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1. THE PRACTISE OF LEADERSHIP STYLES AND THEIR RELATIONSHIP WITH JOB SATISFACTION IN ETHIOPIAN PUBLIC ORGANISATIONS BY: AWEKE ASHENAFI (Ph.D)

CHAPTER ONE: INTRODUCTION

The purpose of this study was to investigate the practises of leadership styles and their relationship with employees' job satisfaction with particular reference to Ethiopian public organisations. The study mainly focuses on identifying the most dominant leadership style(s) applied by public leaders and to find empirical evidence of the relationship between transformational, transaction and laissez-faire leadership styles and job satisfaction. In so doing, the researchers reviewed a number of scholarly works on the subject, i.e., leadership theories and styles, and job satisfaction through conducting preliminary survey on the Ethiopian public organisations located at Addis Ababa. This chapter comprises of six sections: research background, problem statement, objectives of the research, scope of the study, significance of the study and organization of the paper.

1.1 Research Background

In today's dynamic organisation, leadership plays a central role in achieving organisational goals (Saeed & Ahmad, 2012). Similarly, NawoseIng'ollan and Roussel (2017) note that, "In today's society, flow of life depends on effective leadership in several aspects, such as organisations development, survival of community, work function and effective performance". To meaningfully operate in this challenging environment, leaders of public organisations need to transform themselves before they try to transform others and address increasingly complex and dynamic environment. This requires committed, passionate, transformational and visionary leadership (Tierney, 1999 cited in Mitiku & Mitiku, 2017: 42). The ever-changing organisational environment has created a need for new leadership style(s) that encourage positive change and improvement, taking into consideration that the specific roles and qualities of informal leaders are not well understood yet (Stincelli & Baghurst, 2014).

Effective leadership is usually viewed as an essential ingredient in organisational success. Gadot (2006 cited in Malcalm & Tamatey, 2017) underscored that, leadership determines the extent of

successes and failures of organisations. Charlton (2000) also argued that the performance of organisations and employees was as a result of positive influence through effective leadership. It's contended that leadership effectiveness has an optimistic effect on the organisational performance (Sakiru, Enoho & Abdullahi, 2013). In line to this, Sammons (1999:14 cited in Mitiku & Mitiku, 2017: 42) pointed out that almost all studies of institutional effectiveness have underlined leadership to be among the key factors for organisational success.

In organisations, leadership is a managerial activity the purpose of which is to direct the employees in one immediate chain of command toward the accomplishment of work goals (Osabiya & Ikenga, 2015:193). Leadership is the ability to convince and mobilize others to work together as a team under his leadership to achieve a certain goal (Sundi, 2013:50). Leslie, *et al* (2013) assert that leadership is the ability to influence people to willingly follow one's guidance or adhere to one's decisions. Bizhan (2013) see leadership as a pattern of managerial behavior designed to integrate personal or organizational interest and effect, in pursuit of some objectives. Richard *et al* (2010) state that leadership is the ability to influence people towards attainment of goals. This captures the idea that leaders are involved with other people in achievement of goals. Robbins and Judge (2013) elaborated that leadership influence as very important, scarce and with no substitute. Thus, leadership is the capacity of a person to impact, encourage others and participate to the accomplishment of an organization goal (Yukl, 2013). It is an influence relationship among leaders and followers to carry out in such a way to reach a defined goal (Hamidifar, 2009). Leadership is also related to motivation, interpersonal behaviour and the process of communication (Khoza, Chetty & Karodis, 2016).

According to Obisi (1996, cited in Osabiya & Ikenga, 2015:195), organisations need qualified leaders; leaders who evolve to perform consistently within organisations must possess four key abilities to effect change. The important characteristics of leaders include applying leadership styles appropriately, communicating effectively, an aging perform

ance regularly, and developing associates' responsibilities. These keys, when applied skilfully, provide leaders opportunities to unlock excellence in leadership. More importantly, when working at their best, leaders challenge the process, inspire shared vision, enable others to act, model the way and encourage the heart (Kouzes & Posner, 1995 cited in Mitiku & Mitiku, 2017: 41).

Leadership, as defined by Gharibvand (2012) is how the leader communicates in general and relates to people, the way in which the leader motivates and trains the subordinates and the way leaders provides direction to his/her team to execute their tasks. Leaders play the role of direct, facilitate, and control different policies and strategies through applying different leadership styles to achieve a vision in past decades. It helps to make change both with internal and external relation within the organization particularly and outside courtiers in general. Leaders in different countries have exercised different leadership styles as a strategy to meet the political, economic and social objectives through providing governance services in the country. Leadership styles are strategy or the situation that leaders need to know and exhibit a particular country or organization as an approach (Asika, 2004). It is the heart in the public service sector governance within an organization to provide services and improve the welfare of the citizens.

Leadership style is viewed as the combination of traits, characteristics, skills and behaviours that leaders use when interacting with their subordinates. Leadership style is a strategy that an organisation can undertake to influence the performance of the employee positively, and alternatively the performance of the organisation (Khoza *et al.,* 2016:50). Leadership style might be important factor to achieve organizational goals and consequently to enhance organizational performance. However, employees' commitment is also essential for organisational success (Bass & Riggio, 2006).

Since 2016, there has been political instability in most cities of Ethiopia. As a result, loss of life, damage of property and migration of people is observed and it is still continuing in some parts of the country. To overcome this, the ruling party has been conducting different reforms which mainly focuses on structural and political 'ideology' changes. Hence, it is important to move forward to reap the benefits from this change through a radical shift in leadership strategies from the old or traditional leadership practises (for example, great man, and trait leadership styles) to a more contemporary leadership styles, such as transformational leadership and servant leadership. There is also an argument that transformational leadership is facilitative of change because it contributes to organizational improvement, effectiveness and institutional culture (Barnett, McCormick & Conners, 2001 cited in Hay, 2006:10). As such, this style is appropriate in environments of turbulence and change.

Although the ideas of leadership styles and their effects on organisational performance, employees' job and commitment have long existed, a detailed and in-depth study should be done in association with these two variables. Thus, the focus of this study was to examine whether transformational, transactional and laissez-faire leadership styles were practised in Ethiopian public organisations and their relationship with employees' job satisfaction. Leadership theory suggests that transformational leadership, transactional leadership and laissez-faire leadership styles are related to job satisfaction (Govender, Garbharran and Loganathan, 2013:390).

1.2 Problem Statement

The role of leadership is well investigated on the basis of its competences and characteristics to address different organisational issues. Many leadership theories and styles are presented by scholars to handle and manage different organisational situations, such as employees' commitment, job satisfaction and productivity. Defining and discussing different characteristics of leadership authors also mention that some of these characteristics are more important, which a leadership should have to address the phenomena in organisations successfully, but the relationship between these leadership characteristics and job satisfaction is not much investigated.

Meta analyses have consistently found that transformational leadership behaviour is at least as common and effective in public organisations (Dumdum, Lowe & Avolio, 2002; Lowe, Kroeck & Sivasubramaniam, 1996; cited in Wright & Pandey, 2010:76). Even so, it remains uncertain as to whether such leadership style affects job satisfaction. Some researches indicated that new and unexpected problems emerged as a result of decentralization of authority from top level leaders to subordinates and empowering employees as a result of implementing transformational leadership strategies. More specifically, leaders began to retreat from decision-making, opting instead to minimize their personal risk and relinquish authority (Van Wart, 1998). In short, loss of managerial accountability may be noticed in a given organisation due to practising this type of leadership style.

While much of the research to date has been concerned with the relationship between leadership styles and employee job satisfaction, the findings have been mixed. Some studies have argued that neither transactional nor transformational leadership styles are capable of improving employee motivation and satisfaction level (Asghar & Oino, 2017: n.p). On the contrary, there

are also other studies which found that both leadership styles positively affect employees' job and career satisfaction (Jansen, Vera & Crossan, 2009). Epitropaki and Martin (2005) concluded that effectiveness of transactional and transformational leadership styles varies from one situation and industry to another. This suggests that the evidence on their relationship is inconsistent. In other words, there are blurred ideas about the relationship between leadership styles and job satisfaction in general. Furthermore, most studies have shown the relationship between leadership styles and job satisfaction in the private sector and developed economies. Although progress has been made in understanding leadership traits, there is need to realize that much is not known about how leadership styles can be applied effectively to enhance employees' job satisfaction, thus gaps and unanswered questions remain. Studies in connection to the issue under this study were not adequately investigated so far in Ethiopian public organisations' context except few attempts. In general, there is a need for more studies on the subject as a priority. Sensing the above gap, the current researcher takes an initiative to identify the most dominant leadership style(s) practised in Ethiopian public organisations and to evaluate whether there is relationship between transformational, transactional and laissez-faire leadership styles and job satisfaction.

1.3 Objectives of the Research

The general objective of this study was to examine the practises of leadership styles and their relationship with employees' job satisfaction in Ethiopian public organisations as perceived by employees. In line with this, the study specifically addressed the following objectives:

1. To determine the most dominant leadership style(s) practised in Ethiopian public organisations.
2. To determine the level of employees' job satisfaction related to their leader's style of leadership.
3. To investigate the relationship between aspects of transformational leadership with job satisfaction in public organisations of Ethiopia.
4. To determine the relationship between aspects of transactional leadership with job satisfaction in Ethiopian public organisations.
5. To examine the relationship between laissez-faire leadership with job satisfaction in Ethiopian public organisations.

1.4 Scope of the Study

This study delaminates itself to assess the practises of leadership styles vis-visa job satisfaction in Ethiopian public organisations located at four Regional States, namely: Tigray, Amhara, Oromia and Benishangul-Gumuz. Towards this purpose, the researchers only gathered the experiences of senior personnel or experts who are working in five public organisations at each Regional States. The studied organisations were Education Bureau, Trade and Industry Bureau, Health Bureau, Agriculture and Rural Development Bureau, Public Service and Human Resource Development Bureau. The participants of the study are assumed to have relationship with leaders in their respective organisations. Although there are a number of leadership styles in the literature, the focus of this study was only on three leadership styles: transformational, transactional and laissez-faire. The study investigated whether there is relationship between these leadership styles and employees' job satisfaction.

1.5 Significance of the Study

The findings of this study will provide information for Ethiopian public leaders about the real practises of leadership styles in the country. In particular, information that highlights the relationship between leadership styles and job satisfaction plays an important role in ensuring services to citizens are delivered. The results of this investigation served as a basis for public leaders to assess their leadership strengths and weaknesses, and used the findings to become more effective public leaders.

It is intended that findings of this research can be used to bring improvements in the work being done in public organisations. This may serve as a valuable contribution in facilitating the change undertaking in the country by motivating the civil servants working in public organizations. This study also attempts to argue about the underline fact that management within public organizations of Ethiopia should focus on factors affecting the employee job satisfaction and therefore try to manage workforce and organizational parameters accordingly.

Finally, this study will contribute in identifying the potential gaps in the existing literature about how different leadership styles are practicing in Ethiopian public organisations; and filling the gaps to expand the research. Additionally, it is hoped that this research will be seen as a starting point for research in leadership in public sector and stimuli for further research to provide valuable insight for both academics and practitioners.

1.6 Organization of the Paper

The study is organized into five chapters as summarised below:

Chapter one serves as introductory to the study in terms of its objectives. It commences with the background of the study, problem statement, research questions, research objectives, scope and limitations of the study, definitions of key terms and concepts, and the sequence of chapters. **Chapter two** focuses on the literature review covering the theoretical and practical implementation of different leadership styles and their effect on employees' job satisfaction. **Chapter three** provides detailed methodological approaches employed in the study including research design, study population, sample size and sampling techniques, sources and types of data, methods of data collection and analyses, and ethical considerations of the study. **Chapter four** presents the data and the analyse made in line with the literature review discussed in Chapter two. It also creates discussions according to the results of the data analysis. **Chapter five** summarised the research findings and integrates information gathered from this study in terms of the study objectives.

CHPTER TWO: REVIEW OF RELETED LITERATURE

This section treats a review of related literature. Relevant topics, such as the concept of leadership, leadership theories, leadership styles and their classifications are discussed in detail. The chapter has also sketched the conceptual framework of the study.

2.1 The Concept of Leadership

Leadership is a subject that has long excited interest among people. The term connotes images of powerful, dynamic individuals who command victorious armies, direct corporate empires from atop gleaming skyscrapers, or shape the course of nations (Yukl, 2013). Many authors have conducted a number of studies on leadership, but there is no conscious definition of what leadership is, no dominant paradigm for studying it, and little agreement regarding the best strategies for developing and exercising it (Givens, 2008). Similarly, Mwombeki (2017) underlined that "Leadership has been well researched over the years by many researchers, but there is still lack of a definition that is universally accepted". Each scholar defined leadership in a way that works best for his/her in his/her work with students, managers, government officials, community organizers, health care providers, and educational administrators (Mitiku & Mitiku, 2017). The following are a few examples of such definition.

Leadership is wide spread process, which calls for authority, responsibility and delegation of power (Talat, 2015). As defined by Yusuf-Habeeb and Ibrahim (2017), Leadership is a social influence process that seeks to elicit cooperation and support of individuals towards actualization of some set goals. Peris (2012) perceives leadership to be a reciprocal process of social influence, in which leaders and subordinates influence each other in order to achieve organizational goals. In the book titled Management Principles (2007:208 cited in Khoza, Chetty & Karodia, 2016), leadership is described as the process of influencing employees to work willingly toward the achievement of organisational objectives. Leadership is a procedure of communication amongst leaders and subordinates in which leaders endeavors to have an impact on followers to accomplish a shared objective (Yukl, 2008, cited in Amin, Akram, Shahzad & Amir, 2018:49). According to Northouse (2016), leadership is a process through which a leader impacts agroup of people to attain common goals.

From the above leadership definition, one can identify four central points: (a) Leadership is a process (b) Leadership involves influence (c) Leadership occurs in groups (d) Leadership demands common goals.

2.2 Leadership Styles

Leadership style is set as the pattern of behavior that leaders display so as to achieve organizational goals. Bhatti, *et al* (2012) noted that "Leadership style is the pattern of behaviors engaged in by the leader when dealing with employees". As defined by Khoza, *et al* (2016), "Leadership style is a strategy that an organisation can undertake to influence the performance of the employee positively, and alternatively the performance of the organisation."

Within the competitive world organisational atmosphere, it is essential that organisations employ leadership styles which allow them to outlive inside a dynamic atmosphere (Sakiru, *et al.*, 2013). Organizations use a variety of leadership practise to educate and prepare employee to accomplish the daily activities. Leadership is not "one size fits all" thing; often, a manager must adapt their style to fit a situation or a specific group and this is why it is useful to gain a thorough understanding of various leadership styles. Most leaders adapt their leadership style in accordance with the demand and working environment of an organization (Zahari & Shurbagi, 2012 cited in Asghar & Oino, 2017). After all, the more approaches the manager is familiar with, the more tools they will be able to use to lead effectively (Murray, 2013 cited in NawoseIng'ollan & Roussel, 2017).

As cited by Basit, Sebastin and Hassan (2017), Kurt Lewin and colleagues (White, Lewin & Lippitt, 1939; Lewin, 1948) defined three classical styles of leadership in decision-making: autocratic, democratic and laissez-faire. However, for creating better understanding on different types of leadership styles, the following section discusses some more styles related to leadership. For the purpose of this study, only three leadership styles (transactional, transformational and laissez-faire) are discussed as follows.

2.2.1 Transactional Leadership Style

Yulk (2007) asserts that transactional leadership style is a leadership style that emphasizes on transaction between leaders and subordinates. As clearly pointed out by Avolio and Bass (2002), "Transactional leadership emphasizes the transaction or exchange that takes place among

leaders, colleagues and followers". This exchange is based on the leader discussing with others what is required and specifying the conditions and rewards these others will receive if they fulfil the requirements.

The transactional leadership strictly follows the base line, prefer to remains in a stipulated framework for the maximum employees' performance (Shah & Kamal, 2015). Unlike the transformational leadership who works upon the popular will with utmost flexibility thus transactional leadership transcending what is written in black and white (Khan & Nawaz, 2006). The transactional leader, following his/her style by implementing rules and regulations, establishes writ of authority, prescribes and focuses upon certain goals, directs the employees to achieve the pre-determined tasks (Avolio & Bass, 2004). Transactional leaders try to motivate with the use of external rewards and threats, continuous employee monitoring and control mechanisms (Dönmez & Toker, 2017). In short, transactional leaders focus on motivating employees through the punishment and reward mechanism (Asghar & Oino, 2017).

According to Bass and Avolio (1995), transactional leadership consists of two dimensions: contingent rewards and management by exception. In 'Management by exception', the leader avoids giving directions if the old ways are working and allows followers to continue doing their jobs as always if performance goals are met (Lowe, *et al.*, 1996). Management by exception may be active or passive. Avolio and Bass (2002) state that, "When active, the leader arranges to actively monitor deviances from standards, mistakes, and errors in the follower's assignments and to take corrective action as necessary. When passive, the leader waits for deviances, mistakes, and errors to occur and then takes corrective action". Management by exception (passive) refers to leaders intervening only when problem arise whereas management by exception (active) refers to leaders actively monitoring the work of followers and make sure that standards are met (Antonakis *et al.*, 2003 cited in Voon, Lo, Ngui & Ayob, 2010).

Contingent reward refers to leaders clarifying the work that must be achieved and use rewards in exchange for good performance. Contingent reward is where leaders make agreement about what must subordinate do and promising reward obtained when goal is achieved (Avolio & Bass, 2002; Bass & Avolio, 2003).

2.2.2 Transformational Leadership Style

Transformational leadership is a leadership style that seeks positive transformations "in those who follow" and that achieves desired changes through the "strategy and structure" of the organization (Peter & James, 2013, cited in Yadav & Agrawal, 2017). As explained by Hay (2006), transformational leadership is that which "… facilitates a redefinition of a people's mission and vision, a renewal of their commitment and the restructuring of their systems for goal accomplishment."

In contrast to other leadership styles, for example, transaction-based leadership, transformational leaders motivate behaviour by changing their followers' attitudes and assumptions. Researchers describe the transactional activity as focused on a task-related activity, whereas transformational strategies focus on individualized consideration, influence and inspirational motivation (Lowe *et al*., 1996; Zaleznik, 2004; cited in Bumgarner, 2016). To direct and inspire individual effort, these leaders transform their followers by raising their awareness of the importance of organisational outcomes thereby activating their higher order needs and inducing them to transcend their own self-interest for the sake of the organisation (Wright & Pandey , 2010). Overall, researchers agree that transformational leadership strategies encourage higher levels of employee satisfaction, which leads to improved performance (Braun, Peus, Weisweiler & Fred, 2012, cited in Bumgarner, 2016).

Burns (1978), as cited in Bumgarner (2016), identified five aspects of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, individualized consideration and cascading effective' or 'falling domino effect'. Based on the review of various literatures (for example, Bono & Judge, 2004; Simic, 1998; Stone, Russell & Patterson, 2003; Hay, 2006; Bumgarner, 2016; Bass, Avolio, Jung & Berson, 2003), the concept of transformational leadership is understood as one theory or model of leadership having four dimensions and are discussed as follows:

- **Idealized influence:** It is the perception of followers as a result of transformational behaviors (Bass, 1990). It is also to mean charismatic vision and behaviour that inspires others to follow. Provides a role model for high ethical behavior, instils pride, gains respect and trust. Idealized influence is about building confidence and trust and providing

a role model that followers seek to emulate. Idealized influence is also classified as Idealized attribute and Idealized behavior (Sadeghi & Pihie, 2012).

- **Inspirational motivation:** Leaders can explain the organization's mission and vision in clear and simple ways that improve employee understanding and acceptance. In other words, it is leaders' capacity to motivate others to commit to the vision. It is the degree to which the leader articulates a vision that is appealing and inspiring to followers. Leaders with inspirational motivation challenge followers with high standards, communicate optimism about future goals, and provide meaning for the task at hand.
- **Intellectual stimulation:** Leaders with this style stimulate and encourage creativity in their followers. 'Intellectual stimulation' is described as stimulating follower effort to be innovative and creative by questioning assumptions, reframing problems and approaching old situations in new ways (Dönmez & Toker, 2017). Leaders assist employees to think about problems in different and new ways and encourage followers to develop innovational solutions and creativity. As a result, leaders nurture and develop people who think independently.
- **Individualized consideration:** This is all about coaching to the specific needs of followers. Leaders treat each follower as an individual and demonstrate care and concern for their well-being. Simply put, it is the degree to which the leader attends to each follower's needs, acts as a mentor or coach to the follower and listens to the follower's concerns and needs.

2.2.3 Laissez-faire Leadership Style (delegative leadership)

Avolio and Bass (2004b) expanded the examination of transformational leadership and identified strategies to define the continuum of leadership. The continuum starts with laissez-faire, which is a French description that means hands-off (Bumgarner, 2016). Laissez-faire leadership style has low involvement of activities, leaving matters to their followers and very little involvement in decisions making (Basit *et al*., 2017). Deluga (1992, as cited in Koech & Namusonge, 2012) proclaimed that laissez-faire leadership style is associated with unproductiveness, ineffectiveness and dissatisfaction. According to Bass and Avolio (1997) and Hartog and Van Muijen (1997), laissez-faire leaders avoid making decisions, the provision of rewards and the provision of positive/negative feedback to subordinates.

In general, leaders who search for the most effective leadership style may find that a combination of styles is effective because no one leadership style is best (Darling & Leffel, 2011 cited in Anyango, 2015). As suggested by Bass (1997), for any organization to survive in a dynamic and competitive environment, it has to adopt the best leadership styles. Because employees' perception of leadership style greatly affects the performance and commitment of the employee to achieving the organizations goals (Jaskyte, 2004).

2.3 Job Satisfaction

According to Mosadegh Rad and Yarmohammadian (2006), as cited in Voon, Lo, Ngui and Ayob (2011), employee job satisfaction refers to the attitude of employees towards their jobs and the organization which hires them. Ping (2015), referring the work of Ajila and Omolayo (2012), stated that employee job satisfaction is the attitudes of the employees towards their job as well as what they feel about the work. These authors explained that high level of job satisfaction can be created if a person has more motivated and positive thinking towards their job. However, this will be switch to another way if they have negative attitudes and demotivating towards their job.

Individuals' job satisfaction level is visible from their attitude towards their work. Highly satisfied employees have a positive and favourable attitude towards their work while unsatisfied workers have a negative attitude towards their job (Armstrong, 2006, cited in Asghar & Oino, 2017). Lee and Ahmad (2009), as cited in Voon *et al* (2011), found that job satisfaction affects levels of job dissatisfaction, absenteeism, grievance expression, tardiness, low morale, high turnover, quality improvement and participation in decision-making. These in turn affect the overall performance of the organization.

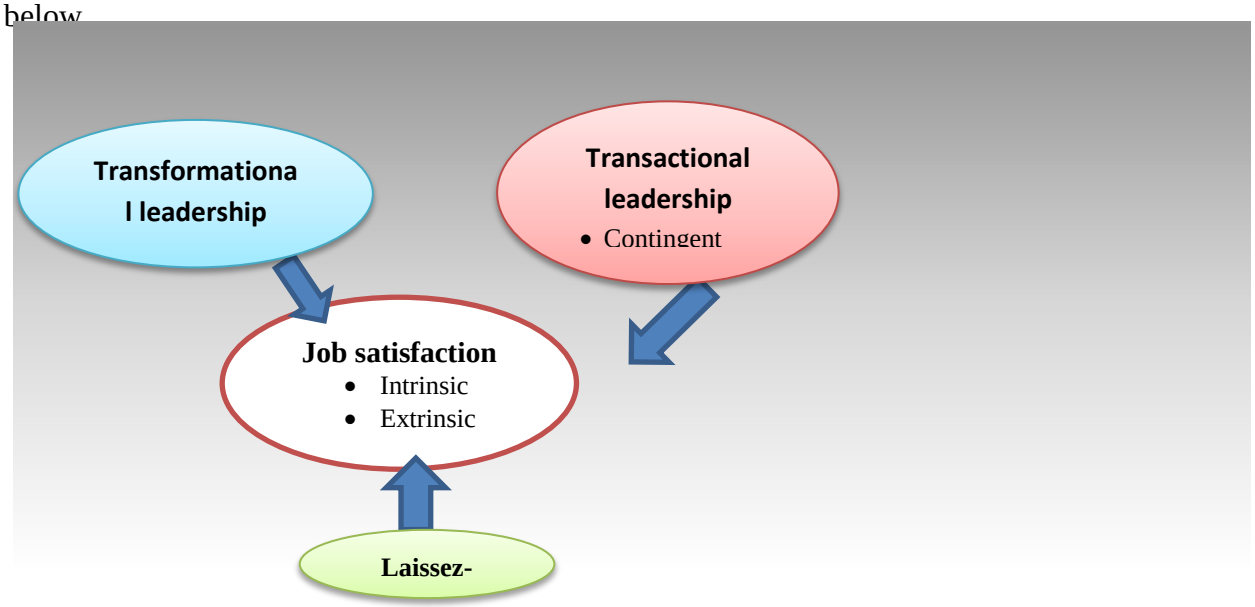
2.4 Conceptual Framework of the Study

Many researches attempted to identify and measure the impact of different factors on job satisfaction. As listed by Arzi and Farahbod (2014), the factors include ethics (Ulrich, O'Donnell, Taylor, Farrar, Danis & Grady, 2007; Schwepker, 2001), cultural values (Lund, 2003; Kirkman & Shapiro, 2001), as well as HRM practises (Manafi, Gheshmi & Hojabri, 2011) are the important factors that can impact job satisfaction. However, this study intends to investigate how leadership styles affect employees' job satisfaction. In this study, three leadership styles, namely transformational, transactional and laissez-faire are studied as independent variables and job satisfaction as dependent variable.

Transformational leadership has four dimensions or subscales: Idealised influence, Inspirational motivation, Intellectual stimulation and Individualized consideration. The study attempts to identify the relationship of these subscales with job satisfaction. Transactional leadership comprises of three components (contingent reward, management by exception active and passive). Laissez-faire leadership is also the other leadership style where a leader hands-off in most works of employees and no necessary decisions are made, leadership responsibilities are ignored, authority unused, and actions delayed.

Job satisfaction defined by Wicker (2011) is a sense of pride and inner fulfilment achieved when doing a particular job. Hoppock (1935, cited in Saleem, 2015:565) in his book presented the idea of job satisfaction as a theoretical construct as being any number of mental, physiological, and environmental situations which prompts to a person to express fulfilment with their occupation.

Kalleberg (1977), as cited in Voon *et al* (2011:26), proposed that job satisfaction consists of two components. These are intrinsic (referring to the work itself) and extrinsic (representing facets of the job external to the task itself) job satisfaction. Hirschfield (2000, cited in Voon *et al.*, 2011:26) stated that intrinsic job satisfaction refers how people feel about the nature of the job tasks themselves whereas extrinsic job satisfaction refers how people feel about aspects of the work situation that are external to the job tasks or work itself (Shim, Lusch & O'Brien, 2002). The literature has been used to underpin the conceptual framework for the study shown in Figure 2.1 given below



CHPTER THREE: RESEARCH METHODOLOGY

This chapter comprises the research design, study population, sample size and sampling techniques, sources and types of data, data collection and analysis methods, and ethical considerations of the study.

3.1 Research Design

The study employed a cross-sectional with a survey design. It is both descriptive and explanatory in nature. It is descriptive as it describes the leadership style(s) practised in sample public organisations. In addition, the characteristics of the respondents are described through descriptive analysis. The study also aimed to determine the association and direction between leadership styles and employees job satisfaction. Thus, explanatory analysis is used to establish such relationship between variables. The study is dominated by quantitative research approach supported by few qualitative data.

3.2 Study Population

Four Regional States of Ethiopia were the focus of the study. These are Amhara, Oromia, Tigray and Benishangul-Gumuz. The number of study areas was limited to this number due to the time and money constraints. However, almost 50 percent of the Regional States in Ethiopia (they are 9 in number) were covered by this study. From each region, five public organisations were selected as unit of analysis. These are Education, Health, Trade and Industry, Public Service and Human Resource Development, and Agriculture and Rural Development Bureaus. Thus, 20 public organisations are studied in total. The target population of this study consists of 2,133 employees, who are working in the selected public organisations in their respective Regional States. Table 3.1 (next page) illustrates the population of the study in each public organisation and Regional State.

3.3 Sample Size and Sampling Techniques

The Regional States included in the study were selected through convenience sampling technique. Whereas, the studied public organisations were selected by simple random sampling technique from each Regional State.

Table 3.1: Study Population

S/n	Organizations	Regions				Total
		Tigray	Oromia	Amhara	Benishangul-Gumuz	
1	Education	105	117	109	70	401
2	Health	92	131	102	79	404
3	Trade & Industry	105	111	108	67	391
4	Agriculture & Rural Development	116	137	124	70	447
5	Public Service & Human Resource Development	117	153	139	81	490
	Total	**535**	**649**	**582**	**367**	**2,133**

In most situations, researchers do not have access to an entire statistical population of interest partly because it is too expensive and time consuming to cover a large population or due to the difficulty to get the cooperation from the entire population to participate in the study (Chuan, 2006).The study used the following formula developed by Kothari (2004) to determine the sample size from the target population:

$$\mathbf{n = [z^2.\ p.\ q.\ N] / [e^2(N - 1) + z^2.p.q]}$$

Where,

n = the required sample size;

z = the value of the standard variant at the desired confidence level;

p = sample proportion or the proportion of defectiveness;

q = 1 – p;

N = the total population; and

e = acceptable error or the degree of accuracy expressed as a proportion.

Therefore, the total samples taken from employees working in selected public organisations were 326. After determining the sample size, proportional sampling technique was also used to share the total sample size to each public organisation of Regional States as indicated in Table 3.2 (next page). Finally, sample respondents were selected from public organisations through simple random sampling technique, mainly lottery method.

3.4 Data Collection Methods

The study adapted the revised Multifactor Leadership Questionnaire Rater Form (MLQ 5X-Short Form) which was developed by Bass and Avolio in 1997. The questionnaire was administered by employees to determine the leadership style(s) practised in selected public organisations. Self-rater Form that can be completed by leaders was not used in the current study to minimize potential leaders' self-report bias.

Table 3.2: Sample size per respective Regional States and public organisations

		Regional States				
S/n	Selected Bureaus	Tigray	Oromia	Amhara	Benishangul-Gumuz	**Total**
1	Education	16	18	17	11	62
2	Trade & Industry	16	17	17	10	60
3	Health	14	20	15	12	61
4	Agriculture & Rural Development	18	21	19	11	69
5	Public Service & Human Resource Development	18	23	21	12	74
	Total	**82**	**99**	**89**	**56**	**326**

3.5 Data Analysis Methods

This study followed more of quantitative approach of data analysis to obtain both inferential and descriptive statistics. One of the most widely used techniques of summarising quantitative data is descriptive statistics. The study used descriptive statistics in the form of frequency distribution, figures, tables and percentages. This is supported by the Statistical Package for Social Sciences (SPSS) computer software version 23 and Microsoft Excel 2010. Inferential statistics, namely Pearson correlation analysis was also employed. Correlation analysis was used to ascertain the association and direction of the dependent and independent variables. Qualitative data, on the other hand, gathered through questionnaires (responses to open-ended questions) are considered as an integral part of the analysis and content and thematic analysis were used to analyse them.

CHPATER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This study aimed to investigate the practises of leadership styles and their relationship with employees' job satisfaction in Ethiopian public organisations. Of the total questionnaires distributed to target respondents, 265 questionnaires were collected in usable fashion, resulting in a response rate of 81.3 percent. Hence, the data presentation and the analyses made is based on the perceptions of employees collected through this number of questionnaires.

4.1 Demographic Data

Demographic data was collected in various aspects. The statistics revealed that 72.5 percent of the participants were males and 72 percent of employees have so far spent more than seven years of work experience with the organisations, while the majority (84.6%) of the respondents are at least degree holders.

The collected data shows that of the total 265 survey participants, 72.5 percent were males. This indicates that the gender disparity within public organisations is still high; there is need for some interventions by public organisations to give more opportunities for unemployed qualified females. Majority of the participants are with the age range between 31 and 40 years (44.2%). Next to this, 29 percent of them are between 41 and 50 years. Others are between 18 and 30 and above 60 years of age. Hence, the data show that the majority of respondents are in the productive age group.

The study sought to also investigate the highest academic qualifications attained by the respondents. The majority (43.8%) of the respondents are degree holders. Respondents, who have masters and above level of education is 40.8 percent. Diploma holders account 11.3 percent. Other respondents who have below diploma level are only 4.1 percent. This clearly shows that public organisations employed qualified personnel who can understand the leadership style(s) applied in their respective organisations and follow different strategies to enhance their level of job satisfaction and achieving organisational goals.

The data show that 72 percent of the respondents have more than seven years of work experience. 21.5 percent of the same group of respondents have also four to six years of work experience. Only 6.5 percent have three and below years of experience.

4.2 Leadership styles practised in sampled public organisations

As the main purpose, this study examines the practises of leadership styles in public organisations of Ethiopia. Specifically, it investigates whether transformational, transactional and laissez-faire leadership styles are applied by public leaders. These leadership styles are most common in the leadership literature and assumed to be useful if they are discussed together.

4.2.1 The practice of transformational leadership in public organisations

Table 4.1 below contains descriptive statistics of transformational leadership and its attributes or dimensions. Referring the Table, the mean values of transformational leadership dimensions range from 1.60 to 2.29; and the overall scores for the transformational leadership style is 1.98. All the mean values of this leadership style are less than what Bass and Avolio (1997) consider ideal levels for effective leadership. For the most effective leadership these authors suggested mean scores of greater or equal to 3.0 for all subscales of transformational leadership. The Standard Deviation (SD=1.058) shows that there is no much variation among the perceptions of respondents regarding this issue. The collected data confirmed that transformational leadership style is sometimes preferred by public leaders and exercised occasionally within Ethiopian public organisations.

Table 4.1: Descriptive Statistics: Transformational Leadership

Attributes of Transformational Leadership	n	Mean	SD
Idealized Influence (Attributed)	265	2.20	1.096
Idealized Influence (Behavior)	265	2.12	1.125
Inspirational Motivation	265	2.29	1.070
Individualized Consideration	265	1.60	1.015
Intellectual Stimulation	265	1.68	0.984
Transformational leadership	**265**	**1.98**	**1.058**

4.2.2 The practice of transactional leadership in public organisations

In this study, whether public leaders have been practicing transactional leadership style in their respective public organisations was evaluated through three subscales, namely contingent reward, management by exception (active) and management by exception (passive). Accordingly, the mean scores of each subscale are presented in subsequent Tables.

Table 4.2: Contingent reward

Statements	n	Mean	SD
My leader …			
Provides me with assistance in exchange for my efforts.	265	2.98	.832
Discusses in specific terms who is responsible for achieving performance targets.	265	3.05	.829
Makes clear what one can expect to receive when performance goals are achieved.	265	2.97	.906
Expresses satisfaction when I meet expectations.	265	2.97	.881
Contingent reward	**265**	**2.99**	**.519**

As shown in Table 4.2, the mean score of contingent reward in the current study is 2.99, which is greater than the suggested mean score of 2.0 by Bass and Avolio (1997). These two scholars suggested that a mean score of 2.0 for contingent reward is common in leadership. However, the descriptive statistics in the Table depicts that all statements stated under contingent reward subscale have mean scores greater than 2.0. This indicates that a number of employees perceived their immediate leaders as doing an above average job of clarifying expectations and recognizing accomplishments.

Table 4.3: Management by exception (active)

Statements	n	Mean	SD
My leader …			
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	265	2.46	1.148
Concentrates his/her full attention on dealing with mistakes, complaints and failures.	265	2.42	1.204
Keeps track of all mistakes.	265	2.71	1.110
Directs his/her attention toward failures to meet standards.	265	2.53	1.158
Management by exception (active)	**265**	**2.53**	**.685**

The mean value of all the statements forwarded for respondents about management by exception (active) is 2.53, which is beyond the range suggested by Bass and Avolio (1997) (1.0 to 2.0). This implies that employees perceived that their immediate leaders are mainly focussing on mistakes that they may make and give more attention whether the set standards are met or not.

Table 4.4: Management by exception (passive)

Statements	n	Mean	SD
My leader …			
Fails to interfere until problems become serious.	265	2.42	1.178
Waits for things to go wrong before taking action.	265	2.35	1.152
Shows that he has a firm believer in "If it is not broke, don't fix it".	265	2.42	1.109
Demonstrates that problems must become chronic before I take action.	265	2.31	1.130
Management by exception (passive)	**265**	**2.37**	**1.142**

Non-transactional passive leaders wait for problems to arise before taking action, avoid making decisions, or are not around when needed (Bass and Avolio, 2002: viii). Suggested mean score for management by exception (passive) by Bass and Avolio (1997) is 1.0, which is much below what we obtained in this research (mean = 2.37). This value confirms that employees working in studied public organisations perceived their immediate leaders do not wait too long before resolving a problem or taking corrective action.

Table 4.5: Descriptive Statistics: Transactional leadership

Subscales	n	Mean	SD
Contingent reward	265	2.99	.519
Management by exception (active)	265	2.53	.685
Management by exception (passive)	265	2.37	1.142
Transactional leadership	**265**	**2.63**	**.355**

The above Table summarises the mean values of the three subscales of transactional leadership and the overall transactional leadership. As indicated in the Table, the overall score of transactional leadership is 2.63, which indicates that this leadership style is fairly often practised by leaders in sampled public organisations as compared with the other two leadership styles discussed earlier. The data shows that leaders in public organisations are trying to enhance the performance of each employee and the overall organizational performance through providing reward/incentive if only if employees meet the expected level of performance.

4.2.3 The practice of laissez-faire leadership in public organizations

The data obtained (Table 4.6 next page) show that the overall mean score of laissez-faire leadership style is 1.81 which is much greater than the score suggested by Bass and Avolio (1997), i.e., 0.0. There is no much variation in the perceptions of respondents towards this issue (SD=1.122). The mean scores in the Table show that laissez-faire leadership is applied at low level. Specifically, employees perceived that their leaders are taking most of the decisions in the

organisation and subordinates have no freedom in deciding their own policies and methods and to make independent decisions. The consulted literature show that the most effective leadership style depends on the ability to allow some degree of freedom to employees in administering different functions and participate in decision-making process of the organisation.

Table 4.6: Descriptive Statistics: Laissez-faire leadership

Statements	n	Mean	SD
My leader …			
Avoids getting involved when important issues arise.	265	1.74	1.035
Is absent when needed.	265	2.10	1.167
Avoids making decision.	265	1.50	1.038
Delays responding to urgent questions.	265	1.88	1.248
Laissez-faire leadership	**265**	**1.81**	**1.122**

4.3 Job Satisfaction

Job satisfaction is the dependent variable in this study which can be affected by various factors, including leadership styles practised by leaders. Job satisfaction is influenced by many organisational contextual factors, ranging from salaries, job autonomy, job security, workplace flexibility, to leadership (Mosadegh Rad and Yarmohammadian, 2006, cited in Voon, Lo, Ngui and Ayob, 2011). Bhatti, *et al* (2012) explained that "Leadership style has a positive impact on job satisfaction". Table 4.7 and 4.8 report the descriptive statistics of the items of intrinsic and overall intrinsic job satisfaction; and the items of extrinsic and overall extrinsic mean values as follows.

Table 4.7: Descriptive Statistics: Job satisfaction (Intrinsic)

Statements	n	Mean	SD
Employees receive adequate training to do their job well	265	1.23	.854
Employees have good feeling that their efforts will be appreciated	265	1.20	.888
Using compensation system increases motivation of employees	265	1.03	.841
Performance evaluation induces employees' justice perceptions	265	1.14	.874
Intrinsic job satisfaction	**265**	**1.15**	**.649**

As can be seen in the above Table, all the items of the intrinsic job satisfaction components have scored very low mean values which indicate that employees are dissatisfied with the nature of the work itself or on the work assignment given by their respective organisations. As a result, they have low level of satisfaction.

Table 4.8: Descriptive Statistics: Job satisfaction (Extrinsic)

Statements	n	Mean	SD
The payment of salary is very close to our expectations	265	.89	.679
We use a new technology to facilitate our works	265	1.43	1.053
The relationship between supervisors and us is very friendly	265	1.88	.932
We have family-friendly policies to support our families	265	1.15	.767
Extrinsic job satisfaction	**265**	**1.34**	**.575**

Similar to the intrinsic job satisfaction, all the statements forwarded to respondents under the extrinsic job satisfaction have low mean value with a range of 0.89 and 1.88. The overall extrinsic job satisfaction of employees is also below moderate level (1.34). This implies that employees working within public organizations are dissatisfied with the external factors or working conditions. Particularly, employees are very dissatisfied with the payment of salary which is below their expectations.

Table 4.9 below suggests that the mean of the overall job satisfaction of employees is very low (mean = 1.24), which indicates how employees are dissatisfied with both the nature of the work itself and the job environment they are working in. This needs the effort of both leaders and managers in motivating employees through different mechanisms, such as improving the working conditions, using new technology, creating good relationship among employees and supervisors to employees.

Table 4.9: Descriptive Statistics: Overall job satisfaction

Job satisfaction	n	Mean	SD
Intrinsic job satisfaction	265	1.15	.649
Extrinsic job satisfaction	265	1.34	.575
Overall job satisfaction	**265**	**1.24**	**.462**

The collected qualitative data show that the reasons for the low job satisfaction of employees include the irrelevance of employees work with their field of specialization; the monotonous nature of the work, which do not initiate employees to be innovative; lack of clear compensation system and often full of biasedness; and inadequate promotion and training opportunities. All these problems are categorised with the intrinsic job satisfaction. Respondents have also mentioned other reasons external to the work they are assigned in. Some of the reasons for the low level of extrinsic job satisfaction are the poor relation among employees and with the management body; weak mentoring system; leadership, prevalence of corruption in the organisation; inadequate staff, which causes work burden; and limited opportunities of participation. These and other problems are perceived as some of the causes for low level of

work motivation and high employees' turnover. As a consequence, a number of employees have initiation to leave their current job or position and they need to look for other job opportunities.

4.4 Leadership Styles and Job Satisfaction

The job satisfaction of employees and leadership style are the main elements that impact the organization effectiveness (Kennerly, 1989, cited in Ariz & Farahbod, 2014:180). Consistent to this, leadership is known as one of the important aspects of employees' job satisfaction. It can fully impact the dedication and motivation of employees. Regarding this, Voon, Lo, Ngui and Ayob (2011:24) state that, "By adopting the appropriate leadership styles, leaders can affect employee job satisfaction …". This indicates that effective leadership style is important for motivating employees and increasing their satisfaction level. Indeed, it is important to examine which leadership style at most influences in making changes in an organisation to enhance employees' job satisfaction. Thus, this study investigated the relationship between leadership styles with job satisfaction. To find out the relationship among variables of interest, correlation analysis techniques was performed. Table 4.10 illustrates descriptive statistics of the study variables and their dimensions.

Table 4.10: Descriptive statistics of the study variables and their dimensions

	n	Mean	SD
Contingent reward	265	2.99	.519
Management by exception (active)	265	2.53	.685
Management by exception (passive)	265	2.37	1.142
Transactional leadership	**265**	**2.63**	**.355**
Idealized Influence (Attributed)	265	2.20	1.096
Idealized Influence (Behavior)	265	2.12	1.125
Inspirational Motivation	265	2.29	1.070
Individualized Consideration	265	1.60	1.015
Intellectual Stimulation	265	1.68	0.984
Transformational leadership	**265**	**1.98**	**1.058**
Laissez-Faire leadership	**265**	**1.81**	**1.122**
Intrinsic job satisfaction	265	1.15	.649
Extrinsic job satisfaction	265	1.34	.575
Overall job satisfaction	**265**	**1.24**	**.462**

As shown in the above Table, the mean values of transactional leadership, transformational leadership and laissez-faire leadership are 2.63. 1.98 and 1.81, respectively. The mean of transactional leadership is greater than the other two leadership styles. The mean and Standard Deviations of each subscale of transactional leadership and transformational leadership are illustrated in the Table. The overall employees job satisfaction mean is found to be low

(Mean=1.24), with varied perceptions among respondents (SD=.462). This may be due to the high attention given by public leaders to meeting standards, controlling performance, correcting mistakes and punishment of underperformers rather than motivating, inspiring and empowering subordinates through transformational leadership strategies. However, this section focuses on discussing the relationship of the dependent variable (job satisfaction) and the independent variables (leadership styles) as one of the objectives of the current study.

4.5 Results of Pearson Correlation Analysis

As discussed in Chapter 3 of this study, independent variables are divided into three types of leadership style, namely transactional, transformational and laissez-faire leadership style. As for the dependent variable, job satisfaction has been divided into two components: intrinsic and extrinsic job satisfaction. To examine whether there is association between independent variables and the dependent variable, Pearson correlation analysis was conducted in this study. Pearson correlation analysis is a method for exploring the correlation between two quantitative, continuous variables. The coefficient can take on the value that fall between negative 1 and positive 1; the value of positive 1 represents a positive correlation and if the coefficient value is negative 1, it symbolizes a negative correlation.

4.5.1 Transformational Leadership and Job Satisfaction

As discussed in prior section of the thesis, the four aspects or dimensions of transformational leadership are idealised influence, inspirational motivation, individualized consideration and intellectual stimulation. Idealised influence further subdivided into two: behaviour and attribute. Table 4.11 illustrates (next page) the result of the correlation analysis between transformational leadership and its dimensions, and job satisfaction.

The result of the correlation analysis reported in the Table indicates that there is a statistically positive relationship between transformational leadership and job satisfaction (r=0.301, p=0.048). But the relationship is considered as weak. Although there is limited effort by public leaders to implement transformational leadership, its effect on the level of job satisfaction is low. Leaders within Ethiopian public organisations were mainly focusing on formulating and articulating organizations' visions and challenging goals and motivating followers to work beyond their self-interest in order to achieve common goals.

Table 4.11 also illustrates the relationship between the attributes or dimensions of transformational leadership and job satisfaction. The dimensions have statistically positive correlation with job satisfaction, except the idealized influence. More importantly, the inspirational motivation dimension has strong association with job satisfaction (r=.703, p=0.041) as compared with the other dimensions. Intellectual stimulation, and Individualized consideration dimensions have positive but moderate relationship with the job satisfaction (r=.530, p=0.047) and (r=.401 p=0.038), respectively.

Table 4.11: Pearson Correlation analysis (Transformational Leadership Vs. Job Satisfaction)

			1	2	3	4	5	6	7
1	Idealized Influence (Attributed)	Pearson Correlation	1	.023	.045	.150*	.003	.485**	.314
		Sig. (2-tailed)		.711	.462	.014	.964	.000	.061
		N	265	265	265	265	265	265	265
2	Idealized Influence (Behaviour)	Pearson Correlation	.023	1	.106	.067	.074	.550**	.251
		Sig. (2-tailed)	.711		.084	.277	.227	.000	.928
		N	265	265	265	265	265	265	265
3	Inspirational motivation	Pearson Correlation	.045	.106	1	-.030	.004	.477**	.703**
		Sig. (2-tailed)	.462	.084		.627	.953	.000	.041
		N	265	265	265	265	265	265	265
4	Intellectual stimulation	Pearson Correlation	.150*	.067	-.030	1	.134*	.497**	.530**
		Sig. (2-tailed)	.014	.277	.627		.029	.000	.047
		N	265	265	265	265	265	265	265
5	Individualized consideration	Pearson Correlation	.003	.074	.004	.134*	1	.468**	.401*
		Sig. (2-tailed)	.964	.227	.953	.029		.000	.038
		N	265	265	265	265	265	265	265
6	Over all transformational leadership	Pearson Correlation	.485**	.550**	.477**	.497**	.468**	1	.301*
		Sig. (2-tailed)	.000	.000	.000	.000	.000		.048
		N	265	265	265	265	265	265	265
7	Job satisfaction	Pearson Correlation	.314*	.251	.703**	.530**	.401*	.301*	1

		Sig. (2-tailed)	.061	.928	**.041**	**.047**	**.038**	**.048**	
		N	265	265	265	265	265	265	265

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.5.2 Transactional Leadership and Job Satisfaction

A number of studies explained the positive relationship between transactional leadership and job satisfaction. Ali *et al* (2013), for example, indicated a significant relationship between job satisfaction and transactional leadership style (r=0.178, p=0.211). However, the relationship between these two variables is small, according to these researchers. Consistent to this finding, the current study indicated that there is statistically significant relationship between transactional leadership style and job satisfaction (r=.533, p=0.02). Similarly, two of the attributes of transactional leadership, that are, contingent reward and management by exception (active) have also significant relationship with job satisfaction (r=.344, p=0.011 and r=.681, p=0.004, respectively). However, management by exception (passive) has no statistically significant relationship with job satisfaction (r=.344, p>0.05). The positive relationship between transactional leadership style and the overall job satisfaction imply that the practise of transactional leadership style, such as contingent reward may enhance public organisations employees' satisfaction for short period of time.

As presented in Table 4.12, the mean value of transactional leadership is 2.63 which indicates that the studied public organisations in Ethiopia are occasionally practicing transactional leadership style as compared to the other two leadership styles. The mean score of the overall job satisfaction is 1.24, which shows low level of employee satisfaction. This, in turn, implies that employees working in Ethiopian public organisations are not satisfied with the transactional leadership style practised by public leaders.

Table 4.12: Pearson Correlation analysis (Transactional Leadership Vs. Job Satisfaction)

			1	2	3	4	5
1	Contingent reward	Pearson Correlation	1	-.023	.030	.492**	.344
		Sig. (2-tailed)		.704	.631	.000	.011
		N	265	265	265	265	265
2	Management by exception (active)	Pearson Correlation	-.023	1	-.063	.593**	.681
		Sig. (2-tailed)	.704		.303	.000	.004
		N	265	265	265	265	265
3	Management by exception (passive)	Pearson Correlation	.030	-.063	1	.602**	.062
		Sig. (2-tailed)	.631	.303		.000	.312
		N	265	265	265	265	265
4	Transactional leadership	Pearson Correlation	.492**	.593**	.602**	1	.533
		Sig. (2-tailed)	.000	.000	.000		.002
		N	265	265	265	265	265
5	Job satisfaction	Pearson Correlation	.344	.681	.062	.533	1
		Sig. (2-tailed)	.011	.004	.312	.002	
		N	265	265	265	265	265

**. Correlation is significant at the 0.01 level (2-tailed).

4.5.3 Laissez-faire Leadership and Job Satisfaction

Laissez-faire leadership is commonly viewed as the absence of leadership where the leader takes a "hands-off" approach, abdicating responsibility, delaying decisions and gives no feedback to employees' (Xirasagar, 2008, cited in Loganathan, 2013). The Table below shows that there is no statistically significant relationship between laissez-faire leadership and job satisfaction ($r=.036$; $p>0.05$). On the contrary to the findings of the current study, Chaudhry and Javed (2012), as cited in Ping (2015:8), mentioned that employees' job satisfaction has significant relationship with laissez-faire leadership. However, these researchers further state that laissez-faire leadership style is more unfavourable among employees because leaders did not provide any guidance and leave full responsibility to the employees. This implies that the low level of employees' job satisfaction in the current study could not be as a result of the low level of practising this leadership style in sampled public organisations.

Table 4.13: Pearson Correlation analysis (Laissez-faire leadership Vs. Job Satisfaction)

			1	**2**
1	Laissez-faire leadership	Pearson Correlation	1	.036
		Sig. (2-tailed)		.560
		N	265	265
2	Job satisfaction	Pearson Correlation	.036	1
		Sig. (2-tailed)	.560	
		N	265	265

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

This final chapter comprises of the summary of major findings, conclusions and recommendations.

5.1 Major Findings of the Study

Findings of the study are summarised below:

- The respondents of this study generally perceived that all the three leadership styles (transformational, transaction and laissez-faire) were practised by public leaders in Ethiopian public organisations with different extent. Transactional leadership is the most preferred and fairly often practised leadership style in the studied public organizations (Mean=2.63). Nevertheless, the Standard Deviation (SD=.355) of this style indicates that the perceptions of respondents differ within the sampled public organisations. Such leaders mostly focus on the transaction or exchange that takes place with employees. This exchange is based on the leader discussing with employees about what is required and specifying the conditions and rewards employees will receive if they meet the set standards of performance. Besides, employees perceived that leaders with this style of leadership emphasis on implementing rules and regulations, exercise their authority, prescribes and focuses upon goals, directs employees to achieve the pre-determined tasks.
- Regarding the practise of transformational leadership, employees perceived that the style is sometimes exercised by their immediate supervisors at moderate level (Mean=1.98; SD=1.058). The Standard Deviation shows that there is no variation in responses of employees. The mean values of this leadership style and its dimensions are less than what Bass and Avolio (1997) consider ideal levels for effective leadership. For the most effective leadership, these authors suggested mean scores of greater or equal to 3.0 for all subscales of transformational leadership. Although employees have positive attitude towards transformational leadership, they in general perceived that their immediate supervisors/leaders have limitations to fully apply the ideal levels of transformational leadership as per their expectations.
- The above finding is also confirmed by the dimensions of transformational leadership. All the attributes of this leadership style have scored low mean values indicating the limited implementation of transformational leadership. In particular, the individualized

consideration and intellectual stimulation dimensions have scored the least mean values (Mean=1.60 and 1.68, respectively). This indicates that public leaders are not treating each employee as an individual; do not demonstrate care and concern for their well-being, do not act as a mentor to the employee and listens to the employee's concerns and needs. Further, public leaders are not stimulating their followers' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways.

- Similarly, the idealized influence attributed and behavior subscales have scored low mean values (Mean=2.20 and 2.12, respectively), which exposed that public leaders could not be a role model that followers seek to emulate for high ethical behavior; failed to gain respect and trust from subordinates; and unable to build confidence and trust. It was possible to reach greater levels of autonomy and independent thinking by incorporating idealized influence, which in turn, improves the outcomes of public organizations.
- However, laissez-faire leadership is the least practised style in Ethiopian public organisations (Mean=1.81, SD=1.122). Evidences obtained from employees disclosed that there were no considerable implementations of laissez-faire leadership by public leaders. The perceptions of employees clearly indicate that most decisions have been made by leaders at different levels with limited involvement of employees. Tasks are given to each department and employees within sections following top-down approach and there is also strict monitoring and evaluation mechanisms to check whether tasks are done.
- The research was also able to establish job satisfaction levels of employees working in public organisations. The study found that most employees are dissatisfied as a result of the leadership style applied by public leaders. The satisfaction level of employees is low (Mean=1.24). The Standard Deviation (SD=.462) indicates that there were variations in the responses of employees, with some subjects being neither satisfied nor dissatisfied, while some were very satisfied and others were very dissatisfied.
- There is statistically positive correlation between transformational leadership and job satisfaction (r=0.301, p=0.048). However, the degree of correlation is weak. All the dimensions of transformational leadership have also statistically significant correlation with employees' job satisfaction, except the idealized influence dimension. More

importantly, the inspirational motivation dimension has statistically strong significant association with job satisfaction as compared with the other dimensions (r=.703, p=0.041). Similarly, intellectual stimulation and individualized consideration dimensions have also statistically significant relationship with job satisfaction (r=.530, p=0.047) and (r=.401,p=0.038), respectively. But, the degree of their correlations with job satisfaction is moderate. However, both the subscales of idealized influence (attributes and behaviour) have no statistically significant association with job satisfaction with r=.314 (p>0.05) and r=.928 (p>0.05), respectively.

- The study further indicated a positive and statistically significant relationship between transactional leadership and job satisfaction. Their relationship is strong (r=.533, p=0.02). Likewise, Management by exception (active) and contingent reward have a positive and significant relationship with job satisfaction (r=.681, p=0.004) and (r=.344, p=0.011), respectively. However, Management by exception (passive) has no statistically significant relationship with job satisfaction (r=.344, p>0.05).
- The study also found that there is no statistically significant relationship between laissez-faire leadership and job satisfaction (r=.036; p>0.05). This implies that most decisions within public organizations are made by leaders which affect the participation and motivation of lower level employees.

5.2 Conclusions

Respondents of this study perceived their immediate supervisors are displaying all the three types of leadership styles, namely transformational, transactional and laissez-faire leadership, but with varied degree. However, the most dominant leadership style practised in Ethiopian public organisations is transactional leadership in which the skills and experience of employees are utilized to its maximum through a system of rewards/punishments for good deeds and otherwise. On the other hand, transformational leadership style has been implemented moderately and laissez-faire leadership is found to be the least applied style in the studied public organisations. Since employees have positive attitude towards transformational leadership and due to the fact that this leadership style has positive impact on job satisfaction, commitment, organisational performance, productivity and minimise turnover and absenteeism, public organisation had been better to apply transformational leadership based on the given situation.

Analysis of the survey reveals that the satisfaction level of employees within the public organisations of Ethiopia is at low level. Major reasons behind this fact could be the limitations of public organisations to properly implement transformational leadership and the high focus of leaders on reward/punishment mechanisms (transactional leadership) contributed to the low level of job satisfaction among employees. Beyond this, other reasons for the dissatisfaction of employees were: limited training, promotion and participation opportunities; lack of recognition for employees' contributions; unfavorable working conditions; discrimination among employees by leaders; and unethical behavior of leaders and some employees.

The finding of the study indicated a positive and strong relationship between transactional leadership and job satisfaction. That means public leaders prefer transactional leadership than other leadership styles. Furthermore, two of the components of this leadership styles - management by exception (active) and contingent reward - have a positive and significant correlation with job satisfaction. The positive and strong relationship between transactional leadership and the job satisfaction imply that the practise of this leadership style affects the level of employees' job satisfaction due to the mechanism leaders followed to motivate employees through performance-contingent reward/punishment.

The study result shows that transformational leadership has a positive association with job satisfaction which means that transformational leader through their inspiring and motivating behavior can induce changes in psychological states of members of organisations. However, its effect is weak or small.

The findings of this study revealed that public leaders sometimes applied laissez-faire leadership style to lead employees. But, the extent of practising this leadership style is almost zero. This implies that employees could not get opportunities and freedom to participate in organizations functions. Furthermore, the result shows there is no statistically significant relationship between this leadership and job satisfaction. Thus, the study concludes that this leadership style does not contribute to the low level of job satisfaction among employees in public organisations.

5.3 Recommendations

On the basis of the conclusions drawn from the findings of the study, the researcher would like to offer the following suggestions:

1. It is better to apply more of transformational leadership with other leadership styles, such as transactional leadership in public organisations based on the given situation. Public organisations need transformational leaders to shape the future of the nation and the coming generation. Specially, with regard to today's complex organizations and dynamic environment, transformational leaders are often seen as ideal agents of change who could lead followers in times of uncertainties and high risk-taking.
2. Further, they need to consider the capabilities of employees and to properly scan the situation where organizations operate to practicing more transformational leadership behavior and creating a motivating and less political environment that will lead to good job satisfaction.
3. There should be leadership development strategy at national level to develop leadership skills on the part of public leaders through seminars, workshops and trainings on the practices of effective leadership outlined in this study. Public organisations are also advised to plan and invest resources in the leadership development of all managers and potential leaders.
4. There are a lot of qualities which a leader must acquire so that the maximum problems will easily solve by him or her. A leader can face the challenges easily and obtain maximum results through the following qualities of leadership: integrity, support, clear goals, clear communication, vision, expects the best, encouragement, stimulating work, inspiration, recognition and focus on team interests and needs.

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2. THE EFFECT OF SACCOS'PERFORMANCE ON ECONOMIC IMPROVEMENT OF MEMBERS (THE CASE OF DESSIE-ZURIA DISTRICT)

BY : GIRMA GETANEH

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The foundation of human civilization is Cooperation which creates interdependence of mutual help among human beings as an essential aspect of social life. Modern cooperatives history traced to the impact of the industrial revolution which brought huge wealth to the capitalist and poverty to unorganized labor since Cooperatives are an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (Kejela, 2013).

The principle of cooperation in the field of saving and credit was applied in the middle of 19th Century for the first time in the World by Raiffeisen & Schulze at the same time in rural and urban areas respectively in Germany. At that time, the economic condition of German was extremely shocking for peasants and artisans felt crushed under the heavy weight of indebtedness due to Jews rule over the market and the poor laborers had no way out to buy articles of their requirement from them and sell their product to them consequently, German laborers and peasants were passing such bad time. Raiffeisen tries to reduce the suffering of the people who are living in rural areas while Schulze adopted the new measures for giving relief to the people in the urban areas (John, 1986).

SACCO Society was introduced in Africa for the first time by Ghana in 1959,with the intention of assisting villagers in order to improve their economic conditions (Ngombe& amp; Mikwamba, 2004), then after English speaking nations were the first to adopt SACCOs, in their countries next to Ghana (Mwakajumilo, 2011).

In Ethiopia, the history of modern cooperatives was started in 1960,regardless of this early start, SACCO in Ethiopia have established in1968 by employees of Ethiopian Airlines for the first time (FCA, 2012).

Cooperatives have played a significant function which headed for achieving the growth and poverty reduction strategy through promoting income generating activities and improving access

to near banking services to rural and urban households (Prakash, 1994) likewise, SACCOs had also promote the economic interest of their members particularly and the communities as a whole generally by activating to engage in productive activities to generate income, create employment opportunities, increase the economy of a well-defined area and improve their livelihood situation (Gebeyehu,2002).

The formation of SACCOS viewed by the government of Ethiopia and other development agencies as an answer to credit access problems and the best alternative to improve rural productivity, due to this reason FCA states in its Growth and Transformation plan-II (GTP-II) from 2015-220 to increase Cooperatives saving and investment, by saving from Birr 6.6 billion to Birr 21.5 billion and reach the saving share collected by saving & credit cooperative (SACCOs) to domestic national saving to 5 %; as well as loan disbursed from Birr 4.78 billion to Birr 12.4 billion to solve their members common economic problem through developing saving culture of members and increase their income and asset, (FCA, 2015).

Now a day saving**s** and credit cooperatives (SACCOs) are functioning as the main rural micro credit financial institutions in Ethiopia. However, the usefulness of such micro credit institutions in solving the problems of the rural poor has not been studied extensively about their Impact on members Economic Improvement particularly in Dessie Zuria wereda, South Wollo Zone Amhara Region of Ethiopia.

Due to the above reason the researcher had initiated to undertake a research on Effect of SACCOs' performance on Members' Economic Improvement for thesis study to fulfill the partial requirements of Masters of Art Degree in Cooperative Business Management.

Therefore, the objective of this study were to evaluate the Effect of SACCOs performance on members Economic Improvement in Dessie-zuria Wereda, South Wollo Zone Amhara Regional state of Ethiopia, specifically to analyze contribution of SACCOs in improving members' income, to identify the impact of SACCOs on members House Accommodation and to identify SACCOs Contribution on Employment Condition of members in Dessie-zuriaWereda.

1.2. Statement of the Problem

Recent introduction of new financial services laws have seen SACCOs being embraced as formal financial institutions (Rehema, 2013) and the financial service is a very significant sector in today's modern economy. SACCOs like other financial institutions play a great role in the economy by mobilizing savings and allocating credit for investments thereby helping to improve member's living standards through economic improvement.

Cooperatives contributed both social and economic benefits for their members since they are socio-economic entity, but to be viable they are primarily responsible for seeking solutions for common economic problems of their members by satisfying common economic need of

members to improve their economic conditions and raised them to a better economic position to acquire asset and/or wealth as an economic entity, (Zeuli, 2004).

Along with this in general a research done by ILO (1998) also indicates that the economic objectives of cooperatives from member point of view include income generation, patronage dividend, saving and credit access, lower input prices, creation of off farm activities, better utilization of resources, and lower prices of consumer goods and positively contribute towards the achievement of development goals of the state through the increment of national income, export revenues, provision of employment opportunity, better utilization of resources and promotion of thrift and credit among citizens.

Various studies had been carried out on SACCOs by a number of researchers and acknowledge the importance of SACCOs in reduction of rural poverty (e.g., Champo, Mwangi & Oloo, 2008; Mbwana & Mwakujonga, 2013 & Mwelukilwa, 2001)as well as Kifle (2012) also conducted on the Impact of SACCO in Ofla WeredaTigray Region of Ethiopia. Even through these studies have been conducted still it's Impact on members' Economic improvement remain ambiguous and only very little is known. Different Studies also shown that economic factors such as income and family background are important determinants for lack of assets among low-income populations. However, the basis of starting SACCO is to meet such common economic need through mutual help that caused acquisition of asset ownership and improve their income.

Therefore, further research were needed to investigate the Effect of SACCOs' Performance on economic improvement of members which was not that much examined so far particularly in the study area had initiated the researcher to conduct a research on the this issue and bring up with a result that will contributes to fill the gap of ambiguity and literature of the study area Dessie-zuria wereda SACCOs in South Wollo Zone, Ethiopia. The study was specifically analyze contribution of SACCOs on improving members' income and their Impact on members' House Accommodation as well as Contribution on Employment Condition of members in Dessie-zuria Wereda. This investigation will be important for making decision at various levels to ensure that SACCOs achieve intended goals and gain support from rural peoples through improving their economic condition.

1.3. Objectives of the Study

The general objectives of the study were to examine the Effect of SACCOsPerformance on Economic Improvement of members' in Dessie-Zuria District South Wollo Zone, Amhara Region, Ethiopia.

The specific objectives of the study would be:

1. To analyze effect of Dessie-Zuria SACCOs' performance to improve members' income.
2. To identify the impact of SACCOs on members House Accommodation in Dessie-Zuria.
3. To identify SACCOs Contribution on Employment Condition of members in Dessie-Zuria.

1.4. Research Questions

1. What were SACCOs contributed to members' income improvement in Dessie-Zuria?
2. What impact does SACCOs had on members House Accommodation in Dessie-Zuria?
3. What Employment conditions were SACCOs contributed for members in Dessie-Zuria?

1.5. Significance of the Study

This study would generally help to know whether SACCOs had the desired effects on improvement of their members' economic status then, it will help for any development practitioners and policy makers as well as NGOs to have better understanding to how and where they should intervene and take effective measures to take over the desired objectives beyond the current state of affairs. In addition, the study will be also supply a basis for researchers who might have interest to do further assessment on this issues.

1.6. Scope of the Study

This study would be mainly concentrated on examining the Effect of SACCOs' Performance on members' economic improvement of Dessie-zuria Woreda in South Wollo Zone, Amhara Region, Ethiopia specifically to examine contribution of SACCOs in improving members' income, to identify the impact of SACCOs on members House Accommodation and to identify SACCOs Contribution on Employment Condition of members. Undoubtedly, it would be concerned with explore and analysed the impact of services offered by SACCOs including saving, provision of loan/credit, investment opportunities in form of shares, dividend and consultation & training services on the members' economic improvement. The dependent variable of this study would be members income improvement, change in their house accommodation and creation of employment opportunity as result of SACCOs activities which could indicate the Economic Improvement of members.

1.7. Limitation of the Study

The study does not explain all aspects of these SACCOs. It was limited to some selected variable which can describe the dependent variable specifically focused on examining contribution of SACCOs in improving members' income, identifying the impact of SACCOs on house accommodation by members and employment creation condition for them as well as it has a limitation of not used comparative analysis with non-members or base line figures for comparison of changes in members economic status of members since the SACCOs didn't had actual recorded data when they registered their members from the beginning.

1.8. Organization of the Study

The study would be organized in to five chapters. The first chapter would be the introduction part which incorporates background of the study, statement of the problem, research objective, research question, scope and limitations of the study. The second chapter would be discussed the

theoretical and empirical review of literature and the third chapter present the research methodology. In the fourth chapter it would present data and discussion followed by the fifthchapter which deals with conclusion and recommendation of the study. As well as the appendixes will include the interview questionnaire and the extended reference.

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical Literature Review

2.1.1. Concept of Cooperatives and Saving and Credit Cooperative

Cooperative was founded from Latin word "co-operari" where 'co' means together and 'operari' means working together. Working together for member is the initial concept of cooperatives. The Cooperative is a member centered business, (Bharadwaj, 2012).

The International Cooperative Alliance defines a cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise", (ICA, 1995).

Saving and Credit Cooperative Society is a group of people who have common bond, live in the same community, save money together and lend it to one another at agreed interest rate, time and conditions and a democratic, unique member driven and self-help union (Marcus, Beth & Caroline, 1999).SACCOs are a legal entity established by the voluntary membership of individuals or organization for the purpose of depositing their savings and providing credits to its members (URT, 2004).

2.1.2. Significance of Saving and Credit Cooperatives

It is well recognized that SACCOs provide a means to learn the value of regular saving and wise use of credit. Some even consider them as a form of economic empowerment, where members collectively control and manage their own financial institution which provides saving, credit and financial management services, (Galor, 1995)

As ICA (1995), the most basic function of SACCO Society is financial intermediation. That is bringing savers and borrowers together in a system that enables them to pool their money as savings and shares, and after capturing funds transforming into loans by calculating all of the costs of doing this business to make profitable/useful to both parties (the SACCO Societies and its members). SACCO Societies as financial institutions can raise their funds internally (self-financing) and externally (outside financing), (ICA, 1995).

Savings and credit cooperatives are becoming an inspiration of hope to the developing countries. These institutions grant loans to members at reasonable rates of interest in times of need. The lent money helps entrepreneurs in impoverished societies to start essential businesses in their communities (Guilford, 2007)

Services Offered by SACCOs

According to Bailey, SACCOs offer various financial products to their members including shares, savings, emergency loans, loans, life and loan insurance, fixed deposits, educational savings, housing loans, funeral insurance benefits of SACCOs to members, financial counseling so that the members can solve most of their financial problems, and the risk of management service to ensure the safety of members' savings and loans (Ahmimbisibwe, 2007).

Saving and credit cooperatives (SACCOs) are those financial institutions which are promoting saving culture in the society. The aggregate saving mobilized by SACCOS in both urban and rural areas up to the year 2018were reached more than 15.585 billion ETB. The relative performance of SACCOs were 3.798% with respect to saving mobilization at national level much to be desired and the trend is encouraging since these organizations are recent phenomena in the country, (FCA,2019)

2.1.2. Historical Development of SACCOs

The history of SACCOS in the world can be traced based on two origins of modern cooperation. The first modern cooperation emerged in certain working class environments in European industrial cities in 1840s, particularly in Great Britain and France. These pioneers invented models of the consumer and labor cooperative that defend and promote the interest of working class in the face of the social disasters endangered by the Industrial Revolution (Assenga, 2008).

In African countries, the first experiences of savings and credit cooperatives were to a large degree the work of foreign missionaries (Mwelukilwa, 2001).Many of the first savings and credit cooperatives emerged in the English- speaking countries, primarily in Ghana 1955, Uganda 1946 and in Nigeria dates back to 1951-1953 (Mbwana andMwakujonga, 2013). In Tanzania SACCOS emerged in 1954, Kenya in 1964, Liberia 1965, Sierra Leone, Zambia and Botswana in 1967 (MUCCoBS, 2005).

In Ethiopia, the history of modern cooperatives goes back to the imperial regime where the first proclamation on cooperatives was issued in 1961 (FCA, 2005). Savings and credit cooperatives (SACCOs) were organized by employees of Ethiopian Airlines, the Light and Electric Power Authority, the Commercial Bank, the Highway Authority and Telecommunications.

During the military regime cooperatives was viewed as a key instrument to build a socialist economy pursued the cooperatives agenda more aggressively. Large number of cooperatives was observed during the centrally controlled economy which lasted from 1974 to 1991 (ILO, 2008).

The present government provided a legal framework which is both comprehensive in many respects (including its ability to accommodate cooperatives in various sectors/sub-sectors) and incorporates universally accepted principles of cooperatives including voluntary membership (Proclamation No. 985/2016). As a result some improvements have been seen in cooperative societies in the country. Cooperative societies started to distribute inputs, provide loan to their members, market produces of members in the domestic and foreign market, Unions(secondary cooperatives) were formed with the assistance of Cooperative Union Project (CUP)funded by VOCA/Ethiopia/USAID), dividend payments were made by the unions as well as primary cooperatives (Kifle, 2015).

Now a day's there are more than 20,067 primary SACCOs which constitute 36% of the total numbers of cooperative existed in Ethiopia and 128 unions of SACCOs in all over the region of the country. SACCOs' expand in recent years particularly from the year 2003 – 2010 E.C in higher rate; the numbers of SACCOs' were increased by 13,010 within these consecutive years as shown in the following graph, (FCA, 2019).

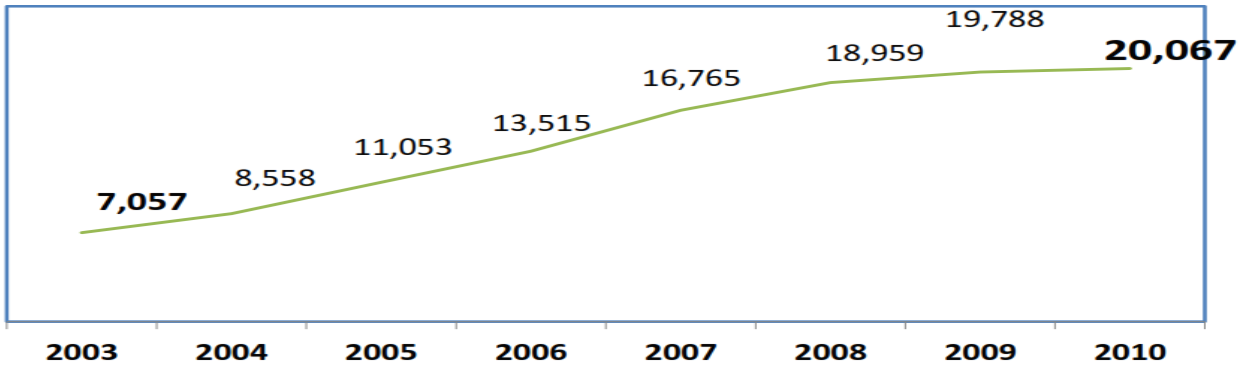


Figure 1: growth trends of SACCO numbers

2.1.3.The Meaning and Concepts of Income and House Accommodation

2.1.3.1. The Concepts of Income and House Accommodation

Economic security throughout the life is fundamentally linked to both income and house accommodation. Incomes are flows of resources that are what people obtain as a return on their labor or use of their capital, or as a public program transfer (Sherraden, 1991).Most income is spent on current consumption. Whereas, Accommodation are stocks of resources that are what people accumulate and keep hold over a period of time and are used as a source of security against contingencies (Barrett and Sahn, 2001).

As a general concept, house accommodations are rights or claims related to property, which are tangible that has a potential to be used for long period of time at home. Therefore, the Hose and House accommodation of household is one of the best tools used to indicate improvement in economic status. Moreover, Hose accommodation improvement is one of the economic policies enables the poor people and their families to save in small amounts and to use those savings usually for specific purposes that often permanent in a very poor countries (Moser, et al, 2006).

2.1.3.2. The Meaning of Assets in the Farmers Context

Ownership of selected assets would be incorporate the items which are modern and traditional farm equipment, home furniture, communication and entertainment equipment, household durables and a few other items such as automobiles, bikes and jewelries (CSA& the WB, 2013).

Farmer household assets can be assessed as; Livestock assets: include cattle, sheep and goats, poultry and equines, Productive assets: include all asset used to produce crop and livestock like water pump, sickle, spade, beehives, cart, pick axes and axes, Household (home) assets: include stove, and other cooking materials, and Consumer durable assets: include telephone, radio, bed, home, bicycle, etc. So that, household's asset accumulation means that an increasing in the real value of all types of assets of Household (home) equipment and furniture over a specified reference period; usually the period of time for which a program or an intervention that is expected to bring asset accumulation is implemented (Tadele, 2011).

2.1.4. Savings

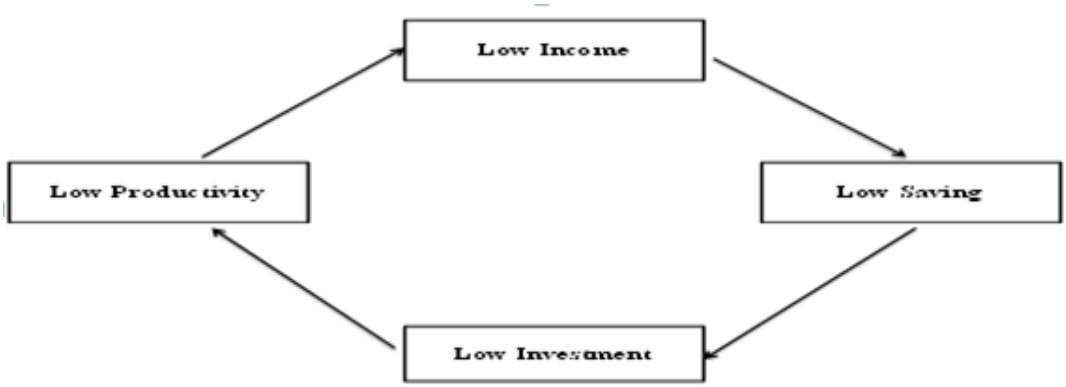
Saving means keep back something valuable for future use, it is all about the future, about anticipating and preparing for possible risks and emergencies like a bad harvest, sickness or death; preparing for upcoming events and expenditures i.e. Payment of school fees, a marriage, old age, or funeral; or starting a new business or expanding an existing one and it can be in kind, cash (home or in a bank) or by giving, (FAO, 2002).

2.1.5. Credit

Credit simply means transfer of wealth or resources to an individual in return for future payment that is normally accompanied by interest. A credit is a legal contract where one party receives resource/ wealth from another party and promises to repay on a future date along with interest, means a credit is an agreement of postponed payments (Aryeetey, 1995).

The Contribution of SACCOs in Increasing Members' Income

Savings are input for investment, without saving investments are very hard to be realized so that, SACCO's play important role in lower income groups increasing their assets it leads to increased income as a result of business expansion, meeting housing accommodation needs and increasing wealth through savings which helps to break the vicious cycle of poverty (Branch & Cora 1999).



Source: World Bank Report, 2004

Figure 2: The vicious cycle of poverty

The poor people in Ethiopia have low income that leads to low saving and in turn leads tolow investment. Without new investment, productivity may not be improved and this willresult in low income so that SACCOs help the poor in bringing them together to Save and acquirecredit access which provide the members an investment opportunity in the future.

The Contribution of SACCOs on members' Housing and House Accommodation

The impact of participation in SACCO on member's assets specifically on housing and house accommodation were tries to be identified by Kafle Tesfamariam in his research indicated as an additional assets creation in the form of construction of new houses, repairing old ones and purchase of household equipment like tape recorders, radio, television, chairs, and tables was significantly impacted by the participation in SACCO membership.

The Contribution of SACCOs in Creating Employment Condition

The role of cooperatives in development is threefold as is indicated by ILO: economic, social and political. The economic function involves provision of opportunities for improved incomes to members, create employment opportunities, mainly in rural areas, and allow disadvantaged groups to be organized for social and economic benefit through economic activities which include agriculture, fishing, financial services, production and labor, mutual guarantee or insurance, retailing and wholesaling, housing and public services (ILO, 2001).

2.2. Empirical Literature Review

Kifle had conducted on The Impact of Savings and Credit Cooperatives in Ofla WeredaTigray Region of Ethiopia and come out with there is Positive significant correlation have been observed between seniority, saving, size of loan, number of times loan availed and post income of the respondents. Similarly for profit, there is significant and positive correlation between seniority, the size of loan and number of times loan availed and profit from economic activities while the variable saving had significant negative correlation with the profit, (Kifle, 2012).

The study by Brown Anyelwisye (2007) on Impact of Microfinance Institutions on Poverty Reduction among Smallholder Farmers: Case of Selected SACCOs in Dodoma Urban and Kongwa Districts concluded that SACCOS play a significant role in improving the conditions of smallholder farmers. The findings in this study revealed that the micro credits have impacted the activities and lives of beneficiaries in several positive ways as follows; owning valuable assets, household expenditure on basic needs, incomes from farm and off-farm activities, and house ownership, toilets and utilities.

A cross sectional study by Ramotraand Kanase (2009) examined the impact of cooperatives on members' standard of living with the aid of interviews among cooperative members located in 12 villages in India. The study found a positive correlation (r=0.71) between income and household condition, which signify positive changes among members after the establishment of cooperatives. They concluded that per capital income of the members is on the increase.

Research done by Tesfamariam (2012) in OflaWoreda of Mekeledisclosed that member in Saving and Credit Cooperatives made additional assets in the form of new house construction, livestock purchase (Sheep, goat, cow, oxen, donkey, chicken) and electronic and/or house equipment i.e., tape recorders, radio, television, and chairs being members. Coops are major channel for member's cash savings (Frank, Ngozi, &Nkem, 2013).It enhance saving habit, democratic decision through General assembly on surplus to be allocated and retained with the aim of asset building and found that savings, credit, and income have positive effects on economic security and asset accumulations of members in cooperatives.

There was a study conducted in Ghana and come up with findings of participation in cooperatives leads to increase in members' household income and more employment due to members obtain loan to diversify their source of income from the cooperatives by Wanyama, Develtere, & Pollet. The finding shows that the use of cooperative loan increases household income level of the borrowers because the loan serves as additional investment and therefore helps to improve economic position for better living standard of the members as a result additional operations, (Wanyamaetl, 2008).

The results of a study conducted by Brown shows a significant difference in cash accrued from estimated farm income and off-farm activities between borrowers and non-borrowers at $p<0.01$. Hence the results was predict that, provision of credit to farmers has a substantial contribution to improve percentage level of income among smallholder farmer's borrowers and the results had also indicates that there were statically significant difference in estimated mean assets value between borrowers and non-borrowers at $p<0.01$,(Brown, 2007).

2.3. Conceptual Framework

The researchers had developed a conceptual framework based on an insight gained from the literature reviewed above while a number of theories and issues pertinent to the study were discussed in the literature review; the following components were chosen as the basis of the analysis of the research problem. The function of SACCOs are independent variables including loan issued, Deposit/share capital collected, consultation and training provided, consistency and reliability of service delivered, frequent time of service delivered and dividend payout amount which can influence the economic improvement of their members indicated in income improvement, change in their house accommodation and creating employment opportunity.

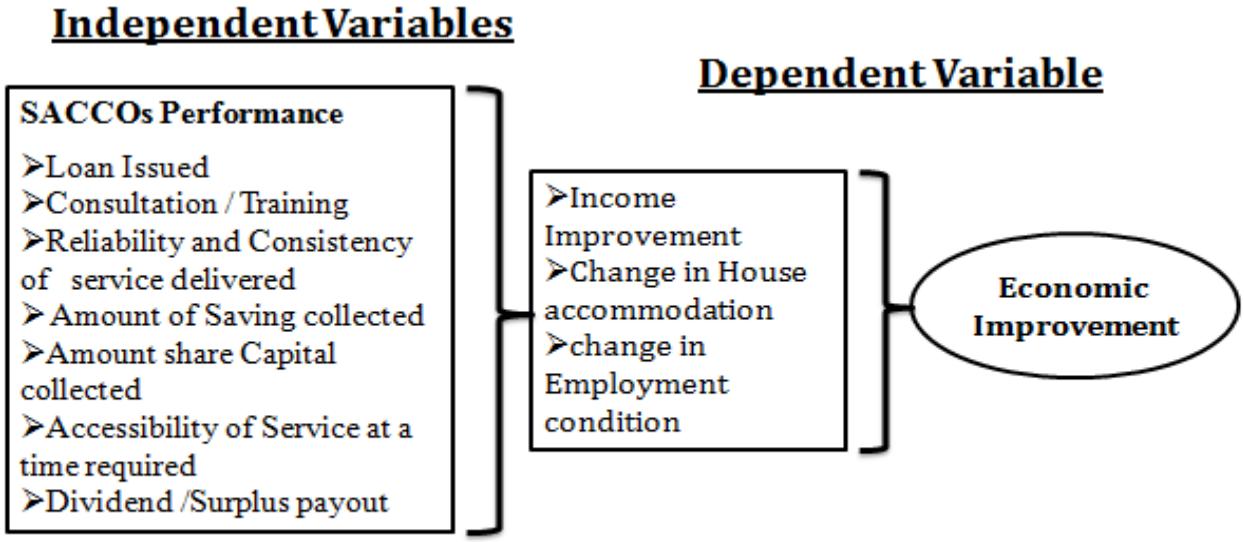


Figure 3: Researcher conceptual framework

As indicated in the above figure the independent variables for this study were the activities that are performed by SACCOs which had direct impact on their members' income improvement, house accommodation and employment condition that shows economic improvements of members. So that this study were investigate how much the function SACCOs had been caused to improve the economic conditions of their members particularly in Dessie-zuria District using regression analysis.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Description of the Study Area

Dessie-zuriaWoreda is located in Amhara Rigion, south wollo zone, it bound in Dessie town and DessieZuria (Amharic "Greater Dessie Area") is one of the woredas in the Amhara Region of Ethiopia. Located at the eastern edge of the Ethiopian highlands in the DebubWollo Zone, DessieZuria is bordered on the south by Albuko and WereIlu, on the southwest by Legambo, on the northwest by Tenta, on the north by Kutaber, on the northeast by Tehuledere, and on the east by Kalu. The cities of Kombolcha and Dessie are independent woredas surrounded by Dessie Zuria; the District has a population density of 168.22, which is greater than the Zone average of 147.58 persons per square kilometer. A total of 35,437 households were counted in this District resulting in an average of 4.45 persons to a household, and 34,524 housing units. The livelihood of most of the households was mainly depended on agricultural activities mainly included in crop production and livestock rising. However, they have been vulnerable to climatic variations and other agricultural problems in each year, (DZWA office, 2019).

According to District's cooperative promotion office data there are different types of cooperative namely; multi-purpose, irrigation and consumers in addition to SACCOs but at moment irrigation and consumers cooperative are not functional due to different problems of external body's interference while they had established, lack of members sense of ownership fo these cooperatives, (DZWCP office, 2019).

3.2. Population and Sampling Technique

3.2.1. Target Population

The target populations for the study were members of saving and Credit Cooperatives (SACCOs) in Dessie-Zuria District which are registered under Dessie-zuria district Cooperative Promotion Office (DZWCPO). According to DZWCPO, there were 32 SACCOS as of January 2019, which are registered under the promotion office with a total members of 11,100 of which 6,270 male and 4,830 female, (DZWCP office, 2019).

3.2.2. Sample and Sampling Technique

Dessie-zuria District was selected purposively due to its nearness, homogeneity of SACCOs and their members and availability of organized data, then after two sages sampling technique were employed. At the first stage five cooperatives were selected out of 32 SACCOs, since the researcher believes that these 5 SACCOs can represent other SACCOs since the district had homogeneous SACCOs and their members were also engage in similar activities. The five SACCOs had been selected using simple random sampling techniques out of32 SACCOs and at

the second stage the sample size of 137members were selected from the sampled SACCOs' members randomly as a respondent with a proportional rate as it was depicted in the table below.

The sample size was determined using the formula proposed by Kothari, out of the target total population in the study area for the study were (11,100 SACCOs member)with 5%significance level of error,(Kothari, C. R. 2004).

$$n = \frac{(Z)^2 * p * q * N}{e^2(N-1) + Z^2 * p * q} n = \frac{(1.96)^2 * 0.9 * 0.1 * 11{,}100}{0.05^2(11{,}100-1) + (1.96)^2 * 0.9 * 0.1}$$

n≈ 137

n:Sample size

p:Expected probability of individual to be included in the sample

q: failure (probability of individual to be excluded in the sample, (1-p)

e: Significance level of the error

Z: Normally distributed value of the population (Represents the95% of the confidence interval)

Table 3.1: Sample size of each SACCO respondents

Name of Random sampled SACCO	Members of the SACCO			Proportional sample size	Remark
	Male	Female	Total		
Addischora	482	366	848	137*(848/3,076) = 38	Using proportional random sampling
Key-gedel	423	227	650	137*(650/3,076) = 29	
Tebasit-Kobo	386	281	667	137*(667/3,076) = 30	
Megera	321	244	565	137*(565/3,076) = 25	
Adebabay	203	143	346	137*(346/3,076) = 15	
Total = 5 SACCOs			3,076	137	

Source: Own computation using data gathered from Dessie-zuria cooperative promotion office

3.3. Source of Data and Data Collection Methods

Both primary and secondary data were used for this study. The primary data was derived from the respondents' through questionnaire using close ended and open ended questions to allow deep investigation of household on Impact of SACCOs on Economic improvement of members. Secondary information was gathered from published, unpublished documents and reports which were relevant for the study and incorporated with primary data. The data were collected by five enumerators who have a minimum of grade- 10 and have experience in data collection process from March 01 to April 20, 2019.

3.4. Choice and Definitions of Variables

The study had an outcome variables measure economic benefits received from the SACCOs in the form of direct and indirect ways which were collected through extent level of improvement.

a) Indicator Variables for members' income improvement

Change in expenditure/ consumption pattern: Members' expenditures were used as an indicator for measuring income both food and non-food expenditure.

Increase in saving amount: Saving amount of members in SACCO to increase the amount of depos it, to obtain credit, and to earn interest as a patronage.

b) Indicator Variables for Improvement of House Accommodation

***Change in Housing*:** change in the quality of members' house which would be measured in rating its quality of home as compared with the prior to membership.

Change in Furniture and Electronic Equipment: These were indicated that change in the value and quality of any housing furniture and house equipment.

c) Employment: No& types of employment created for members with SACCOs contribution.

d) Indicators of SACCO's Performance

Provision of Credit: amount of money disbursed for members as per amount of saving, equity and by-law of the SACCO.

Provision of Business Consultation & Training: the number of consultation & training provided for members about economic utilization of available resource.

Reliability and Consistency of service: the extent of trustworthiness as well as uniformity of service delivered for their members by the SACCO.

Amount of share capital collected: Amount of share Capital collected from members to increase the capital of the SACCO and reduce its risk from interest payout for deposit.

Amount of saving collected: amount of periodic and non- periodic saving of members collected by the SACCO to increase deposit of members.

Timing of Service: providing Service at convenience time and as soon as requested by members Amount of share Capital collected from members

Dividend (Surplus) payout: amount of money received as a surplus from SACCO in proportion to members' participation and Equity (Share) they have.

Table 3.2: Description of variables and Its Measurement

Variable	Description and Measurement	Type of Variable
Outcome variables		
Change in Income:	Change in saving and expenditure on food & non-food	Continuous
Change in House &ACC.	Change in the value House, furniture and equipment	Continuous
Change in Employment	The extent level of employment condition	Categorical
SACCO performance	The extent level of performance	Continuous
Socio-economic & Demographic Variable		
Sex of Member	Sex of the SACCO member (1 if male, 0 female)	Dummy
Age of Member	Age of the SACCO member in years	Continuous
Mrts of Member	Marital status of Member (1 if married, 0 otherwise)	Dummy

Family size	Number of family members	Continuous
Education	Educational status of members	Categorical
Land size	Member's owning of cultivated farming land (in Hectare**)**	Continuous
Membership years	No of years stay in the SACO (in year)	Continuous

3.6. Methods of Data Analysis

After the collections of quantitative and qualitative data from primary and secondary sources the result were presented using descriptive statistics and different Econometric model with the help of STATA 12 version, which is commonly applied in social science and infer the results.

Since the study has been examined the Effect of SACCOs Performance on Economic improvement of members with a specific objective of members Income Improvements, House Accommodation and Employment creation condition, the study were investigate how the performance of SACCO had Impacted Members Economic status through analyzing the performance indicator of the SACCOs and economic improvement outcome indictor variables of the study using different appropriate descriptive statistics as a categorical and continuous variable and then analysis has been undertaken using inferential statistics analysis.

Descriptive statistical Analysis such as mean, standard deviation, frequency and percentage has been calculated to analyze the sample respondents' response and their socio-economic biographical data through comparing their before and after membership and tested using appropriate statistical tools.

Correlation analysis has been used to examine the relationship exists between the variables used in the study, then **regression Analysis model** has been used to test the Effect of determinant variables on the members economic improvement outcome variables.

Selection of Regression

As the study was about the Effect of SACCO Performance on members Economic Improvement, the independent variable lies mainly within the function of the SACCOs and since Economic improvement was a latent variable indicated by outcome variable indicators the number and type of regression used were depend on the indictor outcome variable number and nature.

The study was used three outcome variables as an indicator of Economic improvement of members and specific objective, as a result there were three regression model employed for each outcome variable and specific objective.

That was: - Economic Improvement of members = f (SACCOs' performance indicator variable)
The functional relationship between the probability of improvement in members' income of the SACCOs and the function of SACCOs were specified as follows:

$$\mathbf{Y = ß_0 + ß_1X_1 + ß_2X_2 + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots ß_7X_7 + \epsilon\ldots\ldots\ldots\ldots\ (2)}$$

The functional relationship between the probability of improvement in members' House & House Accommodation and the function of SACCOs were specified as follows:

$$\mathbf{Y = ß_0 + ß_1X_1 + ß_2X_2 + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots ß_7X_7 + \epsilon\ldots\ldots\ldots\ldots\ (3)}$$

The functional relationship between the probability of creating employment condition for SACCOs' members and the function of SACCOs were specified as follows:

$$\mathbf{Y = ß_0 + ß_1X_1 + ß_2X_2 + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots ß_7X_7 + \epsilon\ldots\ldots\ldots\ldots\ (4)}$$

Where: Y = is Outcome variables of the study

$ß_0$ = is Constant or intercept

$ß_1$, $ß_2$… $ß_7$ refers coefficients of each independent variable respectively

X_1= Amounts of Credit Provided

X_2 = Consultation & Training Provided

X_3 = Service Reliability and Consistency

X_4 = Amount of saving collected

X_5 = Timing of Service delivery

X_6 = Amount of share capital collected

X_7 = Amount of share capital collected

ϵ = is the error term

To understand the whole impacts of the SACCOs performance on their members' economic improvement indicator outcome variables, simple linear regression model were employed through changing the performance indicator variable in to continuous variable which was the average performance of the SACCOs.

Then the Model was re-arranged in to; $\mathbf{Y = ß_0 + ß_1X_1 + \epsilon\ldots\ldots\ldots\ldots\ldots\ldots\ (5)}$

Where: Y = is income and House accommodation of respondents

$ß_0$= is Constant or intercept

$ß_1$ = refers coefficients of SACCOs performance

X_1= Average SACCOs performance

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Descriptive Statistical Analysis

4.1.1. Descriptive Statistical Analysis of categorical Demographic Variables

Table 4. 1: Descriptive Statistics of Categorical Demographic Variables

Categorical Variable	Total Respondent (n= 137)	Frequency	Percent	Test (P-Value)
Sex of Respondents	Male	74	54.01	
	Female	63	45.99	bi-test p = 0.1965
Marital Status	Married	108	78.83	bi-test p = 0.000
	Otherwise	29	21.17	
Educational Level	Illiterate	49	35.77	
	Read & write	40	29.20	Chi-77.416* (0.00001)
	Primary School	43	31.39	
	Secondary & Preparatory	5	3.65	
Head of Family	Yes	129	94.16	bi-test p = 0.000
	No	8	5.84	

Source: Own survey, 2019.
Note: * means significant at 5% probability levels.

As it was seen from the above table the total of 137 sample of members were surveyed for this study from these respondents 54.01% and 45.99% were male and female members respectively. Within this sex structure, about 78.83% of them were married (coupled)and21.17% were otherwise (might be divorced, widowed, etc.) member heads. The test result of sex composition between male and female was statistically in significant at 5% probability level as a result we can conclude that there was no difference in membership of the SACCOs between male and female, but in terms of their marital statuses there was statistical evidence to conclude that majority of members in the SACCOs were married with the same level of probability since its binomial probability test was significant at (p = 0.000).With regards to educational status of respondents 49 (35.77%) were Illiterate and40 (29.20%), 43 (31.39%), 5 (3.65%) of the respondent members were who can read & write, Primary School and Secondary & Preparatory levels of educational status. From the result of educational status majority (35.77%) of the respondents were illiterate.

The other categorical demographic variable of the respondents was heads of family from all respondent incorporated in the questionnaire 94.16% were family head and other 5.54% were not head of the family, as a result we have a statistical evidence to conclude members of the SACCO were family heads who have children and elder peoples who need help from them.

4.1.2. Descriptive Statistical Analysis of Demographic Continuous Variables

Table 4. 2: Descriptive Statistics of Continuous Variables

Variable Total Respondent (n= 137)	Mean	S. deviation
Age of Respondents	40.43	10.22
Family size	5.06	1.61
Years of membership	5.78	1.73
Land size	0.712	0.362

Source: Own survey, 2019.
Note: * means significant at 5% probability levels.

As observed in the above table, average age of members who participated in the questionnaire was 40.43 years with the standard deviation of 10.22. Consequently which implied that members who participated in the SACCOs were adults who can able perform more and are productive parts of the population from the community. Among the total respondents, the average family size or members of households was observed about 5.06 with a standard deviation of 1.61. Furthermore, this result implies that SACCOs' member support on average 5 children or elder people as a family member.

With regard to the owned cultivated land, it was on an average of about0.712hectare among the total respondents with a standard deviation of 0.362. Moreover, this result indicates that cultivated land owned by members were very minimal that couldn't support their family members as a result they had to search other alternative sources of income. On the other hand with respect to years of membership in the SACCO which shows seniority of membership were as indicated in the table on average 5.78 with a standard deviation of 1.73.

4.1.3. Descriptive Statistics of Outcome Variables

4.1.3.1 Improvements of members' income

Table 4. 3: Descriptive Statistics results of Average Income Improvement

```
Two-sample t test with equal variances

Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
Incomebf |     137    1.961679     .03107    .3636651    1.900236    2.023122
IncomeAf |     137    3.381387    .0327713    .3835787     3.31658    3.446194
---------+--------------------------------------------------------------------
combined |     274    2.671533    .0485152    .8030686    2.576021    2.767044
---------+--------------------------------------------------------------------
    diff |            -1.419708    .0451587               -1.508613   -1.330803
------------------------------------------------------------------------------
    diff = mean(Incomebf) - mean(IncomeAf)                        t = -31.4382
Ho: diff = 0                                     degrees of freedom =      272

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000
```

Source: Own survey, 2019.

Average income improvements of members were calculated through changing the income improvement indicator variables in to a continuous variable as the above table result revealed that average income improvement of members before joining were 1.96 with the standard deviation of 0.364 by assuming 0.031 standard error, whereas after joining the SACCO their average improvement of members income were 3.38 with a standard deviation of 0.384 by assuming a 0.033 standard error. As a result paired wise two sample mean comparison test was used to test if there was a significant difference on average income improvement of members between their after and before membership, the t-test result t = -31.44 indicate there is a statistical evidence to concluded members' average income improvement after their membership was greater than before their membership improvement at a 5% level of probability.

Generally the above result was revealed in similar finding with the results ofa study conducted by Wanyama, Develtere, &Pollet(2008), that concluded membership in cooperatives leads to increase in members' household income and more employment due to members obtain loan to increase their source of income from the cooperatives.

4.1.3.2. Condition of Members' House and House Accommodation

Table 4. 4: Descriptive Statistics of Average House and House Accommodation Improvement

Two-sample t test with equal variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
HouAccBf	137	1.720803	.0314109	.3676556	1.658686	1.78292
HouAccAf	137	2.59854	.0401564	.4700181	2.519129	2.677952
combined	274	2.159672	.0367822	.6088537	2.087259	2.232084
diff		-.8777372	.0509822		-.978107	-.7773674

diff = mean(HouAccBf) - mean(HouAccAf) t = -17.2166
Ho: diff = 0 degrees of freedom = 272

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
Pr(T < t) = 0.0000 Pr(|T| > |t|) = 0.0000 Pr(T > t) = 1.0000

Source: Own survey, 2019.

Theaverage members' House& House accommodation extent levels of improvements before joining were 1.72 with the standard deviation of 0.368 by assuming a 0.0314standard error, but after SACCO their average improvements were 2.60 with a standard deviation of 0.470 by assuming a 0.0402 standard error as indicated in the above table. Paired wise two sample mean comparison test had been used to test if there was a significant difference between their after and before membership average House and House Accommodation improvement of respondents and the result of difference in the average improvement mean of before and after membership between the respondents were a statistically significant a t= -17.22 which indicate there is statistical evidence to conclude members' average improvement of House and House Accommodation after membership was greater than before their membership at 5% level of probability.

The descriptive statistics result of the study on Members' House and House accommodation ownership as well as improvement was revealed similar results with the finding of Branch & Cora (1999), that had concluded SACCOs play a role in meeting housing accommodation needs and increasing wealth through savings which helps to break the vicious cycle of poverty and the finding results of Tesfamariam (2012), in Ofla Woreda of Mekele disclosed that member in SACCOs made additional assets in the form of new house construction and electronic and/or house equipment i.e., tape recorders, radio, television, and chairs being members.

4.1.3.3. Creating Employment Condition of Members

*T*able 4. 5: Descriptive Statistics of Creating Employment Condition Variables

Variable Total Respondent (**n= 137**)		Frequency	Percent	*Test (P-value)*
Self-employment opportunity	Never	26	18.98	
	Temporary	94	68.61	Ch-77.62*(0.0001)
	Permanent	17	12.41	
Type of employment undertaken	Full time	20	18.02	
	Part time	76	68.47	
	Seasonal	13	11.71	Ch-117.8* (0 .0001)
	Other	2	1.80	
	Total	= 111		
Family member employment opportunity	Yes	55	40.15	
	No	82	59.85	

	Obs	Mean	S. dev	Min.	Max.
Number of individuals employed	64	1.078	0.599	0	2

Total Respondent (**n= 137**)	Frequency	Percent	*Test (P-value)*
Contribution of the SACCO to create Employment Very Low	37	27.01	
Low	10	7.30	
Medium	46	33.58	52.8* (0 .0001)
High	40	29.20	
Very High	4	2.92	

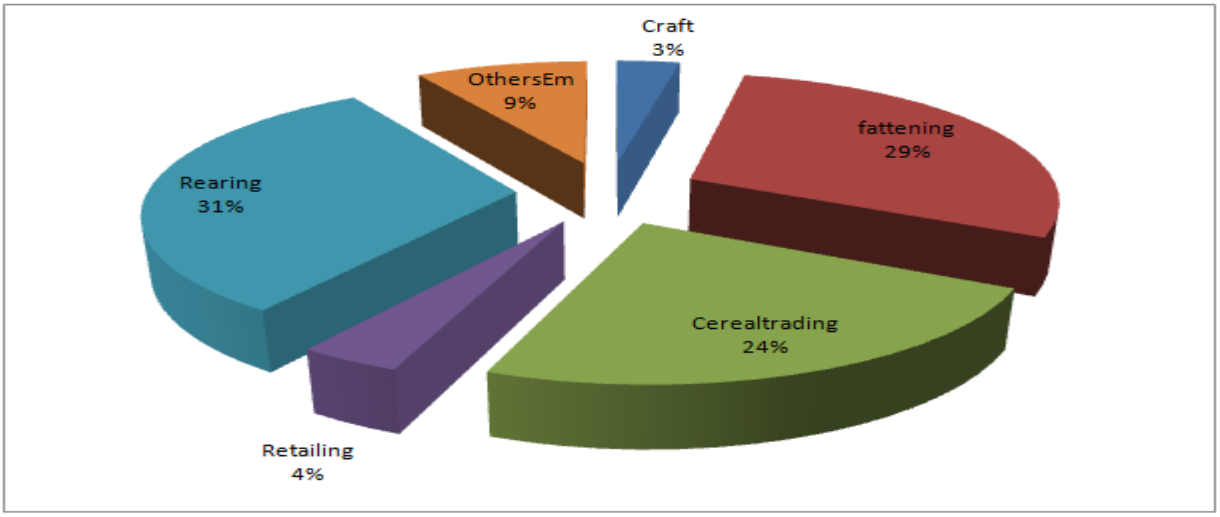
Source: Own survey, 2019.
Note: * means significant at 5% probability levels.

From the above table descriptive statistics results of employment condition of members after their membership, 18.98% of the respondents were replied that the SACCO never creates self-employment conditions for them where as the others that means 81.02% of the respondents replied that it had helped them to create their own employment as permanent and temporary opportunity which were (68.61% of the respondents said temporary while the rest 12.41% of respondents replied that permanent)with the help of their SACCO activities. As a result the SACCOs had created a temporary self-employment opportunity for their members with a chi-square goodness of fittest result =77.62 at (P-value = 0.00001) with a 5% of confidence level as shown in the table.

The employment opportunities created were 18.02%, 68.47%, 11.71% and 1.80% under taken on Full time, Part time, Seasonal and other than listed and concluded that the type of employment created were undertaken on a part time bases with a Ch-117.8 at (P = 0 .00001) at 5%.The number of individuals who were created employment opportunity by members with the help of the SACCO was1.078 on average with a standard deviation of 0.599 by 55 respondents out of the total respondents and employment opportunity other than themselves for their families with yes or no question as indicated in the above table the result shows 40.15% of the respondents relied Yes and 59.85% of the respondent replied No which shows majority of the respondents were not create employment opportunities for their families. The extent level of SACCOs contribution in creating employment condition for members and their families were shown in the above table revealed that 27.01% were viewed of the Very Low extent, 7.30% were of the view of the Low extent, 33.58% were of the view of Medium extent, 29.20% were viewed of the High extent while 2.92% were of the view of Very High. The finding implies that majority of the respondents viewed that SACCOs had contribute Medium level as a result of chi-square goodness of fittest results = 52.8 at (p-value = 0 .00001) with a 5% level of confidence interval.

The major types of employment created by members due to the contribution of their SACCOs

Figure 4: Major Types of employment created by SACCO members due to their SACCO



Source: Own survey, 2019.

The above chart depicts that the types of employment condition created by SACCOs members with the help of their SACCOs provision of credit with low interest rate. The chart indicates that majority (31%) of the job created by members were rearing animal followed by animal fattening which constitute (29%), cereal trading covers (24%) of the employment created by members, crafts and retailing covers 4% and 3% respectively and others were 9% which are different micro trading activities not listed her according to the sample respondents reply. As a result the major jobs created were Animal husbandry in general.

4.1.3.4. Descriptive Statistics Results of SACCOs Operational Performance

The total average performance of the SACCOs were calculated and tested through changing the extent level of each indicator variables of performance used in this study as depicted in the table;

Table 4. 6: Descriptive Statistics of SACCOs' performance Variables

One-sample t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
TotalP	137	2.74708	.0251801	.2947261	2.697285	2.796876

mean = mean(TotalP) t = -10.0444
Ho: mean = 3 degrees of freedom = 136

Ha: mean < 3 Ha: mean != 3 Ha: mean > 3
Pr(T < t) = 0.0000 Pr(|T| > |t|) = 0.0000 Pr(T > t) = 1.0000

Source: Own survey, 2019.

As shown in the above table total average performance of the SACCOs were 2.747 with standard deviation of 0.295 through assuming a 0.025 standard error. The study had used one-sample t-test to test if there was statistical evidence to reject sample mean and the result from the t-test weret-10.044value, which is no statistically significant different from the test value of 3., which indicates no statistical evidence to reject the sample mean and can be concluded that the SACCOs' performance has a significantly less than or equal to 3 which indicate that the average total performance of the SACCOs were Medium.

Regarding the results of general questionnaire provided for respondents bring up that SACCOs were better and cheaper that can help them to increase their income through providing credits and consultation service with low interest fee to improve their income source and increasing saving culture than borrowing from other financial institution sources The SACCOs had an impact on their housing and its accommodation by improving the quality of their ownership of household accommodation through increasing their income and directly providing credit to fulfill their requirement according to the response of the respondents' general questionnaire related with impact of SACCOs on their hosing and house accommodation concerned. Related with creating employment condition they had replied that it had a greater contribution to engage in different types of job as a permanent and temporary through fulfilling the financial needs of their required amount to start different types of business.

4.2. Inferential Statistical Analysis

4.2.1. Improvements of members' income

The causality relationship with performance indicator were analyzed using multiple regression analysis by identifying the relationship between dependent variable income as a function of SACCO services delivered independent variable as the findings were presented in below table;

Table 4. 7: Multiple linear regression results of members' income improvement

Source	SS	df	MS		Number of obs =	137
					F(7, 129) =	51.20
Model	14.7140269	7	2.10200385		Prob > F =	0.0000
Residual	5.29600956	129	.041054338		R-squared =	0.7353
					Adj R-squared =	0.7210
Total	20.0100365	136	.147132621		Root MSE =	.20262

IncomeAf	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Capital	-.0009719	.0402479	-0.02	0.981	-.0806033	.0786594
Consistency	.0309099	.0251176	1.23	0.221	-.0187858	.0806056
Saving	-.0170488	.0296366	-0.58	0.566	-.0756855	.0415879
Time	.0100812	.0311886	0.32	0.747	-.0516261	.0717885
Credit	.2453177	.0277527	8.84	0.000	.1904084	.3002271
Consultation	.0057858	.0246833	0.23	0.815	-.0430507	.0546222
Dividend	.282412	.0252921	11.17	0.000	.2323709	.3324531
_cons	1.552583	.209066	7.43	0.000	1.138941	1.966225

Source: Own survey, 2019.

The model summary revealed coefficient of determination between the independent variables and dependent variable indicated by (R^2) value of 0.7353 and adjusted R^2 of 0.721 shows that 73.53% of the variation in members income explained by the seven explanatory variables of the SACCOs function performance which had been comprised, the remaining 26.47% of the variance is explained by other variables which are not included on the model and the model had been correctly computed at (p=0.000).The study findings revealed that there was a significant causality relationship between credit and dividend with members' income improvement (p=0.000),but there was no significant causality relationship with the other independent variables used in this study except the constant term at a 5% level of probability.

As a result the findings for the regression equation could be formulated to estimate the members' income improvement would be as follows:

Y (Income improvement) = 0.245(Credit)+ 0.282(Dividend) + 1.55 + Є

The study were also analyzed the effect of SACCOs' overall performance on members income improvement using a simple linear regression model as shown in the following table;

Table 4. 8: Simple linear regression results for average members' income improvement

Source	SS	df	MS	Number of obs =	137
				F(1, 135) =	43.57
Model	4.88245231	1	4.88245231	Prob > F =	0.0000
Residual	15.1275842	135	.112056179	R-squared =	0.2440
				Adj R-squared =	0.2384
Total	20.0100365	136	.147132621	Root MSE =	.33475

IncomeAf	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
TotalP	.6785604	.1027986	6.60	0.000	.4752563	.8818645
_cons	1.497168	.2868792	5.22	0.000	.9298095	2.064527

Source: Own survey, 2019

As the above simple linear regression model revealed the correlation coefficient of determination (R^2) value of 0.2440 and adjusted R^2 of 0.2384 indicates that 24.40% of the variation in members income improvement was due to the SACCOs performance, the remaining 75.6% of the variance was explained by other than the function of the SACCO variables used in which the model had been correctly computed (p=0.000) at a 5% level of confidence interval.

The study findings showed that there was a positive significant causality relationship between members' income improvement with the average performance of the SACCO at (p = 0.000) and the constant term was also significant at a 5% level of confidence interval, which means that, the SACCO performance were positively contributed for the improvements of members income the variable using the following equation;

Y (Income improvement) = 0.679(SACCO performance) + 1.5 + Є

As a result the researcher had concluded that for each unit of members' income improvement the SACCO had contributed 67.90% which was indicated from the above regression equation,but their income had improved in 24.40% due to the SACCO performance indicators incorporated in the model in Dessie-zuria District so that if the SACCO performs more they could be change the members income more than what it was existed now.

4.2.2. Improvements of members' House and House Accommodation

Table 4. 9: Multiple linear regression results for House and its accommodation

Source	SS	df	MS		Number of obs =	137
					F(7, 129) =	12.28
Model	12.0135108	7	1.71621583		Prob > F =	0.0000
Residual	18.0311972	129	.139776723		R-squared =	0.3999
					Adj R-squared =	0.3673
Total	30.044708	136	.220916971		Root MSE =	.37387

HouAccAf	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Capital	.0301211	.0742644	0.41	0.686	-.1168128	.177055
Consistency	.1650226	.0463463	3.56	0.001	.0733252	.25672
Saving	.159103	.0546847	2.91	0.004	.0509079	.267298
Time	.0058956	.0575484	0.10	0.919	-.1079653	.1197565
Credit	.0290454	.0512086	0.57	0.572	-.0722721	.1303628
Consultation	.2762558	.045545	6.07	0.000	.1861439	.3663677
Dividend	-.0439128	.0466684	-0.94	0.348	-.1362474	.0484217
_cons	.9100204	.3857636	2.36	0.020	.1467777	1.673263

Source: Own survey, 2019

From the above result, overall the model revealed that the correlations coefficient of determination between the independent variables and dependent variable indicated by (R^2) value of 0.40 and adjusted R^2 of 0.3677 shows that 40% of the variation in members house and its accommodation improvement was explained by explanatory variables of the SACCOs function performance that had included in the model, the remaining 60% of the variance is explained by other variables which are not included on the model while the comparison was significant to imply that the model had been correctly computed (p=0.000) at a 5% confidence level.

The overall the model results which indicates the collective impacts of all independent variable was significant at (F-value = 0.000), at a 5% confidence interval .

The study finding disclosed that there was a significant causality relationship between members' house and its accommodation improvement with consistency at (p=0.001),saving(p=0.004) and consultation at (p = 0.000) respectively but doesn't had a significant relationship with the other independent variables used in this study except the constant term at a 5% level of probability.

As a result the findings of the regression equation could be formulated to estimate the members' House and its accommodation improvement would be as follows:

Y (House improvement) =0.165(Consistency) +0.159(Saving) + 0.276(Consultation) + 1.55 + €

There was a positive relationship between explanatory with the outcome variable imply for each unit of members' House and its accommodation improvement the performance of the SACCO would contributed positively.

The impact of overall performance of the SACCO on members' House and its accommodation were also predicted using a simple regression model as shown below table through regressing the members' total average House and its accommodation with the average total performance.

Table 4. 10: Simple linear regression results average House and its accommodation improvement

```
. regress HouAccAf TotalP

      Source |       SS       df       MS              Number of obs =     137
-------------+------------------------------           F(  1,   135) =   40.40
       Model |  6.91959563     1  6.91959563            Prob > F      =  0.0000
    Residual |  23.1251124   135  .171297129           R-squared     =  0.2303
-------------+------------------------------           Adj R-squared =  0.2246
       Total |  30.044708    136  .220916971           Root MSE      =  .41388

------------------------------------------------------------------------------
    HouAccAf |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      TotalP |   .8078112   .1270997     6.36   0.000     .5564471    1.059175
       _cons |   .3554195   .3546959     1.00   0.318    -.3460599    1.056899
------------------------------------------------------------------------------
```

Source: Own survey, 2019

As the above simple linear regression model revealed the correlation coefficient of determination between the independent variables and dependent variable indicated by (R^2) value of 0.2303 and adjusted R^2 of 0.2246 shows that 23.03% of the variation in members house and its accommodation improvement was due to the SACCOs performance, the remaining 76.97% of the variance was explained by other variables which was significant to imply that the model had been correctly computed (p=0.000) at a 5% confidence interval.

The study findings revealed that there was a positive significant causality relationship between members' house and its accommodation improvement with the average performance of the SACCO at (p = 0.000) but the constant term was not significant at a 5% level of confidence interval, which means that as the SACCO performance increase the improvements of House and its accommodation of members had also increased as explained in the following equation;

Y (House improvement) = 0.808(SACCO performance) + Є

Based on the result the researcher concluded that due to the SACCO performance members' house and its accommodation had improved by 80.80%, but its coefficient of determination to change members' house and its accommodation were by 23.03% in Dessie-zuria District. If the SACCOs had performs more they could be change the members' house & its accommodation more than what it was.

4.2.3. Change in Employment Condition of members

Table 4. 11: Multiple Ordered Logistic Regression results of Members employment condition

Ordered logistic regression — Number of obs = 137; LR chi2(7) = 17.64; Prob > chi2 = 0.0137; Log likelihood = -141.63726; Pseudo R2 = 0.0586

SACCOemp	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Dividend	.0592431	.246551	0.24	0.810	-.4239881	.5424742
Consultation	-.0010155	.2273717	-0.00	0.996	-.4466558	.4446247
Credit	.8636125	.2913994	2.96	0.003	.2924801	1.434745
Time	.2057092	.2982715	0.69	0.490	-.3788922	.7903106
Saving	-.3411575	.2778754	-1.23	0.220	-.8857833	.2034682
Consistency	.4098115	.2347009	1.75	0.081	-.0501938	.8698167
Capital	.2372195	.3782542	0.63	0.531	-.5041451	.9785842

Source: Own survey, 2019

The results indicate that the overall model was statistically significant at (p = 0.0137), but each of the predictor variables were not significant except Credit (p = 0.003) at 5% level of confidence interval. There were two cut points for this model because there are three levels of the outcome variable; those were Low, Medium and High levels of employment condition for members due to this the cut pint had been two with the same probability of coefficients assigned.

One of the assumptions underlying ordinal logistic regression is that the relationship between each pair of outcome groups is the same. In other words, ordinal logistic regression assumes that the coefficients that describe the relationship between, say, the lowest versus all higher categories of the response variable are the same as those that describe the relationship between the next lowest category and all higher categories, etc. because the relationship between all pairs of groups is the same, there is only one set of coefficients.

The study findings revealed that there was a significant causality relationship between credit with members' employment condition at (p=0.003),but there was no significant relationship with the other independent variables used in this study as a predictor variable at a 5% level of confidence interval.

As a result the findings for the logistic regression equation could be formulated to estimate the members' employment condition would be as follows:

Y (Employment condition) = 0.86(Credit) +Є

The effect of SACCOs' explanatory variables (function) in contributing for members' employment condition was explained in positive relationship with the outcome variable imply for each unit's increment of members' employment condition created credit provision of the SACCO would contributed 86%. This indicates that there was a higher positive direct causality relationship between members employment creation condition and credit provision performance of SACCOs, which implies as the performance of Credit provision for their members' increased by the SACCOs the employment creation condition of members will be directly increased.

Table 4. 12: Simple Ordered Logistic Regression results of Members employment condition

Ordered logistic regression — Number of obs = 137; LR chi2(1) = 2.52; Prob > chi2 = 0.1127; Log likelihood = -149.20053; Pseudo R2 = 0.0084

SACCOemp	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TotalP	.9000915	.5703473	1.58	0.115	-.2177686	2.017952
/cut1	1.83825	1.585323			-1.268927	4.945426
/cut2	3.257114	1.60294			.1154089	6.398818

Source: Own survey, 2019

The above simple logistic regression analysis results of the contribution of SACCOs overall Average performance to create members' employment condition indicate that the overall model was not statistically significant evidence that supports coefficients of contribution since the probability value (chi^2 = 0.1127) was not significant at 5% level of confidence interval with a two cut points model due to there were three levels of the outcome variable with the relationship between all pairs of groups is the same, only one set of coefficients.

The study findings revealed that there was no statistical evidence that support the overall average performance of the SACCOs had a significant causality relationship with creating employment condition for members at a 5% level of confidence interval.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. CONCLUSIONS

The descriptive statistics analysis resulted to contribution of SACCOs on average income improvement of members' concerned the paired wise two samples mean comparison test indicates there was statistical evidence that indicates members' average income improvement after their membership was greater than before their membership improvement at a 5% level of confidence interval. Concerning analysis results of SACCO members' House and House Accommodation improvements concerned, there was statistical evidence to concluded members' average improvement of House and House Accommodation after membership was greater than before their membership at 5% level of probability. The descriptive statistics results of SACCOs contribution in creating employment opportunities for their members' and their families indicates that there was significant statistical evidence that support SACCOs created employment opportunities at a Medium extent level. The descriptive statistics results on the performance of SACCOs had also indicates that there was significant statistical evidence on average total performance of the SACCOs were 2.747 with a standard deviation of 0.295 through assuming a 0.025 standard error which indicate a Medium performance using one sample t-test results.

Regarding the inferential statistics results of the multiple linear regression model of the study findings on improvements of members' income shows there was a significant causality relationship between members' income improvement with credit at (p=0.000) and with dividend at (p=0.000) at a 5% level of probability. The finding had also revealed that there was a significant causality relationship between members' house and its accommodation improvement with consistency at (p=0.001), saving at (p=0.004) and consultation at (p = 0.000) respectively at a 5% level of probability. The finding of employment condition of members using logistic regression had revealed with a significant causality relationship of creating members' employment condition with a credit at (p=0.003 at 5% level of probability.

Lastly, the study findings results of simple linear regression model analysis disclosed that there was a significant positive causality relationship between the average performance of the SACCOs with members' income improvement at (p = 0.000) and with members' house and its accommodation improvement at (p = 0.000) at a 5% level of confidence interval, which leads to concluded that there were statistical evidence at 5% level of probability to conclude SACCOs had its own positive impact through contributing to improve members' income and their house and its accommodation, whereas there was no any significant statistical evidence at 5% level of probability to concluded that SACCOs overall performance had contributed for creating employment opportunity condition for their members and family members in general.

5.2. RECOMMENDATIONS

SACCOs had expected to have their own effect to improve the economic conditions of members' through improving income, their house and its accommodation and crating employment opportunities for themselves and their families unless, they will not be viable. To do so the performance efficiency had to be improved towards higher levels. Based on the observed findings the researcher forwards the following recommendations;

SACCOs had to reverse its Low performance through exploiting existing favorable opportunities to solve the members' common economic problems and could bring higher impact on through;

1. Planning their activities in detail and then periodically review what was performed and what activities had left
2. Increase members awareness on the benefits of Saving and capital amounts of collection in training and consultation through;
    - Diversifying the types of saving products in the SACCOs like- interest free, non-regular, children, education and other types of saving
    - Diversify the benefit of members in dividend allocation and providing other preferential benefits for those who had higher capital in the SACCOs in addition to other criteria used in dividend allocation
    - Providing alternative option for members to deposit and withdraw non-periodic saving with their consent like other financial institutions.
3. Assigning a caliber manager who can control the overall performance of the SACCOs in light with the economic needs of members.
4. Align the loan re-payment schedule of loan client members with their production time
5. Coordinate with other types of cooperative to acquire finance when the loan requests of members become higher that it's capacity to solve members finance requirement rather than reducing the amount they required.
6. Keep consistent and reliable service for all members at all time to increase members' sense of ownership for their SACCOs.
7. Undertaking feasibility study for different source of income for members with collaboration the district office experts to increase members income

Moreover further research had recommended to be conducted in the study area about the Impact of SACCOs on Members' Economic improvements through comparative analysis with none-members economic improvement, Impacts of SACCOs on their members' Economic improvement through trend analysis using time series data of members and it had to be also conducted through comparative analysis with other types cooperative organization impact analysis.

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3. Analysing of Determinants of Households' Resilience to Food Insecurity in Gubalafto District, North East Ethiopia

BY: Dr. Mohammed Teshome

Introduction

1. Background

Ethiopia is one of the populous countries in Africa having majority of the population settled in rural areas. The country's economy is dependent on rainfed agriculture. About 42 % of country's Gross Domestic Product (GDP), 79.3% of employment and 90% of export come from agriculture sector and the government expenditure on agriculture reached at 17.5% of total outlay of government in 2014.

The country has heterogeneous topography and highly variable tropical monsoon climate which is suitable for diverse cropping and livestock development. Arable land of the country is around 15.1%. Despite potential farmlands, suitability of climate and river water resource, only limited resources are utilized. According to FAO (2015) report, 23 million hectares are harvested; 5% of land is irrigated and arable land per person is 0.16 hectares. Crop yields from small farms are low and agriculture value added per worker is 278 USD, which is below regional averages. Agricultural market linkages are weak and the use of improved seeds, fertilizers and pesticides remains limited (USAID, 2014).

After the end of civil war in 1991, Ethiopia formulated agricultural led economic growth policy. Its prime objective is to sustainably enhance rural incomes and national food security focusing on irrigation development, market system and infrastructure development, livestock development and provision of safety nets to protect vulnerable households (CSA and WFP, 2014). Food Security Programmes (FSP) (formulated in 1996 and revised in 2002 and 2003/04) and National Nutrition programmes (NNP) (developed in 2008) are main active programmes of the country to reduce chronic poverty, food insecurity and malnutrition. Productive Safety Net Programme (PSNP) is one of the major components of food security programmes since 2005. Its objective is to prevent and build the depletion of household assets, to stimulate markets and improve access to basic services, and rehabilitate and enhance the natural environment through labour-based public works (USAID, 2014). The programmes target more than 6 million beneficiaries in more than 300 districts including the study area Gubalafto. It is also a multibillion and multi-funded programme and one of the largest safety net programme in Africa next to South Africa.

Despite the billions of government budget and international aid on reduction of chronic poverty and food insecurity since the end of the civil war in 1991 and having one of the world's sustained and fastest-growing economies at average annual growth rate of 8.5-10.5 % for the last 10 consecutive years, Ethiopia remains one of the poorest and chronically food insecure country of our planet. Moreover, these progresses have been uneven across regional states. Particularly, the progress in Amhara region, where the study area is located, is discouraging. Despite many efforts and interventions, the incidence of food insecurity and child malnutrition has been remained high

and the progress of food insecurity reduction in Amhara state is in devastating situation as progress hasn't been shown in reduction. For the last ten years (2000 to 2011) in Amhara, the number of rural people below rural food poverty line increased by 12% and the percentage of rural people living below food poverty line reached 42.5% of the population in 2011, while national rural average dropped by 6.4% and stood at 34.7% (MoFED, 2012). Among regional states, the highest prevalence of rural food energy deficiency is found in Amhara (49%) followed by Dire Dawa (42%) and Tigray (42%) based on 2,550 kcal per adult equivalent (CSA and WFP, 2014).

The trend and the level of energy consumption in Amhara regional state have been either stagnant or declining. It had shown a downturn in 2005 and had slightly increased only by 50 kcal from the year 2000 and reached at 2,195kcal in the year 2011, which is the lowest among regional states and lower than national average (MoFED, 2012). Similarly, the prevalence of child under five malnutrition is higher and severe public health problem in Amhara state having 52% stunted, 10% wasted and 33% underweight, while the national average is 44%, 10% and 29 % of children were stunted, wasted and underweight respectively in 2011(CSA and WFP, 2014).

Gubalafto district is one of drought prone area found in "Ethiopian famine Belt" of North Wollo zone in Amhara regional state. Since the 1950s, every 10 years Ethiopia has been hit by major famine and food crisis and many of these famines and food crisis experiences put their hoofmarks in North Wollo area, where the study area is situated. The 1953, 1957-58, 1962-66, 1977-78, 1984-85, 1987-88, and 2003-04 famine and food crisis traces this Zone including the study area. The district is drought prone and does not produce enough food even in the normal situation. The land is under heavy population pressure. The average cultivated land for poor farmers is 0.25 hectare and most of the better-off farmers possess not more than two hectares of land (MoARD, 2007). The sufferers of chronic food security and child nutrition in the district are enormous and deep-rooted as elsewhere in Amhara Regional State that needs to be studied in-depth and search appropriate solutions for the problem.

This study measures and identifies determinants of household resilience to food security at the district level, which is rarely studied in Ethiopia at all levels. Attempts were made by few researchers. For instance, Mulat and Negussie (2010) by employing two stages of estimation that at the first stage Principal Component Analysis (PCA) and at the second stage panel fixed model and dynamic panel model using micro panel data of Ethiopian rural households survey; Maxwell et.al (2013) (Tuft University/world vision) tried to measure resilience in two districts of Tigray in Northern Ethiopia using "livelihoods change over time" (LCOT) approach by collecting bi annual data of four rounds (in "hunger" and "postharvest" season); and other few studies by NGOs as impact evaluation of their resilience programmes and projects. So far, consensus has not been reached on how resilience can be measured, what analytical model should be used for it, what types of data should be collected at what point in time and interval, using what tools , techniques and type of analysis and at what levels and subjects (WFP, 2014). Different organizations such as FAO, Technical Assistance to NGOs (TANGO), World Food Programme (WFP), Tuft University and researchers have used different models and analytical framework. In this study, though we don't employ a new analytical framework, we adapted FAO's Resilience Index Measurement and Analysis (RIMA) model to measure resilience which is applied at country level such as in Palestine, Kenya, Somalia, Nicaragua, and Niger. This study tried to test the applicability and appropriateness of FAO's RIMA model at district level using household

level factors that probably determine the process of resilience at household level. Thus, the study will provide additional thoughts for further development of the model at a district level. The rest of the paper is organized as follows. Section two introduces methodology, section three presents result and discussion, and finally conclusion are made.

2. Methodology

2.1. Data Source and Collection

The study used two stage stratified sampling to select 230 households Four kebles1(villages) randomly selected, one from NHBlivelihood zone and 3 from NWElivelihood zone since majority of population is reside in NHB livelihood zone. Systematic sampling was used to select households from each of the kebelestaking into account the share of inhabitants in each kebele. In short, n^{th} of the household were selected from health extension workers household registration pad. Simple random sampling was made in the selection of the first household in each kebeles.

Two trained health extension workers were responsible to collects data in each kebeles. All information was taken from households‟ respective homes.

2.2. Measuring Household Food Security Status

The study applied four indicators to identify food secure and insecure households in the study area. These indicators are Direct Calorie Intake, Household Food Access Scale Indicator (HFASI), Food Consumption Score (FCS) and coping Strategy Index (CSI).

2.3. Measurement of Household Resilience to Food Security[1]

In the measurement of resilience to household food security, the study adapted FAO's Resilience Index Measurement and Analysis (RIMA) analytical framework model due to its applicability for our one time cross sectional data.

According to FAO, RIMA model is formulated from the concept that why one household bounce back to a desired level of food securities while its counterpart household does not. Hence, RIMA model captures the interaction between shocks and their effects on households, with resilience capacity of household taken as the reason for the difference in outcomes, in this case food security, between two similar households who are exposed to the identical shock.

Another concept which should be taken into account is vulnerability of household; though resilience is different from vulnerability in a sense that the later one explains the susceptibility of a household to harm and the immediate coping mechanisms adopted (FAO, 2015). But there are some variables that can be shared by both resilience and vulnerability such as the shocks, stresses adaptive capacity of the socio-economic system.

Briefly, the relation between resilience and the outcome for a given household (food security) and vulnerability can be expressed in equation (1) and 2) respectively as follows:

[1] This section mainly taken from FAO(2015): Resilience Index Measurement and Analysis model technical notes

$$Y_i^1 = f\left(Pr_g^0, Pr_{se}^0, R_i^0\right) \quad (1)$$

Equation 1 above shows the dynamic of an outcome variable Y_i in time 1 is a function of Pr_g, Pr_{se} and R_i during time 0 – i.e. before the shock occurred.

- Pr_g is the probability of a household to be reached by a natural crisis due to its geographical location.
- Pr_{se} is the probability of a household to suffer from a shock due to particular demographic and socio-economic characteristics of a household that determine its livelihood.
- R_i is the resilience of the system.

Equation 2 below shows that vulnerability is a function of a household's risk exposure and its resilience to such risks. Hence, vulnerability of the household *i* is a function of the exposure to risk and resilience.

$$V_i = f(exposure_{risk}, R_i) \quad (2)$$

The household resilience index can be expressed as follows

$$RI = (IFA + AA + NAA + ABS + HTL + SSN + S + HS + SPC + EC + AC \ldots\ldots (3)$$

Where RI = resilience Indicator; IFA = income and food access; ABS = access to basic services; AA = agricultural assets; NAA = non-agricultural assets; HTL = household technological level; SSN = social safety nets; S = stability; HS=Household structure SPC= social participation and capital; EC = economic connectivity; AC = adaptive capacity.

However, both the resilience (left hand side of the equation) and its dimension (determinants) on the right side of the equation are not observable. Every dimension needs to be estimated from other observable variables independently at time T_0 and then a composite index of household resilience is to be created. In short, two stages analysis strategy shall be followed and the diagram below shows how the resilience index can be estimated.

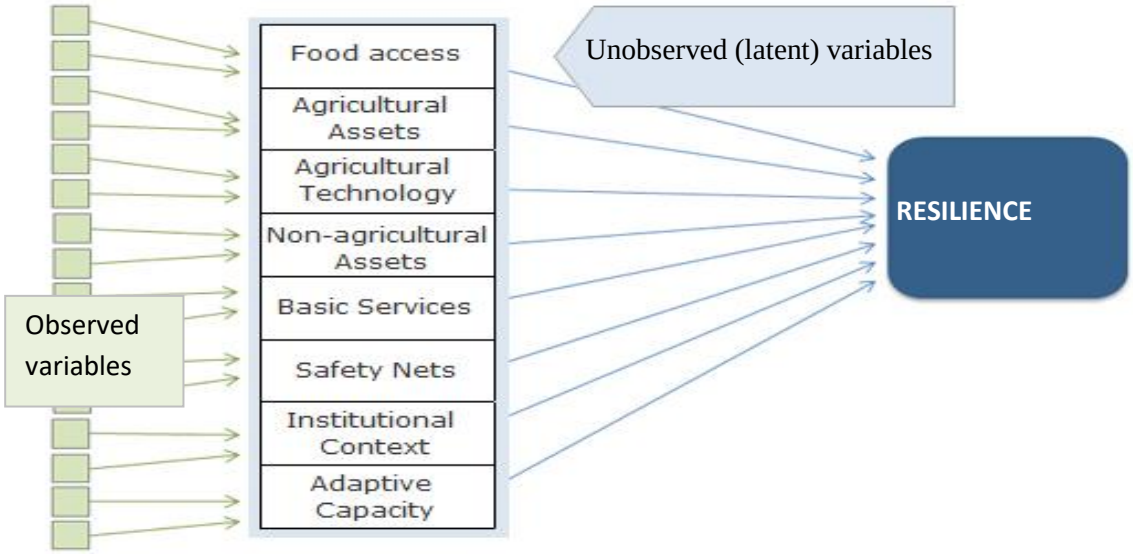


Figure 2.1
Estimation Procedure of RIMA Model

Source: FAO, 2012

In the first strategy, the latent dimensions of resilience index can be estimated through different factor analysis techniques such as iterated factor analysis, principal component analysis; multiple indicators multiple causes and so on. In the second stage Structural Equation Model (SEM) is used to estimate Resilience Index (RI) Originally, RIMA used two stage factor analysis strategy so that different factor analysis was used at the first stage to estimate dimensions of resilience (as we did in this study) and in the second stage, the resilience index is derived using a factor analysis on the interacting parameters estimated in the first stage.

Table 2.1

Description of Parameters/Dimensions of Resilience to Household Food Security

No.	Dimensions of residence(latent Variable)	Description	Expected relationship with resilience
1.	Income and Food Access (IFA)	This is the main indicator of food security. It includes household income level (proxied by expenditure), food consumption and diversity of foods.	+
2.	Access to Basic Services (ABS)	This shows households access to basic services such as access to school, markets, health facilities, toilets, water and so forth.	+
3.	Agricultural Assets (AA)	It is the main livelihood assets that rural households depend on. It includes land, livestock and tree plantation.	+
4.	Non-Agricultural Assets (NAA)	This includes houses and durable assets that are used for day to day activities and can be exchanged at the time of crisis.	+

5.	Household Technological Level (HTL)	This dimension includes the different technological levels in farming activities. Such as fertilizers, artificial insemination, pesticides, technological inputs and new agricultural practices adopted.	+
6.	Safety Nets (SN)	Social safety nets are important in mitigating crisis. It includes assistance from governments, NGOs, relatives and friends.	+
7.	Sensitivity to Shocks (S)	It indicates the degree of shocks that affects households and its frequency as well as steadiness and sensitivity of livelihood in the future.	+
8.	Adaptive Capacity (AC)	This shows the capacity of a household to adapt to a new situation and develop new sources of livelihood (e.g. having more sources of income may decrease the negative effects of shocks on a household).	+
9.	Household Structure (HS)	It takes into account dependency ratio and female ratio in the household.	-
10.	Economic Connectivity (EC)	This captures households connectivity to financial institutions i.e. access to credit, availability of bank account, situation of creditworthiness and indebtedness.	+
11.	Social Participation and Capital (SPC)	This shows households participation in community groups and associations and connectivity with friend(s). For example participation in farmers' association, *idir*, *equb*, cooperatives, number of friends.	+

The limitation behind the usage of factor analysis is that it assumes that the residual errors (i.e. unique factors) are uncorrelated with each other and are uncorrelated with the common (i.e. latent) variable. But, this is not an acceptable assumption in the analysis of food security that the problem of food security is multidimensional and these dimensions are interrelated, therefore, high intra dimension correlations are expected. Taking this into consideration, the study used structural equation, which allows the correlation between residual errors. In this study, the RIMA estimation is based on 11 variables. Unlike the previous studies, this study included new variable i.e. household social participation and capital that can probably determine the resilience of households. The short descriptions of dimensions of resilience are presented in the following table 3.1. List of observed variables used for estimation of the dimensions of resilience are also presented in chapter sex.

3. Findings and Discussions

3.1. Profiles of Food Security in Gubalafto District

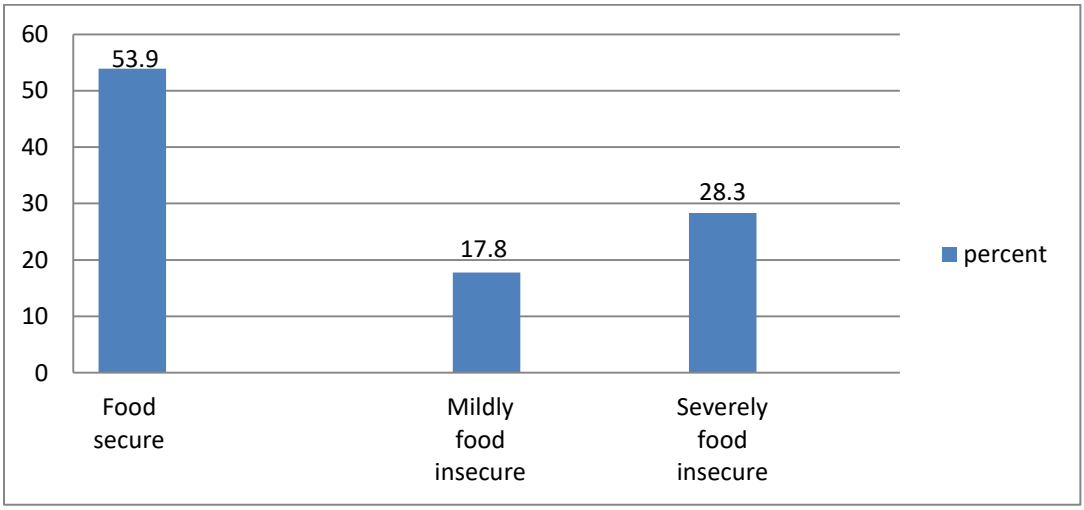
In this study, we tried to report the prevalence of food insecurity by employing four different indicators of food (in) security i.e. DCI, HFIAS, FCS and CSI that captures different dimension of food security such as quantity, quality, accessibility and adequacy.

Food Security Status Based on DCI

The DCI or calorie consumption indicator shows the quantity dimension of food security or food energy deficiency**.** There are different thresholds of calorie consumption to identify food secure and insecure individuals or households. The thresholds differ from institution to institution, country to country, and purpose of identification. In this study, we used 2,100 kcal daily per adult equivalent consumption as a threshold, which has been used by Government of Ethiopia and WHO, to identify food secure and insecure households. To show the severity of food insecurity status, we categorized those food insecure

Figure 3.1

Food Security Status Based on Kilocalorie Consumption



Source: Author's calculation from field survey, 2018

households into two categories i.e. mildly food insecure and severely food insecure if the household consumed from 1,650 to 2,100 kcal and below 1650 kcal per day per adult equivalent respectively. The finding indicates that 53.9 % of households are food secure, 17.8 % mildly food insecure and the remaining 28.3 % severely food insecure. The food insecure households in sum account 46.1 %. That means 46.1% of households were consuming below the minimum daily food consumption requirement threshold of 2,100 kcal.

Different decompositions/indices of food security have been estimated following **Foster**–Greer–**Thorbecke** (FGT) decomposition method taking 2,100 kcal per adult equivalent per day as a threshold. The widely used FGT indices are head count ratio, prevalence ratio and severity ratio. As shown in the table below, using 2,100 kcal threshold, the head count, prevalence and severity ratio are 0.46, 0.18 and 0.043 respectively. The head count ratio indicates how much of the households fall below the food security line threshold of 2100 kcal. In other words, 28.3% of sampled households were living in food energy deficiency or food insecurity. They did not consume the minimum amount of calories required to keep on healthy and maintain regular physical activity. However, the head count ratio doesn't indicate the extent of food security. It can be captured by prevalence or gap index. In the study area, the gap index is estimated to be 0.18 which indicates the average proportionate food insecurity gap in the population (where the

food secure households have zero gaps). The figure has also an important implication for policymakers and development actors since it shows how much resources have to be required for those food insecure households to bring them to minimum food energy intake and become food secure. It also shows the extent of the gap that has to be filled up to the minimum daily requirement. However, it doesn't show the extent of inequality among the insecure households. The inequality among the food insecure can be captured by the square gap/severity index and it is found to be 0.043.

Table 3.1

Food Security Indicators Based on Kilocalorie Consumption

Food Security Indices	Below 1650 kcal	Below 2100 kcal
Head count	0.283	0.461
Prevalence	0.125	0.183
Severity	0.023	0.043

Source: Author's calculation from field survey, 2018

As shown in the table below, the mean daily per adult kilocalorie consumption is 2,717 kcal with high intra-household variation (SD = 712). The minimum and maximum daily per adult consumption kilocalorie is 1,423.6 and 4,142 kcal respectively. The mean daily per adult kilo calorie consumption found in this study is below the mean of rural areas at country level (3,164 kcal) and slightly falls below the mean of rural Amhara (2,758 kcal) in 2011 survey. This shows how deep the food security situation is in the study area even after 3 years of the national survey.

Table 3.2

Summary Statistics of Level of Kilocalorie Consumption

Indicators	kcal
Mean	2717.
Minimum	1423.6
Maximum	4142.9
SD	712

Source: Author's calculation from field survey, 2018

Food Security Status Based on HFIAS

Household Food Insecurity Access Scale (HFIAS) assesses whether households have experienced problems in food access in the preceding 30 days. The HFIAS module has four indicators which give summary information on Household Food Insecurity Access-related Conditions, Household Food Insecurity Access-related Domains, Household Food Insecurity Access Scale Score, and Household Food Insecurity Access Prevalence. These indicators are

helpful to understand the behaviours, characteristics and changes in household food insecurity (access) in the surveyed population.

However, for simplicity of works, the study only reports Household Food Insecurity Access Scale Score (mean of scores) and Household Food Insecurity Access Prevalence which categorizes households into four different levels of food security (access) status based on the occurrence of accessibility questions and scores.

The food insecurity status according to HFIAS is presented in the table below. The score ranges from 0 to 27. The household could score 0 if they respond "no" to all occurrences of questions. In contrast, the household could score 27 if they respond "often" for all occurrences of questions. The lower the score, the less food insecurity (access) a household experienced. The higher the score, the more food insecurity (access) the household experienced. As shown in the table below, the mean HFIAS is estimated to be 6.1, having the minimum of 0 score and maximum of 26. The standard deviation of 6.22 indicates the presence of high variation among households.

Table 3.3

Summary Statistics of Level of HFIAS

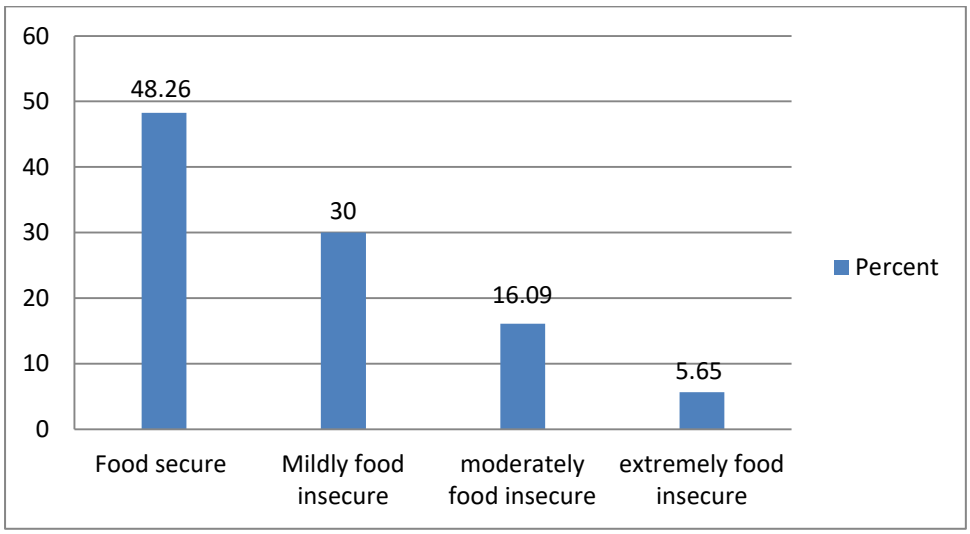
Indicators	HFIAS
Mean	6.1
Minimum	0
Maximum	26
SD	6.2

Source: Author's calculation from field survey, 2018

However, HFIAS score has no clear cut-off points for categorization of households to different level of food security. For categorization of household food security status, the study used one of the indicators/components of HFIAS module called HFIAP indicator. According to HFIAP, households food security status can be categorized into four based on the response, behaviour and experience of households food access condition. Since HFIAS score is expressed on a continuous scale, it is more sensitive to capture smaller increments of changes over time than the HFIAP indicator. Therefore, the HFIAP indicator should be reported in addition to the average HFIAS score for programme monitoring and evaluation (Coates et.al 2007).

Based on the FAO (2007) procedure, the result of HFIAP is presented in the table below. The finding indicates that 48.26% of households are food secure, 30% mildly food insecure, 16.09 % moderately food insecure and 5.65 % extremely food insecure. In sum, all types of food insecurity account 51.74%. That means more than half of households faced food accessibility problem in the study area.

Figure 3.2
Food Security Status Based on HFIAS



Source: Author's calculation from field survey, 2018

Food Security Status Based on FCS

FCS shows both the quantity and quality dimensions of food security in combination. It is a composite score based on dietary diversity, food frequency, and the nutritional importance of food groups consumed during the last 7 days (WFP, 2008). The score ranges from 0 to 112. The household would score 0 if they didn't eat any food during the last 7 days; whereas the maximum FCS would be scored if a household consumed each food group every day during the last 7 days. The lower the score, the more food insecurity a household experienced. The higher the score, the less food insecurity the household experienced in terms of quantity and quality.

The following table presents the result of FCS. As shown in the table below, the mean FCS is 31.7 having the minimum score of 19.5 and a maximum of 49.5. The standard deviation of 7.7 indicates relatively higher intra-household variation in FCS.

Table 3.4
Summary Statistics of FCS

Indicators	**FCS**
Mean	31.7
Minimum	19.5
Maximum	49.5
SD	7.6

Source: Author's calculation from field survey, 2018

The food quality /diversity of household food consumption for each food groups over seven days reference period is shown in the table below. In the study area, staples are the most frequently consumed food groups and are the main source of kilocalorie consumption. The frequency of fruit, meat and dairy food groups are very low. Except staple food groups, the frequency consumption of each food groups are below the average of Amhara state and rural Ethiopia (except pulses which are slightly more than the average of rural Ethiopia) as of 2011 estimation. This indicates that after three years of the national survey, the quantity and quality of food consumption in the study area are below the average of regional and country level because of deep-rooted and severe food security situation in the district.

Table 3.5

Mean Number of Days of Consumption (out of 7) of All Food Groups

Country/ State/District	Staples	Pulses	Vegetables	Fruits	Meat	Dairy	Sugar Or Honey	Oil
Amhara**	7	5.7	5.5	0.2	1.6	0.6	1.4	3.7
Ethiopia (rural) **	6.5	4	5	0.5	1	1.6	1.4	4.2
Gubalafto district*	7	4.5	4.7	0.1	0.3	0.2	1.3	3

Source: * Author's calculation from field survey, 2018, ** CSA and WFP, 2014.

When we look at the number of food variety consumption for seven days recall period, large number of households consumed less variety of foods. Taking consumption of three and fewer food groups as a benchmark, around 39% of households in the study area consumed three or fewer food groups in seven days. Compared to the national and regional situation in comparable study, this figure is almost comparable to the average of rural Amhara regional state but above the average of the rural Ethiopia that 40.6% and 33.5% of households consumed three or fewer food groups in seven days respectively in 2011.

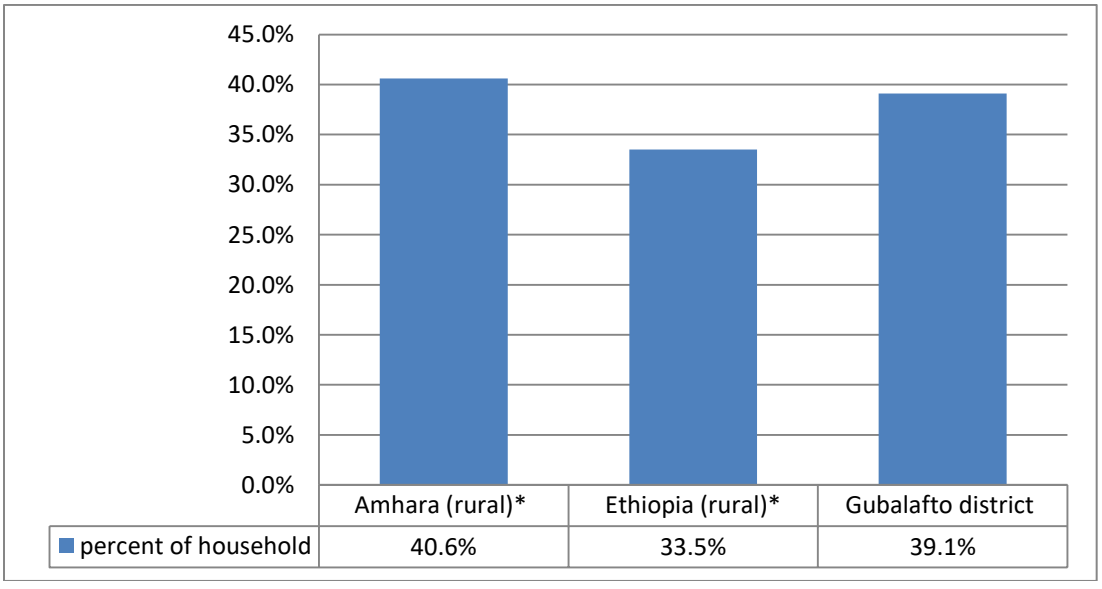
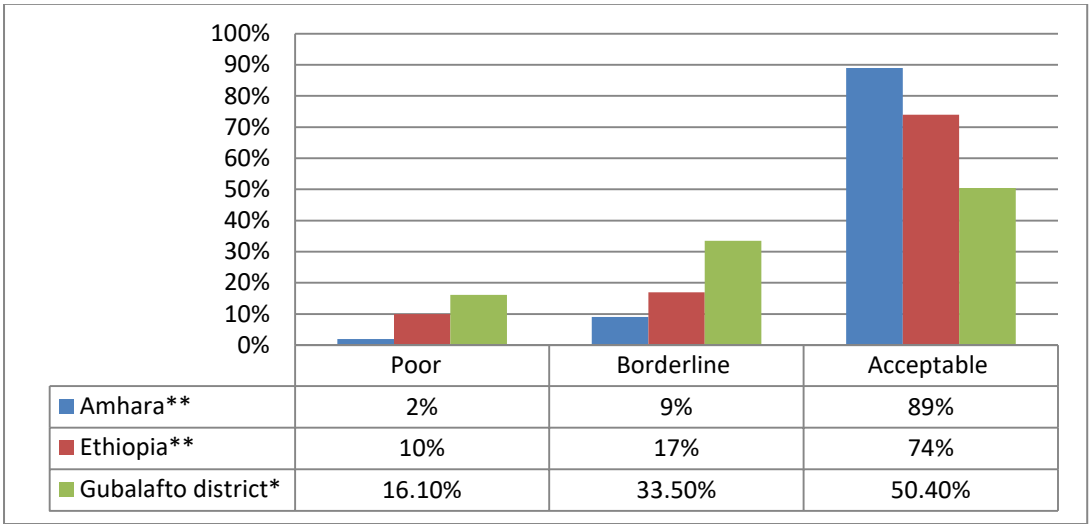


Figure 3.3
Percentage of Households Who Consumed 3 or Fewer Food groups in 7 Days

Source: Author's calculation from field survey, 2018, ** CSA and WFP, 2014

Besides the mean score of FCS, the study reports the food security status of household based on FCS. In FCS, there are two kinds of cut-offs that determine the status of food security depending on the frequency of consumption of oil and sugar in the society i.e. either FCS score of 21 and 35 or 28 and 42. If the consumption of oil and sugar is not frequent, the former one can be used to determine food security status. Accordingly, below FCS score 21 is considered as poor, above 35 acceptable and between 21 and 35 as borderline. However, this can be raised from 21 and 35 to 28 and 42 if sugar and/or oil consumption are frequent among nearly all households surveyed, even when the consumption of other food groups is rare (WFP, 2008).

The consumption of oil and sugar is not frequent in the surveyed households. Therefore, the 21 and 35 thresholds have been selected to determine the status of household food security status based on FCS. The figure below shows household food security status as measured by FCS. The result shows that almost half of the household have acceptable FCS score (greater than 35). Around 33 % of households are on borderline having FCS of 21 to 35. Almost 16% of households have poor FCS which is below 21. As it can be seen from the table below, the share of households in poor, borderline and acceptable consumption in Gubalafto district is higher than the 2011 estimation for Amhara regional state and Ethiopia in comparable study.



	Poor	Borderline	Acceptable
Amhara**	2%	9%	89%
Ethiopia**	10%	17%	74%
Gubalafto district*	16.10%	33.50%	50.40%

Figure 3.4 Food Security Status Based on FCS

Source: * Author's calculation from field survey, 2018, ** CSA and WFP, 2014.

Food Security Status Based on CSI

Another food security indicator is Coping Strategies Index (CSI). It assesses the behavior of households exercise in order to cope with a shortfall of food. The score is constructed through a series of questions about how households manage to cope with a shortfall in food for consumption and their frequency in order to get a numeric score (Maxwell and Caldwell, 2008).
A number of formats and questions have been used by different researchers in different countries to access CSI. In this study, we have adapted eleven questions out of 13 set questions and frequency/severity value of 0 to 4 where "0" (Never), "1" (Hardly at all; <1 time/week), "2" (Once in a while; 1–2 times/week), "3" (Pretty often; 3–6 times/week), and "4" (Always; every day). Then the severity of frequencies is multiplied by weights of each question/coping strategies to get scores for each household. The higher the CSI score, the more food insecurity the household experienced and vice versa.

By doing so, the following table shows the result of CSI. As shown in table 4.6, the mean CSI score is found to be 14.8 with standard deviation of 14.22 which indicates the existence of high variation among households in CSI score. This indicates that some households have used severe strategies frequently to cope with food deficit. The minimum and maximum scores of CSI are found to be 1 and 43 respectively. Surprisingly, no zero score is reported, which indicates the best food security condition of households.

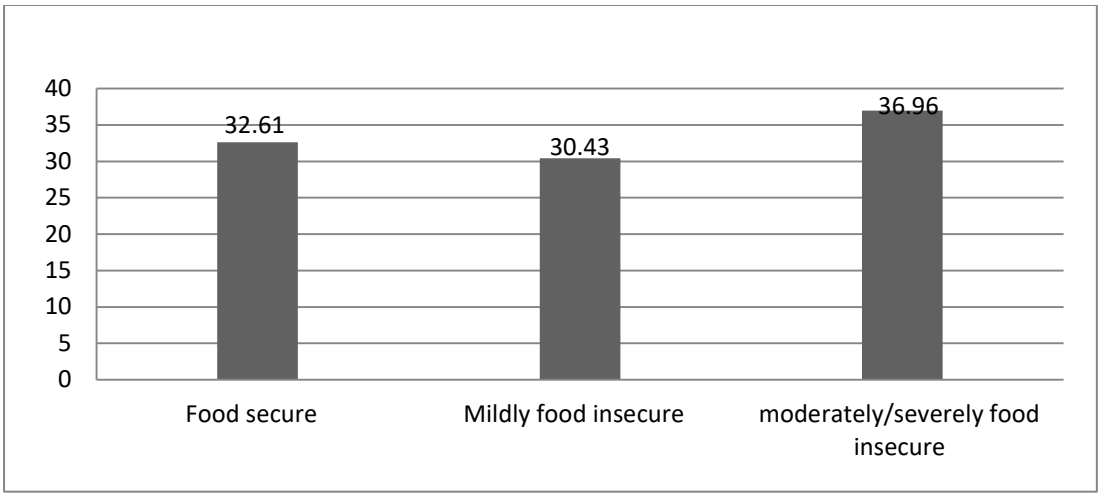
Table 3.6 Summary Statistics of CSI

Indicators	CSI
Mean	14.8
Minimum	1
Maximum	43
SD	14.22

Source: Author's calculation from field survey, 2014

The CSI method does not have any universally accepted cut-offs to categorize households into different level or status of food security. Hence, we adapted Maxwell et.al (2012) classification made for Tsaeda Amba and Seharati Samra district in Tigray state in northern Ethiopia. The number of questions, frequency, weight and time reference of CSI format for this and Maxwell et.al (2012) study for the above mentioned districts are the same and made the adaption of classification easy. According to Maxwell et.al (2012) classification, CSI score from 0-2 were considered as food secure, from 3-12 mildly food insecure and 13 and above as moderately/severely food insecure. Accordingly, the majority of households (36.96%) are categorized as moderately/severely food insecure and 30.43% as mildly food insecure households in the study area. In total, around 67.59% of households are food insecure based on CSI score. The remaining 32.41 % of households are identified as food secure.

Figure 3.5
Food Security Status Based on CSI



Source: Author's calculation from field survey, 2018

In general, the four indicators of food security show different prevalence of food insecurity. The minimum prevalence of food insecurity is reported in DCI (46.1%) and the maximum is in CSI indicator (67.38%). Both FCS and HFIAS reported comparable estimation that 51.74% and 49.6% of households is food insecure respectively. An important result of these estimations is that all four indicators show high prevalence of food insecurity in the study area, which is higher than the average of the country and Amhara state too.

3.2. Rural Household Resilience to Food Security

This section presents major findings on examining determinants and measurement of rural household resilience to food security. As it has been discussed in detail in methodology part, the study adapted **FAO's** Resilience Index Measurement and Analysis (**RIMA**) model using SEM. Following **FAO's RIMA** model, resilience index can be expressed as:

$$RI = (access\ to\ income + Asset + acaptive\ capacity + access\ to\ basic\ services + safety\ nets \dots\dots\dots\dots\dots\dots)$$

The dependent variable RI (left-hand side of the equation) is a latent variable which is not observed *per se*. Eleven different dimensions (independent variables) have been used to estimate RI though these dimensions are latent variables by themselves. For that reason, two stages approach have been employed in estimating RI.

In the first stage, every dimensions or components of resilience have been estimated separately by running different mechanisms of multivariate analysis or known as data reduction method. To do this, we employed factor analysis/principal component and Barlett scoring method for those dimension/components of RI which have only a set of continuous/numerical observed indicators. Optimal scaling method has been used for those dimensions/components of RI which have a mix of nominal, numerical or ordinal observed variables/indicators. In the second stage, after separately estimating the dimensions/ component s of RI, SEM has been used to estimate RI. In doing so, the regression coefficient of each dimension is estimated. The covariances for theoretically acceptable relationship between dimensions of RI are estimated assuming the probability of intra-dimensional correlation is high since food security is a multidimensional problem. In other words, the study tried to estimate the correlation between residual errors of dimensions/ components of RI. In the following pages, the study presents the result of estimation of dimensions of RI (in the first stage) and the role of these dimensions in RI (in the second stage).

SEM Estimation of Household Resilience to Food Security

After independently estimating the dimensions of resilient by employing different multivariate techniques, SEM is used to estimate RI.

SEM is a general statistical approach with many applications. The model has been used as an approach to data analysis that combines simultaneous regression equations and factor analysis (Ecob and Cuttance, 1987). Factor analysis models test hypothesis about how well sets of observed variables in an existing data set measures latent construct (i.e. factors). As we have discussed in the first stage, we have estimated the latent dimensions of resilience by employing different multivariate analysis i.e. factor analysis, principal component analysis, optimal scaling etc. That means we have got measured or observed dimensions of resilience. By its nature the values obtained from factor analysis have zero mean and constant variance (in this study we make their variance one). From the observed variables obtained by factor analysis, it is possible to run SEM to estimate the latent variable RI.

Considerably SEM needs large sample size subject to the number of observed variables. Researchers have recommended different sample size requirement ranges from a minimum of 100 to 5000 to run SEM. Anderson and Gerberg 1988), suggested a minimum of 100 to 150, Boomsome (1983) recommended a minimum of 400, Hu et al (1992) also recommended 5000 cases as a minimum to run SEM. Others suggest a **rule of thumb** ratio of **sample size** to the number of free parameters. Bentler & Chou (1987) suggests 5 cases per variable for normal and elliptical distributions and 10 subjects per variable for other distribution; Costello and Osborne (2005) recommends 20 cases per variable. In this study, the sample size is 230 households and we have 11 observed variables estimated from multivariate techniques. The estimated variables are continues and no missing data. The missing data and outlier problem have been treated in stage one taking the mean of villages. In general, 230 cases are quite sufficient to run SEM in this study.

SEM assumes multivariate normality that each **variable** in a set should be normally **distributed** around fixed values on **all other variables** in the set (Henson, 1999). In this study, we tested both univariate and multivariate normality test for all dimensions of resilience. Shapiro-Francia normality test is used to test univariate analysis and all variables are found to be normally

distributed with mean zero and variance one (appendix 9). In addition, multivariate normality test is conducted using Doornik-Hansen test. The result shows the test is insignificant (χ^2 (22) = 23.918, Pr = 0.3515), which verifies that the variables are normally distributed.

Prior to running SEM or estimating parameters, it is badly needed to specify the model and resolve specification error or identification problem. Miss specified model may result in biased parameter estimates that don't represent the true model. Therefore, the model shall be free from specification and identification problem. A "just" and "over identified" model is used for estimating parameters.

Prior research and theories are required to choose among feasible explanations and to provide the rationale for specifying model and testing an implied theoretical model. Our model has been adapted from FAO's RIMA model which is applied in Palestine (2008), Nicaragua (2011), Kenya (2010), and Niger (2011). The first three studies used factor analysis to estimate RI, while SEM is employed for the case of Niger. A detail of the conceptual framework of the model has been explained in methodology part in chapter three.

We assessed the "order condition" which is a necessary condition for model identification. According to "t rule" by Bollen (1989), in "order condition" the number of free parameters to be estimated must be less than or equal to the number of distinct values of the matrix variance and covariance. According to "t rule", the distinct values of the matrix can be found by this formula (p (p+1)/2); where "p" represents the number of observed variables. About 11 observed variables, as dimensions of RI, are identified. The formula gives a value of 66 (11(11+1)/2), which is greater than the number of free parameters (11). Therefore, the model is "over identified" and the difference between distinct values 66 and observed values (11) is 55 which indicate the degree of freedom for specified model.

A different goodness-of-fit has been developed to assess the fit for SEM. There is no single universally agreed goodness of fit measurement for SEM. Each indicator of goodness-of-fit has its own advantages and disadvantages. Different scholars and reviewers suggest different combinations of goodness-of-fit for SEM. For this reason, determination of goodness-of-fit in SEM is not an easy task as it is not straightforward like other statistical techniques. Normally, having statistically significant and acceptable theoretical model is mandatory to apply SEM. That means the parameter estimates should be consistent with their theoretical foundation and practical meaning.

The estimated chi-square after model modification found to be significant (χ^2) (29) = 56.778, Pr=0.002), which indicates that the model is badly fitted. The chi-square goodness of fit has many criticisms since the value can be overly influenced by sample size, correlations, variance unrelated to the model and multivariate normality (Kline, 2011).

Under population error, we have three indicators of goodness-of-fit namely, Root-Mean-Square Error of Approximation (RMSEA), lower bound and upper bound and Pc close. RMSEA 0.00 to 0.08 is acceptable level and indicates close fit. If the lower bound is below 0.05 and if the upper bound is above 0.1, they would not reject the hypothesis that the fit is poor. In line with RMSEA, the lower limit close to zero (below 0.05) and the upper limit less than 0.1 is considered as a well-fitted model (Hooper et.al, 2008). Pc close measure provides the probability that the RMSEA value is less than 0.05. If it is below 0.05, it indicates the model is not a close fit. If it is above 0.05, the fit of the model is close. In this study, the estimated model has RMSEA of 0.065,

upper bound of 0.089, lower bound of 0.039 and Pc close of 0.158. Therefore, the three fitness indices under population error indicate the model is close to fit.

The information criterion Akaike Information Criterion (AIC) and **Bayesian Information Criterion** (BIC) are reported in Appendix 8. Since the main objectives of information criteria are to compare models, we don't use these indicators as goodness-of-fit indicator in this study.

Under baseline comparison, Comparative Fit Index (CFI) and Tucker and Lewis (TCI) are reported. Values close to 0.9 or 0.95 reflects a good fit where 0 shows no fit and 1 shows perfect fit. In this model, the value of CFI and TLI is 0.97 and 0.94 respectively which indicates the model fitted well.

Lastly, Standardized Root Mean Square Residual (SRMR) and Coefficient of Determination (CD) are reported under the size of residual indicators statistics which helps as goodness-of-fit indicator. SRMR value less than 0.05 or 0.08 indicates a good model fit. In this study, the model shows SRMR of 0.039 which indicates the model fit well by this indicator. The CD is like an R^2 for the whole model. A value close to 1 indicates a good fit. In this model, the SEM has found CD to be 0.91 which indicates the model is well fitted.

Result of SEM Estimation

Table 4.7 shows the estimation result of SEM for 11 variables (dimension of RI). The estimated model is well fitted after some model modifications. Having sound parameter estimates in terms of magnitude, direction (consistent with practical theory) and statistically significant coefficient is the prime goal of using SEM. All estimated parameters have their prior expected directions which are consistent with the underlying theory. Moreover, all variables have a standardized estimate in ranges of plus or minus one and positive variance. That means the estimated model has no indication of a high degree of multicollinearity in the data. In the occurrence of a standardized estimate out of the range of plus or minus one and negative variance, one might suggest the presence of high multicollinearity data (Garson, 2012).

We displayed standardized values (standardized coefficients) for paths rather than path coefficients (factor loading) for comparison purpose of parameters. The path coefficients retain scaling information of variables while standardized estimates remove scaling information by transforming the unstandardized estimates to standard deviation unit. In doing so, standardized estimates correspond to effect-size estimates for the change in one variable given a change in another, both measured in standard deviation units. It can be also interpreted as the correlation coefficients between the indicator and the latent variable.

As shown in table 4.7, resilience component IFA, AA, NAA, HTL, ABS, AC, EC and SCP are found to be positive and significantly correlated with resilience at 1% level of significant, while HS is found to be negative and significantly correlated with resilience at the same level of significance. SSN and S are found to be insignificant but have positive and negative correlation with resilience respectively as expected.

NAA, ABS and EC have the largest positive effect on resilience having standard coefficient (correlation coefficient) of 0.83, 0.80 and 0.68 followed by HTL and AA having standard coefficient (correlation coefficient) of 0.63 and 0.61 respectively. AC and IFA (a direct and most

important indicator of household food access capacity indicator) have almost similar positive effect having standard coefficient (correlation coefficient) of 0.47.

SPC dimension of resilience has statistically positive effect on RI and its regression coefficient is 0.28. Household structure, which is constructed by combining the ratio of dependency and female member of a household, has significant negative effect on resilience with standard coefficient values of -0.24. Only S and SSN are statistically insignificant and have the lowest standard coefficient of -0.02 and 0.11 respectively.

From the above discussion we can also understand that the resilience of households to food security is highly dependent on household assets (both agriculture and non agriculture), access to basic service, economic connectivity (in other words, it is the financial assets of households) and household technological level.

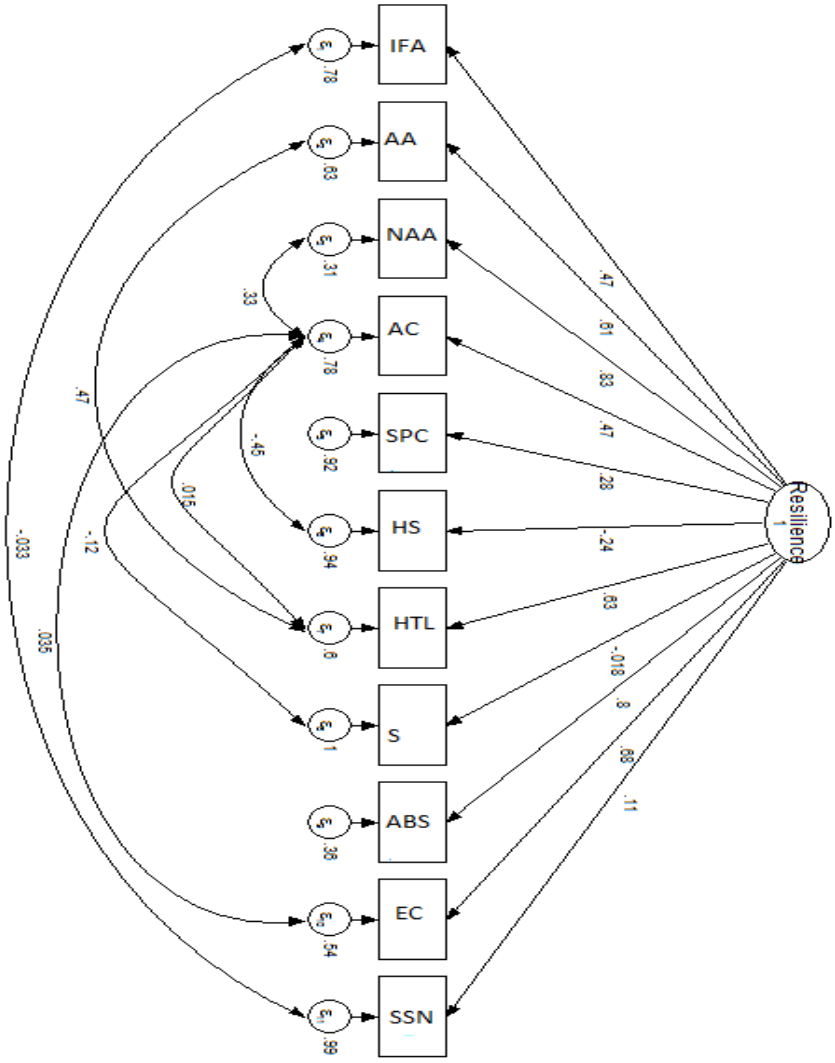
Table 3.7

Structural Equation Model Estimation of Resilience

Standardized	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
IFA	.4716232	.0574965	8.20	0.000	.3589322	.5843141
AA	.6087057	.0483123	12.60	0.000	.5140154	.703396
NAA	.8316056	.030762	27.03	0.000	.7713132	.891898
AC	.4655365	.0610641	7.62	0.000	.345853	.58522
SPC	.275894	.0664149	4.15	0.000	.1457232	.4060647
HS	-.2368473	.0683919	-3.46	0.001	-.370893	-.1028016
HTL	.6315848	.0468282	13.49	0.000	.5398033	.7233663
S	-.0180582	.071772	-0.25	0.801	-.1587288	.1226123
ABS	.7984119	.0327965	24.34	0.000	.7341319	.862692
EC	.6788453	.0420975	16.13	0.000	.5963357	.7613548
SSN	.106097	.0715285	1.48	0.138	-.0340962	.2462903
cov(e.IFA,e.SSN)	-.0331587	.0677808	-0.49	0.625	-.1660065	.0996892
cov(e.AA,e.HTL)	.465792	.0567291	8.21	0.000	.354605	.5769789
cov(e.NAA,e.AC)	.3272434	.0730932	4.48	0.000	.1839834	.4705034
cov(e.AC,e.HS)	-.4536804	.0501339	-9.05	0.000	-.5519411	-.3554197
cov(e.AC,e.HTL)	.0147678	.0533951	0.28	0.782	-.0898848	.1194203
cov(e.AC,e.S)	-.1245125	.0552079	-2.26	0.024	-.2327181	-.0163069
cov(e.AC,e.EC)	.0348385	.0612687	0.57	0.570	-.0852458	.1549229

Source: Author's calculation from field survey, 2018

Figure 3.6.: Path Diagram for Estimation of Resilience Index



Source: Author's calculation from field survey, 2018

In addition to estimating the regression coefficient of resilience dimension, it is imperative to discuss the factor score or resilience index found in SEM and factor scores of components of resilience from different perspective such as gender and livelihood zone which helps to make specific interventions.

Resilience and Gender

Table 4.8 shows the mean comparison of female and male-headed households' resilience index and its components. Male-headed are more resilient than female-headed households. The mean of components of resilience also indicates that female households are less resilient like the aggregate index of resilient. *t*-test has also been conducted to see whether there is significant

mean difference between female and male-household heads in terms of resilience index and its components. The result shows that IFA, AA, NAA, EC, HTL and ABS are statistically significant which indicates that there is significance mean difference between male and female-headed households in terms of resilience index and across these resilience components. That means male-headed households perform better on these components than female-headed households. Resilient component HS is higher in female-headed household than male-headed households. The *t*-test confirms that there is significance mean difference in HS. This indicates that there are significant number of dependents and female household members in female-headed households that contribute to household resilience. This is not a surprising result in developing countries where children below the age of 15 and women actively participate in income generating activities that in fact might help households to move out of shocks as well as from food insecurity or poverty.

The t-test also indicates that resilience component AC, S, SPC and SSN are not statistically significant that implies no significance difference between male and female-headed households in terms of these components. However, female-headed household perform better in SSN and SPC though they are not statistically significant. This shows that female-headed households' resilience is highly dependent on safety nets from institutions and relatives, and social participation and networking. The same result is found in Kenya that SSN was the only and simplest way that female-headed households have to cope with shock (Alinovi et al 2013).

Table 3.8

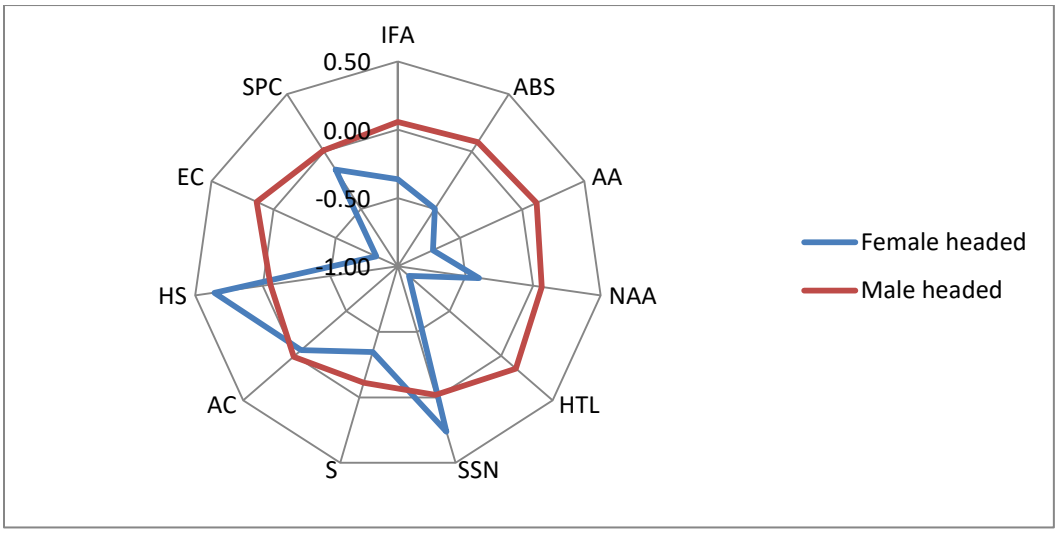
Resilience and Its Components by Sex of Household Head

S. No.	Resilience and its Dimensions	Female-headed n=32	Male-headed n= 198	Difference	*t* value
1.	R	-0.70 (0.71)	0.11 (1.00)	-0.81	-4.4484 Pr=0.00
2.	IFA	-0.36 (0.90)	0.06 (-1.00)	-0.42	-2.2238 Pr=0.0271
3.	ABS	-0.50 (0.99)	0.08 (0.94)	-0.58	-3.0905 Pr=0.0022
4.	AA	-0.72 (1.00)	0.12 (0.99)	-0.83	-4.5629 Pr=0.00
5.	NAA	-0.40 (0.79)	0.06 (0.02)	-0.46	-2.4641 Pr=0.0145
6.	HTL	-0.89 (0.77)	0.14 (0.96)	-1.04	-5.7995 Pr=0.00
7.	SSN	0.26 (1.60)	-0.02 (1.65)	0.28	0.8961 Pr=0.3711
8.	S	-0.35 (1.04)	-0.11 (1.26)	-0.24	-1.0068 Pr=0.3151
9.	AC	-0.06 (0.99)	0.01 (1.00)	-0.07	-0.3782 Pr=0.7056
10.	HS	0.36 (1.25)	-0.06 (0.95)	0.42	2.1981 Pr=0.029
11.	EC	-0.83 (0.14)	0.14 (0.79)	-0.96	-4.6064 Pr=0.00
12.	SPC	-0.16	0.01	-0.17	-0.8659

		(1.16)	(0.98)		Pr=0.3874

Source: Author's calculation from field survey, 2018

Figure 3.7 Resilience Components by Sex of Household Head

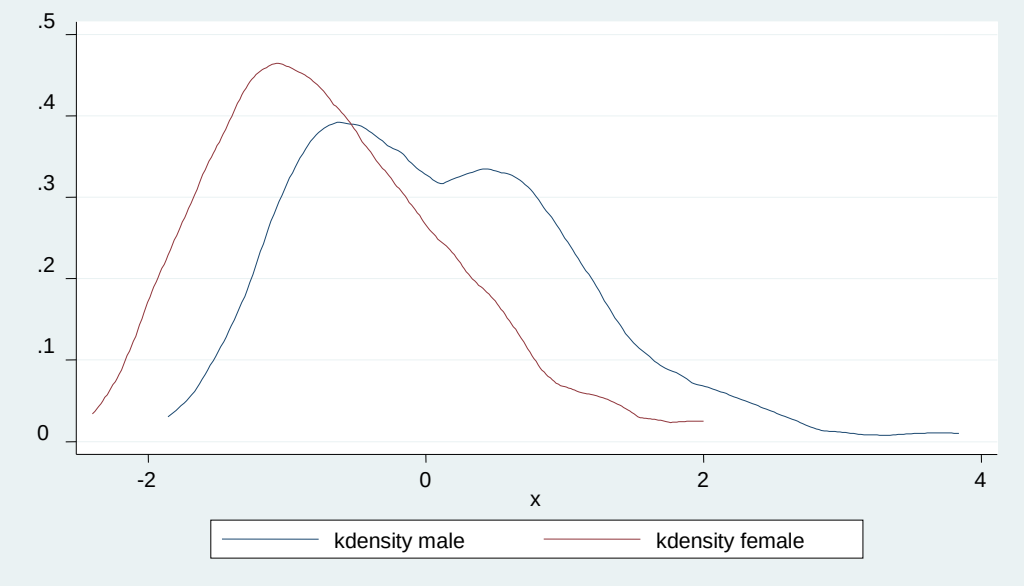


Source: Author's calculation from field survey, 2018.

The radar chart in figure 4.7 also shows resilience components for female and male-headed households that confirm the above discussion. Female-headed household's resilience is dependent on SSN, SPC and HS, while male-headed households' resilience depends highly on IFA, EC, HTL, AA, NAA, and ABS followed by EC, HTL and AA.

Similarly, the Epanechnikov's kernel density estimate shows the resilience distribution for both female and male-headed household. Female-headed households, which have less resilience capacity, are skewed to the left, while male-headed households, which have more resilient capacity, are skewed to the right. In general, female-headed households have limited livelihood resources and resilience capabilities to cope with shocks and stresses. Importantly, the kernel density distribution shows that though female-headed households have less resilience level, they have more equally distributed resilience among households than among male-headed households.

Figure 3.8 Kernel Density Distribution of Resilience Index by Sex of Household Head



Source: Author's calculation from field survey, 2018.

Resilience and Livelihood Zones

The study area has two livelihood zones i.e. the North Wollo Highland Belg (NHB) and North Wollo East Plain (NWE). As can be seen from table 6.14, North Wollo highland Belg livelihood residents are more resilient than North Wollo East Plain livelihood zone and the mean difference of resilience index is also statistically significant. Table 4.9 and figure 4.9 shows resilience and its components by livelihood zone.

NWE livelihood zone residents perform well in all components of resilient except IFA and SSN. This may be due to the fact that NWE livelihood has relatively better land and livestock holding, access to basic services and higher technological level. Particularly, some villages in NWE have access to irrigation system that highly contributes in attaining food security.

Table 3.9

Resilience and Its Components by Livelihood Zone

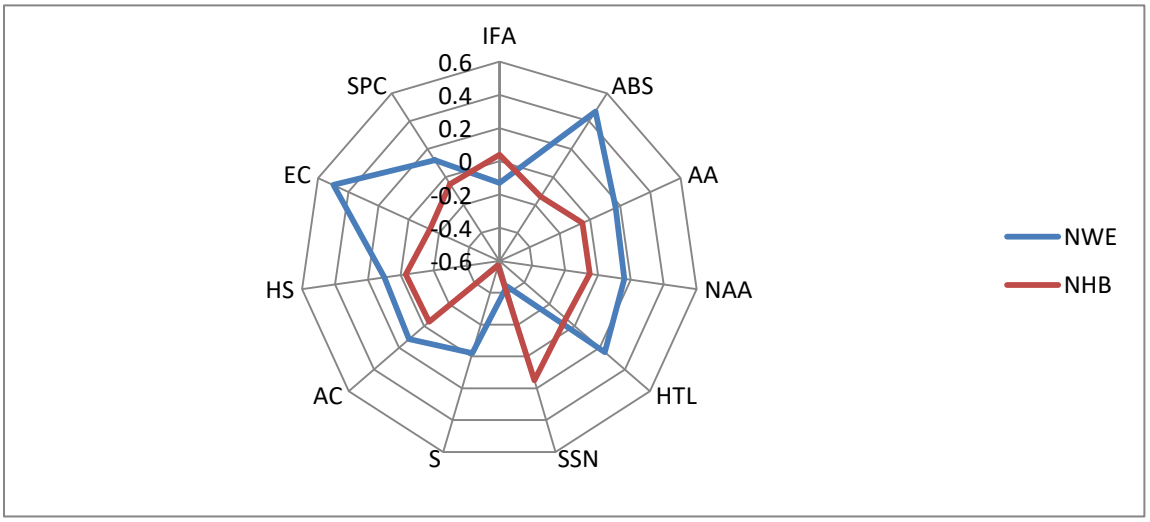
S. No.	Resilience and its dimensions	NWE	NHB	Difference	t value
1.	R	0.3 (0.94)	-0.09 (1.0)	0.39	2.46 Pr=0.01
2.	IFA	0.04 (1.03)	-0.13 (0.89)	-0.17	-1.1 Pr=0.27
3.	ABS	0.47 (0.87)	-0.14 (1.0)	0.61	3.98 Pr=0.00
4.	AA	0.17 (1.11)	-0.05 (0.96)	0.22	1.39 Pr=0.17
5.	NAA	0.16 (0.94)	-0.05 (1.01)	0.21	1.3 Pr=0.19

6.	HTL	0.24 (1.07)	-0.07 (0.97)	0.32	2.02 Pr=0.04
7.	SSN	-0.44 (1.54)	0.15 (0.12)	-0.6	-2.33 Pr=0.02
8.	S	-0.02 (1.24)	-0.57 (1.1)	-0.55	-2.89 Pr=0.00
9.	AC	0.12 (0.72)	-0.04 (1.07)	0.16	1.01 Pr=0.31
10.	HS	0.1 (1.03)	-0.03 (0.99)	0.13	0.82 Pr=0.41
11.	EC	0.5 (1.04)	-0.14 (1.13)	0.65	3.67 Pr=0.00
12.	SPC	0.12 (1.08)	-0.05 (0.99)	0.17	1.06 Pr=0.29

Source: Author's calculation from field survey, 2018

Figure 3.9

Resilience Components by Livelihood Zone

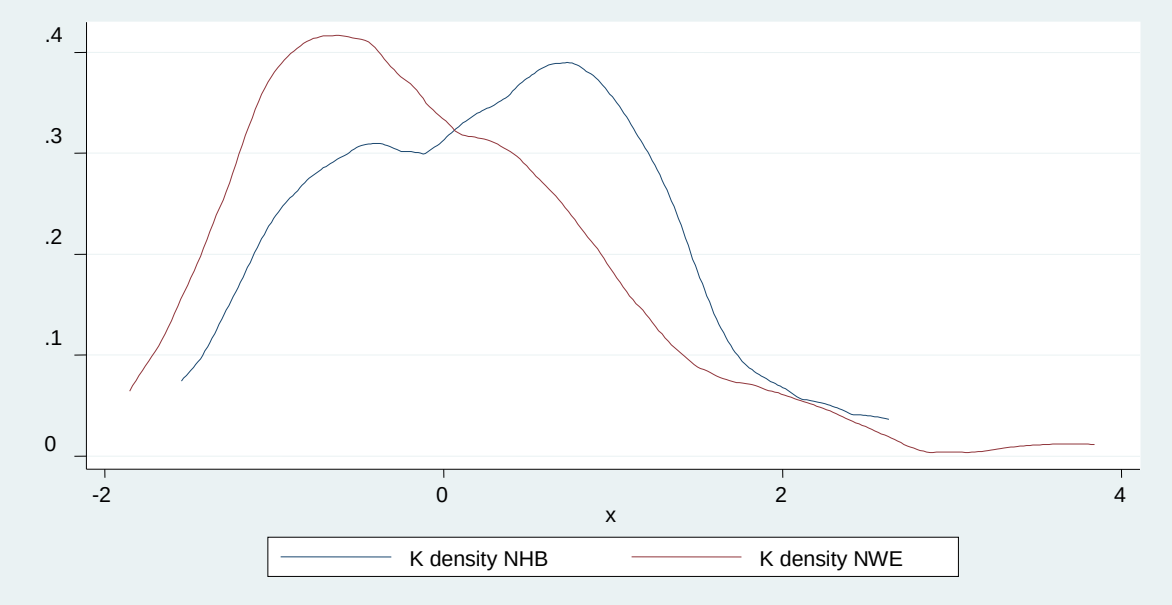


Source: Author's calculation from field survey, 2018

Among the components of resilience, access to basic service, economic connectivity and household technological level are the most important resilience component in NWE and the mean difference is also statistically significant. Moreover, NWE livelihood zone performs well in terms of AA, NAA, AC, HS and SPC than NHB livelihood zone but the mean difference is not statistically significant. In NHB livelihood zone household, resilience is highly depend on SSN and to some extent access to income and food access capacity though the later one is not statistically significant.

Figure 3.10

Kernel Density Distribution of Resilience Index by Livelihood Zone



Source: Author's calculation from field survey, 2018

In the same token, the Epanechnikov's kernel density shows that NHB is more skewed to the left which indicates less resilient capacity of the livelihood zone. The NWE's resilience distribution is skewed to the right which indicates that the zone is more resilient. Moreover, the graph indicates that both livelihood zones' resilience distributions are not equal among households, which show that there is some sort of inequality in the level of resilience within the same livelihood zone among households.

In general, female-headed households and NHB livelihood zones are less resilient to cope with shocks that need particular interventions to build their resilience capacity.

4. Conclusion

This study is focused on determinants of rural households' resilience to food security in one of drought prone Gubalafto district of North Wollo Zone in Amhara regional state, northern Ethiopia. Broadly, the study has two main objectives i.e. to estimate the prevalence of household food insecurity to estimate and identify determinants of household resilience to food security. The study is based on a primary survey from pairs of 230 rural households using two stage stratified sampling and secondary information. Both descriptive and multivariate analyses are used to empirically examine determinants of household resilience to food security.

Four indicators are employed to determine the prevalence of food insecurity and examine the quality and quantity dimension of food security in the study. Accordingly, 46.1%, 51.7%, 49% and 67% of households are food insecure based on DCI, HFIAS, FCS and CSI indicators. The mean daily per adult kilocalorie consumption is found to be 2717 kcal. The mean HFIAS, FCS and CSI are also found to be 6.1, 31.7 and 14.8 respectively. Around 39% of households

consume three or fewer food groups in seven days period. Staple foods are the most frequently consumed food groups and the main source of kilocalorie consumption.

In the analysis of household resilience to food security, the study found that resilience index and its components make significance difference between gender and livelihood zones. Male-headed household and households living in NWE livelihood zone are more resilient. Household structure (having more dependent and female household members), safety nets and social capital and networks are the only components of resilience that female-headed households perform better to cope with shocks, while male-headed households perform better in resilience components of access to income and food, assets of household, economic connectivity, household technological level and access to basic services. NWE livelihood zone residents perform well in all component of resilient except IFA and SSN. Among resilience components, access to basic service, economic connectivity and household technological level are the essential determinant of resilience in NWE. In the NHB livelihood zone, household resilience is highly dependent on SSN and to some extent on income and food access capacity though the later one is not statistically significant.

The structural equation model estimation indicates that resilience component IFA, AA, NAA, HTL, ABS, AC, EC and SCP are found to be positively and significantly correlated with resilience at 1% level of significant, while HS is found to be negatively and significantly correlated with resilience at the same level of significance. SSN and S are found to be insignificant but have positive and negative correlation with resilience respectively as expected. Among resilience components, NAA, ABS and EC have largest positive effect followed by HTL and AA. AC and IFA have mediocre positive impact. In general, the resilience capacity of households to food security highly depends on assets of household (both agriculture and non agriculture), access to basic service, economic connectivity (in other words it is the financial assets of households) and household technological level than any other components. Having more number of dependent and female members of households negatively affect the resilience capacity of households to cope with shocks. Sensitivity to shock has insignificant negative impact on resilience. This may be due to the fact that the data collection year is relatively stable and no big shock was reported in the district. Safety net components play insignificant role in household resilience to food security due to deep-rooted and chronic food insecurity problem in the district. Hence, PSNP could only help in meeting one of its objectives of "consumption-smoothing" and missed out protection of productive asset and its role in resilience. Therefore, PSNP amount of benefits, duration of benefits and targeting households should be reconsidered and reviewed and should go in line with other nutrition and asset and resilient building programmes.

Households living in highland areas are more vulnerable to food security and less resilient to shocks. Therefore, interventions on livelihood need to be made in these areas including resettlement of vulnerable groups voluntarily into resource abundant areas of the region or other parts of the country. Moreover, building resilient interventions should be based on livelihood zones characteristics and attention should be given to women.

Most households are living in a traditional dirty hut with non separated animal house, kitchen, bed and living room, which is the most important cause for diseases that affect food and nutritional status of households. Improving rural housing has been missed out from government interventions. Therefore, affordable, environment friendly and technically easily adoptable rural house intervention should be introduced, advocated and encouraged for rural households in line with other food and nutrition programme interventions.

Cultivated land is under heavy population pressure, soil fertility is eroded, and drought is the common phenomenon in the district. As a result, the current livelihood could not ensure

household food security and the wellbeing of households. Therefore, interventions should be shifted from development or emergency assistance into livelihood interventions. Promotion of income generating activities for rural households especially those who are not entitled to land is needed.

Institutional coordination unit should be put in place for different interventions of food and nutrition security, and social protection. Nutrition programmes are coordinated by health office; PSNP and other agriculture extension programmes by office of agriculture; water and sanitation by water and sanitation desk office and social protection like health insurance under office of labour. Therefore, there should be adequate institutional mechanism to coordinate these food and nutrition and health interventions at a district level.

Basic services and rural infrastructure should be scaled up in order to increase both household and community resilience capacity in the wake of shocks.

Agricultural technologies especially input packages are not likely to be the most appropriate intervention in areas such as highland area where population pressure and soil infertility threaten the long-term viability of agricultural livelihoods. Therefore, these agricultural input/technology interventions should be focused on in lowland areas where there are relatively better land holdings and fertile soil based on willingness and full participation of farmers.

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4.STRATEGIC ENTREPRENEURSHIP AND FIRM PERFORMANCE: THE MEDIATING ROLE OF INNOVATION CAPABILITY AND MANAGERIAL CAPABILITY- IN THE CASE BGRS SMEs

BY: BERIHUN MUCHE ((Ph.D.)

1. INTRODUCTION

Ethiopia officially the FDRE is a lower income country with a population of about a bout 100 million located in east Africa. Generally speaking, the economy of Ethiopia suffers from factors that are common in developing countries. These factors include a relatively inequitable distribution of income, corruption and an unfavourable climate for business enterprise.

Developing a sustainable economy is the most crucial action to set a blueprint for the economy of Ethiopia. The Government has implemented a substantial investment program to accelerate growth, increase employment level and reduce poverty. The program involves implementing structuring projects in key sectors of the economy, including:(1) implementing value chain projects; (2) improving the economy's competitiveness, especially with greater support to facilitate transportation activities; (3) developing trade at the regional level, taking account of the country's geographic location, and; (4) supporting the development of the private sector. Our study focuses on the one of objective of the Strategic Document for Growth and transformation plan concerning the promotion of the private sector development. This research is mainly inspired by the following statement of the Minister of Small and Medium-sized Enterprises.

"If the small and medium sized enterprises (SMEs) were to contribute 50% of GDP, we would already be an emerging country. The government expects SMEs to improve, with all the support structures it has given them, so that we are an emerging country before 2030," Minister Trade, 2015.

The key findings concerning the importance of entrepreneurship highlighted by the Global Entrepreneur Monitor Project (2000) show two important aspects the first aspect is the general thought that "entrepreneurship is strongly associated with economic growth" and the second aspect is that "all countries with high levels of entrepreneurial activity also have above average economic growth, only a few high growth countries have low levels of entrepreneurial activity". Thus the question that motivates the development of this research is: why is BGRS, given its entrepreneurship activities, not experiencing above average economic growth?

In general, SMEs play a key role in transition and developing countries (OECD, 2004) and are a potential source of wealth creation (Rankhumise and Rugimbana, 2010). SMEs contribute to tax revenue, to value added, to innovation, to employment and to improving the living standards (Dalberg, 2011). They provide products and services while serving large firms as suppliers and subcontractors. Better business performance for SMEs, can help governments achieve both economic growth and social inclusion objectives, including the escape from low productivity traps and the improvement of the quality of jobs for low-skilled workers (OECD, 2009, 2017b). However, SMEs face many challenges and often have low productivity, lack competitiveness and have a small market share (ILO, 2013). Studies that aim to explore the determinants of Small and medium-sized enterprises (SMEs) performance have become increasingly important around the world (Hamilton, 2012; Wiklund et al., 2009; Qian and Li, 2003; Chandler and Hanks, 1994; Covin, 1991; Covin and Covin, 1990; Zahra and George, 1999). Among these studies, those that investigated the major problems inhibiting the development of small businesses in emerging economies have highlighted different areas in which SMEs need attention and support.

An emerging body of empirical evidence supports the assertion that differences in firm performances are affected by both owned and controlled resources as well as how the firm manages those resources. Resource orchestration was validated as a mean of managing firm's resources in order to gain maximum value from them. In emerging economies, institutional constraints or undeveloped institutions limit the number of strategic business alternatives (Peng et al., 2008; Puffer et al., 2010). The international business (IB) literature reported that, contrary to firms from developed economies, firms in emerging economies do not possess competitive advantages and lack international market experience (Zhang and Van den Bulcke, 1996). Therefore, firms in emerging economies should seek new ways to improve their managerial efficiency. This is especially important for SMEs in Ethiopia because firm success is often dependent on access to unique resources that can allow them to grow successfully. In general, firms in Ethiopia gain access to these resources through strong personal connections. However, most Ethiopia SMEs do not have such resources, forcing them to seek out other ways to achieving competitiveness and growth. Barney (1991) suggests that managers are critical to firm performance for their ability to realize the full potential of firm's resources by understanding the potential of owned or controlled resources and by taking actions that appropriate value from those resources. SMEs development requires a cross cutting strategy that touches upon many

areas such as good governance, abundant and accessible finance, supportive education, sufficiently healthy and flexible skilled labor and the ability to implement competitive operating practices and business strategies, etc. (OECD, 2004).

J Foreman-Peck, (1998) stated that the supposed 'delayed industrialization' of the 19th century African economy is caused by the inappropriate attitudes and actions of the managerial classes. Duncan (1972) and Miller (1988) argue that a manager perception of external environment is more important than its actual state. If managers perceive that the environment is uncertain then most decisions will be designed to deal with uncertain environments. Because they are the cornerstone of their organizations, entrepreneurs, managers or leaders should imperatively master and adopt all the tools and techniques that can potentially bring higher and sustainable performance. The current stage of SME development in Ethiopia requires the development of new approaches to business management, new business management tools, and the application of the most modern business management practices.

In today's literature, the combination of entrepreneurship with strategy is gaining more and more attention. How firms create wealth has been conceptualized as a multidisciplinary construct that fuses tools, techniques and concepts from entrepreneurship and strategic management.

Entrepreneurship refers to the creation of wealth, change, innovation, employment, value and growth (Morris et al. 2008).Among the various definition of entrepreneurship, the one that captures all the core keywords of entrepreneurship encountered in research is the one given by Stevenson and Jarillo-Mossi (1986), they define entrepreneurship as a process of creating value by bringing together a unique package of resources to exploit an opportunity. Entrepreneurship creates conditions for a prosperous society and stimulates the related industries and businesses in which the new venture is born. Hashim (2008) defines strategic managements the entrepreneurial process that enables a firm to realize its objectives through the design and implementation of effective strategies that are based on its distinctive capabilities and business environment. A major component of strategic management is the management of opportunities and threats in the external environment considering the firm's internal strengths and weaknesses. It is a way of thinking and strategic thinking requires more of an external than internal focus. It implies to be constantly looking for new sources of competitive advantage. It entails an ability to envision how the resources and core capabilities of a firm can be combined to create new sources of value.

Meanwhile it is about ensuring that employees stay focused on their job and objectives and make sure that they are flexible in the tactical approaches used within the organization.

Born from a movement of scholars, Strategic entrepreneurship (the integration of entrepreneurship and strategic management) is a relatively new concept that was first mentioned in early 2000. After Strategic Entrepreneurship emerged officially in Strategic Management Journal 2001 special issue on "strategic entrepreneurship" (Hitt, Ireland, Camp & Sexton, 2001) a published editorial was out in 2003 refer Hitt et al. (2003), and to answer the questions that were raised about the validity of the new field as a theory (Schindehutte and Morris, 2009), Corley & Gioia (2011) in their paper highlighted three characteristics of SE that make it suitable for being a theory : (a) move theoretical conceptualization forward in the field of management, (b) indicate new theoretical linkages that have rich potential for theory and research in management, and (c) provide clear implications of theory for problem-solving in administrative and organizational situations.

Stevenson and Jarillo (2007) argue that environmental sensing, opportunity seeking, strategic flexibility and entrepreneurial are part of the entrepreneur's managerial capabilities that explain how firms act to achieve their goals. In fact, the managerial capabilities are closely related with a firm organizational learning and organizational learning in turn encourages knowledge absorption.Penrose (1959) argues that knowledge absorption is effectively promoted when the firm managers are able to sense potential opportunities and be proactive when facing new type of challenges. Ireland et al, (2003) argue that such process of continuous seeking of entrepreneurial opportunities and dynamic development of the firms' capabilities lead to sustainable competitive advantage and superior firm performance. Strategic entrepreneurship is a big picture of the firm. Its focuses on every aspects of the firms including the industry and market, the competitive environment in which the firm operates, the firm long term direction, the firm strategy, the firm resources, the firm competitive capabilities, the firm business opportunities and the firm prospect for growth and success. Thus, strategic entrepreneurship focus on the central question of how a firm creates its initial performance and how they can sustain their competitive advantage over time taking into consideration the firm entrepreneurial and managerial posture.

Although Strategic Entrepreneurship is as much important in well-established firms as in new ventures (Bettis and Hitt, 1995), present research on SE mainly study large firms in developed

country creating a gap in literatures on the field of SE in the private sector of advanced countries but also in the overall business environment of small countries. Besides, there is no common consensus on the components of SE in empirical studies due in parts to its implication in a firm overall administrative and organizational situation of firms and its theoretical and conceptual ambiguity. Some study the impact of SE by assessing directly the level of entrepreneurial mindset, entrepreneurial leadership, strategic planning or planning flexibility while others chose to study SE under its forms, i.e strategic renewal, sustained regeneration, domain redefinition, organizational rejuvenation and business model reconstruction variables, This study uses the core ideas sustaining the concept of strategic entrepreneurship described in Ireland and Webb (2007).In their study they noticed that all assumptions, ideas and explanations of Strategic Entrepreneurship lie within two main components: exploration and exploitation.

Statement of the Problem

In today's literature, the combination of entrepreneurship with strategy is gaining more and more attention. How firms create wealth has been conceptualized as a multidisciplinary construct that fuses tools, techniques and concepts from entrepreneurship and strategic management. A number of studies in entrepreneurship and business strategy disciplines have addressed the relationship between EO and performance; and many of them concluded positive relationship (Wiklund & Shepherd, 2005; Belgacem, 2015; Sahoo, S. & Yadev, S., 2017; Rigtering, Kraus, Eggers, & Jensen, 2013).This shows that EO is influential concept in successful business performance. Whereas, some others found out that this relationship is either weak or does not hold at all as mentioned in a meta-analysis (Rauch, Wiklund, Lumpkin, & Frese, 2009). This justifies the need for further studies in different contexts for comprehensive generalizability of this strategic posture for better firm performance.

In Ethiopia, SMEs represent about most percent of economic map and employ most percent of workforce they contribute less to GDP (GES, 2016). Moreover, most SMEs in Ethiopia die within their first two years of existence; only about twenty percent survive, thrive and grow to maturity (ECAM, 2015).The magnitude of the problem in BGRS is even sever, seven out of ten firms created between 2010 and 2015 didn't survive in May 2016. However, individual entrepreneurship became the only way out of a youth generation facing an enforced idleness.

Despite government efforts to promote entrepreneurship, entrepreneurship in BGRS is very often seen as the simple act of creating business and jobs.

Moreover, there are statistics that suggest that survival rates for one-to-five year SME have been declining in the last ten years and 55 percent of small businesses fail beyond five years (Lobel, 2014). The results of this study would allow a better understanding on SMEs development and growth in BGRS. It provides a better understanding of the impact of the different constitutive elements of strategic entrepreneurship exploration and exploitation of SMEs performance.

Despite the large amount of studies published related to evaluating the performance of firms in Ethiopia, SMEs still struggle to survive and grow. The challenges of SMEs are a national concern, Government and practitioners seek ways to provide an environment in which SMEs can overcome their challenges and participate more in the national economy. The objective with these research questions is to improve the understanding of what the real issues of SMEs in BGRS are. The research question 1 is more deductive in nature based on the literature and knowledge gained in this research. The research questions 1, 2 and 3 are get clear answers based on the findings from this research.

In this research, the influence of both exploration and exploitation activities on firm performance of BGRS SMEs are being investigated in two ways: Firstly by investigating the impact that SE as a combination of exploration and exploitation can have on firm performance. Secondly by investigation that impact through two mediators, managerial capabilities and innovation capability. The study propose that SE is one of the possible sources for creating successful firms in emerging countries like Ethiopia particularly BGRS, because it can boost innovation and managerial capabilities thus improving firm performance.

2. RESEARCH PURPOSE AND CONTENT

The study have important implication on the research level as well as on the managerial level. It seeks to answer the general question on the impact of strategic entrepreneurship on firm performance. There is a wide range of studies on the subject on large companies but there are limited studies on small and medium size enterprise and even less studies on its impact on SMEs in. This study contributes to the existing literature on entrepreneurship and strategic management and closes some knowledge gaps. It differs from previous studies on Ethiopia SMEs that solely concentrate on the investigation of individual factors such as financial capital access or human

resource management. to study SMEs performance in Ethiopia. The study helps to better understand how SMEs can boost their performance when relying on the implementation of strategic entrepreneurship and the processes through which strategic entrepreneurship impacts SMEs performance. On the managerial level, this study offers perspectives on why strategic entrepreneurship is essential to SMEs development and how it works to impact the firm performance. The findings of this study encourage managers to be aware of strategic entrepreneurship and to pay more attention on the role of managerial capabilities and innovation capability in SMEs. The specific implications are as follow: (1) This work would support to decision makers in designing policies to assist SMEs; (2) This study work would supports the activities of SMEs owners and managers as it distinguishes between an imitative entrepreneurship that doesn't carry a vision or development strategy to a strategic entrepreneurship based on the constant search for opportunities and competitive advantage, (3) This study work would also help managers and consultants identify the dynamics behind organizational learning as it is in the interest of SME managers to understand how to systematize organizational learning in their organization. In terms of recommendations.

Research Questions

Some questions have intrigued and guided this research. The main research questions that are particularly relevant to this study and that we try to contribute to are:

Research question 1: What could contribute to higher survival rate of SMEs in BGRS?

Research question 2: How can SMEs in BGRS achieve higher level of growth to contribute better to economic development?

Research question 3: How strategic entrepreneurship impacts SMEs performance in BGRS?

Research question 4: What is the role of managerial capabilities and innovation capability in BGRS SMEs?

Research question 5: Why is BGRS given its level of entrepreneurship, not experiencing above average economic growth?

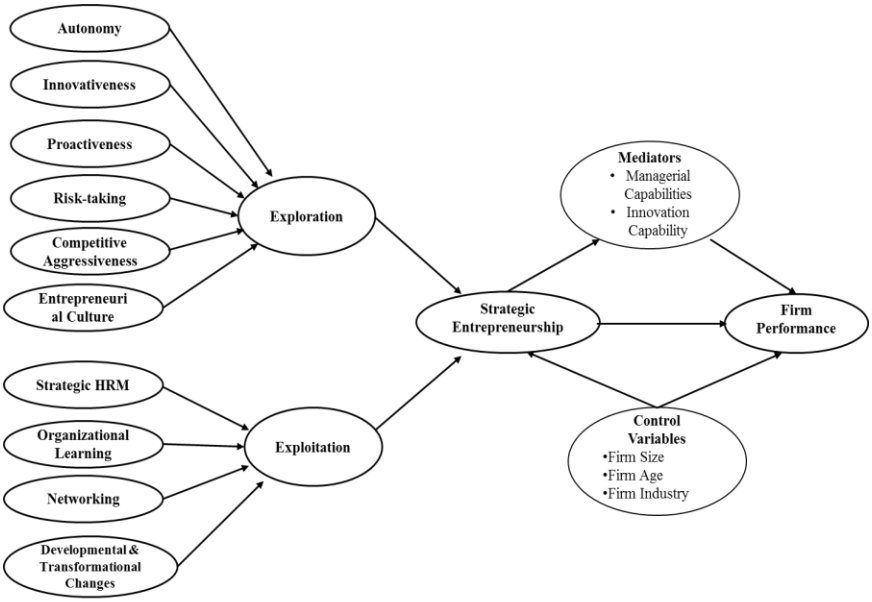
To answer the research questions, ten hypotheses are formulated:

- The **first hypothesis** is that exploration is positively associated to firm performance: It is based on the idea of Hitt and al, (2001) that firm survival and success increasingly is a function of a firm's ability to continuously find new opportunities and quickly produce innovations to pursue them;

- The **second hypothesis** is that exploitation is positively associated to firm performance: It is based on the idea that entrepreneurial firms trying to establish themselves in the market and generating value through exploration only may not be sufficient because they don't have the required resources and capabilities; they need to exploit alternatives to be more efficient than competitors (Terziovski 2010), and to develop capabilities to manage innovation networks (Dodgson et al. 2006).
- **The third hypothesis** is that SE has a positive influence on firm performance: It is based on the idea that strategic entrepreneurship can help firms to become more creative and innovative in the value creation process, maintain a competitive advantage and achieve superior firm performance (Ireland et al, 2003)
- The **fourth and fifth hypothesis argue** that exploration and exploitation have a positive influence on innovation capability: It is based on the idea of Cao et al., (2009) that both exploration and exploitation increase organization performance and innovation.
- The **fifth and seventh hypothesis argue** that exploration and exploitation have a positive influence on managerial capabilities: It is based on the idea of Adner and Helfat (2003) that the characteristics of a firm's top management team are very important to the development of managerial capabilities that ensure sustained competitive advantage.
- The **eighth hypothesis** is that Managerial capabilities have a positive influence on firm performance: It is based on the idea of Symeonidis (1996) that the relevance of a firm's resources depends on its ability and in particular that of the owner-manager or managerial board to mobilize them;
- The **ninth hypothesis** is that Innovation Capability has a positive influence on firm performance: It is based on the idea that innovation capability can help companies to differentiate from competitors in the market (Morales et al., 2007);
- The **tenth hypothesis** is that: Managerial capabilities have a positive influence on innovation capability: It is based on the idea that management capabilities are likely to influence innovation success; managerial capabilities are an antecedent to innovation capability (Hooley et al., 2005).
- The **eleventh hypothesis** is that Managerial capabilities and Innovation capability mediate the relationship between Strategic entrepreneurship and firm performance: It is based on the idea that in the construct of strategic entrepreneurship, firms develop

strategy that aligns with the resource-based view, the knowledge-based view and the capability-based view and innovation.

2. Conceptual Framework of the Study.



3. RESEARCH METHODOLOGY

Entrepreneurship plays a big role in shifting the resource dependence economy to knowledge-based economy. The purpose of this study is to investigate the impact of strategic entrepreneurship on BGRS SMEs through the mediating effects of innovation capability and managerial capabilities. The reasons behind the choice of SMEs as the implementation area for this study are two folds. First, SMEs have a more flexible structure compared to the large firms by easily adapting to the changes occurring in the external environment and since they are closer to the market, they are more likely to develop innovations. Secondly, SMEs are one of the key drivers in the economy because they fill the gap between the needs of large firms and customers. This section introduces the data set that was usde for constructing the sample and data for this

study, presents the techniques that used to operationalize the variables and the econometric method chosen for the analyses.

Sampling Technique and Sample size

This study investigatede the strategic enterprenurship and firm performance in the small and medium enterprises in Benishangul Gumuz Regional State. A two stage sampling technique used in order to select 932 owners/managers of SMEs from the total population. There are two stages in which the sampling process is carried out, geography followed by sectors of respondents in those small and medium entreprises. In the first stage, zones are geographically clustered into 3 areas. In the second stage, in each zone, the SMEs are categorized into sector strata such as manufacturing, construction, metal and wood work. So, the study used a stratified random sampling technique to select sample owners/managers among the total population. Then sample owners/ managers in each SMEs sector strata were selected randomly on a proportion basis.

Malhortra and Peterson, (2006) stated that, larger the sampling size of a research, the more accurate the data generated but the sample size is different due to different situation. Taking the viability and representativeness of the sample, and financial constraints into consideration, 932 owners/managers were selected from the total population of 3108. This represents a sample of 30% of the total population. According to Cresswell (2003), 30% is deemed an acceptable sample size for social science research studies because it allows generalizing to the population. Therefore, the representative sample size of 3108 populations is determined to be 932.

Elaboration of the questionnaire

Measurement Items

The Author developed measurement items by adopting measures from prior studies and

modifying them to fit the context of this study.

- **Dependent variable**

The performance of small businesses is defined as their capability to create wealth and employment by business start-up, survival and sustainability (Sandberg, Vinberg, & Pan, 2002). There has been a debate on which performance measures (the use of either objective or subjective methods) are more suitable for SMEs business performance evaluation (Siti Nur

'Atikah Zulkiffli and Nelson Perera, 2011). Dess & Robinson (1984) and Sapienza et al (1988) argue that in SMEs, objective data often do not fully represent firms' actual performance, as managers may manipulate them to be exempted from personal or corporate taxes. Besides, SMEs managers don't want to reveal their objective performance measures as they believe they are confidential (Sapienza et al., 1988; Gruber et al., 2010). Based on these aspects, Covin & Slevin (1989) advised the use of subjective measures in the evaluation of SMEs business performance for they provide more complete information. Subjective measures can either include satisfaction, goal attainment, or global success ratings as performance indicators.

In this study used Perceived non-financial performance with geographic expansion, employee retention and service level. These elements were used by SAADAT, (2016) to measure the subjective perceptions of respondents about the performance of their firm. The respondents were asked to indicate their response on an eleven-point Likert type scale (1=strongly agree and 5=strongly disagree and 3=neutral).

- **Independent variables**

Independent variables include EO and entrepreneurial culture, representing the exploration component of the concept. The entrepreneurial orientation in this study is based on the work of Yahui Li, Dongming Xu (2014). They believe that the degree of entrepreneurial orientation can be obtained through the measure of five dimensions of EO: Autonomy, risk-taking, innovativeness, competitive aggressiveness and pro-activeness. The scale for this study is a seven-point Likert-type scale. Respondents are asked to indicate on a seven-point Likert type scale (1=strongly agree and 7=strongly disagree and 4=neutral) their responses. Entrepreneurial culture variable is measured on a five-point Likert-type scale. Respondents are asked to indicate on a five-point Likert type scale (1=strongly agree and 5=strongly disagree) their responses.

Strategic HRM, organizational learning, networking, developmental and transitional changes form the exploitation component assessed using a five-point Likert-type scale. Respondents were asked to indicate on a five-point Likert type scale (1=strongly agree and 5=strongly disagree) and (1= highly significant and 5= highly insignificant) their responses. Strategic

entrepreneurship will be measured by computing exploration and exploitation variables as in the works of Galina and Gina (2013).

- **Mediating Variables**

Innovation Capability Innovation Capability seeks to identify the innovation capability of a firm. Innovation capability is measured using a seven-point Likert type scale. The items used in the scale are adapted from Calantone et al. (2002). respondents are asked to indicate on a seven-point Likert type scale (1=strongly agree and 7=strongly disagree and 4=neutral) the place of innovation, which could manifest through the new ideas, things, operating methods and products but also the perception of a firm towards innovation, whether it is too risky or not. The ratings of these items will be averaged to assess the level of managerial capabilities in the firm, with the result that the higher the score, the better the innovation capability.

Managerial Capabilities Managerial Capabilities seeks to identify the capabilities of key decision makers to manage a firm. Managerial capabilities are measured using a seven-point Likert type scale. The items used in the scale are adapted from Carmeli and Trisher, (2004). Respondents are asked to indicate on a seven-point Likert type scale (1=strongly agree and 7=strongly disagree and 4=neutral) the tendency of the management style used by the hierarchy or decision makers. The ratings of these items are averaged to assess the level of managerial capabilities in the firm, with the result that the higher the score, the better the management capabilities.

- **Control variables**

In regression analysis, a control variable is a variable that is added to the regression model as a predictor since it has or might have an effect on the dependent variable. Control variables are added in the model in order to differentiate the effect of the independent variable from the effects of the control variables. The instrument includes a number of demographic questions, which are included for descriptive and control purposes. These questions address the following: gender of respondents, education level of respondents and some company background information such as industry classification, size of the firm and the years of activities.

- According to Rosen, 1991, firms that are younger pursue radical innovations more often than their older counterparts. Zahra, 1991 argues that a firm's age influences its entrepreneurial activities. Thus, older firms are expected to be less entrepreneurial in their

operations and more conservative in their market orientation. In this study, the age of a firm is determined by the number of years since the firm started operating. But since the values are not numeric value but rather nominal value in range, the author coded firm's age as 1 for 0 – 2 years, 2 for 2 – 5 years, 3 for 6 – 10 years and 4 for 10+ years.

- Literatures show that smaller firms may exhibit different organizational characteristics compared to their larger counter parts, Covin and Slevin (1989); Zahra, (1991) believe that difference in company size also influences entrepreneurial orientation. Rueda-Manzanares, Aragon Correa and Sharma, (2008) posit that larger firms may have more resources than smaller firms. Therefore, the difference in size may influence performance (Robinson, 1982). In this study, the author coded firm size as 1 for 1 – 5 employees, 2 for 6 – 20 employees, 3 for 21 – 100 employees and 4 for >100

Structure of the questionnaire

The study used primary data and the questionnaire consists of 66 closed-ended questions that were distributed to Respondents. The questionnaire focus on various aspects of company management with questions related to firm activities in 2019 and seeks to identify the management style of SMEs in BGRS.

Data Processing and Analysis

Cooper and Schindler (2008), describe data analysis as a research technique for the objective, systematic and qualitative explanation of the visible content of a subject. Both qualitative and quantitative methods of data analysis used to increase the study quality. In the first step raw data was edited by the researcher to identify omission and errors. Following editing the data and at the house and at the field, the next steps is: coding, tabulation and classification of the data. Descriptive statics that were articulated through frequency distribution, tables, means score, standard deviations and charts. Hierarchical multiple regressions was used to analyze the relationship between the dependent and explanatory variables with the help of STATA version 12, E-view version 9 and SPSS version 22 packages. Inferential statistics was employed to estimate the variable association and effects in the regression model analysis. To test Association between the independent variables and the dependent variable (Firm Performance) in this study correlation analysis was used where the designation correlation varies from +1 to -1, in which the sign signifies the direction of the relationship.

In order to determine validity of the model and the goodness of the fit respectively F-statistics and R2 were used. Where F-statistics is significant when p-value < 0.05. To test the proposed hypotheses of the study, the subsequent two conditions are given to be fulfilled. H0 (Null Hypothesis) and H1 Alternative Hypothesis) where α (significant level) = 0.05, in this condition H0 supposed to be rejected if P- value is < than α or else fail to reject H0: and accept H1

1. H0: Null Hypothesis: H0i: $\beta i = 0$. Where, (i=1, 2, 3, 4)
2. H1: Alternative Hypothesis: H1i: $\beta i \neq 0$. Where, (i = 1, 2, 3, 4)

The regression result also provides p-values and t- values. If the p-value is less than $\alpha = 0.05$ null hypotheses H0i would rejected in support of alternative hypotheses. H1: is which means that the predictor variable (Xi) has a significant effect on variable performance (dependent variable (Y).

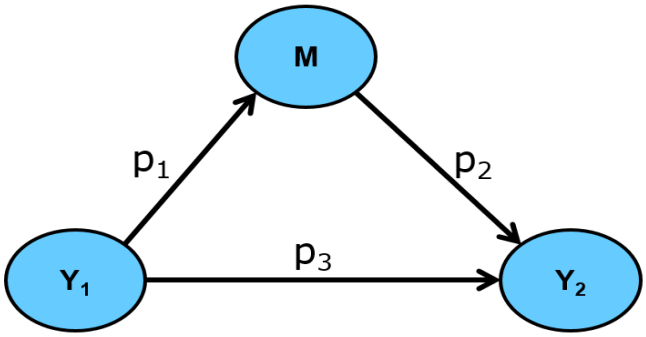
Econometric Model

To test the relationship between strategic entrepreneurship variables and performance hierarchical regression models was employed. Therefore, by using the specified models this study attempted to predict the extent to which each of the independent variables and the Two mediating variable Z1 Z2(Innovative capability and Managerial capability) influence the dependent variable (Y) firm Performance in Ethiopia.

Mediating Effect Validation

A mediator is a third variable intervenes between two other related constructs, mediation occurs when a change in the exogenous construct causes a change in the mediator variable, which, in turn, results in a change in the endogenous construct. Thereby, a mediator variable governs the underlying mechanism or process of the relationship between two constructs. The mechanisms that underlie the cause-effect relationship between an exogenous construct and an endogenous construct can be assessed through the analysis of the strength of the mediator variable's relationships with the other constructs. Although this study have only two mediator variable, but the model can include a multitude of mediator variables simultaneously. The systematic mediator analysis process is found in more detail in Nitzl et al. (2016), Cepeda et al. (2017) and Hair et al. (2017). The following figure shows the example of a simple mediator model.

Figure 2: Mediator Model



Y1 represents the independent variable, Y2 represents the dependent variable and M is the mediator. P1 is the path between of Y1M, P2 id the path of Y2M and P3 is the path of Y1Y2.

4. PRESENTATION AND DISCUSSION OF RESULTS

The first part of this chapter presents the demographic profile of the firms that took part in the study. The second part follows the steps described in the previous chapter for constructs validation and the test for mediating effect. And then presents the results on the validation of latent variables and all results associated with the hypotheses formulated chapter two.

Econometric Model Analysis Results

Multicollinearity Test

Multicollinearity for model is also assessed by VIF value. The table below shows that the VIF values respectively fall below the threshold of 10. Thus, we conclude that there is no multicollinearity among the variables.

Table 4.1: Multicollinearity Test

Variables	*VIF*
Exploitation	4.,8316
Exploration	4,7376

Firm performance	2,8613
Innovation Capability	5,5891
Managerial Capabilities	1,3571
Strategic Entrepreneurship	3.941

The specific correlation indicators among the variables are shown on the table below:

Table 4.2: Specific Correlation Among Latent Variables

	Exploitation	***Firm performance***	***Innovation capability***	***Managerial capabilities***
Exploitation		**2.03**	**1.817**	**1.311**
Exploration	**1.531**	**1.821**	**1.747**	**1.345**
Innovation capability		**1.412**		
Managerial capabilities		**2.432**	**2.297**	

We can observe that the correlations exploitation-firm performance, managerial capabilities-firm performance, and managerial capabilities-innovation capability are a little bit higher than the other correlations in the model.

Coefficient Analysais

The degree of significance is estimated through the critical ratio obtained at the end of the bootstrap procedure. The results show that the critical ratios for the paths from exploration to managerial capabilities, exploration to firm performance, exploitation to managerial capabilities, exploitation to firm performance, strategic entrepreneurship to firm performance and managerial capabilities to innovation capabilities are all greater than 1.96 for a threshold of significance of 5%, which implies that the relationship between the constructs is significant. However, the paths from exploration to innovation capabilities, strategic entrepreneurship to innovation capabilities, strategic entrepreneurship to managerial capabilities, managerial capabilities to firm performance and innovation capability to firm performance all have a critical ratio of less than 1.96 for a

threshold of significance of 5%, thus the relationship between the constructs is not significant. The second line on the table represents the respective critical ratios and their degree of significance.

Table 4.3: Summery of Coefficients Analysis

	Firm Performance	*Innovation Capability*	*Managerial Capabilities*
Exploitation	0.183 (2.131***)	0.143 (2.116**)	0.809 (2.943**)
Exploration	0.188 (2.226***)	0.173 (1.962**)	0.432 (2.117**)
Innovation Capability	0.175 (1.987**)		
Managerial Capabilities	0.163 (2.107***)	0.320 (3.97**)	
Strategic Entrepreneurship	0.387 (2.234***)	0.01 (0.92)	0.02 (0.93)

*p<0 .1, **p <0 .05, ***p < 0.01

The first line on table above portrays the coefficients of the structural model. It emphasized the significant paths and it follows that the path coefficients on the relation between exploration and firm performance, exploitation and firm performance, exploration and managerial capabilities, exploitation and managerial capabilities, exploitation and innovation capability, managerial capabilities and innovation capability, strategic entrepreneurship and firm performance are all positive. Moreover, there is a significant positive relationship between exploration and firm performance, exploitation and firm performance, exploration and managerial capabilities, exploitation and managerial capabilities, managerial capabilities and innovation capability also have significant positive relationship between strategic entrepreneurship and firm performance.

The total direct effects of sub-groups of exploration and exploration on managerial capabilities are as follow:

Table 4.4 R-square Results

	R^2	**Adjusted R^2**
Firm performance	0.581	0.573
Innovation Capability	0.422	0.418
Managerial Capabilities	0.631	0.622

Mediating Variables

The total indirect effect and the specific indirect effects. These outcomes, which are available in the results reports, permit conducting a mediator analysis. First, examine the direct paths to analyze the mediation effect. The study follow Baron and Kenny (1986) method which gives four conditions that need to be met in order to prove the mediation effect.

1. In the first condition, the independent variable (Strategic Entrepreneurship, SE) should have a significant effect on the dependent variable (Firm Performance FP).
2. In the second condition, the independent variable (Strategic Entrepreneurship, SE) should have a significant effect on the mediating variables (Managerial Capabilities, MC and Innovation Capability, IC).
3. In the third condition, mediating variables (Managerial Capabilities and Innovation Capability) should have a significant effect on the dependent variable (Firm Performance).
4. In the fourth condition, effects of both independent (Strategic Entrepreneurship) and the mediator (Managerial Capabilities and Innovation Capability) variables on a dependent variable (Firm Performance) are calculated. After this step, the mediation effect may be considered only when the effect of the independent variable on the dependent variable decreases (partial mediation) or becomes meaningless (Full mediation).

The tests for indirect effect reveal two significant mediation effects: the path from exploitation to firm performance and the path from exploration to firm performance as shown on the table 4.5. It can be noted that the total indirect(mediation effects) to firm performance are both insignificant, with their beta values respectively.

Based on the significance and the coefficients of the paths between the constructs, we summarize the validation of the research hypothesis on the table below:

Table 4.5: Research Hypothesis Status

Hypothesis Formulation	**Status**
H1: Exploration is positively associated to firm performance	**Accepted**
H2: Exploitation is positively associated to firm performance	**Accepted**
H4: Exploration and Exploitation have a positive influence on Innovation capability **H3a:** Exploration has a positive influence on innovation capability **H3b:** Exploitation has a positive influence on innovation capability	**Accepted**
H4: Exploration and Exploitation have a positive influence on Managerial capabilities **H4a:** Exploration has a positive influence on managerial capabilities **H4b:** Exploitation has a positive influence on managerial capabilities	**Accepted** **Accepted**
H5: SE has a positive influence on firm performance	**Accepted**
H6: Managerial capabilities have a positive influence on firm performance	**Accepted**
H7: Innovation Capability has a positive influence on firm performance	**Accepted**
H8: Managerial capabilities have a positive influence on innovation capability	**Accepted**
H9: Managerial capabilities and Innovation capability mediate the relationship between Strategic entrepreneurship and firm performance **H9a:** Managerial capabilities mediates the relationship between Strategic entrepreneurship and firm performance **H9b:** Innovation capability mediates the relationship between Strategic entrepreneurship and firm performance	**Rejected**

Research Hypothesis Discussion

H1: Exploration is positively associated to firm performance: Accepted

The results for exploration were statistically significant and positive implying that the variable exploration is indeed positively associated to firm performance with a path coefficient of **0.183** This reveals that in BGRS, the search of new opportunities, experimentation and variation which is achieved through an entrepreneurial orientation (EO) and entrepreneurial culture (EC) improves SMEs performance. Moreover, research in the field of entrepreneurship has found a positive link between the attributes of entrepreneurial orientation: autonomy, innovativeness, proactiveness, risk-taking and competitive aggressiveness and firm performance (Munoz et al., 2015), Overall, these findings suggests that if innovativeness, autonomy, entrepreneurial culture are effectively imbibed, the expectation of SMEs to achieve higher level of performance shall be achieved.

H2: Exploitation is positively associated to firm performance: Accepted

The results confirm a positive and significant relationship between exploitation and SMEs performance. Exploitation as represented by Strategic Human Resource Management, Organizational Learning, Networking and Organizational Change (Developmental and Transitional Change) has a positive relationship to firm performance. The results show that exploration has a little more positive impact on firm performance ($p=1\%$, $\beta=0.1.88$) than exploration ($p=1\%$, $\beta=0.183$).

Bernard (2002) defines Human Resource Management as a set of management practices concerning individuals looking for to valorize and develop individuals and groups competencies. In the context of Strategic HRM, the management practices the human resource deployments activities are planned in order to enable an organization to achieve its goals (Wright and MCMahan, 1999). The study reveals the positive link between strategic human resource management and firm performance. This implies that firms in which SHRM is implemented perform better than others. This result aligns with previous studies on this aspect. This explains the belief of Ulrich (2007) that early attempt to link HRM with organizational performance relies on the common sense belief that improving the way people are managed inevitably leads to enhanced firm performance.

Organizational learning is a plus to the ability of the firm to strategically manage their resources as well as to conduct changes and exploit opportunities. The level of Organizational Learning in the firm has been found to be associated with higher firm performance. This means that SMEs in Ethiopia that deeply analyze their results and exchange their experience at the end of each project, learn from the most successful companies in their industries, conduct change suggested by partners, clients and subcontractors and implement seminars and training to strengthen employees' knowledge on firm activities are able to learn faster and accumulate and retain their knowledge. These results are in line with previous studies on the positive impact of OL on firm performance. Salim and Sulaiman (2011) suggested that OL is positively correlated to the operational performance in Malaysian SMEs. Many studies, just like our study, have found a positive Impact of Networking on Firm Performance. Debadutta Kumar Panda (2014) finds out that Managerial networking with buying firms or buyers, competitors, and government officials is positive and statistically significant determinants of SMEs growth regardless of type of business and the size.

The analysis of Developmental and Transitional Changes show they positively influence SMEs performance. This implies that firms that conduct small improvements as well as significant changes such as changes in the structure, the culture or the strategy are more likely to improve their performance in terms of service level, employee retention and geographical expansion. These results are in line with the study of Fokam Jeff Astein (2016) who found that transformational and transactional leadership both have a significant positive impact on performance outcomes argues, SMEs' managers should pay close attention to the key organizational activities of information gathering, communication, and learning that allow various elements of organizational change to operate successfully. Therefore, SME managers in BGRS need to move beyond the search for simple, generalizable solutions or recipes for success and accept that change is a complex dynamic within which employee attitudes and future expectations will be shaped but also accommodate the needs of employees, who directly benefit from these change initiatives.

H3: Exploration and Exploitation have a positive influence on innovation capability

H3a: Exploration has a positive influence on innovation capability: Accepted

H3b: Exploitation has a positive influence on innovation capability: Accepted

The effect of exploration and exploitation activities has only recently started to attract the attention of researchers (Rothaermel and Deeds, 2004; Jansen et al., 2006) and the objective of their study was mostly to understand whether the development of exploration and exploitation strategies was related to firm performance

Faems et al., 2005 believe that Exploration and exploitation are other types of innovation strategies. Ahuja/Lampert (2002) both argue that exploration and exploitation help firms to deal with the rapid obsolescence of their products and services.On the one hand, firms need to efficiently exploit the existing resources to survive in the short run and in the long run, firm must explore new possibilities and develop new competencies.

Innovation capability is defined as the ability of the firm to transform an idea into a something new with a potential economic value. Unlike exploitation activities, which mainly focus on the existing resources, Teece, et al., (1997) argue that it takes some years to achieve positive outcomes from exploration activities as the returns that are associated with exploration are highly variable in time (March, 1991). Moreover, as stated by Nadia Jacoby (2005), the best organizational structure that effectively promotes exploration strategy is a disintegrated one. Employees should be able to operate independently without a too tight coordination process because the discontinuities enable the discovery of new possibilities.

H4: Exploration and Exploitation have a positive influence on managerial capabilities
H4a: Exploration has a positive influence on managerial capabilities: Accepted
H4b: Exploitation has a positive influence on managerial capabilities: Accepted

Exploration has since been widely extended to notions such as organizational diversity, diversification, and variation, according to past studies on organizational learning, the essence of exploration activities is to create variety in experience (Holmqvist, 2004; McGrath, 2001) which is associated with increasing the existing knowledge base of a manager (Katila and Abuja, 2002; Sidhu et al., 2004). Firms that follow an exploration strategy are able to maintain a competitive advantage through continuous innovation and knowledge combination and sharing.

Exploitation on the other side, has been broadly used to describe the organizational focus and the experience. Studies on exploitation confirm that the essence of exploitation activities is the creation of reliability in experience (Levinthal and March, 1993) which deepens the manager's existing knowledge base (Katila and Abuja, 2002). Scholars have also argue that firms that follow an exploitation strategy are able to maintain competitive advantage which is produced through high levels of efficiency and reliability in the production and the delivery of existing products or services.

The results of our study confirm the hypothesis that exploration and exploitation have a positive impact on managerial capabilities. Therefore, in the context of exploration and exploitation, Assets to be valued are now intelligence, knowledge, motivation, in other words the skills of people to enable the profitability of the organization. Scholars like Vorhies et al, (2011) have proven a positive relationship between exploration and exploitation activities and an organization's ability to increase its marketing capabilities by moving it towards a customer-focused marketing. There is a general belief that over time, repeated use of exploration and exploitation routines generates reliable feedback that allows a firm to further refine their existing competencies and better evaluate the success of those strategies.

H5: SE has a positive influence on firm performance: Accepted

This study finds a significant and positive relationship between strategic entrepreneurship and SMEs performance in BGRS. It means that firms that simultaneously engage in exploration and exploitation activities or in other words, firms have both entrepreneurial orientation and strategic orientation behavior are successful in retaining employees, expanding geographically or increase their service level. This result is in line with the previous studies on the subject. Literatures on Strategic Entrepreneurship argue that it should be significant on the performance and that the significance must be positive. A great illustration for this is the work of Ireland et al. (2003), which states that it is important for SMEs to develop strategic entrepreneurship, because it enables them to achieve competitive advantage by identifying new opportunities. Moreover, strategic entrepreneurship can add more complexity to the management style, creates conflicting demands, and higher the costs for SMEs (Voss and Voss 2013). The negative impact of Strategic Entrepreneurship on the performance of SMEs in Cameroon can also be explained by the fact that there is a will to develop the firm however activities related to exploration and exploitation are not carried until they have the potential to reverse or add up to

the firm performance. Activities such as innovation activities, personnel training, organizational learning all requires investment in time, effort and money and should be carefully supervised to ensure that the firm can fully gain from them.

H6: Managerial capabilities have a positive influence on firm performance: Accepted

Managerial capabilities enable managers to analyze the current situation, perceive tendencies, anticipate changes, identify opportunities and recognize potential threats (Martin, 2011, Yukl, 2002), as well as to establish processes that are needed for developing new products (Maggitti et al., 2013). The top management team is the people that adopt the firm's general decisions, establish the firms' objectives, and designs the means to achieve them (Kor, 2006). This team is very important in all firms, but its importance is even more significant in SMEs because it is considered as their most important asset (Lerner and Almor, 2002); conversely, its absence or a deficit in management capabilities is one of the greatest factors that limit the growth of SMEs(Rubio-Bañón and Aragón-Sánchez, 2009).

H7: Innovation Capability has a positive influence on firm performance: Accepted

Hult, Hurley et al. (2004) suggest that innovation capability plays a significant role in solving business problems and challenges; it provides firms with the ability to succeed. Firms' innovation capability in the market becomes even more important when firms are faced with shortening product and business model life cycles (Pérez-Luño, Wiklund & Cabrera 2011). To be competitive and to remain in the market, firms must pursue innovation. Therefore, it is necessary to constantly seek new ways to deliver value. The investigation of BGRS SMEs in this research revealed a significant and positive impact of SMEs managerial capabilities on the ability to innovate. The results are in line with those of previous studies that argue that innovation capability is the most important determinant of firm performance.

Organizational innovation refers to the implementation of a new ways and process in the company's practices in the workplace or in external relations. Organizational innovation aims at improving the performance of a business by reducing administrative or transaction costs, improving the level of job satisfaction, accessing and discovering other markets or reducing supply costs. This type of innovation is generally oriented depending on the material conditions

and technologies available. In fact, the implementation of innovations has a significant cost while its benefits remain at the commercial level. In the same way, the cost of computerization is high whereas technology tends to quickly become obsolete and they hardly make it possible for a firm to distinguish itself from the others. Another aspect to consider in this regard is the access to financial services which is very limited particularly for SMEs.

H8: Managerial capabilities have a positive influence on innovation capability: Accepted

The results of the analysis confirm that management capabilities have a positive and direct influence on innovation capabilityof SMEs in BGRS. Furthermore, studies suggest that innovation processes require top management teams to use their management capabilities to effectively assign and distribute the firm's resources and activities (Wolff and Pett, 2006).

H9: Managerial capabilities and Innovation capability mediate the relationship between Strategic entrepreneurship and firm performance: Rejected

The mediating role of managerial capabilities and innovation capability was one of the central of this research. In this research, we argued that strategic entrepreneurship is able to boost the firm performance because it enhances the firm's ability to perform repeatedly a productive task that is related either directly or indirectly to a firm's capacity to create value through innovative ideas. The analysis results on the mediation effect of managerial capabilities and innovation capability show that it has mediation didn't occurs from managerial capabilities and innovation capabilities. It means that strategic entrepreneurship has an direct effect only on firm performance, and its impact couldn't go through managerial capabilities and innovation capability.

5. Recommendation

The Government of BGRS mainly through the Ministry of Small and Medium Size Enterprises is doing a lot to improve SMEs business climate. The Ministry has designed programmes and provided SMEs with all kinds of institutions to support and accompany in their growth journey. However, based on the answers reported by respondents in this study, it is important to note that there is still more to be done. To ensure that SMEs operate at their optimum capacity and quickly and effectively contribute to the BGRS development goal 'vision 2030', it is important to not

only understand the external challenges that SMEs may face but also their internal challenges. therefore, the author proposes the Following recommandations:

- Most SMEs in BGRS operate in the informal sector and this poses a big problem to the government and economy in the way that the vast majority of government policies are designed for the formal sector, leaving out a significant proportion of the economy. We recommend that the Government creates inclusive incentives to encourage informal SMEs to become formal.
- In general, this study highlights two types of skills in the creation and management of SMEs in BGRS: the entrepreneurial skills that refer to the capacity to mobilize resources, more often used in the business creation process. And the managerial skills which refers to the ability to manage effectively, plan, organize and mobilize resources. In this regards, the author recommend that (1) the Government promotes SMEs incubation in the areas of technical-functional skills and managerial skills; (2), The author recommend the development and implementation of strategic entrepreneurship education throughout the country to help entrepreneurs and SMEs managers turn to a more promising type of entrepreneurship that can ensure the long-term development of the firm itself and support the country's economic development efforts.
- The Government of BGRS should actively support SMEs by providing both direct financial support, and indirect support to increase their innovation capacity and create a favorable ecosystem for SME innovation and growth.
- According to Green et al. (2006), SHRM practices directly and positively influence individual performance which in turn impact on the organizational performance. Thus, we recommend that SMEs in BGRS, irrespective of the industry, should pay more attention to the SHRM practices identified in this study. This will foster employee commitment to work which will consequently enhances productivity and profitability. Besides, entrepreneurial centers and business schools in BGRS should also incorporate strategic human resource management principles into their curricula. Owners and managers of SMEs who attend such centers and schools will be taught the benefits of integrating HR function into their strategic operations.

5.CORPORATE WORK ETHICS PRACTICES AND THEIR EFFECT ON THE COMPANIES' PERFORMANCE- *with mediating of Employees' attraction and loyalty-* A case Study of Selected FDI Companies, Addis Ababa-Ethiopia

BY: DR. GETACHEW MUHAMMED SEID

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Where a country wants to change from a command to a market economy; the fundamental challenges that all companies faced are to do business ethically which is magnified in both kind and degree (U.S. Department of Commerce, 2004). In addition, business ethics can vary across cultural, legal, political and social differences (Toyne and Nigh, 1997); thus, an ethical decision lies in "the point where the accepted ethical standards no longer serve for all situations" (Ferrell et al., 2012). Therefore, companies today are expected to meet different standards of business ethics that go beyond what had been expected traditionally (U.S. Department of Commerce, 2004). Moreover, they should prepare code of conducts based on their organizational specifications (ECCSA, 2014). The ability to recognize and deal with complex business ethics issues has become a significant priority in twenty-first-century to a market economy companies (Ferrell et al., 2012)

Ethics is a branch of social science comes from the Greek word *ethos* – means moral character or custom *(Perle, 2010); w*hich is a set of rules of conduct or moral code that help us to classify what is bad and what is good (Olena, 2005). But, the term business ethics represents a combination of two familiar words- "business" and "ethics"; thus, business ethics is nothing, but it is the application of ethics in business (Dimitriades, 2007; Paliwal, 2006) that determine acceptable conduct in companies by which the propriety of company's activity can be reviewed (Ferrell, 2002; Paliwal,2006).

Business ethics and FDI companies

Many developing countries like Africans see attracting foreign direct investment (FDI) as an important strategy for their economic development (Mengistu, 2009) as the FDI in Africa has a significant role; for instance, 14% of the government budgets fund of African countries generated from FDI companies. Thus, most African countries are attracting FDI companies. In 2014, the FDIs flowed to Africa remained stable at $54 billion, but 11% growth in Central and East Africa (Mail & guardian Africa, 2015). Moreover, there is a strong argument that FDI companies, in Africa, should perform ethical business activities not only for the sake of the wellbeing of their employees, consumers, communities, and suppliers but also for their long term profit. Because profitability is inevitably depend on ethical and moral practices of the company (Bardy et al., 2011).

1.2. Statement of the Problem and Research Gaps

There are very limited literatures on business ethics as a field of teaching, research and training in the East African including Ethiopia since business ethics as an academic field and as an area of research has received little attention *(Mawa and Adams, 2016).* Most business companies in the country were operating under traditional norms of business practices that place more value on short-term objectives rather than long term (Asfaw, 2015). The problems are not only with related to inexistence of specific code of ethics, but also limited study in the field. A thorough review of the existing literature particularly in Addis Ababa reveals only one relevant research work on business ethics as an academic field of research. This work is by Bekele Gebisa *(2015)*; "Business Ethics Practices: MOHA Soft Drinks Industry S.C., Teklehaimanot Plant" however, this was a case study, particularly to one company.

The focal point of this study was therefore to evaluate the business ethics practices and investigate the causal relationship between **business ethics practices and company** performance

1.3. Objectives of the study

The main objective of this study is to analyze the corporate ethics practices towards to employees and the companies' performance with mediating of *Employee attraction and loyalty in* FDI business operating in Addis Ababa

Specific objectives of the study are:

1. Develop an operational framework of the corporate work ethics principles/standards for FDI companies operating in Addis Ababa-Ethiopia.
2. To investigate the extent to which the FDI companies are practicing work ethics.
3. To analyse the effect of corporate work ethical practices and companies' performance

1.4. The research question

In order to address the above stated objectives, the study should answer the following major research questions:

I. What would be the functional corporate work ethics principles for FDI companies operating in Addis Ababa-Ethiopia?

II. To what extent does the FDI company practice work ethical standards identified previously?

III. What is the effect of corporate work ethics practices on nonfinancial and financial performance of FDI companies

CHAPTER TWO

2. WORK ETHICS CONCEPTS AND THEORIES

This chapter included the following literatures:

2.1.Ethics Overviews:- Ethics and related terms, *Ethical dilemma*

2.2.Business Ethics concepts

2.3.Sources of business ethics

2.4.Ethical theories:- Why study ethical theories? , Classification of ethical theories

2.6.Emerging global Codes of conduct towards to work ethics

2.7.Work ethics infrastructure

2.8.The organizational Ethical/ Moral Action

2.9.Business ethics program

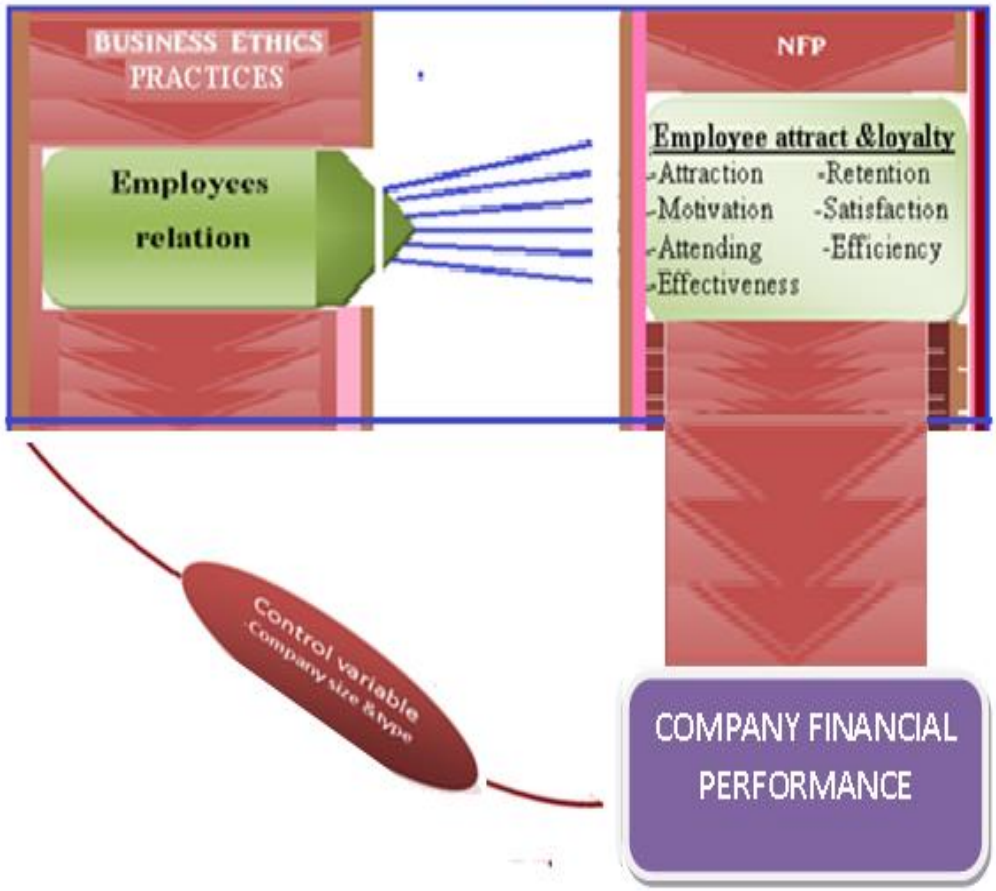
2.10.The relationship between Ethical Practics and Company Performance

2.11.Organizational Performance

2.12. Development of a Conceptual Framework of the study

The conceptual framework provides a basis to understand the effects and causal relation of different variables and it allows the development of hypotheses.

Figure: 4.4. A conceptual framework of the study



2.13. Variables of the Study

I. Dependent latent variables-Financial performance

The present study considered the Companies' financial performances (FP) as dependent latent variable; while the companies' performance with related to profits, revenues, and costs are assumed to be dependent observable variables. Meaning that, they are indicators of a company's financial performance.

A. Mediator variables- *Employee attraction and loyalty*

In this study ***Employee attraction and loyalty*** has been treated as a mediator but a latent variable; which in return, is indicated by some other observed variables. The followings are observed variables assumed to be indicators of the Employee attraction and loyalty as a non-financial performance including:

- Employee attraction
- Employees' retention
- Employees' motivation
- Employees' satisfaction
- Employees' attendance
- Employees' efficiency
- Employees' effectiveness

II. Independent variables: Corporate work ethics

In this study, the corporate work ethics principles intended to serve as a standard in appraising the work ethics performance of FDI companies. These principles were viewed as exogenous observes variable (independent variable) of the companies. The Companies' sizes and types have been considered as control variables.

2.14. Development of Hypotheses

The interference of CWE to the Companies' Performance- hypothesis

- H1: CWE practices perceived by employees has no a significant positive effect on employees attraction and loyalty.
- H2: The employees' attraction and loyalty has no a significant positive effect on financial performance.
- H3**:** CWE practices perceived by employees has no a significant direct positive effect on FDI companies' financial profitability

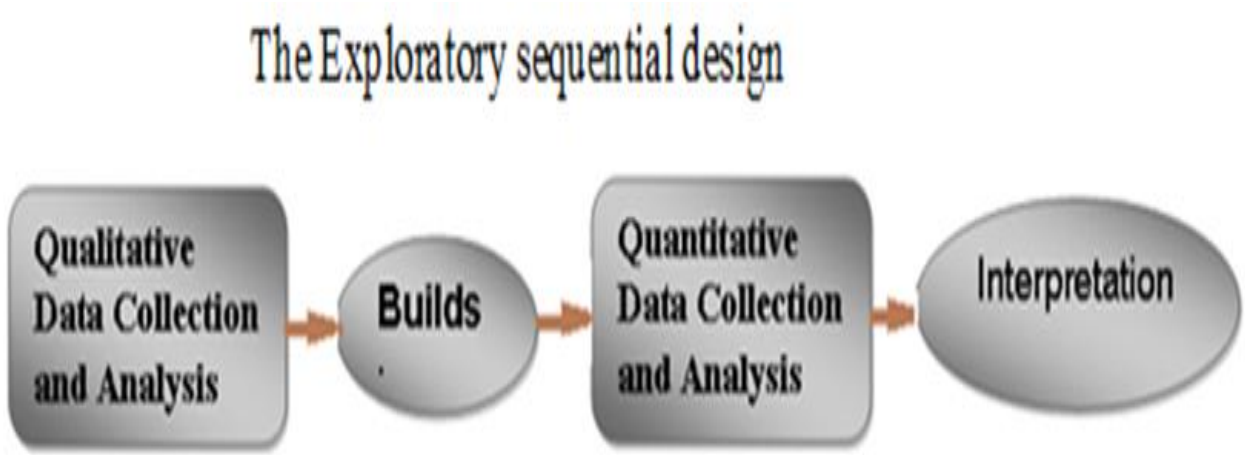
- H4**:** CWE practices perceived by employees has no a significant total effect on FDI companies' financial profitability

CHAPTER THREE

3. METHODOLOGICAL ISSUES: RESEARCH DESIGN, HYPOTHESIS AND FRAMEWORK

3.1. Introduction

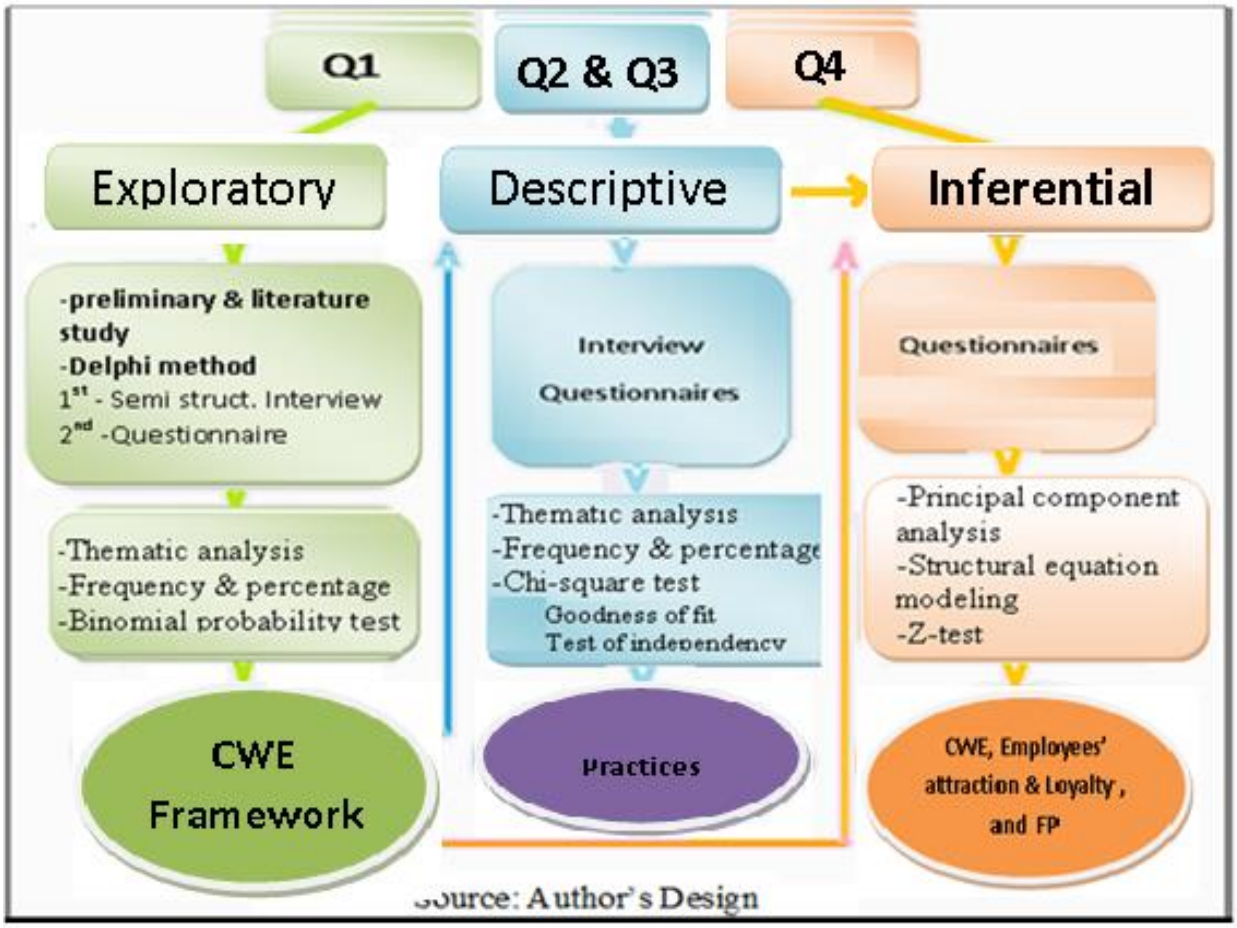
This study used mixed approach. Researchers are now using different approaches for designing their mixed methods studies. There are several mixed approaches described in literatures. The Exploratory sequential design a type of mixed approach; it has been an appropriate design for this study. The exploratory design is a two-phase sequential design used when a researcher wants to recognize and starts by qualitatively exploring a topic before developing to a second, quantitative phase (Creswell and Plano Clark, 2004).



Source: Adopted from Creswell and Plano Clark, 2004.

3.2. Research design model

Figure: 3.1. Research design model



As shown in Figure 4.3 the nature of the study is exploratory sequential design; first, the study has developed ethical principle framework and then assessed the extent to which it is being practiced and then analysis the companies' performance.

3.3. Specific Research Design

I. Sample Design, Data Requirement and Sources

The study was conducted in Addis Ababa. It has 6 zones, 28 numbers of woredas, and 328 numbers of kebeles. The total area of the city is 540km2. According to the draft plan, Addis Ababa alone takes 54% of the total investment in Ethiopia (Addis Ababa city council report, 2016). The total numbers of foreign investment in Addis Ababa now reached at 1047. However, only 156 companies were at operation stage, of which 105 companies were service and trade, and 51 were manufacturing companies (AAIA Report, 2014). Companies at operation stage were the focusing areas of the study.

In order to address the research objectives, sample companies were selected proportionally. Before going forward in the process of sampling, sample framing criteria has to be in place.

Accordingly, the sample size of the study was 48 FDI companies, of which 19 from manufacturing and 29 from service and trade types of companies proportionally. This is 31% of the population. The **sample size** of **30**% seemed to be **ideal** (Range Manangement Society of India, 2000). Moreover, the study has administered a multistage sampling. First, applied proportional stratified sampling for all investment sectors; strata based on sectors type, and then applied systematic random sampling as appropriate sampling technique as well as "before, then after" technique.

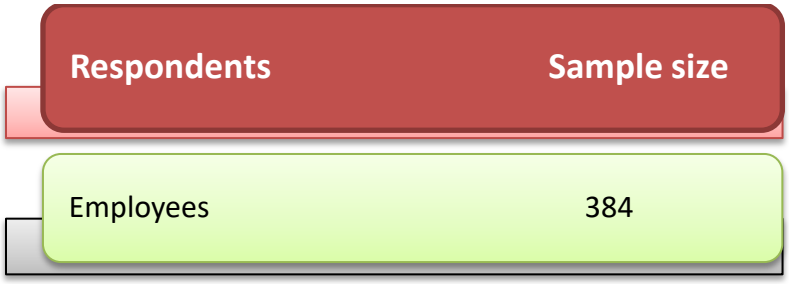
Table: 3.1. Sample distribution of FDI companies (operation stage)

Busin. sectors	***Countries of origin***						
	Chain	Sudan	USA	Turkey	India	Others	**Total**
Manufacturing	*5*	*2*	*2*	*2*	*2*	*6*	*19*
service & trade	*5*	*5*	*4*	*3*	*2*	*10*	*29*
	10	*7*	*6*	*5*	*4*	*16*	*48*

Source: Author's construct

One of the most essential issues in any statistical procedure or approach is sample size; it seems to be general rule to that quantitative research with larger sample respondents will have more accurate result (Dawson, 2002).

Therefore, in order to address the first objective, totally 25 knowledgeable expert participants were selected; and to address the second objective, 76 managers have been selected through purposive sampling method. Moreover, to draw sample from stakeholders, the desired margin of error that can be tolerated is 5%. Accordingly, based on Cochran's formula and the desired specification, the sample sizes from employees groups were determined as follow:



Source: Author's construct

This study has employed a multistage sampling. To employees, it was designed proportionally based on the type and numbers of workers currently working in each company. The second stage was using simple random sampling.

II. Data collection techniques

The Delphi method, with two rounds, has been the most important method of data collection in addressing the first objective of the study. Other appropriate data collection techniques for this study have been decided to be questionnaire and semi- structured interview techniques.

III. Data analysis techniques

All data analysis was done by this researcher independently. STATA 12 software was used for statistical analysis. The followings were the data analysis techniques of this study

- Thematic analysis- for first round Delphi method
- Descriptive statistics such as frequency and percentage- for second round Delphi
- Dichotomous analysis- to convert ordinal variables (a 5 level likert scale response) in to categorical dichotomous variables
- Binomial test- to test the statistical difference between the observed and expected frequency of two outcomes (dichotomous variables) and then to decide whether to accept or reject

- Chi-square goodness of fits test-to test the statistical difference between the observed and expected frequency of more than two outcomes and then to decide whether to accept one of the outcome
- Chi-square tests of independency- to test the statistical difference between two categorical variables
- One sample T-Test
- Principal component analysis (PCA)- a method used to reduce the data or to extract number of components
- Confirmatory factor analysis (CFA): - to simplify complex sets of data and reduce the numbers of variables. This set out a numbers of factors and simplify correlation matrixes
- Structural equation modelling (SEM):- It represents the hybrid of factor analysis simultaneous equation modelling and path analysis; it is used to build and estimate models.
- As well as Z- test, model fit indices, and correlation matrixes

CHAPTER FOUR

4. DELPHI METHOD-FOR FDI COMPANIES' ETHICAL PRINCIPLES

I. Introduction

This study has employed Delphi method to extract operational business ethics principles based on the experts' group consensus. Through this technique of data collection, the study has developed ethical principles for FDI companies by taken 25 experts. The data collection was done with two round Delphi method. And analyzes was done by using descriptive statistics: frequency and percentage. the semi-structured interview in the first round Delphi technique; and close ended questionnaire in the second round Delphi.

And the test was done through binomial distribution test by using STATA 12 software package. Subsequently, this chapter outlined, the main findings of the interviews and questionnaires in the Delphi technique of data collection. The findings have been outlined under each round of Delphi technique.

I. The Expelled CBE Principles or Standards

The followings are the list of CBE principles Excluded

Figure: 5.4. The excluded CBE principles or standards identified from the second round Delphi analysis

Source: the Author's analysis (2018)

II. Operational CBE Principles or Standards

The followings are the list of CWE principles viewed as operational guidelines

Figure: 5.3.The CBE principles or standards identified from the second round Delphi analysis

Source: the Author's analysis (2018)

4. CORPORATE WORK ETHICS PRACTICES IN THE STUDYAREA

I. The overall CWE practice

a). Ethical infrastructure

Ethical infrastructure that support to nurture ethical conduct or ethical culture and avoid unethical behaviour (Hatcher, 2010).

- The four essential **ethics infrastructures** to create an ethical culture and behaviour are;1) **existence of code of ethics, 2) ethics training, 3) ethics offices, 4) good reporting systems** (Clark, 2003).
- The **idea** is that companies **with good ethical infrastructure** are more likely to reach **high ethical performance** (Laasch and Conawa, 2014; Stanwick and Stanwick, 2015, Ferrell et al., 2016).

Therefore, different officers were interviewed about the existence of better Ethical infrastructure in their companies The number of respondents was 76 managers; the data collection was done via semi-structured interview and analyzed through thematic analysis

- **Finding from interview**

1. FDI Companies do not have their own **code of ethics**
2. There is no formal **ethics training program designed and delivered that contained about work ethics**
3. FDI companies did not plan to have an independent **ethics office as well as officers**; and did not consider this offices as relevant

As far as concerning to the extent of practicing identified work ethics principles, different employees were asked to state their extent of believe and rated the extent to which FDI companies are practicing work ethics towards their employees.

It can be viewed as important to explain the extent to which FDI companies are practicing the various Work ethics principles. The analysis was done through chi-square goodness of fit test. As a result, FDI companies operating in Addis Ababa are not sufficiently and adequately practicing the followings CWE standards or principles.

For their employees

- Provide Equal and Equity Compensation
- Recognize & Resolve the Workers' Personal and Social Problems

- Respect the Workers' Values, Norms, Interest, Dignity and Privacy
- Freedom of Work as to Join, Leave, and Association
- Create Conducive (Healthy, Safety) Working Environment

However, these companies were performing the followings CWE standards or principles to a medium extent

For their employees

- ✓ Access Adequate and Truthful Information
- ✓ Provide Equal opportunity and treatment

Moreover, the overall extent of CWE practice analysis was done through one sample T-Test. The result is indicated as the follow.

```
. ttest Averageworkethics == 3

One-sample t test
```

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Averag~s	377	2.738537	.0306501	.5951176	2.67827	2.798804

```
    mean = mean(Averageworkethics)                                t =  -8.5306
Ho: mean = 3                                     degrees of freedom =       376

    Ha: mean < 3                 Ha: mean != 3                 Ha: mean > 3
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000
```

This is T- test results on the existence of better CWE practices in FDI business. According to the table, the average value of work ethics practices indicates to 2.738537, and the P- value is 0.0000; which is statistically significant. Moreover the expected average was 3. Thus, there is a statistical significant evidence to say that FDI businesses are not practicing work ethics.

Overall Employee Related CWE Practice by Business Sectors and Countries *of Origins*

This is to Comparative work ethics performance Difference among manufacturing and Service sectors as well as country of origin

I. Chi-Square Test Results

***Table: 4.1**. Overall employee related CWE practice & FDI Business Sectors*

Overall employee related CBE practice	FDI Business Sectors		
	Manufacture	Service& Trade	Average
Low extent	**54.06%**	**48.34%**	**52.56%**
Medium	**21.58%**	**24.67%**	**22.39%**
High extent	**24.15%**	**26.98%**	**25.05%**
Total	**100%**	**100%**	**100%**

***Table: 4.2.**. Overall employee related CWE practice & FDI countries of Origin*

Overall employee related CBE practice	FDI countries of origin						
	China	Sudan	USA	Turkey	India	Others	Averag
Low extent	53.25%	49.03%	49.07%	52.14%	52.26%	55.05%	**52.56%**
Medium	23.81%	25.00%	26.09%	20.71%	18.42%	21.37%	**22.39%**
High extent	22.94%	25.97%	24.84%	27.14%	29.32%	23.58%	**25.05%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

***Table: 4.3.** Chi-Square independency Test Results*

Chi-square	Value	df	P-value
Pearson chi2(2) / independency test (MS)	6.7700	2	0.034
Pearson chi2(10) / independency test (origin)	13.0195	10	0.223

This part is to gain understanding about the general employee-related CWE practice of FDI companies; the broad-spectrum data which is analyzed in this is originated from the seven questions. Accordingly, goodness of fit test is 0.000; there is a significance difference. Thus, it is an evidence to conclude that FDI companies are not ethically good to their workers. However, for sectors' practice differences test, the Pearson chi square independency test Coefficient result indicates 6.77. The P-value is reached at 0.034. This result is significant at the 5% significance level. Based on this, one can conclude that there is an ethical practice different

between manufacturing and service sector towards their employees. Here, service companies are better that manufacturing. On the other hand, in order to analysis the Comparative work ethics performance Difference among country of origin; the P- value in Pearson chi square independency test was undertaken; the result shows 0.223. It implies that there is no statistically significant difference. So, it is possible to say that foreign countries are similar in performing ethics for their workers.

5. THE WORKERS' PERFORMANCE LEVEL (*Employees' loyalty)*

One sample T- test

The overall extent of Employees' Performance

```
. ttest AverageEmpPerformance == 3

One-sample t test
```

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Averag~e	377	2.697613	.0255235	.4955766	2.647426	2.747799

```
    mean = mean(AverageEmpPerformance)                        t = -11.8474
Ho: mean = 3                                    degrees of freedom =      376

    Ha: mean < 3                 Ha: mean != 3                 Ha: mean > 3
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000
```

The average value of ***Employees' Performance is*** 2.697613, and the P- value is significant at 5% level and under the expected average value of 3. Thus, there is a statistical significant evidence to conclude that, in FDI businesses, the ***Employees' attraction and loyalty is below the expected.***

6. THE IMPACT OF CORPORATE WORK ETHICS PRACTICES ON THE COMPANIES' PERFORMANCE THROUGH STRUCTURAL EQUATION MODELLING

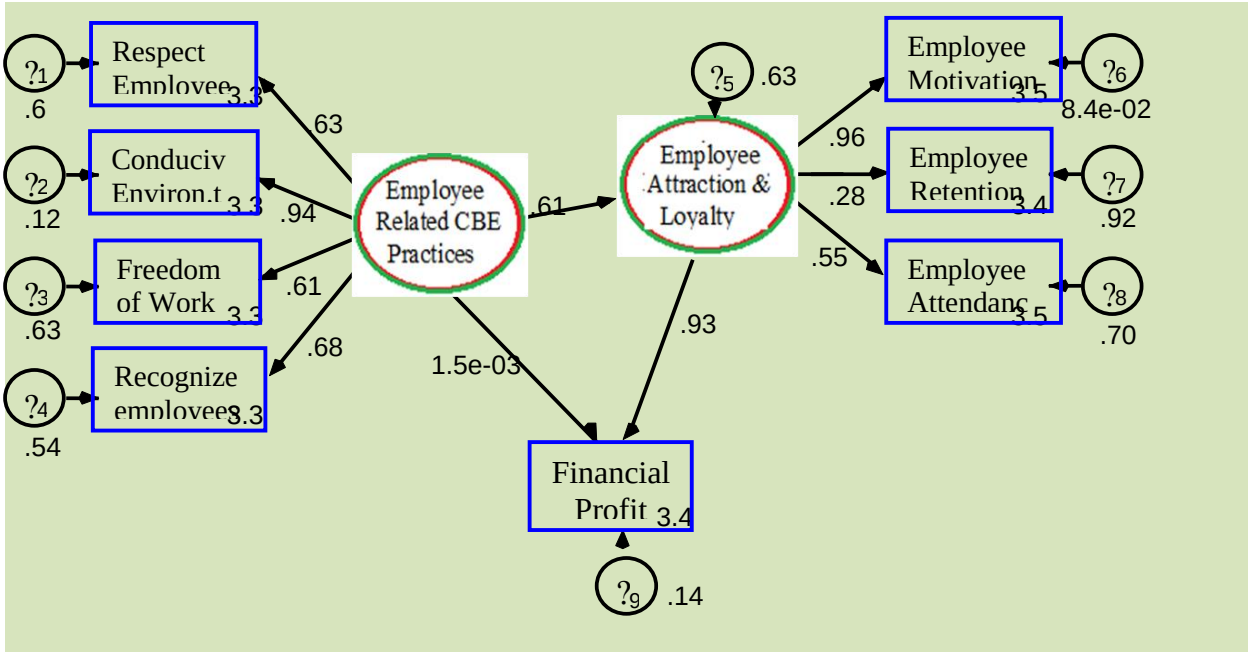
A SEM model has been built and tested for fit. When the model fitted and statistical support for the model has been obtained, the study interpreted the result of the estimation. In SEM, the focus of interpretation was the parameter estimates (Robins et.al, 2007). In this study, the magnitude and the sign of estimates were from the standardized estimation of SEM; a structural model was evaluated on the basis of goodness of fit measure. The model fit indices were chi-square to degree of freedom ration, RMSEA, SRMR, TLI and CFI. A Model has been built and the output results are presented and interpreted in the next section.

6.1. SEM- Model building and estimation

After performing principal component analysis (PCA) and Confirmatory factor analysis (CFA) Sequentially, SEM models have been built and estimated.

1. Employee related

Figure 7.4: A mode for employee related CBE practice, Employee attraction and loyalty, and Financial Performance



In Figure 7.4, the standardized factor loading from path analysis result indicates that the path coefficient between "employee-related CBE practice" and "employee attraction and loyalty" and between "employee attraction and loyalty" and "financial performance" was positive and significant. It was 0.61 and 0.93 respectively. However, the path coefficient between employee-related CBE practice and financial performance was insignificant; which was 0.0015. R-square value and Z- values are calculated and shown together; the amount of variance in the financial profit accounted for by the Employee related CBE practices was almost zero; while the fraction of variances of employee attraction and loyalty by exogenous variable (employee related CBE) was 0.372 and the fraction of variances of profit by exogenous variable (employee attraction and loyalty) was 0.865. Concerning to Z- value, relationships between these variables were positive and greater than 1.96 except the third paired.

The further analysis was also undertaken via mediating variable (employee attraction and loyalty). As a result, the mediating between CBE and financial performance was strong and significant (0.61*0.93=0.567). Therefore, it can be viewed that the relationship between CBE practices and financial performance is mediated by employee attraction and loyalty. Moreover, the total effect of "employee related CBE practice" on profit was 0.7521 with the Z- value 7.06. This implies that there is a significant total effect of exogenous valuable (employee related CBE practice) on profit generation. Moreover, the model was well fitted (□2/df= 1.7578, RMSEA =0 .063, TLI =0 .97, SRMR = 0.047 and CFI =0.98)

Table 7.18; summary of Hypothesis Testing

S.n	Hypothesis	Test result
1	**H1:** There is no a significant positive effect of CWE practices perceived by employees on employees' attraction and loyalty.	**Reject**
2	**H2:** There is no a significant positive effect of the employees' attraction and loyalty on financial profitability	**Reject**
3	**H3:** CWE practices perceived by employees has no a significant direct positive effect on FDI companies' financial profitability	**Accept**
4	**H4: C**WE practices perceived by employees has no a significant total effect on FDI companies' financial profitability .	**Reject**

CHAPTER FIVE

2. CONCLUSION AND RECOMMENDATIONS

This chapter mainly summarizes the finding, states the main conclusion and sets out the recommendation arising from the study

I. Conclusion

5.1 Corporate Business Ethics Principles

In order to address the first objective of this study, the data has been collected through Delphi method, analyzed by using descriptive techniques of data analysis: frequency and percentage. Moreover, the test was done through binomial distribution test by using STATA 12 software package. Subsequently, the followings are the main functional work ethics principles in which the FDI companies' behavior should be guided.

Workplace/Employee

i. Provide Equal and equity compensation
ii. provide Equal opportunity and treatment
iii. Recognize and resolve the workers' personal and social problem
iv. Respecting the workers' values, norms, interest, dignity and privacy
v. Access Adequate and truthful information
vi. Providing Freedom of work as to join, leave, and association
vii. Creating Conducive (healthy, safety, and dignity) working environment

5.2. Corporate Ethical Practices

The second purpose of this study was to investigate the CBE practice of FDI companies operating in Addis Ababa. As a result, FDI companies have no any ethical infrastructures: 1) code of ethics, 2) ethics training, and 3) ethics offices in view of the fact that the companies with good ethical infrastructure are more likely to reach high ethical performance.

Moreover, FDI companies operating in Addis Ababa are not sufficiently and adequately practicing the followings CWE standards or principles

For their employees

- Provide Equal and Equity Compensation
- Recognize & Resolve the Workers' Personal and Social Problems

- Respect the Workers' Values, Norms, Interest, Dignity and Privacy
- Freedom of Work as to Join, Leave, and Association
- Create Conducive (Healthy, Safety) Working Environment

However, these companies are performing the followings CWE standards or principles to a medium extent

For their employees

- ✓ Access Adequate and Truthful Information
- ✓ Provide Equal opportunity and treatment

5.3. Effects and Causal Relationship between Work ethical practices, employees' attraction and loyalty and profits

A. Causal relation

- ***There is a significant positive effect of:***
  1. CWE practices perceived by employees on employees attraction and loyalty
  2. Employee attraction & loyalty on financial performance (Profitability)

B. Total Effect relation

a) CWE practices perceived by employees has a significant positive effect on FDI companies' profitability

II. Recommendation

- Ethiopian government should create tangible directions; take proper measures, and incentives for good ethical courage and practices .
- Less government regulations, less code of ethics and an increase inflow of FDI business in Ethiopia raised new ethical issues. At the present time fatally greedy and selfish businessmen are being created. The Ethiopian government should therefore conscientiously and attentively follow up what corporate ethical practice is going on and should enable them to prepare their own codes of ethics and start to insist for effective application.

- Furthermore, the government should facilitate the ethics training program so as to improve better ethical awareness and practices.
- Companies should take initiations and their own parts to develop company specific code of ethics and ethical culture, design effective ethics training program to their stakeholders and to properly practice ethics.
- The companies should disclose the process for auditing their ethical performance and facilitate for external auditors. They should disclose their ethical performance level in each annual report and provide this information to outsiders.

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