



## The impact of Eid al-Adha (feast of the sacrifice) sales on the income of cattle fattening enterprises

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### ABSTRACT

The objective of this project is to identify the impacts of the 120 cattle fattening enterprises operating in Ankara by the years 2010, 2011 and 2012 on the total revenue of the sales made during the period of the Eid al-Adha.

The survey findings conducted on the cattle fattening enterprises operating in the 13 districts and various villages affiliated with these districts and the data derived from the survey constitute the material of the research.

While for the years 2010, 2011 and 2012, the average carcass cutting price is 17.35 Turkish liras, 15.06 Turkish liras, 14.15 Turkish liras, the average carcass price in the retail sales during the Feast of Sacrifice is successively 23.07 Turkish liras; 20.02 Turkish liras; 18.44 Turkish liras; For the years 2010, 2011, and 2012 the amount of production is 2,934,293(Kilogram)kg, 2,873,617 kg and 2,851,751 kg. Within the survey, the total revenue is successively 58,292,868 Turkish liras; 49,653,823 Turkish liras and 45,770,314 Turkish liras in the cattle fattening enterprises by the years 2010, 2011 and 2012. Of the said revenue, 50.8% (29,535,136 Turkish liras) comes from the revenue of the Eid al-Adha in 2010, 51.9% (25,740,034 Turkish liras) in 2011, and 50.9% (23,288,724 Turkish liras) in 2012.

**Keywords:** Ankara; Cattle Fattening Enterprises; Eid al-Adha; Feast of the sacrifice.

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## INTRODUCTION

Ritual sacrifice, seen in many societies, has always existed before and after Islam in Anatolia as well. In addition to being worship, it is a fact that sacrifice provides significant economic and social positive externalities in society. There are 150,000 families, which do cattle fattening for Eid al-Adha, in Turkey. Ritual Sacrifice has an important place in increasing meat consumption in Turkey where meat consumption needed for healthy nutrition is low (Çetin 2008;Düzbayır2009).

In addition to being worship, sacrifice become integrated with tradition sociologically. Integration with tradition affects performing frequency of worship of sacrifice positively. Sacrifice is amongst the worship for which general public demand is highest (Çetin 2008;Narin2009).

According to the data declared by TUIK (Turkish Statistical Institute) quarterly, meat production in the 4th quarter of the year 2013 covering Ramadan period and Eid al-Adha is about 1.7 times of other quarters of the same year. These data show demand increase due to Ramadan and Eid al-Adha (TUIK 2014;MMB 2015).

When the Eid al-Adha period is evaluated in terms of supply, incomes of cattle fattening companies can be separated into 2 periods depending on time. First of these periods is the sales revenues of companies from wholesale at the time out of the Eid al-Adha period and the second is the retail sales revenues the companies gained with the sales in the Eid al-Adha period.

Considering the fact that it is not possible to achieve rural economic development without developing stock-breeding in any of the country in the world, the course of change in incomes of cattle fattening companies in the Eid al-Adha period is an important parameter (Aral 1996).

Cattle and sheep & goat slaughter made across Turkey in years 2011, 2012 and 2013 and how many of these are made in the Eid al-Adha period is given in Table 1 (GTHB 2014, TUIK 2014).

**Table 1. Cattle and sheep & goat slaughter made across Turkey in years 2011, 2012 and 2013**

Years	Total cattle slaughter across Turkey	Total sheep & goat slaughter across Turkey	Cattle slaughter in the Eid al-Adha period	Sheep & goat slaughter in Eid al-Adha period
2011	2,571,765 (100%)	6,733,638 (100%)	675.486 (%30.0)	2,022,000 (26.8%)
2012	2,791,034 (100%)	5,467,921 (100%)	753.762 (%35.3)	1,930,255 (27.0%)
2013	3,430,723 (100%)	6,299,135 (100%)	851.948 (%37.0)	2,331,917 (24.8%)

\*Slaughter numbers in the Eid al-Adha period were taken from Ministry Of Food, Agriculture and Livestock, General Directorate of Livestock.

As it is understood from the Table 1; 26.8%, 27%, 24.8% of total cattle slaughter and 30%, 35.3% and 37% of sheep&goat slaughter were made in the Eid al-Adha period in years 2011, 2012 and 2013 respectively. At this point effect of ritual sacrifice on sales revenues of cattle fattening gain importance.

In the study, Retail sale and wholesale of fattening companies in Ankara in the Eid al-Adha period in years 2010, 2011 and 2012 were examined in terms of price and output. As a result of the survey made with the fattening companies, data such as in how many periods the companies make breeding, number of livestock they own and how many of their livestock they sold in the Eid al-Adha period, were acquired. Within this scope, the aim of the study is to determine the effect of livestock sales made in the Eid al-Adha period on incomes of fattening companies with the help of the acquired data. Thus, effects of sales in the Eid al-Adha on increasing the economic welfare of the producer in cattle fattening companies will be evaluated as well.

## MATERIAL AND METHOD

The material of the study consists of data acquired as a result of the survey made in cattle fattening companies operating in 13 counties and various villages connected to these in Ankara city. Also, TUIK and various literature are used in the study.

Target area of the study consists of counties of Ankara city. Within the scope of the study, as a result of the pre-interviews made with operating companies in May 2010 it was selected by using random sampling. By this means, 120 companies, which are small, medium and big sized and accept to participate in survey were designated and included in the study.

Considering the intensity of stock-breeding operations and transportation, 13 counties of Ankara namely; Akyurt, Bala, Cankaya, Cubuk, Elmadag, Gudul, Haymana, Kazan, Kızılcahamam, Nallihan, Polatlı, Sincan, Sereflikochisar, were included in the scope of study. Two survey studies, the first of which is in April-May and the other is in the Eid al-Adha period in the same year, were made for each year and six survey studies (for three years) were made in total.

Sales in the Eid al-Adha period in fattening companies are made based on live weight, not based on the weight of carcass. Therefore, live weights acquired in survey study were converted to carcass weights by using productivity data for Ankara cattle carcass of ESK (Meat and Milk Authority) and retail carcass values were calculated for the Eid al-Adha period. According to this, average productivity rate for carcass acquired as a result of cattle slaughter made in combine slaughter houses of ESK in years 2010, 2011 and 2012, is determined as 57%.



Distribution of companies included in survey by their size and by counties are given in Table 2.

**Table 2. Cattlefatteningcompanies in Ankara included in survey**

No	Counties	By Size			Number of companies by counties	Proportional distribution of companies by counties (%)	Share of counties in production (%)
		1 ≤ 25 livestock	26 - 100 livestock	101 ≥ livestock			
1	Akyurt	3	8	7	18	15	23.6
2	Bala	2	1	-	3	2.5	1.5
3	Cankaya	3	7	1	11	9.2	6.3
4	Cubuk	2	17	8	27	22.5	28.8
5	Elmadag	3	2	-	5	4.2	1.0
6	Gudul	2	4	2	8	6.7	7.8
7	Haymana	1	2	1	4	3.3	3.1
8	Kazan	3	9	3	15	12.5	15.0
9	Kizilcihamam	1	4	-	5	4.2	3.2
10	Nallihan	3	1	-	4	3.3	15
11	Polatli	-	6	1	7	5.8	7.3
12	Sincan	6	-	-	6	5.0	0.2



13	Sereflikochisar	7 - -	7	5.8	0.7
14	Total	35 62 23	120	100.0	100.0

## FINDINGS

Carcass meat prices and carcass meat output for the years 2010, 2011 and 2012 in cattle fattening companies included in the study were acquired. Acquired data have been classified in two categories as the Eid al-Adha period and wholesale out of the Eid al-Adha period. Said values are given for year 2010 in Table 3, for year 2011 in Table 4 and for year 2012 in Table 3 respectively.

**Table 3. Cattle fattening companies prices and output in 2010**

No	Counties	Eid Al-Adhaperiod carcassprice (Turkishliras/kg)	Carcasswholesaleprice (Turkishliras/kg)	Eid Al-Adhaperiod carcassmeatoutput (kg)	Carcasswholesale meatoutput (kg)
1	Akyurt	22.44	17.04	315,342	391,286
2	Bala	22.41	15.76	11,136	29,232
3	Cankaya	23.35	17.29	71,448	116,253
4	Cubuk	23.31	17.20	399,351	457,888
5	Elmadag	23.37	16.91	16,399	11,150
6	Gudul	22.70	17.99	89,436	154,715
7	Haymana	23.46	17.09	31,494	45,414
8	Kazan	23.65	17.66	178,067	228,607
9	Kizilcihamam	23.19	17.32	42,434	48,300
10	Nallihan	23.17	18.71	17,748	24,186
11	Polatli	23.22	17.74	90,654	138,272
12	Sincan	22.48	16.84	4,708	1,976
13	Sereflikochisar	21.55	17.20	12,023	6,769
14	Genel Toplam	23.07	17.35	1,280,240	1,654,048

In Table 3, carcass price is determined as Turkish liras 23.07 and carcass wholesale price is determined as Turkish liras 17.35 by weighted average in the Eid al-Adha period cattle fattening companies in 2010. It is seen that Cubuk, Akyurt and Kazan Counties are leading ones in carcass meat production respectively and they performed more than half of the total production.



**Table 4. Cattlefatteningcompaniespricesandoutput in 2011**

No	Counties	Eid Al-Adha period carcass price (Turkish liras/kg)	Carcass wholesale price (Turkish liras/kg)	Eid Al-Adha period carcass meat output (kg)	Carcass wholesale meat output (kg)
1	Akyurt	19.87	14.99	341,551	373,820
2	Bala	18.97	13.81	11,397	28,884
3	Cankaya	20.15	15.07	69,225	112,879
4	Cubuk	20.38	14.96	385,612	406,174
5	Elmadag	20.17	15.04	18,465	12,651
6	Gudul	19.20	15.09	80,087	138,311
7	Haymana	19.01	15.24	36,300	53,309
8	Kazan	19.81	15.26	181,438	256,831
9	Kizilcihamam	20.09	15.35	43,739	47,465
10	Nallihan	19.36	15.39	20,445	27,825
11	Polatli	20.84	15.17	80,301	120,335
12	Sincan	19.70	14.97	5,241	2,356
13	Sereflikochisar	19.81	15.25	11,910	7,055
14	Total	20.02	15.06	1,285,716	1,587,901

In Table 4, carcass price is determined as Turkish liras 20.02 and carcass wholesale price is determined as Turkish liras15.06 by weighted average in the Eid al-Adha period in cattle fattening companies in 2011. It is seen that carcass prices were decreased by the effect of importation when compared to year 2010.

**Table 5. Cattlefatteningcompaniespricesandoutput in 2012**

No	Counties	Eid Al-Adha period carcass price (Turkish liras/kg)	Carcasswholesale price (Turkishliras/kg)	Eid Al-Adha period carcass meat output (kg)	Carcass wholesale meat output (kg)
1	Akyurt	18.54	14.45	292,581	325,300
2	Bala	18.29	14.62	12,823	32,138
3	Cankaya	19.39	14.35	77,590	100,550
4	Cubuk	18.62	13.97	394,521	446,145
5	Elmadag	17.24	13.52	17,574	11,542
6	Gudul	17.62	14.54	76,960	135,233
7	Haymana	18.27	14.13	42,386	63,580
8	Kazan	18.34	14.05	187,885	265,162
9	Kizilcihamam	17.82	14.12	43,582	49,464
10	Nallihan	18.20	14.44	18,322	25,656
11	Polatli	18.11	13.50	81,849	122,687
12	Sincan	18.10	13.22	4,893	1,631
13	Sereflikochisar	18.10	13.64	11,975	9,716
14	Total	18.44	14.15	1,262,946	1,588,805



In Table 5, carcass price is determined as Turkish liras 18.44 and carcass wholesale price is determined as Turkish liras 14.15 by weighted average in the Eid al-Adha period in cattle fattening companies in 2012. Decrease in carcass prices by effect of importation also continued in 2012. Data acquired from companies through survey in years 2010, 2011 and 2012 have been put together in Table 6 also considering output values.

**Table 6. Cattle fattening companies, actual average price (AAP) and total output in 2010-2011-2012**

No	Countries	2010 AAP Turkishliras/kg	2011 AAP Turkish liras /kg	2012 AAP Turkishliras /kg	2010 Total carcassproductio n (kg)	2011 Total carcassproductio n (kg)	2012 Total carcassproductio n (kg)
1	Akyur	19.4	17.3	16.3	706,629	715,372	617,881
2	Bala	17.6	15.2	15.6	40,368	40,281	44,962
3	Cank	19.6	16.9	16.5	187,703	182,106	178,141
4	Cubu	20.0	17.5	16.1	857,240	791,787	840,667
5	Elma	20.7	18.0	15.7	27,550	31,117	29,116
6	Gudul	19.7	16.5	15.6	244,151	218,399	212,193
7	Haym	19.7	16.7	15.7	76,908	89,610	105,966
8	Kaza	20.2	17.1	15.8	406,674	438,270	453,047
9	Kizilci	20.0	17.6	15.8	90,734	91,205	93,047
10	Nallih	20.0	17.0	16.0	41,934	48,271	43,979
11	Polatli	19.9	17.4	15.3	228,926	200,637	204,537
12	Sinca	20.8	18.2	16.8	6,685	7,598	6,525
13	Serefl	19.8	18.1	16.1	18,792	18,966	21,692
14	Total	19.8	17.2	16.0	2,934,293	2,873,617	2,851,751

Actual average prices generated by dividing the income obtained from wholesale and retail sale prices of fattening companies by output are given together with output numbers in Table 6.

## DISCUSSION AND CONCLUSION

Average retail sale price for carcass was 23.07 Turkish liras, 20.02 Turkish liras, 18.44 Turkish liras for years 2010, 2011 and 2012 respectively and average wholesale price for carcass was 17.35 Turkish liras 15.06, Turkish liras, 14.15 Turkish liras for the same years respectively across Ankara in the Eid al-Adha periods. When wholesale and sales in the Eid al-Adha period are taken into account together, carcass sale price was 19.8 Turkish liras, 17.2 Turkish liras and 16.0 Turkish liras in the years of 2010, 2011 and 2012 respectively.

Within this scope, it is calculated that sales of cattle fattening companies in the Eid al-Adha period in years 2010, 2011 and 2012, increased the wholesale price of carcass 2.45 Turkish liras, 2.14 Turkish liras and 1.5 Turkish liras respectively. When evaluated considering actual average carcass prices, it was seen that sales in the Eid al-Adha period cause increase of 12.1 %, 14.7 % and 13.4 % in sales revenues of fattening companies by years.

Total revenues of 58,292,868 Turkish liras, 49,653,823 Turkish liras and 45,770,314 Turkish liras were generated in cattle fattening companies included within the survey in years 2010, 2011 and 2012 respectively. % 50.8 of the said sales revenue (29,535,136 Turkish liras) in 2010; % 51.9 of the said sales revenue (25,740,034 Turkish liras) in 2011 and % 50.9 of the said sales revenue (23,288,724 Turkish liras) in 2012 were the sales of revenue made in the Eid al-Adha period.



In the study it is seen that livestock industry is a branch of economic activity, which is determined mostly according to the Eid al-Adha one of the most advantages of the industry, in especially cattle fattening companies in Ankara. 43 of the 120 cattle fattening companies make production only for the Eid al-Adha period.

In sacrificial animals market, purchasing by buyers without paying attention to quality price relation, is seen as an advantage for the cattle fattening companies. Therefore, cattle fattening companies try to ease the problems to a certain extent occurred in the market due to instability in prices of meat, milk and forage, with the sales in the Eid al-Adha period (Saner *et al.*2011; Sakarya and Uysal 2000).

In the Eid al-Adha period cattle fattening companies have the chance to supply the animals in their hand to the market with higher prices and receive cash in sales made by retail sale prices (Türkyılmaz 2010. ).

Wholesale trade made for carcass by companies during the year generally bring low profit margin. Also, since sales made in cattle fattening companies are generally made through deferred payment instruments like bill, check in the market, many fattening companies face collection of revenues problem arising from uncovered document in their commercial activities (Tuncel 2013).

Cattle fattening companies increase their annual revenues and profit margins by sales in the Eid al-Adha period. Thus, companies go through financial relief and renewal and they may rise to a more competitive position in the market by increasing their profits and sizes as well (Tuncel 2013).

As long as the cost pressure in the market occurred after meat importation started in 2010 continues in both Eid al-Adha and out of Eid al-Adha period, 87.8 % of cattle fattening companies declared that their fattening business will be affected in various levels. Low prices occurred in meat in the long term will mean that breeder will send animals in his/her hand to butcher and end his/her livestock business (Aydın *et al.* 2010; Karakuş2011).

Difficulties faced by the livestock breeders increase the lack of interest in this field since the new generations of the families operating in this industry turn towards different field of profession. However, measures for removing problems faced by cattle fattening companies will make the industry more attractive. For example, animals brought to livestock market but remained in the hands of breeders (not sold), may be sold at a price that is far below their values or breeders go through a trouble by bearing important expenses made during return. At this point Meat and Milk Authority becomes a part and purchases livestock for overcoming the problems. Thus, this decreases the risk of spreading of animal diseases in the Eid al-Adha in which cattle and sheep and goat movements and slaughter are intense. Increasing the numbers of measures similar to this will increase its importance in obtaining long term stability in red meat industry (Çetinet *al.*2011, GTHB 2015; TZOB 2008).

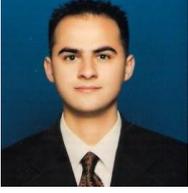
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## Biography



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Publications			
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