

Effects of IPARD Programme on Animal Husbandry in Aydın

M. Kenan TÜRKYILMAZ^{1,a,*}

¹Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Animal Science, Aydın, Turkey.

^aORCID: 0000-0002-7600-2390

Geliş Tarihi: 27.06.2021

Kabul Tarihi: 07.11.2021

Abstract: The first aim of this study was to investigate the utilization of IPARD financial supports controlled by Agriculture and Rural Development Support Institution (ARDSI) by county and production basis. Secondly, the assessment of these enterprises' structural and administrative status of except industrial milk and meat processing enterprises at the enterprise level was aimed. The study was performed with data collected via questionnaire forms from 37 dairy, beef and broiler enterprises. It is estimated that animal producers have got 54536884.28 TL as support in IPARD-I financial support within 9-15th calls. It is calculated that milk production was the leader in total supports with 22328683.05 TL (40.9%). It is determined that Germencik and Yenipazar counties have the most significant shares, while Karpuzlu and Sultanhisar have minor investments. In terms of the number of contracts, it is calculated that the biggest share belonged to Yenipazar and Efeler counties with 10 and 9 projects, respectively. In other words, it is understood that 40% of total signed contracts came from these two counties. Consequently, in terms of the development of animal husbandry, Aydın has obtained 37 animal production and 13 animal processing facilities via seven calls by the IPARD-I program.

Keywords: ARDSI, Aydın, Broiler, Meat, Milk.

IPARD Programının Aydın İli Hayvancılığı Üzerine Etkileri

Özet: Bu çalışmanın ilk amacı Tarım ve Kırsal Kalkınmayı Destekleme Kurumu (TKDK) tarafından yönetilen IPARD destek paketinden işletmelerin yararlanma düzeylerinin sektör ve ilçeler temelinde incelenmesidir. İkinci olarak süt ve et işleme tesisleri dışında kalan 37 işletmenin işletme düzeyindeki incelemelerine geçilerek işletmelerin işleyiş ve yapısal durumlarının değerlendirilmesi amaçlanmıştır. Çalışma toplam 37 süt, besi sığırcılığı ve etlik piliç işletmesinin anketler ile temin edilen verileri ile gerçekleştirilmiştir. Aydın hayvancılığına IPARD destekleri ile 9-15. çağrı dönemleri arasında arı yetiştiriciliği hariç olmak üzere toplam 54536884,28 TL yatırım yapıldığı hesaplanmıştır. Süt üretiminin 22328683.05 TL (%40,9) ile desteklemelerde lider olduğu hesaplanmıştır. Bu miktardan en büyük payı Germencik ve Yenipazar, en küçük payı Karpuzlu ve Sultanhisar İlçe'lerinin aldığı saptanmıştır. İmzalanmış sözleşme sayısına bakıldığında ise en fazla projenin Yenipazar ve Efeler İlçe'lerinden sırasıyla 10 ve 9 proje ile geldiği tespit edilmiştir. Diğer bir anlatımla İl genelindeki toplam projelerin %40'ının bu iki ilçeden çıktığı anlaşılmaktadır. Sonuç olarak Aydın, hayvancılığın kalkınması anlamında IPARD-I kapsamında yedi çağrı ile 37 hayvansal ürün üretim ve 13 hayvansal ürün işleme tesisine kavuşmuştur.

Anahtar Kelimeler: Aydın, Et, Etlik Piliç, Süt, TKDK.

Introduction

IPA (Instrument for Pre-Accession Assistant) means an instrument for distributing of the financial supports in Turkey during the 2014-2020 years in the context of European Union (EU) membership process. IPARD is also a rural development component of Instrument for Pre-Accession Assistant formed to provide financial support for members and nominees to be member countries by EU (Celiktaş, 2006). Agriculture and Rural Development Support Institution was formed to deal with mentioned support issues in 2007 in Turkey. After the first phase, Aydın was added to the second phase of the support package. Out of 165, 117 projects were accepted for a grant between 2013-2015 years according to the financial support package that entered into force on 27/01/2015 (Anonymous, 2006; Anonymous, 2018). European Commission approved the IPARD program

on 25/02/2008. Turkey got started on legal regulations about financial support within the eighth Five Years Development Plan dealing with this issue. Along with the full membership procedure, the importance of rural development was gained momentum (Aydın and Yildirim, 2013; Can and Esengün, 2007; Karatas, 2010). EU has three main equities for financial support programs. Traditional equities (basically consisting of custom levies and agriculture and sugar tax), revenues from VAT, and some parts of national incomes of member countries are acceptable for primary financial resources. Other incomes consist of penalties by EU-related associations, incomes related to EU activities, stoppages from EU employees, and special payments from member states (Karatas, 2010; Zulfuoglu, 2011). Among the other nine countries, it could be said that Turkey

has taken nearly half of the financial supports (4795 million €) by population and geographical size. In general, the share of rural development in total EU financial supports was 17.8%, and the financial supports to Turkey were increased to 4795.2 million € in 2013 from 497.2 in 2007.

The first aim of this study was to investigate the effects of the IPARD program on animal husbandry in Aydin by sectors and counties. The second was to evaluate the management and structural status of the 37 farms apart from milk and meat processing units working on meat and milk production with routine farm visits.

Material and Methods

In the application made to the Animal Ethics Committee of Aydin Adnan Menderes University for the study, written information was received that no approval was required since experimental animals were not used.

The material of the study consisted of data collected with a face-to-face questionnaire from a total of 50 holdings that had been accepted for a grant (24 milk production, 11 milk processing, ten broiler productions, three beef production, and two beef processing) between June 2018 and June 2019. Apart from meat and milk processing holdings, 37 holdings (milk, meat, and broiler production facilities) were individually visited in terms of their structural and management status. In comparison milk production farms were sorted as small (9), medium (7), and big (8) as to their animal capacities; beef production farms were not sorted because of low (3) farm numbers. Milk and meat processing units were added to the study only for their amount of financial support, and therefore there was no other evaluation about these holdings. Data were analyzed with SPSS for descriptive statistics, and results were presented as tables.

Results

In the meaning of development in animal husbandry, Aydin has obtained 37 animal production and 13 animal processing facilities via seven calls by the IPARD-I program (Table 1). The share of milk production in terms of contract numbers was 48%, while meat processing has only 4% share. The share of milk production in its production field was also high (64.9%). As to support amounts, the share of milk production with 22328683.05 TL was also high (40.9%). However, the situation in broiler and beef production was quite different. So, while the share of broiler production in contract numbers was calculated as

20.0%, it is determined that this share decreased to 2.7% when it came to money taken. In contrast, it is seen that 6.0% of the share of beef production in contract numbers increased to 18.0% in the amount of money distributed. In general, it can be said that three out of four supports were allocated to milk-related businesses.

In general, it is determined that ARDSI signed a total of 10698 contracts and transferred 1148933450 € to business activities (agricultural and non-agricultural) between 9-15th calls by the IPARD-I program (Table 2). As to the share of animal husbandry in this amount of money, it is determined that 12 counties have benefitted from 54536884.28 TL support, and the highest (21.17%) and the lowest (0.79%) supports were for Germencik and Karpuzlu, respectively (Table 3). Yenipazar was the leader in terms of supported project numbers (10 projects), while Karpuzlu (only one project) and Buharkent (only one project) were at the bottom. The distribution of sectors' support showed that dairy farming was the leader with 24 projects, and beef production was at the lowest with three projects. It is determined that support for beef processing was only given to Efeler with two projects.

Findings related to farm buildings, land assets, and machinery are given in Table 4. It is seen that small dairy farms have no quarantine box, barn, feed silo, dining hall, or workplace. It is determined that one out of 9 small farms have a birth lodge, and two have calves box. There was no birth lodge, and calves box in three beef production farms.

Because of its characteristics (In general, poultry houses are occupy nearly 80-90% of the total farmland.), only land assets of dairy farms and beef production farms were investigated. According to the farm scales, it is revealed that small (40-50 heads), medium (51-100 heads), and big (over 100 heads) farms have 42.3, 87.9, and 220.8 da land assets on average, respectively (Table 4). During the routine visits, farm owners declared that nearly 80% of land assets belonged to them. In terms of land usage, many farm owners declared that they were using their lands for their businesses. It is also revealed that corn was essential in animal nutrition for small (30.4 da), medium (61.5 da), and big (174.7 da) scale farms for both milk and beef production (Table 4).

It is revealed that farms used different types of equipment with an increasing trend for their professions as parallel to farm-scale (Table 4). It is determined that all the farms have a lot of tractors and silage machines. It is also observed that there were no big machines such as the loader, separator, truck, or tanker in medium and small scale-farms.

Table 1. The number, sector, and support amounts of farms.

Sector	Scale	Number	% in field	% in total	Amount (TL)	%
Milk production	40-50 head	9				
	51-100 head	7				
	101 and over head	8				
		24	64.9	48.0	22328683.05	40.9
Broiler	50000 head	10	27.0	20.0	1466382.49	2.7
Beef production	115 head	3	8.1	6.0	9822231.39	18.0
Total		37	100.0			
Milk processing		11	84.6	22.0	18296891.38	33.6
Meat processing		2	15.4	4.0	2622695.97	4.8
Total		13	100.0			
Grand total		50		100.0	54536884.28	100.0

Table 2. The number of contracts signed and support amounts (€).

Call numbers	Contract numbers	EU	Turkey	ARSDI (EU+Turkey)
9	981	79750020.99	26583348.28	106333369.27
10	417	21895530.86	7298513.54	29194044.40
11	4.530	176867608.33	58955871.98	235823480.31
12	1.679	238935719.46	79645241.54	318580960.99
13	2.318	127419312.12	42473106.14	169892418.26
14	484	138099933.15	46033311.48	184133244.63
15	289	78731948.68	26243983.22	104975931.91
Total	10698	861700073.61	287233376.25	1148933450.00

Table3. Financial supports by counties and sectors (TL).

County	Sectors	N of farm	supported	Financial support	Total support for county	Share in province (%)
İncirliova	Milk prod.*	2		2128266.76		
	Broiler prod.	1		1075923.30	4216008.41	7.73
	Milk proc.**	1		1011818.35		
Germencik	Broiler prod.	2		1666901.02		
	Beef prod.	2		1448088.70	11546396.61	21.17
	Milk proc.	2		8431406.89		
Cine	Milk prod.	4		2606892.26		
	Broiler prod.	1		1704201.00	5070872.28	9.30
	Milk proc.	1		759778.32		
Kuyucak	Milk prod.	2		2377891.12		
	Milk proc.	2		2551385.12	4929276.24	9.04
Karpuzlu	Milk prod.	1		430999.40	430999.40	0.79
	Broiler prod.	1		1490204.23	2354964.67	4.32
Bozdogan	Milk prod.	1		604533.73		
	Milk proc.	1		260226.71		
Kosk	Broiler prod.	1		868307.00	868307.00	1.59
Efeler	Broiler prod.	3		2162070.71		
	Beefprod.	1		48293.79		
	Milk proc.	2		412049.48	5245109.95	9.62
	Meat proc.	2		2622695.97		
Yenipazar	Milk prod.	9		8415161.31		
	Milk proc.	1		2386045.77	10801207.08	19.81
Sultanhisar	Milk prod.	1		493171.04	493171.04	0.90
	Soke					
Soke	Milk prod.	3		4074369.79		
	Broiler prod.	1		3484180.74	7558550.53	13.86
	Milk proc.	1		854624.13		
Buharkent	Milk prod.	1		1022021.07	1022021.07	1.87
Total		50		54536884.28		100.00

*: production, **: processing unit.

Table 4. Building, land (da), and machinery assets of farms by scales.

Milk production	Birth lodge	Calve box	Quarantine box	Barn	Feed silo	Dining hall	Work place
Small	1	2	-	-	-	-	-
Medium	3	4	-	5	3	-	-
Big	7	8	5	8	8	2	2
Beef production	-	-	1	1	1	1	1
Milk production	Average Land	Corn	Barley	Vetch	Triticale	Fodder beet	Trefoil
Small	42.3	30.4	25.2	11.8	7.5	10.1	4.5
Medium	87.9	61.5	50.8	32.2	14.9	21.9	18.3
Big	220.8	174.7	120.5	50.5	35.8	40.6	65.9
Beef production	77.3	55.0	41.3	-	-	-	12.8
Milk production	Tractor	Loader	Manure facility	Feed unit	Truck	Tanker	Silage machinery
Small	9	-	-	-	-	-	5
Medium	7	-	-	-	1	2	2
Big	8	5	3	5	7	8	3
Beef production	3	1	1	1	1	1	-

Results related to the labor force, education status of owners and/or managers, and ownership of farms were given in Table 5.

It is observed that 11 out of 24 farms (45.8 %) have one person for dairy farm activities, while beef production farms have more than one person. However, it is seen from the table that broiler farms use one or two-person as a labor force. It is determined that half of the dairy farm owners

and/or managers were graduated from university while none of the beef producers were elementary school graduates. The main occupation of owners and/or managers was found high in support of 'Yes' (62.5%). Insurance policy for social security was determined as 58.3% in dairy farms while 80.0% in broiler farms. It has been determined that 58.3% of dairy farms, 50% of broiler farms, and 33.3% of beef farms have legal personalities.

Table 5. Findings related to labour force.

		Milk production	%	Beef production	%	Broiler production	%
Labour force	1 person	11	45.8	-	-	8	80.0
	2 person	4	16.7	1	33.3	2	20.0
	More	9	37.5	2	66.7	-	-
Education of the owner and/or manager	Elementary	7	29.2	-	-	2	20.0
	Secondary	5	20.8	1	33.3	3	30.0
	University	12	50.0	2	66.7	5	50.0
Main Occupation	Yes	15	62.5	3	100.0	4	40.0
	No	9	37.5	-	-	6	60.0
Insurance	Yes	14	58.3	2	66.7	8	80.0
	No	10	41.7	1	33.3	2	20.0
Entity	Natural	10	41.7	2	66.7	5	50.0
	Legal	14	58.3	1	33.3	5	50.0

Discussion

IPARD program was a milestone in leaving fusty financial support systems in Turkey and Aydin as well. Aydin has gained momentum in terms of the developments in animal husbandry with IPARD. Apart from the older versions, in this brand-new support approachment, money was released gradually according to the level of construction. There was a five-year-long routine control period

after the establishment. Furthermore, these modern animals producing and processing units took huge attention from neighboring farms and holdings, and it has been a role model for other farms. In a study conducted in Kutahya, it is understood that ten projects on dairy production were supported via four calls in terms of the IPARD-I program. The authors stated that these farms' total additional broiler production capacity had reached 2.4 million heads (Unal and Fidan, 2014). At this point, it should be noted that productivity and

efficiency in these farms were significantly increased. Due to its comprehensive structure, the IPARD support system positively effects on people living in rural areas. In this regard, there were various rural supports related to non-agricultural sectors for socio-economic balance in rural areas (Isık and Baysal, 2011). IPARD has also transferred the complete control to the member countries for better monitoring. Before the IPARD, there was no adequate control mechanism and monitoring in any support program in Turkey (Olgun and Sevilmiş, 2017; Ozkul and Bozkurt, 2019). With this momentum, it is believed that supported and unsupported farms will reach EU standards in animal care, animal health, animal welfare, public health, and food safety (Aydın and Yildirim, 2013). However, as in every new system setup, there were so many problems related to bureaucracy at the beginning. In this sense, Koc and Giray (2015) reported an essential need for an information desk for preparing the projects and implementing those in the sector. It is understood that inadequate communication between Turkey and the EU also caused significant importation problems and mortality aroused from prolonged importation procedures.

Many of the managers and/or owners were university graduates, and one or two of them were also Veterinarians. In a study, Karacor et al. (2019) stated that the average age of owners was 40, education status was generally university degree, 61.5% of owners were experts in their businesses, 69.2% of them were economists, and all of them were males. In a similar study, Ozkul and Bozkurt (2019) reported that 80.7% of 166 farm owners were between 30 and 50 years old, 77.1% had lycee degrees. The entity status of farms showed similarities to the other studies, and there was an increasing trend for the legal entity. This situation was widespread, especially in meat and milk processing units which require so many investments. In a study on the meat sector in Konya, Karacor et al. (2019) stated that 19.2% of farms established in Konya belonged to nature entities. Authors expressed that 30.8% of farms were corporations, and 69.3%, had business experience less than five years. Özkul and Bozkurt (2019) reported that 34% of farms have legal entities, and 33.9% have professional managers in Isparta. Cimen (2017) reported that financial supports positively affect employment and enhance the working and living conditions in rural areas to approximately 90%. In parallel to these findings, there were brand new shelters for workers almost all Aydın farms. Data from ARDSI revealed that productivity increased at least 50% in the 80% of supported broiler and dairy farms (TKDK, 2015).

Gulcubuk et al. (2016) stated that 96.2% of dairy farms and 70.0% of beef-producing farms have an increase in productivity up to 50%. Authors reported that 5% of beef-producing farms and none of the dairy farms expressed no change in productivity. The authors also stated that financial supports have positive effects on marketing channels up to 72.3%. Cimen (2017) reported that all supported farms decreased their production costs and 53.3% of them invested in their sector, and 40% of them increased their scale.

Consequently, contributions to animal husbandry via IPARD verified with this study were essential for increasing production and employment in Aydın. At least, it is thought that this program was a good chance for new entrepreneurs who were reluctant to enter the animal production sector.

Acknowledgements

This manuscript was compiled from the project supported by Aydın Adnan Menderes University Research Projects Unit (Project Number: VTF-17006)

References

- Anonymous, 2006: Katılım Öncesi Yardım Aracı Kırsal Kalkınma (IPARD) Programı 2007-2013, Gıda, Tarım ve Hayvancılık Bakanlığı, Ankara.
- Anonymous, 2018: Tarım ve Kırsal Kalkınmayı Destekleme Kurumu İmzalanın Sözleşmeler Listesi, <http://tkdk.gov.tr/Projelismeler/ImzalaninSozlesmeler>. Date of access: 11.02.2019
- Aydın Hİ, Yıldırım H, 2013: Kırsal Kalkınmanın Yeniden Yapılanması Sürecinde Yerel Aktörler: Bölgesel Kalkınma Ajansları – Tarım ve Kırsal Kalkınmayı Destekleme Kurumu, *Küresel İktisat ve İşletme Çalışmaları Derg*, 4: 28-42.
- Can M, Esengün K, 2007: Avrupa Birliği Kırsal Kalkınma Programlarının Türkiye'nin Kırsal Kalkınması Açısından İncelenmesi: SAPARD ve IPARD Örneği. *Gazi Osman Paşa Üniv Zir Fak Derg*, 24: 43-56.
- Çelikaş İ, 2006: Avrupa Birliği katılım öncesi fonlarının yapısı. *Sayıştay Derg*, 63: 39-49.
- Çimen AO, 2017: IPARD programının kırsal alanda ekonomik kalkınmaya ve yararlanıcılara katkıları ve beklentiler üzerine bir araştırma. Yüksek Lisans Tezi. Ankara Üniv Fen Bil Ens, Ankara.
- Gülçubuk B, Köksal Ö, Ataseven Y, Gül U, Kan M, 2016: Kırsal Kalkınma Desteklerinin UlusalDüzeyde Etkileri: Tarım ve Kırsal Kalkınmayı Destekleme Kurumu (TKDK) Projelerinin İncelenmesi. *TEAD*, 2: 1-10.
- İşık N, Baysal D, 2011: Avrupa Birliği'ne Uyum Sürecinde Türkiye'de Kırsal Kalkınma Politikaları: Genel Bir Değerlendirme. *CÜ İkt ve İdr Bil Derg*, 1: 165-186.
- Karacor Z, Güvenek B, Öztürk H, Akçıl K, 2019: İpard desteklerinin sektörel etkileri: Konya Etsektörü örneği.

- <https://www.researchgate.net/publication/333133022>. Date of access: 12.03.2020.
- Karataş H, 2010: Avrupa Birliği katılım öncesi mali yardımları. Ümit Ofset Matbaacılık, Ankara.
- Koç A, Giray FA, 2015: AB Kırsal Kalkınma Mali Yardımı (Ipard): Türkiye Uygulaması ve Yeni Dönem (2014-2020) değişiklikler. *Akad Bak Derg*, 51: 314-331.
- Olgun FA, Sevilmiş G, 2017: AB Katılım Öncesi Yardım Aracı Kırsal Kalkınma Programı (IPARD) ve Türkiye Açısından Değerlendirilmesi. *Tarım Ekon Derg*, 23: 25-36.
- Özkul G, Bozkurt AA, 2019: Kırsal kalkınmada TKDK'nın rolü: IPARD programına ilişkin Isparta İli'nde bir inceleme. *SDÜ Vizyoner Derg*, 25: 536-554.
- Ünal S, Fidan A, 2014: Tarımsal destek uygulamaları: Ipard desteklerinin Kütahya tarımına etkisi. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, Özel sayı: 63-75.
- TKDK, 2015: Kırsal Kalkınma Çalıştayı TKDK – D8 Ülkeleri, 14-15 Mayıs 2015, Ankara.
- Zülfüoğlu Ö, 2011: Avrupa Birliği Bütçesi ve 2007-2013 Mali Perspektifi İzdüşümünde 2011 Bütçesi Üzerinde Bir Değerlendirme. *Çimento İşveren Derg*, 4: 20-34.
- *Correspondence:** M. Kenan TÜRKYILMAZ
Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Animal Science, 09016, İsikli, Aydın, Turkey.
e-mail: mkturkyilmaz@adu.edu.tr