**Original Research Article**

**Evaluation of Farmers Training Centres (FTCs): A Case Study of Gode and Shabeley woreda in Somali Region, Ethiopia**

***ABSTRACT***

*This study assessed~~s~~ the performance, challenges, and opportunities of Farmer Training Centres (FTCs) in the Gode and Shabeley Woredas of the Somali Region, Ethiopia. Utilizing a mixed-methods approach, data were collected from 140 farmers, 15 extension agents, and supervisors using structured questionnaires, focus group discussions, and key informant interviews. The findings revealed that 80% of the FTCs in the study area~~s~~ meet the recommended staffing levels.~~,~~ ~~yet significant challenges persist.~~ ~~Key issues include~~ The major constraints identify include inadequate resources (60%), ~~with 60% of respondents citing~~ insufficient training materials (40%), and ~~40% noting a~~ lack of operational infrastructure (40%). ~~Despite these obstacles, opportunities for enhancement exist.~~ The study identified high community participation (~~mean score:~~*  = *2.8) and political commitment (~~mean score:~~*  = *2.9) as major strengths. In contrast, economic constraints were ranked as the most significant barrier, with a mean score of 36.5. Institutional weaknesses were also highlighted, with 45% of FTCs failing to adapt training content to local contexts. The~~se~~ study ~~findings~~ ~~underscore~~ recommended that there is a need for tailored interventions to address resource limitations and leverage existing community support. The study provides evidence-based recommendations for enhancing FTCs' effectiveness in pastoral regions, crucial for improving agricultural productivity and rural livelihoods.*

***Keywords****:* Extension workers, problems, prospects, constraints, woredas.

1. **INTRODUCTION**

Agriculture remains the cornerstone of Ethiopia's economy, characterized by traditional subsistence farming with minimal access to modern technology and education [1, 2]. ~~Acknowledging agriculture's~~ It play pivotal role in poverty reduction and national development, the Ethiopian government has emphasized agricultural services in key policy frameworks, such as the Agricultural Investment and Sector Policy Plan [3]. In pursuit of agricultural transformation, the government has adopted rural-focused development policies, central to which is the establishment of Farmer Training Centers (FTCs) in each kebele. The strategy includes the planned creation of 18,000 FTCs nationwide, of which approximately 8,500 have been established, and the training of nearly 60,000 extension agents [4]. FTCs serve as a critical link between farmers and institutional support services—facilitating access to inputs, credit, and market opportunities while enhancing farmers' agricultural skills and decision-making capabilities [5]. These centers are integral to the government's broader objective of transforming extension services through targeted training and capacity-building initiatives.

Farmer Training Centres (FTCs) in Ethiopia offer substantial opportunities for boosting agricultural productivity and advancing rural livelihoods. These centers play a crucial role in training farmers, facilitating the transfer of knowledge, and promoting innovation in agricultural methods. Key opportunities include enhancing capacity building through targeted training, utilizing information and communication technology, and refining land tenure systems to encourage greater farmer participation [6]. Additionally, FTCs can focus on strengthening human resource development, increasing agricultural productivity, fostering innovation, and building robust institutional connections with public entities, private sectors, and NGOs [7].

Making Farmer Training Centres (FTCs) in Ethiopia operational, responsive, and successful remains a substantial challenge, despite the potential they hold and the resources available, including numerous trained graduates working at these centers [8]. Many FTCs lack adequate facilities and essential infrastructure needed to deliver effective training and extension services to farmers [9, 10, 11]. Key challenges faced by FTCs include limited resources—such as operational equipment, agricultural inputs, training materials, and demonstration plots—as well as budget constraints [6]. Moreover, Development Agents (DAs) often lack the practical skills necessary to conduct effective training, leading to insufficient community involvement, low farmer participation, minimal engagement of women, and a high dropout rate [6]. Addressing these challenges is crucial to improving the effectiveness and sustainability of FTCs.

Although previous studies have examined the performance of Farmer Training Centers (FTCs) in Ethiopia, the research remains limited, particularly in regional contexts. For example, one study explored the physical and functional status of FTCs in the Oromia region, focusing on identifying challenges and opportunities that could enhance their functionality [12]. However, this study was confined to Oromia and did not address the unique dynamics of the Somali region, where pastoralist communities frequently migrate in search of pasture for their livestock. Given these distinct socio-economic and environmental factors, the challenges and opportunities for FTCs in the Somali region are likely to differ significantly from those in Oromia. This gap underscores the need for research specifically targeting the Somali region to provide a comprehensive understanding of the performance and constraints of FTCs in this context.

## The main objective of this study was to assessed Farmer Training Centers in Gode and Shabeley woreda in Somali Region, Ethiopia. ~~is to address the existing gap in the literature by conducting a comprehensive assessment of the opportunities, current status, and challenges facing Farmer Training Centers (FTCs) in the Gode and Shabeley woredas, situated in the Shabelle and Fafan Zones of the Somali Regional State (SRS).~~ However, the specific objectives of the study were to: describe personal and demographic characteristics of the respondents in the study area; determine the perceptions of trained and untrained farmers towards FTCS; and identify the opportunities, SWOT analysis and constraints of FTCS in the study area. The findings are expected to offer critical insights that could enhance the operational efficiency of FTCs and provide a foundational framework to guide future interventions, ultimately improving the overall effectiveness of these centers.

# **RESEARCH METHODOLOGY**

**2.1 Study Area**

This~~e~~ study area was conducted in ~~comprises~~ Gode and Shebele Woredas within the Somali Region of Ethiopia. Gode Woreda, located in the Shabelle Zone and named after its major town, is bordered by the Shebelle River to the south, Imiberi to the northwest, Danan to the north, the Korahe Zone to the northeast, and Kelafo to the S~~s~~outheast. According to the 2007 Census by Ethiopia’s Central Statistical Agency (CSA), Gode has a population of 109,718, with 39.41% residing in urban areas and 27.74% identifying as pastoralists. Shebele Woreda, located to the west of Jigjiga in the Jijiga Zone, has a population of 177,560. In addition to its agricultural significance, Shebele shares geographical features similar to the larger Jijiga Woreda, where elevations reach 1,803 meters and the Fafen and Jerer rivers provide perennial water sources. The infrastructure in the Jijiga area includes 80 km of asphalt and 60 km of all-weather gravel roads, with 34.1% of residents having access to drinking water (CSA, 2007). ~~Together,~~ Gode and Shebele woredas reflect the socio-economic diversity and agricultural potential in the Somali Region, with mixed livelihoods that include urban residency, pastoralism, and crop-livestock farming. These characteristics underscore the unique challenges and opportunities present in advancing agricultural development and rural livelihoods within the region.

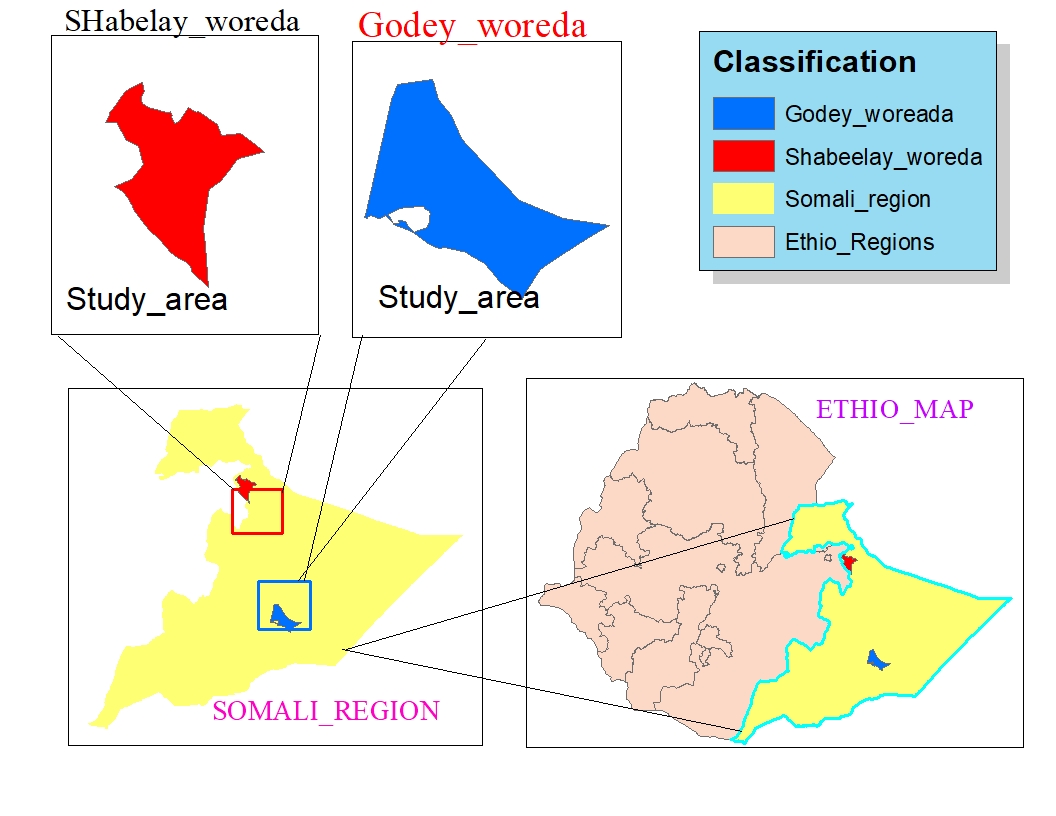


Figure 1: Map of the study area ~~(Source B)~~

**2.2~~1.~~ Sample and Sampling Techniques**

A multi-stage sampling procedure was employed for this study. First, Gode and Shabeley woredas were purposively selected from the 95 woredas of the Somali region due to their agricultural potential and the presence of FTCs established by the Bureau of Agriculture. In the second stage, specific FTCs in these woredas were chosen in consultation with the respective Offices of Agriculture and Natural Resources. Subsequently, lists of trained and untrained farmers (those who had received modular or short-term training and those who had not) were compiled with the assistance of extension agents from the selected kebele FTCs. A total of 140 respondents were then selected using the probability proportional to size (PPS) random sampling method. Additionally, all 15 extension agents and supervisors in the selected kebele FTCs were included as key informants. The study also incorporated focus group discussions and key informant interviews with supervisors, experts, and extension agents, supplemented by secondary data from the Somali Region Agriculture and Natural Resource Bureau.

**2.3. Methods of Data Collection**

This study utilized both primary and secondary data sources, collected through interviews, questionnaires, direct observation, and SWOT analysis. Primary data included self-administered questionnaires for extension personnel, interview schedules for farmers, personal observations, focus group discussions, and informal conversations. Focus groups with trained and untrained farmers provided diverse perspectives. The status, opportunities, and challenges of five selected FTCs were assessed using national standards and checklists. Secondary data were gathered from government and non-governmental documents, including reports from the regional Agriculture and Natural Resources Office. A Likert-type scale evaluated farmers' perceptions of FTC roles in delivering services. SWOT analysis and open-ended questionnaires gathered insights from extension agents, supervisors, and key informants to identify the challenges and opportunities facing the FTCs.

## **2.4. Method of Data Analysis**

~~After data collection, the~~ D~~d~~ata collected were coded, entered, and analyzed using SPSS version 20. Qualitative data were interpreted and conceptually generalized. Descriptive statistics, including means, standard deviations, percentages, frequencies, and rankings, were used to summarize the data. Statistical tests were conducted to determine significant differences between farmers and FTCs. Additionally, a SWOT analysis was employed to assess the strengths, weaknesses, opportunities, and threats related to the research objectives.

1. **RESULTS AND DISCUSSION**

## ~~The results are organized into sections aligned with the study's objectives. This includes detailed discussions of insights from focus groups, direct observations, and a summary of the SWOT analysis. Farmers' opinions on the mandatory services provided by FTCs are also thoroughly examined. These analyses provide a comprehensive understanding of the status of FTCs, covering their organizational and operational conditions, opportunities for growth, and the challenges hindering their ability to fulfill their intended roles.~~

## **3.1. Personal and Demographic Characteristics of Respondents**

~~In both districts,~~ The results on personal and demographic characteristics as presented in Table 1 revealed that ~~the~~ majority (over 60%) of respondents were ~~are~~ married and less than 30% were single in the study area.~~, with 63.6% in Gode and 61.9% in Shabeley. Single individuals represent the second-largest demographic, followed by divorced respondents.~~ However, the finding in Table 1 shows that respondents had ~~Regarding education, the~~ primary level with ~~has~~ the highest representation, accounting for 22.9% to 28.6% in the study ~~of respondents in both districts~~, with basic and secondary education closely followed. ~~The illiterate population comprises the smallest group.~~ The average age of the respondents was ~~is~~ similar across districts, ranging from approximately 42.45 to 47.89 years. Additionally, family size is relatively consistent, with an average ranging from 6.23 to 6.69 members per household.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 1:~~.~~ Distribution of respondents by Sex, Marital status, Education level, Age, and Family size of the five different FTCs | | | | | | |
|  | **GODE DISTRICT** | | | | **SHABELEY District** | |
| **Variables** | **Cilan (31)** | **Badile cad (31)** | **Kunka (21)** | **Hadaw (31)** | **Daadhi (26)** | **Overall (140)** |
| **Sex** | **F (%)** | **F (%)** | **F (%)** | **F (%)** | **F (%)** | **F (%)** |
| Male | 80.6(25) | 80.6(25) | 76.2(16) | 80.6(25) | 76.9(20) | 79.3(111) |
| Female | 19.4(60 | 19.4(6) | 23.8(5) | 19.4(6) | 23.1(6) | 20.7(29) |
| **Marital status** | **%** | **%** | **%** | **%** | **%** | **%** |
| Married | 21(67) | 21(67) | 13(61.9) | 17(54.8) | 17(65.5) | 89(63.6) |
| Singe | 6(19.4) | 6(19.4) | 5(23.8) | 8(25.8) | 6(23.1) | 31(22.1) |
| Divorced | 4(12.9) | 4(12.9) | 3(14.3) | 6(19.4) | 3(11.5) | 20(14.3) |
| **educational status** |  |  |  |  |  |  |
| Primary | 29.0(9) | 32.3(10) | 28.6(6) | 25.8(8) | 26.9(7) | 28.6(40) |
| Secondary | 19.4(6) | 25.8(8) | 19.0(4) | 22.6(7) | 26.9(7) | 22.9(32) |
| Basic | 29.0(9) | 29.0(0) | 23.8(5) | 29.0(9) | 30.8(8) | 28.6(40) |
| Illiterate | 22.6(7) | 12.9(4) | 28.6(6) | 22.6(7) | 15.4(4) | 20.0(28) |
| **Age of respondents** | 45.4±1.98 | 44.87±1.77 | 47.89±0.43 | 42.45±1.97 | 44.04±2.23 | 44.76±0.92 |
| **F~~f~~amily size** | 6.58±0.37 | 6.548±0.37 | 6.23±0.43 | 42.5±0.37 | 6.69±0.425 | 6.56±0.174 |

**3.2 Types of farming**

* 1. **~~Framers by The Type of Cultivation~~**

The analyzed data indicates that 40% of respondents engage in both rainfed and irrigated farming. Specifically, rainfed agriculture accounts for 46.4% of the farming practices, while irrigated agriculture constitutes 13.6%. This distribution highlights a notable reliance on rainfed farming, which is the predominant method used by farmers, while a smaller segment employs irrigation techniques.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 2: Distribution of framers by the type of cultivation | | | | | | |
| **Variables** | **Gode District** | | | **Shabeley District** | | |
| **Cilan (31)** | **Badile cad (31)** | **Kunka (21)** | **Hadaw (31)** | **Daadhi (26)** | **Overall (140)** |
| **Type of land cultivation** | **F (%)** | **F (%)** | **F (%)** | **F (%)** | **F (%)** | **F (%)** |
| Rainfed | 5(16.1) | 5(16.1) | 2(9.5) | 27(87.1) | 26(100) | 65(46.4) |
| Irrigated | 7(22.6) | 7(22.6) | 4(19) | 1(3.2) | 0(0.0) | 19(13.6) |
| Both rainfed and irrigated | 19(61.3) | 19(61.3) | 15(71.4) | 3(9.7) | 0(0.0) | 56(40) |

* 1. **Distribution of Farmers by The Distance From FTCs**

The data reveals that the mean distance from the FTC varies among kebeles, with the highest mean recorded for Daadhi at 1.7692 and the lowest for Badile Cad at 1.0484. The standard deviation reflects the dispersion of data around the mean for each kebele, with Hadaw exhibiting the greatest variability at 1.05571, while Cilan shows the least variability at 0.64675. The minimum and maximum values further illustrate the range of distances from the FTC, highlighting the diversity in data distribution across each kebele and sub-kebele. Overall, the mean distance from the FTC for the entire sample is 1.3500 ± 0.9129, indicating the average distance within the combined dataset.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Table 3:~~.~~ Distribution of farmers by the distance from FTC | | | | | | | |
|  | **GODE DISTRICT** | | | | | **(SHABELEY WOREDA** | |
| **Variables** | | **Cilan (31)** | **Badile cad (31)** | **Kunka (21)** | **Hadaw (31)** | **Daadhi (26)** | **Overall (140)** |
| **Distance**  **~~Residence~~ from FTC** | | 1.0806±0.64675 | 1.0484±.56796 | 1.0714±.57632 | 1.7581±1.05571 | 1.7692±1.21845 | 1.3500±.9129 |
| Minimum | | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Maximum | | 3.00 | 2.00 | 2.00 | 4.00 | 5.00 | 5.00 |

#### **3.4. Present status of FTCs in the study area**

Based on assessments and information from extension agents and supervisors, most FTCs primarily provided input delivery, short-term training, and advisory services, except for Hadow, which offered modular training and awarded green certificates to trainees. Trainee selection involved three key actors: DAs, kebele leaders, and middle-level cabinet members. Many FTCs in the study area did not conduct needs assessments before finalizing training content, as it was primarily based on pre-prepared regional modules. Furthermore, all FTCs lacked operational budgets to fulfil their mandatory roles. Currently, some extension agents offer basic advisory services, while others provide no services at all. During data collection, only one FTC delivered modular training sustainably, and several training programs ceased due to high dropout rates among trainees and trainers. Additionally, the poor construction quality of some FTC buildings raised concerns about their structural integrity.

**3.4 A case study of model FTC (Hadow FTC)**

Hadow FTC was established in 2007, situated 8 km from Jigjiga town along the asphalt road connecting Jigjiga to Harer, making it easily accessible. Despite its strategic location, the FTC lacks electric power. The area’s agro-ecology is semi-arid, with silt clay loam soil, suitable for growing sorghum, maize, chickpea, groundnut, and various vegetables. The center employs three extension agents, one male and two females. Although the FTC has not fully succeeded in its modular training program, it is considered a model center in the Somali region this production year. Notably, farmers who completed their training received awards, and during the assessment, a female extension agent was observed distributing green certificates to the farmers.

#### **4.3~~.~~ Development Agents of The FTCs**

The selected kebeles, comprising five FTCs, employ a total of 15 development agents, all of whom hold ATVET diplomas. Among them, 4 (26.67%) specialize in plant science, 5 (33.33%) in animal science, and 6 (40%) in natural resource management. According to recommendations, 80% of the FTCs (4 out of 5) meet the standard requirement of having three development agents, one each specializing in plant science, animal science, and natural resources. However, one FTC is under-resourced, with only a single extension agent available, as detailed in the table below.

Table 4: Specialization ~~Proportion~~ of Development Agents Per Kebeles

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Name of FTC** | | | | | |
| **Field of Specialization** | **Cillan** | **Badilacad** | **Kunka** | **Hadow** | **Daadhi** | **Total** |
| Plant Science | 1(6.67%) | 1(6.67%) | 0(6.67%) | 1(6.67%) | 1(6.67%) | 4(26.67%) |
| Animal Science | 1(6.67%) | 1(6.67%) | 1(0.00%) | 1(6.67%) | 1(6.67%) | 5(33.33) |
| Natural Resource | 1(6.67%) | 1(6.67%) | 1(6.67%) | 2(13.33%) | 1(6.67%) | 6(40.00) |
| Total | 3(20%) | 3(20%) | 2(13.33%) | 4(26.67%) | 3(20%) | **15(100%)** |

## **4.4~~.~~ Perceptions of Trained and untrained farmers towards FTCs**

The second objective of the study was to know farmer’s opinions towards the mandatory roles of FTCs. The analysis of farmers' perceptions toward FTCs reveals mixed opinions across various aspects. A significant majority of both trained (68.6%) and untrained (65.7%) respondents disagreed or strongly disagreed that attending FTCs is a waste of time, though a portion remained undecided, reflecting uncertainty. Regarding the need-based nature of FTC services, 41.4% of trained and 40.0% of untrained respondents disagreed or strongly disagreed, while 27.9% and 20.0%, respectively, were indecisive.

Most respondents, particularly those untrained, rejected the claim that FTC information did not account for local circumstances (83.6% trained, 73.6% untrained). Few respondents agreed with this statement. Regarding the information received post-FTC establishment, 74.4% of trained and 65.0% of untrained respondents disagreed or strongly disagreed that they received substantial information, indicating doubts about the quality of knowledge provided.

For the perception of extension agents’ openness to learning from farmers, 60.0% of trained and 55.0% of untrained respondents disagreed or strongly disagreed that agents were unwilling to learn, though some remained uncertain. Additionally, 90.0% of trained and 80.0% of untrained respondents felt they were aware of the FTCs' mission. Overall, the findings suggest a need for improvements in service delivery, communication, and better alignment with local needs to address farmers' concerns and uncertainties.

~~Table 5. Perceptions of farmers towards the FTCs~~

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **~~Variables~~** | **~~Category~~** | **~~Total, n (%)~~** | **~~Opinion of respondents towards the mandatory roles of FTCs score~~** | |
| **~~Trained, n (%)~~** | **~~untrained, n (%)~~** |
| **~~Going to FTC is a waste of time~~** | ~~Strongly disagree~~ | ~~28(20.0)~~ | ~~0(0.00)~~ | ~~28(20.0)~~ |
| ~~Disagree~~ | ~~31(22.1)~~ | ~~0(0.00)~~ | ~~31(22.1)~~ |
| ~~Undecided~~ | ~~14(10.0)~~ | ~~4(2.9)~~ | ~~10(7.1)~~ |
| ~~Agree~~ | ~~40(28.6)~~ | ~~5(3.6)~~ | ~~35(25,0)~~ |
| ~~Strongly agree~~ | ~~27(19.3)~~ | ~~9(6.4)~~ | ~~18(12.9)~~ |
| **~~The services given by FTC are not need-based~~** | ~~Strongly disagree~~ | ~~20(14.3)~~ | ~~1(0.7)~~ | ~~19(13.6)~~ |
| ~~Disagree~~ | ~~39(27.9)~~ | ~~1(0.7)~~ | ~~38(27.1)~~ |
| ~~Undecided~~ | ~~28(20.0)~~ | ~~3(2.1)~~ | ~~25(17.9)~~ |
| ~~Agree~~ | ~~35(25.0)~~ | ~~5(3.6)~~ | ~~30(21.4)~~ |
| ~~Strongly agree~~ | ~~18(12.9)~~ | ~~8(5.7)~~ | ~~10(7.1)~~ |
| **~~The information at FTC did not consider our local situation~~** | ~~Strongly disagree~~ | ~~19(13.6~~ | ~~0(0)~~ | ~~19(13.6)~~ |
| ~~Disagree~~ | ~~99(70.7)~~ | ~~15(10.7~~ | ~~84(60~~ |
| ~~Undecided~~ | ~~20(14.3)~~ | ~~2(1.4)~~ | ~~18(12.9)~~ |
| ~~Agree~~ | ~~1(0.7)~~ | ~~1(0.7)~~ | ~~0(0)~~ |
| ~~Strongly agree~~ | ~~1(0.7~~ | ~~0(0)~~ | ~~1(0.7)~~ |
| **~~I have got a lot of information after the establishment of FTC~~** | ~~Strongly disagree~~ | ~~5(3.6~~ | ~~0(0)~~ | ~~5(3.6~~ |
| ~~Disagree~~ | ~~99(70.7)~~ | ~~13(9.3)~~ | ~~86(61.4)~~ |
| ~~Undecided~~ | ~~31(22.10~~ | ~~5(3.6)~~ | ~~26(18.6~~ |
| ~~Agree~~ | ~~2(1.4~~ | ~~0(0)~~ | ~~2(1.4)~~ |
| ~~Strongly agree~~ | ~~3(2.1~~ | ~~0(0)~~ | ~~3(2.1)~~ |
| **~~Extension agents in FTCs do not want to learn from the farmers~~** | ~~Strongly disagree~~ | ~~3(2.1)~~ | ~~0(0)~~ | ~~3(2.1)~~ |
| ~~Disagree~~ | ~~79(57.9~~ | ~~7(5.0)~~ | ~~74(52.9)~~ |
| ~~Undecided~~ | ~~27(19.3~~ | ~~2(1.4)~~ | ~~25(17.9~~ |
| ~~Agree~~ | ~~26(18.6~~ | ~~9(6.40~~ | ~~17(12.1~~ |
| ~~Strongly agree~~ | ~~3(2.1)~~ | ~~0(0)~~ | ~~3(2.1)~~ |
| **~~I don’t know for what purpose the FTCs were established~~** | ~~Strongly disagree~~ | ~~26(18.5)~~ | ~~2(1.4)~~ | ~~24(17.1~~ |
| ~~Disagree~~ | ~~100(71.5)~~ | ~~12(8.6)~~ | ~~88(62.9)~~ |
| ~~Undecided~~ | ~~8(5.7)~~ | ~~3(2.1)~~ | ~~5(3.6)~~ |
| ~~Agree~~ | ~~2(1.4)~~ | ~~1(0.7)~~ | ~~1(0.8)~~ |
| ~~Strongly agree~~ | ~~4(2.90~~ | ~~0(0)~~ | ~~4(2.9)~~ |

Table 5: Perceptions of farmers towards the FTCs should look like this:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perception | WST | WSU | WMST | WMSU | Decision |
| Going to FTC is a waste of time |  |  |  |  | SA |
| The services given by FTC are not need-based |  |  |  |  | A |
| The information at FTC did not consider our local situation |  |  |  |  | SD |
| I have got a lot of information after the establishment of FTC |  |  |  |  | A |
| Extension agents in FTCs do not want to learn from the farmers |  |  |  |  | A |
| I don’t know for what purpose the FTCs were established |  |  |  |  | A |
|  |  |  |  |  |  |

WST = Weighted Score for Trained, WSU = Weighted Score for Untrained, WMST = Weighted Mean Score for Trained, WMSU = Weighted Mean Score for Untrained SA = Strongly Agree, A = Agree, SD = Strongly Disagree

**4.5~~.~~ FTCS mean score**

The data presented in Table 6 illustrate the relationship between the FTC mean scores and the distribution of trained and untrained individuals. The table clearly shows that as the proportion of trained individuals increases, the FTC mean score also rises, indicating an improvement in the overall performance or efficiency of the training centers. Specifically, the mean scores range from 14.00 to 28.00. The lowest mean score of 14.00 corresponds to a scenario where there are only untrained individuals, whereas the highest mean score of 28.00 is associated with instances where all individuals are trained. This trend suggests that the effectiveness of the FTCs is directly tied to the level of training provided, with trained individuals contributing positively to the mean score. As the number of trained individuals rises and untrained individuals decrease, the average performance measured by the mean score improves significantly. For example, an FTC with 4 untrained individuals and 0 trained individuals has a mean score of 14.00, while another FTC with 0 untrained and 2 trained individuals scores a much higher 28.00. This pattern underlines the importance of adequate and targeted training within FTCs to enhance the skills and knowledge of participants, ultimately leading to better outcomes in agricultural extension and rural development initiatives.

Table 6:~~.~~ FTCS mean score

|  |  |  |  |
| --- | --- | --- | --- |
| **UNTRAINED** | **TRAINED** | **TOTAL** | **FTC MEAN SCORE** |
| 4 | 0 | 4 | 14.00 |
| 2 | 0 | 2 | 15.00 |
| 6 | 0 | 6 | 16.00 |
| 10 | 0 | 10 | 17.00 |
| 20 | 0 | 20 | 18.00 |
| 22 | 0 | 22 | 19.00 |
| 11 | 0 | 11 | 20.00 |
| 12 | 0 | 12 | 21.00 |
| 20 | 0 | 20 | 22.00 |
| 15 | 0 | 15 | 23.00 |
| 0 | 6 | 6 | 24.00 |
| 0 | 5 | 5 | 25.00 |
| 0 | 3 | 3 | 26.00 |
| 0 | 2 | 2 | 27.00 |
| 0 | 2 | 2 | 28.00 |
| 122 | 18 | 140 |  |

## **4.6. Opportunities, constraints of FTCs, focus group discussion and SWOT analysis**

### **4.6.1. Opportunities for advancement of FTCs in the study area**

The key opportunities identified by the Woredas' extension personnel are summarized in Table 5. According to the table, the most significant opportunity is the availability of guidelines, curricula, and modules, which received the highest mean score of 4.8. The availability of sufficient extension personnel and transportation facilities within the FTCs ranked second, with a mean score of 3.5. The presence of political commitment towards FTCs followed in third place, scoring a mean of 2.9. These opportunities were also validated by the researcher during field visits to the five FTCs. Additionally, high levels of community participation and the availability of infrastructure throughout Woreda, as well as access to communication channels with FTCs, were ranked fourth and fifth, with mean scores of 2.8 and 2.5, respectively.

Table 7:~~.~~ Rank order of opportunities given by extension personals (N = 7)

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Opportunities** | **Mean score** | **Rank** |
| 1 | The availability of a curriculum, teaching module, and guidelines | 4.8 | 1 |
| 2 | The FTCs' capacity to provide adequate transportation and extension staff | 3.5 | 2 |
| 3 | Political commitment | 2.9 | 3 |
| 4 | The presence of high community participation | 2.8 | 4 |
| 5 | The availability of infrastructure throughout the woredas and  access to information to communicate with FTCs | 2.5 | 5 |

### **4.6.2. Constraints of FTCs**

Table 8 indicates that economic constraints ranked first with a mean score of 36.5, ~~are~~ were perceived as the most significant barriers affecting the effective operation of Farmer Training Centres (FTCs), highlighting the impact of budget limitations and financial resources. Institutional constraints ranked second with a mean score of 32.6, suggesting that bureaucratic and organizational challenges, such as restrictive policies and administrative procedures~~,~~ were ~~are~~ also major constraint faced in FTCs. ~~concerns.~~ General constraints ranked third with a mean score of 23~~,~~ were ~~are~~ seen as moderately influential, encompassing a range of factors outside strict economic or institutional categories that still pose challenges to FTC operations. Social constraints, ranked fourth with the lowest mean score of 13.5, ~~are~~ were considered the least significant, indicating that community dynamics, cultural factors, or social attitudes have a comparatively minor effect on the functionality of FTCs.

Table 8: Major constraints perceived by extension agents

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Constraint** | **Mean score** | **Rank** |
| 1 | Economic constraints | 36.5 | 1 |
| 2 | Institutional constraints | 32.6 | 2 |
| 3 | General constraints | 23 | 3 |
| 4 | Social constraints | 13.5 | 4 |

## **4.7. SWOT analysis of FTCs as identified by extension personnel at** **different level of the hierarchy**

The SWOT analysis of Farmer Training Centres (FTCs), as outlined in Table 9, reveals that the insights provided by extension agents—the primary implementers of government policies—carry more weight than those identified by higher levels in the management hierarchy, including supervisors, Woreda-level personnel, and regional authorities. This suggests that as the hierarchy ascends, there is a tendency to understate or overlook the problems experienced at the grassroots. The strengths, weaknesses, opportunities, and threats identified by extension agents surpass those reported by supervisors, who in turn have a more realistic understanding than Woreda and regional personnel. This trend indicates that the closer the role to the field, the more accurately challenges are perceived and articulated. The SWOT analysis highlights a significant gap between the grassroots understanding of challenges and the perspectives held at higher levels, underscoring the need for greater alignment. It was also observed that many FTCs lack essential services and facilities, reflecting a disconnect between the expectations at policy levels and the realities faced by frontline personnel.

Table 9. SWOT analysis of FTCs by extension personnel at different levels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Extension personnel | **Weighted Score** | | | |
| **Strengths** | **Weaknesses** | **Opportunities** | **Threats** |
| Extension agents | 6 | 19 | 6 | 8 |
| Woreda level | 3 | 2 | 2 | 2 |
| Regional level | 1 | 1 | 1 | 1 |

# **CONCLUSION**

The~~is~~ study concluded that ~~underscores the crucial role of~~ Farmer Training Centres (FTCs) ~~in~~ enhanced~~ing~~ agricultural practices and rural livelihoods in the study area. ~~Gode and Shabeley Woredas of the Somali Region, Ethiopia~~. The major challenge faced by FTCs were ~~Despite their potential, FTCs face significant challenges, including~~ limited resources, outdated curricula, poor infrastructure, and a lack of context-specific training for pastoralist communities. Additionally, many Development Agents (DAs) lack the practical skills necessary to effectively support and train farmers, while budget constraints further limit the scope of training activities. ~~Cultural factors specific to the Somali Region also present unique challenges that require tailored solutions. To overcome these obstacles, several key~~ The study recommended that ~~recommendations are proposed. First,~~ increases~~ing~~ financial support and ensuring consistent budget allocation are essential to provide necessary training materials, equipment, and infrastructure. ~~Second, revising~~ ~~t~~The curriculum revision to better incorporate local agricultural practices and traditional knowledge, ~~will enhance its relevance. Third, targeted~~ capacity-building for Development Agents is crucial to improves~~ing~~ their practical skills,~~. Fourth, encouraging greater~~ community participation, especially from marginalized groups like women, will expand FTCs' inclusivity and effectiveness,~~. Lastly,~~ and strong~~er~~ institutional support and coordination among local and regional governments and community stakeholders are vital for sustaining FTC initiatives were some of the recommendations made. ~~These measures aim to boost FTCs' operational capacity and contribute to the wider goals of rural development across Ethiopia's diverse regions.~~

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