

**THE REPUBLIC OF TURKEY**

**BAHÇEŞEHİR UNIVERSITY**

**THE EFFECTS OF AGRICULTURAL INCENTIVES  
ON THE AGRICULTURAL BUSINESSES BY  
USING THE EVIDENCE FROM THE TURKISH  
AGRICULTURAL MARKET**

**Master's Thesis**

**CİHAN AVŞAR**

**İSTANBUL, 2011**

**THE REPUBLIC OF TURKEY**  
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**GRADUATE SCHOOL OF SOCIAL SCIENCES**  
**CAPITAL MARKETS AND FINANCE**

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**GRADUATE SCHOOL OF SOCIAL SCIENCE INSTITUTE**  
**CAPITAL MARKETS AND FINANCE PROGRAM**

Name of the thesis: The Effects of Agricultural Incentives on the Agricultural Businesses by using the evidence from the Turkish Agricultural Market

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Date of Thesis Defense:

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## ABSTRACT

### THE EFFECTS OF AGRICULTURAL INCENTIVES ON THE AGRICULTURAL BUSINESSES BY USING THE EVIDENCE FROM THE TURKISH AGRICULTURAL MARKET

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2011, January, 65 Pages

The aim of this study is to clarify the effects of agricultural incentives on the agricultural businesses by using the evidence from the Turkish agricultural. The Turkish agricultural industry is the one of the economically effective industry in Turkish economy, and the agricultural policies that are applied in Turkey have focused on securing the stabilization of the food supply, enhancing output and yield growth, fostering rural development, contributing sustainable income level, increasing in self-sufficiency and export.

From the past to the recent years, there has been lot of agricultural incentives given by the government. Unfortunately these agricultural incentives were governed with inefficient policies and were insufficient overall, because there were not effective regulation programs and there were a lot of structural problems within the agricultural industry. Some of these incentives had taken away, the new incentives introduced. Therefore it is essentially crucial to understand how these supports were implemented previously and why they were taken away.

In the analyses the official data from the national institutions such as Ministry of Agriculture and Rural Affairs (MARA), Prime Ministry State Planning Organization, and Turkish Statistical Institute (Turksat) are used. Moreover the data of the international institutions as well, such as World Trade Organization (WTO) and the World Bank.

**Keywords:** Agricultural Incentives in Turkey, Agricultural Industry, CAP (Common Agricultural Policy)

## ÖZET

### TÜRKİYE TARIM PAZARINI REFERANS ALINARAK, TARIMSAL TEŞVİKLERİN TARIMSAL İŞLETMELERİNE ETKİSİ

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2011, Ocak, 65 Sayfa

Bu çalışmanın amacı Türkiye tarım pazarını kaynak olarak, tarımsal teşviklerin tarımsal işletmelere etkisini aydınlatmaktır. Türkiye tarım sektörü Türk ekonomisini etkileyen sektörlerden biridir. Türkiye’de uygulanan tarımsal teşvikler, ülke nüfusunun gıda güvencesini sağlamak ve beslenme düzeyini yükseltmek, tarımsal piyasalarda istikrar sağlamak, bölgesel dengesizlikleri düzelterek kırsal kalkınmayı gerçekleştirmek ve ihracat yoluyla ödemeler dengesine katkı sağlamaya odaklanmıştır.

Geçmişten günümüze, hükümet tarafından birçok tarımsal teşvikler verilmiştir. Maalesef uygulanan teşviklerin yetersiz oluşu, yanlış uygulanması ve tarım sektörünün yapısal sorunlarından dolayı yetersiz kalmıştır. Uygulanan bazı teşvikler zaman içinde kaldırılmış ve bunların yerine yeni teşvikler hayata geçirilmiştir. Bu sebeple, bu teşviklerin nasıl uygulandığı ve neden yürürlükten kaldırıldığını iyi anlamak gerekmektedir.

Ulusal teşkilatlar, örneğin Tarım ve Köyişleri Bakanlığı, Türkiye İstatistik Kurumu ve Devlet Planlama Teşkilatı’nın verileri analiz olarak kullanıldı. Ayrıca uluslararası teşkilatların, Dünya Bankası ve Dünya Ticaret Teşkilatı gibi, verileri de kullanılarak analizler yapılmıştır.

**Anahtar Kelimeler** : Ortak Tarım Politikası (OTP), Türkiye’de Tarımsal Teşvikler, Tarım Sektörü

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## LIST OF ABBREVIATIONS

Agricultural Economics Research Institute	:	AERI
Çay İşletmeleri Kurumu	:	CAYKUR
Common Agricultural Policy	:	CAP
Direct Income Support	:	DIS
Equipment Manufacturers	:	TARMAKBİR
Et ve Balık Kurumu	:	EBK
European Commission	:	EC
European Union	:	EU
Food and Agriculture Organization	:	FAO
Gross Domestic Product	:	GDP
Gross National Product	:	GNP
International Development Association	:	IDA
International Fund for Agricultural Development	:	IFAD
International Money Fund	:	IMF
National Plan for Agriculture and Rural Development	:	NPARD
North Atlantic Treaty Organization	:	NATO
The European Agricultural Fund for the Rural Development	:	EAFRD
Special Accession Programme for Agriculture and Rural Development	:	SAPARD
State Planning Organization	:	SPO
Tarım İşletmeleri Genel Müdürlüğü	:	TIGEM
Tarımsal Üretim ve Geliştirme Müdürlüğü	:	TUGEM
The Agricultural Reform Implementation Projects	:	ARIP
The European Economic Community	:	EEC
The International Bank for Reconstruction and Development	:	IBRD
The Ministry of Agriculture and Rural Affairs	:	MARA
The Ministry of Industry and Trade	:	MIT
Turkish Statistical Institute	:	TURKSAT

The Turkish Association of Agricultural Machinery and Equipments : TARMAKBİR  
World Trade Organization : WTO  
Ziraat Bankası : TCZB

## 1. INTRODUCTION

Agriculture can be defined as producing, protecting, evaluating and marketing of vegetable products and animal products through processing of soil. Although macroeconomic indicators of non-agricultural industries in Turkey is well developed, the effects of the agricultural industry on the economy is much more important than those of other main-stream industries, and agricultural industry continued to be a crucial industry of the Turkish economy. The development of the industrial industry is indirectly related to the development of the agricultural industry in Turkey, i.e. the agricultural mechanization depends on the industrial industry in most ways.

Agriculture is one of the most crucial sources of resources for Turkey, especially in rural areas. Moreover, agriculture is a significant contributor to the GDP of Turkey. Agriculture provides labor force, raw materials for agricultural industry, food & nutrition for people and for exporting. Although Turkey has rich natural and human resources, the Turkish Agricultural Industry did not reach its potential, because there have been a lot of mismanagement of agricultural policies since 1930's. From 1930's to the recent years, there have been numerous agricultural incentives given by the government. Unfortunately these agricultural incentives were governed with inefficient policies and were insufficient overall, because there were not effective regulation programs and there were a lot of structural problems within the agricultural industry. For example, one of the most important structural problems of the industry is that the agricultural industry has very small size of farm businesses.

Most of them are family owned farms, and most of the small family farms produce for themselves, in other words they cannot produce for the agricultural market. Other issues include, but not limited to, mismanagement of these incentives and the misbehavior of the farmers. Along with solving these problems, and for the improvement in the agricultural industry in Turkey, many national and international actors/organizations have provided agricultural support programs for a long time.

The aim of this study is to examine the effects of these incentives on the agricultural businesses by using the evidence from the Turkish Agricultural Market. I tried to introduce the agricultural incentives of Turkey in this study.

First section of this study is devoted to the conceptual explanation, regarding agricultural activities and incentives, and this section consists of two parts. The first part of the section 1 is about the determinant of the agriculture, and the second part of the section 1 is concerning the agricultural incentives.

The second section of this study is about the agricultural development organizations. This section also consists of two parts. The first part of the second section is about the world organization of the agricultural enterprises, and the second part of the second section is about the national organization of agricultural enterprises.

The third section of the study contains the harmonization requirements of the Turkish Agricultural Regulation from the perspectives of the Turkish membership to the EU. This section consists of three parts. The first part is about the agricultural regulations of Europe, the second part is about the agricultural regulations of the selected countries which are at the different development stage; Greece, Romania, and Holland, the last part is about the agricultural regulations of Turkey.

The fourth section of this study is about the agricultural incentives of Turkish Treasury. The last section is reserved for concluding remarks.

## **2. THE CONCEPTUAL EXPLANATION REGARDING AGRICULTURE AND INCENTIVES**

The Turkish Agricultural Industry has an important role in Turkish Economy, because it has contribution to labor force, GNP, and exporting in Turkey. Due to the industrialization and development, many industrial fields in Turkey grow rapidly, but the growth rate of Turkish Agricultural Industry in the economy has been continuously declining. Yet the government must still support agricultural policies, because agriculture has an important role in the economy, and agriculture is one of the fundamental resources needed by humans to stay alive. Before analyzing the conceptual explanation regarding agriculture and incentives, we have to take a look at the history of the Turkish agricultural industry.

It started out with gathering and hunting for nutrition along with protecting themselves from the negative natural conditions. As the necessities of human beings grew, along with technology, knowledge and population, so did agriculture -until nowadays. Furthermore, due to the natural limit on growth of land size the importance of the agriculture has increased, and people started to research and develop new ways of working the land for maximum production per unit area of land. Which is why, there have been many improvements in agricultural technologies and genetic industries within the recent years, which increased the production and efficiency in agriculture.

In our country, the relationship between the government and agriculture started since the Ottoman Empire. In that time, the fundamental role of the government on agriculture was to fill the position of central administration figure. But in due course, because of the incremental conditions, the agricultural policies became insufficient and ineffective, so that these applied agricultural policies could not provide the basics. Therefore, the government had tried to cease this movement of the agricultural industry, and applied new development policies. The redevelopment of those policies could not harmonize with new conditions in the agriculture, so that the structure of the agriculture destroyed in that time. Especially in the period of the World War 1 and War of Independence, the distortion in the agricultural system had reached all-time

high. When we consider the period of the Republic Period, the system could not work anymore, and agriculture took an important place due to these impacts on the political life. The point of the government to the agriculture adjusted, and the new viewpoint had developed the agricultural industry of Turkey. That new approach continued until the World War 2. In that time, the population was low, and the agricultural labor force was insufficient. The government tried to increase the productivity of the agricultural labor force and the population. One of the most crucial factors why the productivity declined was within that period the minorities abandoned the country, and because of that the productivity of agriculture was affected adversely, which in turn declined the population even further.

Before the 1950s, although the opportunity of having capital to invest was limited, the world trade had positive impacts on agricultural technology. Even though there were destructive effects of World War 1 and 2, the newly developed technologies accelerated the world trade. As a result of those improvements, there was an increase in agricultural mechanization, which had positive impacts on the agriculture in Anatolia. In fact the fundamental improvement in mechanization started with Marshall Plan by increasing the number of tractors. After that improvement, the new lands opened to agriculture.

In the 1950s, although the traditional agriculture varied, we cannot discourse the structural change in real terms. The improvement in agriculture was a result from the changing factors which previously restricted the productivity of agriculture. After passing mechanization period, the human labor resource was not a restrictive factor for productivity anymore, but the insufficient technology and capital became restrictive factors for productivity. Even though it was tried by the legislatures throughout the past to decrease the negative impacts on productivity through reduction in taxation, the land law and regarding problems along with the problem of the disintegration of the land remains to be the most important structural problems of the agricultural industry to the day. Within the period of 1950-1953, because of the agricultural mechanization era had taken its course, the industry had developed. Yet despite the improvements, obstruction in agriculture did not delay. The obstruction had occurred because the improvements were extensive but not intensive. The extensive agriculture means the

agricultural production improvement without significant progress in agricultural input and technology; on the other hand the intensive agriculture means the agricultural production improvement with significant progress in agricultural input and technology (Gunaydın 2006, 12). In 1980s, Turkey entered into open market economy. As a consequence of the switch in system, and in the frame of the “ordinance of 24<sup>th</sup> of January”, import substitution policies were abandoned. Because of these policies decision, the agricultural industry in Turkey deteriorated.

## **2.1 THE DETERMINANTS OF THE AGRICULTURAL ACTIVITIES**

### **2.1.1 Human Resources**

Due to the having more than 70 million inhabitants with a high proportion of it being young, Turkey is a country that has very significant potential labor force. Agricultural industry in Turkey has kept its role as a fundamental employer and provided to GNP throughout the years. Almost all of the rural population works in farms in Turkey. Moreover considering the industrial distribution of Turkish employment population, the agricultural industry has a very high percentage. According to the survey of 2003 Household Work Force the ratio of working population in agriculture is 33.9 percent, the ratio of working population in industry is 18.1 percent, and the ratio of working population in services is 48 percent. The function of agriculture is not only to reserve labor force but also to restrain the rural-urban immigration. (Wibberley and Turner 2006). While the ratio of working population in agriculture was 50.6 percent in 1980s, the ratio decreased in 33.9 percent in 2003. Furthermore by increasing capital accumulation and using technology in agriculture this ratio will decrease more.

Turkish economy has experienced several crises, and the agricultural sector has suffered as much as the other sectors. During those crises, the employment in agricultural sector is declining both in relative and in absolute terms. The 70 percent of the total rural population relies on agriculture in terms of employment. The labor force participation rates in rural places are higher than the urban places. Moreover, the female-male differential of labor force participation rates is lower in rural areas than urban ones. The high number of 'unpaid family workers' on farms is the explanation of



this differentiation (Wibberley *et al.* 2006). There are many factors that determine the demand of employment in agricultural sector. These are use of technology, the structure of farm lands and climate. Also because of the development of countries, the demand of labor force in agricultural sector declines. Because of the developments in Turkish economy, the demand of agricultural employment has declined from 2000 to 2008. So that it is expected that there will be a decline in demand of agricultural employment, if the other sectors continue to develop. When we consider the job status of the agricultural employment, we realize salaried workers in agriculture comprise about 5% of the total employment; unpaid family workers comprising 50 percent of the labor force.

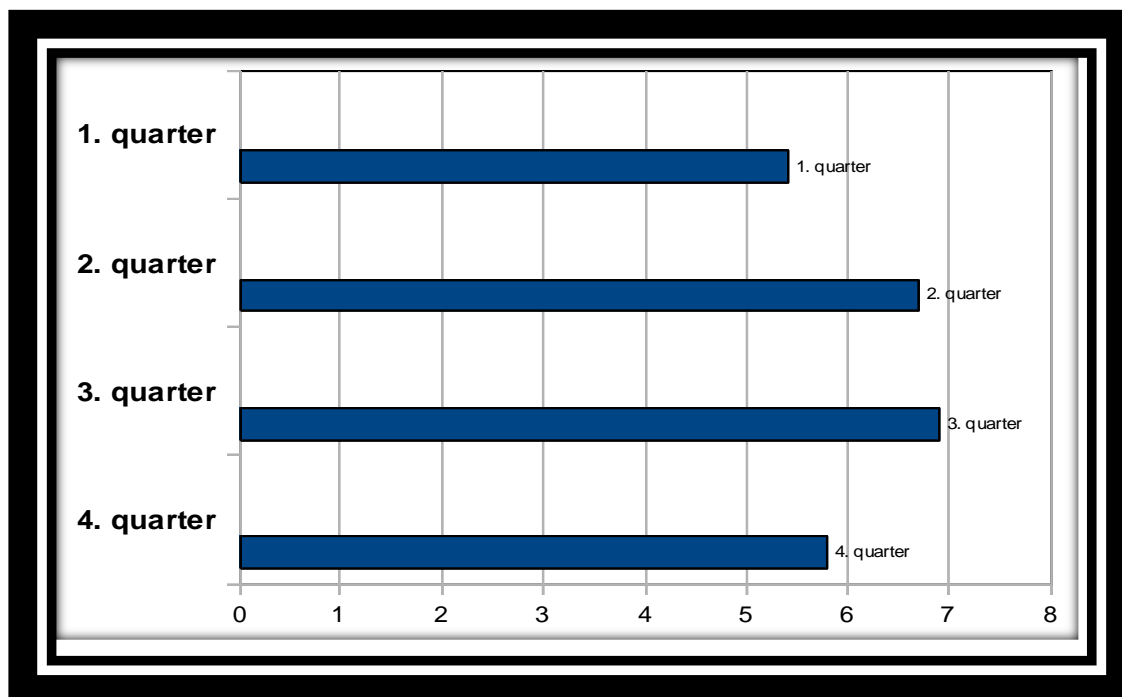
According the survey, 2008 Agricultural Holdings (Household) Wage Structure Survey, average monthly wages of permanent agricultural labors working in agricultural household holdings have increased by 15,80 percent, on the other hand average daily wages of the seasonal agricultural labors working in agricultural household holdings have increased by 11,85 percent from 2007 to 2008(Wibberley and Turner, 2006). In the first quarter of the year, the demand for agricultural employment is at its' lowest level, in the second and third quarter of the year, the demand increases, and the last quarter of the year the demand decreases again. This situation of demand of agricultural employment is due to the demand of the agricultural employment changes according to the seasonal changes. Furthermore while the production increases, the demand for the agricultural employment increases as well.

**Table 2.1 : Growth of output in different industries**

Sectors	2009					2010		
	I	II	III	IV	Total	I	II	III
Agriculture	-1,2	6,2	4,4	2,0	3,5	0,3	1,1	-0,7
Industry	-20,9	-11,2	-4,2	11,6	-6,7	19,4	14,7	8,6
Mining & Quarrying	-13,0	-15,3	-3,2	3,5	-6,7	6,1	14,2	0,1
Manufacturing	-22,1	-11,5	-4,2	13,0	-7,0	21,2	15,2	8,7
Energy	-6,1	-5,8	-4,6	1,5	-3,4	2,4	8,3	11,4
Construction	-18,5	-20,9	-18,2	-6,4	-16,1	8,3	21,9	24,6
Trade	-23,6	-13,6	-4,7	9,7	-8,5	18,1	12,8	6,1
Transport & Communication	-16,1	-10,0	-4,6	3,2	-7,0	11,7	10,1	6,7
Financial intermediation	10,6	7,5	7,8	8,3	8,5	4,4	7,3	6,4
Ownership Of Dwellings	3,2	3,3	2,8	2,5	2,9	2,2	2,1	2,7
(-) Financial intermediation services indirectly measured	10,7	6,6	9,5	11,5	9,7	10,4	13,4	12,7
Services	-12,8	-7,6	-3,8	4,4	-5,0	9,8	9,5	6,0
Public administration and defence; compulsory social security	2,4	1,8	3,5	3,6	2,9	0,5	0,4	-0,1
Education	0,7	1,3	3,3	3,1	2,0	1,5	1,1	-0,5
Health and social work	0,7	2,9	4,5	4,9	3,2	4,9	2,5	-1,1
Taxes-Subsidies	-21,9	-7,7	-7,9	6,4	-8,1	17,2	14,0	8,2
G.D.P. (Purchaser's Prices)	-14,6	-7,6	-2,7	6,0	-4,7	11,8	10,2	5,5

Source : TURKSTAT.

(\*) Calculated by SPO.



**Figure 2.1 : The Periodical Distribution of Agricultural Employment**

Source: DPT, 2009

### **2.1.2 Land, Agricultural Equipment and Machines, and Capital Accumulation**

The development in agricultural sector of Turkey is directly dependent on the land form, agricultural equipment and machines, and capital. Moreover the agricultural enterprises also are dependent to the factors that are mentioned in the previous section. Because of these relations between these factors, I will consider these factors all together in this chapter.

In Turkey, farms are generally family-owned, and fragmented. Which is why, the agricultural business in Turkey consists of commonly small businesses in terms of economical size. The consequences of having small-agricultural businesses are loss of land, the difficulties of implementing industrial size machines, inefficient use of fuel, and capital, along with labor force. To sum up, it causes the production and efficiency to decrease in a greater scale. The average farm size is between 2 and 5 hectares in Turkey. Nearly two-thirds of farm-lands (70 percent of the agricultural holdings) are smaller than 5 hectares. Most of the farms are fragmented; approximately one-quarter is consisted of more than six disjoint parcels. Moreover the average parcels have

declined in recent decades due to the trend of Turkish inheritance law. In turn, the investment per worker and per hectare is low (Anon. 2005). Approximately 38-41 million hectares of land is used for agriculture in Turkey. 22- 26 million hectares of this amount of 38-41 million hectares of land is cultivated, and the rest of the land is permanent pasture and common grazing grounds. In addition there is an inequality about the distribution the land and livestock ownership. 2.5 percent of the farmers do not have any land. The percentage of small farmers, who have below 5 hectares land, constitutes 70 percent of the total number of farmers. They own 20 percent of the land, 45 percent of the sheep, and 50 percent of the cattle.

On the other hand, the larger farmers who have above 20 hectares of land constitute 5 percent of the holdings; own 35 percent of the land, 17 percent of the sheep, and 10 percent of the cattle (Burell A. and Kurzweil M. 2007). Considering the distribution of the quality of land owned by the farmers, we realize that, almost all of the small farmers together, cultivated only 22 percent of the land, and 30 percent of the irrigated land. The farmers who own more than 50 hectares of land cultivated have more than 15 percent of the land, and nearly 15 percent of the irrigated land. As can be inferred, the shares of the irrigated land in the total area declined, while the size of the farms inclined. There are several reasons; the first reason of it is the irrigation intensity in small vegetable gardens, the second reason is the larger lands irrigate from dams and artificial lakes which is constructed and subsidized by the Turkish Government. Furthermore the smaller lands irrigated from wells which are constructed by the budget of these farmers. Field crops make up 87.3 percent of the cultivated area; land lain fallow make up 18.5 percent of the cultivated area, and area sown make up 68.8 percentage of the cultivated area. The vegetable production land make up 3 percentage of the cultivated area. Lastly the orchards make up 9.6 percent of the cultivated area. According to the international standards, Turkey is a major producer of tobacco, grain, cotton, grapes, figs, apricots, tomatoes, and tea.

**Table 2.3 : Agricultural Production- Major Crops**

	In Thousand of Tons						Percentage Change				
	2005	2006	2007	2008	2009	2010*	2006	2007	2008	2009	2010*
Cereals											
Wheat	21.500	20.010	17.234	17.782	20.600	19.500	-6,9	-13,9	3,2	15,8	-5,3
Barley	9.500	9.551	7.306	5.923	7.300	7.200	0,5	-23,5	-18,9	23,2	-1,4
Pulses											
Chick Peas	600	552	505	518	563	530	-8,0	-8,5	2,6	8,7	-5,9
Dry Beans	210	196	154	155	181	205	-6,7	-21,4	0,6	16,8	13,3
Industrial Crops											
Sugar Beet	15.181	14.452	12.415	15.488	17.275	17.000	-4,8	-14,1	24,8	11,5	-1,6
Cotton	2.240	2.550	2.275	1.820	1.725	2.150	13,8	-10,8	-20,0	-5,2	24,6
Tobacco	135	98	75	93	81	55	-13,0	-23,5	24,0	-12,9	-32,1
Oil Seeds											
Sunflower	975	1.118	854	992	1.057	1.220	14,7	-23,6	16,2	6,6	15,4
Groundnut	85	77	86	85	90	98	-8,9	11,7	-1,2	5,9	8,9
Tuber Crops											
Potatoes	4.090	4.366	4.228	4.197	4.398	4.544	6,7	-3,2	-0,7	4,8	3,3
Dry Onions	2.070	1.765	1.859	2.007	1.850	2.014	-14,7	5,3	8,0	-7,8	8,9
Fruit Bearing Vegetables											
Water Melon & Melon	5.795	5.571	5.458	5.752	5.489	5.371	-3,9	-2,0	5,4	-4,6	-2,1
Tomatoes	10.050	9.855	9.945	10.985	10.746	10.000	-1,9	0,9	10,5	-2,2	-6,9
Fruits & Nuts											
Grape & Fig	4.135	4.290	3.823	4.124	4.509	4.503	3,7	-10,9	7,9	9,3	-0,1
Citrus Fruits	2.913	3.220	2.989	3.027	3.514	3.560	10,5	-7,2	1,3	16,1	1,3
Hazelnut	530	661	530	801	500	600	24,7	-19,8	51,1	-37,6	20,0
Apple	2.570	2.002	2.458	2.504	2.782	2.550	-22,1	22,8	1,9	11,1	-8,3
Olive	1.200	1.767	1.076	1.464	1.291	1.395	47,3	-39,1	36,1	-11,8	8,1
Tea	1.192	1.121	1.145	1.100	1.103	1.400	-6,0	2,1	-3,9	0,3	26,9
Value Added in Agriculture											
(At 1998 Prices, Million TR)	9.571	9.701	9.047	9.434	9.767		1,4	-6,7	4,3	3,5	

**Sources: TURKSTAT****(\*) Crop Production 2nd Estimation (2010)**

Agricultural mechanization is a field which produces the power plants, machines, and equipment. Because of the market size and the importance role of agriculture in Turkish Economy, the agricultural machinery industry has grown over the last decades. By using advanced technology and product ranges, the agricultural machinery industry became one of the crucial Turkish machinery industries. During the recent years the numbers of manufactured machinery has increased which regarding in

agricultural sectors. It is one of the consequences of industrialization period and improvement in the modern agricultural techniques (Yavuz, 2005) These are agricultural power suppliers and equipment, transporting and loading equipment, land reclamation equipment, tillage equipment, sowing, planting, and fertilizing equipment, row crop husbandry equipment, plant protection and irrigation tools and equipment, harvesting tools, and etc. From 2001 to 2008 the number of the agricultural equipment and machines has increased by 16 percent, also the number of tractors has increased by 13 percent, and the number of tractors increased to 1.1 million tractors. (AERI 2009, p. 176)

The agricultural machinery industry not only meets domestic demand, but also meets the international demand such as France, Morocco, Bulgaria, Greece, and etc. Also there is an association whose members are manufacturer, importers, and sellers of agricultural machines. The name of this association is called Turkish Association of Agricultural Machinery and Equipment Manufacturers (TARMAKBIR). Moreover there are new irrigation tools and equipment For instance there are machines for producing pipelines. And the World Bank and government support the agricultural irrigation. Furthermore there are a lot of entrepreneurs interested in the irrigation systems.

**Table 2.4 : The presence of agricultural machines and equipments, from 2001-2008**

	2001 (1,000)	2008 (1,000)	The percentage change
Tractors	948,4	1070,7	12,90%
Total equipment and machines	8042,3	9305,5	15,70%
Farm land (million hectares)	26,4	24,5	-7,10%
The number of tractors per hectare	25,8	24,6	-4,70%

Source: TARMAKBIR

Although the number of tractor has increased, but on the other hand the number of tractor, per hectare, has decreased.

**Table 2.5 : The number of tractors**

	Total	One axle		Two axle							Track ( Laying)
		Horse power		Horse power							
		1-5	5 +	1-10	11-24	25-34	35-50	50+	51-70	70 +	
1988	654 636	623	1 311	2 655	16 741	62 230	351 210	219 545	-	-	321
1989	672 845	1 169	1 326	3 623	17 704	64 494	358 620	225 556	-	-	353
1990	692 454	1 234	1 570	3 175	17 841	66 696	364 052	237 579	-	-	307
1991	704 373	968	2 334	3 200	20 194	66 288	366 159	244 910	-	-	320
1992	725 933	951	2 432	3 352	20 595	68 540	373 162	256 601	-	-	300
1993	746 283	1 047	2 714	3 321	20 539	69 239	379 835	269 253	-	-	335
1994	757 505	1 033	2 946	2 770	19 499	68 945	384 160	277 850	-	-	302
1995	776 863	1 022	3 445	2 841	19 960	72 535	389 023	287 616	-	-	421
1996	807 303	1 075	4 620	2 960	19 838	75 116	401 360	301 935	-	-	399
1997	874 995	2 370	4 501	2 631	19 967	78 240	424 128	342 709	-	-	449
1998	902 513	1 449	5 826	3 271	20 371	78 796	434 018	358 456	-	-	326
1999	924 471	1 323	6 783	3 439	20 311	78 094	437 928	376 092	-	-	501
2000	941 835	2 049	7 882	3 776	20 409	77 364	446 541	383 424	-	-	390
2001	948 416	2 048	8 727	4 243	19 955	74 533	450 452	388 098	-	-	360
2002	970 083	2 994	15 689	4 149	19 962	75 359	449 139	-	356 943	45 668	180
2003	997 620	3 098	10 896	4 104	21 155	78 621	459 383	-	368 549	51 668	146
2004	1 009 065	3 220	11 784	3 904	21 075	77 747	458 677	-	376 108	56 349	201
2005	1 022 365	2 848	13 321	3 495	20 264	77 205	460 336	-	382 448	62 237	211
2006	1 037 383	3 094	11 743	3 480	19 716	76 340	465 926	-	390 904	65 972	208
2007	1 056 128	3 852	13 156	4 352	19 260	76 514	469 201	-	399 528	70 029	236
2008	1 070 746	4 096	13 675	6 027	19 635	76 670	471 817	-	401 791	76 817	218
2009	1 073 538	4 403	16 422	4 853	20 494	76 507	465 237	-	404 032	81 386	204

**Source: The Summary of Agricultural Statistics, 2002.**

Capital is another determinant for the agricultural sector in Turkey. There is insufficient capital in agricultural sector, for that reason the agricultural industry cannot develop. The important objectives of today's agricultural policies are increasing agricultural production, increasing yield and quality of life of producers. Especially for increasing the productivity level, providing adequate and effective input use, increasing number of agricultural machines and equipment, combating diseases and

pests, educating the farmers, and improving agricultural technologies, the capital must be increased. In Turkey, the agricultural enterprises have inadequate level of savings, and Turkey has limited capital, so that finding sources is very limited and the business is mostly dependent on the capital invested. The capital requirement of the agricultural enterprises varies according to the size of agricultural enterprises and the level of technology usage. Obtaining input use and income is realized in different periods, and it takes a long time, so that up to this period manufacturers are intensively confronted with financial need. Because of the low profit margins, and insufficient capital accumulation, large agricultural loans are important in this industry. Moreover to get results from agricultural production takes a long time due to the ecological system depended on, thus the capital turnover period is too high. For these reasons, the governments support the agricultural industry by using agricultural incentives.

The necessity of capital for an agricultural business varies according to its size of business, the efficiency of use in technology, and the general economical conditions. When the profit margin is low and the accumulated capital is insufficient, the agricultural credits become more important for the agricultural businesses.

## **2.2 AGRICULTURAL INCENTIVES**

In the period of 1929 and 1930, there was a world economic crisis that caused a decline in the price of agricultural goods. So in that period government used protective policies for the agricultural industry. Pre-1980's period, the government had used only floor price policy and purchasing supports, input subsidies, and cheap credit supports. In that period, there were market price supports for some of the agricultural products. The number of the products that gained the market price supports varied from time to time. In 1960's by the "*passing planned development*", in 1963 the support programs were becoming development programs. During that period not only the market price was at a stand-still, but also the chemical fertilizer supports and cheap credits for the farmers were used.



In the globalization world, the market economy becomes a widespread and acceptable system. In this system the role of governments becomes narrower, and the role of them is defined as regulators and controllers. Sometimes the market economy cannot solve certain problems, and for that reason; the governments use their function of being regulators by intervention (Yalçınkaya et al. 2006). In that period because of the effects of the inflation, the government abated the market price supports for the some of the agricultural products, abated subsidies, and the interest rate of the agricultural products approaches to the interest rate of market.

Agricultural industry is different from most of the other industries due to its characteristics. Agricultural industry has more disadvantages than those of the other industries, so that there are some interventions of the governments by using agricultural incentives. When Turkey determines its government policies, it puts into force their policies functions in the frame of the policies of some international organizations, which Turkey is a member of, such as the World Bank (IBRD), International Monetary Fund (IMF), World Trade Organization (WTO), and European Community (EU). The aims of the agricultural policies that are applied in Turkey have focused on securing the stabilization of the food supply, enhancing output and yield growth, fostering rural development, contributing sustainable income level, increasing in self-sufficiency and export potential.

Agricultural production not only is dependent on the ecology, but also the demand and the supply of the agricultural products is inelastic, so that the risk and uncertainty of the agricultural industry is high. Moreover since getting results from agricultural production takes a long time due to the ecological systems dependent on, the capital turnover period is too high. For those reasons mentioned above, the governments intervene in the agricultural industry by using agricultural incentives.

Lots of different policies apply to agricultural industry to contribute to a rise in the agricultural outputs. In early 1960's the rising sown surface area, in late 1960's the usage of chemical fertilizers, in 1970's the support to mechanization and increase in irrigated area, in 1980's the support to using high yield seeds, reduction in fallow area and new crop rotations have been contributed as benefits of agricultural policies for

this effort. Until 2000's the applied agricultural policies were purchasing supports, credit and product supports, and such. But the consequences of these policies did not succeed as desired, and they caused heavy burdens on the budget, so that with the supports of the international organizations, new supporting policies and Direct Income Supports have been introduced, and the Agricultural Reform Implementation Policy has played an essential role. According to the 2008 report of the ministry, in 2001, the total agricultural supports was 1 billion 868 million TL, in 2008 it has increased to 5 billion 826 million TL. (Tarim 2008). While the amount of support payments has changed from year to year. But the amount of support payments had increased until 2008 principally, but then in 2009 the amount decreased. The government constrained its budget in 2009, then after 2009, the budget for agricultural incentives has increased in 2010. The government is planning to increase the support amount to 5.897 million TL. The total amount of support payments reached 36.355 million from 2003 to 2010.

**Table 2.6 : The support payments**

YEARS	AMOUNT (MILLION)
2003	2.804 MILLION
2004	3.084 MILLION
2005	3.681 MILLION
2006	4.789 MILLION
2007	5.628 MILLION
2008	5.826 MILLION
2009	4.938 MILLION
2010	5.605 MILLION
TOTAL	36.355 MILLION
2011-PLANNING	5.897 MILLION

**Source: TUGEM, 2010**

Although the Turkish government applies these policies and these amounts of support payments, the agricultural industry of Turkey cannot improve as other emerging markets. There is a lot of mismanagement of these incentives in Turkey. Before the analyzing the mismanagement of the incentives, we have to examine the incentives that are applying in Turkish agricultural industries. These are market price support, inputs support, direct payment incentives, reimbursements, deficiency payments, the

supports for the general service expenditures, the fund for supporting used resources, deficiency of duties, and direct income support.

**Table 2.7 : Support type and support payments**

<i>Support Payments</i>		
<b>Support type</b>	<b>2007 (million TL)</b>	<b>Share (%)</b>
	2,462	44,4
DIS	1,641	66,7
Fuel	479	19,4
Fertilizer	342	13,9
Deficiency payments	1,782	32,2
Unginned cotton support	828	46,5
Wheat support	300	16,8
Sunflower oil support	203	11,4
Other	451	25,3
Livestock	723	13
Fodder plants supports	404	56
Milk supports	177	24,6
Water products supports	28	3,8
Others	113	15,6
The agricultural reform services	24	0,4
The agricultural insurance services	32	0,6
Compensative payments	85	1,5
Rural development	80	1,4
Drought	264	4,8
Others	90	1,6
<b>Total</b>	<b>5,542</b>	<b>100</b>

Source: Ekonomik göstergelerle Türkiye’de tarım 2008, FAO, 2009, ICAC, 2009, DairyCo, 2009

**Table 2.8 : Crop production and general agricultural supports**

Crop Production and General Agricultural Supports		
Support Type	Production Effect	Income Effect
DIS		X
Fuel		X
Fertilizer		X
Deficiency Payments	X	X
Compensative Payments	X	X
Forage Crops Payments	X	X
ÇATAK	X	X
Certificated Seeds	X	X
Cooperative Projects	X	X
Rural Development Supports	X	X
Agricultural Insurance	X	X
Certificated Sapling	X	X
Pruning Tea Support	X	X
R&D	X	X

Source: The Ministry of Agriculture and Rural Affairs (MARA)

### 2.2.1 Market Price Support

In Turkey, the market price support had been the most widespread supporting model for a long time. It was producer oriented supporting type. It is a highly effective tool for the regulation of agricultural production, income of the producers and the income distribution of all parts. By the mediation of the Council of Ministers, the government decided the prices of the agricultural products, and delegated one of the associations for purchasing.

The supports have applied for some of the agricultural products not for all of the products. There were some criteria for supported products, such as the demand for the product must have been high, they had a crucial strategically importance, they had to be stocks, and etc. When the determining the price support, the government considered the cost of goods sold, current stock market index level, the balance between supply and demand, and price tags in the word for equivalent goods. In 1980's there were 24

products that were supported, in early 1990's the number of the products that were supported had declined. One of the reason curtailments was the inflation. The agricultural industry was thoughts as the main cause of inflation. In 1990's there were only 10 products that were supported in terms of market price support. But in 1991, the number of products which were supported by the same term increased due to the elections of 1991. In 1992 the number of products increased to 26. After the agreement between Turkey and the World Trade Organization this supporting model taken out of commission and a new model, called Direct Income Support Model, was implemented instead.

### **2.2.2 Input Support**

By intervening the price of the inputs of the agricultural products in Turkey, by having low interest rate credits, and by applying some incentives, agricultural industry have focused on securing the stabilization of the food supply, enhancing output and yield growth, fostering rural development, contributing sustainable income level, increasing in self-sufficiency and export potential. There a lot of input support, such as the credit support of inputs, fertilizer support, fuel support, electricity support, and etc.

Because of the fragmented and divisional structure of the Turkish Agricultural Businesses and the low accumulation of Agricultural Capital, the producers tend to find finance that is not regarding their businesses. From 1970 to 1978 the Turkish Agricultural Bank gave out credits that had lower interest rates than that of going rate of interest to producers of the Agricultural Industry of Turkey. The interest rates of those credit plans for plants and livestock are the same in amount. However the small producers and others did not benefited from those credits up to snuff because of the deficiencies of title deed-cadastre system, credits regarding to the size of lands, the surplus of bureaucracy. Moreover those credits did not pay on time, because of that reason the credit subsidies were unsuccessful. On March 2000 because of the agricultural reform program, those credit subsidies were shut down.

From 1963 to 2001, fertilizer had been controlled by public organizations. Until 1980 the price of the fertilizer kept constant, the rising of the price of the fertilizer had

satisfied the subsidies of public. On September 2001 the fertilizer subsidies were shut down in 2002 subsidies for pesticides disappeared. After a temporary drop in the usage of fertilizer and credits, we can see from the table of fertilizer and credit use, the aggregate use of these item rebounded to previous level. Product and input subsidies/supports were phased out, and Direct Income Support replaced. In 2002 there were no input supports, but in 2003 and in 2004 by the direct income support for the fuel supports, the input supports came back.

**Table 2.9 : Credit and fertilizer use, Turkey, 2000 to 2004**

<i>Agricultural credit (million YTL)</i>	2000	2001	2002	2003	2004
Total agricultural credit given by Agricultural Bank	3409	2949	2884	3562	4017
Credit originating from the Bank	1575	770	600	534	1293
Directly to producers	832	541	444	455	1220
ACCs and other organizations	243	2228	156	7	7
Credit originating from funds	1834	2179	2285	3028	2724
Fertilizer use (thousand tons)	10425	8293	8696	9762	10153

**Source: Turkish Statistical Institute.**

In 2005, both fertilizer and diesel fuel support payments were based on farmland area, none were based on production levels of outputs or actual consumption levels of inputs.

**Table 2.10 : Fertilizer payments for supported product groups, 2005**

Product Group	Payment per Decare
Vegetables, fruits, foliage plants, meadow, forestry products	1.0 YTL
Cereals, feed crops, legumes, tuber crops	1.6 YTL
Oil seed plants, industry plants	3.0 YTL

**Source: Notification No.2005/42<sup>1</sup>**

<sup>1</sup> It was published in the 15.09.2005 and 25973 day and numbered Official Gazette.

Then in 2006 there was another cabinet decree (Decree No: 2006/11436), the farmers were also supported with payments for fertilizer and diesel fuel. But these payments were made to farmers who benefited from direct income support (DIS).

**Table 2.11 : Diesel and fertilizer payments for supported product groups, 2006**

Product Group	Diesel Support Payment per decare	Fertilizer Payment per Decare
Vegetables, fruits, foliage plants, meadow, forestry products	1,80 YTL	1,43 YTL
Cereals, feed crops, legumes, tuber crops	2,88 YTL	2,13 YTL
Oil seed plants, industry plants	5,40YTL	3,00 YTL

**Source: Cabinet Decree No.2006/11483<sup>2</sup>**

According to the table above, any farmer in the scope of direct income payments would get additional per decare 2,88 YTL for diesel and 2,13 YTL for fertilizer support if he cultivated cereals, feed crops, legumes, tuber crops. Comparing to 2005 amounts of support for the same product groups, in 2006 both diesel fuel and fertilizer support amounts were increased according to the data above.

Furthermore there have been the subsidies regarding to the seeds and saplings which are certificated. The Ministry of Agriculture meets the subsidies of the producers of seeds and saplings. Moreover there are the subsidies which applied to the agricultural chemicals, irrigation, and electricity.

### **2.2.3 Deficiency Payments**

By the year of 2007, there were four main objectives for the agricultural policies of Turkey. The first objective was to increase and stabilize the food supply of the population of the country, the second objective was to stabilize the agricultural markets, the third one was to provide rural development by the regulating the regional divergences, and the final one is to increase exportation in order to improve balance of payments. Attaining these four main objectives requires use of some of the important support policies mentioned. The deficiency payment is one of these support policies.

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<sup>2</sup> It was published in the 03.04.2001 and 24362 day and numbered Official Gazette.

In Turkey the deficiency payments started in 1993 for the unginced cotton by the decision of the Council of Ministry, but because of the budget problems and unregistered problem of the agricultural industry, the deficiency payment support was closed down. However in 1998 this kind of incentive system regularly applied again. From 1998 to recent years the deficiency payments based on production costs, world and domestic prices, are implemented for olive oil, oilseeds, cotton, tea, and, as of 2005, for cereals.

The Premium Support is based on the Decree No. 2004/6946, Decree No. 2005/8670. The aim of the support is to increase the production of products with shortage of supply. Premium payments are provided directly to producers once per production period.

With the abolition of the Decree 2007/12415 which effectuated in the periods of 2007-2011, which was about taking away the deficiency payments for the products supports about, Decree No. 2010/159 which is according to the 2010 premium support of the Turkey Basin Agricultural Production and Support Model, the premium supports for the products support about;



**Table 2.12 : Support unit of products support**

Products Support About	Support Unit (kr/kg)	
Oil sunflower	23	
Canola	27,5	
Corn	4	
Safflower	30	
Olive oil	30	
Wheat	5	
Barley, rye, oat, triticale	4	
Paddy rice	10	
Dry bean	10	
Pea	10	
Lentil	10	
Unginned cotton	Certificated	42
	Not certificated	35
Soybean	Certificated	35
	Not certificated	29,5

Source: TAGEM, 2010.

These decree do not contain all of the basins, only 30 basins are point at issue.

#### 2.2.4 The Supports for the General Service Expenditures

In Turkey, there are a lot of subsidies which are regarding to the general services for the farmers increasing their structure of the agricultural productions. These general services can be called as research, educational, and publication services, controlling, auditing and laboratory services, infrastructural services, and etc. These kind supports are decreasing the long term costs, increasing the productivity. Moreover these kinds of subsidies do not directly earn by the producers. The ministry has provided the supports for agricultural research and development projects since 2007. The application for the projects the interested people should contact with the TAGEM. Mostly the agricultural businesses interest in these projects. There are twenty-five projects that are continued projects, also there is only one project is resulted in. From the budget of the project, the supporting expenditure are the tool, equipment and

software, consulting and procurement service, mailing and shipping costs, local travel expenses, and etc

**Table 2.13 : The payments for other incentives**

YEARS	RESEARCH & DEVELOPEMENTAL SERVICES	EDUCATIONIONAL & PUBLICATIONAL SERVICES	COMBATING DISEASES AND PESTS	INFRASTRUCTURAL & OTHER INVESTMENTS	TOTAL
1980	10.900	13.600	16.300	5.400	46.200
1981	15.800	19.700	23.700	7.900	67.100
1982	13.700	17.100	20.500	6.800	58.100
1983	16.000	20.000	24.000	8.000	68.000
1984	13.700	17.100	20.500	6.800	58.100
1985	10.500	13.100	15.800	5.300	44.700
1986	10.600	13.200	15.900	5.300	45.000
1987	11.700	14.700	17.600	5.900	49.900
1988	16.100	20.100	24.100	8.000	68.300
1989	14.300	17.900	21.400	7.100	60.700
1990	16.000	20.000	24.000	8.000	68.000
1991	15.700	19.700	23.600	7.900	66.900
1992	13.900	17.400	20.900	7.000	59.200
1993	14.900	18.600	22.300	7.400	63.200
1994	8.400	10.500	12.700	4.200	35.800
1995	9.500	11.900	14.300	4.800	40.500
1996	11.400	14.200	17.000	5.700	48.300
1997	10.800	13.600	16.300	5.400	46.100
1998	9.000	11.200	13.500	4.500	38.200
1999	6.700	8.400	10.100	3.400	28.600
2000	7.600	9.500	11.300	3.800	32.200
2001	9.000	11.300	13.600	4.500	38.400
2002	13.900	17.400	20.900	7.000	59.200

Source: MARA, 2002

### 2.2.5 Direct Income Support

Within the framework of the Agricultural Restructuring and Supporting Policies, there are some of the new projects that aim to increase the welfare of the farmers and producers by introducing the direct income supporting model. “DIS payments, which

are granted on a flat, per-hectare rate and which entail no requirement to produce commodities, could decrease the production distortions associated with agricultural support policies and enhance the targeting of stated objectives that could not succeed in the previous period". By this new model (DIS) farmers started to go to register their farms, and for the each registered farmers, they received per- hectare payments but there limitation for the payments.

The farmer received per-hectare payments up to a maximum of 50 hectares. More the registered farmers on Direct Income Support also received Diesel Payment per hectare. The limitation of the Direct Income Support is also available for the Diesel Payment too.

**Table 2.14 : Direct income support scheme, Turkey, 2001 to 2004**

	2001	2002	2003	2004
Payment per hectare (YTL)	100	135	160	160
Area ceiling (ha per farm)	20	50	50	50
Participating hectares (mn)	11,8	16,2	16,5	16,7
Share of agricultural area (percent)	48	66	67	68
Farming households participating (mn)	2,2	2,6	2,7	2,7
Share of farming households	54	75	87	87
Total cost (YTL bn)	1,18	2,19	2,64	2,66

**Source: World Bank (2004), MARA**

By passing this new model, the government had some targets to achieve, these are;

- To be directly reached to producers the needed finance for the production products.

- The previous applied agricultural supports did not reach the right producers, so that there were heavily financial burden. It is aimed to decrease that financial burden by moving away those past applied agricultural supports.
- To provide a new registration for the producers, and every year update it. By providing registration is aimed to make preparation for accession EU.
- By being transparent is aimed to provide fairly income distribution among the people.

The concept of the Direct Income Support Model came to Turkey in 1990s with ARIP project. In 2000 the first experiment was made in 4 cities. After those experiments, this model applied in the other cities.

*At the end of 2005, DIS was applied to approximately 17 million hectares of total land of the agricultural land, and 2.75 million farmers have been registered under the National Farmer Registration (NFR) system. The rate of DIS payments was 100 TL per hectare in 2005 and 160 TL in 2006. Total expenditure for DIS payments increased from about 1.946 million TL in 2005 to 2.689 million TL in 2006. (OECD 2007, p. 227)*

Moreover there are the critics about the operation of direct income supports. This support is basically about the flat and per-hectare rate, so that the farmers started to show their farms as larger. Therefore the regulation problems occurred. And the implementation of the Direct Income Support has slowed down due to the uncompleted registration in rural areas.

### **2.2.6 Other Incentives**

The agricultural incentives have been continued until the recent days. There are lots of incentives that I did not mention before. These are import protection of the agricultural products, export subsidies, using the funds subsidies, deficiency duties, reimbursements, and etc.

Moreover there were rural development projects. IFAD (International Fund for Agricultural Development) has financed eight programs and projects in Turkey since 1982. The total cost of these eight programs and projects is 506.9 million USD; moreover the total IFAD loan is 134.4 million USD. As we understood from the

number, the loans of the IFAD face more than 25 percentage of the total cost of the projects. Also there are 1.350.200 households directly benefited from the loans. Five of the eight projects are completed, and the rest three of the eight projects are ongoing projects.

The first project of the IFAD was the Erzurum-Rural Development Project, approved on 31 March, 1982. The total cost of the program was 104.8 million USD, and IFAD financed 14, 5 percentage of the total cost, 15.2 million USD. The second completed project was the Agricultural Extension and Applied Research Project. This project was approved on 3 April, 1984, and the project type of this project was Extension, Training, and Research.

The total cost of the project was 164.9 million USD, and IFAD financed 6.5 million USD. The third project was Bingol-Mus Rural Development Project, approved on 14 September, 1989, the total cost was 52.2 million USD, and the IFAD loan was 19.9 million USD. The fourth one was the Yozgat Rural Development Project, approved on 13 December, 1990, the total cost was 40.5 million USD, and the IFAD loan was 16.4 million USD. And the last completed project was the Ordu-Giresun Rural Development Project, approved on 14 September, 1995, the total cost of the project was 51.2 million USD, and the IFAD financed 20.0 million USD. From the perspective of projects completion degree, four of the projects were about rural development, and only one of these projects was about the extension, training and research. Furthermore there are three ongoing projects in Turkey.

The names of these ongoing projects are the Ardahan-Kars-Artvin Development Project, Diyarbakır-Batman-Siirt Development Project, and the Sivas-Erzincan Development Project. The total costs of these ongoing projects are respectively 26.4 million USD, 36.9 million USD, 30.0 million USD, and the IFAD loans for these projects are respectively 19.2 million USD, 24.1 million USD, and 13.1 million USD. The project type of the Ardahan-Kars-Artvin Development Project is Agricultural Development, of the Diyarbakır-Batman-Siirt Development Project, is Credit and Financial Services, and of the Sivas- Erzincan Development Project is Rural

Development. To sum up, the total cost of these ongoing projects is 93.3 million USD, and the total amount of IFAD loans is 56.4 million USD.

**Table 2.15 : Industrial Breakdown Of Investment Incentive Certificates  
(January-November)**

	Agriculture	Mining	Manufacturing	Energy	Services	Total
<b>Number of Certificates</b>						
<b>2007</b>	60	123	1.313	91	596	<b>2.183</b>
<b>2008</b>	70	131	1.392	135	580	<b>2.308</b>
<b>2009</b>	72	118	894	93	419	<b>1.596</b>
<b>2010</b>	429	232	1.973	142	919	<b>3.695</b>
<b>Fixed Investment (TL.)</b>						
<b>2007</b>	309.427.266	599.809.806	11.077.802.700	3.962.688.354	8.056.357.643	<b>24.006.085.769</b>
<b>2008</b>	351.864.829	635.458.087	9.203.120.834	8.074.000.679	6.143.049.362	<b>24.407.493.791</b>
<b>2009</b>	318.874.039	646.444.446	6.333.769.297	4.113.812.105	4.365.782.162	<b>15.778.682.049</b>
<b>2010</b>	2.260.709.546	1.289.555.904	26.793.682.270	6.386.303.000	7.904.157.050	<b>44.634.407.770</b>
<b>Employment (Person)</b>						
<b>2007</b>	2.205	3.872	63.173	4.558	50.201	<b>124.009</b>
<b>2008</b>	2.557	4.453	43.975	5.024	34.562	<b>90.571</b>
<b>2009</b>	2.026	2.902	33.247	1.343	23.511	<b>63.029</b>
<b>2010</b>	12.325	4.963	55.500	2.347	32.044	<b>107.179</b>

Source: Treasury, 2010

### **3. THE AGRICULTURAL DEVELOPMENT ORGANIZATIONS**

The governments, when determine the agricultural supporting policies, they must consider the suggestions and enforcements of the international organizations that connected with them. When Turkey determines their policies regarding to the agriculture, Turkey must consider the policies of the some of the international organization, because of depending on these organizations, these organizations are World Bank, IMF, World Trade Organization, and EU.

Moreover, mostly the national organizations are interventionists of the policies when determining period. As I said before there is a market economy, and sometimes there is necessity of the intervention of government when the system stops.

#### **3.1 THE WORLD ORGANIZATIONS OF THE AGRICULTURAL ENTERPRISES**

The governments, when determine the agricultural supporting policies, they must consider the suggestions and enforcements of the international organizations that connected with them. When Turkey determines their policies regarding to the agriculture, Turkey must consider the policies of the some of the international organization, because of depending on these organizations, these organizations are World Bank, IMF, World Trade Organization, and EU.

##### **3.1.1 The World Agricultural Organization- The Food and Agricultural Organization of the United Nations**

This organization (FAO) has lead international suffer for defeating starvation problem since 1945. It is not serve developed country but also developing countries. It behaves radical organization where all of the nations meet, negotiate, and debate the policies. Moreover FAO helps the developing countries and the countries, which are in transition period, for modernizing and improving the agriculture of those countries.

FAO's has four main activities. These are being knowledge network, sharing its policy expertise, being organized by providing meeting places for all nations, and finally bringing the knowledge that it's got to the fields.

Moreover according to the new negotiation between EU and Turkey, within the next 3 years, total 873, 8 million Euro of EU rural development grant will be used. The negotiation is signed on 7<sup>th</sup> May, 2010. Livestock producers, farmers, and food processing industries will be able to take advantage of this grant of EU.

### **3.1.2 The World Bank as an Institutional Supporter**

World Bank is the world financial and technical assistance to developing countries, an international organization. The mission of World Bank is professionalism for lasting results and to the people and the environment, knowledge sharing by providing resources and capacity building by establishing public-private partnerships to fight poverty. It has two development institutions-International Bank for Reconstruction Development (IBRD) and International Development Association (IDA), which have 186 member countries.

There are 4 focused areas for the agricultural action plan. The first agricultural plan is organized around to the raise agricultural productivity. By organizing this action plan, the World Bank supports to increasing adoption of the advanced technologies, water management, and etc. The second agricultural plan is organized around to link farmers to the agricultural market and strengthen value addition which included the investments in transport infrastructure, strengthened agricultural producers organizations, strengthened agricultural market knowledge, and access to finance. The third one is about the reducing risk and vulnerability of the agricultural industry which is including supports to innovative insurance products, protection against the catastrophic losses and major diseases of livestock. The forth one is about facilitation agricultural entry and exit, and facilitation rural non-farm income. The credit negotiations between Turkey and World Bank have been shaped for the first time in 1950, and most of the credits are applied to the agricultural industry. The Agricultural Reform Implementation Projects (ARIP) was one of the projects between World Bank



and Turkey which made in 2000. Aims of this reform are decreasing the burden of the budget, and encouraging the growth of the agricultural industry of Turkey.

### **3.1.3 International Fund for Agricultural Development (IFAD)**

International Fund for agricultural Development (IFAD) is a specialized institution of United Nations, and it works as an international financial institution this specialized institution was established in 1977. The establishment of the institution was an important outcome of the 1974 World Food Conference. The aim of the Conference is to finance agricultural development projects for the food production in the developing countries by establishment of IFAD. The Governing Council of the institution is the highest decision- making author. There are 165 member states of the institution. Turkey has been the one of the member states since 1982 in IFAD.

IFAD has financed eight programs and projects in Turkey since 1982. The total cost of these eight programs and projects is 506.9 million USD; furthermore the total IFAD loan is 134.4 million USD. As we understood from the number, the loans of the IFAD face more than 25 percentage of the total cost of the projects. Also there are 1.350.200 households directly beneficiated from the loans. Five of the eight projects are completed, and the rest three of the eight projects are ongoing projects.

First of all we will consider the five-completed projects. The first project of the IFAD was the Erzurum-Rural Development Project, approved on 31 March, 1982. The total cost of the program was 104.8 million USD, and IFAD financed 14, 5 percentage of the total cost, 15.2 million USD. The second completed project was the Agricultural Extension and Applied Research Project. This project was approved on 3 April, 1984, and the project type of this project was Extension, Training, and Research. The total cost of the project was 164.9 million USD, and IFAD financed 6.5 million USD. The third project was Bingol-Mus Rural Development Project, approved on 14 September, 1989, the total cost was 52.2 million USD, and the IFAD loan was 19.9 million USD. The fourth one was the Yozgat Rural Development Project, approved on 13 December, 1990, the total cost was 40.5 million USD, and the IFAD loan was 16.4 million USD. And the last completed project was the Ordu-Giresun Rural Development Project,

approved on 14 September, 1995, the total cost of the project was 51.2 million USD, and the IFAD financed 20.0 million USD. To sum up, the total cost of these of the completed projects were 413.6 million USD; the IFAD financed 78.0 million USD of the total costs of the projects. When we look at the project type of these five-completed projects, four of the projects were about rural development, and only one of these projects was about the extension, training and research.

**Table 3.1 : Completed projects**

The name of the completed project	The total cost	IFAD loan	Approved Date
Erzurum Rural Development Project	104.8 million USD	15.2 million USD	31/03/1982
Agricultural Extension&Applied Research Project	164.9 million USD	6.5 million USD	03/04/1984
Bingol-Mus Rural Development Project	52.2 million USD	19.9 million USD	14/09/1989
Yozgat Rural Development Project	40.5 million USD	16.4 million USD	13/12/1990
Ordu-Giresun Rural Development Project	51.2 million USD	20.0 million USD	14/09/1995
Total	413.6 million USD	78.0 million USD	

**Source: MARA,2009**

There are three ongoing projects in Turkey. The names of these ongoing projects are the Ardahan-Kars-Artvin Development Project, Diyarbakır-Batman-Siirt Development Project, and the Sivas-Erzincan Development Project. The approved date of these projects is respectively on 17 December, 2009, on 14 December, 2006, on 11 September, 2003. The total costs of these ongoing projects are respectively 26.4 million USD, 36.9 million USD, 30.0 million USD, and the IFAD loans for these projects are respectively 19.2 million USD, 24.1 million USD, and 13.1 million USD.

The project type of the Ardahan-Kars-Artvin Development Project is Agricultural Development, of the Diyarbakır-Batman-Siirt Development Project, is Credit and Financial Services, and of the Sivas- Erzincan Development Project is Rural Development. To sum up, the total cost of these ongoing projects is 93.3 million USD, and the total amount of IFAD loans is 56.4 million USD.

**Table 2.2 : The ongoing projects**

The name of the ongoing project	The total cost	IFAD loan	Approved Date
Ardahan-Kars-Artvin Development Project,	26.4 million USD	19.2 million USD	17/12/2009
Diyarbakır-Batman-Siirt Development Project	36.9 million USD	24.1 million USD	14/12/2006
Sivas- Erzincan Development Project	30.0 million USD	13.1 million USD	11/09/2003
Total	93.3 million USD	56.4 million USD	

Source: MARA, 2009

### **3.2 NATIONAL ORGANIZATIONS OF THE AGRICULTURAL ENTERPRISES**

Turkey in the agricultural industry, dominated by the internal dynamics, while much of the 2000s, except at the beginning of 2000s the external dynamics has played important roles for the development of the industry. Agricultural policies were applied until 2000s, thanks to the internal dynamics of the contributions came into force. But those policies the burden of the budget arose, moreover those policies did not lead the industry to the success. Because of these reasons the agricultural industry with the international organizations support, new agricultural support policies have occurred. Furthermore there are still national organizations which try to improve the agricultural

industry of Turkey. The major political organizations in the agricultural industries are the Ministry of Agriculture and Rural Affairs (MARA), State Planning Organization (SPO), Under secretariat for Foreign Trade, Under secretariat of Treasury, and Committee on Restructuring and Support in Agriculture. Moreover there are related organizations of these organizations. The related organizations of MARA are the Meat and Fish Institution (EBK), Tea Institution (CAYKUR), Turkish Grain Board, Directorate General of Agricultural Enterprises (TİGEM), Agricultural Credit Cooperatives and Agricultural Development Cooperatives. The related organizations of the Ministry of Industry and Trade (MIT) are the Agricultural Sales Cooperatives, Sugar Authority, Commodity Exchange, Fresh Fruit and Vegetables Wholesale Markets, and TUIK. Also there are economical actors of the agricultural enterprises. These are banking institutions. The main banking institution is Ziraat Bank.

In this section, first of all we will examine the banking institutions, and then we will consider the political actors of the agricultural enterprises.

### **3.2.1 Banking Institutions**

Agricultural industry is one of the most important industries of Turkey. If individual and corporate actors of the agricultural industry are right and properly encouraged, the economy of the country will be better than previous. Unfortunately a few years ago the Banks of Turkey would not pay much attention to the agricultural industry. Prior to 2000, there were two banks that are widely provided credits to the farmers. These are Ziraat Bank and Tarisbank. With the guidelines of IMF and World Bank, due to the task losses, citing the Ziraat Bank lending to agriculture had been banned. In the same period Tarisbank were seized in an unjust manner. The banking system restructured in the crisis of 2001, but after 3 years, the agricultural loans of the Ziraat Bank reopened, and the other banks have restarted to work with agricultural industry since 2004. Today, banks are competing for dealing credit cards to farmers and lending to agriculture and livestock.

Due to the accumulation of years of experience, the prevalence of having branch and the state-sponsored subsidized loans, Ziraat Bank has maintained leadership in the

agricultural industry. Turkish Agriculture Bank (Ziraat Bank), the Council of Ministers of Agriculture and Rural Affairs (MARA) carried out in coordination offers a means of support payments. A large part of the financing of agricultural industry in our country, or even 95 percent of the agricultural loans is funded by the Agricultural Bank.

*The Agricultural Bank of Turkey (TCZB) provides most loans to farmers and cooperatives and closely watches agricultural credit. Although the TCZB was intended to favor small farmers in the distribution of credit, its loan requirements restrict credit for the many small farmers who either rent or lack a secure title to land or other properties needed as collateral. Much of the bank's lending consists of short-term loans extended to cooperatives for commodity price support. Farmers also obtain credit from merchants, wealthy farmers, and money lenders, often at extortionate interest rates. Much of the World Bank's lending for agricultural projects in Turkey is channeled through the TCZB. (<http://countrystudies.us/turkey/57.htm>)*

The Bank has had some kind of the agricultural support policies to not only the farmers, but also the agricultural enterprises for a long time. It has a lot of loan products that aims of encourage the agricultural industry. Some of the loan products are Business Loans, Harvesting and Marketing Loans, Provision of Supporting Payments Credit Assignment, Guarantees of Input Purchases, Guarantees of Support Grants, and etc; Furthermore it has four basic supports to the agricultural actors. These are supports for the crop production, support for the animal production, grant supports, and foreign-funded support projects.

A large part of the financing of agricultural industry in our country, or even 95 percent of the agricultural loans is funded by the Agricultural Bank. During this period, Ziraat Bank and in addition to the restructuring of the agricultural credit cooperatives, private banks in financing of the agricultural work also further increase the importance given to agriculture. There are a lot of private banks which support the agricultural industry of Turkey by low interest rate of agricultural loans, such as Deniz Bank, Halk Bank, Vakıf Bank, and etc.,

### **3.2.1 Ministry of Agriculture**

Agricultural production not only is dependent the ecology but also the demand and supply of the agricultural products are in elastic, so that the risk and uncertainty of the agricultural industry is high. Moreover to get function of agricultural production takes a long time due to the depending ecological system, so that the capital turnover period

is too high. Because of the reasons that I mentioned at above, the governments intervene the agricultural industry by using agricultural incentives. Ministry of Agriculture has been a major actor of the agricultural policies of Turkey for a long time. To ensure the development of the agricultural businesses, Ministry of Agriculture has been the most crucial national organization in Turkey because of the implemented several incentives programs. Ministry of Agriculture, from time to time with the support of the international organizations, sometimes with the support of the national organizations of these incentives programs is implemented.

Moreover the Ministry of Agriculture, by the agricultural education and training through a rural area of agricultural production is encouraged. Also the Ministry of Agriculture and Rural Affairs, who educated the young people under the Cooperative Agricultural Development, or as an individual by directing investing to be good producers is provided. It is known that, productivity is the basis for the agricultural development, and the education and training take place of the efficiency. Furthermore, unfortunately these training and education of the Ministry of Agriculture and Rural Affairs are insufficient in Turkey.

## **4. THE HARMONIZATION REQUIREMENTS OF THE TURKISH AGRICULTURAL REGULATION FROM THE PERSPECTIVES OF THE TURKISH MEMBERSHIP TO THE EU**

### **4.1 EUROPEAN AGRICULTURAL REGULATIONS**

European Union member countries' agricultural policies, both economic and political meaning of a common framework to manage based on the Common Agricultural Policy (CAP), EU's first common policy which was financed from the Union budget, half of the formation of terms the EU's most important policy is one. Because of the importance of Common Agricultural Policy, European Union has some of the new regulation for the supporting and managing agricultural industries in the rural areas, based on the Common Agricultural Policy.

Common Agricultural Policy in the Union's decision-making process, the Union has more authority than member states have. In this context, the CAP and the market mechanism of price determination are under the authority of the Union altogether. Commission decisions in the process of preparing draft laws, as well as supervision of markets and are responsible for making changes where necessary. The Council has forwarded to the Commission's own decision on the bill before Parliament is consulted. CAP expenditure required for the final say in determining the amount and content, belong to the Council.

CAP is based on three basic principles: the principle of single market; free movement of agricultural products in member countries, which prevents removal of all restrictions, is expected to create a single market. The principle of community preference; the Union aims to give priority to products manufactured in, for that protection against EU imports of agricultural products, while exports are must be subsidized. The principle of joint liability; all expenditure on CAP Union upheld by members of the partnership is aiming high.

Since the beginning of the CAP, Union was willing to support the income level of the manufacturers through two main mechanisms. These farmers into the hands of the targeted price remains below not to import products duty and other charges having equivalent effect taxes apply and the market price of the accepted minimum price or the intervention of the price falls below the issue occurs, the excess supply of is to buy. Union support coming from outside the domestic market will be harmed by low-priced imports in order to prevent tax system was implemented by the Union. As a result, outside the Union on imports of agricultural products into products under the threshold price to avoid taxes and the minimum import price of variable quality were identified. With entering into force in July of 1995, according to the World Trade Organization (WTO) Agreement on Agriculture, While the threshold price to end the application, the variable transformed into a qualified tax rate.

Furthermore, the European Commission has a lot of legal regulation policy about the agriculture and the rural development. These are called “Rural Development Policy 2007-2013”. For instance, there is a Council Regulation (EC) which based on support for rural development by the European Agricultural Fund for the Rural Development (EAFRD). Another regulation is based on the financing of the Common Agricultural policy.

#### **4.2 THE REGULATIONS OF THE SELECTED MEMBER COUNTRIES OF THE EU**

EU accession means that Turkey would have to adopt the policy of EU communities, which is called Common Agricultural Policy, and Turkey would receive agricultural subsidies from the budget of EU (Flam 2003). Before the analyzing the agricultural regulation system of Turkey, we have to consider the agricultural regulations of the selected EU member countries. These are Greece, Romania, and Holland.



#### 4.2.1 Greece

The agricultural industry of the Greek economy before entry into the European Union was a protected and low-technological manufacturing industry. The Greek agriculture was dominated small and family-owned enterprises. Moreover there was a large gap between the members of EU and Greek agriculture. In 1982, Greece entered into EU. The implementation of Common Agricultural Policy was the one of the crucial economic affect on the Greek agricultural industry. The Common Agricultural Policy aims to support the income of farmers, to stabilize agricultural supply for protecting the interest of consumers, to stabilize market, to increase productivity, and to promote technical progress. However there are two opinions about the net effect Common Agricultural Policy. According to the first opinion the net effect of the CAP was negative effective for Greece; furthermore, according to the second opinion the net effect of CAP was positive for Greece. In fact, Greece was one of the beneficiaries of transfer payments, which are funded by EU, but the transfer payments caused trade balance deterioration due to the wrong allocation of agricultural resources.

Greek agriculture has small and fragmented land, dry climate, and mountainous terrain. There are positive and negative comparison between Greece and other EEC countries. For instance, the fresh vegetable, citrus and the other fruits production of Greece is higher than other EEC countries. Furthermore the meat and animal products of the other EEC is higher than those of Greece. Also both of them are less than self-sufficient in the corn production.

There was ahead of schedule of Greece for the implementation CAP. The five-year transition period of and seven-year adjustment period of which regarding the accession agreement, Greece gradually adapted the price of agricultural products to EEC levels by the end of 1983. Moreover the national subsidies turned to EEC subsidies over a five-year transition period, then the national subsidies was abolished for reducing the costs of fertilizers and animal feed. Furthermore the import subsidies could not canceled until the end of the 1986.

#### **4.2.2 Romania**

At the beginning 2007, Romania became a member of EU and applied EU regulations. Half of the population of Romania lives in rural areas. After Poland, Romania is second largest country. The economy of Romania was almost controlled by the state until 1990. Until that period, the Communist Party was dominant, and the party totally ignored market economy. Due to the limited domestic energy resources and oil, and the oil crisis, Romania borrowed external finance. As a consequence, at the beginning of 1980s, the external debt of the Romania was between 20 and 30 percent of the GDP (OECD 2009)

The political decision of the Communist Party deteriorated the economic situation of the country. Repayment of the external payments caused an imbalance in structure of the economy, deterioration in the welfare of the population, and a decline in the supply of some products, especially food. In 1989, the external debt of Romania repaid, but the standard of living became worse. After the collapse of the Communist Party, Romania started market economy. Until 1997, the economic and financial instability continued in Romania. Moreover, Romania not only experienced resistance to the implementation of the structural reforms, but also the process of privatization was limited.

In the context of enlargement, agriculture was the one of the crucial issue for EU and Romania as a whole, due not only to the importance of the agricultural industry, but also due to the allocation of EU budget to agriculture. Nearly half of the EU budget, almost 43 percent of the budget, is allocated to agriculture.

The agricultural land of Romania is 14.7 million hectares, only 10 million of this amount is the arable land. According to an evaluation, which made in 2008, there are 6.8 million hectares of land are not used. The share of agriculture decreased from 12.6% of GDP in 2004 to 6% of GDP. Agricultural mechanization is comparatively poorer than EU average. Almost there are 170,000 tractors, and most of them are obsolete. The agricultural products of Romania fail to meet EU standards, due to the

obsolete agricultural technology, fragmentation and erosion of soil, difficulty in accessing available funds.

The agricultural structure of Romania composed 60% of vegetative production, and 40% zoo-technical production. The private proprietorship has dominant role in the vegetative production.

On June 24<sup>th</sup> 2004, there were identified five strategic fields played role in the negotiation between EU and Romania regarding Common Agricultural Policy. The names of the five strategic fields are the rural development, the cultivable surface for cereals, the animal breeding, the wine industry, and the agricultural industry. For the period 2007-2009 periods, the amount of fund was 4 billion Euros for the agriculture, most of them are expended for the mechanisms of CAP and rural development.

The amount of the payment for the direct payments from 2007 to 2010 is 967.9 million Euros. For benefiting from the direct payments, Romania created a system, the Integrated System of Administration and Control (ISAC), to provide good administration and control mechanism for subsidies, and to prevent the defrauding the budget that provided by EU. Furthermore the agricultural units are affected by the introduction of new standards and sanitary regulations, the elimination of tariff hindrances lead the potential export of Romania.

SAPARD (Special Accession Programme for Agriculture and Rural Development) is based on Council Regulation that is numbered 1268 in 1999, aims to establish supporting sustainable and rural development in candidate countries, to solve affecting long term adjustments of the agricultural industries and rural areas, and to help implementation of Common Agricultural Policies and related policy. NPARD (National Plan for Agriculture and Rural Development) was a plan of Romania for the agricultural industry improvement. NPARD, was approved in 2000, was the basis for the implementation of the SAPARD in Romania. To achieve the objectives of NPARD, Romania had four strategic; improving the accessing market, improving infrastructures for rural development and agriculture, development of rural economy, and development of human resources.

### **4.2.3 Netherlands**

The Netherlands is a small country of EU. More than half of the land area is farmed. The population of them is almost 16.5 million people. Half of the population lives in rural areas. With flower bulbs, cheese, eggs, people associate the Netherlands. The agricultural industry of the Netherlands is the most important industry of the economy. Netherland is not only producer of flowers, meat and meat products, seeds, chocolate, fruits and vegetables, but also international trader of these items.

The Ministry of Agriculture, Nature and Food Quality has the duty of laying down Government Policies which regarding to the agricultural industry. The duties of Ministry of Agriculture, Nature and Food Quality are to meet the demand of a changing modern society regarding the safety and quality of food, the structural changing of the agriculture, and animal welfare.

Agriculture and agricultural industry must deal with the state. Moreover there are several product boards for the different product industries. These are; the Product Board for Arable Agriculture, the Product Board for Horticulture, the Product Board for Dairy Products, the Product Board for Livestock, Meats and Eggs. Since 1950s Netherlands has been the one of the predecessor members of EU. Moreover it is a member of United Nations as well as OECD, NATO, IMF, and WTO.

Netherlands is the one of the major exporter of agricultural products in the world. Almost 80% of the Dutch export is to EU, especially to Germany, United Kingdom, Belgium, and France.

By expansion and increase in intensity and productivity the agriculture and horticulture of Netherlands entered in a new phase in the last few decades. Due to the decline in the number of small farms, the number of the farms has declined since 1990. However the number of the large farms has increased considerably. The average size of the agricultural businesses has doubled since 1986. The agricultural land of Netherlands is 1.9 million hectares.

There are five key focused elements in the government's agro-industry policy. These are sound and sustainable agriculture, food quality, knowledge and innovation, an eye on the international context, and agro-focused business climate. (Facts and Figures 2008)

From 1960s, by being a member of European Union and implementation of Common Agricultural Policy of EU, Netherlands has applied some of the agricultural policies. One of the policies of Netherlands, in 1984, in order to reduce emission of minerals and ammonia, government banned further expansion of intensive livestock farming. Since 2006, Netherlands introduced a new restricted regulation on manure. Another policy about energy saving. In 2000, the national government and the horticulture industry made an agreement for the improving efficiency of energy use.

### **4.3 THE TURKISH AGRICULTURAL REGULATIONS**

Turkey's full EU membership efforts have started with the Ankara Agreement in 1963. Turkey and EU entered into an Association Agreement in the last days of 1964. Custom Union was formed in 1995, and European Council granted Turkey candidature in 1999.

Accession negotiation between EU and Turkey started in 2005. EU accession means that Turkey would have to adopt the policy of EU communities, which is called Common Agricultural Policy, and Turkey would receive agricultural subsidies from the budget of EU (Flam 2003).

In 2004, the number of the member of the Union has increased from 15 countries to 25 countries. Furthermore Bulgaria and Romania became members of EU in 2007. Turkey has been still a candidature of EU, and it has high probability to become a member, because of the high population of Turkey, the high total agricultural area of Turkey, high number of the agricultural businesses of Turkey. But unfortunately, the size of the EU's agricultural businesses is bigger than the size of Turkey's agricultural businesses, and the EU's agricultural businesses are less fragmented than Turkey's. Due to the agricultural importance on the Turkish Economy, and the demographic and

agricultural structure of Turkey, Turkey has high probability to access to full membership of EU.

For being full membership EU, the most important condition for Turkey is ensuring compliance with EU policy. The Common Agricultural Policy is the most time-consuming policy, so that Turkey must solve its agricultural problems before the being a member of EU. Since 2000, the government of Turkey adopted some strategy papers for providing new Agricultural reform policies in Turkey. From 2001 to 2005, Turkey entered a period of significant reform programme in agriculture, called Agricultural Reform Implementation Project (ARIP). The Agricultural Reform Program aimed to decrease the role of government in the agricultural industry, especially before that the government decided the price of agricultural goods, to decrease the distortions and the financial burden of the agricultural supporting programs, to restructure the production of the agricultural goods, the agricultural state-owned enterprises and agricultural sales cooperatives, and to introduce Direct Income Support. I

It should be highlighted that the major purpose of this reform was to move towards a market oriented agricultural policy, and ARIP partly succeed this aim by abolishing the administered price of agricultural goods and input and credit subsidies, restructuring agricultural sales cooperatives and state-owned agricultural enterprises, and introducing DIS.

The price of the agricultural products is linked to world prices, not to Soil products Office. Moreover there was privatization of state economic enterprises which related to state-owned agricultural enterprises in 2001, so that the role of the state on agriculture decreased.

In addition the government had a dominant role in the agricultural sales cooperatives in 2000, but by the law of Agricultural Sales Cooperative and Agricultural Sales Cooperative Union, these cooperatives are mainly channels for the implementation of member-owned cooperatives. These cooperatives are purchasing and processing hazelnuts, olives, cottons.

Cooperatives fund are paid by government, supervised and controlled by the Ministry of Industry and Trade. Though this reform has implemented, but Turkey could not reach the desired results .Because of the being unsuccessful enough to, Turkey, since 2001, the necessary agricultural work has accelerated to prepare related legal regulations.

According to the article of “Screening Report Turkey”, there are a number of commodity laws, such as, “Law on soil conversion and land use” (No. 5403), “Law on agricultural credit cooperatives” (No. 1581), “Law on agricultural sales cooperatives” (No. 4572), “Agricultural insurance law” (No. 5363), “ Law on registration, control and certification of seeds” (No. 308), “Law on producer unions” (No. 5200), and etc.

These laws were adopted on 25 April 2006 by the Turkish Parliament. In 2006 the 2006-2010 Agricultural Strategy Paper was prepared. The main purposes of the 2006-2010 Agricultural Strategy Paper are to secure and develop a sustainable agricultural production, food security, product quality, rural development, better competitiveness of the agricultural industry, and the organizations that related to agricultural production.

Also there is Law on Organic agriculture regulation; this regulation is based in EU regulation. This regulation come into force in 1994 (No.22145), and then revised in 2002 as “Principle and Application of Organic Farming”, and the animal production also included in this revision. (Sayan 2003).

When we consider the Agricultural Policy Reforms in 2000, Erol Cakmak noted in his article as,

*Turkey embarked on an ongoing structural adjustment and stabilization programme towards the end of 1999. Agriculture was selected to undergo heavy adjustment due to the ineffective set of policies and its increasing burden on government expenditures in the last decade.( Çakmak 2003,p.7)*

Without the macroeconomic stabilization programs, there would be additional factors that forced Turkey to enter into agricultural reforms. First of all, Turkey needs a reform which based on trade negotiation. In Turkey there are protective trade policies in major crops. These trade policies have negative impact on the industry and the economy of Turkey. Furthermore these trade policies combined with input subsidies

and subsidies of investment in irrigation infrastructure have created net inflow resources from the government to the industry. (Cakmak 2003)

For the implementation of Direct Income Support, there are new creations which are related to Land Registration system and Farmer Registration System. By creating land registration system is intended to include the information of land and cadastre to the information set, and to make computer based service to farmers. Furthermore, the Farmer Registration System and the Land Registry System, as well as Geographic Information System, Farm Accountancy Data Network and by using the Agricultural Information System for the development and agricultural data base, the works should be accelerated.



## 5. THE AGRICULTURAL INCENTIVES OF TURKISH TREASURY

One of the major national agricultural organizations is the Republic of Turkey Prime Ministry Under secretariat of Treasury. The Republic of Turkey Prime Ministry Under secretariat of Treasury provides budget for the agricultural incentives. “There are functions of the under secretariat of Treasury, within the scope of Law 4059. These are assisting the identification of economy policies, implementing the activities regarding Treasury operations and public financing, implementing the activities required by shareholdings related to State-Owned Enterprises and state partnerships, organizing bilateral and multilateral foreign economic relations, conducting relations with international and regional economic and financial organizations, implementing operations concerning receipt of debt and grant from foreign countries and organizations, carrying out the arrangements concerning capital flow within the framework of financing policies of the country and executing the activities related to the foreign exchange regime, implementing the regulatory and supervisory activities related to the insurance industry, regulating and implementing the investments, investment incentives as well as direct foreign capital investment activities and identifying the bases on monitoring and improving the implementation, and finally carrying out other duties assigned by the relevant legislation”.

The Republic of Turkey Prime Ministry Under secretariat of Treasury regulates and implements investments, investment incentives as well as direct foreign capital investment activities and identifies the bases on monitoring and improving the implementation.

*The duties of the General Directorate of Incentives and Implementation are to prepare, implement, monitor and evaluate the implementation of, and take the necessary measures for, incentives to support and guide investments and foreign-currency-earning services in line with the principles targets and policies stated in development plans and annual programmes, also taking the objectives of export and import policies into consideration; to evaluate investment projects under the legislation to encourage investments; to issue incentive certificates for those of such projects which are found appropriate; to ensure coordination between organizations in charge of the implementation of incentives; to submit opinions to concerned organizations on disputes that arise in practice; to perform the closing procedures for investments carried out in accordance with the terms and conditions of Investment Incentive Certificates; to apply penalties to investors acting contrary to the terms and conditions of their investment incentive certificates; to perform the duties prescribed by legislation in connection with the implementation of investment*

*incentives; to examine and evaluate investments on location; and to carry out other, similar duties as may be assigned by the Under secretariat*<sup>3</sup>.

The Republic of Turkey Prime Ministry Under secretariat of Treasury has a lot of agricultural incentives in context of the Law of Agriculture; direct income support, deficiency payments, compensative payments, live stock payments, agricultural insurance payments, rural development support, environmental support for farmland protection program, and other support programs.

The name of the Board of the Agricultural Law is Agricultural Support and Guidance Committee. The Article 19 is about the basis of the implementation of these agricultural supports. These basis are; the amount of the support payments may vary regarding to the area, businesses, land, products, agricultural systems, the maximum annual total amount of the subsidy which the agricultural businesses get can be determined, agricultural support tools for its share in the total budget for agricultural support may be increased or decreased at a rate of 25% where necessary by the Council of the Ministers, supports can be paid through producer organizations, supports to be paid in the determining the amount of quality, standards and health criteria are take in account, and etc,. The financing of these incentives, budget resources and the external sources is used.

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<sup>3</sup> It was published in the 20.12.1994 and 22147 day and numbered Official Gazette.

## 6. CONCLUSION

Considering the agricultural industry of Turkey, macroeconomic indicators of non-agricultural industry in Turkey developed, and the effects of the agricultural industry on the economy is much more important than those of other main industries. Agricultural industry continued to be a crucial industry of the Turkish economy.

The development of the industrial industry is indirectly related to the development of the agricultural industry of Turkey, such as the agricultural mechanization depends on the industrial industry in most way. Moreover agriculture is a significant contributor to the GDP of Turkey. Agriculture provides labor force, raw materials for agricultural industry, foods/nutrition for human beings, and exportation.

Although Turkey has rich natural and human resources, the Turkish Agricultural Industry did not reach its potential, because there have been a lot of mismanagement agricultural policies since 1930s. From 1930s to the recent years, there have been supportive agricultural incentives. Unfortunately these agricultural policies were inefficient and insufficient because there were not effectively regulation programs and there were a lot of structural problems of the agricultural industry.

Agricultural industry is different from most of the other industries due to its characteristics. Agricultural industry has more disadvantages than those of the other industries, so that there are some interventions of the governments by using agricultural incentives. When Turkey determines its government policies, it puts into force their policies functions in the frame of the policies of some international organizations, which Turkey is a member of, such as the World Bank (IBRD), International Monetary Fund (IMF), World Trade Organization (WTO), and European Community (EU).

Agricultural production not only is dependent on the ecology, but also the demand and the supply of the agricultural products is inelastic, so that the risk and uncertainty of the agricultural industry is high. Moreover since getting results from agricultural production takes a long time due to the ecological systems dependent on, the capital

turnover period is too high. For those reasons mentioned above, the governments intervene in the agricultural industry by using agricultural incentives.

These previous applied policies did not succeed as desired, and they0 caused heavy burdens on the budget, so that with the supports of the international organizations, new supporting policies and Direct Income Supports have been introduced, and the Agricultural Reform Implementation Policy has played an essential role. According to the 2008 report of the ministry of agriculture, in 2001, the total agricultural supports was 1 billion 868 million TL, in 2008 it has increased to 5 billion 826 million TL. (Tarim 2008). The total amount of support payments reached 36.355 million from 2003 to 2010.

One of the most important agricultural incentives is the market price support, it had been the most widespread supporting model for a long time. It was producer oriented supporting type. It is a highly effective tool for the regulation of agricultural production, income of the producers and the income distribution of all parts. . The supports have applied for some of the agricultural products not for all of the products. After the agreement between Turkey and the World Trade Organization this supporting model taken out of commission and a new model, called Direct Income Support Model, was implemented instead.

The second one is the input support. There a lot of input support, such as the credit support of inputs, fertilizer support, fuel support, electricity support, and etc. On March 2000 because of the agricultural reform program, those credit subsidies were shut down. On September 2001 the fertilizer subsidies were shut down in 2002 subsidies for pesticides disappeared. After a temporary drop in the usage of fertilizer and credits, we can see from the table of fertilizer and credit use, the aggregate use of these item rebounded to previous level. Product and input subsidies/supports were phased out, and Direct Income Support replaced. In 2002 there were no input supports, but in 2003 and in 2004 by the direct income support for the fuel supports, the input supports came back.

There are also general services supports, such as research, educational, and publication services, controlling, auditing and laboratory services, infrastructural services, and etc.

These kind supports are decreasing the long term costs, increasing the productivity. Furthermore these kinds of subsidies do not directly earn by the producers.

DIS payments, which are granted on a flat, per-hectare rate and which entail no requirement to produce commodities, could decrease the production distortions associated with agricultural support policies and enhance the targeting of stated objectives that could not succeed in the previous period. By this new model (DIS) farmers started to go to register their farms, and for the each registered farmers, they received per- hectare payments but there limitation for the payments. Moreover there are the critics about the operation of direct income supports. The farmers started to show their farms as larger, therefore the regulation problems occurred, and the implementation of the Direct Income Support has slowed down due to the uncompleted registration in rural areas.

Moreover there were rural development projects. IFAD (International Fund for Agricultural Development) has financed eight programs and projects in Turkey since 1982. The total cost of these eight programs and projects is 506.9 million USD; furthermore the total IFAD loan is 134.4 million USD. As we understood from the number, the loans of the IFAD face more than 25 percentage of the total cost of the projects. Also there are 1.350.200 households directly beneficiated from the loans. Five of the eight projects are completed, and the rest three of the eight projects are ongoing projects.

The governments, when determine the agricultural supporting policies, they must consider the suggestions and enforcements of the international organizations that connected with them. When Turkey determines their policies regarding to the agriculture, Turkey must consider the policies of the some of the international organization, because of depending on these organizations, these organizations are World Bank, IMF, World Trade Organization, and EU.

Furthermore there are still national organizations which try to improve the agricultural industry of Turkey. The major political organizations in the agricultural industries are the Ministry of Agriculture and Rural Affairs (MARA), State Planning Organization (SPO), Under secretariat for Foreign Trade, Under secretariat of Treasury, and

Committee on Restructuring and Support in Agriculture. Also there are economical actors of the agricultural enterprises. These are banking institutions. The main banking institution is Ziraat Bank.

EU accession means that Turkey would have to adopt the policy of EU communities, which is called Common Agricultural Policy, and Turkey would receive agricultural subsidies from the budget of EU.

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