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AGRIBUSINESS

Factors effective on reaching goals and target groups of agricultural supports: a case study in Diyarbakir Province, Turkey

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ABSTRACT: *In this study, factors affecting the willingness to continue organic almond production in Eğil and Dicle districts of Diyarbakır were investigated. A semi-structured interview method was used in data collection. Descriptive statistics and logistic regression were used in data analysis. According to the results, it was reported that the association membership status and agricultural supports are very important (P<0.01) and the size of the almond establishment (acres) (p<0.01). Association membership status significantly increases the desire to continue organic production by approximately 11%. Conversely, 24.2 percent of the participants who claim that support is needed for almond production is willing to produce organic. However, one hectare increase in almond plantation reduced the probability of continuing organic almond production in the ceteris paribus by 1%, suggesting that organic farming awareness is not sufficiently developed. It turns out that support payments are the main driving force for farmers to continue organic production, and the underlying reason for association membership is access to support payments.*
Key words: *agricultural support policy, logistic regression, organic almond.*

Determinação de fatores eficazes para alcançar as metas e os grupos-alvo dos apoios agrícolas: um estudo de caso na Província de Diyarbakir, Turquia

RESUMO: *Neste estudo foram investigados os fatores que afetam a disposição de continuar a produção orgânica de amêndoas nos distritos de Eğil e Dicle, em Diyarbakır. O método de entrevista semiestruturada foi utilizado na coleta de dados. A estatística descritiva e regressão logística foram utilizados na análise dos dados. De acordo com os resultados, verificou-se que o status de membro da associação e os apoios agrícolas são muito importantes (P<0,01) e o tamanho do estabelecimento de amêndoa (acres) (p<0,01). O status de membro da sociação aumenta significativamente o desejo de continuar a produção orgânica em aproximadamente 11%. Por outro lado, 24,2% dos participantes que afirmam que é necessário apoio para a produção de amêndoas e estão dispostos a produzir produtos orgânicos. No entanto, o aumento de um hectare na plantação de amêndoa reduz a probabilidade de continuar a produção orgânica de amêndoa no ceteris paribus em 1%, sugerindo que a conscientização da agricultura orgânica não é suficientemente desenvolvida. Acontece que os pagamentos de apoio são a principal força motriz para os agricultores continuarem a produção orgânica, e a razão subjacente para a associação é o acesso a pagamentos de apoio.*
Palavras-chave: *política de apoio agrícola, efeito aleatório, regressão logística, amêndoa orgânica.*

INTRODUCTION

Per capita income is low in agriculture due to the structural characteristics of this sector as it has strategic importance for the nations and so requires to be supported to ensure the citizens' essential needs such as food security. Moreover, protective and supporting policies towards agricultural sector is a necessity for sustainability of this sector and for the competition in world markets (YORGUN, 2006). With support policies, governments aim to direct agricultural production, increase productivity, encourage product variety and ensure quality and sustainable production (YAVUZ, et al. 2004).

As well as the amount of the agricultural supports, type and conditions of the support payments, the degree to what extent farmers benefitted from the supports all affect the effectiveness level of the supports. There is no doubt that micro level studies in that agricultural supports are analysed at farm level may contribute to macro policy making. Farmers are directly affected by the support policies and increasing the micro level studies is also of importance regarding the determination of how farmers approach the subject (ERDAL, et al. 2013). Turkey has supported the agricultural sector using either foreign or domestic sources in various ways from past to present. The United Nations International Fund for Agricultural Development (IFAD) supported farms in Eğil and Dicle districts of Diyarbakır province in 2011. These districts are characterized with relatively

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mountainous geography and so average farmland size is smaller compared to the rest of province with flat or less undulated geography (Figure 1).

The 70 percent of the supports given by IFAD for almond orchard establishment was granted. The minimum and maximum sizes of supported almond orchards were 0.5 and 6.5 ha. Simultaneously with the IFAD grants, farmers have started to receive organic production and EBALP supports. The EBALP (Environmentally Based Agricultural Land Protection Program) is the scheme which aims to protect the quality of soil and water, to provide sustainability of natural resources, to prevent erosion and to reduce adverse effects of agricultural practices on environment. It has been commenced in four provinces in 2006 and has presently been implemented in 58 provinces throughout the country. Farmers in Dicle and Eğil districts have still been receiving organic production and EBALP supports. In this study we aimed to determine the factors affecting the willingness of the farmers to continue organic production to unveil if targeted results have been achieved with the supports. By doing this we test the hypothesis that supports alone are not effective to make a behavioural change in farmers.

MATERIALS AND METHODS

Material

Study area covers Eğil and Dicle districts of Diyarbakır province, Turkey. For the purpose of the research, the universe of the study encompasses all almond growing farms using the IFAD grants. The IFAD grants were used in establishing almond orchards by the farms which have been receiving support from the Ministry of Agriculture and the South-eastern Anatolia Project (SAP) Regional Development Administration for organic almond production within the context of EBALP Scheme which aims to protect the quality of soil and water, to provide sustainability of natural resources, to prevent erosion and to reduce adverse effects of agricultural practices on environment. Study was conducted in two phases. In the first stage, conceptual framework of the study was designed after relevant literature reviews. After forming the hypotheses required data were collected in the second phase of the study. Study data were collected through face-to-face farmer interviews using structured questionnaires. Questionnaire technique is the formal, the most effective and preferred tool in data collection and all units of the population are subject to observation (SERPER & AYTAÇ, 2000). Due to that there were 52 almond grower farms granted by IFAD in two districts and this size was achievable, all 52 almond producers were interviewed using the complete enumeration survey in February 2019 (GÖKÇE, 1988). Special emphasis and effort were paid to help the respondents understand and respond the questions most accurately.

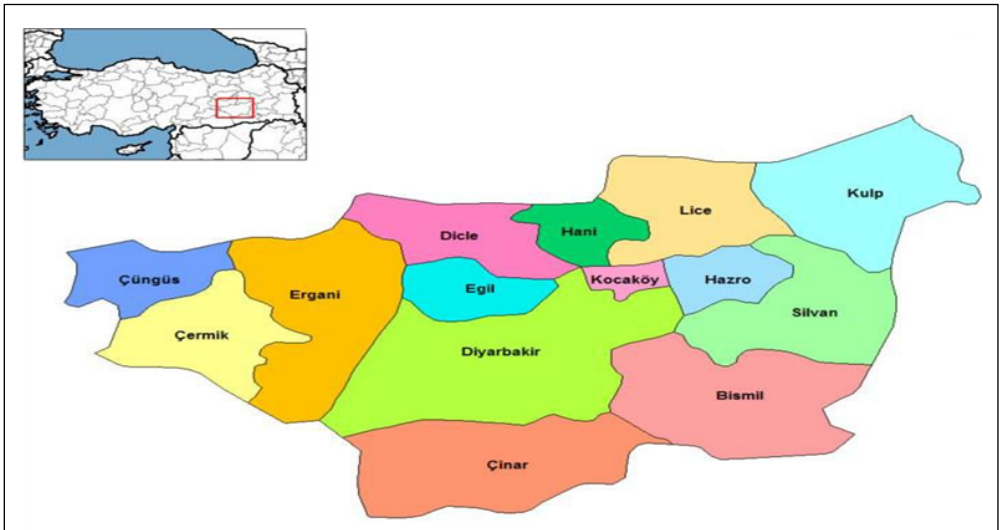

Figure 1 - Map of districts in the Diyarbakir province and the Eğil and Dicle district.

Data analysis

Organic almond production was considered as an innovation for the study area. So, the willingness of the farmers to continue organic almond production was employed as dependent variable (1: willing; 0: not willing) and the factors explaining the dependent variable were analysed with logistic regression method (the "limited dependent variable" regression model and the logit estimation method).

Moreover, descriptive statistical analysis was also used to summarize the variables considered in the study (Tables 1, 2 and 3). In addition, Croncbach's alpha statistic was calculated for the measure of reliability or internal consistency of ordinal variables of Likert Scale in the study. It is expressed as a number between 0 and 1 and the values above the 0.70 is considered to be acceptable (TAVAKOL AND DENNICK 2011).

In econometric studies, limited dependent variable regression models are used when the dependent variable is qualitative. A dependent variable indicating two states refers to the presence or absence of an event. In case of occurrence of an event, the dependent variable takes the value of 1, or zero otherwise. Accordingly, the dependent variable in our case has two outcomes or two categories of responses: 1: willing to continue to organic production and 0: not willing to continue organic production (CAMERON & TRIVEDI 2010; ADKINS & HILL, 2011).

In the present study, The "logit model" to be encoded as described above is expressed as follows:

$$P_i = E(Y=1|X_i) = \frac{1}{1+e^{-(\beta_1+\beta_2 X_i)}} \quad (1)$$

For the ease of illustration, the formula could be shown as follows:

$$P_i = \frac{1}{1+e^{-Z_i}} \quad (2)$$

in which

$$Z = \beta_1 + \beta_2 X_i \quad (3)$$

P_i gives information about the explanatory variable (X_i) and i refers to the possibility of the individual making a certain preference. The model can be tested by the LR (k) (likelihood ratio) test with k degrees of freedom.

Contrary to the linear regression models, the slope coefficients in logistic regression cannot be treated as the marginal effect of the independent variables over dependent variable at *ceteris paribus* assumption. So, interpreting the results of regression analysis can be exceedingly difficult in such models. For that reason, there is a need to see the effect of the independent variables on the dependent variable to interpret the calculated coefficients in such models. For that purpose, calculus and finite difference methods are used to calculate the marginal efficiency and the result is not changed in either method for continuous variables. However, we used the finite difference method since it gives better results in binary variables (CAMERON & TRIVEDI, 2010).

Table 1 - Descriptive statistics for the independent variables of the study.

Variable	Obs	Mean	Std- Dev	Min	Max
Continuation	52	0.519	0.504	0	1
Age	52	53.403	11.766	27	83
Schooling	52	6.442	3.327	0	15
Experience	52	6.365	1.804	2	10
Lobour	52	4.254	2.360	0	9.5
Membership	52	0.557	0.501	0	1
Traning	52	0.384	0.491	0	1
Off-farm income	52	0.461	0.503	0	1
Satisfaction	52	0.596	0.495	0	1
Knowlevel	52	0.365	0.486	0	1
İnititation	52	0.634	0.486	0	1
Supported	52	27.509	0.486	0	1
Plant-size	52	27.509	3.336	0.5	18
Dry-Yield	52	47.508	64.218	0	350

Table 2 - Proficiency and willingness related answers of respondents about almond Farming.

If attended to the training activities on almond farming.			If yes, time of the attendance			Place of the training activity			Knowledge level on the almond farming		
	N	%		N	%		N	%		N	%
Yes	20	38.4	1-3 year ago	3	15	Provincial directorate of agriculture	15	75.0	Very High	4	5.3
No	32	61.5	4-6 year ago	12	60	University	1	5.0	Low	9	11.8
Total	52	100	7-9 year ago	5	25	Agricultural Research Institute	2	10.0	Medium	24	31.6
			Total	20	100	Organic Producers' Association	2	10.0	High	15	19.7
Satisfaction with the almond farming			Willing to continue organic almond farming			Total	20	100	Total	52	100
	N	%		N	%	The way of starting almond farming			The effect of supports on starting almond farming		
Very High	5	9.6	Willing	28	53.8		N	%		N	%
Low	21	40.3	Indecisive	15	28.8	Inherited	33	63.5	Partly	17	32.7
Medium	18	34.6	Not willing	9	17.4	Seeing from Neighbours	1	1.9	Yes	30	57.7
High	8	15.3	Total	52	100	Profitable	12	23.1	No	5	9.6
Total	52	100				Provincial Directorate of Agriculture	6	11.5	Total	52	100

Skewness and Kurtosis test was used to control the normality of the residuals of the model (TORRES-REYNA, 2007), and the results suggested that normality assumption was not violated ($p>0.05$; Table 4). Since we used cross sectional data and that heteroskedasticity in the error term is one of the commonly encountered problem in this type of data, we used Robust Standard Errors procedure to cure heteroskedasticity (GUJARATI, 2011; ADKINS & HILL, 2011). Data were analysed using SPSS 23.0 (IBM, 2015) and STATA 14.0 (STATACORP., 2015) statistical packages.

DISCUSSION AND CONCLUSION

Socio-economic characteristics

Analysis of the data revealed that about 29, 48 and 23% of the respondents fall within the 25-44, 45-64 and 65-plus age groups respectively as their average age was about 54 years. Economic power is considered to be an important factor in diffusion of innovations. It finds a general acceptance that economic power and the possibility of the middle and older age group to allow time to agricultural production is higher than that of younger group. Present study findings were in line with this general acceptance. In the study conducted by TATLIDIL (1989) in Polatlı district of Ankara province to determine the factors effective on the adoption and diffusion of the sprinkle irrigation technology, it was reported that there was a significant relationship between the diffusion of that technology and the age of the respondents. However, in the study conducted by KALANLAR (2005) in Ayaş district of Ankara province on the diffusion of drip irrigation technology, student-t and Chi-square tests revealed no significant relationship between the innovators and other groups.

Like in most of the areas, experience in agriculture is accepted as an important driver for the farmers to do their works more easily, timely and

Table 3 - Knowledge levels of producers on organic agriculture and their use of organic agriculture supports.

If attended to the training activities on organic farming.			The effect of prices in starting organic almond growing			The way of awareness of the supports on organic almond orchard establishments			The level of utilizing the supports for certified sapling		
	N	%		N	%		N	%		N	%
Yes	5	9.6	Partly	25	48.1	Association	19	36.5	Yes	23	44.2
No	47	90.3	Yes	22	42.3	Agricultural Advisor	2	3.8	No	29	55.8
Total	52	100	No	5	9.6	Directorate of Agriculture	31	59.6	Total	52	100
			Total	52	100	Total	52	100			
The level of utilizing the supports for organic production			The level of utilizing the EBALP supports			The reason for the association membership			The drivers of association membership		
	N	%		N	%		N	%		N	%
Yes	44	84,6	Yes	23	44.2	Thought to be advantageous	11	21.1	Directorate of Agriculture	45	86.5
No	8	15,4	No	29	55.8	For utilizing the supports	41	78.9	Own opinion on the benefits of membership	7	13.5
Total	52	100	Total	52	100	Total	52	100	Total	52	100

quickly. In the present study, average agricultural experience of the farmers was found to be about 24 years. Similarly, AKIN (2008) reported that 57.5% of the farmers starting to grow organic strawberry in Akşehir district of Konya province had more than 20 years of agricultural experience.

In the present study, almond growing experiences of the respondents was reported to be 6.4 years in average. Considering that almond supports have been given by IFAD since the year 2011, this result is thought to be in harmony with the course justified by the previous studies. It was determined that 75% of the respondents in both districts were member of the association of organic agricultural producers. Nevertheless, membership status of the respondents is 61% higher in Eğil district compared to that in Dicle district. In the qualified conversations with the almond producers it was revealed that the association in Eğil district was established with the cooperation of the SAP Regional Development Administration, the Diyarbakır Governorate and the Provincial Directorate of Agriculture in 2009 and that the high membership status in Eğil district could also be explained with the intensive work of mentioned organizations on convincing the producers for membership. Data analysis revealed that 55.2% of the respondents had no income generating activities other than agriculture as 15.8% and 10.2% of them were tradespeople and government employee respectively, and 19.7% received monthly retirement pension payments. In the study conducted by KALANLAR (2005), 15% of the producers who did not adopted

Table 4 - Skewness-Kurtosis test results for normality assumption.

Variable	Observations	Pr (Skewness)	Pr(Kurtosis)	Adj. Chi2	Prob>Chi2
Residuals	52	0.0975	0.6180	3.16	0.2056

drip irrigation had off-farm income while 22.5% of the producers who adopted the drip irrigation had off-farm income. In the mentioned study, it was reported that the differences between the innovators and other producer groups were not statistically significant (KALANLAR, 2005).

Only two of the respondents in the present study had irrigated land and their average farmland size was 2.65 ha. The rest had no irrigated land and their average farmland size was 2.87 ha. Recommending and supporting almond production for and in non-irrigated areas seem to be logical. Thus, study respondents confided that almond farming was satisfying in utilizing non-irrigated, otherwise non-utilizable or low income, low yielding areas.

Proficiency and intention in almond farming

Study respondents were asked to describe their knowledge level on almond farming and according to the answers 5,3%, 19,7%, 31,6% and 11,8% of them had very high, high, medium and low-level knowledge on almond respectively. Around 40% of them stated that they attended training activities on almond of which 25%, 60% and 15% attended 7-9, 4-6 and 1-3 years ago respectively (Table 2). Firstly low, subsequently high and later again low-density attendances to training activities were perceived as the normal course of action since innovators, who are less in number in the population, early and late majorities attend to the training activities subsequently in the context of agricultural extension (ROGERS, 2003). Moreover, it is a known fact that type, perceived utility, time and place of the training activity affect the attendance. For that reason, relevance, place and time convenience of the training activities should be planned very carefully (BOYACI & KARATURHAN, 2003).

In present study 75% of the respondents received the training activity organized by directorate of agriculture while only 10% stated that they attended to the training activities given by Organic Producers' Association (Table 2). Data analysis revealed that more than 90% of the respondents did not receive any training on organic production (Table 2). Through questioning their decision-making ways on almond farming, we attempted to create an opinion on how the respondents make decisions. Around 63% of them stated that they inherited some amount of almond establishment from their fathers.

It is thought that almond supports made a positive impact on the producers regarding the adoption and diffusion of almond farming since it is a precondition that innovations should (in general) not contradict with the needs, existing values and past experiences of the producers for the success (ROGERS, 2003).

In the present study, it was reported that the proportions of the respondents who started almond production due to 1) assuming it as a profitable investment, 2) the guidance of the directorate of agriculture and seeing from neighbours and friends were 23.5%, 11.5% and 1.9% respectively. Of course, it is hard to say that these proportions are in line with the previous studies since the proportion of the neighbours and friends as a convincing source of information is generally higher. In their study, according to KALANLAR (2005) neighbours (62.5%) ranked first among the information sources convincing to adopt drip irrigation system. Moreover, BOZ et al. (2004) reported from their study that farmers were inclined to use other farmers as information sources compared to agricultural organizations.

In present study satisfaction level of the respondents with almond farming were reported to be very high (9.6%), high (15.3%), medium (34.6%) and low (40.3%). Also, it was found that 53.8% of them were willing to continue almond farming and 28.8% were indecisive as the rest (17.4%) were not willing. The contradiction between the satisfaction level and the willingness to continue almond farming was questioned in qualified conversations. It was revealed that respondents were actually satisfied with almond farming but the reason for unsatisfaction was the low yield due to organic production.

It was revealed that 57.7%, 32.7% and 9.6% of the respondents in this study thought that supports were, in respective order, effective, partly effective and non-effective on starting almond farming, while the effect of almond prices was 42.3%. In the light of this information given here it is obvious that the most effective factor on starting almond is the supports. Accordingly, SEZGIN et al. (2010) also reported that supports had significant and positive effect on the farmers' willingness to use artificial insemination.

All respondents were also questioned about how they became aware of the almond establishment supports. Around 60% and 36% of them stated that they were made aware by directorate of agriculture and the Organic Producers' Association respectively. This result is in harmony with the findings reported by ERDAL et al. (2013). They reported that farmers were informed about the supports by directorate of agriculture (70.7%), chamber of agriculture and other farmer organizations (16.9%) and agricultural advisors (1.1%) (Table 3).

In our study, 44.2%, 84.6% and 44.2% of all respondents also made use of certified sapling,

organic farming and EBALP supports in addition to the supports given by IFAD. Through questioning of the purpose of membership to the Organic Producers' Association we tried to measure the earnestness of the farmers on the subject. As a result, it was reported that a significant majority of the respondents (78.9%) got association membership primarily only to access the supports as only 21.1% of them perceived association membership to be useful for their success. In a study to examine the factors affecting the organizational status of the farmers by SARI & KÜLEKÇI (2017), it was determined that agricultural supports had more effect on the possibility of one organization membership (11.8%) than the possibility of two or more organization memberships (7.5%). AKSOY et al. (2014) determined that there was a very significant relationship between the number of supports farmers received and their membership status (P<0,01), implying that association member farmers benefited more from supports than non-members did. This situation appears to be dangerous due to creating the perception of that association membership is used as a tool or step to access the supports. In their study conducted in Kazova district of Tokat province to examine the inclinations of the cooperative members KAYA & ESENGÜN (1996) determined that cooperative members had lack of knowledge and involvement in cooperative work. The question "how did you become a member of the association" was manipulated and directed to the respondents as the cross query of previous question. It was quite interesting that this time 86.5% of the respondents stated that they decided to get a membership as a result of the guidance and encouragement of the directorate of agriculture as only 13.5% stated that they got a membership on their own decision. In qualified conversations it was revealed that farmers decided to get membership upon their convincement, by the staff of the directorate of agriculture, on that it was the precondition for government supports. As a result, it was clear that farmers had lack of knowledge about the association and its operations. Previous studies also revealed similar findings that farmers had inclinations to become a member or shareholder of associations only to get supports or grants rather than the advantages of their operations (SAĞLAM, 2013). Accordingly, in another study conducted in UK, Germany and Portugal by DAUGBJERG et al. (2005), it was reported that farmers were inclined to utilize the supports without a comprehensive knowledge. This is of importance, showing that farmers exhibit a similar behaviour pattern in whichever countries they live.

In present study, it was determined that all respondents utilized IFAD grants, and a majority of them also utilized organic production and EBALP supports. IFAD grants were paid for almond orchard establishment as the others were the supports for organic production. Farmers reported that they did not receive any training course on organic production. Qualified conversations revealed that farmers accepted to meet the requirements, one of which was the association membership, for organic production to be able to utilize government supports before trees reached maturity. One of the requirements when examining the secondary data, it was seen that both study districts were in the freshwater basin of Diyarbakır province and the regulation on the protection of freshwater and domestic water basins imposes to encourage organic production or good agricultural practices in agricultural areas, under the control of Ministry of Agriculture. However, it was also grasped that the already-necessity of organic production in this basin was not shared with the farmers.

Regression analysis results

As stated above only 17.4% of the respondents stated that they were willing to continue organic almond production as the proportion of those unwilling to organic production was 53.8% (Table 2). According to regression analysis results a positive but insignificant relationship was detected between farmer age and the willingness to continue organic farming. A ten-year increment in age of farmer increases the possibility of willingness by a very small percentage such as 8% (Table 5). In a study about the adoption and diffusion of the innovations in cotton farming, ARMAĞAN (1993) reported no significant relationship between farmer age and adoption of innovations. However, in another study in this regard, adoption of the innovations was reported to be related to farmer age in tomato farming (HOŞGÖR, 1995).

In present study even though a positive relationship was detected between age and willingness to continue organic production it was not statistically meaningful and according to the model a ten-year of increment may only make an eight percent increase in probability of willingness at *ceteris paribus*. In a study on the participation of farmers to organic production no significant difference was detected between the organic and conventional groups regarding the education level of farmers (ÖZCAN, 2004). TAN et al. (2017) reported that Farmer's age was defined as the most important factor.

We reported a positive and significant relationship between association membership and

Table 5 - Random-effects logistic regression analysis results for the willingness to continue organic almond production.

Explanatory Variables	Coefficient	Robust Std. Err.	z	p	Marginal Effec(dy/dx)
Age (in years)	0.040	0.039	1.04	0.298	0.008
Schooling (in years)	0.037	0.244	0.15	0.878	0.007
Experience (in years)	0.027	0.309	0.09	0.929	0.005
Labour (in male equivalent units)	0.032	0.180	0.18	0.859	0.006
.Mmembership status (1: member; 0: not)	0.534	0.088	6.05	0.000	0.108
Training (Organic Farming) (1: Yes; 0: No)	0.400	0.971	0.41	0.680	0.080
Income (Off-farm)(1: Yes; 0: No)	-0.059	0.710	-0.08	0.933	-0.011
Satisfaction (1: Satisfying; 0: unsatisfying)	1.062	1.152	0.92	0.356	0.219
.Knowledge (1: Satisfying; 0: unsatisfying)	0.028	0.768	0.04	0.970	0.005
Initiation	-0.790	0.531	-1.49	0.137	-0.160
Supports (1: Necessary; 0: unnecessary)	1.206	0.133	9.04	0.000	0.242
Plant size (in hectare)	-0.006	0.000	-14.11	0.000	-0.001
Yield (in kilogram per hectare)	-0.005	0.015	-0.38	0.706	-0.001
Constant	-3.583	2.045	-1.75	0.080	

Log pseudolikelihood:-30.479515.
(*) dy/dx is for factor levels is the discrete change from base level.

the willingness for organic production. Association membership increased the probability of willingness by 10.8%. Thus, association member respondents were willing for organic production 10.8% more than non-member ones at ceteris paribus. In another study conducted in Erzurum was thet association membership had a positive and meaningful contribution to use artificial insemination (AKSOY & DENIZLI, 2012).

Every 1 ha of increment in almond plantation decreases the probability of continuing organic almond production by 1% at ceteris paibus. While the demand for organic agriculture is expected to increase as the amount of soil increases under normal conditions, it is seen that the producers think the opposite. In organic agriculture, the yield per unit area is lower than traditional agriculture. Small landowners increased their income by getting organic agriculture support along with their income from organic production. When the amount of land of the producers increases, the production options increase and it is possible to obtain a higher production income than the amount of support received per hectare. Therefore, it is thought that organic production is avoided as the amount of land increases.

Turkey has some 24 million hectares of agricultural land which is larger than the total area of most of the countries in Europe. However, cultivated agricultural land has steadily been decreasing year by year. Agriculture has been supported with various tools and sources for a long time in Turkey. The most important question to be answered here is to what degree the supports reach the targeted objectives.

In another word, the most important issue is to determine the effectiveness of the supports and the factors affecting it. Present study revealed that supports encouraged the almond acreage. From the viewpoint of farmers, almond production is not an innovation and the supports oriented for it found a rapid and genuine response. However, subsequent organic production and EBALP supports could not have the same effectiveness as organic farming is a new type of production, and farmers had almost no training in organic farming. KARATURHAN et al. (2018) reported that that the producers with vocational training increased the probability of adoption of organic agriculture by 9.2 percent.

Consequently, the only point of focus for farmers was to access the supports in the short run, and adoption of the innovation was left out of the agenda and a fake adoption behaviour emerged. Due to that prior technical and legal trainings were not given, in several past support experiences to foster the adoption of innovations the same mistake was repeated in such that farmers pursued the production or technique as long as supports were given but when

the supports ceased, as a bad example for the others, everything thought to be achieved was soon be back. As was the case in past experiences, it was revealed in the present study that the membership of respondents to the organic producers' society was not a real and voluntary membership that formed with a bottom-up movement by the awareness of the producers, rather it was a fake membership which was used as a step to access the supports. This problem highly increases the risk of "fake participation" in organizations, being normal in minds of producers. Since the farmers in most of the oriental countries do not have the bottom-up thinking capacity, their memberships to the organizations hold somewhat inactive status. Although, supports via farmer organizations seem to be positive and promotive for the organizational movement of the farmers it is not enough and creates the risk of perceiving the agricultural organizations as the support distribution centre in the eye of farmers. For that reason, it will be useful to give effective and continuous training services to the farmers on the operations and benefits of agricultural organizations. The benefits of the agricultural farmer organizations are unquestionable worldwide. So, why do farmers abstain from something beneficiary for themselves? Answer of this question is that farmers are not sufficiently aware of the benefits of agricultural farmer organizations. So, availability of the consultancy service on the operations and management to be provided by the government at the early establishment stages of such farmer organizations untill they gain proficiency will be useful. This will be effective in helping farmers to trust farmer organizations. Having and increasing good examples will change the negative perception of the farmers against the agricultural farmer organizations. Also, availability of agricultural supports tailored to local needs and setting the cost sharing conditions will help increasing the effectiveness of agricultural supports and allocation of other scarce resources to the agricultural production.

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DECLARATION OF CONFLICTS OF INTERESTS

The authors declare no conflict of interest. The founding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, and in the decision to publish the results.

AUTHORS' CONTRIBUTIONS

All authors contributed equally for the conception and writing of the manuscript. All authors critically revised the manuscript and approved of the final version.

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