CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Tropical AgriSciences



Role of Transformational Leadership for Agricultural Cooperatives in Cambodia

MASTER'S THESIS

Prague 2023

Author: Bc. Nela Olszarová

Chief supervisor: Ing. Petra Chaloupková, PhD., dr. h.c.

Second (specialist) supervisor: Ing. Jiří Hejkrlík, Ph.D.

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Tropical AgriSciences

DIPLOMA THESIS ASSIGNMENT

Bc. Nela Olszarová

International Development and Agricultural Economics

Thesis title

Role of Transformational Leadership for Agricultural Cooperatives in Cambodia

Objectives of thesis

The main objective of the research will be to identify the main factors which influence the leadership style, trust, and commitment between the members and leaders and commitment of the members. The primary focus will be to investigate members' perceptions of cooperative leaders' transformational leadership. The specific objectives will be to investigate how important the role of leadership is in the process of establishing, initial sustaining cooperation and commitment to group objectives among small farmers in Cambodia.

Methodology

The data will be collected through face-to-face interviews with members of agricultural cooperatives in Cambodia. To investigate members' perceptions of cooperative leaders' transformational leadership, we will use quantitative techniques. The data will be collected from three selected cooperatives including active and passive members. The cross-sectional dataset will be collected at the cooperative level in November 2022 in Kampong Speu province, Cambodia. Transformational leadership behaviour will be assessed using responses to five dimensions subscales inspired by the Multifactor Leadership Questionnaire. The survey will contain 54 questions divided into 6 sections.

The proposed extent of the thesis

50 pages

Keywords

commitment, cooperative management, leadership style, team performance, trust

Recommended information sources

- Bass BM. 1999. Two Decades of Research and Development in Transformational Leadership. European Journal of Work and Organizational Psychology: 8(1): 9–32.
- Bhuyan S. 2007. The "People" Factor in Cooperatives: An Analysis of Members' Attitudes and Behavior. Canadian Journal of Agricultural Economics/Revue Canadienne D'agroeconomie, 55(3): 275–298.
- Eti-Tofinga B, Douglas H, Singh G. 2017. Influence of evolving culture on leadership: A study of Fijian cooperatives. European Business. Review 29: 534–550.
- Hejkrlik J, Chaloupkova P, Sokolska T. 2021. The role of transformational leadership and leaders' skills for new agricultural cooperatives inpost-soviet countries. Annals of public and cooperative economics DOI: 10.1111/apce.12353.
- Hendrikus P, Koentjoro, Meiyanto S, Andayani B. 2021. Transformation of women's leadership through producing natural dyed hand-woven fabrics (ethnographic study on Palue weavers). Gaceta Sanitaria 35: S554-S557.
- Mensah ER, Karantininis K, Adégbidi A, Okello JJ. 2008. Determinants of Commitment to Agricultural Cooperatives: Cashew Nuts Farmers in Benin. Leadership Quarterly, 5(2): 81–87.
- Zakić N, Vukotić S, Laketa M, Laketa L. 2013. Agricultural co-operatives: Researching members' perception of important issues of co-operatives on the example of Serbia. Journal of Animal and Plant Sciences 23(1): 290–297.

Expected date of thesis defence

SS 2022/23 - FTA

The Diploma Thesis Supervisor

Ing. Petra Chaloupková, Ph.D., dr. h. c.

Supervising department

Department of Economics and Development

Electronic approval: 8. 4. 2023

doc. Ing. Miroslava Bavorová, Ph.D.

Head of department

Electronic approval: 12. 4. 2023

prof. dr. ir. Patrick Van Damme

Dean

Prague on 20. 04. 2023

Declaration

I hereby declare that I have done this thesis entitled "Role of Transformational Leadership for Agricultural Cooperatives in Cambodia" independently, all texts in this thesis are original, and all the sources have been quoted and acknowledged by means of complete references and according to Citation rules of the FTA.

In Prague 21.4. 2023
Bc. Nela Olszarová

Acknowledgements

I would like to express my deepest gratitude to my supervisor, Ing. Petra Chaloupková, PhD., dr. h.c., for her invaluable guidance, support, and encouragement throughout the course of this research. Secondly, I would like to extend my heartfelt appreciation to the second (specialist) supervisor: Ing. Jiří Hejkrlík, Ph.D. of my thesis for his valuable feedback and insightful critiques. I am also grateful to the staff and members of Diakonie ČCE for their significant contribution and collaboration in the realization of data collection for presented Master's thesis. My gratitude also goes out to Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, the for their financial support [Grant Number: 20223114] which enabled me to focus on my research and complete this work. Lastly, I would like to thank my family and friends for their unwavering love and support, which has been a constant source of motivation and inspiration.

Abstract

Agricultural cooperatives play a crucial role in the development of agriculture and rural communities. The success of these cooperatives depends on the leadership style of their managers and the level of commitment and trust among their members. Therefore, this study aimed to investigate the main factors which influence leadership style, trust of members and their commitment in agricultural cooperatives in Kampong Speu province, Cambodia and analyze members' perceptions of cooperative leaders' transformational leadership.

The data were collected through a questionnaire survey distributed to 450 members of three selected agricultural cooperatives in in Kampong Speu province in Aoral district and Thpong District. The questionnaire focused on questions related to leadership style, commitment, trust and perceived benefits of cooperative membership. In addition, the standardised Multifactor Leadership Questionnaire was used to analyse the transformational leadership style. Data analysis was conducted using descriptive statistics and regression analysis in program SPSS.

The results of this study showed that there was significant difference between active and passive members of the cooperatives and their perception of transformational leadership. Furthermore, the study identified that the trust among members appeared to be the most positively related to the commitment of the members, this trust is essential for the success of agricultural cooperatives. Perceived benefits due to membership and leadership style were positively related to commitment, suggesting that higher levels of these variables were associated with higher levels of members' commitment to the agricultural cooperatives. Cooperatives are a great opportunity for young and inexperienced farmers, as commitment is ideal for them, according to the results. To attract and motivate members, it is important to promote perceived benefits. Non-profit organizations can improve cooperatives' success by providing training on transformational leadership skills.

Key words: commitment, cooperative management, leadership style, team performance, trust

Contents

1.	Intr	roduction	1
2.	Lite	erature Review	1
	2.1	Agricultural cooperatives	1
	2.2	Leadership in cooperatives	2
	2.3	Members' commitment	3
	2.4	Perceived benefits	5
	2.5	Leadership style	6
	2.6	Leaders' skills	8
	2.7	Agricultural cooperatives in South and Southeast Asia	9
3.	Ain	ns of the Thesis	12
4.	Met	thodology	13
	4.1	Data collection approach	13
	4.2	Data collection instrument	16
	4.3	Data analysis	18
5.	Res	ults	20
	5.1	Characteristics of agricultural cooperatives' members	20
	5.2	Commitment, trust, perceived benefits of the cooperatives' member 23	ers
	5.3	Factors of transformational leadership style	28
	5.4	Factors affecting the commitment of the members	29
6.	Disc	cussion	32
	6.1	Commitment of the members of agricultural cooperatives	32
	6.2	Perceived benefits	33
	6.3	Trust among members and towards the leader	34
	6.4	Leadership style	34
	6.5	Limitations	35
7.	Cor	nclusions	37
8.	Ref	erences	39

List of tables

Table 1: Active and passive members' distribution across ACs	. 18
Table 2: Socio-demographic characteristics of the respondents	. 22
Table 3: Commitment and trust of the cooperatives' members	. 25
Table 4: Perceived benefits of the members	. 27
Table 5: Factors of Multifactor Leadership Questionnaire and comparison between	
active and passive members	. 29
Table 6: Factors influencing the commitment of the cooperative members	. 31
List of figures	
Figure 1: Map of Cambodia and study area (Kampong Speu province)	. 14
Figure 2: Conceptual framework of the research	. 16

List of the abbreviations used in the thesis

AC agricultural cooperative

ACIAR Australian Centre for International Agricultural Research

ČCE Evangelical Church of Czech Brethren

MAFF Ministry of Agriculture, Forestry and Fisheries

MLQ Multifactor Leadership Questionnaire

NGO non-profit organization

OLSM Ordinary Least Squares Method

SPSS Statistical Package for the Social Sciences

1. Introduction

Agricultural cooperatives play a crucial role in the development of agriculture and rural communities in Cambodia. The success of these cooperatives is heavily influenced by the leadership style of their leaders, as well as the commitment and trust among their members. Leadership is commonly defined as guiding a group towards a common goal, as highlighted by various scholars such as Stogdill (1950); Limsila & Ogunlana (2008); McNamara (2008). The effectiveness of a group is also influenced by the leadership provided by team leaders, who facilitate information sharing and foster trust among members, as noted by Lee et al. (2010). The leadership style of an organization significantly impacts the level of interest and commitment of its members, as emphasized by Obiwuru et al. (2011). In fact, the absence of leadership often explains the failure and weaknesses of many cooperatives, as highlighted by Zakić et al. (2013). Farmers' commitment is essential for the efficiency and survival of agricultural cooperatives (Awoke 2021).

Although there were done several studies focused on leadership styles, the research focused on the transformational leadership style of cooperative leaders in Cambodia was lacking. Therefore, the main objective of this research was to identify the main factors, which influence the commitment of the members, trust between the members and leaders, and leadership style in three selected cooperatives in Kampong Speu province in Cambodia. The specific objectives were to investigate firstly members' perceptions of cooperative leaders' transformational leadership and secondly to compare these perceptions between active and passive members of the cooperatives.

The results of the Master's thesis can be used for further project activities and potential improvements for other Czech development cooperation projects.

2. Literature Review

2.1 Agricultural cooperatives

Over the whole World, cooperatives significantly improve the lives of rural populations (Mhembwe & Dube 2017). The growth of smallholder farms, which generate an estimated 75% of food commodities and serve as a source of nutrition and income for millions of people, is crucial to attempts to increase food security and alleviate poverty in South-East Asia (Lowder et al. 2016). The formation of agricultural cooperatives has been intended to promote the growth of the agricultural industry, to collaborate with the private sector, to obtain innovation and credit, to sustain the supply of food to domestic and foreign markets, and, primarily, to create agricultural cooperatives as rural agricultural organisations to enhance the socioeconomic conditions in rural areas (Hun et al. 2018). Cooperatives differ from other economic enterprises primarily in that they are governed by the logic of private and joint co-ownership; instead of seeking to make a profit, they seek to create the conditions necessary for the independent units linked with them to effectively assert themselves on the marketplaces. The goal of cooperativism is to organize people with the aim of enhancing their quality of life and developing effective systems for the global community's economic and social advancement (Brandão & Breitenbach 2019). Cooperatives can be created using topdown or bottom-up strategies. Policy measures that encourage individuals to form and join groups lead to top-down systems. Bottom-up formation happens when people selforganize into groups to work toward a common objective (Olson 2009). Cooperatives are by the definition and design aimed to assist small farmers in conquering market inefficiencies, lowering transaction costs, enhancing collective resource management, lessening the effects of natural disasters, and tackling technical and financial challenges through stable democratic institutional frameworks (Hilliova et al. 2017).

2.2 Leadership in cooperatives

Previous researchers described leadership in many ways. One of the definitions identified leadership as a dynamic social process in which leaders influence members or followers to carry out assignments in order to achieve expected and desired outcomes (Eti-Tofinga et al. 2017). Based on existing literature on agricultural cooperatives, it is assumed that farmers actively organize and join cooperatives, which they own, manage, and profit from (Nivazmetov et al. 2021). Men, who are more heavily involved in the workforce are emphasized as leaders rather than women, because the literature on leadership views work as an indivisible part from leadership (Hendrikus et al. 2021). Majority of cooperatives around the World face multiple challenges and problems such as lack of financial support, poor management and dearth of management skills, and absence of competitive markets to sell their products (Mhembwe & Dube 2017).

There are different opinions and perceptions of what does it mean word leadership (Stogdill 1950; Limsila & Ogunlana 2008). Some of the researchers have a thought that leadership is about the first or the most powerful but according to McNamara (2008) leader is an individual who establishes direction in an effort and persuades others to follow such route. Most meanings include the idea of leading a group forward towards a purpose (Stogdill 1950; Limsila & Ogunlana 2008). Leaders have various traits that set them apart from other members of the group. They exert the most influence over all significant choices, are the most engaged within the group, and are crucial to fostering mutual trust and group cohesiveness (Braun et al. 2013; Xie et al. 2018). Leadership is a social influence mechanism that allows one individual to compel the assistance and cooperation of others in the completion of a shared purpose (Ali et al. 2015). Generally, absence of leadership often explains the failure and weaknesses of many cooperatives (Zakić et al. 2013). The cooperative cycle and the framework of collective development phases can both be used to clarify the role of leadership in farmers' organizations. Forming, storming, norming, and performing are the four main basic phases of group growth. Each stage has a different leader's impact and function (Francesconi & Ruben 2008). The development of a group's leadership is essential for the formation process of the organization as well as for the implementation of regulations and building of trust (Xie et al. 2018).

According to Zamani et al. (2019) several studies demonstrate the technical and economic inefficiency of cooperatives due to a variety of issues, including the horizon issue, the principle-agent dilemma, free riders, the portfolio problem, member diversity, and member financial responsibility.

In addition to being essential for the initial formation of a group, leadership is also crucial for the upholding of norms and building of trust as a group matures (Braun et al. 2013) Numerous studies have discovered that the relationship between followers' attitudes and their views of their supervisors' transformational leadership can be mediated by their trust towards the supervisor (Dirks & Ferrin 2002). The cooperative's direct contact person engaged by the member can build confidence in the relationship between the two parties. When there is an absence of trust among a member and a cooperative staff, the interchange of services may drop if the member chooses to work with a reliable private company instead (free-riding), or the member may even decide to leave the cooperative completely (Jensen-Auvermann et al. 2018). According to Creed & Miles (1996) managers are the ones that set the tone for interorganizational trust by modelling it through their behaviour, policies, and values. Managers have the chance to inspire others to foster a culture of trust, and leaders profit from elements that foster trust within cooperative employees who serve as its representatives and members. The likelihood of opportunistic behaviours is lowered by trust (Jensen-Auvermann et al. 2018). Group effectiveness is influenced by team leaders who facilitate information sharing and foster trust (Lee et al. 2010). However, based on Dirks & Ferrin (2001) trust is important for interactions between team members as well as leader-follower relationships.

2.3 Members' commitment

Supply networks for agricultural cooperatives are becoming more and more tightly integrated. The commitment of cooperative members to a customer-focused approach is crucial; otherwise, vertical coordination may be expensive, and the loss of farm-level independence may have a detrimental impact on participants' dedication to common goals. Members of an agricultural cooperative do not hesitate to sell their

produce to alternative consumers during difficult economic times (Cechin et al. 2013). Farmers commitment is essential for the efficiency and survival of the AC (Awoke 2021). Encouraging farmers to join cooperatives and participate in the market can highlight their dedication to agricultural cooperatives. Cooperatives have been widely promoted as an effective means of enhancing market access and reducing poverty. However, farmers' involvement with cooperatives is multi-layered, with three levels of commitment to the organization (Mensah et al. 2008).

The degree to which a person identifies with, engages with, and/or is hesitant to quit an organization is known as organizational commitment (Awoke 2021). Membership in a cooperative, however, does not accurately reflect how actively individuals participate in the cooperative or the dynamics of the organization as a whole. Formal membership in a cooperative does not imply that all members have the same commitment to it or that they all profit from it (Fulton 1999). The degree of identification, the degree of engagement, and the degree of loyalty are three metrics that may be used to assess work engagement. Organizational commitment is believed to include many different aspects, including emotional connection to the company, the perceived cost of quitting, and a sense of duty to stay (Awoke 2021). One way to measure commitment is by observing the actions of a member within the cooperative. This could include engaging in group meetings, participating in collective marketing efforts, investing in cooperative capital, or participating actively in the cooperative's governmental structures (Mwambi et al. 2020).

Having a commitment is viewed as having a preceding attitude of loyalty, which may or may not lead to genuine loyalty. Organizational aspects of democratic governance have an impact on individual devotion as well. For instance, members' notion of being involved in cooperative governance increases their engagement. Also, it was shown that members who participated on a cooperative committee, attended cooperative education, or were on the board of directors tended to be more dedicated (Cechin et al. 2013). Each participant in this organization of persons formally engaged in private industry with a clear positive economic goal is accountable for maintaining their independent identity (Mhembwe & Dube 2017). According to Cechin et al. (2013) effective communication and dedication go hand in hand, and relational rules boost involvement and cut down on opportunism.

The members' lack of interest in their associations and organizational activities is one of the major issues that all membership-based organizations face. Regardless of how important members are to a cooperative organization, it is common to hear from individuals who are unaware of what their cooperative is doing or who feel disregarded by the administration of their cooperative (Bhuyan 2007). Collaboration between members is crucial to the success of cooperatives; participants should always work together as a team (Mhembwe & Dube 2017). One of the primary goals of companies is efficiency (Zamani et al. 2019).

According to Amini & Ramezani (2008) the success of cooperatives depends on member engagement, which is crucial if members are aware of and committed to cooperative ideals. According to the findings of Donkor & Hejkrlík (2021) the cooperative is perceived by the active members as a market that offers a higher price than the competition and offers them secure, stable pricing. Other reasons why people are active members include getting dividends, keeping control, and participating in the organization. Individuals that are very dedicated are more inclined to assist their cooperative by taking part in all cooperative activities (Goddard 2005).

2.4 Perceived benefits

Farmer participation within the AC is motivated by benefits gained among the members as noted by Chhinh et al. (2022). There are many benefits which can be obtained by being part of agricultural cooperatives. According to Ito et al. (2012) and their study in China, the ACs offer their members significant economic benefits. Cooperatives are seen favourably by farmers as a way to enhance their economic well-being. Farmers typically join cooperatives because they see it as a structure that may assist them lower production and marketing risks, improve their prospects of growing their businesses and raising their revenue (Zheng et al. 2012). The advantages of cooperatives' membership often vary by kind and geographical region. Although some of these advantages may be social, they are often assessed in economic terms (Anania & Towo 2016). According to findings of Anania et al. (2020), cooperatives have a positive social impact on access to social services, better living standards, access to agricultural education, and the promotion of food security and solidarity. In the communities where they operate, they have been helpful in assisting community development initiatives.

Additional, less obvious advantages of cooperative membership include decreased transaction costs, improved access to technical expertise, and encouraged resource sharing (Funk et al. 2011). As noted by Helliova et al. (2017), only a small percentage of cooperatives offer any advantages to non-members and to the broader community.

2.5 Leadership style

Worldwide, there is a rising demand for social cohesion and sustainable development, which raises awareness of cooperatives since their guiding principles are essential to achieving these targets and the implementation of the Sustainable Development Goals (Martinez-Leon et al. 2020). An organization's leadership style significantly affects whether its members are interested in and committed to the organization (Obiwuru et al. 2011). According to Ali et al. (2015), significant impacts on people include culture and leadership ideas. The reason for this is because leaders are those who establish the company's tone, establish its principles and conventions, and develop and uphold an image that represents what the organization is like. There are many different types of leadership styles that have been identified by researchers and experts, however presented thesis was mainly focused on two types of leadership styles: Transactional leadership and Transformational leadership (Bass 1999). There has been much research on the effects of transactional and transformational leadership styles in the commercial sectors, but less on how these styles affect the agricultural and cooperative fields (Braun et al. 2013; Xie et al. 2018). The most used measure of transformational leadership is the Multifactor Leadership Questionnaire MLQ (Bass 1999; Rafferty & Griffin 2004).

According to the Bass (1999), every leader must exhibit both transactional and transformational characteristics on a regular basis, although each leader's profile skews more toward one and less toward the other. More transformative and less transactional chief executives are more efficient as managers and more fulfilling to their teams.

Transactional leadership

Members get compensation or recognition for adhering to a leader's instructions under transactional leadership, which refers to the trade between the leader and member

to serve each group's own self-interests (Bass 1999; Rafferty & Griffin 2004). Although transformational leadership significantly increases the impact of transactional leadership, transactional leadership may still be pleasantly satisfying and successful (Bass 1999). A leader and his/her followers can enter into a contractual agreement that serves as the basis for transactional leadership, and both parties assume that the conditions of the agreement will be fulfilled in order for their relationship to continue (Dartey-Baah 2015). According to Bass (1997) there are three facets of the transactional leadership style, contingency reward, management by exceptions, and management by exception divided into passive and active. By completely comprehending the demands of the team and outlining their duties, leaders with transactional leadership styles assist team members in completing their tasks. The goal of a transactional style of leadership is to allow team members and leaders to mutually profit from completing tasks and achieving personal fulfilment (Xie et al. 2018). According to Martinez-Leon et al. (2020) transactional leadership is used more frequently on all-female teams than on mixed-gender teams with a female president. Transactional leaders prioritize their followers' physical and security demands. A negotiating exchange or reward system is the foundation of the connection that develops between the leader and the member (Bass 1985; Bass & Avolio 1993).

Transformational leadership

By using idealistic influence, inspiration, intellectual stimulation, or thoughtful thinking, the leader can help the follower see beyond their immediate self-interests. This is known as transformational leadership (Bass 1999). The appropriate thing to do or what is required by the regulations and rules is not what leaders practicing transformational leadership do. Instead, they uphold moral principles even when they conflict with established rules and protocols (Avolio 1994; Nash & Bangert 2013). In addition to intellectually stimulating, inspiring, and identifying with the team's mission, members of transformative teams do care about one another. Teams that are transformational are effective (Bass 1999). In order for the members to develop the leadership skills necessary to lead themselves, transformational leaders provide learning opportunities for their followers and encourage them to solve challenges their own approach (Gronn 1997; Nash & Bangert 2013). Instead of just achieving compliance,

transformational leaders inspire their teams to perform above expectations by altering their attitudes, values, and beliefs (Rafferty & Griffin 2004). The four components of a transformative leadership style are individual concern, leadership appeal, moral model, and incentive for vision (Rafferty & Griffin 2004; Nash & Bangert 2013; Xie et al. 2018). The four-factor model, nine-factor model, and three-factor model are some prevalent factor models for the MLQ (Avolio & Bass, 2004; Nash & Bangert 2013).

This kind of leadership exemplifies the ideal leader behaviour that followers and companies expect from managers. This is because it has a big influence on company outcomes like job fulfilment for workers (Dartey-Baah 2015). According to Xie et al. (2018) it is easier for leaders with transformational leadership style to gain trust, and trust positively impacts development atmosphere. Trust and individuality are essential to developing innovation atmosphere, and trust and individual identification serve as a bridge between transformational leadership style and innovation atmosphere. Together with dependent reward, the variety of behaviours covered by personalized consideration have also been noted as problematic (Rafferty & Griffin 2004). According to Martinez-Leon et al. (2020), the transformational method is more frequently employed in teams that are exclusively made up of either men or women and is less frequently utilized in mixed teams with a male majority and a female president. The followers of transformational leaders are inspired to engage in extra-role behaviors because they have faith in, admiration for, devotion to, and respect for them (Limsila & Ogunlana 2008).

2.6 Leaders' skills

According to Hejkrlík et al. (2023) and their study in post-soviet countries, there are significant differences among cooperative leaders and members with regard to of personal traits, assets, social engagement, and loyalty to their organizations. It is clear that leaders tend to be more intelligent individuals and mostly men. Gaining leadership positions in the creation of new organisations appears to need more knowledge.

One of the things that could make a firm successful is a leader's behaviour. A leader must be able to be highly accountable for their work and subordinates in order to continue leading in a difficult atmosphere. Being in charge of a team demands a lot of

devotion to get the job done, thus it is not an easy position (Ali et al. 2015). While other members are more satisfied with communal decision-making, leaders place a greater emphasis on being able to make autonomous decisions regarding their farms (Hejkrlík et al. 2023). Effective leaders need a variety of talents, but they also need number of personal qualities, such as the desire to be incharge and the capacity to speak with empathy, honesty, and integrity (Weihrich & Koontz 2005). The involvement of members, leaders' interpersonal as well as technical abilities, and the amount of educational programs they attend all have a major influence on the performance of the cooperative (Hejkrlík et al. 2023). According to Zakić et al. (2013), for high-quality professional and administrative operations in agricultural cooperatives, the proper knowledge and abilities are required. There have been many different categories of leadership abilities utilized. For instance, grouping talents into the following four categories: cognitive, interpersonal, business, and strategic (Mumford et al.2007). On the other hand, Savolainen (2014) classified three types: emotional, social and technical skills. In order to expand and support their members in achieving a higher quality of living, cooperatives require profit. As they are the members themselves, leaders typically lack the necessary skills and abilities to take these activities into consideration. This is a barrier for leaders who must overcome (Boas & Ferreira 2006). Technical skills are linked to information and practices that are particular to a certain work, whereas human skills involve the capacity to comprehend, guide, and manage the behaviour of individuals as well as groups. The capacity to analyze a situation and tell cause from effect is one of the conceptual talents that is frequently acquired via formal education, contemplation, and experiences (Mujtaba & Kaifi 2010).

2.7 Agricultural cooperatives in South and Southeast Asia

The growth of smallholder farms is crucial to attempts to increase food security and alleviate poverty in South-East Asia (Lowder et al. 2016). According to Zhang et al. (2020) the agriculture industry employs 85% of the people of Cambodia. Small agricultural cooperatives were first founded by Cambodian rural farmers to promote rural solidarity and finance. During 1950s and 1960s the first ACs were formed (Ofori et al. 2019). Early ACs were operated by the Royal Office of Cooperatives of Cambodia and have been described as quite effective (Syden & Lee 2016). A royal decree was

implemented in 2001 to address the operations of inoperable ACs because of their failure in the 1980s following the fall of the Democratic Kampuchea administration. These cooperatives' main duties were facilitating financing, supply, marketing, and the delivery of agricultural technical assistance (Chanrith, 2008). Agricultural cooperatives have been promoted in Cambodia since 2003 (Hun et al. 2018). Additionally, in June 2013, the Law on Agricultural Cooperatives went into effect, mandating that all ACs register with the Ministry of Agriculture, Forestry and Fisheries (MAFF). The goal of enforcing this rule was to assist farmers in increasing agricultural productivity and in finding alternative employment opportunities, so enabling them to raise their socioeconomic standing and level of independence (MAFF 2013). In order to facilitate knowledge-sharing, the dissemination of information from the international NGOs, and the channelling of their resources and subsidies, NGOs frequently work in partnership with local agricultural cooperatives at the village level (ACIAR 2015). According to Ofori et al. (2019) in order to ensure food safety and decrease vegetable imports from nearby nations like Vietnam and Thailand, government-sponsored initiatives have lately committed funding to promote local vegetable cultivation. A \$20 million initiative to boost vegetable output and improve food safety along the vegetable supply chain was put into action by the Cambodian government in July 2017 (Ofori et al. 2019).

When trying to enter markets in developing nations, smallholder producers face numerous obstacles. Due to their limited resources, these producers frequently face barriers to accessing a variety of essential services, such as market assistance, financial support, and extension services. It is thought that without organizing structures like producer organizations, especially cooperatives, smallholder farmers may not be capable of handling difficulties successfully on their own (Tray et al. 2021). Due to limited access to infrastructure, educational opportunities, health care, and institutional assistance, Cambodian farmers frequently experience socioeconomic difficulties (Zhang et al 2020). According to Theng et al. (2014), only a very small percentage of Cambodian producer cooperatives succeeded in running their businesses. By its rapid economic growth, Cambodia transitioned from an agrarian to a service and production-based economy. The Royal Government of Cambodia vigorously encouraged the restoration of the agriculture cooperative (AC) system founded in the 1950s and 1960s with the goal of increasing agricultural output, and as a result, a new one was created (Syden & Lee 2020). According to Zhang et al. (2020) the Cambodian agricultural

cooperative's main responsibilities are to plan regular community gatherings for the exchange of information, offer financial services, and distribute information from the sponsoring organizations. Members must buy shares in the agricultural cooperative and pay a one-time membership fee in order to participate. Despite significant advancements in recent years, the ACs still face a number of difficulties, including a lack of working capital, a weak business plan, an unstandardized financial management system, a lack of good standard agricultural products to meet consumer needs, poor access to markets, intense competition with outside traders, a lack of an AC network, a lack of physical market infrastructure and offices, and a lack of understanding of rights and obligations among the majority of farmer members (Barrett 2008; Syden & Lee 2020; Syden & Lee 2016). Cambodian agricultural cooperatives have annual gatherings to welcome new members and thank those who leave. Boards of directors, which serve as the executive body of ACs, are chosen by farmer members at general meetings every five years. Any member who is 18 years of age or older may seek for election to be one of the board's less than 15 members (Chhinh et al. 2022).

Since their founding in 1965 under various governments, ACs have a lengthy history; yet, in comparison to its neighbours, such as Vietnam and Thailand, Cambodia's ACs are still in their early stages of development. There were 1217 agricultural cooperatives in 2021 in Cambodia (Chhinh et al. 2022). In the 1950s, agricultural cooperatives were a key instrument in the fight against poverty; today, they are still very important in fostering effective use of resources and production in Vietnam. It has not been simple to build and evolve this kind of economic association since the cooperative movement's inception in the agricultural sector. Vietnamese agricultural cooperatives have gone through four stages of development: voluntary collectivization, obligatory collectivization, de-collectivization, and neo-collectivization (Cox & Le 2014). A study of 2,546 cooperatives in Thailand concluded that the asset size of cooperatives has a positive influence on technical efficiency but a negative impact on scale efficiency (Zamani et al. 2019). According to study from Sri Lanka due to problems including weak governance, a lack of management abilities, insufficient shareholder engagement, a lack of money, and a failure to recognize and cater to the requirements of the farmers, the cooperatives have thus far fallen short of expectations (Esham & Kobayashi 2013).

3. Aims of the Thesis

Agricultural cooperatives have very important roles in terms of increasing food production, reducing poverty, improving economic situation and development of rural areas. As it was described by many authors leadership is very important for success of the agricultural cooperatives. However, there was no research focused on the leadership styles of the cooperative leaders in Cambodia. Therefore, the main objective of this research was to identify the main factors, which influence commitment of the members, trust between the members and leaders, and leadership style in three selected cooperatives in Kampong Speu province in Cambodia. The specific objectives were to investigate firstly members' perceptions of cooperative leaders' transformational leadership and secondly to compare these perceptions between active and passive members of the cooperatives.

Based on the literature review the hypothesis were identified as below:

Perceived Benefits H1: Financial benefits are the main factors for joining the agricultural cooperatives.

Commitment H2: Individual perceptions of a leader's transformational leadership are positively related to an individual member's commitment to the cooperative.

H3: Members who trust their leaders are more committed to the cooperative.

4. Methodology

4.1 Data collection approach

To investigate members' perceptions and identify the main factors, which influence commitment of the members, trust between the members and leaders, and leadership style, the quantitative technique via questionnaire survey was selected as the main form of data collection. A cross-sectional questionnaire was collected at the cooperative level during November 2022 in Kampong Speu province, Cambodia. Data were collected from members of three agricultural cooperatives. Namely, the cooperative Sahakum Kasekam Satrei Sammakki Sangke santop with 415 members located in the Aoral district in Sangkae Satob commune. The cooperative Sahakum Kasekam Rung Rerng in Rung Roeang commune with 824 members and Sahakum Kasekor Sammakki Amleng in Amleang commune with 1,012 members were located in the Thpong District. These cooperatives were purposively selected, due to connections to Czech development cooperation activities by NGO Diakonie ČCE, also known as Diaconia of the Evangelical Church of Czech Brethren, is a Czech-based Cristian organization that focuses on humanitarian aid, development projects, social work, and other charitable activities in the Czech Republic and various other countries (Diakonie ČCE 2021). In total, the target population was 2,251 AND according to the sample size calculation, the minimum number of respondents was set up at the 329 level. Therefore, it was decided to contact 20% of the members of the three selected ACs. Finally, we reached 450 respondents from these three selected cooperatives. The data were collected through face-to-face interviews using electronic structured surveys in the programme Kobo. Before the interviews, the questionnaire was translated to Khmer language and local interviewers from NGO Diakonie ČCE, were selected and trained. In total, there were five enumerators conducting the surveys. To avoid measurement reliability errors, the pre-tests were conducted with sample of the respondents.

Study area

The province of Kampong Speu is located west of Phnom Penh, between Sihanoukville and the capital city as showed in Figure 1(USAID 2008; Tourism Cambodia 2020). Kampong Speu is situated along the primary transportation route. Kampong Speu is ideally situated to give access to high-quality inputs as well as to export and domestic markets since a good national route connects the two. Population was 762.500, aged between 15-64 and 65% were employed in Agriculture. The size of the province was 7.017 km² divided into eight districts and 87 communes (USAID 2008).



Figure 1: Map of Cambodia and study area (Kampong Speu province)

Source: Wikimedia Commons (2010)

Conceptual framework

The conceptual framework for this master's thesis was focused on exploring the categories of factors such as leadership and leadership style of leaders, trust within the cooperative, perceived benefits, and their impact on members' commitment (teamwork between members, communication with leader and attendance at group meetings). These factors have been described in previous studies (Amini & Ramezani 2008; Lee et al. 2010; Cechin et al. 2013; Savolainen 2014; Xie et al. 2018; Awoke 2021; Donkor & Hejkrlík 2021) In comparison to previous studies, this thesis focused on comparison of the factors such as farmers' commitment, leadership style, trust and perceived benefits.

The conceptual framework was designed to capture the interrelationships among these factors and their potential impact on farmers' commitment within the cooperative context as shown in Figure 2. Personal characteristics of the farmers consisted of gender of the respondents, age, education, experience in the farming sector, size of their farms and their farm's main product. In terms of leadership style, the research was focused only on two types, Transformational and Transactional leadership styles. Area concerning trust was targeting trust among members as well as trust towards the leader of the cooperatives. Perceived benefits were divided into three categories such as financial (access to credit), technical (technical support, workshops) and social (better standard of life, knowledge, family and friends). All of these factors were analysed to find out impact on members' commitment consisting of teamwork between members, communication with leader and attendance at group meetings.

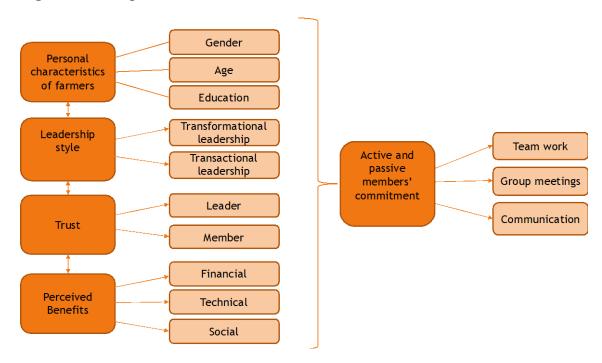


Figure 2: Conceptual framework of the research

4.2 Data collection instrument

The structured questionnaire survey for leaders and members included 54 questions divided into six sections. The areas of the questionnaire were personal information, commitment, trust towards the leader and trust among the members and leadership style. The survey counted seven questions regarding personal information including gender, age, years of formal education, years of the experience in the farming sector, years of membership, main product of their farm and farm size. Following part of the survey was focused on commitment of the farmers, this section included 8 questions regarding investment to the cooperative, function, selling products through cooperative, participation at group meetings, communication with leader and cooperative. The trust section of the questionnaire consisted of four questions, two were focused on the trust towards the leader and the remaining two on trust among members. The penultimate section of the questionnaire dealt with perceived benefits of the members due to being part of the AC and the benefits which made them to be part of the group such as better access to marker, financial support, family, friends, knowledge and

technical support. This area of the survey contained 14 questions. The Likert scale was mainly used for evaluation of the questions.

Last section of the questionnaire contained 21 questions regarding the leadership style of the leader, which was constructed based on seven-factor Multifactor Leadership Questionnaire (MLQ). The questions were formulated to fit the local environment. This type of survey is focused on leadership, mainly on seven factors related to transformational and transactional leadership styles (Bass 1999). Each question was evaluated on the scale from 0 to 4 which represented frequently, if not always; fairly often; sometimes; once in a while; not at all. The score for each factor was determined by summing three specified aspects on the questionnaire. Factors included were idealized influence, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management-by-exception and Laissez-faire leadership. There were three questions concerning every factor. The score range was from low, moderate to high.

Factors of seven-factor MLQ are divided as follows (Bass & Avolio 2004; Limsila & Ogunlana 2008; Nash & Bangert 2013).

- 1. Idealized influence reflects whether the leader has the respect and trust of his subordinates, devotion to them, appealing to their desires and goals, and set an example for them.
- 2. Inspirational motivation assesses how much the leader offers a vision, employs the proper symbols and pictures to aid others in focusing on their task, and makes an effort to make them feel as though their labour matters.
- 3. Intellectual stimulation measures how much the leader inspires others to think creatively about solving old problems in novel ways, fosters a culture of tolerance for seemingly extreme viewpoints, and encourages individuals to reflect on their own values and the organization's ideals.
- 4. Individual consideration describes how much you the leader concerns for others, allocates tasks to specific people, and pays attention to individuals who seem to be less engaged in the group.

- Contingent reward demonstrates how often the leader directs others in order to receive rewards, underline expectations of them, and acknowledge their achievements.
- 6. Management-by-exception estimates the leader communicates the work requirements to others, satisfaction with standard performance, and following to the adage "if it ain't broke, don't repair it,".
- 7. The last measured factor, Laissez-faire, assesses the ability to delegate authority to others, accept uncertainty, and let people pursue their own interests.

The questionnaire survey structure is attached to this Master's thesis in Annex 3.

4.3 Data analysis

For the purpose of the study, the respondents were divided according to active, and passive based on their commitment towards the AC according on the replies to four questions including cooperation with how many other members and how often, communication with leader, and participation at group meetings. Based on mean of these questions the individuals were considered active or passive as per the border line 3.5. The individuals who scored higher than 3.5 were considered to be active members and the respondents who had 3.5 or less then 3.5, were deemed as passive. The Table 1 displays the distribution of active and passive members across the three selected agricultural cooperatives Amleng, Rung Rerng, and Sangke Satop.

Table 1: Active and passive members' distribution across ACs

Agricultural cooperatives	Active	Passive
Amleng	50	153
Rung Rerng	163	1
Sangke Satop	8	75

Note: N = 450

Data from the questionnaire were manually coded in Microsoft Excel and then used for descriptive data analysis and creation of tables. The data were cleaned and then used for statistical tests in SPSS statistical software, version 28.0.0.0(190). To determine the statistical significance, it was needed to conduct statistical test to obtain p-value. Mann-Whitney U-test was used to compare differences between two independent groups of respondents, the active and passive members and determine the significance. The responses were converted to ordinal numbers, U-value was calculated and then compared to the tabulated values to obtain p-value. Further analysis was done by linear regression test to find out the relationship between the independent variables such as gender, age, education, farm size, experience in the farming sector, years of membership, trust among members, trust towards leader, benefits, perceived benefits due to membership, leadership style and dependent variable commitment of the members for the whole sample size. Output of the analysis included unstandardized coefficient (B) which is the predicted coefficient for the predictor in the equation for linear regression. For a unit change in the related predictor variable, it quantifies the amount of change in the dependent variable, provided all other predictor variables remain constant. Standard error which is the estimated standard error of the unstandardized coefficient, and it measures the accuracy or degree of uncertainty of the calculated coefficient. Standardized coefficient (Beta) is the coefficient that has been scaled or standardized by multiplying it by the predictor variable's standard deviation. T-value is the calculated t-statistic for the estimated coefficient, which is used to test the null hypothesis that the true population coefficient is zero. The last column of the output showed significance which is the probability value associated with the t-value. It indicates the probability of obtaining a t-value as extreme or more extreme than the observed value, assuming that the true population coefficient is zero (Gibbs et al. 1983; Faguet & Davis 1984; Hron et al 2012). The R² value is an important measure of the goodness of fit of a regression model. The value of R² indicated a good fit of the model, 89,8% meaning that the independent variables were good predictors of the dependent variable. The multiple linear regression model was calculated by Ordinary Least Squares method (OLSM). The model summary table is attached in the Annex 1.

5. Results

5.1 Characteristics of agricultural cooperatives' members

The total number of respondents participating in the survey was 450, with majority of women (75%) above men (25%). Most of the respondents were in age category 36–45 years (28.67%). Additionally, highly populated categories were also 46–55 years and 56+, both categories counted over 20% of the respondents. As presented in the Table 2 the bulk of the participating respondents (52%) had attained primary education; although 26.89% of farmers had no formal education completed. The highest number of participants fell into the category of 11–20 years of experience in the farming sector (31.33%), however, 21–30 years of experience category was closely behind. Majority of the members (72%) were part of their agriculture cooperative for 6–10 years, nonetheless the second largest group was category from 1 to 5 years. Almost all of the respondents had the function as a member. The farm size of mass of the farmers was in the range from 2–4.9 ha and bulk of the participated population were raising animals. The main product of most of the farms was rice, while cows and chickens were raised the most in case of animal production.

In all of the three cooperatives, which were included in the survey, the gender distribution was found approximately the same with a predominance of women over men. In the cooperative AC Rung Rerng, the most represented category was farmers over 56 years, but on the other hand, the most numbered group of farmers in the remaining's ACs was the category from 36 to 45 years old. The majority of members in the cooperatives Amleng and Sangke Satop had attained primary education as opposed to the AC Rung Rerng where the most represented group was without formal education. According to the results in AC Sangke Satop and Amleng, most of the members had 21–30 years of experience in the farming sector unlike in the cooperative Rung Rerng, where the most represented group was the category from 11 to 20 years of experience. In all three ACs participated, the mass of the members has been part of the cooperatives from 6 to 10 years and the function of most of them was being a member. Based on the responds, most of the farms were sized between 1 and 1.9 ha in the coops Rung Rerng and Sangke Satop, however the biggest number of farmers in the AC Amleng had their

farm sized between 2 and 4.9 ha. The bulk of participants in the cooperatives Amleng and Sangke Satop were raising animals unlike in the Rung Rerng, where the significant number of members were not raising animals at their farms.

Table 2: Socio-demographic characteristics of the respondents

			Thpong dis	Thpong district		
Variables	Total sa	mple	Amleng	Rung Rerng	Sangke Satop	
Personal characteristics	N = 450		N = 203	N = 164	N = 83	
	N	%	%	%	%	
Gender						
Male	112	24.89	23.15	21.95	34.94	
Female	338	75.11	76.85	78.05	65.06	
Age						
18–25	17	3.78	4.43	3.66	2.41	
26–35	84	18.67	17.24	21.34	16.87	
36–45	129	28.67	34.98	20.12	30.12	
46–55	108	24.00	26.11	21.95	22.89	
56+	112	24.89	17.24	32.93	27.71	
Education						
No formal education (0 years)	121	26.89	9.36	51.83	20.48	
Primary education (6 years)	234	52.00	60.10	43.90	48.19	
Lower secondary education (3 years)	75	16.67	23.65	2.44	27.71	
Upper secondary education (3 years)	16	3.56	5.42	1.22	3.61	
University education (4–5years)	4	0.89	1.48	0.61	0.00	
Experience in the farming sector						
(years)						
≤10	80	17.78	24.63	14.63	7.23	
11–20	141	31.33	31.03	33.54	27.71	
21–30	127	28.22	32.51	21.34	31.33	
31–40	60	13.33	10.84	15.24	15.66	
41+	42	9.33	0.99	15.24	18.07	
Member of AC (years)						
≤1	1	0.22	0.00	0.61	0.00	
1–5	123	27.33	38.42	24.39	6.02	
6–10	325		61.08	75.00	93.98	
11+	1	0.22	0.49	0.00	0.00	
Function in the cooperative						
Member	443		98.52	99.39	96.39	
Secretary	1	0.22	0.00	0.00	1.20	
Finance	2	0.44	0.49	0.00	1.20	
Sub-leader	2	0.44	0.49	0.00	1.20	
Leader member	2	0.44	0.49	0.61	0.00	

(continued)

			Thpon	Oral district	
Variables	Total sample		Amleng	Rung Rerng	Sangke Satop
	N = 450		N = 203	N = 164	N = 83
	N	%	%	%	%
Farm characteristics					
Farm size (Ha)					
≤1	33	7.33	2.46	0.00	33.73
1–1.9	170	37.78	33.00	42.07	40.96
2-4.9	176	39.11	58.62	29.88	9.64
5-9.9	9	2.00	2.96	1.83	0.00
10+	62	13.78	2.96	26.22	15.66
Raising animals					
No	141	31.33	13.30	61.59	15.66
Yes	309	68.67	86.70	38.41	84.34

Note: AC = Agricultural cooperative

5.2 Commitment, trust, perceived benefits of the cooperatives' members

The subsequent section of the survey was focused on the commitment, trust to leader, trust among members and perceived benefits. The Table 3 shows the factors influencing the leadership in the agricultural cooperatives for the total sample as well as for active and nonactive members of the participated cooperatives.

According to the Table 3 total sample of the respondents were selling less than half of their products through their cooperatives and participated on more than half of the groups' gatherings. They were cooperating with almost majority of other members often. In terms of communication the respondents stated, they were communicating with their leader sometimes and from time to time they felt involved in the decisions of their cooperatives. Based on the results, the active members were selling almost all of their products through their cooperative whereas the passive members were selling less than half of their products though the cooperative. In addition, the active participants were much more cooperating and communicating with other members and leader than the passive respondents.

Total sample revealed that the participants had quite high trust towards their leader however they had the confidence to approach their supervisor only sometimes if there was a problem. Results showed that passive members had quite high trust towards the leader of the cooperative, however, their confidence to approach the head of the AC was noted much lower. Active respondents had higher trust to the leader even though the confidence to approach the leader in case of any problem was lower. Active respondents had higher trust to the leader even though the confidence to approach the leader in case of any problem was lower. Active members had reported high trust among members in spite of the passive members, which trust towards other members, was measured much lower.

Table 3: Commitment and trust of the cooperatives' members

Factors of the leadership	Total Sample	Active	Passive	p-value
	N = 450	N = 221	N = 229	
Commitment				
Share in cooperative	49,527.93	65,756.76	33,866.04	0.009
Share in coopperatives(cost)	10	10	10	0.326
Selling products through the cooperative ¹	2.55(1.40)	3.56(1.40)	1.57(1.39)	< 0.001
Participation at the group meetings ¹	3.55(1.67)	4.55(1.17)	2.59(1.16)	< 0.001
Cooperation with the other members of the cooperative ¹	3.78(0.96)	4.49(0.96)	3.10(0.96)	< 0.001
Cooperation with the other members of the cooperative ³	3.76(1.13)	4.62(1.14)	2.94(1.13)	< 0.001
Communication with the leader of the cooperative ³	3.48(1.21)	4.51(1.21)	2.49(1.20)	< 0.001
Involvement in the decisions of cooperative by the management ³	3.51(1.26)	4.56(1.26)	2.51(1.25)	< 0.001
Trust to leader				
Trust to leader ²	4.25(0.62)	4.62(0,62)	3.89(0.62)	< 0.001
Confidence to approach leader if there is a problem ³	3.32(1.34)	4.38(1.33)	2.28(1.34)	< 0.001
Trust among members				
Safe space in the cooperative to openly discuss new ideas ³	3.26(1.33)	4.33(1.33)	2.23(1.33)	< 0.001
Lending equipment to others ³	3.66(1.93)	4.55(1.20)	2.80(1.19)	< 0.001

Note: used scales for answering (none = 1, all = 5)¹; (strongly disagree = 1, strongly agree = 5)²; (Not at all = 1, frequent if not always = 5)³ level of significance = 0.05; bolt = significant

The Table 4 targeting the perceived benefits revealed that the most important aspect for total sample was to gain better standard of life with 4.26. Secondly highly rated factors were also financial support, gain knowledge and technical support with 4.22. The lowest rated benefits for total sample were family, access to market and possibility to attend workshops. Active respondents became members of AC to gain better standard of life, financial support and friends in contrast to passive representatives where the most crucial factors were better standard of life, gaining knowledge and financial benefits. The passive members replied that because of being members they perceive technical support and possibility to attend workshops where the other part of participants reported financial benefits and options to access credits as the most valuable ones. Moreover, the active members of the cooperatives were quite satisfied with their AC and meeting their expectations, on the other hand, the passive representatives were more likely unsatisfied.

The highest scored perceived benefit was to gain better standard of life therefore the first hypothesis H1: Financial benefits are the main factors for joining the agricultural cooperatives, was rejected. However, the differences between perceived benefits were not significant and ranged from 4.14 to 4.26.

Table 4: Perceived benefits of the members

Factors of the leadership	Total Sample N = 450	Active N = 221	Passive N = 229	p-value
Perceived benefits	11 100	1, 221	11 22)	
Become a member because of: access to market ²	4.17(0.59)	4.48(0.60)	3.87(0.59)	< 0.001
Financial support ²	4.23(0.57)	4.57(0.57)	3.90(0.56)	< 0.001
Family ²	4.14(0.67)	4.45(0,68)	3.84(0.67)	< 0.001
Friends ²	4.21(0.63)	4.55(0.64)	3.89(0.63)	< 0.001
Gain knowledge ²	4.22(0.57)	4.54(0.57)	3.92(0.56)	< 0.001
Better standard of life ²	4.26(0.58)	4.61(0.58)	3.92(0.57)	< 0.001
Because of being a member of a cooperative I perceive: technical support ²	4.22(0.54)	4.51(0.54)	3.93(0.53)	< 0.001
Financial benefits ²	4.22(0.60)	4.57(0.61)	3.88(0.60)	< 0.001
Knowledge ²	4.20(0.58)	4.53(0.59)	3.89(0.58)	< 0.001
Possibility to access credit ²	4.21(0.61)	4.57(0.61)	3.87(0.60)	< 0.001
Possibility to attend workshops ²	4.19(0.58)	4.50(0.58)	3.90(0.57)	< 0.001
Until what extent does the cooperative meet my expectations ³	3.68(1.11)	4.50(1.11)	2.88(1.10)	< 0.001

Note: used scales for answering (none = 1, all = 5)¹; (strongly disagree = 1, strongly agree = 5)²; (Not at all = 1, frequent if not always = 5)³ level of significance = 0,05; bolt = significant

5.3 Factors of transformational leadership style

The perception of the leader's leadership style by the respondents participating in the survey was analysed. Furthermore, the comparison between active and passive members in the perception of their leader in terms of the transformational leadership style.

As the results showed, the total sample revealed the factor with the lowest number as a contingent reward with 7.62 and on the other hand the factor with highest score, idealized influence, with 8.46 and all of the means fell into moderate score group measured by the MLQ scaling method. The rest of the measured factors, Inspirational motivation, Intellectual stimulation, Individual consideration, Management-by-exception, Laissez-faire leadership, for total sample were higher then 8.00 and fell to moderate cathegory.

The lowest factor for passive members was discovered as contingent reward and in comparison, the most significant number (6.44) for idealized influence. The remaining factors Inspirational motivation, Intellectual stimulation, Individual consideration, Management-by-exception scored more than 5 points and Laissez-faire leadership scored above 6 points. The Table 5 revealed comparison between the active and passive members of the ACs. The mean to all of the factors for active participants for measured through score range as high, above 10. On the contrary, the score measured for passive members was moderate through all the targeting areas. Active representatives had rated idealized influence and individual consideration (10.56) as the strongest aspects and contingent reward (10.13) as factor with lowest score. According to the results the active respondents had seen the leader more as a transformational leader compared to passive respondents. All of the measured factors were tested statisctically significant.

Overall, the results of the MLQ indicates that the group of active participants tended to rate their leaders' behaviour closer to the transformational leadership style in all the leadership factors measured compared to the passive group, as evidenced by the higher mean scores in the active group across all factors as displayed in Table 5. These

findings suggest that the active members have different perception of their leaders' leadership behaviours compared to the passive respondents.

Table 5: Factors of Multifactor Leadership Questionnaire and comparison between active and passive members

Factors	Total Sample N = 446	Active N = 219	Passive N = 227	p-value
1.Idealized influence	$8.46(2.65)^2$	$10.56(2.66)^3$	$6.44(2.64)^2$	< 0.001
2.Inspirational motivation	$8.03(3.06)^2$	$10.52(3.08)^3$	$5.64(3.05)^2$	< 0.001
3.Intellectual stimulation	$8.15(3.00)^2$	$10.53(3.01)^3$	$5.86(2.98)^2$	< 0.001
4.Individual consideration	$8.20(2.96)^2$	$10.56(2.98)^3$	$5.93(2.95)^2$	< 0.001
5.Contingent reward	$7.62(3.16)^2$	$10.13(3.17)^3$	$5.20(3.13)^2$	< 0.001
6.Management-by-exception	$8.12(2,89)^2$	$10.35(2.89)^3$	$5.97(2.86)^2$	< 0.001
7.Laissez-faire leadership	$8.13(2.87)^2$	$10.21(2.88)^3$	$6.12(2.85)^2$	< 0.001

Note: Mean; Score range used for measuring transformational leadership Low = 1;

Moderate $=^2$; High $=^3$; (SD); level of significance = 0.05; bolt = significant;

5.4 Factors affecting the commitment of the members

The further analysis was focused on which factors were affecting the commitment of the agricultural cooperative's members. The first step of the analysis was to find out which independent variables were statistically significant in relation to commitment as displayed in Annex 2. To test the relationship between the independent variables and dependent variable the simple regression analysis was used separately for each independent variable. The analysis identified education, years of membership, experience in the farming sector, farm size, trust among members, trust towards the leader, perceived benefits and leadership style as statistically significant. On the other hand, gender and age were not tested as statistically significant.

Based on the output from multiple linear regression analysis, several statistically significant coefficients were observed, indicating that they were associated with the dependent variable (commitment of the members) in a statistically significant way. The Table 5 indicated that trust among members, perceived benefits due to membership and leadership style have positive standardized coefficients, suggesting that higher levels of these variables are associated with higher levels of members' commitment. On the other hand, years of formal education, trust towards the leader and experience in the farming sector have negative standardized coefficients, indicating that

higher levels of these independent variables are associated with lower levels of members' dedication withing the agricultural cooperatives. According to Table 5 the independent variable trust among members appears to be the most positively related to the dependent variable commitment of members, indicated by the highest standardized coefficient (Beta = 0.509; t-value = 13.641; p-value of <0.001). In contrast Table 5 displays the independent variable with the lowest relationship with the dependent variable to be years of membership. This is indicated by the smallest standardized coefficient (Beta = 0.007; t-value 0.435 and p-value = 0.663). Furthermore, the associated t-value and p-value suggest that the relationship between years of membership and commitment of members is not statistically significant.

H2: Individual perceptions of a leader's transformational leadership are positively related to an individual member's commitment to the cooperative. In this case, the p-value for the coefficient of the leadership style variable was lower than the significance level. Based on the findings there was observed statistically significant positive relationship between individual perceptions of a leader's transformational leadership and an individual member's commitment to the cooperative. The positive coefficient value (0.391) as in Table 5 for the leadership style variable also supported the hypothesis that higher perceptions of transformational leadership are associated with higher levels of commitment among cooperative members. Therefore, the hypothesis was accepted.

H3: Members who trust their leaders are more committed to the cooperative.

Since the p-value (0.049) is less than the level of significance (0.05), it suggested that there may be a statistically significant relationship between trust towards the leader and commitment to the cooperative. However, the negative coefficient (-0.075) and the negative t-value (-1.976) indicated, that the relationship between the variables is negative, meaning that as trust towards the leader increased, commitment to the cooperative decreased. Based on this analysis, the hypothesis was rejected as the results suggested a negative relationship between trust towards the leader and commitment to the cooperative.

Table 6: Factors influencing the commitment of the cooperative members

Independent var.	Unstandardized c.		Standardized c.		
Independent var.	В	Std. Error	Beta	t	Sig.
Gender	0.029	0.038	0.012	0.772	0.440
Age	0.033	0.023	0.037	1.405	0.161
Education	-0.039	0.024	-0.031	-1.650	0.100
Experience in farming sector	-0.051	0.022	-0.060	-2.270	0.024
Years of membership	0.004	0.010	0.007	0.435	0.663
Farm size	0.008	0.015	0.008	0.521	0.602
Trust among members	0.450	0.033	0.509	13.641	< 0.001
Trust towards the leader	-0.075	0.038	-0.066	-1.976	0.049
Reasons for becoming					
member	-0.119	0.109	-0.061	-1.090	0.276
Perceived benefits due to					
membership	0.420	0.114	0.212	3.683	< 0.001
Leadership style	0.428	0.045	0.391	9.453	<0.001

Note: Dependent variable: Commitment; bolt = signicant; N = 450

6. Discussion

6.1 Commitment of the members of agricultural cooperatives

The results showed that active members sell majority of their products through the cooperative compared to the passive ones which sell only some of their goods through their AC. As reported by Cechin et al. (2013) members of an agricultural cooperatives do not hold back when selling their farm goods to alternative consumers in difficult economic times. According to Mwambi et al. (2020) a member's attendance at group meetings is one way to operationalize commitment of the participant. Based on the results of the survey active members attend almost all meetings in contrast to passive members who attend only some of the gatherings.

Collaboration between members is important for the success of cooperatives; participants should always work together as a team (Mhembwe & Dube 2017). According to the results of the questionnaire passive farmers collaborate with only few other members and only sometimes in comparison with the passive individuals, who cooperate with majority of the other members fairly often. As reported by Cechin et al. (2013) effective communication and dedication to the organisation go hand in hand. The output of the survey showed that active participants were communicating with their leader frequently on the other hand the passive individuals discussed with their manager only occasionally. As it was described by Awoke (2021) the degree to which a person identifies with, engages with an organization is known as organizational commitment. The participated respondents reported that they felt sometimes involved within the decisions of their cooperative. As noted by Donkor & Hejkrlík 2021, years of members' education were significantly positively related to commitment of the members which is not in line with results from linear regression analysis were the education, as the independent variable, was not tested statistically significant at a commonly used significance level of 0.05. The outcome of the regression analysis suggested that years of formal education and experience within the farming sector had a negative relationship with members' commitment. Therefore, the results suggested that commitment is better for members who have low experience within agriculture. It can be is best opportunity for young and/or beginning farmers to became members of the AC. Lastly, as expected according to the results, active farmers were more committed to the cooperative rather than the passive members.

6.2 Perceived benefits

The farmers' participation within the cooperative can be motivated by several benefits as described by many authors (Funk et al. 2011; Ito et al. 2012; Anania & Towo 2016; Chhinh et al. 2022). The overall results indicated that among the main motivation of members to join cooperative were mainly to obtain better standard of life, secondly to have financial support and thirdly to gain new knowledge. However, the differences were not significant. According to Boas & Ferreira (2006) in order to expand and support members in achieving a higher standard of living, cooperatives required profit. As it was described by Anania et al. (2020), cooperatives have a positive social impact on access to social services, better living standards, access to agricultural education, as well as the promotion of food security and solidarity which is in line with the results. Members have reported that because being part of the cooperatives they perceive technical support, followed by financial benefits and access to credit. According to Ofori et al. (2019) rural farmers in Cambodia initially founded smallholder agricultural cooperatives to promote rural solidarity and credit provision. According to the findings of Chhinh et al. (2022) farmers' engagement is encouraged by the benefits gained among the group. Based on Chanrith (2008) the main cooperatives' tasks included marketing, providing agricultural technical assistance, and facilitating credit and supplies. For example, according to Francesconi & Wouterse (2015) farmers join cooperatives in several African nations because the government and NGOs give them benefits and subsidies for inputs.

Active farmers participated in the survey have reported that their AC meets their expectations frequently if not always on the contrary passive members have stated that the cooperative meets their expectations only sometimes. As noted by Bhuyan (2007) the members' lack of interest in their organizations and organizational activities is one of the major issues that all membership-based organizations face. Regardless of how important members are to a cooperative organization, it is typical to hear from participants who are unaware of what their cooperative is doing or who feel disregarded by the administration of their cooperative.

6.3 Trust among members and towards the leader

Results indicated that active participants of the agricultural cooperatives trust the leader but noticeably their will to approach the leader if there is a problem is lower. On the other hand, the passive members did not have a problem to sometimes lend their equipment to other participants, but they felt there is safe space to openly discuss new ideas only once in a while. Factors that enhance the relationship of trust among cooperative staff members and members are advantageous to leaders (Jensen-Auvermann et al. 2018). Based on the output of Table 5 trust among members was statistically significant and positively related to commitment of the members. Based on the output there was observed a statistically significant negative relationship between trust towards the leader and members' commitment, with higher levels of trust towards the leader being associated with lower levels of commitment, as indicated by the negative coefficient and statistically significant p-value (significance level 0.05). Based on the findings of Donkor & Hejkrlík 2021 trust and commitment had negative relationship and on average, passive members were more trusting of the cooperative's other members than actively devoted ones. As it was described by Creed & Miles (1996) managers are the ones that set the tone for interorganizational trust by modelling it through their behaviour, policies, and values. According to findings of Xie et al. (2018) it is easier for leaders with transformational leadership style to gain trust, and trust positively impacts development atmosphere.

6.4 Leadership style

Overall, the results of the MLQ indicated that the group of active participants tended to rate their leaders' behaviour closer to the transformational leadership style in all the leadership factors measured compared to the passive group, as evidenced by the higher mean scores in the active group across all factors. The followers of transformational leaders are inspired to engage in extra-role behaviours because they have faith in, admiration for, devotion to, and respect for them (Limsila & Ogunlana 2008). These findings suggested that the active members had different perception of their leaders' leadership behaviours compared to the passive respondents. According to Hejrklík et al. (2023) degree of members' commitment is considerably increased by the

perceived transformational leadership style, which also fosters a favourable environment and causes members to alter their views and begin acting cooperatively for the benefit of the organization's sustainability and efficiency as a whole.

Active participants reported as the highest factors idealized influence and individual consideration compared to the passive members, who also rated idealized influence as the highest factor and secondly laissez-faire leadership. Idealized influence measures a leader's ability to inspire followers by setting an example, winning their respect and trust, and being devoted to them. The appropriate thing to do or what is required by the regulations and rules is not what leaders practicing transformational leadership do. Instead, they uphold moral principles even when they conflict with established rules and protocols (Nash & Bangert 2013). According to findings of Limsila & Ogunlana (2008), compared to the transactional leadership style, the transformational style shows a stronger favourable correlation with employees' job performance and organizational commitment.

Assessing one's capacity to hand over control to others, deal with uncertainty, and allow others to pursue their own interests is known as laissez-faire leadership (Bass & Avolio 2004). The lowest rated factor for active members was contingent reward likewise the passive members. According to Bass & Avolio (2004) contingent reward shows how frequently a leader instructs people to obtain rewards, emphasizes expectations of them, and recognizes their accomplishments.

6.5 Limitations

A personal data collection was planned; however, due to the situation regarding COVID-19 and associated travel restrictions, personal attendance for data collection was not possible. This results in the possibility of drawing only from the provided data, but to fully illustrate the current situation on site, it would be appropriate to supplement with additional information. The results of the work will be discussed with representatives of Diakonie ČCE and will lead to further project activities. However, this will be beyond the scope of this Master's thesis. It would be appropriate to focus on more areas in Cambodia in future studies. Despite that, within the scope of this study, priority was given to these three purposely selected cooperatives due to ongoing

cooperation and potential improvement for other Czech development cooperation projects.

7. Conclusions

The research aimed to identify the main factors which impact the trust between the members, trust towards the leaders, leadership style and commitment of the members. The primary focus was to investigate difference between active and passive members' perceptions of cooperative leaders' transformational leadership. The results showed that the perception of transformational leadership style was perceived differently by active and passive participants. Active members rated their leader much higher in comparison with the passive ones in terms of transformational leadership style. Additionally, it was observed that the strongest factor for becoming member of the agricultural cooperative was to gain better standard of life, however the differences between the perceived benefits were not significant. Furthermore, the linear regression analysis identified that the independent variable trust among members appeared to be the most positively related to the dependent variable commitment of the members. Secondly perceived benefits due to membership and leadership style had positive standardized coefficients, suggesting that higher levels of these variables were associated with higher levels of members' commitment. On the other hand, trust towards the leader and experience in the farming sector had negative standardized coefficients, indicating that higher levels of these independent variables were associated with lower levels of members' dedication withing the agricultural cooperatives.

Therefore, commitment is ideal for members who have low experience in agriculture. Thus, it is a great opportunity for young and/or beginning farmers to became members of the agricultural cooperative. Among the main factors affecting commitment is trust, particularly trust among members, which plays a crucial role. For that reason, when forming and strengthening cooperative activities, social relationships and connections should not be overlooked, and activities to increase trust among members should be encouraged. Offering supplementary group activities such as family gatherings can be one way to strengthen cooperative relationships. When promoting cooperative activities, it is important to highlight perceived benefits to attract new members and motivate existing ones. Additionally, leadership style plays a role, so it is

recommended that non-profit organizations operating in this area provide training to enhance leadership skills, particularly in aspects related to transformational leadership.

8. References

ACIAR. 2015. Sustainable intensification and diversification in the lowland rice system in Northwest Cambodia. Available from https://www.aciar.gov.au/sites/default/files/project-page-docs/fact_sheet_cse_2015_044_a.pdf (accessed April 2023).

Ali NM, Jangga R, Ismail M, Kamal SNIM, Ali MN. 2015. Influence of Leadership Styles in Creating Quality Work Culture. Procedia Economics and Finance **31**: 161-169.

Amini AM, Ramezani M. 2008. Investigating the success factors of poultry growers' cooperatives in Iran's Western provinces. World Applied Sciences Journal 5(1): 81-87.

Anania, P, Towo PE. 2016. The Contribution of Agricultural Marketing Co-operatives in Service Provision to Members in Tanzania. A Case of Moshi District. Tengeru Community Development Journal **3**(2): 87-117.

Anania P, Rwekaza GC, Bamanyisa JM. 2020. Socio-economic benefits of agricultural marketing co-operatives and their challenges: Evidence from Selected Cases in Moshi District Council (Tanzania). Ager-Revista de Estudios Sobre Despoblacion y Desarrollo Rural **30**: 97-146.

Avolio BJ. 1994. The "natural": Some antecedents to transformational leadership. International Journal of Public Administration 17: 1559-1581.

Awoke HM. 2021. Member commitment in agricultural cooperatives: Evidence from Ethiopia. Cogent Business & Management **8**(1): 1968730.

Barrett CB. 2008. Smallholder market participation: concepts and evidence from eastern and southern Africa. Food Policy **33**(4): 299-317.

Bass BM. 1985. Leadership and Performance beyond Expectations. Free Press, New York, NY.

Bass BM, Avolio BJ. 1993. Transformational leadership: a response to critiques, in Chemers, M.M. and Ayman, A. (Eds), Leadership Theory and Research: Perspectives and Directions, Academic Press, San Diego, CA, 49-80.

Bass BM. 1997. "Does transactional-transformational leadership paradigm transcend organisation a land national boundaries?" American Psychologist **52**(2): 130-139.

Bass BM. 1999. Two Decades of Research and Development in Transformational Leadership. European Journal of Work and Organizational Psychology: **8**(1): 9-32.

Bass BM. Avolio BJ. 2004. Multifactor Leadership Questionnaire: Manual and Simpler Set, 3rd ed., Mindgarden, Inc., Redwood City, CA.

Bhuyan S. 2007. The "People" Factor in Cooperatives: An Analysis of Members' Attitudes and Behavior. Canadian Journal of Agricultural Economics/Revue Canadienne D'agroeconomie **55**(3): 275-298.

Boas AAV, Ferreira MB. 2006. Improving leaders' skills and competencies: The challenge for farming systems in the beginning of the millennium. Changing European Farming System for a Better Future: New Visions for Rural Areas.

Brandão JB. Breitenbach R. 2019. What are the main problems in the

management of rural cooperatives in Southern Brazil? Land Use Policy 85: 121-129.

Braun S, Peus C, Weisweiler S, Frey D. 2013. Transformational leadership, job satisfaction, and team per- formance: A multilevel mediation model of trust. Leadership Quarterly **24**: 270-283.

Cechin A, Bijman J, Pascucci S, Omta O. 2013. Decomposing the Member Relationship in Agricultural Cooperatives: Implications for Commitment. Agribusiness **29**(1): 39-61.

Cox A, Le V. 2014. Governmental influences on the evolution of agricultural cooperatives in Vietnam: an institutional perspective with case studies. Asia Pacific Business Review **20**(3): 401-418.

Creed WED, Miles RE. 1996. Trust in organizations: A conceptual framework linking organizational forms, managerial philosophies, and the opportunity costs of controls. In R. M. Kramer & T. R. Tyler (Eds.), Trust in organizations: Frontiers of theory and research (pp. 16-38). Sage Publications, Inc. DOI:10.4135/9781452243610.

Dartey-Baah K. 2015. Resilient leadership: a transformational-transactional leadership mix. Journal of Global Responsibility **6**(1): 99-112.

Diakonie ČCE. 2021. About Us. Diakonie ČCE. Available from https://www.diakonie.cz/en/about-us/ (accessed April 2023).

Dirks KT, Ferrin DL. 2001. The role of trust in organizational settings. Organization Science 12: 450-467.

Dirks KT, Ferrin DL. 2002. Trust in leadership: Meta-analytic findings and implications for research and practice. Journal of Applied Psychology **87**: 611-628.

Donkor E, Hejkrlík J. 2021. Does commitment to cooperatives affect the economic benefits of smallholder farmers? Evidence from rice cooperatives in the Western province of Zambia. Agrekon **60**(4): 408-423.

Esham M. Kobayashi H. 2013. Farmer Companies in Sri Lanka: Lessons from Agricultural Cooperatives in Japan. Millennial Asia, 4(2): 117-133.

Eti-Tofinga B, Douglas H, Singh G. 2017. Influence of evolving culture on leadership: A study of Fijian cooperatives. European Business. Review **29:** 534-550.

Faguet GB, Davis H. C. 1984. Regression Analysis in Medical Research. Southern Medical Journal 77(6): 722-725.

Francesconi GN, Ruben R. 2008. The Life cycle of agricultural cooperatives: Implications for manage- ment and governance in Ethiopia. Journal of Rural Cooperation **36**(2): 115-130.

Francesconi GN, Wouterse F. 2015. Promoting the role of farmer-based organizations for value chain integration: The tension between a program's targeting and an organization's investment strategy. Agricultural Economics (United Kingdom) **46**(4): 527-36.

Fulton M. 1999. Cooperatives and member commitment. LTA 4 (99): 418-37.

Funk MJ, Westreich D, Wiesen C, Stürmer T, Brookhart MA, Davidian M. 2011. Doubly robust estimation of causal effects. American Journal of Epidemiology **173**(7): 761-767.

Gibbs PH, Montgomery DC, Peck EA. 1983. Introduction to Linear Regression Analysis. Technometrics **25**(4): 388. DOI:10.2307/1267869.

Goddard E. 2005. Attitudes Towards and Satisfaction with Cooperatives in Alberta: A Survey Analysis. In Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting.

Gronn, P. 1997. Leading for learning: Organizational transformation and the formation of leaders. Journal of Management Development **16**: 274-283.

Hejkrlík J, Chaloupkova P, Sokolska T. 2023. The role of transformational leadership and leaders' skills for new agricultural cooperatives inpost-soviet countries. Annals of public and cooperative economics **94**(1): 109-129.

Hendrikus P, Koentjoro, Meiyanto S, Andayani B. 2021. Transformation of women's leadership through producing natural dyed hand-woven fabrics (ethnographic study on Palue weavers). Gaceta Sanitaria **35**: S554-S557.

Hilliova M, Hejkrlík J, Mazancova J, Tseren T. 2017. Reaching the rural poor through agricultural cooperatives in Mongolia. Annals of Public and Cooperative Economics **88**(3): 449-466.

Hron K, Filzmoser P, Thompson K. 2012. Linear regression with compositional explanatory variables. Journal of Applied Statistics **39**(5): 1115-1128.

Hun S, Ito S, Isoda H, Amekawa Y. 2018. Impacts of Agricultural Cooperatives on Farmers' Revenues in Cambodia: A Case Study of Tram Kak District, Takeo Province. Journal of Agricultural Science: **10**(2): 82.

Chanrith N. 2008. Farmers' associations in Cambodia: Internal functions and external relations. In: Regional Center for Social Science and Sustainable Development (RCSD). Faculty of Social Sciences, Chiang Mai University, Chiang Mai.

Chhinh N, Sok S, Sou V, Nguonphan P. 2022. Local Engagement in the Agricultural Cooperatives (ACs) Operation in Cambodia. Sustainability **14**: 16515.

Ito J, Bao Z, Su Q. 2012. Distributional effects of agricultural cooperatives in China: Exclusion of smallholders and potential gains on participation. Food Policy **37**(6): 700-709.

Jensen-Auvermann, T, Adams I, Doluschitz R. 2018. Trust—Factors that have an impact on the interrelations between members and employees in rural cooperatives.

Journal of Co-Operative Organization and Management DOI: 10.1016/j.jcom.2018.09.001.

Kmusser. 2010. Wikimedia Commons. Available from https://commons.wikimedia.org/wiki/File:Cambodia_Kampong_Speu_locator_map.svg (accessed April 2023).

Lee P, Gillespie N, Mann L, Wearing A. 2010. Leadership and trust: Their effect on knowledge sharing and team performance. Management Learning **41**(4):473-491.

Limsila K, Ogunlana SO. 2008. Performance and leadership outcome correlates of leadership styles and subordinate commitment. Engineering. Construction and Architectural Management **15**(2): 164-184.

Lowder SK, Skoet J, Raney T. 2016. The number, size, and distribution of farms, smallholder farms, and family farms worldwide. World Development 87: 16-29.

MAFF. 2013. Law on Agricultural Cooperative; Ministry of Agriculture, Forestry and Fisheries (MAFF). Phnom Penh, Cambodia.

Martinez-Leon IM, Olmedo-Cifuentes I, Arcas-Lario N. 2020. Leadership Style and Gender: A Study of Spanish Cooperatives. Sustainability **12**(12): 5107. DOI: 10.3390/su12125107.

McNamara C. 2008. Field Guide to Leadership and Supervision. Authenticity Consulting, Minneapolis.

Mensah ER, Karantininis K, Adégbidi A, Okello JJ. 2008. Determinants of Commitment to Agricultural Cooperatives: Cashew Nuts Farmers in Benin. Leadership Quarterly 5(2): 81-87.

Mhembwe S, Dube E. 2017. The role of cooperatives in sustaining the livelihoods of rural communities: The case of rural cooperatives in Shurugwi District, Zimbabwe. Jamba-Journal of Disaster Risk Studies 9(1): a341. DOI:10.4102/jamba.v9i1.341.

Mujtaba BG, Kaifi BA. 2010. Management skills of Afghan respondents: a comparison of technical, human and conceptual differences based on gender. Journal of International Business and CulturalStudies: 1-14.

Mumford TV, Campion MA, Morgeson FP. 2007. The leadership skills strataplex: Leadership skill requirements across organizational levels. Leadership Quarterly **18**(2): 154-166.

Mwambi M, Bijman J, Mshenga P. 2020. Which type of producer organization is (more) inclusive? Dynamics of farmers' membership and participation in the decision-making process. Annals of Public and Cooperative Economics 1-24. DOI:10.1111/apce.12269.

Nash S, Bangert A. 2013. Exploring the relationships between principals' life experiences and transformational leadership behaviours. International Journal of Leadership in Education, 17(4): 462-480.

Niyazmetov D, Soliev I, Theesfeld I. 2021. Ordered to volunteer? Institutional compatibility assessment of establishing agricultural cooperatives in Uzbekistan. Land Use Policy **108**: 105538 DOI: 10.1016/j.landusepol.2021.105.

Obiwuru T, Okwu A, Akpa V, Nwankwere I. 2011. Effects of leadership style on organizational performance: A survey of selected small-scale enterprises in Ikosi-Ketu Council Development area of Lagos State, Nigeria. Australian Journal of Business and Management Research 1(7):100-111.

Ofori E, Sampson GS, Vipham J. 2019. The effects of agricultural cooperatives on smallholder livelihoods and agricultural performance in Cambodia. Natural Resources Forum **43**(4): 218-229.

Olson M. 2009. The Logic of Collective Action: Public Goods and the Theory of Groups, with a new preface and appendix. Harvard University Press.

Rafferty AE, Griffin MA. 2004. Dimensions of transformational leadership: Conceptual and empirical extensions. The Leadership Quarterly **15**(3): 329-354.

Savolainen T. 2014. Trust-building in e-leadership: A case study of leaders' challenges and skills in technology mediated interaction. Journal of Global Business Issues **8**(2): 45-57.

Stogdill RM. 1950. Leadership, membership and organization. Psychological Bulletin **47**(1): 1-14.

Syden R, Lee M. 2016. Development of Agricultural Cooperative in Cambodia, Lessons from South Korea. Journal of Agricultural Extension & Community Development **23**(2): 195-210.

Syden R, Lee M. 2020. An Assessment of Women Agricultural Cooperatives in Western Province of Cambodia. Journal of Saemaulogy **4**(2): 47-77.

Theng V, Keo S, Nou K, Sum S, Khiev P. 2014. Impact of farmer organizations on food security: the case of rural Cambodia. Cambodia Development Resource Institute (CDRI), Phnom Penh, Cambodia.

Tourism Cambodia. 2020. Tourism Cambodia. Available from https://tourismcambodia.org/provinces/61/kampong-speu (accessed April 2023).

Tray B, Garnevska E, Shadbolt N. 2021. Linking smallholder producers to high-value markets through vegetable producer cooperatives in Cambodia. International Food and Agribusiness Management Review **24**(6): 905-920.

USAID. 2008. KAMPONG SPEU, Build your business in Cambodia's growth corridor. Kampong Speu Province Kampong Speu Province, Investment Profile: 1-12.

Weihrich H, Koontz H. 2005. Management A Global Perspective (11th ed.). New Delhi:Tata McGraw Hill.

Xie Y, Xue W, Li L, Wang A, Chen Y, Zheng Q, Wang Y, Li X. 2018. Leadership style and innovation atmosphere in enterprises: An empirical study. Technological Forecasting and Social Change **135**: 257-265.

Zakić N, Vukotić S, Laketa M, Laketa L. 2013. Agricultural co-operatives: Researching members' perception of important issues of co-operatives on the example of Serbia. Journal of Animal and Plant Sciences **23**(1): 290-297.

Zamani O, Mojaverian M, Nader H. 2019. Comparing Efficiency Between Cooperative and Non-cooperative Farms: A Case of Sugar Beet Farmers of West Azerbaijan, Iran. International Journal of Rural Management **15**(1): 78-96.

Zhang AJ, Matous P, Tan DKY. 2020. Forget opinion leaders: the role of social network brokers in the adoption of innovative farming practices in North-western Cambodia. International Journal of Agricultural Sustainability 1-9. DOI: 10.1080/14735903.2020.1769808.

Zheng S, Wang Z, Awokuse TO. 2012. Determinants of Producers' Participation in Agricultural Cooperatives: Evidence from Northern China. Applied Economic Perspectives and Policy 34(1): 167-86.

Appendices

List of the Appendices:

Appendix 1: Summary table

Appendix 2: Factors influencing the commitment of the cooperative members - each independent variable tested separately

Appendix 3: Questionnaire Survey

Appendix 1: Summary table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.948a	0.898	0.895	0.32643

Note: a Predictors: (constant), leadership, age, gender, membership, farm size, education, benefits, experience in farming

Appendix 2: Factors influencing the commitment of the cooperative members - each independent variable tested separately

Variables	Unstandardized c.		Standardized c.		
v at tables	В	Std. Error	Beta	t	Sig.
Gender	0.099	0.110	0.043	0.904	0.366
Age	0.033	0.041	0.037	0.793	0.428
Education	-0.410	0.055	-0.330	-7.391	< 0.001
Experience in farming					
sector	0.094	0.040	0.111	2.365	0.018
Years of membership	0.422	0.101	0.194	4.179	< 0.001
Farm size	0.274	0.042	0.296	6.568	< 0.001
Trust among members	0.815	0.016	0.921	50.053	< 0.001
Trust towards leader	0.927	0.031	0.820	30.282	< 0.001
Benefits	1.451	0.061	0.747	23.758	< 0.001
Perceived benefits due					
to membership	1.517	0.060	0.765	25.124	< 0.001
Leadership style	1.000	0.021	0.914	47.741	< 0.001

Note: Dependent variable: Commitment; bolt =

significant; N = 450

Appendix 3: Questionnaire Survey

Personal information

- 1. Gender? (Male/Female)
- 2. How old are you?
- 3. Years of formal education? (No formal education/Primary education/Lower secondary education/Upper secondary education/Universitary education)
- 4. Years of experience in farming sector?
- 5. For how long are you member of cooperative?
- 6. What is the main product of your farm?
- 7. What is the size of your farm (Ha/number of animals)?

Commitment

- 8. How many shares you have in your AC?
- *How much per share you have to pay?
- 9. What is your function in the cooperative? (Member /Secretary /Finance/Marketing /Sub-leader/Leader)
- 10. I sell my products through the cooperative (All my products/Majority of my products/Half of my products/Some of my products/None of my products)
- 11. I participate at the group meetings (All meetings/Majority of the meetings/Half of the meetings/Sometimes/Never)
- 12. I cooperate with the other members of the cooperative (All members/With majority members/Half of the members/Some of the members/None of the members)
- 13. How often I cooperate with the other members of the cooperative (Frequently, if not always /Fairly often/Sometimes/Once in a while/Not at all)
- 14. I communicate with the leader of the cooperative (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)

15. I do feel involved in the decisions of cooperative by the management (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)

Trust towards leader

- 16. I trust the leader of the cooperative (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 17. I feel confident to approach the leader if there is a problem (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)

Trust among members

- 18. I feel there is safe space in the cooperative to openly discuss new ideas (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 19. I do not have a problem to lend my equipment to other members (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)

Perceived benefits

- 20. I have became a member of cooperative because of better access to market (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 21. I have became a member of cooperative because of financial support (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 22. I have became a member of cooperative because of my family (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 23. I have became a member of cooperative because of my friends (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 24. I have became a member of cooperative to gain knowledge (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 25. Because of being a member of a cooperative I perceive better standard of life (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 26. Because of being a member of a cooperative I perceive technical support (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 27. Because of being a member of a cooperative I perceive financial benefits (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)

- 28. Because of being a member of a cooperative I perceive knowledge (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 29. I have the possibility to access credit at the cooperative (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 30. I have the possibility to attend workshops through the cooperative (Strongly agree/Agree/Neither agree nor disagree/Disagree/Strongly disagree)
- 31. I have became a member of cooperative because of other reason (write what)
- 32. Because of being a member of a cooperative I perceive other benefits (write what)
- 33. Until what extent does the cooperative meet my expectations? (Frequently, if not always /Fairly often/Sometimes/Once in a while/Not at all)

Leadership Style

- 34. The leader makes others feel good around him (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 35. The leader expresses with a few simple words what the members could and should do (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 36. The leader enables others to think about old problems in new ways (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 37. The leader helps others develop themselves (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 38. The leader tells others what to do if they want to be rewarded for their work (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 39. The leader is satisfied when members are behaving according to the rules of the cooperative (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 40. The leader never changes established work practices of the members (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 41. Others have complete faith in leader (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)

- 42. The leader provides an inspiration to other members (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 43. The leader provides others with new ways of looking at puzzling things (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 44. The leader lets others know how he thinks their are doing (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 45. The leader provides recognition/rewards when others reach their goals (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 46. As long as things are working, the leader does not try to change anything (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 47. Whatever others want to do is OK with the leader (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 48. Others are proud to be associated with the leader (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 49. The leader helps others find meaning in their work (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 50. The leader gets others to rethink ideas that they had never questioned before (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 51. The leader gives personal attention to others who seem rejected (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 52. The leader calls attention to what others can get for what they accomplish (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 53. The leader tells others the standarts they have to know to carry out their work (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)
- 54. The leader asks no more of others than what is absolutely essential (Frequently, if not always/Fairly often/Sometimes/Once in a while/Not at all)