



Role of Social Enterprises to Overcome Food Insecurity: Evidence from Ethiopia

Eshetu Tefera BEKELE¹

Received: August 02, 2022. Revised: October 29, 2022. Accepted: November 15, 2022.

Abstract

Purpose: Food security is a dynamic concept, which has continuously integrated new dimensions and levels of analysis over the years; this reflects the wider recognition of its complexities in research and public policy issues. Food insecurity is a major challenge for Ethiopia and for many African countries. This paper aims to identify the roles of social enterprises to overcome food insecurity. **Research design, data and methodology:** The research has focused on one primary question. What are the role of social enterprises to overcome food insecurity? The survey questionnaire was developed and an interview was made using enumerators. A total sample size of 400 sample households was selected randomly using the method of sampling with probability proportionate to size. Descriptive and inferential statistical analysis methods were used for data analysis. **Results:** Results of the regression analysis show that all of the hypothesized independent variables are significantly and positively affecting post membership income of the sample households. **Conclusions:** all stakeholders as government, development actors and academic institutions should closely monitor and support social enterprises/cooperatives technically, financially and materially. By doing so, the full potential and contributions of social enterprises in reducing unemployment and solving the social and environmental problems can be effective.

Keywords: Social Enterprises, Food Security, Food Insecurity, Cooperatives, Ethiopia

JEL Classification Code: E24, Q13, Q18

1. Introduction

The livelihoods of rural Ethiopian people are highly sensitive to climate. Food insecurity patterns are seasonal and linked to rainfall patterns, with hunger trends declining significantly after the rainy seasons (Endalew & Sen, 2021). Climate-related shocks affect productivity, hamper economic progress and exacerbate existing social and economic problems. In the Ethiopian context, currently, there is a big consensus among scholars that, poverty and food insecurity problems are highly linked. Droughts and other related disasters (such as crop failure,

water shortage, and livestock disease, land degradation, limited household assets, low income) are significant triggers, more important factors which increase vulnerability to food security and undermined livelihoods (Mohamed, 2017a).

To minimize the incidence of food insecurity, social enterprises as cooperatives have significant contribution to empower their members economically and socially and create sustainable rural employment through business models focused on economic, social and environmental shocks. Cooperatives in general and agricultural cooperatives in particular, offer small agricultural

* This research was supported by the Tongmyong University research grant 2022 (Research Project Number: 2022A005) AND The author would like to thank Tongmyong University for providing the respective research fund

1 First and Corresponding Author. Assistant Professor, College of Business Administration, Tongmyong University, Busan, South Korea. Email: eshetugirma2011@gmail.com

© Copyright: The Author(s)
 This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

producers' opportunities and a wide range of services, including improved access to markets, natural resources, information, communications, technologies, credit, employment, and training.

The concept of integrating social aims with profit-making has been an emerging trend in the world today, especially in the wake of the 2007-2009 financial crisis which shone the spotlight on the problems of pure profit-maximization. Social enterprise is at the very core of this new movement to integrate social aims with profits, taking root in an increasing number of circles today, ranging from the field of international development, to impact investing, and even public policy. Today, the success of organizations is not only judged by the financial performance or the quality of their products or services; rather they are being evaluated on the basis of their impact in solving the social and environmental problems of the society at large. Hence, they are evaluated on their impact to transform society, from business enterprises to social enterprises.

Consistent with (Diaz-Sarachaga & Ariza-Montes, 2022), a social enterprise is defined as an organization that exists for a social purpose and engages in trading to fulfill its mission, using market-based techniques to achieve social end. Evolving from non-profit concept, social enterprise is a revitalized, rather than new concept, demanding business as a tool for societal development. Social enterprises differ from traditional non-profit organizations primarily because of their business-like approach to social issues. Emerging norms within the social enterprise sector include return generation, market, customer focus, and self-funding when needed.

Following the globally accepted definition, in the Ethiopian context, social enterprises are considered as, enterprises that directly address social needs through their products and services or through the numbers of disadvantaged people they employ (Abdulmelike, 2017). Based on their principles, cooperatives are highly concerned about the issue of the community and their roles are similar with social enterprises. Though it is less common for individual entrepreneurs to set up a business as a social enterprise, there are some well-established social enterprise companies that offer products and services alongside employment and training of disadvantaged people. In the context of Ethiopia, there is no distinct legal form or registration process for social enterprises. Besides, they are mostly registered under the umbrella of cooperatives. Hence, cooperatives are considered to achieve the role of social enterprises.

To address the food insecurity problem, the Ethiopian government is taking different measures with programs that meet the varying needs of vulnerable and food insecure households. One of the measures is organizing farm households into cooperatives which are considered as social enterprises. To the best of my knowledge, there has been no adequate study conducted in Ethiopia

regarding the roles of social enterprises to overcome food insecurity. Moreover, knowledge about the roles of social enterprises to overcome food insecurity is also limited. Hence, the findings of this research would give a substantial answer based on empirical evidence. It is believed that clear understanding about the role of social enterprises/cooperatives to overcome food insecurity have practical implications at the micro and macro level. To be specific, it will help policymakers, development practitioners, and cooperative board of directors to design appropriate policies and strategies to overcome food insecurity. Hence, the findings of this study will fill the existing knowledge gap and give a clear direction for further interventions.

2. Literature Review

2.1. Food Security Concepts and Definitions

Food security concept is believed to have originated three decades ago in the mid-1970s in the first world food conference and was narrow in its coverage and definition. This concept initially paid attention to the national and international level and was defined from the perspective of the food supply with special attention to stable food price and food availability.

A situation where all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life is known as food security (Abegaz, 2017). Accordingly, the food security concept encompasses the following four components: food access, food availability, food utilization, and sustainability. Food access is ensured when households and all individuals within them have adequate resources to obtain appropriate foods for a nutritious diet. Additionally, food availability is said to be achieved when sufficient quantities of food are consistently available to all individuals within a country. Food utilization refers to the consumption of food through adequate diet, clean water, sanitation, and health care to reach a state of nutritional well-being where all physiological needs are met. Food sustainability, on the other hand, refers to a situation where the above three components of food security are fulfilled at any time.

This component of access to food security implies that people should not be in any situation of risks owing to sudden shocks of economic or climatic crisis or cyclical events. The concept of stability can, therefore, refer to both the availability and access dimensions of food security. Food insecurity, in contrast, is viewed as the denial of the above rights either at household, individual, or community levels (Tobin, 2009). Food insecurity also defined as, limited availability of nutritionally adequate and safe foods, and insufficiency of money to meet dietary energy requirement (Tarasuk, 2001).

2.2. Social Enterprises: A Pathway for Social Change

In recent years, the term ‘social enterprise’ has become familiar with academic and policy audiences as well as to the general public (Haugh, 2005; Choi & Jang, 2014; Diaz-Sarachaga & Ariza-Montes, 2022). Still, understanding of the term, social enterprise depends on different cultural contexts. In the USA, social enterprise usually refers to nonprofit organizations which develop ‘earned income strategies’ to generate revenue to finance their social mission, while in Europe it is seen as representing a different way of doing business and is usually located in the third sector (Haugh, 2005). In any case, social enterprises are generally understood in terms of a business model which meets both social and economic objectives, contributing to labor market integration and social cohesion (Kerlin, 2006).

The foundation for current social entrepreneurship was laid by the pioneers like *Muhammad Yunus*. He was the founder of *Grameen* Bank and father of microcredit who identified the stable equilibrium for poor Bangladeshis’ limited options for securing a small amount of credit. The formal banking of the then Bangladesh provided the rich with loans keeping the poor out of the system. The poor were unable to receive loans because of the inflated interest rates that if they accept would leave them without any penny. Following this, *Yunus* introduced a credit scheme where the poor can afford the loan. Accordingly, *Yunus* started to borrow \$27 from his own pocket to 42 women who were living in the village of *Jobra*. The borrowed women repaid back all of the loans. *Yunus* found that with even small amounts of capital, women are able to participate in business transactions to generate income. *Grameen* Bank sustained itself by charging interest on its loans and then recycling the capital to help other women. *Yunus* brought inspiration, creativity, direct action, courage, and fortitude to his venture, proved its viability, and over two decades spawned a global network of other organizations that replicated or adapted his model to other countries and cultures, firmly establishing microcredit as a worldwide industry (Martin & Osberg, 2007).

The difference between social and business entrepreneurship has been clarified by different authors. According to (Austin, Stevenson, & Wei-Skillern, 2012), the main difference between social and other types of entrepreneurship lies in the purpose the firm is established. This was supported by (Cukier et al., 2011), stating that social entrepreneurship focuses primarily on activities with social purposes whereas business entrepreneurship focuses on activities with business profit-making purposes. By selling goods and services in the open

market, social enterprises reinvest the money they make back into their business or the local community. This allows them to tackle social problems, improve people's life chances, support communities and help the environment. So when a social enterprise benefits, society benefits.

Many business schools and foundations currently advocate the idea of a mission-driven business that promotes broad business methods going beyond earned income strategy to bring social innovation (Abdulmelike, 2017). The social innovation school of thought focuses on social entrepreneurs as individuals who tackle social problems and meet social needs in an innovative manner. Hence, in order to solve the multifaceted social and environmental problem, encouraging creativity and innovation should get priority attention. By doing so, we can create so many innovators, who can do things in a better way. Moreover, social enterprises as cooperatives have significant contributions to empower members economically, socially and in changing the knowledge of members to have access to technological, institutional, and organizational innovations.

2.3. Role of Social Enterprises in Poverty Alleviation

One of the major challenges facing developing and underdeveloped countries of the world is poverty (Lateh, 2018). Although the level and extent of poverty and unemployment have been observed to be different within and across the nations, still it remains as the major obstacle to the optimum utilization of human resources for both social and economic development.

Social entrepreneurship is viewed as a way of combating poverty, with the pursuit of an entrepreneurial strategy (Diochon, 2013). Social entrepreneurship makes ventures that may be for benefits or nonprofit, yet the need is frequently on utilizing market oriented exercises to create framework, change that enhances the lives of individuals. Several past studies undertake an analytical, critical and synthetic examination of “social entrepreneurship” in its common use, considering both the “social” and the “entrepreneurship” elements in the concept. On both points, there is a range of use with significant differences marked by such things as the prominence of social goals and what are thought of as the salient features of entrepreneurship. Social goals are broadly constructed to include serving the needs of the disadvantaged, unemployed, homeless, and small holder farmers. To achieve sustainable outcomes, social enterprises adopt business models that encompass commercial trading as well as creating social and environmental impacts (Doherty & Kittipanya-Ngam, 2021).

According to (Chia et al., 2022), unlike charities, social entrepreneurs do not typically rely on donations or aid as their main source of funding. Social ventures aim to become self-sufficient by developing viable business models and multiple streams of financial and nonfinancial support. Social entrepreneurs often engage with the communities that they aim to serve, involving them as partners or co-designers of solutions. Because they interact with different groups of stakeholders, social entrepreneurs are likely to view problems in context and acknowledge the interrelations between health and non-health factors, for example, between lack of education and health-seeking behavior, or poverty and ill-health. Rather than providing products and services for free, social entrepreneurs develop frugal solutions to deliver healthcare and social services. The dual focus on affordability while empowering or educating communities allows social entrepreneurs to sustain their programs of work.

Studies conducted by (Diaz-Sarachaga & Ariza-Montes, 2022), revealed that, the United Nations General Assembly acknowledged in its resolution 73/225 the outstanding role of entrepreneurship and more specifically, social entrepreneurship as a driver of sustainable development and the 2030 Agenda by fostering inclusive growth, increasing employment, combating social inequalities and facing major social and environmental issues. The contribution of social enterprises to face current economic and environmental challenges is on the rise. The analysis of more than a thousand social enterprises in 2015 in nine Organization for Economic Cooperation and Development (OECD) countries showed revenues exceeding EUR 6 billion and a job creation of about 6 million individuals, among them around half a million people from vulnerable groups (Dwivedi & Weerawardena, 2018). Social enterprises account for 3% and 8% of the Gross Domestic Product (GDP) in Australia and the European Union. Despite the development of several indicators and frameworks, the measurement of social impact is still a pending issue that remains unsettled (Roundy et al., 2018).

To date, social enterprise research has mainly focused on understanding how tensions resulting from the dual mission (generate profit and achieve social goal) are resolved. There is a general assumption that tensions arise due to trade-offs between the pursuit of social and financial objectives. However, the actual role of social enterprises to overcome food insecurity is not well studied before.

3. Research Methods and Materials

3.1. Method of Data Collection

To generate information at the household level, a household-level survey was undertaken using a semi-structured interview. Before conducting the interview, a pre-test of the interview schedule was completed and accordingly, the revision was made and finalized. The data used for this study were collected in 2021 for two consecutive months with the help of professional enumerators.

3.2. Sampling

In this study, three food insecure districts namely: *Boset*, *Fentale*, and *Ziway* are purposively selected from East *Shoa* Zone, Ethiopia. Using the formula illustrated by (Moroda et al., 2018), the sample size of each district was calculated, which resulted in a total of 400 sample members of the multipurpose agricultural cooperatives.

3.3. Data Analysis

To identify the roles of social enterprises to overcome food insecurity multiple regression model is used by taking “Y” as income after membership of the respective multipurpose agricultural cooperatives. The model is specified as follows (Gujarati, 2009).

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_iX_i$$

Where:

Y= Post membership Income of a household

a=Intercept (Constant)

b₁ to b_i= Regression coefficients

X₁-X_i=independent variables that influence the income of households' after being members of the respective multipurpose agricultural cooperatives.

3.4. Description of Explanatory Variables

Based on pre-existing theories, reviewing previous empirical literature, and the researcher's observation and practical experience the following proxy variables that may have affected the income level of the members of the multipurpose agricultural cooperatives were hypothesized. In this study, there are 7 independent variables (membership period, access to agricultural inputs, access to credit, access to extension advisory services, dividend payment, employment opportunity, and women empowerment), that are hypothesized to affect the dependent variable (income).

Membership Period: In this study, it is hypothesized that the higher the number of years associated with the member of the multipurpose agricultural cooperatives, the higher the exposure in getting knowledge and benefiting all of the production, management, marketing, and

financial associated services. According to (Ortmann & King, 2007), the higher the education level, the better would be the knowledge of the farmer towards the cooperative and acquire news and education about the benefits of the cooperative easily. The absence of training and experience sharing discourages peoples' interest in joining cooperatives (Bekele, 2021). As of the main idea of these pieces of literature, educated or well-trained farmers are in a better position to know the benefit of cooperatives and are more likely participate in cooperative activities; which in turn will help them to improve their income and ultimately ensure food security. To acquire more knowledge and information from the cooperatives, senior members are benefiting better than the newcomers. Moreover, agricultural cooperatives also open room for members to exchange technical knowledge among themselves, which later can have its own impact to improve the economic wellbeing of members. *Hence, it is hypothesized that membership period in cooperative organizations and income are positively related; which in turn has significant influence to ensure food security (H1a).*

Access to Agricultural Inputs: In this study, it is hypothesized that getting the required agricultural inputs through multipurpose agricultural cooperatives, will increase production and income of members to ensure food security. Access to a variety of business services such as research, financial, management, inputs or other forms of technical support are vital to the viability of cooperative (Ortmann & King, 2007). *Hence, access to agricultural inputs and members' income are positively related; which in turn has significant influence to ensure food security (H1b).*

Access to credit: In this study, it is hypothesized that, by getting the required credit through multipurpose agricultural cooperatives, members can diversify their income to ensure food security. Providing credit support for the poor householders that crucially help them to promote their autonomy in production and business, as well as increase their income. Credit support will empower low-income households to think of innovative agricultural and related business. *Hence, access to credit and cooperative members' income are positively related; which ultimately is a guarantee to ensure food security (H1c).*

Access to extension advisory services: In this study, it is hypothesized that, by getting frequent extension advisory services through multipurpose agricultural cooperatives, members can get better knowledge regarding better production, management, and marketing of their agricultural production and productivity. Proper utilization of extension advisory services will improve their income and ultimately ensure food security. Many studies show the positive effects of participation in extension programs on agricultural productivity, rural

incomes and poverty reduction (Cunguara & Moder, 2011). *Hence, in this study access to extension advisory services and cooperative members' income are positively related; which ultimately has an impact to ensure food security (H1d).*

Dividend Payment: In this study, it is hypothesized that, by getting a dividend from their respective cooperatives, members can get additional income which can ultimately help them to ensure food security. Unlike investor based business, cooperatives are paying a dividend back to their members and use for social services. *Hence, in this study, getting access to dividend payment and members' income are positively related; which has its own contribution to ensuring food security (H1e).*

Employment opportunity: In this study, it is hypothesized that, by getting employment opportunities from their respective cooperatives, members can get additional income which can ultimately help them to ensure food security. Access to employment opportunities helps to diversify and increase the amount of income received by households (Gebre, 2012). *Hence, members' access to employment opportunities through their cooperatives, has a positive effect to improve members' income to ensure food security (H1f).*

Women Empowerment: In this study, it is hypothesized that, when women are empowered economically and able to participate in any leadership positions and decision-making activities, the income of the household will be improved which ultimately plays a significant role to ensure food security. Women's participation in economic activities can automatically increase the overall status of the entire family. *Hence, women empowerment through cooperatives and households' income are positively related; which ultimately has an impact to ensure food security (H1g).*

4. Results and Discussion

4.1. Descriptive Analysis

4.1.1. Household Welfare Situation

The average annual income of the sample households after joining their respective cooperatives is 713 USD (US Dollar), while it was 452 USD before joining the cooperatives. With regarding their expenditure, there is also a significant average annual expenditure difference observed before and after joining the respective cooperatives. The empirical data revealed that the average annual expenditure of sample households' after joining the respective multipurpose agricultural cooperatives is 642 USD, but before they joined the respective multipurpose agricultural cooperatives, the figure was 383 USD.

Group discussion held with selected key informant members of the respective multipurpose agricultural cooperatives revealed that, income difference of members before and after membership is happened because of the significant roles played by the respective cooperatives: in changing the business awareness of people, proper supply and utilization of agricultural inputs, provision of credit, dividend payment and their role in empowering women economically, socially and in leadership position. Table 1 below shows the comparison of income and expenditure of sampled households before and after the membership of cooperatives.

Table 1: Comparison of Income and Expenditure Before and After Membership

Welfare Indicators	Before Joined	After Joined	T-value
Average Income (in USD)	452	713	10.021***
Average Expenditure (in USD)	383	642	8.499***

4.1.2. Perceived Roles of Cooperatives’ to Overcome Food Insecurity

Descriptive results on the possible contribution of multipurpose agricultural cooperatives to overcome food insecurity were analyzed. Based on the result, 90% of the sample respondents strongly agree about the possible roles of their respective cooperatives in supplying agricultural inputs, mainly chemical fertilizer and improved seeds. Moreover, 80% of them also strongly agree on the possible contribution of their respective cooperatives in the provision of credit and agricultural extension advisory services. In the meantime, 82% of them again strongly agree on the possible contribution of their respective cooperatives in empowering women to play a significant role in household decision making, develop saving culture, engaged in agribusiness activities and participate in leadership position. On the other hand, 72% of the sample households also strongly agree on the possible contribution of their respective cooperatives in creating employment opportunity and paying them dividend based on their economic participation in their respective cooperatives (Table 2).

Table 2: Descriptive Results on the Perceived Roles of Cooperatives

Items	Strongly Disagree	Disagree	Neutral	Agree (n=400)		Strongly Agree (n=400)	
				No	%	No	%
Cooperatives increased members’ access to agricultural inputs?	-	-	-	40	10	360	90
Cooperatives increased members’ access to credit?	-	-	-	80	20	320	80
Cooperatives increased members’ access to extension advisory services?	-	-	-	80	20	320	80
Cooperatives play significant role in empowering women?	-	-	-	72	18	328	82
Cooperatives create job opportunity to members?	-	-	-	112	28	288	72
Cooperatives pay dividend to their members	-	-	-	112	28	288	72

4.2. Results of the Regression Analysis

To identify the roles of social enterprises to overcome food insecurity, multiple regression model is used by taking the dependent variable “Y” as income after membership of the respective multipurpose agricultural cooperatives as a function of different explanatory variables (Table 3).

Table 3: Results of the Regression Model

Explanatory Variables	Regression Coefficient	Standard Error	Significance Level
Membership period	0.3132	0.0287	0.034**
Access to agricultural inputs	0.7827	0.2533	0.002***
Access to credit	0.457	0.165	0.011**

Access to extension advisory service	0.436	0.172	0.045**
Dividend payment	0.1809	0.1321	0.100*
Employment opportunity	0.0842	0.0432	0.062*
Women empowerment	0.426	0.0785	0.034**

4.3. Discussion

Commensurate with the final results of the regression model, out of the seven hypothesized independent variables that influence post membership income of the sampled households, all of them (membership period, access to agricultural inputs, access to credit, access to extension advisory services, dividend payment, employment opportunity, and women empowerment) are found to be statistically significant. The coefficient of determination (R^2) results i.e. 0.669 shows that 66.9% of the total variation of the dependent variable “Y” (post membership income of the respondents) is explained by the independent variables included in the regression analysis.

According to the model result, membership period is statistically significant at less than 5% probability level with expected sign. As a result, the longer households become members of the multipurpose agricultural cooperatives, the more they are benefited from all services of the cooperatives. Keeping other factors constant, an increase in a year of membership of the respective cooperatives, the likelihood of households' economic benefit will increase by a factor of 0.0287. *Hence as hypothesized, H1a is supported.*

As reported by the model result, access to agricultural inputs is statistically significant at less than 1% probability level with expected sign. As a result, by getting agricultural inputs through their cooperatives, households income has been improved to ensure food security. Agricultural inputs as improved seed, fertilizers, and other technologies have significant influence to increase farm production, which ultimately has a positive effect to increase income and ensure food security. Results of this study reveal that all other factors are remaining constant, households' income increase by a factor of 0.2533, as farm households' access to agricultural inputs increased by one unit. *Hence as hypothesized, H1b is also supported.*

As stated in the model result, access to credit is statistically significant at less than 5% probability level with expected sign. As a result, by getting credit through their cooperatives, households'/members can diversify their business activities and their income has been

improved to ensure food security. Results of this study reveal that all other factors remaining constant, households' income increase by a factor of 0.165, as a farm households' access to credit increases by one unit. *Hence as hypothesized, H1c is also supported.*

Pursuant to the model result, access to extension advisory service is statistically significant at less than 5% probability level with expected sign. As a result, by getting extension advisory services through their cooperatives, households' can learn more innovative ways of doing agricultural and related business, by doing so income has been improved to ensure food security. Results of this study revealed that all other factors remaining constant, households' income increased by a factor of 0.172, as a farm households' access and use of extension advisory service increase by one unit. *Hence as hypothesized, H1d is also supported.*

Conforming to the model result, dividend payment through the multipurpose agricultural cooperatives is statistically significant at less than 10% probability level with expected sign. As a result, by getting dividend payment through their cooperatives, households' income has been improved to ensure food security. Results of this study revealed that all other factors remaining constant, households' income increase by a factor of 0.1321, as a farm households' dividend payment through cooperatives increased by one unit. *Hence as hypothesized, H1e is supported.*

In consonance with the model result, employment opportunity through cooperatives is statistically significant at less than 10% probability level with expected sign. As a result, by getting employment opportunity through their cooperatives, households' income has been improved to ensure food security. Results of this study revealed that all other factors remaining constant, households' income increased by a factor of 0.0432, as a farm households' access to employment increases by one unit. *Hence as hypothesized, H1f is also supported.*

Congruent with the model result, women empowerment is statistically significant at less than 5% probability level with expected sign. As a result, as women are empowered economically, socially, and in leadership position through cooperatives, households' income has been improved to ensure food security. Results of this study revealed that all other factors remaining constant, households' income increased by a factor of 0.0785 when women are empowered through cooperatives. *Hence, as hypothesized, H1g is also supported.*

5. Conclusion

5.1. Summary

Social entrepreneurship is a process that can provide viable solutions to problems with the purpose to improve access to social services, health education and local labor exploitation, reducing all forms of discrimination by providing jobs to people in need. Social entrepreneurs focus on systemic social change that disregards institutional and organizational norms and boundaries; they look for sources of resources and alliances exploiting a range of organizational forms from charities to not for profit to commercial venture.

Social enterprises are playing a significant role in improving the awareness of people in economic, social, and environmental issues, provides employment opportunities, promote women empowerment, improves societal access to institutional supports like access to agricultural inputs and credit, and encourages innovation and creativity. By doing so, social enterprises can enhance members' income/wealth creation which ultimately has its own contribution to overcome the problem of food insecurity.

Descriptive results on the roles of social enterprises to overcome food insecurity revealed that the respective multipurpose agricultural cooperatives are playing a significant role in increasing members' access to agricultural inputs, credit, extension advisory service, empowering women, and creating job opportunities. When we see the income and expenditure situation of households' before and after the membership of cooperatives, there is a statistically significant difference in the income and expenditure data of households' before and after membership. This entails that, both income and expenditure of households' have been improved after they join their respective cooperatives. Moreover, results of the regression analysis show that all of the hypothesized independent variables (membership period, access to agricultural inputs, access to credit, access to extension advisory services, dividend payment, employment opportunity, and women empowerment) are significantly and positively affecting post membership income of the sample households.

5.2. Policy Implications

Based on the empirical findings of this study, the following recommendations are given to the concerned stakeholders (policymakers of Ethiopia, non-governmental organizations, social enterprise companies, countries with the food security problem, development practitioners and donor organizations). Up on the empirical findings of this study, to solve the food insecurity problem, social enterprises as cooperatives have played a significant role in employment creation,

empowering women, improve access to credit, provision of agricultural innovations and enhance members' awareness to do business. To use the full potential of social enterprises/cooperatives, government, development actors, and academic institutions should closely monitor and support their initiatives technically, financially, and materially. By doing so, the full potential and contributions of social enterprises in reducing unemployment and solving the social and environmental problems can be effective.

5.3. Limitations and Further Research

The present study focuses on the role of social enterprises to overcome food insecurity by taking empirical evidence from East *Shoa* Zone, Ethiopia. Though results of this study have its own contribution to give policy direction on the food security situation of Ethiopia and other developing countries, to get a comprehensive result, further study should be undertaken at the regional or international level with a higher number of sample size. On the other hand, Social enterprises in Ethiopia have adopted a broad range of legal structures: some are structured as Nongovernmental organization (NGOs) with a Private Limited Company arm, some as sole traders or others as private-sector business forms or cooperatives. Among the different social enterprises, cooperatives are directly working with food insecure farm households, hence, this study gives attention on the roles played by cooperatives to overcome food insecurity with a special focus on the affected rural households. To get a holistic view, further research may focus on the roles of social enterprises to overcome poverty and related problems taking into consideration both urban and rural contexts.

References

- Abdulmelike, A. (2017). Social Entrepreneurship: Literature Review and Current Practice in Ethiopia. *hand*, 9(31), 86-93.
- Abegaz, K. H. (2017). Determinants of food security: evidence from Ethiopian Rural Household Survey (ERHS) using pooled cross-sectional study. *Agriculture & Food Security*, 6(1), 1-7.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2012). Social and commercial entrepreneurship: same, different, or both? *Revista de Administração*, 47(3), 370-384.
- Bekele, E. T. (2021). Factors Affecting the Participation of Milk Producers in Dairy Marketing Cooperatives: Evidence from Ethiopia. *The Journal of Industrial Distribution & Business*, 12(10), 19-30. <https://doi.org/10.13106/jidb.2021.vol12.no10.19>

- Chia, A., Ong, J., Bunde, A., & Lim, Y. W. (2022). Social entrepreneurship in obesity prevention: A scoping review. *ObesityReviews*, 23(3), e13378.
- Choi, Y.C., & Jang, J.-H. (2014). Analysis of Current Conditions Facing Social Enterprises in Korea. *International Journal of Business and Social Research*, 4(3), 119-125.
- Cukier, W., Trenholm, S., Carl, D., & Gekas, G. (2011). Social entrepreneurship: a content analysis. *Journal of Strategic Innovation and Sustainability*, 7(1), 99-119.
- Cunguara, B., & Moder, K. (2011). Is agricultural extension helping the poor? Evidence from rural Mozambique. *Journal of African Economies*, 20(4), 562-595.
- Diaz-Sarachaga, J. M., & Ariza-Montes, A. (2022). The role of social entrepreneurship in the attainment of the sustainable development goals. *Journal of Business Research*, 152, 242-250.
- Diochon, M. (2013). Social entrepreneurship and effectiveness in poverty alleviation: A case study of a Canadian First Nations community. *Journal of Social Entrepreneurship*, 4(3), 302-330.
- Doherty, B., & Kittipanya-Ngam, P. (2021). The role of social enterprise hybrid business models in inclusive value chain development. *Sustainability*, 13(2), 499.
- Dwivedi, A., & Weerawardena, J. (2018). Conceptualizing and operationalizing the social entrepreneurship construct. *Journal of Business research*, 86, 32-40.
- Endalew, H. A., & Sen, S. (2021). Effects of climate shocks on Ethiopian rural households: An integrated livelihood vulnerability approach. *Journal of Environmental Planning and Management*, 64(3), 399-431.
- Gebre, G. G. (2012). Determinants of food insecurity among households in Addis Ababa city, Ethiopia. *Interdisciplinary Description of Complex Systems: INDECS*, 10(2), 159-173.
- Gujarati, D.N. (2009). *Basic econometrics* (5th ed.). Tata McGraw-Hill Education.
- Haugh, H. (2005). A research agenda for social entrepreneurship. *Social enterprise journal*, 1(1), 1-12.
- Kerlin, J. A. (2006). Social enterprise in the United States and Europe: Understanding and learning from the differences. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 17(3), 246-262.
- Lateh, M. (2018). Social entrepreneurship development and poverty alleviation-A Literature review. *MAYFEB Journal of Business and Management*, 2, 1-11.
- Martin, R. L., & Osberg, S. (2007). Social entrepreneurship: The case for definition. *Stanford social innovation review*, 5(2), 28-39.
- Mohamed, A. A. (2017a). Food security situation in Ethiopia: a review study. *International Journal of Health Economics and Policy*, 2(3), 86-96.
- Moroda, G. T., Tolossa, D., & Semie, N. (2018). Food insecurity of rural households in Boset district of Ethiopia: a suite of indicators analysis. *Agriculture & Food Security*, 7(1), 1-16.
- Ortmann, G. F., & King, R. P. (2007). Agricultural cooperatives I: History, theory and problems. *Agrekon*, 46(1), 18-46.
- Roundy, P. T., Bradshaw, M., & Brockman, B. K. (2018). The emergence of entrepreneurial ecosystems: A complex adaptive systems approach. *Journal of Business Research*, 86, 1-10.
- Tarasuk, V. S. (2001). Household food insecurity with hunger is associated with women's food intakes, health and household circumstances. *The Journal of nutrition*, 131(10), 2670-2676.
- Tobin, J. C. (2009). *Hunger efforts and food security*: Nova Science Publishers.