

MEASURING PERCEPTIONS AND THE DRIVERS OF MEMBERSHIP COMMITMENT OF COCOA FARMERS' COOPERATIVE SOCIETIES IN ATWIMA MPONUA DISTRICT, GHANA

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Abstract Limited studies exist on the commitment of members to cooperative societies. Therefore, the study sought to measure perceptions of membership and the drivers of membership commitment of cocoa farmers' cooperative societies in the Atwima Mponua District of Ashanti Region, Ghana. Data was collected from a sample of 400 cocoa farmers through a multi-stage sampling technique. Descriptive statistics (mean and standard deviation) and inferential statistics (binary logit regression) were used in analyzing the data. Results show that cocoa farmers agree that they benefit from the cooperative and they appreciate the management, marketing and business, internal dynamics and public interest of their cooperatives. The study also discovered that farm age, access to extension service, farming experience, farmer status, cooperative benefits and internal dynamics are critical to obtaining commitment in cooperative societies. The study shows the need for the Ghana Cocoa Board to improve farmers' access to extension services so as to improve their commitment in cooperative societies. Cooperative organizations are encouraged to consider the perceptions of the cocoa farmers and their socio-economic characteristics in order to elicit the desired commitment.

Keywords: *Cooperative Benefits, Cooperative Membership, Cooperative Management, Marketing and Business, Member Commitment, Perception, Public Interest*

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INTRODUCTION

A cooperative society is an autonomous and voluntary group with similar socio-cultural needs. They do this through a jointly owned and democratically controlled business. Cooperatives are founded on self-reliance, democracy, equality, equity and solidarity (ICA, 2013). According to Fulton (1995), membership in a cooperative society

is proof of something the cooperative offers. Morfi et al., (2021) further noted that members are an important part of any cooperative organisation. Their active participation and loyalty to the cooperative are vital for its success. If members' commitment is only limited to economic patronage, a cooperative society will be the same as any other business unit.

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Farmers participate in agricultural cooperatives to overcome barriers such as poverty, market failure, missing services in the production process, decreased income, increased transaction costs with trades and contribution to community development. One of the key activities of cooperative societies is the assistance they give to their members on implementing good agricultural practices (Sinyolo & Mudhara, 2018). Group membership offers farmers a better opportunity to overcome transaction costs, transportation costs and access inputs and output markets. Also, farmers in groups often buy together in bulk, resulting in economies of scale and improved bargaining power. These group advantages lead to a greater likelihood of getting success to affordable and better farm inputs, higher productivity and better output prices, which lead to higher household incomes and asset accumulation (Abebaw & Haile 2013; Sinyolo & Mudhara, 2018).

The inefficiencies of the Ghanaian cocoa farmer are evident as most of them produce significantly below their optimal output levels. They often need better yields and low income due to poor farm management and lack of adoption of cost-effective agriculture technologies (Dary and Grashuis, 2021). Bachke (2019) believes that this can significantly be reduced through the action of social capital (membership of cooperatives). It is also a fact that extension workers tend to operate more efficiently with groups of farmers rather than individual holders. The active participation of farmers in cooperatives should not only be limited to economic benefits (Abebaw & Haile 2013).

Member commitment is the choice to utilize a cooperative even when the cooperative's activities are inferior to that offered by others (Fulton, 1999). For a number of reasons, member commitment is crucial to cooperatives (Trechter et al., 2002). Uncommitted members are more likely to quit when things get uncomfortable. Since equity capital is mostly obtained from members, either through initial deposits or retained earnings, this can be lost if members are not committed. Commitment to cooperatives lowers the cost of transactions. Committed members are more likely to adhere to formal and informal norms. Finally, a continuing member-cooperative relationship is necessary for its legitimacy and viability (Fulton and Giannakas, 2007).

The performance of a cooperative society may be affected if member commitment wanes. Poor levels of commitment could have an impact on governance by reducing cooperative involvement

and causing non-alignment with cooperative values. In extreme circumstances, members of a cooperative group may leave, culminating in the cooperative's abrupt collapse. So, it is crucial to evaluate and keep track of members' commitment within a cooperatives' framework. This will make it possible for cooperative societies to realign their objectives to fit into their activities for profitable cooperative endeavors (Meyer and Herscovitch, 2001).

Based on the random utility theory postulated by McFadden (1974), this study believes that a cocoa farmer will rationally choose what they prefer and where they do not. Their individual expected utility of being committed members should thence be greater than not being committed group members (Sinyolo & Mudhara, 2018). Two key utility dimensions underline this present study; economic and social. According to Hendrikse and Veerman (2001), economists can advance strong theoretical arguments which show that farmers engage in the activities of cooperative societies for financial gains. Concerning the social dimension, it can be realised that farmers join cooperative societies for the reason of belongingness and could form the basis for building up financial capital (Valentinov, 2007; Borgen, 2001). Cooperatives also exist so members can contribute to its governance, acquire information, participate in meetings and discuss investment options (Morfi et al., 2021; Yu and Nilsson, 2019).

Numerous studies have been conducted to investigate the determinants of membership of cooperative societies or farmer-based organisations. For instance, Hernández-Espallardo et al., (2013), Grashuis and Cook (2019), Feng et al., (2016), Hansen et al., (2001), among others identified key factors relating to membership. Many researchers have testified to a strong relationship between members' satisfaction with their cooperatives and their view of cooperative economic and social benefits (Borgen, 2001; Feng and Hendrikse, 2008; Morfi et al., 2015; Morfi et al., 2021). Others have reported the positive effect of farmer groups on various outcomes such as fertiliser use, crop yields, market access, incomes and poverty reduction (Abebaw & Haile 2013; Mojo et al., 2017; Ma & Abdulai 2016; Sinyolo & Mudhara 2018). Studies have also found that the benefits of group membership are based on groups' internal dynamics and the individual members' socio-economic characteristics. Often, the focus of such studies is on members and non-members. A similar study undertaken by Yu and Nilsson (2021)

delved into farmer cooperatives' social, economic and environmental assessments. Socio-economic variables such as experience in farming, gender, number of household members, size of household, farmer's age, marital status, educational level, farm size, access to extension service, access to credit facilities and wealth-related measures (livestock size) have been reported to be positively correlated with group membership (Abebaw & Haile 2013; Sinyolo & Mudhara 2018).

Beyond knowing the factors that influence membership status, this study seeks to throw light on the factors that make farmers decide to remain committed in cooperative societies. Again, previous studies focused on members and non-members and concentrated on different dimensions of cooperatives separately. This study takes a composite view of the various dimensions of cooperatives, thus, management, marketing and business, benefits, internal dynamics, public interest). Therefore, this study aims to measure perceptions of membership and the drivers of membership commitment of cocoa farmers' cooperative societies in the Atwima Mponua District of Ashanti Region. The study seeks to find out (1) the perception of members on the marketing and business activities, cooperative management, cooperative benefits, internal dynamics and public interest of their cooperatives and (2) the factors that drive members to remain committed to their cooperative societies.

RESEARCH METHODS

The Atwima Mponua District is located in the South-western part of the Ashanti Region, covering an area of approximately 1883.2 square kilometers representing 7.7% of the entire region (24,370.5km²). The district is the second largest in the region after Sekyere Afram Plains (4,101.6 km²) containing 37,525 cocoa cooperative farmers. As high as 85% of households in the district engaged in agriculture. In the rural localities, about nine out of ten (88.3%) were agricultural households while in the urban localities, 64.4% of households are into agriculture. Most households in the district (98.6%) are involved in crop farming. Poultry (chicken) is the dominant animal reared in the district accounting for 54%.

A descriptive survey design was adopted by the researchers. The multi-stage sampling technique was used. In the first stage, the simple random sampling technique was used in selecting the district. In the second stage, ten (10) operational

areas were purposively selected from the 32 operational areas because most of the farmers there are actual farm owners, and these communities are far apart. In the third stage, a simple random sampling technique was used to select 40 farmers from the 10 operational areas selected. Four (4) cooperative societies were selected from each operational area. Only cocoa farmers who belonged to cooperative societies were selected. In total 400 members were selected. The Yamane (1973) formula was used to select the sample size because the total number of farmers in the district was known.

Using the Yamane (1973) sample size formula (95% confidence level), the study sample size was 400. The sample size was selected based on a certain degree of accuracy.

The formula is stated as

$$n = N / (1 + N(e)^2) \quad (1)$$

Where:

n = sample size required

N = number of people in the population

e = allowable error (5%)

This research was mainly based on primary data. A standardized structured questionnaire was used through a face-to-face method to collect quantitative data from the farmers within the selected operational areas in the District. In order to get accurate data from the selected farmers, they were ensured of their confidentiality during fieldwork by contracted enumerators since achieving the research objectives was prime. Interviews were held at the morning and evening hours of the day in the homes of the farmers when they were present and relaxed. It occurred from 28th May to 18th June, 2021. To ensure that information solicited from the respondents was not compromised in the shortcomings of translations, interviewers were asked to conduct interviews in the best-known languages of farmers. Data were analyzed using descriptive statistics such as mean and standard deviation and inferential statistics such as the binary logit regression model.

The study of farmers' perception on cooperative membership was done using a five-point Likert scale to gather the degree of perception based on perception statement from strongly disagree (1) to strongly agree (5). Membership perception was measured based on thematic areas such as marketing and business, cooperative management, benefits, internal dynamics and public interest. The mean rank of individual perception statements under each perception thematic area was obtained by dividing the number

of respondents who selected a particular scale and values summed up to get the mean rank.

Membership commitment was measured using three indicators; payment of dues, attendance to meetings and voluntary tasks. These three indicators were measured on a three-point likert scale, thus, never-1, sometimes-2, always-3. A member farmer is expected to have a maximum of 9 points and a minimum of 3. Scores were obtained for each respondent. From this, a member who had a score between 3.00 to 6.49 was labelled as 'not committed' (0) and a farmer who had a score between 6.50 to 9.00 was labelled as 'committed' (1). Membership commitment was thus measured as a binary variable.

The data on the drivers of membership commitment was analyzed using binary logit regression. It has been widely used in studies on cooperatives (Guo et al., 2011; Kontogeorgos et al., 2014; Feng et al., 2016). The probability that an individual will choose one of two alternatives (showing commitment to the cooperative organization versus not showing commitment to the cooperative organization) can be estimated using a binary logit model. A logistic regression model analyzes the relationship between the binary dependent variable and a set of explanatory variables (Stock and Watson, 2014). This study's explanatory variables were designed according to economic and social dimensions. The binary logit model about the hypotheses are;

$$\text{logit}(pi) = \log\left[\frac{pi}{1-pi}\right] = \alpha_i + \beta_i EC_i + \gamma_{ij} SO_j + \theta_{ik} X_k + \epsilon_i \tag{2}$$

where pi is the binary indicator that is equal to 1 if the farmer is a committed group member and 0 if the farmer is not a committed group member, pi = P(Yi = 1); EC_i represents the economic factor independent variables [income: gross farm income in Ghana cedis; access to credit: yes-1, no-0]; SO_j represents the social factor independent variables [gender: male-1, female-0; marital status: married-1, not married-0; household size: number of persons living in the farmers' house; religion: Christian-1, not Christian-0; farmer status: indigene-1, migrant; education: years of formal education; farm experience: years of farming; age: years farm age: years of cultivating the land; access to extension services: yes-1, no-0] and X_k represents the other independent variable k (marketing and business: index; cooperative management: index; benefits: index; internal dynamics: index; public interest: index].

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

Table 1. Socio-economic Characteristics of Respondents

Characteristics	Mean	Std. Dev.
Gender	0.81	0.13
Marital status	0.64	0.04
Religion	0.69	0.75
Household size	5.98	0.61
Age	46.32	0.11
Education	9.01	0.38
Farmer status	0.57	1.03
Farm size	6.61	0.12
Farm age	18.10	0.72
Access to extension	0.91	0.55
Access to credit	0.73	0.19
Farm experience	13.43	0.23
Farm income	33500	100.27

Source: Field Data, 2021

With a mean of 0.81 for gender, it means that majority of the farmers who were interviewed were males. Marital status had a mean of 0.64, implying that majority of the farmers who were interviewed were married. Religion of the respondents (Mean=0.69) shows that majority of them were Christians. An average of 5.98 was found for household size. Average age of the farmers was 46.32 years. Average attendance to formal education was nine (9) years. In terms of farmer status, majority of them were indigenes. Average farm size used by the farmers was 6.61 acres. Farms of cocoa farmers have existed for an average of 18 years. Majority of the farmers had access to extension services and credit. Average farm experience was 13.43 years while average farm income was found to be 33500 Ghana cedis.

Perception on Marketing and Business

Table 2. Perception on Marketing and Business

Perceptions	Mean	Std. Dev.
We get the best deals from our buyers	3.90	0.39
Our products are always available	4.01	0.18
We have easy access to financing	3.62	0.51
We have high return on investment	3.76	0.54
Market risk is reduced for us	4.07	0.25
The cooperative represents our interest	4.07	0.26
Our products and services are well advertised	3.84	0.46
Overall Average Index	3.90	0.37

Source: Field Data, 2021

Among the total farmers (400) interviewed on their perceptions of the cooperatives' marketing and business activities, the overall estimated average index was 3.90 (SD = 0.37). Thus, the cooperative represents our interest averaged 4.07 (SD = 0.26), market risk is reduced for us averaged 4.07 (SD =

0.25), our products are always available averaged 4.01 (SD = 0.18), we get the best deals from our buyers averaged 3.90 (SD = 0.39) our products and services are well advertised averaged 3.84 (SD = 0.46), we have a high return on investment also averaged 3.76 (SD = 0.54) and also we have easy access to financing had a calculated average of 3.62 (SD = 0.51). An analysis of the results shows that cocoa farmers agree on the perception about marketing and business that cooperative societies represent their interes, reduces their market risk, makes products always available, gets best deals from buyers (Licensed Buying Companies), products and services are well advertised, they have a high return on investment and they have easy access to financing. Cooperative societies engaged in agricultural activities exist in almost every part of Ghana, regardless of their levels of development. These cooperatives also make important contributions to rural development and poverty reduction especially by giving them an advantage to market their cocoa beans, venture into profitable investments, incur less marketing cost and promote the farm business and its products (Morfi et al., 2021).

Perception on Cooperative Management

Table 3. Cooperative Management

Perceptions	Mean	Std. Dev.
We receive technical assistance from management	4.70	0.17
Executives are professional in their work	4.26	0.25
We are always informed of management plans	3.83	0.15
Executives render accounts to us	3.76	0.32
We trust the executives in their dealings with us	3.66	0.19
Overall Average Index	4.04	0.21

Source: Field Data, 2021

An overall average index of 4.04 shows that farmers agree on how their cooperatives are being managed. Specifically, we receive technical assistance had an average of 4.70 (SD = 0.17), executives are professional in their work had an average of 4.26 (SD = 0.25), we are always informed of management plans had an average of 3.83 (SD = 0.15), executives render accounts to us had an average of 3.76 (SD = 0.32) and we trust the executives in their dealings with us also averaged 3.66 (SD = 0.19). The overall average index estimated was 4.04 (SD = 0.21). The results show that most cocoa farmers agree to cooperative management. The implication is that farmers receive technical assistance from management, the executives are professional in their work, farmers are always informed of management plans, the

executives render accounts to the members and they trust their executives in their dealings. Cooperative management is crucial in terms of cooperative principles as a well-structured organization (Trechter et al., 2002). From the summarized results in the Table 3, it showed that the cooperative management activities are better and clear to the farmers as it has improved the understanding of their membership to the association, because they have a high average index which shows farmers agree to the perceptions of cooperative management.

Perception on Cooperative Benefits

Table 4. Farmers Perception on Cooperative Benefits

Perceptions	Mean	Std. Dev.
Networking is facilitated among members	4.03	0.38
We always receive updated information	3.92	0.31
We enjoy access to new technology	3.55	0.25
We have established friendly relations	4.11	0.41
Programme always meet my needs	4.02	0.29
We get free labor from members	3.83	0.60
To get access to loans for farming	3.98	0.04
We enjoy subsidized inputs/assistance from government	4.06	0.33
We enjoy timely access to extension services	4.03	0.45
We enjoy good bargaining power for loans	4.00	0.71
Overall Average Index	3.95	0.38

Source: Field Data, 2021

An overall average index of 3.95 shows that farmers agree that the cooperative societies are beneficial. Specifically, we have established friendly relations (M = 4.11, SD = 0.41), we enjoy subsidized inputs/assistance from government (M = 4.06, SD = 0.33), networking is facilitated among members (M = 4.03, SD = 0.38), we enjoy timely access to extension services (M = 4.03, SD = 0.45), programme always meet my needs (M = 4.02, SD = 0.29), we enjoy good bargaining power for loans (M = 4.00, SD = 0.71), to get access to loans for farming (M = 3.98, SD = 0.04), we always receive up dated information (M = 3.92, SD = 0.31), we get free labor from members (M = 3.83, SD = 0.60) and I enjoy access to new technology (M = 3.55, SD = 0.25). The implication is that farmers establish friendly relations, they enjoy subsidized inputs/assistance from government, networking is

facilitated among members, they enjoy timely access to extension services, programmes always meet their needs, they enjoy good bargaining power for loans, they get access to loans for farming, they receive up dated information, they get free labor from members and they enjoy access to new technology. Cooperatives play important roles in agriculture and cash crop production like cocoa at all stages of food production, distribution and marketing. They provide very important support especially for small-scale businesses and low-income farmers in the farm areas from production to marketing, in that members can establish friendly relations, enjoy timely access to extension services, gain good bargaining power to get access to loans for farming and access to new technology (Morfi et al., 2021). This finding supports that of the following researchers; Agbo (2009), Feng et al., (2016), Hellin et al., (2009), Bernard and Spielman (2009), Ma and Abdulai (2016) and Verhofstadt and Maertens (2014). The implication is that if farmers join cooperative societies, they are more likely to get access to the benefits mentioned earlier.

Perception on Internal Dynamics

Table 5. Farmers Perception of Internal Dynamics

Perceptions	Mean	Std. Dev.
Offers members with education/training	3.05	0.24
Welcome new members	3.01	0.14
Offers members opportunities to influence	4.94	0.21
Provides fair and equitable voting rights	4.03	0.18
Facilitates discussion among cooperatives	4.04	0.22
We know our rights and duties as members	4.15	0.24
We know the status of our cooperative	4.01	0.22
We attend regular meetings	4.03	0.27
We pay our monthly dues regularly	4.05	0.24
The democratic principle of one-man-one-vote is maintained	4.01	0.25
The monthly contributions are affordable	4.07	0.19
There is fairness in applying rules and regulations	4.03	0.25
There is continuous harmony in the group	3.60	0.26
Use of a common language during meetings	4.11	0.36
Members are involved making decisions	3.97	0.29
We have the opportunity to voice our concerns	4.01	0.29

Overall Average Index	3.94	0.05
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Source: Field Data, 2021

An overall average index of 3.94 shows that farmers agree that the internal dynamics existing in the cooperative societies are good. Specifically, it offers members opportunities to influence (M = 4.94, SD = 0.21), we know our rights and duties as members, (M= 4.15, SD = 0.24), for use of a common language during meetings (M = 4.11, SD = 0.36), the monthly contributions are affordable, (M = 4.07, SD = 0.19), we pay our monthly dues regularly (M = 4.05, SD = 0.24), facilitates discussion among cooperatives (M = 4.04, SD = 0.22), we attend regular meetings (M = 4.03, SD = 0.27), provides fair and equitable voting rights (M = 4.03, SD = 0.18), there is fairness in applying rules and regulations (M = 4.03, SD = 0.25), the democratic principle of one-man-one vote is maintained (M = 4.01, SD = 0.25), we have the opportunity to voice our concerns (M = 4.01, SD = 0.29) and we know the status of my cooperative (M = 4.01, SD = 0.22). The implication is that, the cooperative societies offer members opportunities to influence, they know their rights and duties as members, they use a common language during meetings, the monthly contributions are affordable, they pay monthly dues regularly, facilitate discussion among cooperative members, they attend regular meetings, they provide fair and equitable voting rights, there is fairness in applying rules and regulations, the democratic principle of one-man-one vote is maintained, they have the opportunity to voice our concerns and they know the status of their cooperative. Trust determines the level of cooperation and the success of a cooperative is dependent on the trust and commitment exhibited among members. A conducive atmosphere is needed for them to create and share their opinions (Phakathi et al., 2021; Bernard & Spielman, 2009).

Perception on Public Interest

Table 6. Farmers perception on public interest

Perceptions	Mean	Std. Dev.
Exemplifies ethical business practices	3.85	0.41
Provides community support	3.47	0.63
Enhances the image of the community	3.67	0.54
Promotion of fairness with other organisations	3.06	0.24
Promotion of democratic processes with other organisations	3.36	0.25
Our members have security and freedom	4.03	0.19
We make decisions that affect the good order of the	4.45	0.25

community		
We promote government affairs for the well-being of members	3.90	0.21
Other cooperative societies like our activities	3.63	0.41
Overall Average Index	3.71	0.35

Source: Field Data, 2021

An overall average index of 3.71 shows that farmers agree that their cooperatives have a public interest. Specifically, we make decisions that affect the good order of the community had an average of 4.45 (SD = 0.25), our members have security and freedom had average of 4.03 (SD = 0.19), we promote government affairs for the well-being of members had an average of 3.90 (SD = 0.21), exemplifies ethical business practices had an average of 3.85 (SD = 0.41), enhances the image of the community had an average of 3.67 (SD = 0.54), other cooperative societies like our activities had an average value of 3.63 (SD = 0.41), provides community support had an average of 3.47 (SD = 0.63), promotion of democratic processes with other organisations also had an average of 3.36 (SD = 0.25). Promotion of fairness with other organisations averaged 3.06 (SD = 0.24). The implication is that they make decisions that affect the good order of the community, members have security and freedom, they promote government affairs for the well-being of members, they exemplify ethical business practices, they enhance the image of the community, other cooperative societies like their activities, they provide community support, they promote democratic processes with other organisations and promote fairness with other organisations averaged. It is a fact that cooperatives normally exist, particularly in rural areas to effect changes or behaviours that will benefit the community and the public at large so that people's wants and needs are addressed when necessary (Nilsson et al., 2009).

Moreover, cooperatives seek to change people's or community actions through laws, regulations or other methods of persuasion. Diener and Biswas-Diener (2002) suggested that social connections make poor people more satisfied. Communication within the cooperative enhances useful technology acquisition and improves social conditions (Valentinov, 2004; Nilsson et al., 2009; Yu and Nilsson, 2019).

Membership Commitment of Cocoa Farmers

Table 7: Membership Commitment of Cocoa Farmers

Members hip Commit ment	Neve r (1)	Someti mes (2)	Alwa ys (3)	Me an	Std. Dev
Payment of members hip dues	68 (17.0)	102 (25.5)	230 (57.5)	2.405	0.786
Attendan ce to meetings	61 (15.25)	152 (38.0)	187 (46.75)	2.315	0.849
Voluntar y task	91 (22.75)	97 (24.25)	212 (53.0)	2.303	0.823

Source: Field Data, 2021

Respondents were asked about their commitment to their cooperative societies in relation to payment of membership of dues, attendance to meetings and voluntary tasks. The results show that 57.5% of the respondents pay their dues always, 46.75% attend meetings always and 53% take up voluntary tasks. Payment of membership dues had the highest mean while taking up voluntary work had the least mean.

The Determinants of Cocoa Farmers' Decision to be Active Members

Table 8: Determinants of cocoa farmer's decision to be active members of cooperatives

Character istics	Coeffi cient	Std . Err	T	P> z	[95% Conf. Interval
Gender	-0.03	0.05	-0.55	0.58	-0.0713
Marital status	0.04	0.02	1.41	0.16	0.0101
Househol d size	0.01	0.02	0.17	0.84	-0.0303
Age	-0.01	0.01	-0.21	0.83	-0.0101
Religion	0.03	0.04	0.75	0.45	0.0055
Educatio n	0.05**	0.04	1.27	0.02	0.0033
Farmer status	0.11**	0.05	2.15	0.03	0.0121
Farm size	-0.01	0.01	-0.99	0.20	-0.0101
Farm age	0.01**	0.01	4.48	0.00	0.0102

Access to extension service	0.71** *	0.1 7	4.2 8	0.00	0.	1. 38 03
Access to credit	0.02	0.0 5	0.4 7	0.64	- 0.	0. 12 08
Income	0.05	0.0 3	2.6 2	0.21	0.	0. 01 32
Farming experience	-0.13*	0.0 8	- 1.7 0	0.09	0.	0. 13 07
Marketing and business	0.479	0.3 18	1.8 22	0.16 8	0.	0. 10 07
Cooperative benefits	0.537	0.2 80	1.9 18	0.04 5**	0.	0. 01 11
Cooperative management	0.146	0.3 07	0.4 76	0.28 1	- 0.	0. 01 01
Internal dynamics	0.976	0.5 50	1.7 74	0.07 7*	0.	0. 01 30
Public interest	-0.354	0.2 94	- 1.2 0	0.22 8	0.	0. 01 04
Constant	-0.59	0.2 9	- 2.2 0	0.03	- 1.	- 0. 11 06

Source: Authors' Computation, 2021

NB: ***1%, **5%, *10% Sig level

The study applied binary logit regression analysis to determine the drivers of farmers' decisions to remain committed to cooperative societies. Results of this analysis are given in Table 8. Correspondingly, it was determined that farm age, access to extension service, education and farmer status were the factors positively and significantly influencing farmers' decisions to remain committed as members of cooperatives.

It suggests that as farm age, access to extension service, education and farmer status in farming increases, their commitment to cooperatives increases and vice versa. Agricultural production cooperatives are generally established to solve members' issues by providing services such extensions which aid members in their production process. These results agree with the studies conducted by Abebaw and Haile (2013) that years of age in farming were strong determinants of membership of agricultural cooperatives. Ma et al., (2020) also agrees that sufficient access to extension services is more likely for a farmer to be active cooperative members.

Farmers who have gotten various trainings in agricultural related activities are bound to join cooperatives. When they join, they gain access to information and extension support services. In line

with the views of Fischer and Qaim (2012) and Sinyolo and Mudhara (2018), education level is positively associated with group membership. It is because it empowers the farmer to understand or comprehend information better, directly increasing membership's net benefits.

Farming experience negatively influenced farmers' decisions to be active members of cooperatives at 0.01%. It suggests that as farmers experience in farming increases, their commitment to cooperatives reduces. It may be because very experienced farmers have gained adequate training and skills in their occupation and have also established adequate working conditions. On the contrary, farmer's experience positively affects participation in a cooperative organization (Bernard et al., 2008; Abebaw & Haile, 2013).

Cooperative benefits and internal dynamics were also found as factors that influence commitment of farmers in cooperative societies. The implication is that as farmers perceive a cooperative to offer them with benefits, they remain committed. Also, when they perceive that the internal dynamics are working, they decide to commit themselves to the society.

CONCLUSION

The survival of any cooperative ultimately depends upon its members' commitment to patronizing the activities of the organization. In the search for the perceptions of cooperative members on various aspects of their activities, the study found high perceptions on the five thematic areas; marketing and business, cooperative management, cooperative benefits, member commitment and public interest. An overall perception index of 3.91 also means that the cocoa farmers had a good perception of their cooperative societies. The study also discovered that farm age, access to extension service, education, farmer status, cooperative benefits and internal dynamics were the drivers positively and significantly influencing cocoa farmers' decisions to be committed members of cooperatives. The study recommends that the Ghana Cocoa Board should enhance access to extension services since it influences farmers' commitment to cooperative societies. Ghana Cocoa Board should develop a policy that could enable it to continue to work with only cooperatives in order to enhance marketing and business, cooperative management, cooperative benefits, member commitment and public interest. Ghana Cocoa Board should adequately support extension agents with necessary logistics so that they can be more accessible to farmers since their level of accessibility influences farmers' decision to join cooperatives. Further research must be conducted to determine why membership perception was

relatively low on public interest and commitment.

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