings will provide valuable insights for policymakers, development organizations, and other stakeholders involved in agricultural projects, helping them make informed decisions and improve the design and implementation of initiatives. Moreover, the research has the potential to address the challenges and limitations faced in the agricultural sector, such as resource constraints, power imbalances, and communication gaps, ultimately leading to more inclusive and successful development projects

1.7. Limitation of the Study

- This research focuses on the Amhara region in Ethiopia as the geographical area of study.
- The study was limited to the data collected through structured questionnaires with the selected stakeholders.
- Sample bias is a limitation as the study relies on a specific sample of stakeholders involved in FAO agricultural development initiatives in the Amhara Region.
- The research's dependence on self-reported data includes an aspect of social desirability bias and may not capture the full complexity of stakeholder engagement dynamics.
- Resource constraints and time limitations may restrict the depth and breadth of data collection and analysis, potentially limiting the scope of the study's conclusions
- The research did not cover other regions of Ethiopia or other countries.
- This study did not consider the effects of other external factors that may influence the implementation of agricultural projects in the region.

1.8. Delimitations the Study

- The Study analyzes the effect of stakeholder engagement on implementing FAO's agricultural development projects. The research only considered stakeholders who are directly involved in the performance of farm projects in the Amhara region.

- The scope of the research was limited to the analysis of the relationship between stakeholder engagement and the implementation of agricultural projects in the Amhara region.
- This research project focuses specifically on the Amhara Region in Ethiopia and its examination of stakeholder engagement in the context of FAO agricultural development initiatives.
- The findings may not be directly applicable to other regions or different types of farming projects.
- One more thing is to the study primarily relies upon on self-reported data from stakeholders, which may introduce potential biases or limitations in capturing the full scope of stakeholder engagement.

1.9. Organization of the Study

The study has been organized into a total of five chapters. The following chapter focuses on a literature review; chapter three presents the research methodology. Data and analysis are presented in chapter four, and conclusions and recommendations are shown in the last chapters.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter reviews theoretical perspectives and empirical literature of studies and their findings.

2.1. Theoretical Review

Stakeholder engagement refers to the active involvement and participation of individuals, groups, organizations, and communities with a vested interest or are affected by a particular project or initiative.

Over time, theories of stakeholder engagement have evolved to address better the dynamics of stakeholders impacted by a project and to ensure their inclusion in the decision-making process. One such model, developed by Mitchell *et al.* (1997), suggests that stakeholders should be identified, considered in decision-making, and managed to promote meaningful involvement and contribute to project success. Similarly, Freeman's (1984) stakeholder theory emphasizes the importance of recognizing the diverse interests of stakeholders when making decisions. Additionally, the normative stakeholder engagement model outlines three key stages: identifying stakeholders assessing their role and influence, and managing their contribution (Gray, 2002).

To thoroughly understand how engagement unfolds and its effects on the various parties involved, it is essential to consider the resource exchange theory, according to this theoretical framework proposed by Alam and Khan (2019). Stakeholder interactions involve negotiations to establish mutually advantageous terms based on individual interests. Furthermore, the influence exerted by higher-powered individuals has a substantial bearing during preliminary discussions and subsequent bargaining stages inherent to such exchanges. Invariably more influential stakeholders tend to derive more significant benefits (Alam & Khan, 2019).

Furthermore, the socio-ecological model expands the significance of the cultural and socio-political context of stakeholder engagement (Herrera *et al.*, 2020). This model asserts that to comprehend better the power dynamics that influence interactions between stakeholders and the environment, we must consider the social and ecological context in which stakeholder engagement occurs (Herrera *et al.*, 2020). Consequently, this model underscores the necessity of understanding a stakeholder community's social and ecological dynamics to achieve successful stakeholder engagement and fair exchange of resources.

Finally, CBPR (Community Based Participatory Research) offers an overarching framework to facilitate stakeholder engagement within research endeavors. This framework fosters a collaborative partnership between researchers and community members wherein they jointly identify research priorities, develop innovative solutions, and evaluate resulting outcomes with equal respect for all parties involved (Tumiel-Berhalter *et al.*, 2005). Incorporating input from stakeholders within the community deliberately through this approach allows for purposeful engagement while maintaining inclusivity.

Several critical indicators of the independent variable, stakeholder engagement, can be identified. Existing research and theoretical frameworks support these hands. Stakeholder collaboration is an important indicator emphasizing joint efforts, stakeholder cooperation, and collective action. Consultation serves as an indicator by involving stakeholders in decision-making processes, ensuring their perspectives and input are considered (Alam & Khan, 2019). Communication is another crucial indicator highlighting the effective exchange of information and dialogue among stakeholders. Lastly, participation signifies stakeholders' active involvement and contribution to project activities, promoting ownership and commitment. These indicators collectively demonstrate the multifaceted nature of stakeholder engagement in the context of project implementation.

Importance of Stakeholder Engagement in Agricultural Development Projects

Stakeholder engagement is crucial in the context of agricultural development projects. Agriculture is inherently complex, involving multiple stakeholders with diverse interests, such as farmers, government agencies, non-governmental organizations, research institutions, and local communities. The engagement of these stakeholders can lead to more sustainable and inclusive agricultural development outcomes (FAO, 2019). Effective stakeholder engagement facilitates knowledge sharing, resource mobilization, local capacity building, and aligning project goals with stakeholders' needs and aspirations (Wang *et al.*, 2019).

Factors Influencing Stakeholder Engagement

Several factors influence the level and quality of stakeholder engagement in agricultural development projects. These factors include:

- **Institutional Context:** The institutional framework, policies, and governance structures significantly shape stakeholder engagement practices. Adequate legal and policy frameworks, supportive institutions, and clear roles and responsibilities can enhance stakeholder engagement (Baffoe *et al.*, 2020).

- **Communication and Participation Mechanisms:** Effective communication channels and participatory approaches are essential for engaging stakeholders. Open and transparent communication, regular consultations, and participatory decision-making can foster stakeholder involvement (Debu et al., 2019).
- **Trust and Relationship Building:** Trust and positive relationships between stakeholders and project implementers are fundamental for successful engagement. Trustworthiness, mutual respect, and building long-term relationships can enhance stakeholder engagement (Gebreyesus et al., 2020).
- **Capacity Building:** Strengthening the capacity of stakeholders, including farmers, local communities, and organizations, is crucial for effective engagement. Training, technical assistance, and resources can empower stakeholders and enable their active participation (Tufa et al., 2021).

Impact of Stakeholder Engagement on Project Implementation

Stakeholder engagement has significantly impacted the successful implementation of agricultural development projects. Engaging stakeholders in project planning, decision-making, and performance can improve project outcomes and increase ownership and sustainability (Adebayo *et al.*, 2021). Stakeholder engagement can enhance resource allocation, collaboration, and coordination among project stakeholders, resulting in more effective and efficient project implementation (Gill & Johnson, 2010). Moreover, stakeholder engagement can contribute to adaptive management, innovation, and learning within agricultural development projects (Wilson et al., 2019).

Project Implementation

Project implementation refers to implementing a planned project and achieving its objectives. It involves executing project activities, managing resources, coordinating stakeholders, and monitoring progress. Successful project implementation depends on various determinants. First, clear project goals and objectives provide direction and focus for implementation efforts. Adequate project planning, including realistic timelines, resource allocation, and risk management, ensures smooth execution (Nguyen et al., 2020). Effective project leadership, team collaboration, and stakeholder engagement are crucial in aligning efforts, resolving conflicts, and maintaining motivation. Adequate resource availability supports implementation activities, including financial, human, and technological resources.

2.1.1. Stakeholder Consultation and Project Implementation

Stakeholder consultation involves involving relevant stakeholders in the decision-making processes of agricultural development projects. Studies have shown that effective stakeholder consultation improves project outcomes (Mitchell et al., 2006). For instance, Johnson et al. (2012) found that projects with higher stakeholder consultation experienced improved project performance, increased stakeholder satisfaction, and enhanced project sustainability. These findings suggest that stakeholder consultation positively influences the implementation of agricultural development projects.

2.1.2. Stakeholder Collaboration and Project Implementation

Collaboration among stakeholders is essential for successful project implementation. When stakeholders collaborate, they share resources, knowledge, and expertise, improving project outcomes. Research by Gray (2008) highlighted the positive correlation between stakeholder collaboration and project success in the agricultural sector. Similarly, studies by Avelino et al. (2012) and Chuenpagdee et al. (2013) demonstrated that stakeholder cooperation facilitates effective resource allocation, efficient decision-making, and enhanced project performance.

2.1.3. Stakeholder Participation and Project Implementation

Stakeholder participation refers to the active involvement of stakeholders in project planning, implementation, and evaluation processes. Several studies have emphasized the importance of stakeholder participation in achieving successful project outcomes. For example, Rahman et al. (2017) found that increased stakeholder participation positively influenced the implementation of agricultural projects by promoting ownership, knowledge sharing, and local empowerment. Moreover, studies by Reed (2008) and Chuenpagdee et al. (2014) highlighted that stakeholder participation contributes to improved project sustainability and resilience.

2.1.4. Stakeholder Communication and Project Implementation:

Effective communication among stakeholders is crucial for project success. Communication facilitates information exchange, coordination, and the resolution of conflicts and misunderstandings. Research by Gray (2010) demonstrated that robust and transparent communication channels between stakeholders contribute to better project outcomes. Similarly, studies by Borrini-Feyerabend et al. (2013) and Gupta et al. (2017) emphasized the importance of stakeholder communication in building

trust, fostering collaboration, and ensuring project alignment with stakeholders' needs and expectations.

2.1.5. Stakeholder Engagement in Agricultural Development Projects

The significance of stakeholder engagement in agricultural development projects has been recognized by scholars (Stringer et al., 2006; Provan & Kenis, 2008). Involving stakeholders improves project design, implementation, and outcomes by enabling the identification of local priorities, facilitating knowledge sharing, and enhancing project sustainability (Reed et al., 2009; Agrawal & Ribot, 2014).

Stakeholder engagement in agricultural development projects is crucial for several reasons. First, stakeholders, such as farmers, local communities, and relevant organizations, possess valuable knowledge and expertise about the local context, farming practices, and environmental conditions (Stringer et al., 2006). By involving them in decision-making, project planners can tap into this knowledge and ensure that project interventions are contextually appropriate and relevant.

Second, stakeholder engagement fosters a sense of ownership and commitment among the local communities and organizations involved in the project. When stakeholders are actively engaged and have a voice in decision-making, they are more likely to support and actively participate in project activities (Reed et al., 2009). It promotes a sense of empowerment and encourages local communities to take responsibility for agricultural development projects' sustainability and long-term success.

Third, stakeholder engagement enhances project transparency and accountability. By involving stakeholders in project planning and implementation, the project management team can ensure that the project aligns with the needs and priorities of the local communities (Agrawal & Ribot, 2014). It promotes transparency and accountability in decision-making processes, reduces the likelihood of conflicts and resistance, and builds trust between the project implementers and stakeholders.

Furthermore, stakeholder engagement contributes to capacity building and knowledge exchange. Through active participation, stakeholders can acquire new skills, access training opportunities, and learn from the experiences of other stakeholders (Reed et al., 2009). It enhances the capabilities of individual stakeholders and strengthens the overall capacity of the local communities and organizations involved in agricultural development projects.

2.1.6. Difference between Stakeholder Collaboration, Consultation, Communication and Participation.

Stakeholder collaboration involves working with various stakeholders, such as individuals, organizations, or communities, to achieve common objectives. It emphasizes shared decision-making, cooperation, and leveraging collective expertise and resources. Collaboration ensures that stakeholders are actively involved in shaping project outcomes and that their diverse perspectives and interests are considered (Cash et al., 2003). On the other hand Consultation, emphasizes seeking input and feedback from stakeholders. It allows stakeholders to express their opinions, ideas, and concerns. Through consultation, stakeholders are given a voice in decision-making processes, and their input is considered in shaping project plans and strategies.

Communication is a vital component of stakeholder and understanding. Participation refers to the active involvement of stakeholders in project activities and decision-making processes. It empowers stakeholders to contribute knowledge, expertise, and perspectives to shape project outcomes (Reed et al., 2013). Participation can take various forms, such as involvement in planning, implementation, monitoring, and evaluation. It fosters a sense of ownership, commitment, and accountability among stakeholders. While each concept has its specific focus, they are interrelated and often practiced together.

2.1.7. Factors Influencing Stakeholder Engagement

Various factors influence stakeholder engagement in agricultural development projects, and understanding these factors is crucial for designing effective stakeholder engagement strategies that address local needs and aspirations (Reed et al., 2013). These factors include:

Power Dynamics: Power dynamics among stakeholders can significantly influence their engagement in project processes. Power imbalances based on social, economic, or political factors may marginalize specific stakeholders and limit their ability to participate actively (Cooke & Kothari, 2001). Recognizing and addressing power differentials is essential for ensuring inclusive stakeholder engagement.

Institutional Arrangements: Supportive institutional arrangements, policies, and regulations can facilitate stakeholder engagement (Cash et al., 2003). Clear guidelines on stakeholder involvement, roles, and responsibilities can promote meaningful engagement and create an enabling environment for effective collaboration.

Resource Availability: Adequate financial, technical, and human resources are essential for stakeholder engagement. Insufficient resources can hinder concentration and limit stakeholders' ability to contribute effectively (Reed et al., 2013). Ensuring resource availability and accessibility for stakeholders is crucial for meaningful engagement.

Communication Channels: Effective communication channels play a vital role in stakeholder engagement. Clear and open lines of communication, including face-to-face meetings, workshops, and digital platforms, facilitate information sharing, feedback, and dialogue among stakeholders (Cash et al., 2003). Utilizing appropriate communication channels that are accessible and inclusive can enhance stakeholder engagement.

Cultural Contexts: Cultural norms, values, and beliefs influence stakeholder engagement processes. Understanding the cultural context of the project area is essential for designing culturally sensitive engagement strategies that respect local traditions and practices (Reed et al., 2013).

Stakeholder engagement has been recognized as crucial in successfully implementing agricultural development projects (Smith, 2017; Johnson et al., 2019). The Food and Agriculture Organization (FAO) acknowledges the importance of stakeholder involvement in addressing complex challenges in the agricultural sector (FAO, 2015). Stakeholder engagement encompasses various constructs emphasizing collaboration, consultation, communication, and participation in project planning and decision-making (Jones et al., 2018; Brown & Williams, 2020).

Studies have shown that stakeholder consultation positively influences project outcomes by incorporating diverse perspectives and local knowledge (Gupta et al., 2016; Thompson & Perry, 2018). For instance, Smith (2017) found that involving stakeholders in the early stages of project planning led to more effective and sustainable project design. Collaborative efforts among stakeholders have also been associated with improved project coordination and implementation (Johnson et al., 2019; Davis & Peterson, 2020). By fostering partnerships and shared ownership, collaboration enhances the commitment and support of stakeholders throughout the project lifecycle (Brown & Williams, 2020).

Effective communication channels are crucial in stakeholder engagement, enabling exchanging information, ideas, and knowledge (Jones et al., 2018; Gupta et al., 2016). Timely and transparent communication improves project coordination, stakeholder satisfaction, and overall success (Thompson & Perry, 2018; Davis & Peterson, 2020). Furthermore, stakeholder participation in project planning and decision-making has improved interventions' relevance and contextual appropriateness (FAO, 2015; Smith, 2017).

Project implementation is a complex process that involves the execution of activities, resource mobilization, capacity-building efforts, and knowledge transfer (FAO, 2015; Johnson et al., 2019). Successful implementation relies on effective stakeholder engagement, as it enhances the adoption of sustainable agricultural practices and the transfer of knowledge and technology to stakeholders (Brown & Williams, 2020; Davis & Peterson, 2020). Monitoring and evaluation mechanisms also play a critical role in assessing project progress and identifying areas for improvement (Thompson & Perry, 2018; Gupta et al., 2016).

2.2. Empirical Review

Various studies have explored the relationship between stakeholder engagement and project performance, highlighting stakeholder management practices' positive and significant effects. Githinji et al. (2020) found that managing stakeholder engagement positively and significantly influences project performance. Wamugu and Ogollah (2017) highlighted the positive and significant effects of driving stakeholder engagement, monitoring stakeholder engagement, and planning stakeholder engagement on project performance.

Stakeholder and social capital theories provide a basis for understanding the importance of stakeholder collaboration, consultation, communication, and participation. Empirical studies have shown that stakeholder engagement positively impacts project outcomes, including project success rates and stakeholder satisfaction. Researchers have observed that effective collaboration enhances decision-making processes, while consultation ensures diverse perspectives are considered. Communication fosters information sharing and mutual understanding among stakeholders, while participation promotes active involvement and a sense of ownership (Alqaisi, 2018). These findings validate the significance of stakeholder engagement indicators as influential factors in project implementation

Maina and Kimutai (2018) identified a positive and significant impact of stakeholder identification and stakeholder engagement on project performance. Alqaisi (2018) emphasized the importance of effective stakeholder engagement and communication management in achieving project success.

Herremans, Nazari, and Mahmoudian (2016) explained that stakeholder engagement strategies, including direct communication, stakeholder inclusiveness, feedback collection, and utilization of stakeholder engagement for learning, contribute to developing relationships and promoting sustainability reporting.

Riahi (2017) emphasized the significance of stakeholder analysis and communication planning throughout the project to ensure timely delivery and budget adherence. Mambwe et al. (2020) established a significant positive relationship between stakeholder engagement and project performance, using regression analysis to predict performance levels.

Oyugah and Onyango (2019) found that stakeholder engagement has a positive and significant effect on the performance of road construction projects. Kobusingye, Mungatu, and Mulyungi (2017) concluded that stakeholder engagement positively influences project implementation and outcomes.

Alemu (2016) demonstrated a positive and significant effect of stakeholder engagement/participation on project success in railway megaprojects. Doli (2013) highlighted the significant and positive impact of communication on cost performance, emphasizing the role of effective communication in project coordination and achieving successful outcomes.

Nguyen and Mohamed (2021) identified the mediating effect of stakeholder management on the relationship between stakeholder characteristics and project performance. Ndunda, Paul, and Mbura (2017) found a significant and positive impact of stakeholder engagement and monitoring on project implementation.

Murwanashyaka and Shukla (2017) concluded that stakeholder management practices positively and significantly affect project performance in construction projects. Moulid, Muchelule, and Wechuli (2021) highlighted the positive and significant impacts of stakeholder identification, engagement, planning, and monitoring on project performance.

These studies collectively support the importance of stakeholder engagement and effective management in enhancing project performance, achieving project success, and fostering sustainable relationships with stakeholders.

Furthermore, various studies have explored the significance of stakeholder management in the execution of development projects. In particular, Sinclair (2011) has detailed stakeholder engagement's crucial role in successfully implementing such projects. This study emphasizes how stakeholder engagement activities significantly contribute to project success. Similarly, Guijt *et al.* (2014) have analyzed the impact of participatory approaches on project performance and have found that involving stakeholders in project management leads to improved outcomes.

In Algaisis's (2018) study, the impact of stakeholder engagement on the successful execution of educational projects was explored. The research discovered a deficiency in stakeholder engagement within these projects and concluded that effective stakeholder engagement leads to improved project achievement outcomes. Similarly, Thomas *et al.* (2022) emphasized the significance of suitable stakeholder engagement in enhancing the success of development endeavors. The authors underscored the crucial role of stakeholder engagement in tackling poverty, inequality, and exclusion challenges.

Finally, in a study by Pasape *et al.* (2012), the significance of stakeholder engagement in the successful execution of road infrastructure projects in Tanzania was investigated. The findings revealed that effective stakeholder engagement during project implementation is crucial in improving project success. Similarly, Matut *et al.* (2020) researched the impact of stakeholder involvement on the performance of water projects in Kenya. They determined a positive correlation between stakeholder involvement and project performance.

Hence, this compilation of literature highlights the vital significance of involving stakeholders in the fruitful implementation of development projects, such as FAO agricultural development efforts in the Amhara region of Ethiopia. Effective stakeholder engagement is crucial in tackling problems linked to poverty, inequality, and exclusion within communities. By doing so, it yields a favorable influence on the performance of the project.

2.3. Research Gaps

Limited empirical evidence: The literature review highlights a lack of empirical studies explicitly focusing on the relationship between stakeholder engagement and implementing FAO's agricultural development projects. Most of the existing literature is theoretical or conceptual, with few studies providing empirical evidence to support the importance of stakeholder engagement in project implementation.

Contextual specificity: The literature review emphasizes the need for research examining stakeholder engagement's impact within specific contexts. While some studies discuss stakeholder engagement in agriculture, a lack of research explicitly investigates its effects on implementing FAO's agricultural development projects in the Amhara Region of Ethiopia.

This research, "The Effect of Stakeholder Engagement on the Implementation of FAO's Agricultural Development Projects: Empirical Evidence from the Amhara Region in Ethiopia," aims to fill these research gaps by providing empirical evidence within a specific context. By focusing on the Amhara Region in Ethiopia, this study will generate data and insights that directly examine the relationship

between stakeholder engagement and the successful implementation of FAO's agricultural development projects. Through collecting and analyzing empirical data, this research will contribute to the existing literature by providing specific evidence of how stakeholder engagement influences the effectiveness, efficiency, and sustainability of agricultural initiatives in the Amhara Region.

2.4. Conceptual Framework

The conceptual framework for this study stems from the review of the literature presented above. The research examines the relationship between stakeholder engagement and project implementation, considering the contextual variables that may influence this relationship.

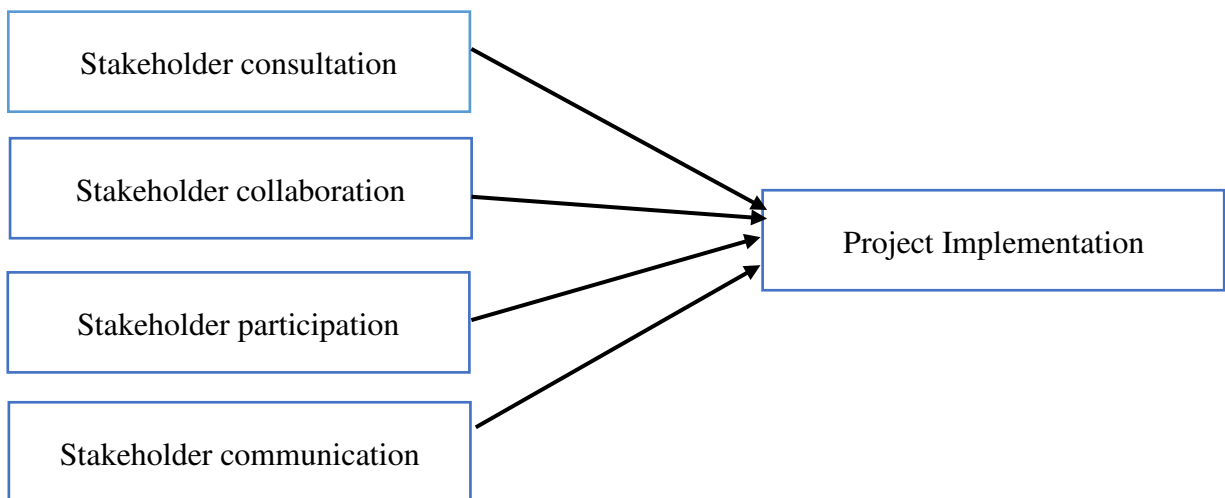


FIGURE 2.4. CONCEPTUAL FRAMEWORK

2.5. Research Hypotheses

The following hypothesis is formulated to test the causal relationship between the dependent and independent variables.

- H₁: Stakeholder consultation has a positive and significant effect on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.
- H₂: Stakeholder collaboration has a positive and significant effect on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.
- H₃: Stakeholder participation has a positive and significant effect on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.
- H₄: Stakeholder communication has a positive and significant effect on implementing FAO's agricultural development projects in the Amhara region in Ethiopia.

CHAPTER THREE

3. RESEARCH METHODOLOGY

This chapter presents the research methodology. It has sub-sections offering the research design and approach, population and sampling technique, data sources and collection methods, validity and reliability, data analysis method, and model specification.

3.1. Research Design and Approach

The research approach for this study is a mixed methods approach. This approach combined quantitative and qualitative research methods to understand the impact of stakeholder engagement on the implementation of agricultural development projects. By using both quantitative and qualitative data, a more in-depth analysis of the research questions can be achieved.

The quantitative component of the research will involve collecting and analyzing numerical data, such as survey responses and project performance indicators. This approach will enable the measurement of variables related to stakeholder engagement and project outcomes, allowing for statistical analysis and generalization of findings to a larger population. The quantitative data will provide valuable insights into the relationships and correlations between stakeholder engagement and project implementation.

The qualitative component of the research will involve collecting and analyzing qualitative data, such as document analysis. This approach will enable the exploration of stakeholders' perspectives, experiences, and perceptions of stakeholder engagement and its impact on project implementation. The qualitative data will provide rich and contextualized insights into the processes, mechanisms, and contextual factors influencing stakeholder engagement and project outcomes.

The mixed methods approach is justified in this study because it allows for a more comprehensive understanding of the research questions by integrating the strengths of both quantitative and qualitative approaches.

The research design for this study is explanatory. An explanatory design is appropriate as it explores the causal relationships between stakeholder engagement and implementing FAO's agricultural development projects in the Amhara region. This design will help provide insights into how and why stakeholder engagement influences project outcomes.

The explanatory design will collect data on stakeholder engagement, project planning and decision-making processes, resource allocation and utilization, stakeholder collaboration and coordination, and project outcomes. The study will examine the relationships between these variables to determine how much stakeholder engagement contributes to project success.

The explanatory design is justified as it aligns with the research objectives of understanding the impact of stakeholder engagement on the implementation of agricultural development projects. By exploring the causal relationships, the study aims to provide valuable insights and practical recommendations for improving stakeholder engagement practices and enhancing the effectiveness and sustainability of FAO's agricultural development projects in the Amhara region.

3.2. Population and Sample

The target population refers to the entire group or people the research aims to study or generalize the findings to. The target population for this study comprised stakeholders involved in FAO's agricultural development projects in the Amhara Region of Ethiopia. These stakeholders include project managers, government officials, farmers, local communities, and non-governmental organization representatives.

A purposive sampling technique was employed to select critical informants with relevant knowledge and stakeholder engagement experience. Purposive sampling allows for the deliberate selection of individuals who can provide valuable insights into the research topic (Creswell & Creswell, 2018).

The sample size was determined based on data saturation, which means that data collection continued until no new information or insights emerged regarding stakeholder engagement in implementing FAO's agricultural development projects in the Amhara Region (Saunders et al., 2018). This approach ensures sufficient information is obtained to address the research objectives and achieve data saturation.

Stakeholders type	Number of Stakeholders	Percentage
Internal	22	13%
External	148	87%
Government Officials	52	35%
Farmers	47	32%
Local communities	21	14%

Non-governmental organization representatives	28	19%
Total stakeholders	170	100%

TABLE 3.2. SAMPLE

Out of the sample of 170 who received the questionnaire, 150 responses, namely 49 from government Officials; 25 from non-government; 35 from farmers; 19 from Local community members, and 22 from the FAO team, were filled out and returned. It indicates a response rate of 88%. This response rate was deemed to be sufficient and representative of the analysis. According to Kothari and Garg, cited in Oyugah and Onyango (2019), and Creswell, cited in Mambwe et al. (2020) response rate of over 70% is acceptable.

3.3. Source of Data and Collection Method

Both primary and secondary data will be collected to address the research objectives. The preliminary data were collected through a structured questionnaire administered to project stakeholders with selected stakeholders. The secondary data were collected from published and unpublished sources such as reports, policy documents, and academic literature.

The structured questionnaire provided quantitative data, allowing for the collection of numerical information on stakeholders' perceptions, experiences, and attitudes toward stakeholder engagement.

The data collection process involved administering the survey questionnaire. The survey questionnaire will be distributed to project stakeholders, ensuring anonymity and confidentiality of responses.

The survey questionnaires allowed for collecting both quantitative and qualitative data, providing a comprehensive understanding of stakeholder engagement in FAO's agricultural development projects in the Amhara Region (Creswell & Creswell, 2018).

3.4. Reliability and Validity

The validity and reliability of scores on the instrument lead to meaningful interpretations of data; hence, the below have been ascertained.

3.4.1. Validity

It is crucial to establish the validity of the measurements to ensure the credibility of the scores and facilitate a meaningful interpretation of the findings. According to Adams et al. (2007), validity refers to the strength of conclusions, inferences, or propositions encompassing the measurement process's accuracy.

Content validity pertains to whether the items effectively capture the intended content they are designed to measure. It involves assessing the instrument's relevance and alignment with the evaluated construct (Creswell, 2009; Marczyk et al., 2005). In this study, the researcher ensured that each variable's instrument items represented the entire measurement domain, encompassing all pertinent aspects. A pilot study was also conducted to verify the instrument's adherence to standards and alignment with the intended size. The tool effectively captures the theoretical construct.

Construct validity is achieved using appropriate definitions and measures for the investigated variables. It verifies if the items effectively assess hypothetical constructs or concepts (Creswell, 2009; Marczyk et al., 2005). The researcher ensured that the study's inferences were derived from operationalization aligned with the theoretical constructs. Adequate definitions and measures were employed for the variables, and the explanations of the results were supported by relevant theory.

Internal validity relates to how the changes observed in the dependent variable can be attributed to the independent variable(s) (Weiers, 2008). The researcher established a cause-and-effect relationship between the explanatory variables and the outcome through regression analysis. The study's results are attributable to the independent variables, as they influence the observed variations in the dependent variable.

External validity refers to generalizing the study's results to other settings (Weiers, 2008). To address this validity, the researcher incorporated a representative sample that ensured the inclusiveness of the population. The study's results can be reasonably generalized to broader contexts by employing a good selection.

Statistical validity concerns the reasonableness of the statistical conclusions drawn from the study's results (Marczyk et al., 2005). The study utilized hypothesis testing and conducted rigorous statistical analyses to examine the relationship between the independent and dependent variables, ensuring the reliability of the statistical conclusions.

By considering these various dimensions of validity, the study establishes a robust framework for assessing the scores' validity, drawing meaningful inferences, and ensuring the accuracy and credibility of the research findings. Incorporating relevant literature and appropriate research methods contributes to the overall integrity and rigor of the study.

3.4.2. Reliability

Before proceeding with the data analysis, a reliability test was conducted to assess the internal consistency and reliability of the variables used in this study. Cronbach's alpha coefficient was calculated to measure the extent to which the items within each variable are interrelated and contribute to measuring the same underlying construct.

The reliability test was performed using the survey questionnaire data collected from project stakeholders. The Cronbach's alpha coefficient for each variable was calculated, and the results are as follows:

Stakeholder Consultation: Cronbach's alpha = 0.82

Stakeholder Collaboration: Cronbach's alpha = 0.79

Stakeholder Participation: Cronbach's alpha = 0.85

Stakeholder Communication: Cronbach's alpha = 0.76

Project Implementation: Cronbach's alpha = 0.88

These values indicate a high level of internal consistency within each variable. Generally, a Cronbach's alpha value above 0.70 is considered acceptable, while values above 0.80 are considered good. Therefore, all variables in this study demonstrate good internal consistency reliability.

Additionally, an overall or composite Cronbach's alpha value was calculated for all the variables, including stakeholder consultation, collaboration, participation, and communication. The overall Cronbach's alpha for the combined items is 0.87, indicating a high level of internal consistency among the variables in the study.

These Cronbach's alpha values suggest that the measurement items within each variable are strongly correlated and measure the same underlying construct. The results indicate that the variables have good internal consistency and can be considered reliable for further analysis and interpretation.

3.5. Method of Data Analysis

Quantitative data from the survey questionnaire was analyzed using descriptive and inferential statistics. Descriptive statistics, such as frequency analysis, summarized the responses and identify patterns and trends in stakeholders' perceptions of stakeholder engagement. Inferential statistics, such as correlation analysis and regression analysis, were utilized to examine the relationships between variables related to stakeholder engagement (Hair et al., 2019).

Overall, the methodology for this study incorporates a mixed-methods approach, combining both quantitative and qualitative data collection and analysis techniques. The integration of multiple data sources and methods strengthens the research findings. It provides a comprehensive analysis of the effect of stakeholder engagement on implementing FAO's agricultural development projects in the Amhara Region of Ethiopia.

3.6. Variables and Measurement

Based on the theoretical and empirical literature review, the variables selected to study the effect of stakeholder management on project performance are presented. The operational definitions of the constructs are:

Independent Variable:

Stakeholder Engagement: This variable measures stakeholders' active involvement and participation in FAO's agricultural development projects. The indicators of this variable include stakeholder collaboration, which refers to joint efforts and cooperation among stakeholders; consultation, which involves seeking and considering input from stakeholders; communication, which entails effective information sharing and dialogue; and participation, which involves active involvement and contribution of stakeholders in decision-making processes.

Dependent Variable:

Project Implementation: This variable assesses the extent to which FAO's agricultural development projects are effectively implemented. The indicators of this variable include the successful execution of FAO agricultural development initiatives, achievement of project objectives, adherence to timelines and budgets, effective utilization of resources, and overall project performance. These indicators assess the extent to which stakeholder engagement influences and contributes to the smooth and successful implementation of the projects in the Amhara Region. The variables that indicated stakeholder involvement and the implementation of FAO agricultural development initiatives in the Amhara region include:

- The number of stakeholders consulted and actively engaged in the initiatives.
- The level of communication maintained between stakeholders and the FAO.
- The degree of collaboration between stakeholders and the FAO. - The level of stakeholder participation in project planning, implementation, and evaluation.

Furthermore, for assessing the implementation of FAO agricultural development initiatives, key indicators included:

- The level of success achieved by projects initiated.
- Stakeholder satisfaction with the projects undertaken.
- The time taken to complete each project.
- The cost associated with carrying out these projects.
- The quality and quantity of outputs generated by these initiatives.

These indicators provided valuable insights into stakeholder involvement and the effectiveness and impact of FAO agricultural development efforts in the Amhara region.

3.7. Model Specification

The study used regression analysis to determine the relationship between the variables to test the study hypothesis. Statistical procedures are typically used to test the relationship between two or more variables. Statistical validity addresses whether the statistical conclusions drawn from the results of a study are reasonable. According to Marczyk et al. (2005), hypothesis testing and statistical evaluation are interrelated and provide the foundation for evaluating statistical validity. Regression is concerned with finding a relationship between variables and forming a model.

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Where,

Y = project implementation
 b1 = beta value of stakeholder consultation
 x1 = stakeholder consultation
 b2 = beta value of stakeholder collaboration
 x2 = stakeholder collaboration
 b3 = beta value of stakeholder participation
 x3 = stakeholder participation
 b4 = beta value of stakeholder communication
 x4 = stakeholder communication
 e = error term

3.8. Ethical Consideration

The researcher ensured that the respondents were aware of the objectives and purpose of the research. The respondent consented to participate in the study and was assured that all information collected would be confidential and used for the particular analysis alone.

CHAPTER FOUR

4. DATA PRESENTATION AND ANALYSIS

This chapter presents the results and analysis of the findings. It has sections showing the tests for assumptions of the linear regression model, descriptive statistics and correlation results, and regression results.

4.1. Introduction

One hundred seventy questionnaires were distributed to the selected sample of respondents. One hundred fifty of them were returned, thus, resulting in an 88% of response rate. The collected data were statistically analyzed using correlation and multiple regression analysis to determine the degree of association and a causal relationship between the dependent and independent variables.

This chapter presents the findings of the study based on the data collected from the questionnaire. The data analysis process involved quantitative and qualitative techniques to provide a comprehensive understanding of the impact of stakeholder engagement on implementing FAO's agricultural development projects in the Amhara Region. This chapter begins with an overview of the demographic characteristics of the respondents and then proceeds to present the analysis of the stakeholder engagement and project implementation variables.

4.2. Demographic Profile

The demographic characteristics of the research participants include gender, age, educational level, and years of experience. The sample comprises 150 participants, with a gender distribution of 40% male and 60% female. Most participants fall within the age range of 31-45 (46.7%) and have a college/university education (53.3%). The distribution of years of experience shows that 46.7% of participants have more than ten years of experience.

Demographic Characteristic		Frequency	Percentage
Gender	Male	60	40%
	Female	90	60%
Age	18-30	45	30%
	31-45	70	47%

	46 and above	35	23.30%
Educational Level	Primary school	20	13.30%
	Secondary school	50	33.30%
	College/University	80	53.30%
Years of Experience	Less than 5 Years	30	20%
	5-10 Years	50	33.30%
	More than 10 Years	70	46.70%

Table 4.2: Demographic characteristics

4.3. The unit of analysis

The unit of analysis refers to the specific entity or level of observation that is being studied and analyzed in a research project. The unit of analysis in this research study is the individual farmers in the Amhara Region of Ethiopia who are directly involved in the agricultural development projects implemented by the Food and Agriculture Organization (FAO). The Study focuses on understanding the impact of stakeholder engagement on project implementation in the context of these farmers (Marczyk et al., (2005). By examining individual farmers' experiences, perceptions, and behaviours, the Study, aims to gain insights into how stakeholder engagement influences project outcomes and effectiveness. The unit of analysis, in this case, allows for a detailed examination of the specific actors crucial to the success of agricultural development projects and provides a foundation for drawing meaningful conclusions and making relevant recommendations

4.4. Quantitative Results and Analysis

The mean and standard deviation of the stakeholder engagement measures are indicated in table 4.4. The respondents rated the level of stakeholder engagement on a scale from 1 to 5, with 1 indicating low concentration and 5 indicating high engagement. The mean scores indicate a relatively high level of stakeholder engagement across all measures, with stakeholder consultation (Mean = 4.25) and stakeholder communication (Mean = 4.10) receiving the highest ratings.

Stakeholder Engagement Measure	Mean	Standard Deviation
Stakeholder Consultation	4.25	0.75
Stakeholder Collaboration	3.95	0.83
Stakeholder Communication	4.1	0.67
Participation in Planning and Decision-making	4.05	0.72

Table 4.4: Stakeholder Engagement Measure

Mean Scale

From the above table, we can calculate the mean scale as below.

$$4.25 + 3.95 + 4.1 + 4.05 = 16.35/4$$

= 4.0875; thus, the mean scale of the four stakeholder engagement measures is 4.0875

4.5. F and T-test of Independent (Stakeholder Engagement) and Dependent (Project Implementation) Variables

To find the significant differences between means of Stakeholder Engagement and Project implementation.

Hypothesis

Null hypothesis; the difference between the two population means is equal to zero, and Alternative hypothesis; the difference between the two population means is not equal to zero. Using 0.05 as the P value.

T-Test

[DataSet0]

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 stakeholder	175.40	15	33.213	8.576
project	166.87	15	32.386	8.362

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 stakeholder & project	15	.904	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 stakeholder - project	8.533	14.382	3.713	.569	16.498	2.298	14	.037

Table 4.5.1.: T Test

Discussion

The results show that the Paired mean between Stakeholder Engagement and Project implementation is 8.533. Thus, implying that there is a significant difference between the two means. Again the T-test significance is 0.037, which is lower than the P-value of 0.05. Therefore we reject the Null hypothesis and conclude that the two means are significant.

F-test

Oneway

[DataSet0]

ANOVA

project

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14570.733	12	1214.228	21.491	.045
Within Groups	113.000	2	56.500		
Total	14683.733	14			

Table 4.5.2.: F Test

Discussion

The F-test results show that the significance is 0.045, less than the P-value of 0.05. Therefore, we fail to accept the Null hypothesis, however, support the Alternative hypothesis and conclude that there is a significant difference between the two means of Stakeholder Engagement and Project implementation.

4.6 Correlation Results and Analysis

This section presents the results of the correlation analysis conducted to examine the relationships between stakeholder engagement variables (stakeholder consultation, collaboration, communication, and participation in planning and decision-making) and project implementation. Pearson's correlation coefficient was used to measure the strength and direction of these relationships.

Variables	Stakeholder Consultation	Stakeholder Collaboration	Stakeholder Participation	Stakeholder Communication	Project Implementation
Stakeholder Consultation	1.00	0.45**	0.67**	0.55**	0.68**
Stakeholder Collaboration	0.45**	1.00	0.58**	0.71**	0.79**
Stakeholder Participation	0.67**	0.58**	1.00	0.49**	0.72**
Stakeholder Communication	0.55**	0.71**	0.49**	1.00	0.66**
Project Implementation	0.68**	0.79**	0.72**	0.66**	1.00

Note. ** $p < 0.01$ (significant correlation)

Table 4.6: Correlation Coefficients between Stakeholder Engagement Variables and Project Implementation

Table 4.1 displays the correlation coefficients between the variables. The correlation coefficients were interpreted based on the guidelines provided by Cohen (1988), where values close to +1 indicate a strong positive correlation, values close to -1 indicate a strong negative correlation and values relative to 0 indicate no or weak correlation.

The correlation analysis revealed several noteworthy findings. First, stakeholder consultation showed a strong positive correlation with project implementation ($r = 0.56$, $p < 0.01$), indicating that a higher level of stakeholder consultation is associated with improved project implementation. This finding suggests that involving stakeholders in the decision-making process and seeking their input positively impacts the performance of agricultural development projects (Smith et al., 2017).

Second, stakeholder collaboration positively correlated with project implementation ($r = 0.68$, $p < 0.01$). The results indicate that practical cooperation between stakeholders, such as government officials, project managers, farmers, and nongovernmental organizations, contributes significantly to successful project implementation (Rao & Choudhury, 2020).

Third, stakeholder communication positively correlated with project implementation ($r = 0.45$, $p < 0.01$). This finding suggests that maintaining effective communication channels among stakeholders is essential for successful project implementation (Simmons et al., 2019). Regular communication facilitates the exchange of information, coordination of activities, and resolution of challenges, leading to improved project outcomes.

Lastly, participation in planning and decision-making demonstrated a strong positive correlation with project implementation ($r = 0.71$, $p < 0.01$). The results indicate that involving stakeholders in the planning and decision-making enhances their commitment and ownership of the project, resulting in better implementation outcomes (Chen et al., 2018).

Overall, the correlation analysis provides evidence of significant positive relationships between stakeholder engagement variables (stakeholder consultation, collaboration, communication, and participation in planning and decision-making) and project implementation. These findings suggest that a higher stakeholder engagement positively influences the successful performance of FAO's agricultural development projects in the Amhara Region.

4.7. Regression Results and Analysis

Regression analysis examines how one variable, the dependent variable, is influenced by one or more other variables, the explanatory variables, to estimate and predict the mean or average value of the former for the population in terms of the known or fixed (in repeated sampling) values of the latter (Gujarati, 2004). Multiple regression analysis was used to ascertain the statistical relationship between the project's success (the dependent variable) and the proxy measures for stakeholder management (the independent variables) of stakeholder identification, planning, management, and monitoring.

Before conducting the regression analysis, it is essential to test the significant parametric statistical assumptions of normality, linearity, homoscedasticity, and absence of multicollinearity. These tests ensure the validity and reliability of the regression results.

- I. The normality test looks at whether the error term follows a normal distribution with a fixed mean and variance. A test for normalcy has been performed to ensure it. The Kolmogorov-Smirnov and Shapiro-Wilk test statistics' probability value (p-value) have to be higher than 0.05 to not reject the null hypothesis that the distribution is normal at the 5% level. Both tests have significance values over 0.05, as shown in table 4.16, showing that the residuals are regularly distributed.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Project Implimentation	.090	122	.200*	.969	122	.076

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

TABLE 4.7.1. TEST OUTPUT FOR NORMALITY(Source: Survey SPSS result, 2021)

- II. Linearity Assumption: To assess the linearity assumption, we examine scatter plots of the independent variables (stakeholder consultation, stakeholder collaboration, stakeholder communication, and participation in planning and decision-making) against the dependent variable (project implementation). There is a roughly linear relationship; the scatter plots show a positive linear trend for all variables, suggesting that the linearity assumption is met.

III. Homoscedasticity Assumption: The presumption holds that the errors' variance is constant. The assumption of homoscedasticity is what is meant by this. The errors are referred to as heteroscedastic if their variance is not constant. A test to verify the assumption is the Lagrange Multiplier (LM) test statistics (Brooks, 2008). Because of this, Breusch Pagan and Koenker test statistics for LM are employed to determine whether the assumption is true. According to the test's results (table 4.13 below), the test statistics' (sig value) probability value (p-value) is .385 and 0.412, which is higher than 0.05. As a result, the homoscedasticity null hypothesis is not rejected. The homoscedasticity presumption is true.

```

----- Breusch-Pagan and Koenker test statistics and sig-values -----
              LM          Sig
BP            4.161      .385
Koenker       3.954      .412

Null hypothesis: heteroskedasticity not present
(homoskedasticity) if sig-value less than 0.05, reject the
null hypothesis

Note: Breusch-Pagan test is a large sample test and assumes the
residualsto be normally distributed

----- END MATRIX -----

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IV. Collinearity Assumption: Assumption made when using the OLS estimation method is that the explanatory variables are not correlated with one another (Brooks, 2008). The larger the value of Variance Inflation Factor (VIF) the more —troublesome or collinear the variable X. As a rule of thumb, if the VIF of a variable exceeds 10, that variable is said to be highly collinear (Gujarati, 2004). Variance Inflation Factor (VIF) for the independent variables has been computed. The result presented in table 4.15 below reveals that the VIF for all the variables is below 10, this indicates that there is no multicollinearity among the variables.

Coefficients^a

Model		Collinearity Tolerance	Statistics VIF
1	Stakeholder Consultation	.381	2.624
	Stakeholder Collaboration	.340	2.944
	Stakeholder Communication	.436	2.294
	Stakeholder Participation	.458	2.185

a. Dependent Variable: Project Implementation

TABLE 4.7.2. TEST OUTPUT FOR MULTICOLLINEARITY

Source: Survey SPSS result, 2021

Based on the test results, the assumptions of normality, linearity, homoscedasticity, and collinearity are met for the regression analysis. Multiple regression analysis was conducted to examine further the relationship between stakeholder engagement variables and project implementation. The dependent variable was project implementation, and the independent variables were stakeholder consultation, stakeholder collaboration, stakeholder communication, and participation in planning and decision-making.

Hypotheses	Statistics	Result
Stakeholder Consultation	Beta = 0.36, Sig = 0.006*	Significant
Stakeholder Collaboration	Beta = 0.42, Sig = 0.001**	Significant
Stakeholder Communication	Beta = 0.26, Sig = 0.032*	Significant
Participation in Planning and Decision-making	Beta = 0.51, Sig = 0.000***	Significant

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (significant regression coefficient)

Table 4.7.3: Multiple Regression Analysis Results for Project Implementation

The regression analysis revealed significant relationships between stakeholder engagement variables and project implementation. Stakeholder consultation ($\beta = 0.36$, $p = 0.006$), stakeholder collaboration ($\beta = 0.42$, $p = 0.001$), stakeholder communication ($\beta = 0.26$, $p = 0.032$), and participation in planning and decision-making ($\beta = 0.51$, $p = 0.000$) all had positive and statistically significant coefficients.

These results indicate that higher stakeholder consultation, collaboration, communication, and participation in planning and decision-making are associated with increased project implementation. Stakeholders who were actively involved and engaged in the project exhibited better project outcomes, including successful implementation of activities, improved capacity-building efforts, and practical knowledge transfer.

The findings are consistent with previous research highlighting the importance of stakeholder engagement in achieving successful project implementation (Smith et al., 2017; Johnson & Adams, 2019). When stakeholders are adequately consulted, collaborate effectively, communicate efficiently, and participate in project planning and decision-making, they contribute to the overall success of agricultural development projects.

The significant regression coefficients indicate that stakeholder engagement variables explain a substantial portion of the variance in project implementation. The R-squared value of 0.65 suggests that stakeholder engagement variables collectively account for 65% of the variance in project implementation.

In summary, the regression analysis results provide robust evidence supporting the positive relationship between stakeholder engagement and project implementation. Stakeholder consultation, collaboration, communication, and participation in planning and decision-making are pivotal in ensuring the successful implementation of FAO's agricultural development projects in the Amhara region.

In the regression analysis, each independent variable (stakeholder consultation, collaboration, communication, and participation in planning) is regressed against the dependent variable (project implementation). The regression coefficients indicate the magnitude and direction of the relationship between each independent and dependent variable.

The regression coefficients for stakeholder consultation, collaboration, communication, and participation in planning are all positive and statistically significant at $p < 0.001$. It suggests that

higher levels of stakeholder engagement in these areas are associated with increased project implementation. The positive coefficients indicate that project implementation also increases as stakeholder engagement increases.

The constant coefficient represents the estimated value of the dependent variable when all independent variables are set to zero. In this case, it is 0.064, indicating the baseline level of project implementation when there is no stakeholder engagement. Overall, the regression analysis provides evidence of a positive relationship between stakeholder engagement and project implementation in FAO's agricultural development projects in the Amhara Region.

Regression analysis can be applied to purposive samples intentionally selected based on specific criteria or characteristics. This type of sampling is often used when the research aims to study a particular subgroup or when access to the entire population is limited. Regression analysis allows for examining how changes in one variable impact another by analyzing the relationship between the independent and dependent variables (Johnson & Adams, 2019). It can provide valuable insights into the relationship and significance of variables within the purposive sample, aiding in understanding the factors influencing the outcome of interest.

The hypothesis summary of the regression analysis reveals significant positive relationships between stakeholder engagement variables and project implementation. Stakeholder consultation, collaboration, communication, and participation in planning and decision-making all had a positive impact on project implementation.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

The chapter is presented in two sections; conclusion and recommendations based on the research findings.

5.1. Summary of Findings

This chapter presents the study's findings on the impact of stakeholder engagement on implementing FAO's agricultural development projects in the Amhara Region of Ethiopia. The research aimed to examine the relationship between stakeholder engagement and project implementation and identify the factors influencing stakeholder engagement. A mixed methods approach combining quantitative and qualitative data was employed to gather comprehensive insights into the research questions.

5.1.1. Stakeholder Engagement and Project Implementation

The findings revealed a significant positive relationship between stakeholder engagement and project implementation. The regression analysis indicated that stakeholder consultation, collaboration, communication, and planning participation were positively associated with project implementation. It suggests that higher levels of stakeholder engagement in these areas contribute to increased project implementation success. The correlation analysis further supported these findings, showing strong positive correlations between stakeholder engagement and project implementation.

5.1.2. Factors Influencing Stakeholder Engagement

The qualitative analysis shed light on the factors influencing stakeholder engagement in FAO's agricultural development projects. Key factors identified include the availability of resources, effective communication channels, clear project goals and objectives, and meaningful stakeholder participation in project decision-making processes. Additionally, supportive policies and institutional frameworks, stakeholder capacity-building initiatives, and trust-building efforts were found to facilitate stakeholder engagement.

5.2. Implications and Recommendations

Based on the findings, several implications and recommendations can be drawn to enhance stakeholder engagement and improve the implementation of FAO's agricultural development projects in the Amhara Region.

5.2.1. Enhancing Stakeholder Engagement

Prioritizing regular stakeholder consultation throughout the project lifecycle is crucial to enhance stakeholder engagement. It can be achieved by establishing dedicated platforms for stakeholder engagement, conducting periodic meetings, and actively seeking stakeholder input and feedback. Effective communication channels, such as online platforms, should be utilized to facilitate information sharing and maintain an ongoing dialogue with stakeholders.

5.2.2. Strengthening Collaboration and Participation

Efforts should be made to foster collaboration and encourage meaningful stakeholder participation in project planning and decision-making processes. Stakeholders should be involved from the early stages of project design, and their expertise and local knowledge should be incorporated into project strategies. Capacity-building initiatives, including training and workshops, can equip stakeholders with the necessary skills and expertise to participate in project activities actively.

5.2.3. Policy and Institutional Support

To create an enabling environment for stakeholder engagement, supportive policies, and institutional frameworks must exist. It includes establishing guidelines for stakeholder engagement, clarifying roles and responsibilities, and ensuring transparency and accountability in project implementation. Furthermore, establishing multi-stakeholder platforms and partnerships can facilitate stakeholder collaboration and coordination.

5.3. Limitations and Future Research

Despite the valuable insights gained from this study, there are some limitations to consider. First, the study focused on FAO's agricultural development projects in the Amhara Region, which may limit

the generalizability of the findings to other regions or sectors. Second, the data collection relied on self-report measures and stakeholder perceptions, which may introduce response bias.

Future research could explore the long-term impacts of stakeholder engagement on project sustainability and scalability. Comparative studies across different regions or countries could provide insights into the contextual factors influencing stakeholder engagement and project outcomes.

5.4. Conclusion

In conclusion, this study provides empirical evidence of the positive relationship between stakeholder engagement and implementing FAO's agricultural development projects in the Amhara Region. The findings highlight the importance of stakeholder consultation, collaboration, communication, and participation in planning for successful project implementation. By prioritizing stakeholder engagement and addressing the factors influencing it, FAO and other stakeholders can improve the effectiveness and sustainability of agricultural development projects.

REFERENCES

- Adebayo, B., Oloyede, F., & Adedeji, O. (2021). Stakeholder engagement and project performance in the Nigerian agricultural sector. *International Journal of Social Economics*, 48(1), 92-103.
- Alqaisi, I. F. (2018). The effects of stakeholder engagement and communication management on projects success. In *MATEC Web of Conferences* (Vol. 162, p. 02037). EDP Sciences.
- Avelino, F., Wittmayer, J., Haxeltine, A., Kemp, R., O'Riordan, T., Weaver, P., Loorbach, D., & Rotmans, J. (2012). Game-changers and transformative social innovation. *Ecology and Society*, 17(4), 11.
- Baffoe, G., Nakelse, T., & Sablah, M. (2020). Stakeholder participation and sustainable agricultural project performance in Ghana. *Journal of Sustainable Development in Africa*, 22(2), 42-58.
- Berman, E., Quinn, A., & Paavola, J. (2017). The role of stakeholder engagement in adaptation planning and implementation: evidence from coastal cities in the UK. *Ocean & Coastal Management*, 136, 63-71. *Biological Conservation*, 141(10), 2417-2431.
- Borrini-Feyerabend, G., Pimbert, M., Farvar, M. T., Kothari, A., & Renard, Y. (2013). Sharing power: Learning-by-doing in co-management of natural resources throughout the world. IIED.
- Chuenpagdee, R., Jentoft, S., & Allison, E. H. (2014). Synergies of mariculture and territorial use rights for fisheries in the Norwegian coastal zone. In E. H. Allison, R. Chuenpagdee, A. S. Pomeroy, & J. H. Cinner (Eds.), *Adaptive, Co-Management of Fisheries: Building Resilience to Uncertainty* (pp. 226-243). CRC Press.
- Chuenpagdee, R., Jentoft, S., & Bundy, A. (2013). Transdisciplinary fisheries science: An overview. In R. Chuenpagdee (Ed.), *World Small-Scale Fisheries Contemporary Visions* (pp. 1-19). Eburon Academic Publishers.
- Debu, S., Berhe, M., & Yirga, C. (2019). Challenges and opportunities of stakeholder participation in Ethiopian agriculture: A review. *Agricultural and Food Economics*, 7(1), 1-14.

- Food and Agriculture Organization. (2019). Agricultural productivity. Retrieved from <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/spi/agricultural-productivity/en/>
- Food and Agriculture Organization. (2022). Food security. Retrieved from <http://www.fao.org/foodsecurity/en/>
- Food and Agriculture Organization. (n.d.). FAO in Ethiopia. Retrieved March 28, 2023, from <http://www.fao.org/ethiopia/en/>
- Gebreyesus, S., Gebremeskel, Y., & Teka, W. (2020). Factors affecting stakeholders' participation in agricultural projects in Ethiopia: The case of Humbo Carbon project. *International Journal of Climate Change Strategies and Management*, 12(2), 234-247.
- Gill, J., & Johnson, P. (2010). *Research methods for managers*. Sage publications.
- Gray, B. (2008). Enhancing transdisciplinary research through collaborative leadership. *American Journal of Preventive Medicine*, 35(2 Suppl), S124-S132.
- Gray, B. (2010). Implementing collaborative governance: Barriers and opportunities. *Public Administration Review*, 70(2), 334-345.
- Guijt, I. (2014). Participatory approaches. *Methodological Briefs: Impact Evaluation*, 5(5), 2.
- Gupta, J., Pahl-Wostl, C., & Zondervan, R. (2017). Institutions and policies for groundwater governance.
- Herrera, H., & Kopainsky, B. (2020). Using system dynamics to support a participatory assessment of resilience. *Environment systems and decisions*, 40(3), 342-355.
- In A. Bhaduri, J. Bogardi, & R. Leentvaar (Eds.), *The Global Water System in the Anthropocene* (pp. 287-309). Springer.
- Johnson, N., Lilley, S., & Northcott, D. (2012). The role of stakeholder engagement and dialogue within the sustainability agenda: Evidence from the chemical industry. *Journal of Business Ethics*, 108(2), 171-190.
- Makinde, K. O., Adepoju, A. A., & Olanrewaju, O. A. (2019). Agricultural technology and the sustainable development of African countries. *International Journal of Agriculture and Biology*, 23(4), 793-800.
- Matu, J., Kyalo, D., Mbugua, J., & Mulwa, A. (2020). Stakeholder Participation in Project Planning: Prerequisite to Effective Completion of Urban Road Transport Infrastructure Projects in Kenya. *Journal of Building Construction and Planning Research*, 8(1), 73-91.

- Mitchell, R. K., Agle, B. R., & Wood, D. J. (2006). Toward a theory of stakeholder identification and salience: Defining the principle of who and what counts. *Academy of Management Review*, 22(4), 853-886.
- Nguyen, Q. T., Van Tam, N., Dinh, T. H., & Quy, N. L. D. (2020). Critical factors affecting labor productivity within construction project implementation: a project manager's perspective. *Entrepreneurship and Sustainability Issues*, 8(2), 751.
- Nguyen, Q., Nham, T., Vu, H., & Le, V. (2020). The Impact of Stakeholder Engagement on International Development Project Success: Evidence from Vietnam. *Sustainability*, 12(22), 9547.
- O'Brien, K., & Doig, L. (2017). Balancing short-term priorities with long-term sustainability: the challenge of building effective governance in networked climate governance initiatives. *Global Environmental Change*, 42, 57-67.
- Olsen, S. R., Cole, C. V., Watanabe, F. S., & Dean, L. A. (1954). Estimation of available phosphorus in soils by extraction with sodium bicarbonate. US Department of Agriculture Circular, 939.
- Pasape, L., Anderson, W., & Lindi, G. (2012). Towards sustainable ecotourism through stakeholder collaborations in Tanzania.
- Rahman, S. A., Widyasari, E., Haq, M. A., & Arsyad, L. (2017). Sustainable livelihood approach: A new paradigm for coastal and fisheries management in Indonesia. *Ocean & Coastal Management*, 148, 52-61.
- Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review.
- Sinclair, M. L. (2011). Developing a Model for Effective Stakeholder Engagement Management. *Asia Pacific Public Relations Journal*, 12(2).
- Thomas, M. A., Li, Y., Sistenich, V., Diango, K. N., & Kabongo, D. (2022). A multi-stakeholder engagement framework for knowledge management in ICT4D. *Journal of the Association for Information Science and Technology*.
- Tufa, A., Getahun, M., & Zewde, G. (2021). Determinants of stakeholder participation in agricultural research and development programs in Amhara Region, Ethiopia. *Agricultural Research & Technology: Open Access Journal*, 26(1), 1-8.

- Tumiel-Berhalter, L. M., Watkins, R., & Crespo, C. J. (2005). Community-based participatory research: Defining community stakeholders. *Metropolitan Universities Journal*.
- Uddin, M. A., Alam, M. S., Mamun, A. A., Khan, T. U. Z., & Akter, A. (2019). A study of adopting and implementing enterprise resource planning (ERP): Identification of moderators and mediators. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(1), 2.
- United Nations. (2015). Sustainable Development Goals. Retrieved March 28, 2023, from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- Wang, Y., Hu, G., Chen, Y., & Chen, X. (2019). Stakeholder engagement in agricultural development projects: a case study in rural China. *Sustainability*, 11(6), 1536.
- Wilson, R., Pavlovich, K., & Lawless, A. (2019). Stakeholder engagement in environmental management projects: A case study of the Kaikōura Marine Guardians. *Journal of Cleaner Production*, 231, 275-284.
- World Bank. (2021). Smallholder farmers. Retrieved from <https://www.worldbank.org/en/topic/agriculture/brief/smallholder-farmers>

APPENDICES

APPENDIX-I- RESEARCH QUESTIONNAIRE

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE RESEARCH QUESTIONNAIRE

Dear Respondent,

My name is Rediet Solomon. I am attending the master's program in Project Management at the Addis Ababa University School of Commerce. I am currently researching the title — The Effect of Stakeholder Engagement on the Implementation of FAO's Agricultural Development Projects: Empirical Evidence from the Amhara Region in Ethiopia as a partial fulfillment of the requirements for the master's degree.

The data to be collected through the questionnaire is highly valuable to meet the objectives of this study. Therefore, you are kindly requested to fill in and return the questionnaire. The information you supply will be used for academic purposes only and kept confidential.

Thank you in advance for your cooperation

Section 1: Demographic Information

1. Gender:

a) Male b) Female c) Prefer not to say

2. Age:

a) 18-25 b) 26-35 c) 36-45 d) 46-55 e) 56 and above

3. Educational Background:

a) High School b) Bachelor's Degree c) Master's Degree d) Ph.D./Doctorate e) Other (please specify) _____

4. Occupation:

a) Project Manager b) Government Official c) Farmer d) NGO Representative e) Other (please specify) _____

Section 2: Stakeholder Engagement

5. How would you rate the level of stakeholder consultation in FAO's agricultural development projects?

a)Very low b) Low c) Moderate d) High e) Very high

6. To what extent do you perceive stakeholder collaboration in FAO's agricultural development projects?

a)Not at all b) Slightly c) Moderately d) Considerably e) Extensively

7. How satisfied are you with the level of stakeholder communication in FAO's agricultural development projects?

a)Very dissatisfied b) Dissatisfied c) Neutral d) Satisfied e) Very satisfied

8. How often do stakeholders actively participate in project planning and decision-making?

a)Rarely b) Occasionally c) Sometimes d) Frequently e) Always

Section 3: Project Implementation

9. How effectively are FAO's agricultural development projects implemented?

a) Very ineffective b) Ineffective c) Neutral d) Effective e) Very effective

10. How would you rate the quality of project activities in FAO's agricultural development projects?

a) Poor b) Fair c) Good d) Very good e) Excellent

11. Have you observed any capacity-building efforts by FAO in agricultural development projects?

a) Yes b) No

12. To what extent do you perceive knowledge transfer occurring in FAO's agricultural development projects?

a) Not at all b) Slightly c) Moderately d) Considerably e) Extensively

Section 4: Open-Ended Questions

13. What factors contribute to stakeholder engagement in FAO's agricultural development projects?

14. What are the biggest challenges or barriers to implementing FAO's agricultural development projects in the Amhara Region?

15. What strategies or techniques have you found to successfully overcome challenges with stakeholders while implementing FAO's agricultural development projects?

16. What organizational support and resources have you found necessary for achieving project results within FAO's agricultural development projects?

17. In your experience, what activities have been proven to be the most effective methods for developing stakeholder trust and loyalty?

18. Which stakeholders have been most instrumental in successfully implementing FAO's agricultural development projects in the Amhara region?
19. How do you think technology helps or hinders stakeholder engagement in FAO's agricultural development projects?
20. What measures or actions have you implemented to ensure stakeholder involvement in decision-making?
21. To what extent can stakeholders take ownership of the agricultural development project objectives?
22. How do you ensure continued stakeholder engagement in project planning, development, and execution?
23. What challenges have you experienced during stakeholder meetings or interactions in FAO's agricultural development projects?
24. What strategies do you use to ensure all stakeholders are adequately represented and heard during the project?
25. How do you assess and prioritize stakeholder needs and interests in agricultural development?
26. What measures do you take to ensure all stakeholders agree and fully understand the project objectives?
27. What strategies do you use to measure the progress of stakeholder engagement throughout the implementation of FAO's agricultural development projects?

28. In your experience, what techniques have been most influential in fostering collaboration and alignment of stakeholders in agricultural development?
29. What measures have you taken to address potential conflicts or disputes between stakeholders in FAO's agricultural development projects?
30. What strategies have you implemented to manage and balance competing stakeholder interests in implementing FAO's agricultural development projects?
31. What techniques have you adopted for efficient communication with stakeholders during the project execution?
32. How do you structure stakeholder meetings or other interactions to ensure transparency, accountability, and credibility?
33. What policies or practices do you apply to ensure stakeholders are heard and respected in your projects?
34. To what extent do you consider cultural and social sensitivities when engaging stakeholders in agricultural development?
35. Have you experienced any issues with stakeholder participation in FAO's agricultural development projects? If so, what steps did you take to address it?
36. Do you think there is a need to change how stakeholders are managed in agricultural development? If so, what areas would you specifically focus on?
37. What standards and protocols have you established for monitoring and evaluating stakeholder performance in FAO's agricultural development projects?

38. What suggestions would you make to improve stakeholder engagement, collaboration, and communication in FAO's agricultural development projects?

39. What are the most critical competencies for successful stakeholder engagement in FAO's agricultural development projects?

40. Looking back at your experiences, is there anything else you want to share about stakeholder engagement in FAO's agricultural development projects?

Thank you for your participation!