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RESEARCH ARTICLE **ARAŞTIRMA MAKALESİ**

Perception analysis of fisheries and agricultural credit cooperative members regarding cooperatives

Su ürünleri ve tarım kredi kooperatifi ortaklarının kooperatiflere ilişkin algı analizi

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Abstract: This research is one of the rare studies that aims to examine the perceptions of the members of Fisheries Cooperatives and Agricultural Credit Cooperatives on cooperatives together. The demographic, socio-cultural and socio-economic conditions of the members of cooperatives, their demands from cooperatives and their perceptions of cooperatives, which are among the pioneers of horizontal organisation in civil society organisations, were examined. A scale consisting of multiple choice and Likert type questions was used in the study. The data obtained from the research were analysed by descriptive and logistic regression methods. It was determined that the average age of the members of Fishery Cooperatives was 49.170+9.884 and the average age of the members of Agricultural Credit Cooperatives was 48.448+10.037. While there were no members with postgraduate education among both Fishery Cooperative members and Agricultural Credit Cooperative members, 0.8% of Fishery Cooperative members and 4% of Agricultural Credit Cooperative members were bachelor's degree holders, 33% of Fishery Cooperative members and 39% of Agricultural Credit Cooperative members were high school graduates. It was found that education level, years of cooperative membership, purpose of using the internet, and additional income had an effect on the members definition of their "financial situation", while the belief that "the main purpose of cooperatives is not to make profit" was negatively affected by reading the cooperative agreement and additional income, and the age of cooperative members also negatively affected the belief that "bureaucracy negatively affects cooperative activities". Due to the characteristics of their products, it was found that the members of the Fishery Cooperative were concerned about the sale of products and both cooperative members complained about the high cost of service procurement.

Keywords: Cooperative, logistic regression, innovative cooperative

Öz: Bu araştırma, Su Ürünleri Kooperatifleri ve Tarım Kredi Kooperatifleri ortaklarının kooperatifçilik algılarını birlikte incelemeyi amaçlayan nadir çalışmalardan biridir. Kooperatif ortaklarının demografik, sosyo-kültürel ve sosyo-ekonomik durumları, kooperatiflerden talepleri ve sivil toplum örgütlenmelerinde yatay örgütlenmenin öncülerinden olan kooperatiflere yönelik algıları incelenmiştir. Araştırmada çoktan seçmeli ve likert tipi sorulardan oluşan bir ölçek kullanılmıştır. Araştırmadan elde edilen veriler betimsel ve lojistik regresyon yöntemleri ile analiz edilmiştir. Su Ürünleri Kooperatifleri ortaklarının yaş ortalamasının 49.170+9.884 ve Tarım Kredi Kooperatifleri ortaklarının yaş ortalamasının ise 48.448+10.037 olduğu tespit edilmiştir. Hem Su Ürünleri Kooperatifi hem de Tarım Kredi Kooperatifi ortakları arasında lisansüstü eğitim almış ortak bulunmazken, Su Ürünleri Kooperatifi ortaklarının %0.8'i ve Tarım Kredi Kooperatifi ortaklarının %4'ü lisans mezunu, Su Ürünleri Kooperatifi ortaklarının %33'ü ve Tarım Kredi Kooperatifi ortaklarının %39'u lise mezunudur. Eğitim düzeyi, kooperatife üyelik yılı, internet kullanım amacı ve ek gelirin ortakların "mali durumlarını" tanımlamalarında etkili olduğu, "kooperatiflerin temel amacının kar elde etmek olmadığı" inancının kooperatif sözleşmesini okuma ve ek gelirden olumsuz etkilendiği, kooperatif ortaklarının yaşının da "bürokrasinin kooperatif faaliyetlerini olumsuz etkilediği" inancını olumsuz etkilediği tespit edilmiştir. Su Ürünleri Kooperatifi ortaklarının ürünlerinin özellikleri nedeniyle ürün satışı konusunda endişe duydukları ve her iki kooperatif ortağının da hizmet alım maliyetlerinin yüksekliğinden şikayetçi oldukları tespit edilmiştir.

Anahtar kelimeler: Kooperatif, lojistik regresyon, yenilikçi kooperatif

INTRODUCTION

Throughout history, human beings have created common living spaces by cooperating with their environment and have developed the consciousness of being able to solve problems that they cannot solve alone. This consciousness has formed the basis of co-operation and made the economic and social cooperation of societies possible. Without a written contract, communities acting in accordance with geographical and cultural conditions have developed cultural heritage based on solidarity in good times and bad. These legacies constitute the basic philosophy of cooperatives.

The notion of cooperatives has existed since the dawn of humankind, evolving into democratic and autonomous entities designed to complement the public and private sectors. In contrast to the practice of distributing profits to members, these organisations prioritise reinvestment to achieve their mission (Kocabaş, 2008).

The first documented instance of a cooperative was that of a consumer co-operative, established by the Fenwick Weavers Association in Scotland in 1769. Rather than providing production or credit, this co-operative aimed to offer manufactured goods to its members at affordable prices. The Enlightenment, which began with the Renaissance in Europe, evolved into a period of awakening, catalysed by the French Revolution and the aspiration of the populace to achieve better living conditions. This period laid the foundations for the development of cooperatives. The movement began in 1844 with 28 weaving workers in the town of Rochdale, and it rapidly spread worldwide (Koraltan et al., 1971).

The Rochdale Principles, a set of principles that emphasised democratic and transparent operations, played a pivotal role in enabling the functioning of cooperatives (İnan, 2016).

In accordance with ICA (2005) principles, the primary function of contemporary cooperatives is to promote the development and growth of their respective communities. In addition to being businesses that operate in the interests of their members, cooperatives also have a responsibility to contribute to the economic and social development of their communities. Cooperatives are defined as voluntary organisations, open to all persons who accept their responsibilities and are able to benefit from co-operative services without any sexual, social or political discrimination. The quality and impact of such enterprises are directly proportional to the extent of member participation in management and the application of cooperative principles. It is imperative to acknowledge that the ongoing adherence to the principles enshrined in their founding objectives and contractual agreements is paramount for the designation of genuine co-operative endeavours (Mülayim, 2010).

The success of cooperatives is directly proportional to the participation of members in the management process and the effective implementation of cooperative principles.It is therefore vital for co-operatives to adhere to the principles laid out in their founding objectives and contracts if they are to operate as a true co-operative (Yücel and Acar, 2018).

In contemporary times, cooperatives are widely regarded as a prosperous business model within both the agricultural and non-agricultural sectors Agricultural Credit Cooperatives (ACCs) furnish their members with agricultural equipment, fertiliser, seed, animal feed and credit. Conversely, Fisheries Cooperatives (SÜK) have been shown to provide social, cultural and educational contributions in addition to activities such as fishing, aquaculture, marketing and establishing processing facilities (Karademir and Emin Arat, 2014).

In a study by Nan et al. (2019), the pivotal function of Agricultural Credit Cooperatives in China with regard to agricultural finance was emphasised, and it was asserted that these structures contribute to the intense competitive environment. Conversely, economic challenges such as a paucity of organisation, inadequate data flow and marketing difficulties have been identified in aquaculture cooperatives (Doğan, 2010).

Recent academic studies on co-operatives have focused on entrepreneurship, innovation and social capital (Fitz-Koch et al., 2018; Spicer et al., 2019). The contemporary generation of cooperatives has evolved beyond the mere marketing of raw materials, metamorphosing into corporate enterprises that specialise in the distribution of processed products (Coltrain et al., 2000).

Cooperatives are organisations that share a common set of values but implement different practices in different geographical locations. These structures have had an extraordinary impact across the world, serving more than one billion people. Moreover, they have come to the fore as civil society organisations that mediate social policies by encouraging horizontal organisation (Yücel et al., 2021).

The extant literature on co-operatives is extensive, but studies examining co-operative members perspectives on co-operatives are limited in number. This study is one of the few to examine the perspectives of members of both Agricultural Credit Cooperatives (ACC) and Fisheries Cooperatives (FC) on co-operatives together. It is hoped that the findings of this study will provide a foundation for further research and experimentation in this area.

MATERIALS AND METHODS

The primary data for this study were obtained from a voluntary survey of members of Fisheries Cooperatives and Agricultural Credit Cooperatives between 15 April and 31 December 2023. The subjects were reached by random sampling method, as is customary in such cases (Altunışık et al., 2012). This approach is based on the principle of conducting the research through a sample that reflects the characteristics of the main mass, without the need to investigate the universe one by one. The following formula was utilised to ascertain the requisite sample volume for field application.

$$n = \frac{Npqt_{\alpha}^{2}}{(N-1)d^{2}+pqt_{\alpha}^{2}} \qquad (1)$$

[N=Total number of units; n=Sample diameter; p=Favourable probability; p=Unfavourable probability; d=margin of error (e.g. 5%); t_a=table value (e.g. 1.96)] (Çiçek and Erkan, 1996; Miran, 2002; Baş, 2013). In light of the inherent characteristics of the research, it was determined that a non-refundable selection approach would be employed, given that each subject would be interviewed on a single occasion. A preliminary field study was conducted to finalise the questionnaires to be applied in the field. It was also stated in writing that the questionnaires would not be used for other than scientific purposes, and care was taken to ensure that the respondents provided accurate answers. A preliminary field study was conducted to finalise the questionnaires to be applied in the field. It was also stated in writing that the questionnaires would not be used for other than scientific purposes, and care was taken to ensure that the respondents provided accurate answers. The reliability test was employed to ascertain whether the collected data accurately reflected the phenomenon under investigation. The alpha coefficient (Cronbach Alpha) was utilised to assess the reliability of the scales employed in the research (Özdamar, 2013) (Table 1).

Table 1. Reliability coefficient test results

Cronbach Alpha	Number of Question
0.833	36

As demonstrated in Table 1, the calculated Cronbach's alpha coefficient is regarded as a reliable indicator (Saruhan and Özdemirci, 2011). The decision was taken to conduct the field study with the questionnaires whose reliability had previously been tested. Permission was obtained from the "Sinop University Human Research Ethics Committee" to conduct the field study.

In the course of the research, face-to-face interviews were conducted with 308 cooperative members, 125 of whom were members of Fisheries Cooperatives, on a voluntary basis.

In the evaluation of the research data, the Logistic Regression (LR) method was utilised for the analysis of the factors affecting the perception of cooperative principles among cooperative members and their expectations of cooperative management.

Logistic regression analysis (LR) method

Logistic regression is a method used to determine the cause and effect relationship with independent variables in cases where the dependent variable is observed in categorical and binary, triple and multiple categories. Logistic regression is a method used to determine the cause-effect relationship with independent (explanatory) variables and to evaluate research data in cases where the dependent (response) variable is observed in multiple categories.

In the classification and assignment process, where the expected values of the response variable are obtained as probabilities according to the explanatory variables, LR is utilised to ascertain the cause-effect relationship with the explanatory variables (xi, i= 1,2,…,k) in instances where the response variable (Y) is observed in categorical, binary, dichotomous and multinominal categories. The expected values of the dependent variable according to the independent variables are obtained as probability. This statistical method facilitates classification in accordance with probability rules by calculating the expected values of the dependent variable as probability and analysing tabulated or raw data sets (Özdamar, 2013).

The normal distribution assumption and the continuity assumption are not prerequisites. The effects of independent variables on the dependent variable are obtained as probability and risk factors are determined as probability (Maimon, 2005; Altıntaş, 2010). The initial studies on the utilisation of the logistic regression model were conducted by Berkson (Berkson, 1944). The LR main analysis, which has been used extensively in recent years, is one of the important methods frequently used in assigning observations to groups (Hosmer and Lemeshow, 1989).

In logistic regression analysis, the probability of one of the values of the dependent variable is estimated. The following model is used to estimate this probability value.

$$\pi_{(x)} = \frac{e^{\beta_0+\beta_1}}{1+e^{\beta_0+\beta_1}} \qquad (2)$$

The key value in regression problems is to find the mean value of the dependent variable conditional on a given value of the independent variable. This value is called the conditional mean and is denoted by Assume that Y is the dependent variable and x is the independent variable. The expression E(Y\ x) denotes 'the expected value of Y given x'. In linear regression analysis, the conditional mean is assumed to be a linear equation of x.

$$E\left(\frac{Y}{x}\right) = \beta_0 + \beta_1 \times x \qquad (3)$$

A transformation of π(x), which will be the centre of the logistic regression study, is the logit transformation as mentioned above. If this transformation is defined in terms of π(x):

$$g_{(x)} = \ln\left[\frac{\pi_{(x)}}{1-\pi_{(x)}}\right] = \beta_0 + \beta_1 \times x \qquad (4)$$

In addition, logistic regression gives the opportunity to make classification in accordance with probability rules by calculating the prediction of the dependent variable as a probability (Freeman, 1987). Logit g(x) is linear in terms of parameters and varies between -∞ and +∞ depending on the values of x (Maimon, 2005).

After the field application was completed, the data obtained from the questionnaires were transferred to the computer environment. Office 2010 programs were used for writing and descriptive statistics, SPSS (version 21) and MINITAB (version 17) statistical package programs were used to analyse the data.

RESULTS

The opinions of the members of Fisheries and Agricultural Credit Cooperatives on their perceptions of cooperatives and the findings obtained from the analysis of the data are presented in this section of the study.

In addition, the demographic and socio-economic status of the co-operative members were examined separately. It was found that the average age of the members of Fishery Cooperatives was 49.170+9.884 and that of the members of Agricultural Credit Cooperatives was 48.448+10.037. While there were no members with postgraduate education among both Fishery Cooperative members and Agricultural Credit Cooperative members, 0.8% of Fishery Cooperative members and 4% of Agricultural Credit Cooperative members were bachelor's degree holders, 33% of Fishery Cooperative members and 39% of Agricultural Credit Cooperative members were high school graduates.

A subject of curiosity among members of the cooperative is the manner in which they define themselves in comparison with the economic conditions that prevail in their immediate environment. In order to ascertain the manner in which co-operative members define their economic situation, participants were invited to respond to the following question: "How would you define your financial situation".

Due to the characteristics of the questions, the data were analysed using the logistic regression method. Dependent variable (Y), the respondent variables answering the question "How would you describe your financial situation" of the cooperative members; the respondent variables were Perception of their economic status [low income group (1), middle income group (2) and high income group (3)], age (years), educational status [primary school (1), secondary school (3), high school (3), associate/undergraduate (4), postgraduate (5)], years of cooperative membership, years of cooperative membership, purpose of Internet use and duration of Internet use, status of reading the cooperative agreement [I read the agreement (1), I did not receive it (2), I did not need it (3), I did not have time (4)], and source of extra income [livestock (1), agriculture (2), trade (3), I have no extra income (4)]. As a result of the model solution, statistically significant variables are explained (Table 2).

Table 2. "How would you describe your financial situation" expression

Variables	Coefficient	Std. deviation	p-value	Odds ratio
Stable	-2.289		0.359	
Age	0.003	0.017	0.830	1.000
Gender	1.087	1.025	0.289	2.970
Education	-0.975	0.229	0.000	0.380
Coop.Membership Period	0.458	0.164	0.005	1.580
Purpose of Using Internet	-1.116	0.408	0.006	0.330
Internet Usage Time	0.697	0.432	1.107	2.010
Coop. Reading the Contract	-0.063	0.206	0.757	0.940
Additional Income Status	0.395	0.127	0.002	1.160

The model was generally significant (p: 0.007) (Table 2). As a result of the LR analysis, it was found that education level, years of cooperative membership, purpose of using the Internet and additional income were effective in defining the financial situation of cooperative members ($p<0.05$).

The negative effect of educational attainment was found to be a factor in the statement that as the level of education increases, shareholders financial needs increase and that they themselves have insufficient material resources.

It was found to be significant that the higher the additional income, the better the economic situation ($p<0.002$).

When members were asked about their purpose in becoming a cooperative member;

- 81% of the members of Fisheries Cooperatives and 65% of the members of Agricultural Credit Cooperatives said that they became a member of a cooperative "to guarantee the sale of their products",
- 82% of the members of Fisheries Cooperatives and 60% of the members of Agricultural Credit Cooperatives believe that they "build strength together" with their members.
- Members of fishing cooperatives and agricultural credit cooperatives reported that "access to subsidies" was easy at rates of 72% and 76%, respectively.
- A significant portion of the members of Fisheries Cooperatives (73%) and about half of the members of Agricultural Credit Cooperatives (55%) are motivated by the idea of "gaining reputation around them",
- It was found that the feeling of "getting cheap services" was a factor for 73% of the members of Fisheries Cooperatives and 54% of the members of Agricultural Credit Cooperatives.

In addition, 69% of the members of Fisheries Cooperatives and 63% of the members of Agricultural Credit Cooperatives believe that "middlemen have been eliminated" thanks to the cooperatives, while 8% of the members of Fisheries Cooperatives and 13% of the members of Agricultural Credit Cooperatives stated that they became members of cooperatives even though they did not believe that "their products were sold at their real value".

Analysis of cooperative members perceptions of "The main purpose of cooperatives is not to make profit" using the logistic regression (LR) method

The main difference between co-operatives and companies is their economic approach. Cooperative members participate fairly in the cooperative capital. This participation enables democratic control of the cooperative capital.

In the LR method applied in the analysis of the data, the dependent variable (Y) is the perception of co-operative members that "the main purpose of co-operatives is not to make profit"; age (years), educational status [primary school (1), secondary school (3), high school (3), associate/undergraduate (4), postgraduate (5)], years of cooperative membership, purpose of internet use and duration of internet use, status of reading the cooperative agreement [I read the agreement (1), I did not receive it (2), I did not need it (3), I did not have time (4)], source of additional income [animal husbandry (1), field agriculture (2), trade (3), I have no additional income (4)]. As a result of the model solution, statistically significant variables are explained (Table 3).

Table 3. "The main purpose of the cooperative is not to make profit" expression

Variables	Coefficient	Std. deviation	p-value	Odds ratio
Stable	4.372		0.088	
Age	-0.058	0.018	0.002	0.940
Gender	-0.945	1.016	0.352	0.390
Education	-0.229	0.226	0.312	0.800
Coop.Membership Period	0.058	0.169	0.730	1.060
Purpose of Using Internet	0.483	0.394	0.221	1.620
Internet Usage Time	-0.381	0.442	0.389	0.680
Coop. Reading the Contract	-0.440	0.219	0.045	0.640
Additional Income Status	-0.284	0.135	0.035	0.750

The model was generally significant (p:0.036). According to the results of the analyses, there is a negative relationship between the age of the members and the fact that the main purpose of the cooperatives is not to make profit. Similarly, there is a negative and statistically significant relationship between the members literacy status and their additional income status ($p<0.05$) (Table 3).

The perception of cooperative services by cooperative members;

- 68% of the members of Fisheries Cooperatives and more than half of the members of Agricultural Credit Cooperatives (64%) believe that "the management informs them about professional issues".

- The majority of the members of Fisheries Cooperatives (73%) and more than half of the members of Agricultural Credit Cooperatives (57%) stated that the management of the cooperative was "informed about the income and expenditure accounts".

- 76% of the partners of the Fisheries Cooperative and 62% of the partners of the Agricultural Credit Cooperative believe that the managers "display a democratic management".

- 68% of the members of Fisheries Cooperatives and 52% of the members of Agricultural Credit Cooperatives stated that they believe that "financial assistance is provided in matters such as birth, death, wedding and accidents" among the reasons for becoming a member of a cooperative.

The shareholders of the Fisheries Cooperative are approximately ¾ of the shareholders of the Agricultural Credit Cooperative. It was also found that 70% of the members of the Fishery Cooperatives and 66% of the members of the Agricultural Credit Cooperatives believed that "cooperative members fulfil their partnership responsibilities properly", while only 4% of the members of the Fishery Cooperatives and 8% of the members of the Agricultural Credit Cooperatives believed that "not all members have equal rights".

Logistic regression (LR) analysis of cooperative members perceptions of "Bureaucracy negatively affects cooperative activities".

There is no single accepted definition of bureaucracy and there are also differences in perception. The simplest definition is that it is perceived as "the management of civil servants working in relevant institutions". Different interpretations of bureaucracy arise from a lack of recognition of the characteristics of the organisational form and from different definitions and approaches. As a social perception, employees avoidance of assuming responsibilities, the belief that stationery is a means of making things worse, slowing down work, making arbitrary decisions, and even administrative pressure are common definitions.

However, the reason for the existence of "bureaucracy" is the process of organising social actions and movements in the relevant field according to rational and objective principles. In other words, the main aim of bureaucracy is to ensure the sustainability of the healthy functioning of the system with its structural features within the division of labour, hierarchy and legal framework.

On behalf of the state in society, public services and state administration are provided by civil servants in the institutions in which they work.

The dependent variable (Y) of the LR regression model to determine cooperative members perspectives on bureaucracy cooperative relations is the respondent variables answering the question "Does bureaucracy negatively affect cooperative activities"; age (years), educational status [primary school (1), secondary school (3), high school (3), associate/undergraduate (4), postgraduate (5)], years of cooperative membership, purpose of using the internet and duration of internet use, status of reading the cooperative agreement [I read the agreement (1), I did not receive it (2), I did not need it (3), I did not have time (4)], source of additional income [animal husbandry (1), field agriculture (2), trade (3), I have no additional income (4)]. As a result of the model solution, statistically significant variables are explained (Table 4).

Table 4. "Bureaucracy affects cooperative activities" expression

Variables	Coefficient	Std. deviation	p-value	Odds ratio
Stable	5.327		0.053	
Age	-0.046	0.019	0.019	0.950
Gender	-1.889	1.084	0.081	0.150
Education	-0.136	0.244	0.575	0.870
Coop.Membership Period	-0.047	0.180	0.793	0.950
Purpose of Using Internet	0.464	0.422	0.272	1.590
Internet Usage Time	-0.460	0.476	0.334	0.630
Coop. Reading the Contract	-0.425	0.236	0.072	0.650
Additional Income Status	-0.162	0.143	0.258	0.850

The model was generally significant (p:0.032). According to the results of the analyses. the 'age' of the members has a negative effect on the opinion that bureaucracy has a negative effect on cooperative activities ($p<0.05$) (Table 4). Some of the views of cooperative members on the cooperative bureaucracy relationship are as follows.

- 78% of the members of Fisheries Cooperatives and 70% of the members of Agricultural Credit Cooperatives are satisfied with the "Are you satisfied with the supervision of the authorities".

- 72% of the members of Fishery Cooperatives and 77% of the members of Agricultural Credit Cooperatives stated that they believe that the official authorities know the problems and will solve them. 23% of Agricultural Credit Cooperative members and 25% of Fisheries Cooperative members chose to remain neutral on this issue.

Finally, in order to determine the opinions of the cooperative members on whether the number of cooperatives is sufficient or not, the question 'Should the number of cooperatives be increased?' was asked and 72% of the members of Agricultural Credit Cooperatives and 82% of the members of Fisheries Cooperatives stated that the number of cooperatives should be increased.

DISCUSSION

The struggles and motivations of co-operatives in developing countries are different (Tadesse et al., 2020). Considering that the individualisation of the world's economic system has weakened the culture of solidarity, cooperatives, whose basic philosophy is to grow on solidarity and cooperation, will be the driving force of social transformation (Nadeau and Nadeau, 2016).

Akçabey and Paksoy (2023), in their research conducted in Agricultural Credit Cooperatives, show a similarity between being a member of the cooperative "due to the ease of benefiting from support".

Individuals should not only care about their own reputation, but also about protecting the rights of stakeholders (Oetzel and Ting-Toomey, 2003).

The compulsory pressure for change, which began with both social and legal changes in areas where traditional cooperatives were inadequate (Gonzalez, 2017), can be solved by the fact that the new generation of cooperatives is based on professionalism (Akçay and Ünlüönen, 2020) and that members are the suppliers of the co-operative (Iliopoulos, 2005).

Didier et al. (2012) in France found that emotional commitment, Cechin et al. (2013) in Brazil found that co-operative strategies, policies and projects, and Can (2015) found that trust was the most influential factor in becoming a cooperative member.

Trust is accepted as an important determinant of attitudes and participation towards the organisation (Barling et al., 2010). Ostrom (1990, 2010) has shown that trust is an important determinant of co-operation and therefore commitment. Allen and Meyer (1990) conceptualised commitment in three different components: affective commitment, continuance commitment and normative commitment: Individuals with affective commitment feel positive emotional attachment to the organisation (Hidalgo-Fernández et al., 2020). Normative commitment is obligation-based (Wiener, 1982). Individuals with a high level of normative commitment believe that staying in an organisation is the right thing to do (Meyer and Allen, 1991) and are aware of the costs of leaving the organisation. Research consistently shows that high levels of trust are positively correlated with member commitment (Yılmaz and Hunt, 2001).

In similar studies, cooperative members have stated that bureaucracy negatively affects fishing activities and reduces the efficiency of cooperatives, and that the bureaucracy problem is caused by the fact that cooperatives are subject to many ministries and laws (Karademir, 2012; Çımat and Duran 2018). Future work could extend to examine the success or failure of cooperative processes (Bourlier-Bargues et al., 2022) and reveal the struggles between different occupational groups in attempts to enable cooperation.

CONCLUSION

In the research, in order to determine the demographic and socio-economic status of Fisheries and Agricultural Credit Cooperative members and their perspectives and expectations of cooperatives, a scale consisting of 11 multiple choice and 25 five-point Likert type questions was used. The data obtained from the questionnaires applied to the co-operative members on a voluntary basis were tested by Logistic Regression method. The ultimate goal of the research is to encourage human development to contribute to some extent to reducing the negative effects of human development on crop productivity and food safety.

The real income of the co-operative members was not measured, but they were asked "how do you define your financial situation" to find out how they feel about their economic situation in society, to be able to live on their economic gains.

The situation was analysed using logistic regression and it was found that education level, years of membership of the cooperative, purpose of using the Internet and additional income were effective in defining the economic situation of members.

As the level of education increases, members report that their financial needs increase and that they have insufficient material resources. As the level of additional income increases, they interpret their economic situation as better because their current income is insufficient.

In particular, they are concerned about the sale of products due to the characteristics of the products of the members of the fisheries cooperative. On the other hand, the cooperative members want more favourable conditions for the purchase of services.

In order to test the awareness of cooperative members that one of the main objectives, if not the most important one, is not to make a profit but to build solidarity together, the question "I know that the main objective of cooperatives is not to make a profit" was asked.

The situational factors were analysed using the logistic regression method and it was found that the belief that "the main purpose of cooperatives is not to make profit" is negatively influenced by members' reading of the cooperative agreement and the status of additional income.

In order to determine the opinions of cooperative members on how bureaucracy affects co-operative activities, the question "Does bureaucracy affect cooperative activities negatively?" was asked.

As a result of the LR analysis conducted for due diligence, the age of the members has a negative effect on their belief that bureaucracy has a negative impact on co-operative activities.

Further research should be undertaken to identify the needs of co-operative stakeholders and barriers to organisation at a national level.

Barriers to cooperative organisation need to be removed and requirements need to be met. National and international examples of successful cooperatives should be shared with members and stakeholders to raise awareness. Paving the way for horizontal organisation under the leadership of cooperatives, taking into account their contribution to democracy.

In order to increase awareness of cooperatives, it is necessary to raise the level of awareness of cooperative members as well as those who receive services from cooperatives by implementing education, training, support and consultancy programmes in cooperation with public, legal and private institutions. We believe that human development is no less important than economic development.

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AUTHOR CONTRIBUTIONS

All authors contributed to the idea and design of the study. Material preparation and research were carried out by Şennan Yücel, Sebahattin Yündem and Gülşen Uzun Gören. The writing and editing of the manuscript was done by Şennan Yücel, Sebahattin Yündem and Gülşen Uzun Gören and all authors read and approved the manuscript.

CONFLICT OF INTEREST STATEMENT

The authors declare that there are no conflicts of interest or competing interests.

ETHICAL APPROVAL

No specific ethical approval was required for this study.

DECLARATION OF AI USE

We have not used AI-assisted technologies in creating this article.

DATA AVAILABILITY

All relevant data are included in the paper.

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