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Impact Assessment of an Integrated Dairy Farming Project in Turkey Financed by Europe Funds

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ABSTRACT

Correction of wrong practices or thoughts by the producer or the adoption of a new production technique shows the success of rural development studies. This study was conducted to assess the effect of Integrated Dairy Farming Project on the Çakmak and Ekinciler villages before and after implementing the European funded "Integrated Dairy Cattle Project" carried out by the Diyarbakır Commercial Exchange in southeastern Anatolia region of Turkey, in 2006. Project villages have enough arable lands and dry farming is performed. The number of cattle is increasing compared to the other villages in the province. In order to make a comparison between the years, three surveys were conducted in 2006, 2007, and 2009 by using questionnaires. The findings of the research show that a considerable portion of the respondents (37%) stated that they did not trust the analysis of this kind of project that had not taken into consideration the rural needs. While 54.4% of the farmers wanted to sell their milk to cooperatives in 2007, the same farmers in 2009 stated that they would not sell to cooperatives. In addition, 47.8% of the farmers trusted and benefitted from Europe (EU) project training programmes in 2007, while selling rate decreased to 35.6% in 2009. Furthermore, 30% of the participants mentioned that they could not trust the project staff since the project duration was short. Because of the reasons mentioned, participation in the project was realized at low level.

Keywords: Dairy farming, European funded projects, Project participation, Rural development, Rural sociology.

INTRODUCTION

In order to improve the economic and social situation of the local population, the European Commission has cooperated with the GAP and granted 47 Million to Regional Development Programme (RDP). This programme complies with the national goals such as ensuring sustainable development, minimizing inequalities between regions, and increasing productivity and employment opportunities.

RDP supports local initiatives aimed at alleviating poverty through the strengthening and diversification of rural based sustainable income generation project such as dairy farming project implemented in some villages.

The European Commission-GAP Rural Development contracts were signed for 84 of the projects. The distribution of the project in terms of the sectors are as follows; for the animal production 32, plant production 29, agricultural enterprises 10, bee keeping 8 and others 5. The Integrated Dairy Cattle Project, which was conducted by the Diyarbakır Board of Trade, was examined in this study. The project aims, as described in a book published by the SOFRECO–AGRIN consortium in 2007, were to conduct animal production activities in an integrated approach holistic manner, enhance farmers' income level through increased hygienic milk production via extension of forage acreage, and facilitate

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marketing of milk production through the establishment of farmer organizations.

Agriculture is of strategic importance to national economies due to its contributions to national income, employment, and the production of raw materials for industry and food. Low productivity caused by infrastructural disorders and poor use of technology limits competitiveness against the EU in agricultural products, especially in large ruminants. In general, risk is very high in agriculture because agricultural production is generally carried out in rural areas and is subject to the effects of natural phenomena (Dinler, 1993). In Turkey, the majority of agricultural enterprises are small, family farm operations. This fact stems from the large number of small and dispersed farms, which has negative effects on the efficiency and cost of services and, in turn, limits rural economies. Moreover, ineffective agricultural extension and training services and limited access to agricultural information services present obstacles to achieving productive agriculture in rural areas (Anonymous, 2002). The share of the national income contributed by agriculture is low compared with other economic sectors. In low-income countries, particularly, wider expansion of the agriculture base is quite effective in alleviating hunger and poverty, enhancing the income levels of small-scale and landless farmers, and increasing the accessibility and quality of food. Important contributions can be achieved by reducing agricultural commodity prices for poor people who live in urban and rural areas in underdeveloped countries because the majority of their incomes is spent on food (Hazell and Ramasamy, 1991).

The alleviation of poverty and hunger through increased agricultural production is manifested at a higher level in the form of increased economic growth. A 1% increase in agricultural income decreased the percentage of poor people by 72% and 48% in Africa and Asia, respectively (Afolami and Falusi, 1999). A 1% increase in agricultural productivity in India was shown to decrease poverty by 0.4% in the short term and 1.9% in the long term (Datt and Ravallion, 1998). The pronounced benefits reaped from improved agriculture have positioned agriculture as the most important economic activity in most definitions of rural development programs. In addition to enhancing the welfare of poor people living in rural areas, efforts towards providing rural populations with better living conditions, sustainability of rural life, environmental preservation, methods for sustainable use of natural resources, and saving the rural inheritance were all accepted as aspects of rural development policy by the EU in 1975 (Bakırcı, 2007). Until 1960, rural development has been attempted by providing agricultural technical support, but the humanitarian and social aspect has been neglected in Turkey. However due to an incomplete and one-sided understanding of the issue, only partial and limited success has been achieved (Fazlıoğlu, 2003).

In other words, rural development was perceived as construction of road and dam, giving the dairy cattle to producers, or providing some grant to buy animals. This situation did not alter the production concept and culture of the farmers.

Gülçubuk (2006) defined rural development as the efforts made by small rural groups to enhance their economic, social, and cultural conditions in a manner integrated with government efforts towards the same objectives. Village act dated 1924 (Eren, 1992). Since 1961, central government prepares national development plans every 5 years, including rural development programs which are implemented according to the plan.

Rural participation is the activity of the individuals that comprise the community in relation to decision-making and implementation of development program and projects and taking advantages of the results. Participation is an active process for the rural community according to their own thoughts taking the initiative and expressing themselves in community (Gülçubuk, 2006).

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In this context, the EU adopts a prerequisite for participation in all areas related to rural development as well.

In rural areas, lack of organization and participation is an obstacle for the rational use of resources. EU emphasizes the importance of participation in rural development and can be overcome with a commitment to the principle of subsidiarity in case of crisis in the rural areas. There is a parallel relationship between the organization and participation in universal experience of rural development that EU considers to be an important issue that is not organized in rural areas. Because it is impossible to provide participation in a non-organized society. Participation contributes to making project capacity to do the project of development in farmers' organizations. Participation develops in producer organizations easier and contributes to increase the project planning capacity of farmers.

In Turkey, and in the world, it has been observed that the extension and rural development projects carried out with the participation of individuals in a rural community were more successful in recent years (Gülçubuk *et al.*, 2010)

The lack of confidence in the project has been due to the minimum participation and a collective lack of comprehensive communication between the NGO and the community as a whole (Garande and Dagg, 2005)

Since 3 October, 2005, rural development systems and approaches have been carried out within the context of Turkey's integration into the EU. Instead of activities of the central government at a macro scale, rural development activities within the context of integration were aimed to support local initiatives and Non-Governmental Organizations (NGOs) so as to give them roles in the dynamics of rural development. To support local initiatives in rural development in southeastern Anatolia, a fund of €20 million was allocated by the European Commission on 15 May, 2004. Work on the projects commenced by 2006 and was scheduled to be completed by the end of 2007. Short courses on project preparation and project cycles were given to the organizations leading the projects by a technical support team set up within the GAP Regional Development Administration. The management of this team was under the auspices of the consortium of the French SOFRECO and Turkish AGRIN companies.

Questions and Hypothesis of research are:

Research Questions

What is the participation level in the Integrated Dairy Farming Project?

What is the efficiency of cooperatives in the project?

Hypothesis of Research

Absence of needs analysis is an obstacle for project participation.

There is a relationship between the duration of the project and participation.

The lack of confidence reduce the project participation.

Improper project implementation and unsuccessful cooperatives are examples of obstacles for participation and organization.

MATERIALS AND METHODS

Determination of Sample Size

This research was conducted in the villages Çakmak and Ekinciler located in the northwest 35 km away from Diyarbakir Province in southeastern Anatolia region of Turkey. These villages were included in the study due to being funded by the EU only. The first survey was carried out to analyze the current situation in April of 2006, while the second survey was made during implementation of "Integrated Dairy Cattle Rearing" project (January 2007). Project has completed in 2007. Finally, the last questionnaire was applied in 2009.

In the surveys conducted in 2007 and 2009, nine common questions were asked that allowed the implementation of McNemar's test. In the 2009 questionnaire forms, sustainability of the project, which may impact

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the success and failure factors, was investigated.

Surveys in each of the three years (2006, 2007, and 2009) were applied to the same person. The projects villages had 350 households engaged in agricultural activities, of whom 90 household were taken for sampling. In the study, the sample size was calculated using the following formula (Montgomery, 1991).

n= Nt2pq/d2(N-1)+t2pq

Where, N= Population size, n= Sample size, p= Probability of the expected event, q= Probability of the absence of the expected event, t= *t* statistic value at a certain degree of freedom for a given confidence interval, d= Margin of error at a given confidence interval.

Sample size was calculated with a 95% confidence interval with no more than 5% deviation from the main population. Study data were collected by administering questionnaires to farm households involved in agriculture in the project villages. To acquire dependable data, the aim of the study was explained to each respondent.

The McNemar test is used to analyze pretest-posttest study designs for intra group comparision (McNemar,1947). 2007 and 2009 in this test as data questions with the data of the multivariate analysis' and relationship with each other which is considered answers to certain questions between the frequency for the detection of "*Chi*-square test" using SPSS program was carried out (Püskülcü and Gemini, 1989).

Data Collection

Questionnaires were employed for data collection, and on-site inspection was used to validate the collected data. Questionnaire forms were prepared after thorough examination of similar domestic and foreign studies conducted previously. After an initial test with a group of farmers prior to implementing the formal survey, corrections were made to the forms to ensure that they were clear and understandable.

Formal surveys were conducted in 2006, 2007, and 2009. In 2006, diagnostic questions were submitted to the respondents. In 2007 and 2009, respondents were asked 13 common questions for analysis using the McNemar test, and the opinions of the farmers and the executives about the project, its sustainability, and related problems were recorded.

Data Analysis

A single-group pretest–posttest experimental design and the McNemar statistical test were used for comparisons within the study group across time. The McNemar test is a test of two dependent samplings of the same group used to determine significant differences in responses across tie. The test is applied to 2×2 contingency tables for a dichotomous trait with matched pairs of subjects to determine whether the row and column marginal frequencies are equal. In this study, the McNemar test was used to determine whether there was agreement between responses obtained during one administration of the questionnaire and its repetition after a specific period of time (Cohen *et al.*, 2007). In other words, responses given at two different times or under different conditions were compared. The McNemar test was used to evaluate whether the effect of a factor was positive or negative and whether there was a significant difference between two observations made at different times or under different conditions (McNemar, 1947). The data obtained in 2007 and 2009 were not evaluated by the McNemar test but were interpreted with multivariate analysis techniques using computer program. Chi-Square tests were also employed to determine differences in the frequencies of answers that were considered to be interrelated (Püskülcü and İkiz, 1989).

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RESULTS AND DISCUSSION

Diagnostic Survey Conducted in 2006

A formal needs assessment survey conducted in Çakmak and Ekinciler villages in 2006 yielded 90 completed questionnaires. According to the survey on the educational level of men in both villages, none of the men were illiterate. The proportion of men who graduated from a secondary school and high school was found as 60 and 33.4%, respectively (Table 1).

Previous work show that there is a significant correlation between education level and adoption of innovations in the agriculture: the vast majority of those who adopted agricultural innovations earlier had higher level of education than the other groups having low education (Taluğ, 1975). In terms of agricultural extension activities, the farmers' participation rate in the agricultural extension activities increased when they had high education level (Atsan *et al*., 2009)

The objective of integrated dairy farming project implemented in Çakmak and Ekinciler villages was development of animal husbandry by "integrated approach". In line with this objective, the improvement of animal breeds were identified as project activities. Artificial insemination level performed in these villages was examined, which showed that 25.6% of livestock producers performed the artificial insemination, 24.4% did not perform, and 50% performed occasionally (Table 1). This rate is well above the average of the Southeast region. A positive relationship was found between education level and the adoption of artificial insemination in Erzurum Province, showing similar socio-cultural characteristics with the study area (Aksoy and Yavuz, 2011). However, in this study, it was found that there was no correlation between education level and artificial insemination response according to the Spearman Rank correlation coefficient: r= -0.072, P= 0.499.

With respect to prior changes in production practices for animal and plant production in the study villages, 32.2% of the respondents stated that there had been no change in animal production; none of the respondents answered the question regarding plant production. An increase in the number of purebred animals was seen as a significant change in animal production by 53.3% of the respondents. Questions regarding the changes in plant production, increases in yield per acre, diversity in crop patterns, and forage acreages were answered by 40, 34.4, and 25.6% of the respondents, respectively (Table 2). These results showed that some activities considered among the project objectives were already performed by the villagers.

To determine the importance of increasing productivity, the farmers were asked whether animal and plant productivity levels were sufficient to meet producers' needs. In response, 73.4 and 65.6% of respondents reported that they did not consider yield levels to be low for plant and animal production, respectively. The percentages of respondents who accepted low yields from plant and animal production were 13.3 and 21.1%, respectively (Table 3).

The distribution of the respondents according to perceptions regarding shortages in roughage and concentrate feed supply is presented in Table 4.

The cropping pattern in the study villages was determined to consist of cereals and corn silage. The primary output of animal

Table 1. Distribution of the respondents' literacy rate and the use of artificial insemination.

	Men		Application of artificial insemination			Correlation coefficient
	n	%		*n*	%	
Illiterate	-	-	Yes	23	25.6	
Primary school	6	6,6	No	22	24.4	
Secondary school	54	60	Sometimes	45	50	
High school	30	33.4				
Total	90	100	Total	90	100	r= -0.072, P= 0.499

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production was milk. The percentages of respondents who stated that they marketed the milk as fresh milk, yoghurt, and cheese were 18, 72.2, and 8.8%, respectively. Yoghurt, in particular, was marketed in Ergani (30 km away) and in Diyarbakır by 71.1% of the respondents, whereas the remaining 28.9% of respondents sold yoghurt on commission through other distributors (Table 5).

The key factor for increasing the success of agricultural extension is the implementation of activities that fulfil the greatest needs of the target group or that satisfy the majority of the target population (Özçatalbaş and Gürgen, 1998). As shown in Table 5, respondents in this study may not have needed to organize under a cooperative because they marketed their products by themselves. Hence, it was very important that the project team planned their activities appropriately.

Changing of the Respondents Views by the Years

After the Integrated Dairy Farm Project was implemented, the previous respondents from 2006 were interviewed again in October 2007 using a different questionnaire. The new questionnaire consisted of two parts and was designed to determine the opinions and viewpoints of the respondents on the objectives, aims, and

Table 2. Respondents' opinions regarding the most important changes in animal and plant productions in the last five years of period.

Changes in animal production	*n*	%	Changes in plant production	*n*	%
No change	29	32.2	No change	-	-
Increases in number of big ruminants	2	2.2	Increases in yield per acre	36	40
Increases in number of pure breed animals	48	53.3	Increases in crop diversity	31	34.4
Increases in number of small ruminants	11	12.2	Increases in forage acreage	23	25.6
Total	90	100	Total	90	100

Table 3. Yield levels in plant and animal production.

Low yield is in question in plant production	*n*	%	Low yield is in question in animal production	*n*	%
Yes	12	13.3	Yes	12	13.3
No	66	73.4	No	59	65.6
Partially	12	13.3	Partially	19	21.1
Total	90	100	Total	90	100

Table 4. The roughage and concentrate procurement methods.

Roughage procurement	n	%	Concentrate procurement	*n*	%
Own production	43	47.8	Off-farm purchasing	64	71.1
Off-farm purchasing	11	12.2	Partially off-farm	26	28.9
Partially off-farm	36	40			
Total	90	100	Total	90	100

Table 5. Milk processing and marketing methods in the study area.

Milk Processing Ways	*n*	%	The marketing ways of the milk and milk products	*n*	%
No processing	17	18	Marketed by our own	64	71.1
Yoghurt	65	72.2	Marketed by commissioners	26	28.9
Cheese	8	8.8			
Total	90	100	Total	90	100

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activities of the project. The first section included yes–no questions for analysis using the McNemar test. The same respondents were interviewed again in 2009, one year after the completion of the project activities, using the same questionnaires as in 2007 to reveal the effects of the project on producers' behaviours and opinions.

In "Integrated Dairy Cattle Project", starting in October 2007, the development of artificial insemination, forage production, increasing the awareness, creation, and development of cooperatives (participation) were ranked as the development objectives. Indeed, the development of participation in rural development work is crucial. But participation or "associative strength" is difficult in creation of awareness (World Bank, 1996).

In 2007, the participants' willingness to cooperate in collective silage production was very high i.e. at 48.9% of respondents. This willingness fell to 37.8% in 2009, an 11.1% decrease compared with 2007, which was statistically significant (P< 0.0020, Table 6). This is important because it revealed that the participants developed negative opinions about such cooperation, probably because there are so many unsuccessful cooperatives in the province.

Public awareness is the most important factor affecting the development of cooperatives (Çıkın and Karacan, 1994). Education levels in rural areas of Turkey do not yet typically exceed the primary school level. According to a study conducted in Tokat Province of Turkey, primary education was not sufficient for innovations to be adopted (Aydın, 1992).

Education is a prerequisite for the development of human resources. In a study conducted in Isparta, it was emphasized that the development of human resources was important for both establishing of cooperatives and participation of the members in a cooperative organizations (Alkan and Demir, 2013).

Generally, low education levels

Table 6. The effect of the project's producer behavior.

	2007				2009				Statistics	
	Yes		No		Yes		No		X^2	*P*
	n	%	n	%	n	%	n	%		
Would you like to participate in corn silage production in joint venture?	43	47.7	47	52.2	30	33.3	60	66.6		0.0020
Do you have information on the functioning the cooperatives?	61	67.7	29	32.2	51	56.6	39	36.6	11.574	0.0007
Would you like to sell fresh milk via cooperative?	35	38.8	55	61.1	0	0	90	100.0		0.0015
Would you like to participate in the development activities?	44	48.8	46	51.1	34	37.7	56	62.2	3.0348	0.0670
Would you like to supply free labour for your village's development?	75	83.3	15	16.6	62	68.8	28	31.1	11.5741	0.0007
Would you like to attend agricultural courses?	76	84.4	14	15.5	50	55.5	40	44.4		0.0020
Do you believe that EU project training programmes will be of your benefit?	43	47.7	47	52.2	32	35.5	58	64.4		0.0010
Do you cultivate forages?	10	11.1	70	77.7	35	38.8	55	61.1	12.800	0.0003
Would you like to benefit from artificial insemination services?	29	32.2	61	67.7	24	26.6	66	73.3	0.3019	0.5827

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correspond to slow development of cooperatives. In the studied villages, 26.7% of the women and 60% of the men had a secondary school education. In addition to the importance of educational level, the provision of sufficient and accurate information on the functioning of cooperatives has a significant impact on the success of these organizations in rural areas. A study conducted in 2012 in the Eğil district of Turkey determined that 29.8% of the respondents did not participate in cooperative membership because they didn't have sufficient information relating to cooperatives (Akın, 2012). In the present study, 84.4% of the participants indicated on the 2007 questionnaire that they were aware of the functioning of cooperatives (Table 6). After project implementation and training in cooperatives, however, the percentage of participants who gave the same answer declined to 55.6%. This difference was statistically significant (P< 0.0007). It appears that, prior to implementation of the project, the respondents had incorrect information or were over confident about their knowledge, and they realized this after the training on cooperatives.

None of the respondents stated that he or she would be able to sell milk to a cooperative in 2009, although 54.4% of them declared they could do so in 2007. Again, the difference between these responses was highly significant (X^2= 47.0204, P< 0.0001). Moreover, in 2007, 83.3% of the participants indicated that they could participate in development actions. Although the percentage of those endorsing this response declined to 68.9% in 2009, the change was not statistically significant (P< 0.0670). When asked whether they would provide free labour for village development, an indicator of participation and cost sharing, 84.4% of the respondents said "yes" in 2007. However, this positive response decreased to 55.6% in 2009. This difference was statistically significant (X^2= 11.5741, P< 0.0007). Similarly, 44.3% of the respondents stated that they would like to attend agricultural courses in 2007, but only 32.2% expressed the same interest in 2009, a significant decline (P< 0.0020). Furthermore, 47.8% of the respondents believed that the project courses would be beneficial in 2007, but this figure dropped significantly, to 35.6% in 2009 (P< 0.0020). Differences between the questionnaire responses regarding increased forage acreage and artificial insemination in 2007 and those in 2009 were not statistically significant, indicating that implementation of the project did not have any effect on respondents' perspectives in these areas.

In the second section of the 2009 questionnaire, respondents were asked to answer questions related to subjects that were expected to affect the success of the project. The results are presented in Table 7. Agricultural and rural development projects should solve problems and meet the needs and expectations of producers to some degree (Şenocak, 1967). Because a good diagnostic study is necessary to determine the needs of the participants, the participants should be consulted. A majority (85.1%) of the respondents stated that they were not consulted during the project preparation and implementation stages. This was a significant proportion of the total sample (P< 0.0001). In response to questions about the efficiency of the training conducted in the project, respondents claimed that the training programs were untimely, short, and not interesting. The most frequent claim was that uninteresting topics were selected for the training programs (46.6%). The difference between the number of respondents who approved of the training programs and those who did not was significant (P< 0.0001). Regarding the relationships between the participants and the project team, 79% of the respondents described it as poor (Table 7).

When questioned about the biggest shortcoming of the project, a large proportion of the respondents (37.7%) stated as "no needs for this kind of project". This case has been interpreted as evidence shown in Table 7 i.e. opinions of the target group were not taken into consideration in

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Table 7. Factors affecting the success of the project.

	Yes		No		Partially	
	n	%	*n*	%	*n*	%
Did they referee your opinion in project preparation and implementation stages?	4	4.3	80	85.1	6	6.6
Chi-square= 125, 067			*P*< 0.0001			
Characteristics of the training works	Yes		No		Partially	
	n	%	*n*	%	*n*	%
Short	36	40.0	40	44.4	14	15.5
Untimely	14	15.5	39	43.3	37	41.1
Not interesting	42	46.6	6	6.6	30	33.3
Chi-square= 54, 373			*P*< 0.0001			
	Good		Bad		Poor	
	n	%	*n*	%	*n*	%
Relation with the Project Team	4	4.4	7	7.7	79	84.0
Chi-square= 120, 200 *P*< 0.0001						

preparing and implementation phase of the projects (Table 8).

Thirty percent of the participants stated that expiration of the project term before a relation was established between the participants and the project team was the second important mistake of the project (Figure 8). Coşgun and Uzun (2007) reported that the most significant problem in joint action was in Köprülü Canyon.

CONCLUSIONS

The basic objective of the development projects is to enhance living standards, which can only be achieved through the development of human resources. Participation of the people is necessary for the success of rural development efforts that arise from bottom-up movements. In the absence of a bottom-up movement, the first stage of any rural development effort should be preparation of programs by the executive team or organization that are focused on the basic needs of the people. Local participation and the creation of economic and social change are only possible through the identification of people's needs and the development of solutions for these problems.

To carry out successful rural development program planning, it is vital to conduct an up-front needs assessment. The problems to be solved should be determined according to the needs of the local people, and attainable and satisfying objectives should be put forth. From the initial diagnostic analysis performed in this study, it was determined that low plant and animal production yields were not a problem and that crop patterns and the number of pure-bred animals showed increasing trends in Çakmak and Ekinciler villages (Table 2). Furthermore, the proximity of the villages to the city centre and favourable transportation facilities enabled 71.1% of the respondents to market their products on their own. These observations can be interpreted to indicate that organizing the farmers under a cooperative union was not an urgent need. We concluded that the project was prepared without

Table 8. The most important shortcoming of the project according to respondents.

	n	%
Short training programs	21	23.3
Ending the project before getting used to the project team	27	30.0
Inaccessibility of the project team	8	8.8
Project is out of the scope of needs	34	37.7

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analyzing the needs and priorities of the participants and that was why the project was not adopted and embraced by the farmers. Furthermore, the project had negative impacts on the attitudes of the participants toward collective action, as reflected by decreased willingness to supply free labour for village development, to sell fresh milk to the cooperative, to attend the agricultural courses, to participate in the development activities, etc. (Table 6).

These negative impacts are thought to have resulted from a lack of confidence in the project caused by the short life of the project and dissatisfaction with the inability of the project to meet the people's needs. This study showed the need for, and importance of, a careful initial diagnostic needs assessment and the necessity of determining and prioritizing the problems of the target people in similar dairy farming projects in the future. Additionally, it suggested that the project life was too short to achieve the objectives or to transfer the desired technology. Making successful changes to production techniques and behaviours requires a sufficient time period.

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ارزیابی اثر پروژه جامع گاو داری شیری در ترکیه با تامین مالی صندوق اتحادیه اروپا

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چکیده

اصلاح عمیات زراعی نادرست یا باورهای غلط تولید کنندگان و اتخاذ روش های نوین تولید نشان دهنده موفقیت مطالعات توسعه روستایی است. هدف پژوهش حاضر ارزیابی اثر پروژه جامع گاو داری شیری در روستا های Çakmakو Ekinciler پیش و پس از اجرای پروژه تامین مالی شده اتحادیه اروپا با عنوان"پروژه جامع گاوشیری" بود که توسط (اداره) تجارت خارجی دیاربکر در جنوب شرقی آناتولی ترکیه در سال ۲۰۰۶ اجرا شد. روستا های پروژه زمین قابل زراعت کافی داشته و زراعت آن ها به صورت دیم بود. نیز، تعداد گاو های آن ها در مقایسه با دیگر روستا های استان رو به رشد است. به منظور مقایسه اثر سال، در سال های ۲۰۰۶، ۲۰۰۷، و ۲۰۰۹ سه نظر سنجی با استفاده از پرسشنامه انجام شد. نتایج پژوهش نشان داد که تعداد قابل توجهی(۳۷٪) از پاسخ دهندگان (مصاحبه شوندگان) اظهار داشتند که آن ها به نتایج تجزیه و تحلیل این گونه پروژه ها اعتماد ندارند زیرا نیاز های روستائیان در

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پروژه مورد توجه نبوده است. در سال ۲۰۰۷ ، ۵۴/۴٪ کشاورزان می خواستند که شیر تولیدی خود را به تعاونی بفروشند و لی همین کشاورزان در سال ۲۰۰۹ اظهار داشتند که شیر را به تعاونی نخواهند فروخت. افزون بر این، ۴۷/۸٪ کشاورزان در سال ۲۰۰۷ به برنامه های آموزشی پروژه اتحادیه اروپا اعتماد داشته و از آن استفاده بردند در حالی که فروش آن ها (به تعاونی) در سال ۲۰۰۹ به ۳۵/۶٪ کاهش یافت. همچنین، ۳۰ ٪ شرکت کنندگان اظهار کردند که به کارکنان پروژه ایمان نداشتند زیرا دوره پروژه کوتاه بود. بر اساس نتایج پیشگفته، مشارکت در پروژه مزبوردر سطح پایینی تحقق یافت.

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