



SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF AGRICULTURAL ECONOMICS
DETERMINANTS OF FARMERS COFFEE MARKET OUTLET
CHOICE: THE CASE OF YIRGA CHAEFE DISTRICT, GEDEO
ZONE, SOUTHERN ETHIOPIA

BY
YICHENEKU WORKU

FEBRUARY, 2024
DILLA, ETHIOPIA

**DILLA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF AGRICULTURAL ECONOMICS**

**DETERMINANTS OF FARMERS COFFEE MARKET OUTLET
CHOICE: THE CASE OF YIRGA CHAEFE DISTRICT, GEDEO
ZONE, SOUTHERN ETHIOPIA**

BY

YICHENEKU WORKU

ADVISOR: TINSAE (PHD)

**A RESEARCH PAPER SUBMITTED TO DEPARTMENT OF
AGRICULTURAL ECONOMICS FOR THE PROGRAM OF
AGRICULTURAL ECONOMICS DILLA UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF MASTER IN AGRICULTURAL ECONOMICS**

**FEBRUARY, 2024
DILLA, ETHIOPIA**

Declaration

I hereby declare that this thesis entitled “Determinants of farmers’ choice of coffee market outlet options in Yirga Chaffe district, Gedeo Zone” has been carried out by me under the guidance and supervision of Tinsae (PhD). The thesis is original and has not been submitted for the award of any degree or diploma to any university or institutions.

Researcher’s Name

Signature

Date

Certificate

This is to certify that the thesis entitles “Determinants of farmers’ choice of coffee market outlet options in Yirga Chaffe district, Gedeo Zone”, submitted to Dilla University for the award of the Degree of Master of Agricultural economics is a record of research work carried out by Mr. Yicheneku Worku, under my guidance and supervision

Therefore, I hereby declare that no part of this thesis has been submitted to any other university or institutions for the award of any degree or diploma.

Adviser’s Name

Signature

Date

Advisor's approval sheet

This is to certify that thesis entitled “Determinants of farmers’ choice of coffee market outlet options in Yirga Chaffe district, Gedeo Zone” accepted in partial fulfillment of the requirements for the award of the Degree of Master of agricultural economics by the College of Agriculture, Dilla University, carried out by Yicheneku Worku under our guidance. The matter embodied in this thesis work has not been submitted earlier for the award of any degree or diploma.

The assistance and help received during the course of this investigation have been duly acknowledged. Therefore, we recommend that it can be accepted as fulfilling the research thesis requirements.

Advisor

Signature

Date

Examiners' approval sheet for submitting final thesis

As members of the Board of Examining of the final degree of master of agricultural Economics thesis open defense, we certify that we have read and evaluated the thesis prepared by Yicheneku Worku under the title “Determinants of farmers’ choice of coffee market outlet options in Yirga Chaffe district, Gedeo Zone.” and recommend that the thesis be accepted as fulfilling the thesis requirement for the Degree of Master of Agricultural Economics.

_____	_____	_____
Chairperson	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date
_____	_____	_____
External Examiner	Signature	Date

Final Approval and Acceptance

Thesis Approved by

_____	_____	_____
Department PGC	Signature	Date
_____	_____	_____
Dean of College	Signature	Date

Acknowledgment

I would like to praise GOD for everything that he has done for me. And then I would greatly like to thank my advisor Tinsae (PhD) for his remarkable and valuable assistance and constructive advice for preparing this paper. In spite of my busiest times during the study he had been consistently following up my progress and constructive comments. Taking all my burdens into account he call me, most often, in favor of me, he is indeed a friendly professional who provided me with good ideas which truly were prolific for the successful accomplishment of my academic endeavor.

Last but not least, I would like to thank my beloved wife and all my family for their continued encouragement, financial and moral support.

Table of contents

Content	Page
Declaration.....	ii
Certificate	iii
Advisor’s approval sheet	iv
Examiners’ approval sheet for submitting final thesis	v
Acknowledgment.....	vi
Table of contents	vii
List of tables.....	x
Acronyms and abbreviations	xi
Abstract.....	xii
CHAPTER ONE	1
1. INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2. Statement of the Problem	3
1.3. Basic Research Questions	5
1.4. Objectives of the Study	5
1.4.1. General Objective.....	5
1.4.2. Specific Objectives.....	5
1.5. Significance of the Study.....	5
1.6. Scope of the Study	6
1.7. Limitation of the Study	6
1.8. THE ORGANIZATION OF THE PAPER	7
CHAPTER TWO	8
2. Review of related literature.....	8
2.1. Theoretical Literature Review	8
2.1.1. Definition and concepts.....	8
2.1.2. Theories related to Farmers' Coffee Market Outlet Choice	8

2.1.3. Approaches to Study the Agricultural Marketing.....	10
2.1.4. Framework for Evaluation of Marketing System	11
2.1.5. Methods of Evaluating Marketing Performance	13
2.1.6. The Ethiopian Coffee Marketing Chain.....	14
2.1.7. Market chain of coffee in Ethiopia	15
2.2. Empirical studies	18
2.2.1. Determinants of Market Outlet Choice	18
2.3. Conceptual framework of the study.....	23
CHAPTER THREE.....	25
3. Research Methodology.....	25
3.1. Description of the study area.....	25
3.2. Research Design.....	25
3.3. Research Approach	25
3.4. Data type and sources	26
3.5. Target Population.....	26
3.6. Sampling Techniques	26
3.7. Sample size determination	27
3.8. Data Collection instruments	28
3.9. Methods of data analysis.....	28
3.10 . Reliability and Validity of Instruments.....	29
3.11. Ethical Considerations.....	30
CHAPTER FOUR.....	34
4. RESULT AND DISCUSSION.....	34
4.1. INTRODUCTION	34
4.2. Farmer’s coffee market outlets choice options in Yirga Chaffe district.....	34
4.3. Demographic and socioeconomic characteristics that affect Farmers coffee market outlets choice options for discrete variables	35

4.4. Demographic and socioeconomic characteristic of farmers that affect farmer's choice of coffee market outlet for continuous explanatory variables.....	37
4.5. Analysis of perception of farmers on factors affects coffee market outlets choices.	38
4.5.1. Analysis of perception of farmers on demographic factors that causes coffee market outlets choices	38
4.5.2. Analysis of perception of farmers on institutional factors that causes coffee market outlets choices	39
4.5.3. Analysis of perception of farmers on economic factors that causes coffee market outlets choices	40
4.5.4. Analysis of perception of farmers on social factors that cause coffee market outlets choices.....	41
4.5.5. Analysis of perception of farmers on farm characteristics that causes coffee market outlets choices	43
4.6. Empirical model.....	44
4.6.1. Determinants of farmers' choice of coffee market outlets options.....	44
4.7. Challenges of farmers choice of coffee market outlet in Yirga Chaffe district.....	46
4.8. Key interview Findings	48
CHAPTER FIVE	49
5. CONCLUSION AND RECOMMENDATIONS	49
REFERENCES.....	51
Appendices.....	58

List of tables

Table's	pages
Table 3.1: proportion of sample allocation.....	24
Table 3.2: Rule of thumb of Cronbach's Alpha	26
Table 3.2: Rule of thumb of Cronbach's Alpha	26
Table 3.4.: Descriptions of Variables and Its Expected Output (sign).....	31
Table 4.1: summery statistics of farmer's coffee market outlets choice options	34
Table 4.2: summery of households' demographic and socioeconomic characteristics.....	36
Table 4.3: Summery statistics of level of causes of demographic factors.....	40
Table 4.5: Summery statistics of level of causes of institutional factors	42
Table 4.6: Summery statistics of level of causes of economic factors.....	44
Table 4.7: Summery statistics of level of causes of social factors	47
Table 4.8: Summery statistics of level of causes of farm characteristics	48
Table 4.9: Regression output on determinants of farmers' choice of coffee market outlets options	49
Table 4.10: Summery of statistics of challenges of farmer's choice of coffee market outlets	53

Acronyms and abbreviations

AfDB - Africa Development Bank

FeMSEDA - Federal Micro and Small Enterprises Development Agency

CIAT - Centro Internacional de Agricultural Tropical

CSA - Central Statistical Agency

DNIVA - Development Network of Indigenous Voluntary Associations

ECX - Ethiopia Commodity Exchange

GTZ - German Agency for Technical Cooperation

IAAE - International association of agricultural economists

ICO - International Coffee Organization

ILO -International Labor Organization

UNIDO - United Nations Industrial Development Organization

USAID - The US Agency for International Development

Abstract

Yirga Cheffee woreda is one of the major producers of coffee in Southern Ethiopia and choice of coffee market outlet is one of the key ingredients to successful marketing of coffee producers. Thus, the objective of this study is to investigate determinants of farmer's choice of coffee market outlet options in the Yirga chaffee district, Gedeo Zone, Southern Ethiopia. Both quantitative and qualitative approaches were employed. The quantitative data was gathered from a sample of 360 farmer households in three kebeles using a structured questionnaire. Qualitative data was collected through Key informants interviews (KIIs) and field observation. The quantitative data were analyzed using descriptive statistics and multivariate regression model. The study found that 59.44% of farmers were choice informal traders coffee market outlets, 26.39% of farmers were choice cooperative coffee market outlets, 10.28% of farmers were choice formal traders coffee market outlets and 3.89% of farmers were choice exporters coffee market outlets in Yirga chaffee district. The estimated results also showed that age, sex, education level, farm size, income, social participation and wealth of the farmers were positively and significantly determining farmer's choice of coffee market outlets in Yirga Chaffe district. However, marital status was negatively and significantly determined smallholder farmers' choice of coffee market outlet options. The study also revealed that low capacity of buyers, delay of payment, lack of continuity, low market information and lack of training were challenges faced farmers to choice of coffee market outlets options in Yirga Chaffe district Therefore, it is recommended that the local government should call and encourage farmers to better choice of coffee market outlet options in Yirga Chaffee district.

Keyword: Coffee, market, choice, Yirga Chaffee, Gedeo zone

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

Coffee is one of the most valuable commodities in the global economy. Globally, coffee market outlets encompass a multifaceted landscape, ranging from large multinational corporations to small, independent businesses. The dominant channels include supermarkets, convenience stores, and specialty coffee shops, reflecting consumer preferences for convenience and diverse coffee experiences (ICO, 2023). Furthermore, the rise of e-commerce platforms and direct-trade relationships has expanded market access for producers, offering alternative revenue streams and potentially fairer prices (Bacon, 2018). Sustainable and ethical sourcing has become increasingly important, driving demand for certifications like Fairtrade and organic, influencing consumer purchasing decisions and shaping market trends (Fairtrade International, 2023).

In Africa, coffee is a crucial agricultural commodity and a significant contributor to many national economies. Market outlets are often characterized by a mix of formal and informal channels (Woldemariam & Tesfaye, 2021). The export of green beans to international markets remains a dominant aspect, often facilitated through cooperatives, marketing boards, and private exporters. Domestic consumption is growing, spurring the development of local coffee shops and cafes, particularly in urban areas (FAO, 2022). Challenges to African coffee farmers often relate to market access, price volatility, and climate change impacts, which can affect their choice of market outlets (Kitinoja, 2017).

In Ethiopia, coffee holds immense cultural and economic significance, earning the country the status of the birthplace of Arabica coffee (Gebrehiwot et al., 2022). The coffee market landscape is diverse, encompassing the traditional coffee ceremony ("buna") as a social institution, the export market, and a growing domestic market. Export channels include government-regulated auctions, direct sales to international buyers, and the burgeoning specialty coffee market, where producers can earn premium prices for high-quality beans. The domestic market includes local coffee houses, hotels, and households. Coffee cooperatives play a critical role in linking smallholder farmers to markets, providing services and improving bargaining power (Abebe, 2019). The Ethiopian government's policies, including those related to traceability and quality

control, are critical in shaping the coffee market and influencing farmers' choices of outlets (MoA, 2023).

Smallholders in rural areas are frequently spread geographically; there are inadequate roads and communications; and there is not enough commerce to support coffee marketing. To put it another way, the likelihood of a market collapse is considerable. Ineffective and undeveloped markets lead to low and unstable prices, which lower the profitability of new technologies for farmers. This discourages entrepreneurs from investing in processing operations and retailers and carriers from making investments in better transportation and market services (Dejen, 2018).

The National Coffee Board of Ethiopia (NCBE), a modern coffee marketing organization founded in 1957 in response to those challenges, uses coffee standard classification, grading, and licensing. The National Coffee Board of Ethiopia (NCBE) was established to regulate coffee marketing within the country to improve Ethiopian coffee quality for export. Each of the NCBE's facilities for coffee inspection, grading, and auction has its own set of operating criteria (Mokonen, 2017).

The Council of Ministers' supporting regulation and Proclamation 702/2008, which went into effect in July 2008, took the place of the previous nearly forty years' worth of quality control and marketing laws governing the coffee exports. Except for grower direct exports, the law mandates that all coffee supply be exchanged on the recently created Ethiopia Commodity Exchange. In general, there are two routes in the Ethiopian coffee marketing chain, according to Gustaf (2011): a direct export route via cooperative unions and another via the Ethiopia Commodity Exchange (ECX). In order to improve market efficiency and establish a safe and secure environment for the benefit of all parties, ECX is establishing local market outlets close to farmers.

Even though ECX is Modern coffee marketing established to improve market efficiency and safe and secure environment; coffee marketing is observed to be inefficient (Yidnekachew, 2022). There are many factors that affect farmer's choice of coffee market outlets. Access to transportation facilities, access to price information, access to credit, quantity of coffee sold and access to extension service (Mekonon, 2017); number of extension visits, transport costs and

distance to cooperatives(solomon,2016). This explained that finding of different researchers were different on determinants of farmer's choice of coffee market outlets.

Due to this, the researcher motivated to study determinants of farmer's choice of coffee market outlets in Yirga Cheffee woreda.

1.2. Statement of the Problem

Coffee market outlet is the process of taking coffee from the producer to the customer. Beyond simply satisfying customer demands, it offers the appropriate amount of coffee in the right location at the right price. Coffee manufacturers make important selections about which marketing outlets to sell their products in, and this choice has a big impact on household income (Mekonon, 2017). A crucial factor in the successful marketing of coffee producers is the selection of coffee market outlets (Engida, 2017).

Even though coffee market outlet choice is a key element for the successful marketing of coffee producers and the government of Ethiopia added and implemented many regulations to modern coffee marketing, increased value and advantage the coffee fair alternate certification by using cooperatives and the alternate-marking and licensing initiatives that have successfully hooked up international branding of the essential coffee varieties of Sidamo, Yirgacheffe, and Harar, farmers coffee market outlet choice is inefficient and underdeveloped in Ethiopia (Dejen, 2018; Nasir, 2020; Yidnekachew, 2022). Though efficient coffee market outlet choice is a device to enhance farmers' earnings and livelihoods, farmers confronted many boundaries to their choice coffee market outlets. This has an implication for the choice of marketing channels that farmers decide on in advertising and marketing their coffee (Yidnekachew, 2022).

Different studies have been conducted on farmers coffee market outlet choice in Ethiopia and found that the coffee market is inefficient and underdeveloped (Dejen, 2018; Nasir, 2020; Yidnekachew, 2022). Inefficient and underdeveloped coffee market outlet choice results in low and variable prices, thereby reducing profitability (Engida, 2017; Negeri, 2017; Asefa et al., 2016; Mokonen, 2017; Dejen, 2018; Nasir, 2020; Yidnekachew, 2022).

In the Ethiopian district of Lalo Assabi, Mekonon (2017) examines the factors that influence the choice of coffee market outlet and the results of livelihood for coffee suppliers. As compared to

private trader outlets, the study's findings indicate that the availability of transportation facilities, price information, and credit have a positive and significant impact on end-user outlet choice. On the other hand, the amount of coffee sold and the availability of extension services have a negative impact on end-user outlet choice. Comparatively to private trader outlets, the choice of cooperative outlet is favorably and significantly impacted by factors such as access to price information, transit options, market distance, and training.

The four primary coffee market outlets in the study area were cooperatives, formal traders, brokers, and informal purchasers. Solomon (2016) conducted a study on the factors influencing coffee farmers' preferences for coffee market outlets in Southwest Ethiopia/Jimma Zone. Additionally, his research indicates that the number of extension visits significantly and favorably influences formal red coffee market preferences, whereas transportation expenses to the main market significantly and negatively affect the preferences of formal traders over informal purchasers. The amount of extensionist visits has a negative and substantial impact on formal dry coffee markets and brokers, while the distance to cooperatives has a positive and significant impact on farmers' choice for cooperatives.

Even though some studies were conducted on farmer's coffee market outlet choices in Ethiopia, their findings were inconsistent or contradicting. Inconsistencies plague existing research on Ethiopian coffee market outlets, evidenced by contradictory claims of market efficiency amidst government modernization efforts. Conflicting findings on key factors, such as extension services and transportation, further muddy the waters: Mekonen (2017) observed a negative impact of extension services on end-user choice, contrasting with Solomon (2016)'s finding of a positive influence on red coffee markets but a negative impact on dry markets and brokers. Similarly, Mekonen (2017) found a positive effect of transportation, while Solomon (2016) noted a negative influence of transportation expenses on formal trader preferences. The absence of clear causation analyses further compounds these issues, preventing a clear understanding of the most impactful factors. These contradictions and uncertainties underscore the need for further research to clarify the complexities of Ethiopian coffee market dynamics. Due to this or to be consistent further investigation is needed. So, the researcher undertook this study to fulfill this gap (evidence gap).

Although farmers in the study are prominent coffee producers, the literature regarding determinants of market outlet choice decisions of smallholder coffee producers in the study area, even for the countries coffee producing zones, is minimal. However, this study identified an evidence gap in those studies and believed in the importance of adding challenges to the choice of available outlet options. Due to this, the researcher is motivated to investigate the determinants of farmer's coffee market outlet choice options. Thus, the primary objective of this study is to analyze the determinants of farmers' coffee market outlet choice as well as the challenges of choosing available outlet options in Yirga Chaffe district.

1.3. Basic Research Questions

1. How farmers perceived on coffee market outlets in Yirga Chaffe district?
2. What are the significant factors that determine farmers' coffee market outlet options choice in study area?
3. What are the problems of farmers to choice available coffee market outlets in study area?

1.4. Objectives of the Study

1.4.1. General Objective

The main objective of this study is to investigate determinants of farmers' choice of coffee market outlet options in Yirga Chaffe district, Gedeo Zone

1.4.2. Specific Objectives

Specific objectives of the study were as follows:

- To analysis of perception of farmers on coffee market outlets in Yirga Chaffe district
- To identify the significant factors that determines farmers' choice of coffee market outlet options in study area
- To identify challenges of farmers to choice available coffee market outlets in study area

1.5. Significance of the Study

It is expected that the government, future scholars, coffee market outlet actors, and coffee producer farmers will find significance in the study's conclusions. Farmers who grow coffee are anticipated to gain from this study since it will offer additional tactics for satisfying the demands

and specifications of various coffee market outlets. Coffee producer farmers and other stakeholders will be able to acquire a competitive edge over others by understanding the elements and strategies involved in the selection of coffee market outlets. The research's findings should also be beneficial to the players in the coffee industry since they will provide them with a better understanding of the underlying reasons behind farmers' preference for a particular outlet over others.

Furthermore, as this study will act as a secondary source of resources for them, it is anticipated that future researchers and academicians will also gain from it. The study is anticipated to add to the body of knowledge already available on the topic by shedding additional light on the selection criteria, driving forces, and key variables that influence consumers' decisions to choose one coffee market outlet over another. Finally, since the government will be aware of the actual state of the firm, it is anticipated that the study's conclusions will greatly benefit the government in terms of taxes.

1.6. Scope of the Study

The conceptual scope of this study is to investigate the determinants of smallholder coffee producers' market outlet choice decisions and identify and map the coffee marketing channels, as well as benefits and challenges of dominant outlets in the area. The geographical scope was bound to be concentrated on three kebeles in Yirga Chaffe district of Gedeo zone, namely Haru, Gerse, and Wogida kebeles. In terms of methodology, the study applied a quantitative research approach, an explanatory research design, and pertinent data gathered through a structured questionnaire and interviewees. The data for the study was primary data collected from coffee producer farmers during 2023 G.C. Analysis of data was by multivariate model.

1.7. Limitation of the Study

In undertaking the study, there are some limitations against achieving its objectives effectively. Firstly, lack of proper records of literatures on determinants of smallholder coffee producers' market outlet choice on previous studies in this area. Secondly, there was lack of cooperation in some respondents during distributing the questionnaire and carelessly filling. Lastly shortage finance especially during data collection was another limitation faced the researcher.

1.8. THE ORGANIZATION OF THE PAPER

This paper was structured in to five chapters. The first chapter was dealt with the introduction part that would consists of background of the study, statements of the problem, objectives of the study, significances of the study, scope of the study, limitation and organization of the study. Chapter Two contained a review of the related literature. The third chapter was dealt with methods of the study, which is about the description and design of research, source of data, sampling, and method of data collection and method of data analysis. The fourth chapter was dealt with data analysis and interpretation. Finally, the last chapter was dealt with the summary of findings, conclusions and recommendations that would be forwarded both by the respondents and by researcher based on the result that would be obtained.

CHAPTER TWO

2. Review of related literature

2.1. Theoretical Literature Review

2.1.1. Definition and concepts

Coffee is one of the most significant commodities in the global economy. It is produced in more than 60 nations, giving smallholder farmers a source of income. Different regions produce this item in different ways. Coffee production is extremely labor-intensive by nature, and a sizable portion of the population depends on it for their livelihood. As a result, coffee significantly affects both the nation's economic growth and the socioeconomic well-being of its citizens (Nasir, 2020).

According to Kotler (2003), marketing is a social activity that helps people and organizations get what they need and want by producing, providing, and freely exchanging goods, services, and value with others. A market is a specific group of people, an institution, and a mechanism for facilitating exchange (Solomon, 2002).

Marketing outlets are sets of interdependent organizations involved in the process of making a product or services available for use or consumption. The sequence of intermediaries and markets through which goods pass from producer to consumer is known as marketing channel. Marketing channel decisions are among the most critical decisions facing management (Kotler, 2003). A marketing outlet is the chain of interrelated enterprises that take part in the process of the movement of goods from the producer to the consumer. It provides the proper amount of goods and services in the proper place, of right quality and optimal price, not only to meet the needs of consumers, but also to stimulate the demand, by using different methods of promotion among all the organizations in the marketing channel. Different authors have described the possible options of marketing channels in different ways (Guibert, 2006).

2.1.2. Theories related to Farmers' Coffee Market Outlet Choice

2.1.2.1. Transaction Cost Economics (TCE)

This framework, pioneered by Ronald Coase and developed further by Oliver E. Williamson, examines the costs associated with exchange (Williamson, 1979). In the context of coffee farmers, TCE suggests that farmers choose market outlets that minimize transaction costs. These

costs include search costs (finding buyers), information costs (assessing market prices and quality standards), bargaining costs (negotiating prices and contracts), and enforcement costs (ensuring contract compliance). Farmers will select outlets that offer lower transaction costs, making them more efficient (e.g., cooperatives or direct sales). They might consider these costs as farmers navigate outlet options like cooperatives, direct sales, or middlemen (Kumar & Singh, 2021).

2.1.2.2. Agency Theory

This theory addresses the relationship between the farmer (the principal) and the market outlet (the agent). It considers issues of information asymmetry and potential conflicts of interest (Jensen & Meckling, 1976). Farmers may face information gaps about the market, and outlets may have different incentives than the farmers. Farmers will choose outlets where the agent's interests are aligned with their own. For example, farmer cooperatives, where farmers are members and thus the "owners," might reduce agency problems. This can create the right incentives for farmers to work in close association with the marketing outlet and the buyers. This choice is based on the alignment of interests, the reduction of information asymmetry, and the trust placed in the agent (Chibba, 2003).

2.1.2.3. Theory of Planned Behavior (TPB)

Developed by Icek Ajzen, TPB posits that farmers' choice of market outlet is driven by their intention to choose a specific outlet, which, in turn, is influenced by three factors: attitude towards the outlet, subjective norms (social pressure to choose a certain outlet), and perceived behavioral control (farmers' belief about their ability to control their choice) (Ajzen, 1991). This model captures the farmers' individual perceptions and social contexts. For instance, if farmers believe a particular outlet offers fair prices (positive attitude), if their peers also use the outlet (positive subjective norm), and if they believe they have the resources and access to utilize the outlet (high perceived behavioral control), they are more likely to choose that outlet. A study by Sharma (2022) showed that attitudes towards the outlet and perceived control were important factors in farmer outlet choice.

2.1.2.4. Social Capital Theory

This theory examines the importance of social relationships and networks for individuals' access to resources and opportunities (Putnam, 2000). Farmers with strong social capital, characterized by trust, reciprocity, and shared norms, are more likely to have access to better market outlets.

Their social networks can provide crucial market information, enable collective bargaining, and reduce transaction costs (Woolcock & Narayan, 2000). Strong social networks enhance access to information, resources, and favorable prices for farmers. For example, participation in farmer groups or cooperatives can foster social capital, improving market access and bargaining power (Grootaert & van Bastelaer, 2002).

2.1.2.5. New Institutional Economics (NIE)

NIE focuses on the role of institutions in shaping economic outcomes (North, 1990). It goes beyond transaction costs, considering how formal rules (e.g., property rights, contract enforcement) and informal norms (e.g., trust, social norms) affect market choices. Farmers choose market outlets based on the institutional environment that governs them, which includes aspects of property rights, contract enforcement, and the influence of trust and social norms (Coase, 1937). A well-defined property rights system, efficient contract enforcement mechanisms, and transparent market regulations reduce uncertainty and risk, encouraging farmers to choose outlets that operate within a stable and predictable environment. The presence of strong farmer organizations and governance structures within market outlets (e.g., cooperatives) can also be seen as crucial institutional factors.

2.1.3. Approaches to Study the Agricultural Marketing

The study of marketing involves various approaches. These include; the functional approach, the system or institutional approach and the individual or commodity approaches (Mendoza, 1995).

2.1.3.1. Functional Approach

This approach included all of the fundamental marketing tasks (activities) that must be carried out in the selling of agricultural commodities and inputs for agricultural production in this strategy. According to Cramer et al. (1997), the functional approach examines marketing in terms of the many tasks carried out to transfer agricultural products from the producer to the consumer. Transporting goods from locations of production to locations of final consumption is the main focus of agricultural product marketing. Accordingly, the market carries out commonly acknowledged tasks such as: a) trading (purchasing and selling); b) physical (processing, storing, and shipping); and c) facilitating (standardization, funding, taking on risk, and market intelligence). The majority of these tasks are carried out in the marketing of almost all goods (Rahima, 2006).

2.1.3.2. Institutional (System) Approaches

The institutional approach looks at what companies or individuals in marketing are doing. The type and traits of the numerous middlemen, associated agencies, and marketing equipment organization are all taken into consideration by the institutional approach to research on agricultural marketing issues (Kohls and Uhl, 1985). This approach focuses on the description and analysis of different organizations engaged in marketing (producers, wholesalers, agents, retailers, etc) and pays special attention to the operations and problems of each type of marketing institution. The analysis is based on the identification of the major marketing channels and it considers the analysis of marketing costs and margins. The organizations or people involved are middlemen who perform the operations necessary to transfer goods from the producer to consumer, because of the benefit of specialization and scale that exist in marketing as well as production (Cramers and Jensen, 1982).

2.1.3.3. Commodity (Individual) Approach

In a commodity technique, a selected commodity or companies of commodities are selected, and the capabilities and institutions involved in the advertising technique are analyzed. This approach focuses on what's being done to the product after its switch from its authentic manufacturing location to the customer (Kohls and Uhl, 1985). It enables one to perceive the precise advertising and marketing troubles of each commodity as well as improvement measures. The method follows the commodity alongside the course between manufacturer and client and is involved with describing what is finished and how the commodity might be treated extra correctly. For this look, an aggregate of all techniques, mainly institutional and purposeful procedures, had been used. Among the to-be-had advertising methods, commodity techniques turned into hired due to its mixture of both functional and institutional methods. Hence, this method is appropriate for this study

2.1.4. Framework for Evaluation of Marketing System

The development of reliable and stable market system has been an important element in commercialization and specialization in the agricultural sector. In order to study the functioning of markets many researchers have applied the Structure-Conduct-Performance (SCP) paradigm. The S-C-P approach will developed in the United States as a tool to analyze the market organization of the industrial sector and it was later applied to assess the agricultural system and

this framework was to evaluate the performance of industries in the USA (Meijer, 1994). The framework distinguishes between three related levels; the structure of the market, the conduct of the market, and the performance of the market.

2.1.4.1. Market Structure

Market structure is defined as, those characteristics of the organization of the market that seem to exercise strategic influence on the nature of competition and pricing within the market (Bain, 1968). It also refers to the number of buyers and sellers, number and size distribution of firms, the degree of product differentiation, the presence or absence of barriers to entry facing new firms (Branson and Norvell, 1983). Kohls and Uhl (1985) bring into play as a rule of thumb, four largest enterprises' concentration ratio of 50 percent or more (an indication of a strongly oligopolistic industry), 33-50 percent (a weak oligopoly) and less than that (competitive industry).

2.1.4.2. Market Conduct

Market conduct refers to the practices or strategies of traders in maximizing their profits or it refers to the market behavior of all firms. Market conduct deals with the behavior of firms that price-searchers are expected to act differently than those in a price-taker type of industry (Cramers and Jensen, 1982). Price searchers can determine their selling prices or quantity of output they sell. In addition, they could use their market power to weaken or eliminate competitors example reducing price (Rahima, 2006).

The market behavior of firms was determine whether or not they compete and whether they are acting innovatively to improve market efficiency. Conduct is pattern of behavior which enterprises follow in adopting or adjusting to the market in which they sell or buy, in other words the strategies of the actors operating in the market (Meijer, 1994).

2.1.4.3. Market Performance

Performance of the market is reflection of the impact of structure and conduct on product price, costs and the volume and quality of output (Cramers and Jensen, 1982). If the market structure in an industry resembles monopoly rather than pure competition, then one expects poor market performance. Market performance is how successfully the firm's aims are accomplished, which shows the assessment of how well the process of marketing is carried out (Abbott and Makeham, 1981). By analyzing the level of marketing margin and their cost components, it is possible to

evaluate the impact of the structure and conduct characteristic on market performance (Bain, 1968).

There are indicators, whether the market performance is successfully functioning or not. Different studies conducted on marketing identify the following key question to identify the nature of marketing performance. Is produce assembled and delivered on time and without willtage? Is it well packed and presented attractively? Is its quality reliable and are terms of contract observed? Is the consumption of the products increasing and sales in competitive market expanding? There are such practical indicators of how well a certain marketing system is operating. Furthermore, performance also affects the development of market structure and market conduct. The latter limits a similar effect the structure of the marketing system (Wase 2018).

2.1.5. Methods of Evaluating Marketing Performance

Commonly used measures of system performance are the marketing margin and marketing costs.

2.1.5.1. Marketing costs

Marketing costs: It speaks about the expenses involved in carrying out different marketing operations in the process of moving goods from manufacturer to customer. Marketing costs comprise handling expenses (such as packaging and unpacking, finding a partner to exchange with, vetting possible trading partners to determine their reliability, haggling with potential trading partners (and officials) to reach a deal, moving the product, keeping an eye on the agreement to ensure its terms are met, and enforcing the exchange agreement) (Holloway et al., 2002).

2.1.5.2. Marketing margin

A marketing margin represents the proportion of the final weighted average selling price claimed by each step in the marketing supply chain. This total margin denotes the disparity between what the consumer pays and what the producer/farmer earns for their goods. Simply put, it reflects the variance between the retail price and the farm price.

A broad margin generally indicates elevated consumer prices and diminished returns for producers. The overall marketing margin can be segmented into various elements, encompassing all marketing service expenses, profit margins, and net revenues. In an imperfect market, the marketing margin is prone to be higher than in a competitive market due to the anticipation of

abnormal profits. Nonetheless, marketing margins may remain high, even in competitive markets, owing to substantial real market costs.

2.1.6. The Ethiopian Coffee Marketing Chain

According to Gustaf (2011), in the Ethiopian coffee marketing chain, there are typically two routes: one through the Ethiopia Commodity Exchange (ECX) and the other via direct export through cooperative unions. Coffee certified by Fair Trade is exclusively marketed through cooperative unions and is directly shipped to various countries worldwide.

2.1.6.1. Ethiopia Commodity Exchange

Coffee marketing in Ethiopia has gone through numerous changes over the decades. Recent initiatives to boom value and benefit the espresso zone encompass fair exchange certification through cooperatives, organic and specialty espresso promotion, and alternate-marking and licensing initiatives that has correctly established the international branding of three of Ethiopia's primary coffee sorts: Sidamo, Yirgacheffe, and Harar. In July 2008, a brand new law (Proclamation 702/2008) and the assisting law issued via the Council of Ministers changed the existing espresso fine management and marketing law governing the arena for the past almost four years. The regulation stipulates that all coffee supply, apart from grower direct exports, is to be traded inside the newly hooked-up Ethiopian Commodity Exchange (USAID, 2010).

ECX is setting up nearby marketplaces close to farmers to make the marketplace more efficient. ECX has warehouses to assure the supply of espresso. Wholesalers take their coffee to the warehouses and obtain a receipt. ECX additionally grades the espresso and guarantees its first-class. At the auction, consumers and sellers only understand the grade and form of coffee, not who produced it. ECX also ensures that buyers have sufficient budget available for trades on the auction. There have been several preceding examples of shoppers' not paying, espresso not being delivered from dealers, and farmers stricken by forged assessments. ECX has been applied to put off these troubles and to create a safe and stable marketplace area to benefit for all and sundry. Farmers are now higher knowledgeable about charges on the ECX via mobile phones and radio and are now not cheated (ECX, 2011).

2.1.6.2. Cooperative Unions

In Ethiopia, there exist four coffee cooperative unions: Sidamo Coffee Farmers' Cooperative Union (SCFCU), Yirgacheffe Coffee Farmers' Cooperative Union (YCFCU), Kaffa Forest Coffee Farmers' Cooperative Union (KFCFCU), and Oromia Coffee Farmers' Cooperative Union (OCFCU). All of these cooperative unions share the same structure and regulations. They have been authorized to bypass the coffee auction (ECX) and are permitted to export their coffee directly. Each union comprises several primary cooperatives (PCs) where farmers can become members. Normally, these PCs are named after the districts where they operate, with membership consisting of local farmers in those specific areas. The PCs purchase coffee from their members at prices determined by local market conditions, which are influenced by competition among cooperatives, local traders, and wholesalers.

When the coffee union sells coffee to foreign importing companies, 70% of the net profit is redistributed to the primary cooperatives. These primary cooperatives, in turn, pay back 70% of their net profit to the farmers as dividends (USAID, 2010).

Cooperative unions based in Addis Ababa export coffee directly without going through the auction at ECX. They receive market prices along with premiums for qualities like fair trade, organic certification, and coffee quality. The fair trade premium is managed separately and funds community projects like infrastructure, educational facilities, machinery, and electricity. The government regulates the dividend system, which remains consistent across all cooperatives. Farmers receive their dividend payouts annually during the low season (Gustaf, 2011).

2.1.7. Market chain of coffee in Ethiopia

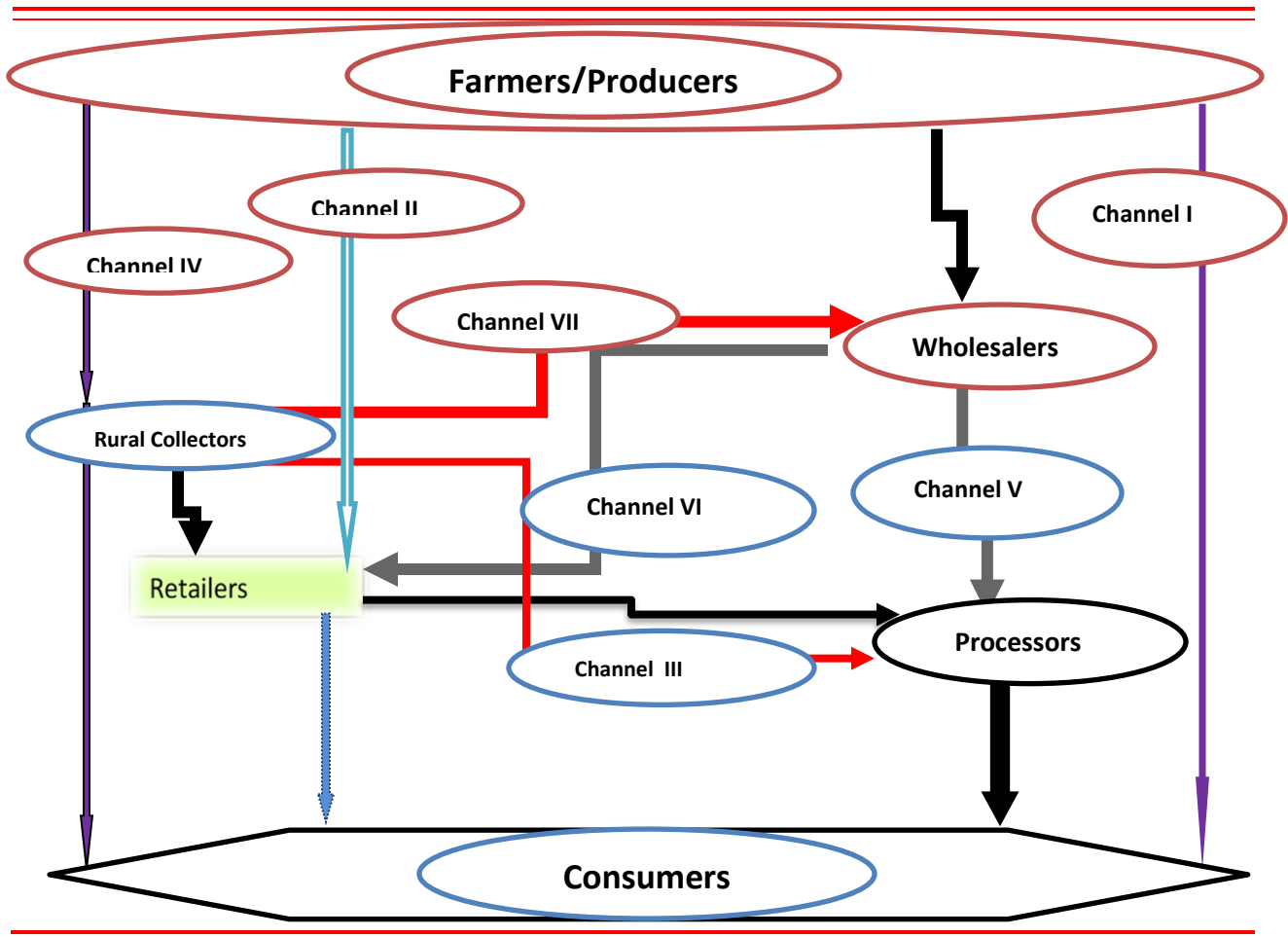
2.1.7.1. Marketing Channels of coffee

A marketing channel is businesses structure of interdependent organizations that originates from the point of product origin to the consumer with the purpose of moving products to their final consumption destination (Kotler and Armstrong, 2003). The analysis of marketing channels is intended to know the alternative routes the product follow from the point of origin to final destination.

Table1, Marketing channels and their definitions

Commodity channels	Definitions
producer (farmers)	The first stage actors in the chain who perform most of the market chain functions right from farm inputs preparation on their farms or procurement of the inputs from other sources to post harvest handling and marketing.
Local Collectors	are farmers or part-time traders in the chain who buy small quantity of goat from farmers in village markets during slack period for the purpose of reselling it to consumers or wholesalers
Wholesalers;	Wholesalers are traders who buy large quantities of goods and resells to retailers than selling directly to the ultimate customers. They are the major actors in the marketing channels. They have somewhat strong financial as well as management-know how in all aspects of the business activity in comparison with other actors.
Retailers	Retailers buy the coffee from farmers' directly or through broker in the market. They directly sells commodity to end users (consumers and processors).
Consumers	They are the final stage actors. They are market actors who purchase either raw coffee or processed coffee for their own consumption directly from producer, collector, retailers or processors for consumption or they have many alternatives as they are the final destination of the products.

Figure 1 Channel of coffee marketing chain in Ethiopia



Channel-I: Farmers → Consumers

This is a channel in which the farmers sell the coffee they produced directly to consumers.

Channel-II: Farmers → Retailers→ Consumers

The channel in which, retailers buy coffee directly from farmers and they in turn sell directly to the consumers. In this case the raw coffee is sold to consumers by the retailers without any processing is carried out.

Channel-III: Farmers → Retailer → processors →Consumers

This channel is the channel in which farmers sell the coffee they produced to the retailer and the retailers sell without any value addition to the processors; processors resell it by adding some amount of value to consumers.

Channel-IV: Farmers → Collectors → Processors → Consumers

This channel is the channel in which farmers sell the coffee they produced to the collectors and they sell without any value addition to the processors; processors resell it by adding some amount of value to consumers.

Channel-V: Farmers → Wholesalers → Processors → Consumers

This is the channel in which wholesalers buy coffee directly from farmers and they in turn sell directly to the processors. In this case the raw coffee is sold to consumers by the processors after value addition processing is carried out.

Channel-VI: Farmers → Wholesalers → Retailers → Consumers

This is the channel in which wholesalers buy coffee directly from farmers and they in turn sell directly to the retailers. In this case the raw coffee is sold to consumers by both the retailer and Wholesalers without value addition process.

Channel-VII: Farmers → Collectors → Wholesalers → Processors → Consumers

This channel is the channel in which farmers sell the coffee they produced to the collectors and the collectors sell without any value addition to the wholesalers and wholesalers resell it to the processors without value addition process. In turn the processors sell it by adding some amount of value to consumers.

2.2. Empirical studies**2.2.1. Determinants of Market Outlet Choice**

In many economic conditions, the selection can be among more than one alternative. These may be unordered options or ordered alternatives. The ordered reaction multinomial fashions (ordered probit and logit) make use of the greater records implicit within the ordinal nature of the established variable. Therefore, those fashions have a different probability than unordered reaction multinomial models and have to be dealt with separately (Baltagi, 2011). There are many cases wherein people pick between numerous alternatives, but no logical ordering of the alternatives exists. For these reasons, it isn't appropriate to apply the ordered probit model. The multinomial probit version, which might be the most commonly used model as far as several unordered options are concerned,. The choice an individual makes does not rely upon the absolute utility associated with an alternative, but at the software relative to different options. The multinomial probit model is often criticized for being over parameterized, which results in inaccurate estimation (Koop, 2003).

The desire decision over the exceptional alternative market outlet, that's more than, can be modeled in two ways: by means of both multinomial logit version and multivariate probit regression analysis. There is the implicit assumption in multinomial logit version that the chance ratio between any pair of alternatives is impartial of inappropriate alternatives (Hill et al., 2011). The choice chances implied via the multinomial logit version need to satisfy the independence of the point options assets. This way, the ratio of possibilities of any two alternatives may be equal, no matter what the alternative options are (Koop, 2003).

The above multinomial logit fashions are based totally on the assumption that the mistake terms are independent, not most effective among special people but also a few of the different options. If there may be interdependency between the mistake phrases for distinct alternatives, the multinomial logit version is not appropriate (Heij et al., 2004).

Multivariate probit version: a natural extension of the probit version might be to permit a couple of equations with correlated disturbances. An individual chooses between more than two choices, once again making the selection that offers the greatest software. Thus, an individual is most likely to choose a specific opportunity if and only if the application derived from this opportunity is greater than that from any other opportunity within the preference set (Greene, 2012). Regarding factors affecting the outlet picks of the families, exceptional researchers used multinomial logit and probit for categorical marketing machines for extraordinary agricultural commodities.

Mekonin (2015) used a multinomial logistical version in analyzing determinants of marketplace outlet desire and livelihood consequences of coffee-producing farmers in Lalo Assabi district, Ethiopia. The result of the model indicates that the selection of quit consumer outlet is undoubtedly and considerably stricken by get admission to to transportation facility, access to charge facts, and getting admission to to credit score as compared to a private trader outlet, whereas the quantity of espresso offered and getting admission to an extension service negatively affected the principle choice of giving up a patron outlet. Similarly, the choice of cooperative outlet is undoubtedly and considerably tormented by distance to the marketplace, getting admission to to transportation facility, getting right of entry to rate facts, and getting right of entry to training compared to non-public trader outlet.

Addisu (2016) used a multivariate probit version in studying determinants of marketplace outlet desire and livelihood consequences of producing coffee. The result found that of the twelve explanatory variables covered in multivariate probit model, four variables drastically affected wholesaler market outlets; one variable drastically affected retailer outlets; one variables notably affected purchaser outlets; and six variables notably affected collector marketplace outlet choices at 1, 5, and 10 percentage probability levels.

Negeri (2017) hired a multinomial logistic model to observe the major determinants of marketplace outlet desire among coffee-generating farmers in Lalo Assabi District of West Wollega Sector, Ethiopia. The version confirmed that the selection of end patron outlet is undoubtedly and notably suffering from lack of access to transportation centers, access to fee information, and access to credit scores in comparison to non-public trader outlets, whereas the quantity of coffee bought and access to extension services negatively affected the principle preference of end purchaser outlet. Similarly, the selection of cooperative outlet is undoubtedly and considerably tormented by distance to the marketplace, get entry to transportation centers, getting right of entry to fee information, and getting entry to training as compared to a private dealer outlet.

Similarly, Diro et al. (2017) studied the share of espresso marketplace outlets among smallholder farmers in western Ethiopia using a multinomial logistic regression version. Consumers, brokers, cooperatives, urban, and rural traders had been discovered to be the primary espresso marketplace outlets inside the vicinity. They similarly observed that sex became a superb and enormous aspect, which implies that male farmers select cooperatives to promote their coffee in comparison to female farmers. According to the study, the good judgment in the back of this is that male farmers have more sources for transportation and time to promote their coffee product to markets, even if the markets are a long way away from their residence.

Mokonen (2017) studied the determinants of marketplace outlet choice of espresso-generating farmers in Lalo Assabi district of West Wollega zone, Ethiopia, with the unique targets of exploring the overall traits and livelihood sports and figuring out fundamental factors affecting coffee market outlet desire. A random sample of 141 espresso producers was selected for interview primarily based on the precise sample length determination. Both descriptive and

inferential statistical methods were employed for factual evaluation. For the advertising of coffee, 11.3%, 51.8%, and 36.9% of the respondents specially selected stop purchasers, private dealers, and cooperative retailers, respectively. The result of a multinomial logistical version confirmed that the choice of end client outlet is positively and drastically suffering from getting admission to transportation facilities, getting admission to price records, and access to credit scores as compared to private trader outlet, whereas the amount of espresso bought and getting admission to extension offerings negatively affected the primary desire of quit patron outlet. Similarly, the choice of cooperative outlet is undoubtedly and appreciably affected by distance to the marketplace, getting admission to transportation centers, getting admission to rate data, and getting admission to education compared to personal dealer outlet.

Dejen (2018) studied the determinant elements that influence those choices amongst espresso farmers in fashionable and member and nonmember coffee growers, especially in Bench Maji Zone, South Western Ethiopia. Using stratified random sampling, 132 smallholder espresso farmers were selected throughout purposefully chosen sixteen espresso cooperatives in Bench Maji Zone of South Western Ethiopia. Farmers promote their produce through special but limited market channels. They took a look and discovered that the primary advertising channels currently in the area have been espresso advertising cooperatives, non-public traders, neighboring cooperatives, and casual investors. Coffee farmers can pick to sell all, a share, or not anything in their coffee cooperatives through any of these channels. One could count on that member coffee farmers supply their espresso to their very own cooperatives, and nonmember farmers anticipate delivering their espresso to personal traders. However, this is not the case in the examination. Rather, it was discovered that 42 percent of member coffee farmers sell their espresso to non-public traders, and in the opposite direction, forty percent of nonmember espresso growers supply their coffee to espresso cooperatives. The question is: why is this happening, and what determines their promotion decisions of coffee farmers? Tobit regression is made and the regression consequences for member farmers are discovered. that factors including training, share of land allotted to espresso, share of off farm profits to total profits, cooperatives performance, delight on cooperatives performance, and 2d fee affected market outlet preference whilst age of the household head, proportion of off farm income and access to education has undoubtedly influenced nonmember espresso growers' client selection selection. Finally the have

a look at confirmed the continuing viability of espresso marketing cooperatives as providers of coffee to espresso customers within the study location

Nasir (2020) studied the espresso market outlet retailers; examine advertising margins and the determinants of outlet desire through smallholder farmers in seka chokorsa district of jimma sector. Both types and assets of statistics were used and accumulated from 124 coffee producers, providers, cooperatives and collectors to achieve vital facts and analyzed the use of multinomial logit model. The survey discovered that 41.1% of smallholders offered their sundried coffee to providers, 33.1% mentioned to have offered to cooperatives and approximately 25.8% of them bought their espresso to creditors. Analysis of marketing margins showed that the prices incurred by way of manufacturers are very high almost more than half of the general expenses relative to charges incurred by number one stores and that they attain fewer margins handiest approximately 28 percent which is not truthful and seasonable in comparison to fees. Hence, there may be a want to interfere on this gap to boom manufacturers' proportion in the vicinity via presenting inputs at low fee which in turn reduces production prices. The results of multinomial logit version indicated that the probability of choosing cooperatives marketing outlet turned into affected by espresso farming experience, instructional level of the household head and postharvest price addition as compared to providers' outlet. Similarly, the probability to pick out the collector outlet is found to be appreciably suffering from the age of the household head, cattle in tropical farm animals unit, get admission to to coffee advertising statistics and get entry to to extension carrier relative to providers' outlet the base class. Therefore, those factors requires intervention and advertising through developing farmers' focus about submit-harvest dealing with, teaching and schooling farmers; strengthening economic and marketplace capability of the cooperatives could increase farmers' choice toward cooperative outlet.

Yidnekachew (2022) studied the e Market chain and the determinants of espresso market outlet preference choices of smallholder coffee creators inside the Debub Ari Region. Unmistakable bits of expertise and econometric models had been used to take a look at the records. A multivariate probit version was used to recognize elements impacting marketplace outlet choices of the smallholder espresso producers. Both essential and discretionary statistics changed into assembled from the survey locale. The multi-degree assessing method has been used for this audit. An amount of 194 espresso writer family heads had been unevenly picked and conversed

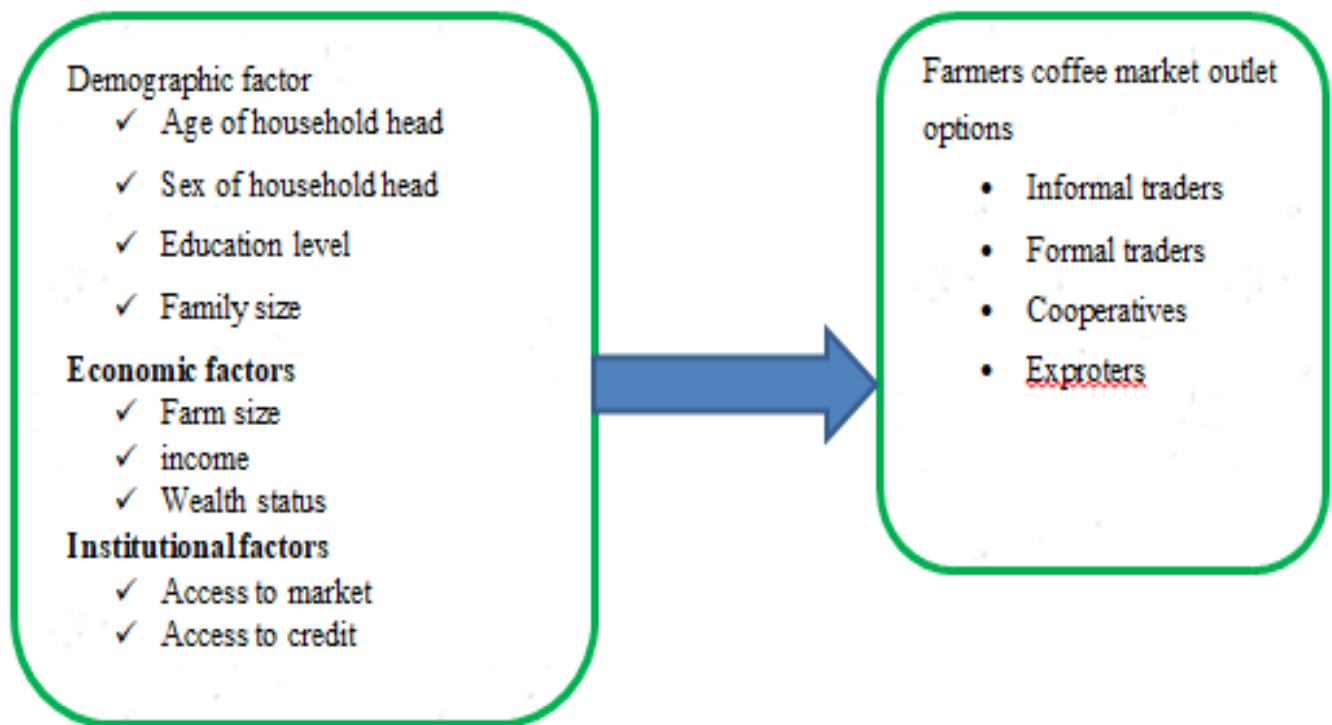
with the help of a pre-attempted coordinated survey. The center social affair discussion and key observers interviews had been directed to upgrade the customary statistics. The chance of selecting finders, wholesalers, outlets, processors, and customer shops is 67.1%, sixty six.Four%, 36.9%, 71.6%, and 15.Three%, independently. The opportunity of households together choosing the four market outlets was zero.031% extra conspicuous than the probability of not picking all marketplace stores, which is 0.003%. Induction to credit unfavorably impacted store, processor, and client market outlet picks, distance to the closest market harm processor market outlet alternatives, and market statistics of farm guide insistently affected store and client marketplace outlet choices.

2.3. Conceptual framework of the study

A conceptual framework is used to research the relationship among unbiased variables (age of the family heads, sex of the family heads, and marital popularity of the household heads). Circle of relatives size of the household, education stage of the household heads, land size of the family, access to primary service, get admission to marketplace, profits of the household heads social, economic and political participation, reputation of the household heads and wealth and asset the family heads have) and structured variables (farmers choice of coffee market outlets)

. INDEPENDENT VARIABLES

DEPENDENT VARIABLES



Source: Researcher's own formulation (2023)

CHAPTER THREE

3. Research Methodology

3.1. Description of the study area

This study has been undertaken in the Gedeo Zone, Southern Ethiopia Regional States. Geographically, the zone is located north of the equator from five°fifty-three'N to 6° 27'N latitude and from 38° 8' to 38° 30' east longitude (Negash, 2010). On the primary motorway from Addis Ababa to Moyale in the direction of Kenya, 365 kilometers from Ethiopia's capital city, Addis Ababa. The slope gradient reaches as much as 70% in some regions, and almost 50% of the landscape is steep, with a slope gradient above 10% (Mesele, 2011; MCTA, 2020). The zone has three agro-ecological zones, whose mid-altitude agro-ecology occupies the largest place (sixty-two.2%), accompanied by excessive land (37.1%) and coffee altitude (0.7%) (Bogale, 2007). The study district is Yirgachefe within the Gedeo Zone SNNPRS. Yirgachefe district is positioned between 6°09' and 6°32' N and 38°08' and 38°32' E, with an altitudinal range of 1501–2500 masl (Negash, 2007). Annual rainfall stages range between 1200 and 1800 mm, with a bimodal distribution, and the suggested annual temperature varies from 15°C to twenty°C (Asnake, 2021).

3.2. Research Design

A research design is also a plan for observation that provides specifications of processes to be observed by the researcher with the intention of obtaining the study's goal in addition to checking the hypothesis (McDaniel and Gates, 2006). For the purpose of the study, explanatory study layout was employed to give an explanation for how independent variables influence dependent

3.3. Research Approach

In order to achieve the objective of the study, the researcher hired a blended research approach that incorporated both quantitative and qualitative approaches. The rationale behind choosing a combined method is to generate the benefit of both tactics, such as dealing with unique targets of the study, which can't be achieved by means of a single method, and to permit one approach to inform any other approach, either in layout or interpretation. It additionally facilitates triangulating the findings of various procedures to be able to offer greater self-assurance to the study. The above description of the types of research brings to light the reality that there are two basic procedures to investigate, viz., the quantitative technique and the qualitative technique. The

former entails the generation of statistics in quantitative form, which can be subjected to rigorous quantitative evaluation in a proper and inflexible fashion.

3.4. Data type and sources

The data used in this study consists of both primary and secondary data.

3.4.1. Primary

For the purpose of data collection, five enumerators who speak the nearby language and English nicely became trained with the aid of the researcher before and at some stage in the information series. They are additionally truly oriented on the objectives and contents of the questionnaires and are familiar with the fundamental strategies of information amassing.

3.5. Target Population

The target population was household farmers in three kebeles in Yirga Chaffe district, namely Haru, Gerse, and Wogida kebeles. The research population has something to do with the full collection of all gadgets of analysis on which the researcher draws unique conclusions (Balnaves & Caputi, 2010). It refers to devices of people that can be the primary awareness of research, in a few cases belonging to the same geographical location and containing comparable traits (Kumar, 2011). Population is a collective time period used to explain the full amount of instances of the kind that might be of concern. It can encompass gadgets, human beings, or even activities (Apuke, 2017). Since population constitutes the totality of units about which the research intends to take a look, the population for the look at becomes all of the 4207 family farmers in Haru, Gerse, and Wogida kebeles. Take a look at total and target population summarized within Desk 3.1

3.6. Sampling Techniques

Multi-stage stratified sampling and simple random techniques have been employed to symbolize the districts as there may be a excessive incidence of coffee-producing belt of the Zone. Stage 1: Selecting Kebeles (Clusters). Since the Yirga Chaffe district likely encompasses multiple kebeles (the smallest administrative unit), and a comprehensive farmer list may not always be readily available at the district level, a multi-stage approach is often efficient and practical (Kalton, 1983). The first stage involves cluster sampling. This approach, combined with stratification, can balance cost-effectiveness and representation.

Stage 2: Stratification and Simple Random Sampling of Farmers within Selected Kebeles (3 kebeles (Haru, Gerse and Wogida kebeles)) were selected. Once the kebeles have been selected, the second stage involves stratification and simple random sampling of farmers within those chosen kebeles (Särndal, Swensson, & Wretman, 1992). This builds upon the cluster sampling in stage 1, allowing for targeted selection of farmers based on key characteristics. Divide farmers into strata based on the size of their coffee farms (poor, medium, and rich).

For each selected kebele, obtain a sampling frame, which is a list of all coffee farmers residing within that specific kebele. The completeness and accuracy of this list are critical for the representativeness of the sample. This can be gathered with the assistance of the Kebele administration, farmer associations, or from existing agricultural records. Within each stratum, within each selected kebele, employ simple random sampling to select the required number of farmers. Distribute the total sample size across the selected kebeles.

The number of farmers selected from each kebele can be determined based on the kebele's proportion of the total farmer population, or may be adjusted to ensure a minimum number of farmers per kebele for meaningful comparisons. This detailed application of multi-stage stratified sampling, incorporating simple random sampling at multiple levels, provides a robust and defensible method for selecting a representative sample of coffee farmers in the Yirga Chaffe district, enabling a thorough investigation into their market outlet choices. The use of stratification ensures that key subgroups are adequately represented, while the random selection within strata minimizes bias.

3.7. Sample size determination

According to the data available the total numbers of household farmers in selected kebeles of Yirga Chaffe district were 4207. The researcher used Yemane's formula (1967), in order to determine the sample size of the population. This formula is reliable to 95% and has only 5% deviation factor.

$$n = \frac{N}{1 + N(e)^2} = \frac{4207}{1 + 4207(0.05)^2} = 365$$

Where N=total population which is 4207

n = is sample from population

e=error tolerance (decided to be taken 5%)

Table 3.1: proportion of sample allocation

District	kebeles	Population		Sample	
		Frequency	Proportion	Frequency	Percentage
Y/Chaffee	Haru	2235	0.53	194	53.15
	Gerse	1194	0.28	104	28.49
	Wogida	778	0.19	67	18.35
	Total	4207	1	365	100

Source: kebele administration office, 2023

3.8. Data Collection instruments

The survey was conducted from June to July 2023 using structured and semi-structured questionnaires. key informant interviews, and observations were also used in the data collection process to provide a deeper understanding of the survey results..

Key informant interview (KII)

KIs were chosen from each kebeles using snowball procedures. Five key informants from each of the three kebeles comprised the 15 KIs that were ultimately chosen. kebele leaders, Union workres, and DAs were interviewed .

3.9. Methods of data analysis

After fieldwork, all the accrued statistics were carefully scrutinized, edited, categorized, coded, and analyzed. They are processed and analyzed according to the outlines laid down at the time of developing the study plan. The analysis changed to be primarily based on the research questions. Responses from the amassed information had been looked after in homogeneous agencies and coded. Basically, the analysis and presentation of the take-a-look at became both quantitative and qualitative. In the first component, the research turned into descriptive analysis (frequency counts, percentages, mean scores, t-test) and regression analyses were employed. In the second part of the econometric model, mainly the multinomial logistic regression model was adopted. Qualitative facts were changed into analyzed via theme.

3.10. Reliability and Validity of Instruments

3.10.1. Reliability Test

Aimed at the point that even if the research were repeated they would end up with similar results or the consistency or dependability of a measurement technique, and it's concerned with the consistency or stability of the score obtained from a measure or assessment overtime and across settings or conditions.

If the measurement is reliable, then there is less chance that the obtained score is due to random factors and measurement error (Marczyh, et al., 2005). According to George and Mallery (2003, as cited in Joseph & Rosemary, 2003) Cronbach's alpha is a coefficient of reliability. It is commonly used as a measure of the internal consistence or reliability of a psychometric test score for a sample of examinees. Cronbach's alpha reliability coefficient normally ranges between 0 and 1.

Table 3.2: Rule of thumb of Cronbach's Alpha

Cronbach's Alpha	Description
$\geq .9$	Excellent
$\geq .8$ but $< .9$	Good
$\geq .7$ but $< .8$	Acceptable
$\geq .6$ but $< .7$	Questionable
$\geq .5$ but $< .6$	Poor
$\leq .5$	unacceptable

Source: Zikmund, et al, 2010

The Cronbach's Alpha value determined to check reliability of the data items for this study is presented in Table 3.4 below.

Table 3.4: Summery items reliability using Cronbach's Alpha

Items category	Cronbach's Alpha
Demographic factors (6 items)	.84
Institutional factors (4 items)	.81
Economic factors (3 items)	.84

Social factors (2 items)	.81
famers characteristics factors (2 items)	.82
Access to basic service factors (8 items)	.83

Considering the values in Table 3.3 above, all Cronbach's Alpha values of each category of items (Table 3.4 above) is greater than 0.8. This suggests that all of the items in the questionnaire are reliable.

3.10.2. Validity Test

Refers to the extent to which the concept one wishes to measure is actually being measured by a particular scale or index. According to Kothari (2004), validity aims at establishing the results which are linked with the condition. It is concerned with the extent that the scale accurately represents the construct of interest. In order to assure the validity of the measurement instrument of the study is conducted based on the literally accepted conceptual framework that clearly indicate the theoretical construct and associated with the measurements valid to evaluate the explain how independent variables. Where possible this should be supported and consideration given to practical things. As per the comments and the discussion with my advisor the question prepared to primary data collection for the research objective is found valid by researcher.

3.11. Ethical Considerations

Mugenda (2008) underlines that participation of the respondents should be in voluntary bases and they have right not to give response without researcher obligation.

The Research was based on certain important ethical principles. These are respects for persons, non-maleficence (do not harm), beneficence (do well), honesty and avoiding plagiarism. All the research participants who were included in this study was appropriately informed about the purpose of the research and their willingness and consent was secured before the commencement of distributing questionnaire and asking interview questions. Regarding the right to privacy of the respondents, the study were maintained the confidentiality of the identity of each participant. In all cases, names were kept confidential thus collective names like 'respondents' was used.

3.10.1. Measures of respondents` perception

According to Masud et al. (2017) summative scale was used to measure respondents` perceptions. Perceptions of respondent`s on determinants farmers coffee market choices were derived as follow:

$$\text{Summative scale (SS)} = \frac{\sum_{i=1}^5 a_i x_i}{5 \sum_{i=1}^5 x_i} \dots\dots\dots(1)$$

Where: a_i = the scale of a class and a constant expressing the-weight given to the class

X_i = frequency of responses

$i=1, 2, 3, 4, 5$ and described as: x_1, x_2, x_3, x_4, x_5 , are the frequencies of response corresponding to $a_1 = 1, a_2 = 2, a_3 = 3, a_4 = 4, a_5 = 5$, respectively. Based on a 5-point Likert scale, the scores was administered to the responses of surveyed households are: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). To simplify the interpretation, mean of each rating was given to strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).The computed mean scores of the main factors were rated based on the index stated by Raju (2009) and Mykletun et al., (2001) as 1.00 - 1.49 = very low, 1.50 - 2.49 = low, 2.50 - 3.49 = medium, 3.50 - 4.20 = high and 4.21 - 5.00 = very high.

3.10. Model specification

Multivariate probit linear regression model apply to identify the relationship between dependent variables and explanatory variables. A multivariate probit version was used to recognize elements impacting marketplace outlet choices of the smallholder espresso producers. Addisu (2016) used a multivariate probit version in studying determinants of marketplace outlet desire and livelihood consequences of producing coffee. Yidnekachew (2022) studied the eMarket chain and the determinants of espresso market outlet preference choices of smallholder coffee creators inside the Debub Ari Region. This is to mean that regressions are used to investigate the relationship between age of the household heads(Agehh), sex of the household heads(Sexhh), family size of the household(Famszhh), educational level of the household heads(educ), land size of the household(farmsize), access to market(Accessmkt), income of the household(HHInco), participation status of the household in local institutions(participation) and wealth and asset that the household own(wealth) (independent variables) and farmers' choice of coffee market outlets options (informal traders, cooperatives, formal traders and exporters) (dependent variables).

The Multivariate linear regression for the j^{th} sample unit has the form:

$$Y_{ik} = \beta_0 + \beta_i X_i + e_i \text{ -----2}$$

Where

Y_{ik} – Dependent variable

β_0 = is the intercept

β_i , $i = 0, 1, \dots, n$ regression coefficients

X_i = is independent variables

e_i -is an error term

The current model regression (multivariate regression) equation is as follow.

$$Fcmoc_{ik} = \beta_0 + age_{hh} \beta_1 + sex_{hh} \beta_2 + mshh \beta_3 + hhfz \beta_4 + educ \beta_5 + farmsize \beta_6 + accessmkt \beta_7 + hhinc \beta_8 + ptcptionstatus \beta_9 + wealth \beta_{10} + e_i$$

Table 3.4.: Descriptions of Variables and Its Expected Output (sign)

Variables name	Variables code	Measurement	Exp. Sign	obtained Sign
Dependent variable				
Farmers choices of coffee market outlets	Fcmoc	Binary with many choices (1 if farmers choice informal traders coffee market outlets, 2 if farmers choice cooperative coffee market outlets, 3 if farmers choice Formal traders coffee market outlets and 4 if farmers choice exporters coffee market outlets)		
Independent variables				
Age of the household heads	Agehh	Continuous variable	+	+
Sex of the household heads	Sexhh	Binary(1 = male, 0 = female)	+	+
Marital status of the household heads	Mshh	Binary with many choice (1 if married , 0 otherwise, 2 if single , 0 otherwise, 3 if divorced , 0 otherwise and 4 if widowed , 0 otherwise)	-	-
Family size of the household	Hhfz	Continuous variable	+	-
Education level of the household heads	Educ	Binary with many choice(1 if illiterate, 0 otherwise, 2 if primary, 0 otherwise; 3 if secondary, 0 otherwise, 4 if certificate, 0 otherwise and 5 if diploma and above, 0 otherwise)	+	+
Land size of the household	farmsize	Continuous variable	+	+

Income of the household heads	Hhinco	Continuous variable	+	+
Access to market	Accessmkt	Binary(1 if households have adequate access to market services, 0 otherwise)	+	+
Social, economic and political participation status of the household heads	Ptcptionstat us	Binary(1 if the household heads have participation in social, economic and political issues, 0 otherwise)	+	+
Wealth and asset the household have	Wealth	Binary with many choice(1 if Poor (HH have 0 to 0.5ha) 0 otherwise, 2 if Medium (HH have 0.51 to 1.6 ha), 0 otherwise; 3 if rich (HH have above 1.6 ha), 0 otherwise,	+	+

CHAPTER FOUR

4. RESULT AND DISCUSSION

4.1. INTRODUCTION

This chapter presents the data analysis and discussion of the research findings obtained from the data collected from the survey questionnaire and KIs. Responses for the measures on the questionnaire are analyzed and presented using descriptive statistics and an empirical model. It has been divided into three sections. The first section was descriptive analysis of factors that affect coffee market outlet choices. The second section was a descriptive analysis of farmers' perceptions of factors affecting the farmer's choice of coffee market outlets; in the third section, responses of respondents were analyzed and interpreted using an empirical model; and finally, qualitative data were analyzed using themes.

4.2. Farmer's coffee market outlets choice options in Yirga Chaffe district

Under this section, the researcher analyzes farmer's coffee market outlet choice options in Haru, Gerse, and Wogida kebeles of Yirga Chaffe district.

Table 4.1: summery statistics of farmer's coffee market outlets choice options

Coffee market outlets choice options	Frequency	Percentage
Farmers choice informal traders coffee market outlets	214	59.44
Farmers choice cooperative coffee market outlets	95	26.39
Farmers choice formal traders coffee market outlets	37	10.28
Farmers choice exporters coffee market outlets	14	3.89

Source: Own survey computation, 2023

Farmer's coffee market outlet choice in Haru, Gerse, and Wogida kebeles of Yirga Chaffe district is shown in Table 4.1. In Yirga Chaffe woreda, 59.44% of farmers were choice informal traders coffee market outlets, 26.39% of farmers were choice cooperative coffee market outlets, 10.28% of farmers were choice formal traders coffee market outlets, and 3.89% of farmers were choice exporters coffee market outlets. This showed that the majority of the respondents farmers chose informal traders' coffee market outlets, followed by cooperative coffee market outlets.

4.3. Demographic and socioeconomic characteristics that affect Farmers coffee market outlets choice options for discrete variables

Under this section, the researcher analyzes the demographic and socioeconomic characteristics that cause farmers coffee market outlet choices in Haru, Gerse, and Wogida kebeles of Yirga Chaffe district.

Table 4.2: summary of households' demographic and socioeconomic characteristics

Variables	Variables categories	Farmers coffee market outlets choice options								Total		Statistical value	
		Informal traders		Cooperatives		Formal traders		Exporter					
		Freq	%age	Freq	%age	Freq	%age	Freq	%age	Freq	%age	chi2	p-value
Gender	Male	200	61.16	80	24.46	33	10.09	14	4.28	327	90.83	2.90	0.407
	Female	14	42.42	15	45.45	4	12.12	0	0	33	9.17		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		
Marital status	Married	167	63.26	62	23.48	28	10.61	7	2.65	264	73.33	2.30	0.512
	Single	9	27.27	17	51.52	2	6.06	5	15.15	33	9.17		
	Divorced	13	56.52	2	8.70	6	26.09	2	8.70	23	6.39		
	Widowed	25	62.50	14	35.00	1	2.50	0	00	40	11.11		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		
Education level	Illiterate	154	79.38	29	14.95	7	3.61	4	2.06	194	53.89	3.94	0.267
	primary	44	45.36	35	36.08	13	13.40	5	5.15	97	26.94		
	secondary	14	29.17	21	43.75	12	25	1	2.08	48	13.33		
	certificate	2	9.52	10	47.62	5	23.81	4	19.05	21	5.83		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		
Access to market	inadequate	146	79.35	32	17.39	3	1.63	3	1.63	184	51.11	3.48	0.323
	adequate	68	38.64	63	35.80	34	19.32	11	6.25	176	48.89		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		
Participati on in local institution s status	Non-Participate	162	79.80	35	17.24	3	1.48	3	1.48	203	56.39	6.13	0.105
	Participated	52	33.12	60	38.22	34	21.66	11	7.01	157	43.61		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		
Wealth and asset status	poor	127	73.84	41	23.84	4	2.33	0	0	172	47.78	22.79	0.000
	Medium	71	49.31	37	25.69	22	15.28	13	9.72	144	40.00		
	Rich	16	36.36	17	38.64	11	25.0	1	2.08	44	12.22		
	Total	214	59.44	95	26.39	34	10.28	14	3.89	360	100		

Source: Own survey computation, 2023

Gender

The chi-square test indicates that there is no significant difference in the distribution of farmers' coffee market outlet choice options across gender categories ($F(2, 360) = 2.90, p = 0.407$). This

suggests that both male and female farmers have similar preferences for informal traders, cooperatives, formal traders, and exporters.

Marital Status

The chi-square test indicates that there is no significant difference in the distribution of farmers' coffee market outlet choice options across marital status categories ($F(6, 360) = 2.30, p = 0.512$). This suggests that married, single, divorced, and widowed farmers have similar preferences for informal traders, cooperatives, formal traders, and exporters.

Education Level

The chi-square test indicates that there is no significant difference in the distribution of farmers' coffee market outlet choice options across education level categories ($F(6, 360) = 3.94, p = 0.267$). This suggests that illiterate, primary school-educated, secondary school-educated, and certificate-holding farmers have similar preferences for informal traders, cooperatives, formal traders, and exporters.

Access to Market

The chi-square test indicates that there is no significant difference in the distribution of farmers' coffee market outlet choice options between those with inadequate and adequate access to market ($F(2, 360) = 3.48, p = 0.323$). This suggests that farmers with inadequate access to market have similar preferences for informal traders, cooperatives, formal traders, and exporters as those with adequate access to market.

Participation in Local Institutions

The chi-square test indicates that there is a significant difference in the distribution of farmers' coffee market outlet choice options between non-participants and participants in local institutions ($F(6, 360) = 6.13, p = 0.105$). This suggests that participants in local institutions have a higher preference for formal traders compared to non-participants.

Wealth and Asset Status

The chi-square test indicates that there is a significant difference in the distribution of farmers' coffee market outlet choice options across wealth and asset status categories ($F(8, 360) = 22.79, p = 0.000$). This suggests that poor farmers have a higher preference for informal traders compared to medium and rich farmers.

Regarding the wealth categories, 47.78% of the respondents were poor, 40% of the respondents were medium, and 12.22% of the respondents were rich. This explains why the majority of farmer respondent's wealth categories were poor. From this, the researcher identified that the majority of farmers who chose an informal trader coffee market outlet were poor, the majority of farmers who chose a cooperative coffee market outlet were rich, the majority of farmers who chose a formal trader coffee market outlet were medium, and the majority of farmers who chose an exporter coffee market outlet were rich. The chi2 value is 22.79, and the p-value is 0.000. This show that wealth and assets significantly determine farmers' choice of coffee market outlet ($p < 0.05$) in the Yirga Chaffe district

4.4. Demographic and socioeconomic characteristic of farmers that affect farmer's choice of coffee market outlet for continuous explanatory variables

Table 4.3 characterize demographic and socioeconomic factors determine households farmers that affect farmer's choice of coffee market outlet status for continuous explanatory variables and statistically test their level of significance using p-value

Table 4.3: Demographic and socioeconomic characteristics of farmers that affect farmer's choice of coffee market outlet

Variable	Mean	Std. Dev.	Min	Max	Statistical value	
					t-test	p-value
Age	46.36944	11.97419	24	86	5.418	0.000
Family size	5.666667	2.837277	0	16	0.124	0.901
Income of the household	2630.742	2356.238	200	24,500	14.26	0.000

The table 4.3 shows that in average age of respondents were 46 years. The minimum and maximum years of the respondent were 24 and 86 respectively. The t-test shows $t=5.418$ and $p\text{-value}=0.000$. This indicates that age of the household determines status of farmer's choice of coffee market outlet and statistically significant at 1% level of significance.

Regarding the income of the respondents, average income was 2630 birr. The minimum and maximum income of the respondents was 200 and 24,500 birr per month respectively. The t-test

shows $t=14.26$ and $p\text{-value}=0.000$. This indicates that income of the household determines status of farmer's choice of coffee market outlet and statistically significant at 1% level of significance.

4.5. Analysis of perception of farmers on factors affects coffee market outlets choices.

4.5.1. Analysis of perception of farmers on demographic factors that causes coffee market outlets choices

Based on the mean score (summative scale) of demographic factors items, the level of causes of demographic factors on coffee market outlet choices in Y/chefe district were explained in table 4.4.

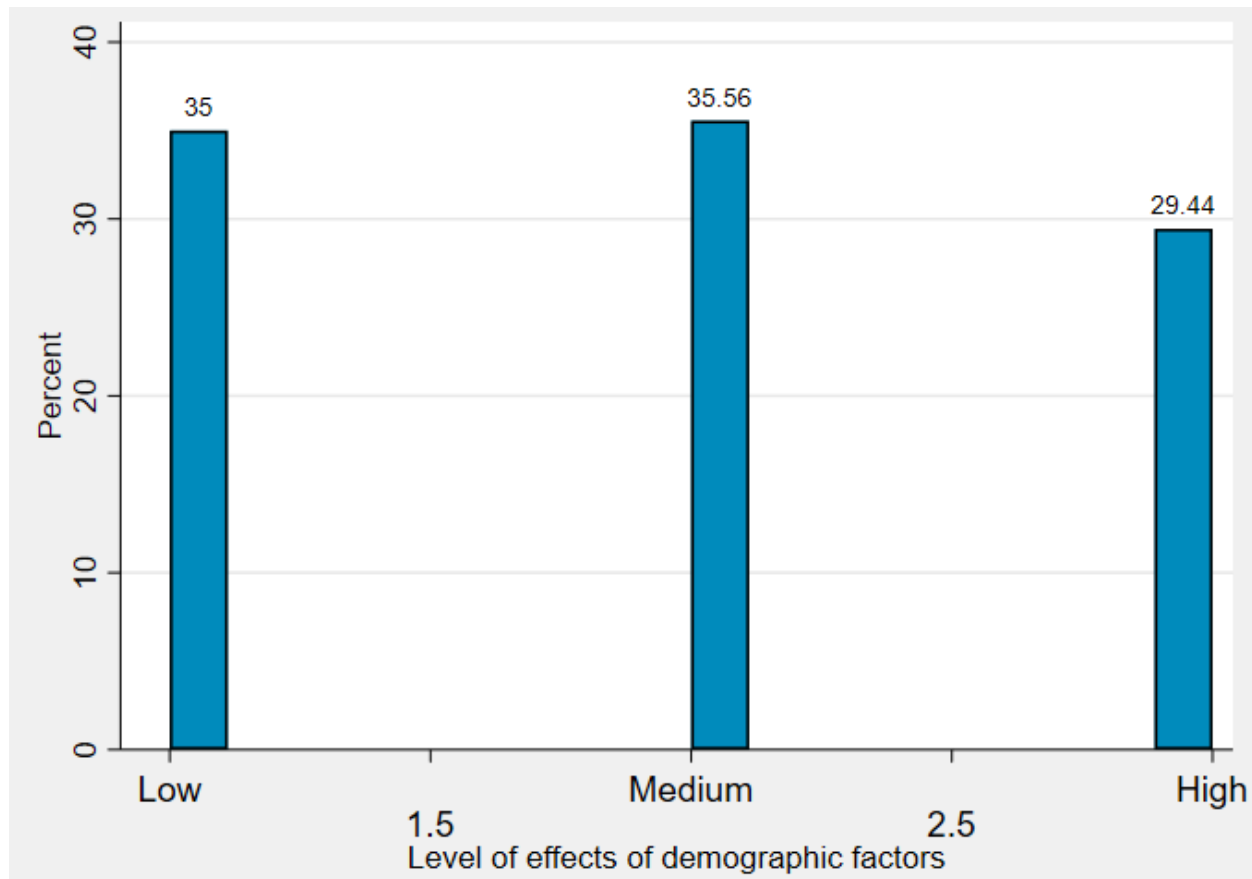
Table 4.3: Summery statistics of level of causes of demographic factors

Demographic factors as a causes of farmers coffee market outlets choices (DEMO)	Level	Frequency	percentage	Mean	SD
	Low	126	35	3.88	0.846
	Medium	128	35.56		
	High	106	29.44		
	Total	360	100		

Source: own survey questionnaire 2023

Based on table 4.3, regarding the level of causes of demographic factors on coffee market outlet choices in Y/chefe district, the survey result depicted that 35% respondents were said low, 35.56% respondents were said medium and 29.44% respondents were said high. From this, the researcher found that the majority of respondents said level causes of demographic factors on coffee market outlets choices is medium.

The computed mean scores were interpreted using the key stated by Raju (2009) and Mykletun et al., (2001) as 1.00 - 1.49 = very low, 1.50 - 2.49 = low, 2.50 - 3.49 = medium, 3.50 - 4.20 = high and 4.21 - 5.00 = very high. Demographic factors as causes of farmers coffee market outlets were medium (mean scores = 3.88) in Y/chefe district is medium. Graphically



4.5.2. Analysis of perception of farmers on institutional factors that causes coffee market outlets choices

Based on mean score (summative scale) of institutional factors items, level of causes of institutional factors on coffee market outlets choices in Y/chefe district were explained in table 4.5.

Table 4.4: Summery statistics of level of causes of institutional factors

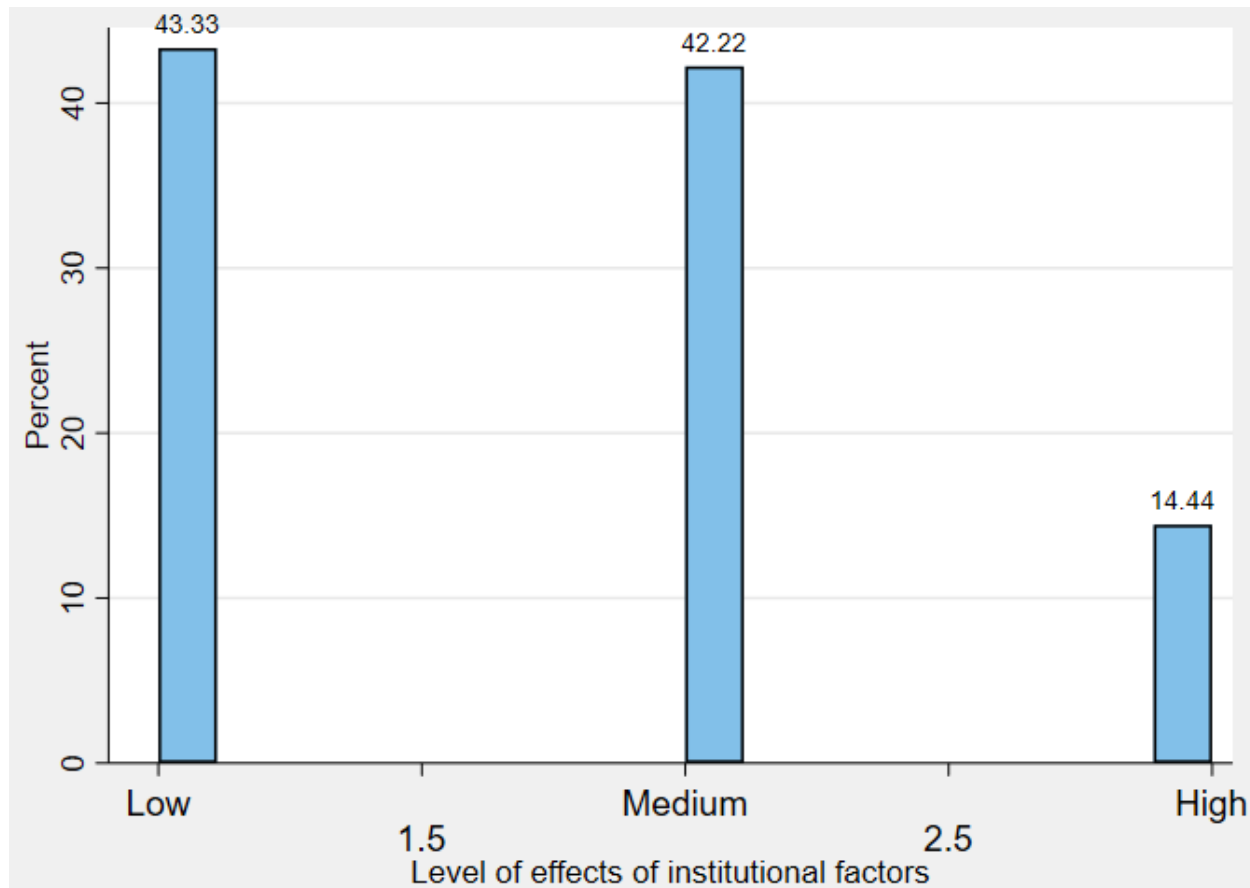
Institutional factors as a causes of farmers coffee market outlets choices (INSTI)	Level	Frequency	percentage	Mean	SD
	Low	156	43.33	2.19	0.75
	Medium	152	42.22		
	High	52	14.44		
	Total	360	100		

Source: own survey questionnaire 2023

Based on table 4.5, regarding the level of causes of institutional factors on coffee market outlets choices in Y/chefe district, the survey result depicted that, 43.33% of respondents were said low, 42.22% respondents were said medium and 14.44% respondents were said high. From this, the

researcher found that the majority of respondents said the level of institutional factors on coffee market outlet choices in Y/chefe district is low. Institutional factors as causes of farmers coffee market outlets was low (mean scores = 2.19) in Y/chefe district

Graphically



4.5.3. Analysis of perception of farmers on economic factors that causes coffee market outlets choices

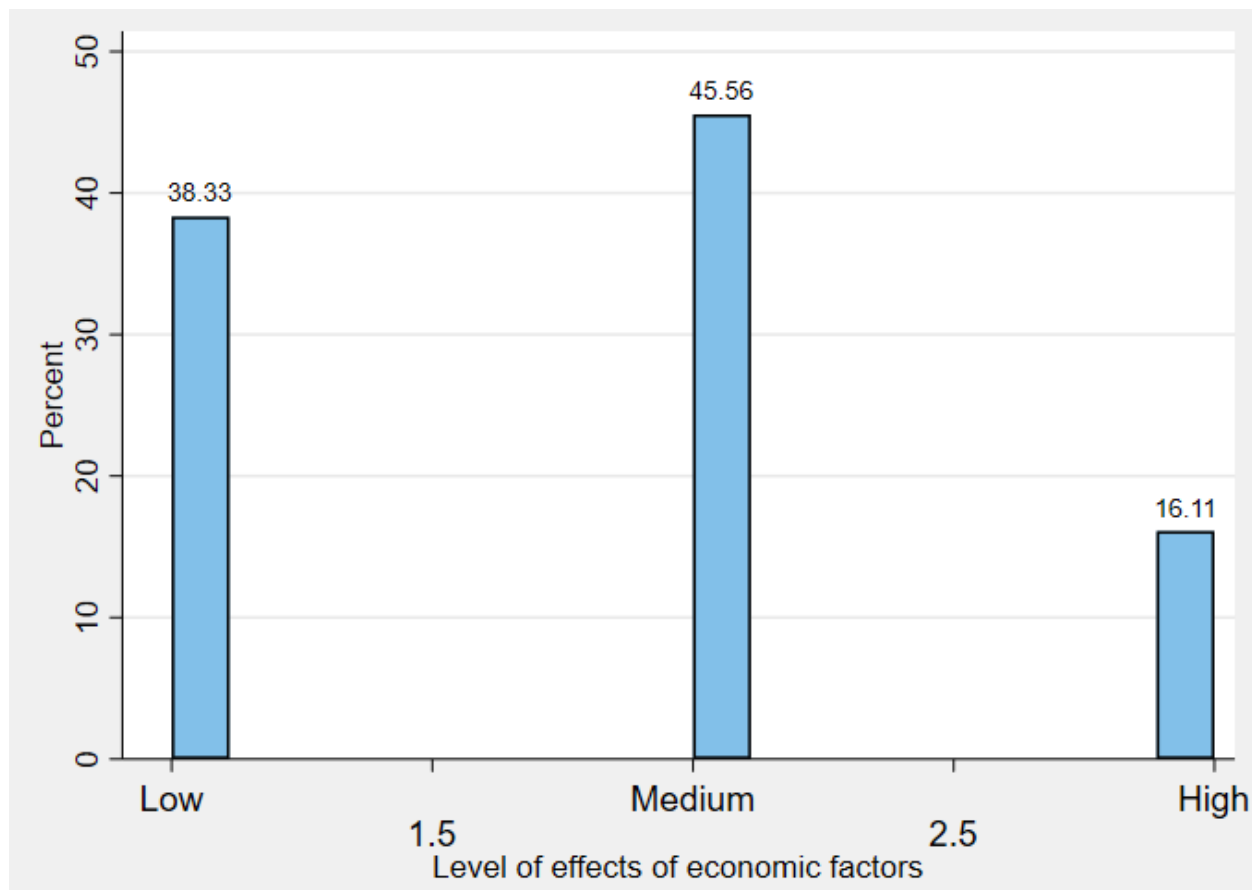
Based on mean score (summative scale) of economic factors items, level of effects of economic factors on coffee market outlets choices in Y/cheffe district were explained in table 4.6.

Table 4.6: Summery statistics of level of causes of economic factors

Economic factors as a causes of farmers coffee market outlets choices (ECO)	Level	Frequency	percentage	Mean	SD
	Low	138	3.33	3.46	0.86
	Medium	164	45.56		
	High	58	16.11		
	Total	360	100		

Source: own survey questionnaire 2023

Based on table 4.6, regarding the level of causes of economic factors on coffee market outlet choices in Y/cheffe district, the survey result depicted that 38.33% of respondents were said to be low, 45.56% of respondents were said to be medium, and 16.11% of respondents were said to be high. From this, the researcher found that the majority of respondents said the effects of economic factors on coffee market outlet choices are medium. Economic factors as causes of farmers coffee market outlets were medium (mean scores = 3.46) in Y/chefe district. Graphically



4.5.4. Analysis of perception of farmers on social factors that cause coffee market outlets choices

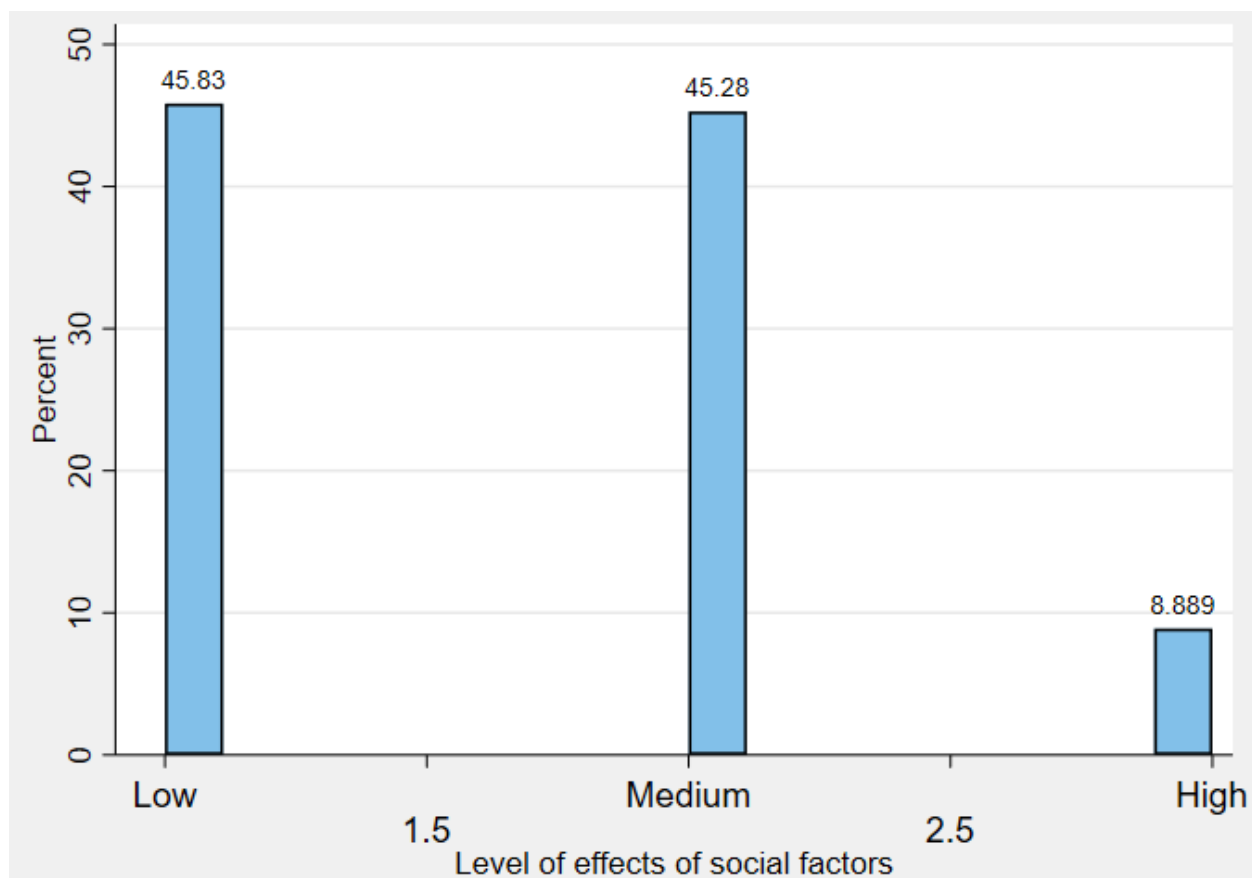
Based on mean score (summative scale) of social factors items, level of causes of social factors on coffee market outlets choices in Y/cheffe district were explained in table 4.7.

Table 4.7: Summery statistics of level of causes of social factors

Social factors as a causes of farmers coffee market outlets choices (SOCIAL)	Level	Frequency	percentage	Mean	SD
	Low	165	45.83	3.66	0.85
	Medium	163	45.28		
	High	32	8.89		
	Total	360	100		

Source: own survey questionnaire 2023

Based on table 4.7, regarding the level of effects of social factors on coffee market outlets choices in Y/cheffe district, the survey result depicted that, 45.83% respondents were said low, 45.28% respondents were said medium and 8.89% respondents were said high. From this, the researcher found that the majority of respondents said level effects of social factors on coffee market outlets choices in Y/chefe district is low. Social factors as causes of farmers coffee market outlets was medium (mean scores = 3.66) in Y/chefe district. Graphically



4.5.5. Analysis of perception of farmers on farm characteristics that causes coffee market outlets choices

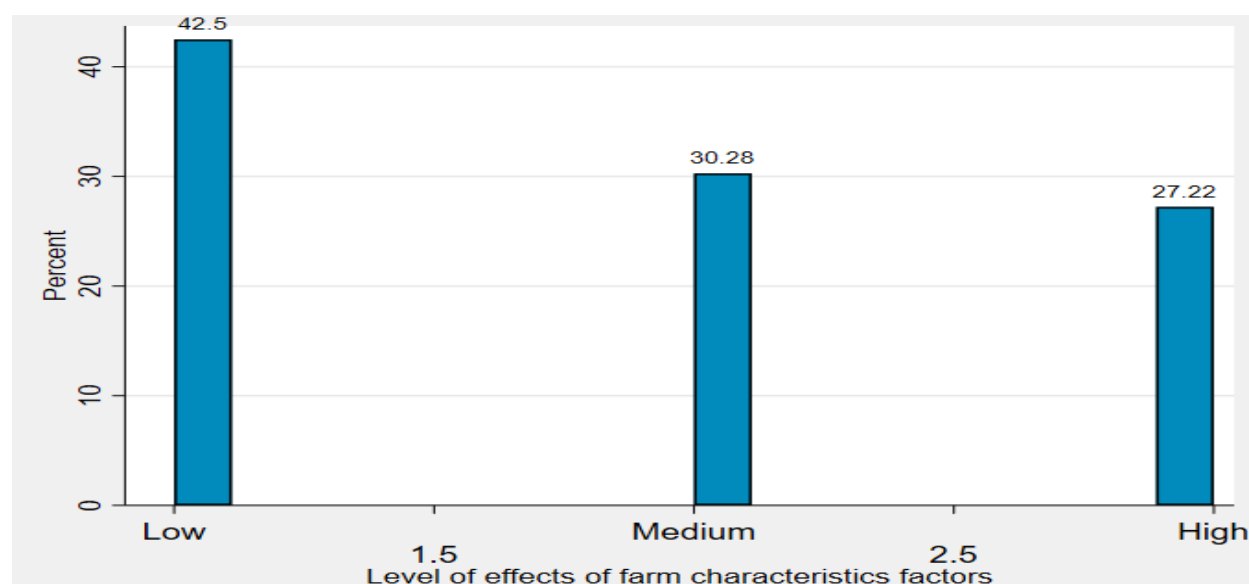
Based on mean score (summative scale) of farm characteristics items, level of causes of farm characteristics on coffee market outlets choices in Y/cheffe district were explained in table 4.8.

Table 4.8: Summery statistics of level of causes of farm characteristics

Farm characteristics factors as a causes of farmers coffee market outlets choices (FCRCS)	Level	Frequency	percentage	Mean	SD
	Low	153	42.50	2.22	0.79
	Medium	109	30.28		
	High	98	27.22		
	Total	360	100		

Source: own survey questionnaire 2023

Based on table 4.8, regarding the level of effects of farm characteristics on coffee market outlets choices in Y/cheffe district, the survey result depicted that, 42.50% respondents were said low, 30.28% respondents were said medium and 27.22% respondents were said high. From this, the researcher found that the majority of respondents said level effects of farm characteristics on coffee market outlets choices in Y/chefe district is low. Farm characteristics factors as causes of farmers coffee market outlets was low (mean scores = 2.22) in Y/chefe district. Graphically



4.6. Empirical model

4.6.1. Determinants of farmers' choice of coffee market outlets options

There are many factors that contribute to farmer's choice of coffee market outlet options. In order to identify the significant factors, multivariate model was applied. Age of the household heads(Agehh), sex of the household heads(Sexhh), family size of the household(Famszhh), educational level of the household heads(educ), land size of the household(farmsize), access to market(Accessmkt), income of the household(HHInco), participation status of the household in local institutions(participation) and wealth and asset that the household own(wealth) were used as independent variables, where as farmers' choice of coffee market outlets options (Fcmocs) was used as dependent variables.

Table 4.9: Regression output on determinants of farmers' choice of coffee market outlets options

Farmers' choice of coffee market outlets options (Fcmocs)	Determinant Variables	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Informal traders	Age (Agehh)	-.0177	.020	-0.88	0.380	-.057	.0219
	Sex (Sexhh)	.5932	.064	9.22	0.000	.4666	.7197
	Marital status (mshh)	.1242	.029	4.24	0.000	.0666	.1818
	Family size (Famszhh)	.1210	.028	4.27	0.000	.0652	.1768
	Educational level (educ)	-.1078	.035	-3.55	0.000	-.1676	-.048
	Land size (farmsize)	-.1082	.033	-3.21	0.001	-.1744	-.042
	Access to market(Accessmkt)	-.0768	.068	-1.12	0.264	-.2119	.0581
	Income (HHInco)	-.0062	.052	-0.12	0.905	-.1097	.0972
	Participation status (participation)	-.1725	.072	-2.36	0.019	-.3161	-.029
	Wealth and asset (wealth)	.0668	.030	2.17	0.030	.0063	.127
Cooperatives	Age (Agehh)	.1662	.037	4.42	0.000	.09233	.240
	Sex (Sexhh)	-.3145	.119	-2.62	0.009	-.5503	-.078
	Marital status (mshh)	-.0016	.054	-0.03	0.975	-.1089	.1056
	Family size (Famszhh)	-.0469	.052	-0.89	0.375	-.1509	.0569
	Educational level (educ)	.0739	.056	1.31	0.193	-.0374	.1854
	Land size (farmsize)	.1872	.062	2.99	0.003	.0638	.3106
	Access to market(Accessmkt)	.0729	.127	0.57	0.569	-.1786	.3245
	Income (HHInco)	.1547	.098	1.58	0.116	-.0381	.3476
	Participation status (participation)	.1094	.135	0.80	0.421	-.1579	.3768
	Wealth and asset (wealth)	.0183	.057	0.32	0.749	-.0943	.1309
Formal traders	Age (Agehh)	-.0763	.039	-1.96	0.051	-.1531	.0003
	Sex (Sexhh)	-.2611	.124	-2.10	0.037	-.5061	-.016
	Marital status (mshh)	-.0341	.056	-0.60	0.547	-.1456	.0773
	Family size (Famszhh)	.0237	.054	0.43	0.666	-.0842	.1317
	Educational level (educ)	.0909	.058	1.55	0.123	-.0248	.2067
	Land size (farmsize)	.1373	.065	2.11	0.036	.00914	.265
	Access to market(Accessmkt)	.1165	.132	0.88	0.381	-.1448	.3779
	Income (HHInco)	.0334	.101	0.33	0.743	-.1669	.2338
	Participation status (participation)	.2481	.141	1.76	0.080	-.0296	.5260

	Wealth and asset (wealth)	.1462	.059	2.46	0.014	.0292	.2632
Exporters	Age (Agehh)	.0751	.035	2.15	0.033	.0062	.1441
	Sex (Sexhh)	.0131	.111	0.12	0.906	-.2067	.2331
	Marital status (mshh)	-.1297	.050	-2.55	0.011	-.2298	-.029
	Family size (Famszhh)	-.0044	.049	-0.09	0.927	-.1061	.0924
	Educational level (educ)	.0344	.052	0.65	0.515	-.0695	.138
	Land size (farmsize)	.0909	.058	1.55	0.121	-.0241	.2059
	Access to market(Accessmkt)	.0311	.119	0.26	0.794	-.2034	.265
	Income (HHinco)	-.1327	.091	-1.45	0.147	-.3126	.0471
	Participation status (participation)	.0995	.126	0.79	0.433	-.1498	.349
	Wealth and asset (wealth)	.0140	.053	0.26	0.793	-.0910	.1190

Source: Own survey computation, 2023

The explanation of the multivariate model results was based on the coefficient of the model, which tells the relationship between the dependent variable and independent variables and their level of significance. The analysis is useful, first, to verify the sign of coefficients of the multivariate model of the various factors in determining farmers' choice of coffee market outlet options.

According to the above multivariate model regression output

- Farmer's household sex, marital status and family size positively and significantly ($p < 0.5$) determined the farmer's choice of informal trader's coffee market outlets in Yerga Chaffe District. This showed that household farmer's being female, single, having many family member increases the probability of choice informal traders' coffee market outlets in Yerga Chaffe District. Whereas, farmer's household education level, farm size, social participation and wealth negatively and significantly ($p < 0.5$) determined the farmer's choice of informal traders coffee market outlets in Yerga Chaffe District. This showed that being household farmer's with high education level, farm size, social participation and wealth decreases the probability of choice informal traders' coffee market outlets in Yerga Chaffe District.
- Farmer's household age and farm size positively and significantly ($p < 0.5$) determined the farmer's choice of cooperative coffee market outlets in Yerga Chaffe District. This showed that household farmer's being older and having many family member increases the probability of choice cooperative coffee market outlets in Yerga Chaffe District. Whereas, farmer's household sex negatively and significantly ($p < 0.5$) determined the farmer's choice of cooperative coffee market outlets in Yerga Chaffe District. This

showed that being household farmer's female decreases the probability of choice cooperative coffee market outlets in Yerga Chaffe District.

- Farmer's household farm size and wealth and asset status positively and significantly ($p < 0.5$) determined the farmer's choice of formal trader's coffee market outlets in Yerga Chaffe District. This showed that household farmer's having many family member and wealth and asset status increases the probability of choice formal trader's coffee market outlets in Yerga Chaffe District. Whereas, farmer's household age and sex negatively and significantly ($p < 0.5$) determined the farmer's choice of formal traders' coffee market outlets in Yerga Chaffe District. This showed that being household farmer's female and older household heads decreases the probability of choice formal traders' coffee market outlets in Yerga Chaffe District.
- Farmer's household age positively and significantly ($p < 0.5$) determined the farmer's choice of exporter's coffee market outlets in Yerga Chaffe District. Whereas, farmer's household marital status negatively and significantly ($p < 0.5$) determined the farmer's choice of exporter's coffee market outlets in Yerga Chaffe District.

4.7. Challenges of farmers choice of coffee market outlet in Yirga Chaffe district

Table 4.10 below describes the challenges of farmer's choice of coffee market outlet in Yirga Chaffe district.

Table 4.10: Summery of statistics of challenges of farmer's choice of coffee market outlets

Challenges	Obs	Mean	Std. Dev.	Min	Max	chi ²	P-Value
Low capacity to buy (chlнге1)	360	4.15	.375	3	5	19.53	0.000
Delay of payment(chлnge2)	360	4.44	.497	4	5	25.15	0.000
Lack of continuity(chлnge3)	360	4.41	.492	4	5	0.25	0.619
Low market information(chлnge4)	360	4.49	.500	4	5	3.59	0.058
Lack training (chлnge5)	360	4.48	.500	4	5	5.22	0.022
Lack of education (chлnge6)	360	4.43	.496	4	5	0.62	0.429

Source: own survey questionnaire 2023

Table 4.10 described the challenges farmer's choice of coffee market outlets options in Yirga Chaffe district. Regarding the farmer's choice of coffee market outlets, options are challenged by the low capacity of buyers; the maximum value is 5 (strongly agree) and the minimum value is 3

(neutral). This means that households level of agreement on the statement farmer's choice of coffee market outlet options is challenged by the low capacity of buyers. The mean value and standard deviation are 4.15 and 0.375, respectively. This also showed that farmer's choice of coffee market outlet options is challenged by the low capacity of buyers since its mean is greater than its standard deviation. The $\chi^2 = 19.53$ and the p-value = 0.000. This means that is practice of limited capacity among buyers challenges farmer's choices of coffee market outlets significantly in Yirga Chaffe district.

Regarding the farmer's choice of coffee market outlets, options is challenged by the delay in payment; the maximum value is 5 (strongly agree) and the minimum value is 4 (agree). This means that households level of agreement on the statement farmer's choice of coffee market outlet options is challenged by delay in payment. The mean values and standard deviation are 4.44 and 0.497, respectively. This also showed that farmer's choice of coffee market outlet options is challenged by delay in payment since its mean is greater than its standard deviation. The $\chi^2 = 25.15$ and the p-value = 0.000. This means that is delay in payment challenges farmer's choice of coffee market outlet options significantly in Yirga Chaffe district.

Regarding farmer's choice of coffee market outlets, options are challenged by low market information; the maximum value is 5 (strongly agree) and the minimum value is 4 (agree). This means that households level of agreement on the statement farmer's choice of coffee market outlet options is challenged by low market information. The mean value and standard deviation are 4.49 and 0.5, respectively. This also showed that farmer's choice of coffee market outlet options is challenged by low market information since its mean is greater than its standard deviation. The $\chi^2 = 0.3.59$ and the p-value = 0.059. This means that low market information challenges farmer's choice of coffee market outlet options in Yirga Chaffe district.

Regarding the farmer's choice of coffee market outlets, options are challenged by a lack of training; the maximum value is 5 (strongly agree) and the minimum value is 4 (agree). This means that households level of agreement on the statement about the farmer's choice of coffee market outlet options is challenged by a lack of training. The mean value and standard deviation are 4.48 and 0.5, respectively. This also showed that farmer's choice of coffee market outlet options is challenged by a lack of training since its mean is greater than its standard deviation.

The $\chi^2 = 5.22$ and the $p\text{-value} = 0.022$. This means that lack of training challenges farmer's choice of coffee market outlet options in Yirga Chaffe district.

4.8. Key interview Findings

In-depth information on the perceptions of kebele leaders, union workers, and DAs on the determinants of farmers' choice of coffee market outlet options was collected using key interviews. To better understand how respondents are perceived on determinants of farmers' choice of coffee market outlet options, KI was employed to gather qualitative information. In these interviews, two (2) kebele leaders, four (4) union workers, and eight (8) DAs a total of 14 interviewees participated in the study.

The first point of individual interviewees was about the coffee market outlet options. This helps to analyse their perceptions of available coffee market outlet options. According to the majority's (90%) perceptions, coffee market outlet options are medium in Woredas.

The second point raised by individual interviewees was about factors that determine farmers' choice of coffee market outlet options in their Woreda. This helps to analyze their perceptions of factors that determine farmers' choice of coffee market outlet options. According to the majority's (96.38%) perceptions, demographic factors, economic factors, and institution factors influenced the choice of coffee market outlets.

The third point raised by individual interviewees was about the challenges of farmers' choice of coffee market outlet options in their Woreda. This helps to analyze their perceptions of the challenges of farmer's choice of coffee market outlet options. Regarding these 87.45% perceptions, the choice of coffee market outlets options farmers were challenged by low capacity of buyers, delay of payment, lack of continuity, low market information and lack of training in Yirga Chaffe district

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

In conclusion, the analysis of farmer's coffee market outlet choices in Yirga Chaffe district reveals a clear preference for informal traders, with significant implications for the socioeconomic landscape of the area. The predominant choice of informal market outlets (59.44%) over cooperatives (26.39%), formal traders (10.28%), and exporters (3.89%) indicates a reliance on easily accessible and direct market options, particularly among poorer farmers.

Demographic and socioeconomic factors influence these choices in complex ways. Gender, marital status, education level, and access to markets did not show significant variations in preferences, suggesting a uniformity across these categories. However, wealth and asset status emerged as critical determinants. Poor farmers were more likely to choose informal traders, while wealthier farmers gravitated towards cooperatives and formal market options.

Age and income also played significant roles, with older farmers and those with higher incomes more inclined towards cooperative and formal trading options. Nonetheless, the overall perceptions of various influencing factors showed that while demographic and socioeconomic factors had medium levels of impact, farm and institutional characteristics were generally seen as less impactful.

Farmers face challenges that heavily sway their market outlet choices. Low buyer capacity, delayed payments, insufficient market information, and lack of training were identified as significant obstacles. These challenges, if unaddressed, could hinder farmers' ability to attain better prices and market positioning, further entrenching existing inequalities.

5.2.Recommendations

Based on the above conclusion, the researcher recommends that:

- The government, NGO and concern body should call and encourage farmers to choice of coffee market outlets options since it has huge contribution in income generation and improvements in Yirga Chaffe.

- The government, NGO and concern body should give consideration on farmers household heads' age, marital status, land ownership, access to basic service, income status, active local institutions participation; wealth and asset status to farmers' choice of coffee market outlets options in Yirga Chaffe because they are significant factors that determines farmers' choice of coffee market outlets options.
- The government, NGO and concern body should improve the access to basic services for farmers to boost choice of coffee market outlets options in Yirga Chaffe.
- The government, NGO and concern body should raise farmers' awareness that choice of coffee market outlets options in Yirga Chaffe

REFERENCES

- Abraham Tegegn (2013). Value chain analysis of vegetables: the case of Habro and Kombolcha Woredas in Oromia region, Ethiopia. An MSc Thesis presented to the School of Graduate Studies of Haramaya University. 78p.
- Addisu Hailu (2016). Value chain analysis of vegetables: The case of Ejere district, West Shoa Zone, Oromia National Regional State of Ethiopia. MSc Thesis, Haramaya University, Haramaya, Ethiopia
- Ali, E (2019). Farmers' attitudes towards climate risks and effects of farmers' risk aversion behavior on inputs use in northern Togo. *Sarhad Journal of Agriculture*, 35(3): 663-674.
- Almaz Giziew. (2013). Determinants of market supply of vegetables: A case of Akaki-kality sub-city, Ethiopia. *Journal of Rural Development*, 32(3): 281-290.
- Anteneh. A., Muradian, R. and Ruben, R. (2011). Factors affecting coffee farmers market outlet choice in Ethiopia. Centre for International Development Issues Nijmegen, Radboud University, the Netherlands
- Ayelech Tadesse (2011). Market chain analysis of fruits for Gomma woreda, Jimma zone, Oromia National Regional State. M.Sc thesis presented to School of Graduate Studies, Haramaya University.p110.
- Bebe, B. O., Lagat, J. K. and Magembe, E. M. (2012). Evaluation of the factors associated with shift from pastoral to agro-pastoral farming systems in Trans-Mara West district of Narok County, Kenya. *Asian journal of agricultural sciences*, 4(6): 403-410.
- Berhanu Kumal, Kindie Getnet, Derek Baker, and Belay Kassa. (2014). Determinants of participation decisions and level of participation in farm level milk value addition: The case of smallholder dairy farmers in Ethiopia. *Ethiopia Journal of Applied Science and Technology*, 2(2): 19 - 30.
- Bizualem, A., Degye, G. and Zekarias, S. (2015). Aalysis of marketed surplus of coffee by smallholder farmers in Jimma zone, Ethiopia. *Journal of Biology, Agriculture and Healthcare*, 5(5): 2015.
- Bongiwe G. and B. Masuku. (2012). Factors affecting the choice of marketing channel by vegetable farmers in Swaziland. *Canadian Center of Science and Education. Sustainable Agriculture Research*, 2(1); 123
- Chala Hailu and Chalchisa Fana. (2017). Determinants of market outlet choice for major vegetables crop: Evidence from smallholder farmers' of Ambo and Toke-Kutaye districts, West Shewa, Ethiopia. *International Journal of Agricultural Marketing*, 4(2): 161-169.

- Christopher, C. (2011). Kilimanjaro and Oromia coffee value chain Case Studies: Producer benefits from fair trade and free market channels; By partner institutions of the NCCR North-South: Overseas Development Institute (ODI) London, UK and Swisspeace Bern, Switzerland. Pp. 17
- CIAT (2004). Increasing the competitiveness of market chains of smallholder's producers. Manual, 3: Territorial Approach to Rural Agro Enterprise Development Project. Coffee Families in Transition. *World Development*, 39 (1): 134-145.
- CSA (2015). Ethiopian sample survey enumeration. Federal Democratic Republic of Ethiopia. Addis Ababa, Ethiopia.
- CSA (2017). Federal Democratic Republic of Ethiopia, Central Statistical Agency, Agricultural Sample Survey, 2017, Volume I, Report on area and production of major crops (private peasant holdings, *meher* season). Addis Ababa, Ethiopia.
- Dejen (2018) studied the determinant factors that influence these choices among coffee farmers in general and member and nonmember coffee growers in particular in Bench Maji Zone South Western Ethiopia.
- DNIVA (2005). Report on opportunities and challenges in the cotton Sector and poverty reduction in Kasese District. October 2005, Uganda
- Dorothy, M. and Hubert, S. (2001). Manual for value chain research on home workers in the garment industry. Institute for Development Studies University of Nairobi, Kenya and Institute of Development Studies University of Sussex, UK.
- Dougherty, C. (2007). *Introduction to Econometrics, 3rd Edition*. Oxford university press, UK.
- Dougherty, C. (2007). Greene, W.H. 2008. *Econometric Analysis, 6th Edition*. Pearson Prentice Hall, USA.
- Dutta, S. (2006). *Introductory Economics*. New Age International (P) Limited, Publishers, New Delhi.
- ECX (2011). Making market for all. Solving an age Old Problem, Addis Ababa.
- ECX (2016). Coffee market traceability and new developments 14th Africa Coffee Conference & Exhibition Der es Salaam.
- Elias Abebe, (2005). Economics of coffee marketing: A Case Study of Goma District in Jimma Zone of Ethiopia, An MSc Thesis presented to the School of Graduate Studies of Haramaya University Pp

- Elias Abebe, (2005). Economics of coffee marketing: A Case Study of Goma District in Jimma Zone of Ethiopia, An MSc Thesis presented to the School of Graduate Studies of Haramaya University Pp. 56.
- Ethiopia Commodity Exchange. (2017). *About Ethiopia Commodity Exchange* [Online] Available from: [http:// www.ecx.org.et](http://www.ecx.org.et) [accessed: 26th June, 2017].
- Ethiopian Commodity Exchange Authority (2017). *Coffee Exporters Marketing Cost and Profit Margin*. Addis Ababa.
- Ethiopian treasure. (2017). Available: [http://www. Ethiopian treasures. co .uk/pages/geography.htm](http://www.Ethiopian treasures. co .uk/pages/geography.htm)
- Ethiopian Commodity Exchange Authority (2015). *Commodity Exchange Practice and Stakeholders' Role*. Addis Ababa. 8th edition
- Ethiopian Commodity Exchange Authority (2019) *Commodity Exchange Practice and Stakeholders' Role*. Addis Ababa. 8th edition
- Evans, R. (2004). Marketing in the 21st century-8th Edition, Atomic Dog Publishing. Pp.
- Fakoya, O., M. Agbonlahor and A. Dipeolu. (2007). Attitude of women farmers towards sustainable land management practices in South-Western Nigeria. *World Journal of Agricultural Sciences*, 3(4): 536-542.
- Furusawa, K. (2004). Environmental and social responsibilities of agricultural trade and business: Integration of organic and fair trade (in Japanese). Nogyo to Keizai. Pp. 42.
- Geoffrey, S.G. (2015). Factors influencing the choice of marketing outlets among small-scale pineapple farmers in Kericho country. Egerton University, Kenya.
- Greene, W.H. (2008). *Econometric Analysis, 6th Edition*. Pearson Prentice Hall, USA.
- Greene, W.H. (2012). *Econometric Analysis, 7th Edition*. Pearson Prentice Hall, USA.
- GTZ (German Agency for Technical Cooperation). (2006). Value chain analysis and “Making Markets Work for the Poor” (M4P) – poverty reduction through value chain promotion. Eschborn: GTZ.
- Gustaf, D. 2011. Ethiopian Coffee and Fair Trade-An empirical study, School of Business and Economics, Gothenburg University Department of Economics, autumn. Pp. 14.
- Heij, C., de Boer, P., Franses, P.H., Kloek, T. and van Dijk, H.K. (2004). *Econometric Methods with Applications in Business and Economics, 1st Edition*. Oxford University Press Inc., New York, USA.

- Hill, R.C., Griffiths, W.E. and Lim, G.C. (2011). *Principles of Econometrics, 4th Edition*. John Wiley and Sons, Inc., USA.
- ICO (International Coffee Organization). 2017. Value addition in the African coffee sector. International Coffee Council 120th Session 28 and 29 September 2017. Yamoussoukro, Côte d'Ivoire
- ILO (International Labor Organization), 2006. An ILO Guide for Value Chain Analysis and Upgrading, Geneva, Switzerland.
- ILO (International Labor Organization), 2009. Local value chain development for decent work. A guide for development practitioners, government and private sector initiatives. Geneva, Switzerland.
- International Coffee Organization. (2012) Ethiopian coffee: challenges and opportunities [Online] Available from: <http://www.ico.org> [accessed: 23rd sep.2017].
- International Coffee Organization (ICO). 2015. *Sustainability of the Coffee Sector in Africa*. London: International Coffee Council (ICC).
- Jim, D., (2006). A Case study of institution building and value chain strengthening to link Ethiopia cooperative coffee producer to international market. Pp. 12.
- Kadigi, L.M. (2013). Factors Influencing Choice of Milk Outlets among Smallholder Dairy Farmers in Iringa Municipality and Tanga City.
- Kaplinsky, R., (2006). How can agricultural commodity producers appropriate a greater share of value chain incomes? Sarris A. and D. Hallam editors Agricultural commodity markets and trade: New approaches to analyzing market Structure and instability, Cheltenham, UK.
- Kotler, P. and Armstrong, G. (2016). *Principle of Marketing, 16th Edition*. Pearson Education Inc., USA.
- M.Karthikeyan., (2015). *Effectiveness of Cooperatives in Coffee Value Chain: An Analysis in Sasiga District of Oromia Region, Ethiopia*. In the National Conference on Cooperative Development in Ethiopia.
- Mamo Girma and Degnet Abebaw. (2012). Patterns and determinants of livestock farmers' choice of marketing channels: micro-level evidence. *Ethiopian Economics Association*, Addis Ababa, Ethiopia. P55.
- Mekonin Abera. (2015). Determinants of Market Outlet Choice and Livelihood Outcomes of Coffee Producing Farmers: The case of Lalo Assabi woreda, Oromiya, Ethiopia. M.Sc thesis submitted to the School of Graduate Studies, Haramaya University. 62p.

- Meron Yohanes. (2015). Performance of vegetable market: The case of Kombolcha district, East Hararghe Zone of Oromia National Regional State, Ethiopia. MSc Thesis, Haramaya University, Haramaya, Ethiopia.
- Minten, Mekdim D, Ermias E, Tadesse K (2014). Structure and performance of Ethiopia's coffee export sector. Working Paper 66, Addis Ababa, Ethiopia
- Mokonen (2017) studied the determinants of market outlet choice of coffee producing farmers in Lalo Assabi district of West Wollega zone, Ethiopia
- Muhammed Urgessa. (2011). Market chain analysis of *teff* and wheat production in halaba special woreda, southern Ethiopia. M.Sc thesis submitted to the School of Graduate Studies, Haramaya University. 104p.
- Nasir (2020) studied the coffee market outlets, analyze marketing margins and the determinants of outlet choice by smallholder farmers in seka chokorsa district of jimma zone.
- Olowa, O.W. and Olowa, O.A. (2017). Analysis of the fruits and vegetable market chain in Shomolu local government area of Lagos State. *World Rural Observations*, 9(1):56-64.
- Oxfam, 2002. Mugged: poverty in your coffee cup. Boston, MA: Oxfam International.
- Padmanand Madhavan Nambiar, Wojciech J. Florkowski, Manjeet S. Chinnan and Anna V. A. Ressurrecion. (2015). Shopping outlet choice and frequency in Uganda. *Paper presented at the southern agricultural economic association (SAEA)*, Annual meeting, Atlanta, Georgia, USA.
- Petit, N., (2007). Ethiopia's coffee sector: A bitter or better Future? *Journal of agrarian change*, 7(2): 225-263
- Shewaye Abera. (2016). Econometric analysis of factors affecting haricot bean market outlet choices in Misrak Badawacho district, Ethiopia. *International Journal of Research Studies in Agricultural Sciences*, 2(9): 6-12.
- Takele Honja, Endrias Geta and Amsalu Mitiku. (2017). Determinants of market outlet choice of the smallholder mango producers: The case of Boloso Bombe Woreda, Wolaita Zone, Southern Ethiopia: A multivariate probit approach. *Global Journal of Science Frontier Research*, 17(2): 23-30.
- Tewodros Tefera. (2014). Analysis of chickpea value chain and determinants of market options choice in selected districts of Southern Ethiopia. *Journal of Agricultural Science*, 6(10): 26-40.

- Tora Bäckman (2009). Fair-trade coffee and development a field study in Ethiopia national konomiska institutional vidlunds university Department of Economics at the University of Lund Minor Field Study Series No. 188, S-220 07 Sweden.
- Tora Bäckman, (2012). Fair-trade coffee and development a field study in Ethiopia Selected Paper prepared for presentation at the Triennial Conference, Fozdo Iguaçu, Brazil, 18 -24 International association of agricultural economists (IAAE).
- Tora, B., 2009. Fair trade coffee and development a field study in Ethiopia. Department of Economics at the University of Lund, Sweden. No. 188. Pp. 46.
- UNIDO (United Nations Industrial Development Organization), 2009. Agro-value chain analysis and development: The UNIDO Approach. A Staff Working Paper, Vienna, 2009, *United Nations Industrial Development Organization*.
- UNIDO and FAO (United Nations Industrial Development Organization and Food and Agricultural Organization). 2009. Ethiopian agro-industry strategy: Oilseeds value chain analysis, Bench marking, Strategy and Action Plan, unpublished report.
- USAID (The US Agency for International Development). 2010. Ethiopian coffee industry value chain analysis. Profiling the actors, their interactions, costs, constraints and opportunities. Pp. 16.
- USAID.)2010). Ethiopian Coffee Industry Value Chain Analysis Profiling the Actors, Their Interactions Costs Constraints and Opportunities. Chemonics International profile.
- USDA (United States Department of Agriculture) 2018. World Coffee Markets and Trade report. Accessed date: Oct. 13, 2018.
- USDA. 2014. Assessment of commodity and trade issues, global agriculture information network grain report number et 1402, Ethiopia.
- USDA. 2016. Coffee Production and Exports Remain Steady Report number ET 1615, Ethiopia.
- Wendmagegn Balete.(2014). Market Chain Analysis of Coffee: the case of Dale District of Southern Ethiopia. MSc Thesis, Haramaya University, Haramaya, Ethiopia.
- Wenz, K. and W. Bokelmann. (2011). Incorporating value chain research and problem based learning into horticulture and agriculture study programs in Kenya and Ethiopia. Humboldt-Universität zu Berlin, Faculty of Agriculture and Horticulture, Department of Agricultural Economics, Berlin, Germany.
- Williams, T.O., Spycher, B. and Okike, I. (2006). Improving livestock marketing and intra-regional trade in West Africa. Determining economic incentives and policy framework. International Livestock Research Institute. Nairobi.

Wooldridge, J.M. (2016). Introductory Econometrics, a Modern Approach, 6th Edition. Cengage Learning, USA.

Yidnekachew (2022) studied the e Market chain and the determinants of coffee market outlet choice decisions of smallholder coffee creators in the Debub Ari Region

Appendices
DILLA UNIVERSITY
SCHOOL OF AGRICULTURE
DEPARTMENT OF AGRICULTURAL ECONOMICS

Questionnaire for farm households

My name is Yicheneku worku from Dilla University under Department of Agricultural Economics, college of Agriculture. I am undertaking a research on **Determinants of small holder farmer's coffee market outlet choice in Yirga chefe District, Gedeo Zone, Southern Ethiopia**. I seek your permission to gather the following information from you will be used for the study purpose only. Any information that you will provide will be treated with outmost confidentiality. Please fill free to answer all the questions with honesty.

Section A: Respondents identification

Please, write the required response in the space provided where applicable as per the instruction of each section.

1. Name of District_____
2. Name of kebele _____
3. Name of Village_____
4. Name of Enumerator_____
5. Date: _____

Section B: General characteristics of household head respondents

Please, encircle to the alternatives provided for you on below demographic factors.

Demographic variables	Answer (Circle)
Gender	1. Male 2. Female
Age	1. 15-20 years 2. 21-25 years 3. 26-30 years 4. 31-35 years 5. 36-40 years 6. 41-45 years 7. 46-50 years 8. 51-55 years 9. 56-60 years 10. Above 61 years
Marital status	1. Single 2. Married 3. Divorced 4. Widow/widower

Family Size	_____
Ethnicity	1. Gedeo 2. Oromo 3. sidama 4. Other_____
Religion	1. Orthodox Christian 2. Catholic Christian 3. Protestant Christian 4. Muslim 5. Traditional belief system 6. Other_____
Education level	1. No education 2. Primary school (Grade 1-4) 3. Elementary school (Grade 5-8) 4. High school (Grade 9-10) 5. Grade 11-12 and above
Farming experience	1. 0-10 years 2. 10-20 years 3. 20-30 years 4. >30 years
Farm size	1. < 0.25 ha 2. 0.25-0.5ha 3. 0.5-0.75ha 4. 0.75-1ha 5. 1 -1.25ha 6. 1.25-1.5ha 7. 1.5-1.75ha 8. 1.75-2ha 9. 2.25-2.5ha 10. 2.5-2.75ha 11. 2.75-3ha 12. >3ha

Section C. Perceptions of farmers on coffee market outlets

C1. Do you/ your household members participate in coffee production?

A. Yes B. No

C2. If your answer is “Yes” for Question C1 above, for how many years you/ your household have been participated in coffee production? Please specify in years: _____ years.

C3. If your answer is “Yes” for Question C1 above, had you/ your household sold coffee?

A. Yes B. No

C4. . If your answer is “Yes” for question C3 above, for whom you/ your household have been sold frequently?

- A. For cooperatives/Union
- B. For wholesaler
- C. For retailers
- D. To foreigner(Export)
- E. Others: specify:_____

Section D: Questions on determinants of coffee market outlet choice

D1. Are the any factors that influence you/ your household to choice coffee market outlets?

- A. Yes B. No

D2. . If your answer is “Yes” for question D1 above, list the factors that influence you/ your household to choice coffee market outlets?

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____

D3. Please rank your level of agreement on factors that influence you/ your household to choice coffee market outlets by tick mark (✓) in below table

S/N	Factors	scales				
1	Demographic factors	1	2	3	4	5
1.1	Your age influence you to choice coffee market outlets					
1.2	Your sex influence you to choice coffee market outlets					
1.3	Your marital status influence you to choice coffee market outlets					
1.4	Your family size influence you to choice coffee market outlets					
1.5	Your education level influence you to choice coffee market outlets					
1.6	Your business experience influence you to choice coffee market outlets					
1.7	Others: specify:_____					
2	Institutional factors	1	2	3	4	5
2.1	Distance to formal village market influence you to choice coffee market outlets					
2.2	Distance to formal main market influence you to choice coffee market outlets					
2.3	Distance to cooperatives influence you to choice coffee market					

	outlets					
2.4	Distance to extension services influence you to choice coffee market outlets					
2.5	Others: specify:_____					
3	Economic factors	1	2	3	4	5
3.1	income influence you to choice coffee market outlets					
3.2	Price of selling					
3.3	Quantity of selling					
3.4	Others: specify:_____					
4	Social factors	1	2	3	4	5
4.1	Membership in formal institutions influence you to choice coffee market outlets(union, Microfinance, safety net program),					
4.2	Membership in informal institutions influence you to choice coffee market outlets(Iqub, idir and maheber)					
4.3	Others: specify:_____					
5	Farm characteristic					
5.1	farm size for coffee production influence you to choice coffee market outlets					
5.2	diversification of coffee production influence you to choice coffee market outlets					
5.3	Others: specify:_____					
6	Access to basic service					
6.1	Access to credit service influence you to choice coffee market outlets					
6.2	Access to market services influence you to choice coffee market outlets					
6.3	Access to agricultural extension influence you to choice coffee market outlets					
6.4	Access to training influence you to choice coffee market outlets					
6.5	Access to agricultural inputs (Fertilizer, improved varieties, pesticides, others)					
6.6	Access to transportation influence you to choice coffee market					

	outlets					
6.7	Access to information influence you to choice coffee market outlets					
6.8	Access to safety net program influence you to choice coffee market outlets					
6.9	Others: specify: _____					

1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree

Section E: Questions related to problems of coffee market outlets

E1. Did you phase any problems to choice coffee market outlets? 1. Yes 2. No

E2. If yes for question E1 above, please rate your level of constraints by tick mark (✓) in below table

S/N	Problems coffee market outlets	Rating				
		1	2	3	4	5
1	Low capacity to buy					
2	Delay of payment					
3	Lack of continuity					
4	Low market information					
5	Lack training					
6	Lack of education					
8	Other (Specify)					

DILLA UNIVERSITY
SCHOOL OF AGRICULTURE
DEPARTMENT OF AGRICULTURAL ECONOMICS

Interview questions

Respondents' identification

- Name of District _____
- Name of kebele _____
- Name of Village _____
- Position _____

1. Do you/ your household/ the community members participate in coffee production?
A. Yes B. No
2. If your answer is “Yes” for Question 1 above, for how many years you/ your household/ the community have been participated in coffee production? Please specify in years: _____ years.
3. If your answer is “Yes” for Question 1 above, had you/ your household/ the community sold coffee?
B. Yes B. No
4. If your answer is “Yes” for question 3 above, for whom you/ your household/ the community have been sold frequently?

A. _____
B. _____
C. _____
D. _____
5. Are there any factors that influence you/ your household/ the community to choice coffee market outlets?

B. Yes B. No
6. If your answer is “Yes” for question 5 above, list the factors that influence you/ your household / the community to choice coffee market outlets?

A. _____
B. _____
C. _____
D. _____
7. Did you/the community phase any problems while selling coffee to coffee market outlets?
1. Yes 2. No
8. If yes for question 7 above, please problem of coffee market outlets existed in your area

A. _____
B. _____
C. _____
D. _____
E. _____

Appendix -2

Regression output on determinants of farmers' choice of coffee market outlets options

```
. mvreg Inftrader Coop Ftraders Exporters = agehh sexhh mshh famszhh educ Farmsize accessmkt Hhinc Participation w
> ealth, noconstant
```

Equation	Obs	Parms	RMSE	"R-sq"	F	P
Inftrader	360	10	.4334802	0.6912	78.35513	0.0000
Coop	360	10	.8076546	0.3992	23.25487	0.0000
Ftraders	360	10	.8390807	0.2600	12.29735	0.0000
Exporters	360	10	.7532786	0.1134	4.476333	0.0000

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Inftrader						
agehh	-.0177179	.0201637	-0.88	0.380	-.0573751	.0219394
sexhh	.5932017	.0643606	9.22	0.000	.4666196	.7197837
mshh	.1242561	.0292848	4.24	0.000	.0666599	.1818524
famszhh	.1210034	.02837	4.27	0.000	.0652062	.1768005
educ	-.1078359	.0304135	-3.55	0.000	-.1676521	-.0480197
Farmsize	-.1082383	.033668	-3.21	0.001	-.1744553	-.0420212
accessmkt	-.076897	.0686642	-1.12	0.264	-.2119434	.0581493
Hhinc	-.0062587	.0526375	-0.12	0.905	-.1097843	.0972669
Participation	-.1725896	.0729802	-2.36	0.019	-.3161245	-.0290547
wealth	.0668137	.0307365	2.17	0.030	.0063621	.1272653
Coop						
agehh	.1662196	.0375687	4.42	0.000	.0923308	.2401084
sexhh	-.3145047	.1199158	-2.62	0.009	-.5503508	-.0786586
mshh	-.0016821	.054563	-0.03	0.975	-.1089948	.1056305
famszhh	-.0469678	.0528586	-0.89	0.375	-.1509284	.0569927
educ	.0739845	.056666	1.31	0.193	-.0374642	.1854333
Farmsize	.1872742	.0627298	2.99	0.003	.0638994	.310649
accessmkt	.072927	.1279343	0.57	0.569	-.1786897	.3245436
Hhinc	.1547266	.0980735	1.58	0.116	-.0381609	.3476142
Participation	.1094502	.1359758	0.80	0.421	-.1579822	.3768825
wealth	.0183191	.0572679	0.32	0.749	-.0943135	.1309517
Ftraders						
agehh	-.0763937	.0390305	-1.96	0.051	-.1531575	.0003702
sexhh	-.2611223	.1245817	-2.10	0.037	-.5061452	-.0160993
mshh	-.0341844	.0566861	-0.60	0.547	-.1456726	.0773038
famszhh	.0237455	.0549154	0.43	0.666	-.0842601	.1317512
educ	.0909675	.0588709	1.55	0.123	-.0248177	.2067528
Farmsize	.1373153	.0651706	2.11	0.036	.00914	.2654907
accessmkt	.1165149	.1329122	0.88	0.381	-.1448922	.377922
Hhinc	.0334736	.1018896	0.33	0.743	-.1669193	.2338665
Participation	.2481952	.1412666	1.76	0.080	-.0296431	.5260334
wealth	.1462203	.0594963	2.46	0.014	.0292052	.2632355
Exporters						
agehh	.0751861	.0350394	2.15	0.033	.0062719	.1441003
sexhh	.0131734	.1118423	0.12	0.906	-.2067941	.233141
mshh	-.1297162	.0508895	-2.55	0.011	-.2298039	-.0296284
famszhh	-.0044948	.0492999	-0.09	0.927	-.1014561	.0924665
educ	.034428	.0528509	0.65	0.515	-.0695174	.1383734
Farmsize	.0909031	.0585065	1.55	0.121	-.0241654	.2059715
accessmkt	.0311884	.119321	0.26	0.794	-.2034879	.2658647
Hhinc	-.1327861	.0914706	-1.45	0.147	-.3126874	.0471152
Participation	.0995873	.1268211	0.79	0.433	-.1498399	.3490146
wealth	.0140081	.0534123	0.26	0.793	-.0910414	.1190575