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## The Role of Agriculture in Turkish Economy at the Beginning of the European Union Accession Negotiations

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**Abstract:** In this study, Turkish economy and importance of agriculture in the economy on the way of accession negotiations to the European Union (EU) are discussed. Compliance with EU norms based on macroeconomic indicators is evaluated. Turkish economy exhibits the characteristics of a developing economy based on per capita income, economic growth, employment, income distribution, foreign trade volume and economic structure. Long-term economic growth rate of Turkey is quite low and it is negatively affected by economic crises. Income distribution among the households and the regions (both of the geographical and rural-urban regions) is imbalanced. Income per capita is about  $\frac{1}{4}$  of an average developed country and the economy is still characterized by a high degree of dualism in the economic sectors, regions as well as social segments. Economy suffers from trade deficit and the level of agricultural import has almost reached to agricultural export's level in 2004. From the point of view of all socio-economic indicators, the contribution of agricultural production to domestic economy is essential in terms of employment, contributing to national income and export earnings. The enterprise size is relatively small, duality in socio-economic structure is common, population is high, productivity level is low, costs are high and competition power of some sub-sectors is low in Turkish agricultural sector. Small family farms are the main unit of crops and livestock production and household members provide most of the labor requirements of the farms. Turkey launched a radical change in agricultural policy instead of unsustainable and costly system of support policies including input subsidies and support prices and issued a policy paper for 2006-2010 in line with the Common Agricultural Policy of the EU. Reevaluation of the agricultural policies is needed in order to minimize the regional development differences and to control the migration from rural areas to cities.

**Key words:** Agriculture, economic development, Turkey, EU

### INTRODUCTION

Parallel to the global and regional developments in periods, significant changes have occurred in economic policies adopted and implemented in Turkey over the years. Economic progress can be evaluated in four different periods via to political developments in Turkey. They are; (i) 1923-1949 Period, (ii) 1950-1960 Period, (iii) 1961-1980 Period and (iv) Post-1980 Period (Demirci, 2004). Turkey had experienced a political transformation with the foundation of Republic in 1923. Generally, liberal economic policies are followed and the priority was given to private sector until 1930s (1923-1930). National economy was negatively affected from the global economic crises of 1929-1931 period. Thus, centrally planned economic model was emphasized among the economic policies. Instead of following a strictly state controlled economic policy, public enterprise was put forward in the area where private sector was infant so that mixed economic model were emphasized during 1931-1949 period. The effect of industrialization and the

development initiations were realized with policies implemented in this period. Liberal policies were again standing in the forefront with the multi-party political period started in 1950s. Turkey had its first foreign aid in 1948 with Marshal Plan and had its first acquaintance with International Monetary Fund (IMF) by 1958 Moratorium. The primarily agrarian economy of the 1920s, 1930s and 1940s has been substantially transformed over the past few decades in the direction of industrialization (Öniş and Bakır, 2005). Five year development plan period started in 1963 with the acceptance of 1963 Constitution and foundation of State Planning Organization (SPO, 2000). Development had been suspended because of regional integration tendencies, political instability experienced in 1950s and 1960s and global economic developments (such as oil crises) experienced in 1970s. In these circumstances, the desired success could not achieved by implementing socio-economic policies.

After economic stability measures put into force in January 24, 1980, extrovert industrialization and liberalization policies were started to be implemented. The

objectives of these measures were to speed up the transaction of the national economy to more developed levels. With a program of structural change and liberalization, export revenues increased and these revenues did speed up the industrialization of the economy. Consequently, the Turkish economy has become an exporter of manufactured goods and economic liberalization and export oriented industrialization policies have been sustained by 1980s instead of continuing previous import-substituting policy. High inflation level and the devaluation of the Turkish Lira (TL) resulted into difficult economic conditions for the year 1994 and stabilization and structural adjustment package on April 5, 1994 was put into practices. In 1999 and 2000s, a series of standby agreements were made with IMF and the objectives of these programs focused on inflation targeting and macro economic stabilization. The economic crisis of November 2000 and February 2001 were called major withdrawal for the Turkish economy and these collapses of output caused a dramatic increase in unemployment in service and industry sectors particularly. In fact, the governments have adopted similar policies and utilized similar political and economic instruments since 1980s. The similarities were observed in basic economic tools such as convertibility of TL, standby agreements and stabilization programs with IMF, export incentive programs, privatization of state-owned enterprises, economic liberalization, agricultural supports and incentives. While the agriculture was not addressed in IMF-Turkey relations that are started in 1950s; within the scope of structural regulations, mostly restructuring of agriculture, producer organizations, agricultural policies and privatization of state-owned enterprises dealing with agriculture were emphasized in the agreements implemented in 1999-2005 period (Tanrıvermiş, 2002).

Economic and agricultural policies proposed in Turkey since 1980s. Their impact has been discussed among the researchers, policymakers, governmental and non-governmental institutions. According to some researchers and organizations, after 1980, Turkish economy carried out a great leap and with the advantages brought by liberalization and it almost passed over a new era. On the other hand, according to some authors, due to economic policies implemented after 1980, Turkish economy derailed from its directions and unrecoverable damages were caused to economic structure. To what extent, are these totally conflicting ideas acceptable? During the last 25 years, significant positive progress together with some negative ones has been experienced in national economy. In fact, an economy consists of several components strictly tied to each other. In this study, Turkish economy, categorized as a developing

economy, was evaluated as a whole and the role of agriculture in national economy was evaluated from the view point of macro economic indicators. Whole national economy and the basic characteristics of agricultural sector were discussed and some proposals are also discussed in the way of accession to the EU. The EU's Helsinki Summit of December 1999 whereby Turkey has been given a formal candidate country status and then European heads of the governments decided to start EU accession negotiations with Turkey in October 2005. However, the majority of the researchers expected that the accession negotiations have a long period to end and the most of the policymakers and observers believe that Turkey will not become before 2014 (Eder, 2003; Oskam *et al.*, 2004; Grethe, 2005; Öniş and Bakır, 2005). After the time Turkey consulted to the EU for full membership, there have been significant political, economic and social changes in Turkey. In this context, one of the main challenges will be the adaptation to the legal requirements of the EU in Turkish agriculture sector and in rural development. In this process, researches related to the potentials and current status of Turkish economy and the role of agriculture in nationwide economy will be valuable for policymakers and other stakeholders.

## MATERIALS AND METHODS

This paper is based on a literature review. Depending on the macro economic data for the last 50 years, changes in national economy are evaluated in sectoral and national scale in a whole-part relation. State of national economy and importance of agriculture in the economy were discussed based on economic indicators such as national income, income distribution, foreign trade level, employment rate, demographic structure of economy and inter-sectoral relations. A general assessment about developments of economy is presented, changes on basic indicators are discussed and some provisions for future expectations are discussed. Also, in this study, economic development and change are explained with ratio analysis and trend evaluation, but detailed economical model estimation was not carried out. All data refer to Gross National Product (GNP) and income per capita in current prices, converted into US dollar at current exchange rates.

## RESULTS AND DISCUSSION

**Development of gross national product (GNP) and income distribution:** The level of the economic development is one of the important factors in the integration process. Development can be regarded as a improvement process

Table 1: GNP and development of growth rate in Turkey (1950-2005)

Years	GNP (Million \$)	GNP per capita (\$)	Sectoral distribution of GNP (%)			Growth rate (%)	Growth rate (%)		
			Agriculture	Industry	Services		Agriculture	Industry	Services
1950	5,047	166	41.7	14.6	43.7	9.4	10.9	9.3	8.0
1960	7,554	188	37.9	17.2	44.9	3.4	2.3	0.4	5.4
1970	18,326	519	37.3	17.2	45.5	4.4	2.8	1.3	4.3
1980	69,749	1,570	26.1	19.3	54.6	-2.8	1.1	-3.3	-3.7
1990	152,393	2,712	17.5	25.5	57.0	9.4	6.8	8.6	10.3
1994	131,137	2,159	15.5	26.4	58.1	-6.1	-0.7	-5.7	-6.6
1995	171,979	2,784	15.7	26.3	58.0	8.0	2.0	12.1	6.3
1996	184,724	2,936	16.9	25.2	57.9	7.1	4.4	7.1	7.6
1997	194,360	3,032	14.5	25.3	60.2	8.3	-2.3	10.4	8.6
1998	205,978	3,159	17.5	22.9	59.6	3.9	8.4	2.0	2.4
1999	187,664	2,827	15.3	23.2	61.5	-6.1	-5.0	-5.0	-4.5
2000	201,463	2,987	14.1	23.3	62.6	6.3	3.9	6.0	8.9
2001	144,607	2,110	12.1	25.7	62.2	-9.5	-6.5	-7.5	-7.7
2002	182,929	2,634	11.6	25.2	63.2	7.9	6.9	9.4	7.5
2003	238,409	3,390	11.7	24.7	63.6	5.9	-2.5	7.8	6.7
2004	301,636	4,172	11.2	24.9	63.9	9.9	2.0	9.4	10.2
2005	357,700	4,964	10.2	25.4	64.3	5.0	1.0	5.0	5.7

Source: Adopted from SPO (2005), SPO (2006) and Turkish Treasury (2006)

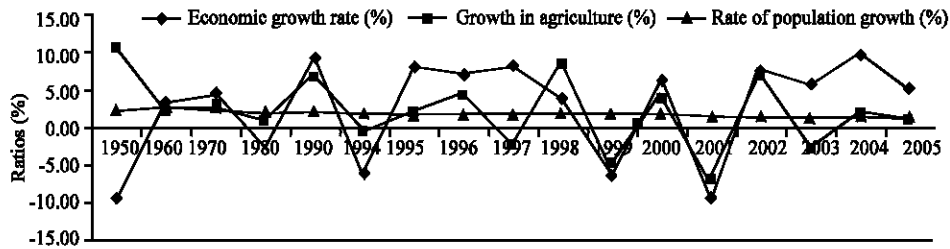


Fig. 1: Economic growth, growth in agriculture and population growth rates in Turkey

in the welfare of economy. It is commonly measured by GNP per capita. An unstable development trend was observed in GNP after 1980 and this can be explained by crises experienced in the economy. While the GNP in 1950 was 5 billion \$, it was 70 billion \$ in 1980, 201 billion \$ in 2000 and 358 billion \$ in the year 2005. While the increase in GNP in 1950-1980 period was 14 times of 1950, it was 5.1 times of 1980 in the 1980-2005 period. However, significant decreases occurred in GNP due to social and political problems and/or economical crises in 1960, 1970, 1980, 1984, 1994, 1999 and 2001 and an increasing trend in monetary value of GNP was observed in other years (Table 1 and Fig. 1).

A decrease at 2.8-9.5% levels in GNP was observed in 1980, 1994, 1999 and 2001 periods and this indicates the production capacity loss and impoverishment due to problems arisen in the economy. A trend in which fast growing rates are generally followed by an economic decline is observed. Economy achieved a high growth rate (8%) in 1993, but faced a decline in 1994 with April 5, 1994 decisions. The growth rate of 8% achieved in 1995 was not a sustainable growth. Weak or strong relations between economic growth and production are in direct relationship with sustainability of the growth. Generally,

high growth rate is not permanent or continuous if it is largely caused by growing trade sector. Under these conditions, as it was in the years 1992, 1993, 1995, 1996, 1997, 2000 and 2004, high growth rates in economy was not permanent and production dominant (Table 1). Important differences occur between sectoral growth rates and overall economic growth rates. Growth in agriculture was less than industrial and service sectors, a gap always existed between targeted growth rates and the realized ones. With the impacts of liberalization of foreign trade and extroverted economic growth after 1980, growth rate in agriculture were left behind the industrial and service sectors. On the other hand, impacts of crises in agricultural growth have yielded different results than other sectors (Fig. 1).

In development stage, the share of agriculture in GNP decreases and the share of industrial and service sectors increase. While the share of agriculture in GNP was 43% in 1923-1924 period, this rate was 44% in 1925-1929 period. Since industrial sector was put forward in 1930s, the share of agriculture in GNP went down to 40% (Karluk, 1995; Kıralkaya and Akder, 2000; Cinemre, 1999). From the years of the World War II, the Turkish economy has been transformed by the steady growth of industry and

**Table 2: Income distribution in urban and rural areas of Turkey**

Percentages of households	Turkey			Urban areas			Rural areas		
	1994	2002	2003	1994	2002	2003	1994	2002	2003
1st 20%	4.9	5.3	6.0	4.8	5.5	6.1	5.6	5.2	6.4
2nd 20%	8.6	9.8	10.3	8.2	9.7	10.3	10.1	10.3	11.0
3rd 20%	12.6	14.0	14.5	11.9	13.9	14.5	14.8	14.7	15.0
4th 20%	19.0	20.8	20.9	17.9	20.5	20.8	21.8	21.7	21.2
5th 20%	54.9	50.1	48.3	57.2	50.4	48.3	47.7	48.0	46.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gini	0.49	0.44	0.42	0.51	0.44	0.42	0.41	0.42	0.39
5th/1st	11.2	9.5	8.1	11.9	9.2	7.9	8.5	9.2	7.2
1st+2nd	13.5	15.1	16.3	13.0	15.2	16.4	15.7	15.5	17.1

Source: Adopted from SIS (2005) and Yükseler (2004)

services and the consequent decline in the share of agriculture in GNP. The share of agriculture in GNP was between 26.1 and 37.3% in 1950-1980 periods and agriculture has become the key sector of economy. This ratio was rapidly decreased after 1980s and it was 17.5% in 1990, 14.1% in the year 2000 and 10.2% in the year 2005. The share of industry in GNP was below 20% before 1980 and varied between 23 and 26% after 1980. Since the development-especially expected from industrial sector-was not sufficient, the share of service sectors in GNP varied between 55 and 64% after 1980. The share of agriculture in economy is still almost two times higher than developed countries.

Agriculture is Turkey's largest employer and a major contributor to the GNP, exports and industrial growth. However, as the country is developed, importance of agriculture has declined relative to the rapidly growing industry and services sectors. Although the share of agriculture in the Turkish economy has tended to fall over a period of several decades due to the increase in industrial and services sectors, it still accounts for a relatively larger share of total output and employment than in many other countries. Although the share of agriculture in GNP decreased from 41.7 to 10.2% during the last 55 years, industrial sector were not able to fill up the place of this decrease. In this period, the share of industry in national income increased from 17 to 26%. The gap between these rates was filled up by service sector. Development in service sector is not a surprise since it requires much lower initial capital and technology utilization than industrial sector. Excessive development of the service sector with limited value-added creation capacity can not provide the desired acceleration of the economy. However, since the employment is a vital issue in economy, services can provide contributions in solving some economic problems by supplying seasonal and temporal employment opportunities (Önder, 2003).

Turkey is lagging far behind advanced nations because of the poverty and low standards of living. Income per capita is increasing rapidly and average income level usually exhibits similarities with developing countries. While the income per capita was 166.4 \$ in 1950,

it was 519 \$ in 1970, 1,570 \$ in 1980, 2,712 \$ in 1990, 2,987 \$ in the year 2000 and 4,964 \$ in the year 2005 (Table 1). It was seen that income per capita has not realized a serious movement during the last 20-25 years period and exhibited an absolute decline in the years of crises. Regression in exchange rates after the year 2002 and parallel to over valuation of TL, a significant development is observed in income level per capita. The important point here is to provide mid and long-term sustainability in the increase of national income per capita (Fig. 1). On the other hand, per capita Gross Domestic Product (GDP) in purchasing power parity in Turkey has reached to 8,141 \$ (Turkish Treasury, 2006), whereas it is 22,600 Euro in EU-25 and 24,400 Euro in EU-15 (Commission of the European Communities, 2005). The average income of Turkey 3.4-3.7 times less than the EU average and it is the same with Baltic countries and Poland average. It is seen that income distributions among households, the geographical regions and/or rural-urban areas are imbalanced and income per capita is about ¼ of developed countries.

While the fifth 20% percentile income group was gaining 11.2 times higher than the first 20% percentile in 1994, this constant went down to 9.5 times in the year 2002 and 8.1 times in the year 2003 (Table 2). Although inequity exists in income distribution in Turkey, significant developments were achieved during the last 10 years. Gini coefficient, which is an indicator of inequities in income distribution, was 0.49 in 1994; it has gone down to 0.44 in the year 2002 and to 0.42 in the year 2003. Since the Gini coefficient in developed economies is between 0.25 and 0.30, it can be said that income distribution in Turkey is quite corrupted. Improvement of income distribution in urban areas was clearer and the improvements in income distribution of rural parts were more limited. The results of 2002 and 2003 Surveys indicate that income distribution was corrupted against the top income group and a nation-wide decrease was observed in rural and urban household real incomes (Yükseler, 2004).

**Sectoral distribution of population and labor and unemployment:** Ratio of rural population in total

Table 3: Population, growth rate and sectoral distribution of civil employment

Years	Total population	Rural population (%)	Population growth rate (%)	Civil employment (1000 inhabitants)	Employment (%) agriculture (1000 inhabitants)	Sectoral distribution of civil employment (%)		
						Agriculture	Industry	Service
1927	13,648,270	75.8	-	5,371	4,850	90.3	3.4	6.3
1935	16,158,018	76.5	21.10	6,372	5,605	88.0	4.0	8.0
1940	17,820,950	75.6	19.59	7,745	6,699	86.5	5.6	7.9
1945	18,790,174	75.1	10.59	9,363	7,939	84.8	7.2	8.0
1950	20,947,188	75.0	21.73	11,945	8,940	74.8	8.3	16.9
1955	24,064,763	71.2	27.75	13,768	8,835	67.2	10.6	22.2
1960	27,754,820	68.1	28.53	16,523	8,960	54.2	13.0	32.8
1965	31,391,421	65.6	24.63	17,547	8,837	50.4	14.5	35.1
1970	35,605,176	71.3	25.19	17,988	8,444	46.9	15.9	37.2
1975	40,347,719	67.1	25.01	20,009	8,813	44.0	16.5	39.5
1980	44,736,957	64.1	20.65	20,587	9,080	44.1	16.0	39.9
1985	50,664,458	54.1	24.88	21,197	9,259	43.7	16.5	39.9
1990	56,473,035	48.7	21.71	21,205	8,837	41.7	17.5	40.8
2000	67,420,000	42.7	14.70	21,780	9,039	41.5	17.1	41.4
2001	68,407,000	42.0	14.40	22,048	8,856	40.2	17.2	42.7
2002	69,388,000	41.2	14.10	21,580	7,769	36.0	17.7	46.3
2003	70,363,000	40.4	13.80	21,524	8,089	37.6	17.5	44.9
2004	71,332,000	39.7	13.50	21,354	7,458	34.9	18.5	46.6
2005	72,065,000	39.7	13.50	22,046	6,493	29.5	19.4	45.8

Source: Adopted from SIS (2004), SPO (2005), SPO (2006) and Turkish Treasury (2006)

population was 76% in the 1920s and this ratio remained almost at the same level until 1960s. Since then, even this ratio went down to 34%, while the rural population in 1927 was 10.3 million people; it has reached to 22.2 million people and maintained its absolute increase trend. High population growth has significant economic and social results. While this rate was 2.0% in 1950-1990 periods, it is around 1.35% today (Table 3). Birth and death rates are at quite high and average life and life expectancy levels are at quite low. Since the population dependency rate is so high, budget deficits of social security institutions are increasing and increasing transfers are made from treasury to these institutions. In 1935, 829 people corresponds for actively working 1000 people, 751 people in 1950 and 527 people in the year 2004. About 76.8% of total population was taken under social security.

Compared to the developing countries, indicators like infant mortality, life expectancy and school enrollment rates are the lowest in Turkey over. In the year 2004, mature birth rate was 1.92 %, mature mortality rate was 0.64%, infant mortality rate was 2.69 and life expectancy at birth was 70.7 years (SPO, 2005). Over the last three decades, Turkey's population has been migrating not only to urban areas but also to other countries. In 1950, the rural population represented 75% of the total; four decades later, it has dropped to 48.7%. In the 1980s, urbanization grew at an annual rate of 6%. Together with the industrialization, workforce in agriculture should be transferred to other sectors. It is expected with the development that share of agriculture in civil employment should decrease and the share of non-agricultural sectors should increase. During the foundation years, the share

of agriculture in civil employment was between 85% and 90%. The share of agriculture in total employment decreased from 85 to 47% in 1950-1980 periods and to 30% in 1980-2005 periods. The share of agriculture in civil employment in developed countries varies between 2 and 5% and varies between 20 and 70% in developing countries (Tufan, 1997; FAO, 2002). Turkey exhibits the characteristics of a developing country based on sectoral distribution of employment and demographic structure. The share of employment in the agriculture sector in total civilian working population in EU-25 varies between 1.2% (UK) and 18.7% (Latvia). The EU is demanding that this statistic be reduced to 5.2%, that is, to the EU average (Commission of the European Communities, 2005). This is possible if Turkey develops an agro-industry or if the service sector is expanded.

Although the share of agriculture in GNP moved backwards during the last 30 years, still 40% of population lives in rural areas of the country and 30% of active population deals with agriculture. These numbers indicate that socio-economic structure of the society has not changed yet and productivity in agriculture is at very low levels. That means the share of 34.0% of civil employment in GNP is 10%. Family owned farms is the basic unit of crop and livestock production and household members provide the most of labor requirements of the farms. Although significant part of economically active population looks like to be employed in agriculture, about 40% of current labor in farms is left idle (Tanrıvermiş 2002). Despite the structural change in the economy, agriculture is still characterized by hidden unemployment, which is a challenge in the development process. The

Table 4: Total export and import development (1950-2005)

Years	Total export (Million \$)	Sectoral distribution of export (%)			Total import (Million \$)	Sectoral distribution of import (%)				Export coverage ratio (%)
		Agriculture	Mining	Industry		Agriculture	Industry	Mining	Others	
1950	263	88.0	2.5	9.4	286	0.1	94.6	4.6	-	91.9
1960	321	92.9	5.6	1.4	468	10.5	88.0	1.5	-	68.6
1970	589	76.0	6.1	17.9	948	3.1	85.7	11.2	-	62.1
1980	2,910	74.9	6.6	18.4	7,909	7.4	80.4	12.2	-	36.8
1985	7,958	57.4	6.6	36.0	11,343	3.4	58.6	38.0	-	70.2
1990	12,959	17.4	2.5	79.9	22,302	5.9	77.4	16.7	-	58.1
1994	18,109	9.9	1.8	88.2	23,270	12.6	68.4	18.8	0.3	77.8
1995	21,636	9.3	1.6	88.4	35,709	11.2	69.9	18.5	0.4	60.6
1996	23,225	9.0	1.5	88.8	43,627	10.1	72.1	17.3	0.5	53.2
1997	26,261	8.7	1.3	89.2	48,559	9.4	75.7	14.3	0.6	54.1
1998	26,973	7.7	1.4	90.1	45,921	8.3	73.6	17.5	0.6	58.7
1999	26,588	6.0	1.4	91.9	40,671	3.9	81.1	13.0	2.0	65.3
2000	27,775	6.0	1.4	91.9	54,503	3.9	81.1	13.0	2.0	50.9
2001	31,334	6.3	1.1	92.0	40,410	3.4	78.9	15.9	1.8	77.5
2002	36,059	4.9	1.1	93.5	50,146	3.3	80.2	13.9	2.6	71.9
2003	47,253	4.5	1.0	93.9	66,742	3.7	80.3	13.0	3.0	70.8
2004	63,121	4.0	1.0	94.3	97,549	2.8	82.5	11.2	3.5	67.1
2005	73,414	4.7	1.1	94.2	116,553	2.4	80.7	14.0	2.9	63.0

Source: Adopted from SPO (2005), SPO (2006) and Turkish Treasury (2006)

decreases in income and welfare levels due to implemented agricultural policies in mountains and high land regions have brought production limitations on some basic products such as tobacco, sugar beat, hazelnut and tea plantations which caused a serious migration from rural areas to urban parallel to decreasing state supports. Rapid population growth, environmental factors, low farm income and human expectations are among the main causes of this migration. Migration of young and dynamic labor force from rural areas to cities increases unemployment resulting economic loses. Also, migration is increasing problems in the cities.

Unemployment is closely linked with poverty and represents lost potential output and it is a burden of public finance in terms of transfer payments. A significant unemployment problem has arisen due to insufficient development of production capacity in economy and low productivity rates. Unemployment ratio was around 8% in 1980s, this ratio went down to 7% in the middle of 1990s and even to 6% at the end of 1990s. However, this ratio again increased to 8.5% due to the impacts of deep economic crisis experienced in the year 2000. The causes of unemployment are complex and include growth of population, macroeconomic problems and insufficient rural development and inappropriate skill development strategies. Low incomes and rapid population growth rate also affect human capital development negatively. Rural unemployment and poverty are the main issues that need to be solved in the new era.

**Development of foreign trade and decreasing role of agriculture in foreign trade:** Rapid growth occurred in 1980s, led by manufacturing but also by agro-industry and a rapid growth of both domestic and foreign

investment. Reform realized in the foreign exchange system left exporters largely free of restrictions in international transactions. Trade policies, which included tax rebates, export credits and credit subsidies, also enhanced export performance of the sector. The increase in export values was 11.1 times in 1950-1980 periods and 21.7 times in 1980-2005 periods. During the same periods, import values increased by 27.7 times and 11.9 times, respectively. After 1980, the increase in total import was higher than the increase in total export. Export/import ratio is the indicator of foreign trade deficit and it is usually below 1. Export/import ratio followed a fluctuating trend in 1950-1980 period and it was 91.9% in 1950, 62.1% in 1970, 36.8% in 1980, 58.1% in 1990, 50.9% in the year 2000 and 63.0% in the year 2005. Domestic markets were protected with high custom taxes in 1950-1980 periods and the export coverage exhibits significant changes over the year parallel to liberalization trends in economy. Export coverage varies with value gain of TL against foreign currencies in domestic market and devaluation applications. After the crisis experienced in the year 2000, initially an important increase was seen in this ratio and the ratio again followed a decreasing trend parallel to excessive valuation of TL in 2004 (Table 4).

Although foreign trade always has deficit, other foreign revenues such as especially the worker's remittances and tourism partially prevent excessive disruption in balance of payments (Table 4). While agriculture was dominant in Turkish export revenues until 1980s, together with the gradual removable of customs and funds related to agricultural products especially after 1984, a drastic reduction in agricultural products in total export and an important increase in import have arisen. The share of agriculture in export was 92.9% in 1950,

**Table 5: Development of Investment/Saving ratios in Turkey**

Years	Public investment/GNP	Private investment/GNP	Total investment/GNP	Savings/GNP	Deficit/GNP
1963	5.1	11.3	16.4	15.1	-1.3
1970	6.9	14.8	21.8	22.1	0.3
1980	8.7	13.1	21.8	16.0	-5.8
1985	9.2	11.0	20.2	18.8	-1.4
1990	7.0	15.7	22.6	22.0	-0.6
1995	4.2	19.8	24.0	22.1	-1.9
1997	6.1	20.2	26.3	21.4	-4.9
1999	6.6	15.5	22.1	21.2	-0.9
2000	6.8	15.9	22.8	18.2	-4.6
2001	6.4	12.6	19.0	17.5	-1.5
2002	6.3	11.0	17.3	19.2	1.9
2003	4.9	11.2	16.1	19.3	3.2
2004	4.5	13.9	18.4	20.2	1.8

Source: Adopted from SPO (2005), SPO (2006) and Turkish Treasury (2006)

74.9% in 1970, 57.4% in 1980, 17.4% in 1990, 9.9% in 1995, 6.0% in the year 2000 and 4.7% in the year 2005. While the share of industry in export was between 1.4 and 36% in 1950-1980 period, following the industrialization and extrovert economic growth strategies implemented, this ratio was 75.3% in 1985, 79.9% in 1990, 91.9% in the year 2000 and 94.2% in the year 2005.

About 36% of Turkish export in 1980 was composed of industrial products and the remaining 64% was constituted by agricultural and mining sectors. Export structure of Turkey freed itself from dependence on agriculture and mining in 1990s and in the years 2000. Ratio of industrial products in total exports has increased up to 94%. Among the industrial export products, agriculture dependent industrial products (processed agricultural products) such as livestock, foods, beverages, tobacco, forest and textile constituted 20-50% of export products in 1980-2000 period and 20-30% in 2000-2005 periods (SPO, 2005). It is seen that ratio of agriculture dependent products or processed agricultural products in industrial export was quite high. While the export of fresh fruit and vegetable has decreased during the last 25 years, export of processed agricultural products which were placed in production industry export exhibited a rapidly increasing trend. It is important to point out the types of exported industrial products. Consumption goods constitute 50-60% of export. Among the consumption goods, textile and processed agricultural products have a special place.

Ratio of agricultural products in general export was 4.7% in the year 2005. When the agro-industry products and raw materials such as textile and leather with increasing trends are included, the export share contributed to country economy by agriculture will be around 50-60%. During the same period, ration of agricultural products in general import increased from 2.4 to 4.1%. Despite the overall trade deficit of Turkey, the agriculture trade balance has been significantly positive until 2000s. Agricultural product's foreign trade balance closed positively and Turkey is leaving along the way of being agricultural product importer country. However,

trade liberalization and rising demand in the region resulted in agricultural product exports rising to a value of \$ 2,541 billion and agricultural import \$ 2,630 in 2004 (excluding agro-industry). On the other hand, following the customs union agreement, export to EU increased by 3.7% and import from EU increased by 3.8% and EU-Turkey agricultural products trade balance is positive. The share of export of Turkey to the EU market was not changed significantly after put into practice of the custom union in 1996.

**Investment, saving and debt levels and their relations**

**with GNP:** Apart from insufficient investment capacity in Turkey, total domestic savings were not able to cover even this insufficient investment capacity. Ratio of total investments to GNP in 1963-2004 period varied between 16 and 26%. Ratio of private investments to GNP was usually higher than the ratio of public investments (Table 5). Since the year 2000, ratio of total investments to GNP is significantly reduced but under these conditions domestic savings has reached up to a level to feed up the investments. The main reason of decrease in total investment/GNP ratio in the years 2000 was the significant decrease in private investments/GNP ratio. During the crisis years, private sector has preferred short-term financial investments instead of long-term fixed capital investments and as a result, production capacity has decreased. Under these conditions, it will be hard to find employment for increasing population with an annual growth rate of 1.35% and to increase the share of industry in civil employment. Önder (2003) stated that contributions of investments to economy or their productivity levels based on their technological capacities were significantly insufficient. Also, the sectoral distribution of total fixed investment is not imbalanced and the share of agricultural investment in total has been decreasing within last five decades to 4.6% in 2004 from 12% in 1960s.

The foreign debt of Turkey maintains its rapidly increasing trend. While the total foreign debts were 1.9 billion \$ in 1970 and 16.2 billion \$ in 1980, they reached



Table 6: Foreign debt stock of Turkey (1980-2005)

Years	Total foreign debts (Million \$)	Foreign debt terms		Total foreign debt/GNP (%)
		Short term (%)	Medium and long term (%)	
1970	1,929	-	-	10.5
1980	16,227	15.44	84.56	23.3
1985	25,476	18.68	81.32	37.4
1990	49,030	19.37	80.63	32.2
1994	65,601	17.24	82.76	49.6
1995	73,278	21.26	78.74	43.1
1998	96,388	21.55	78.45	46.7
1999	102,987	22.26	77.74	55.6
2000	118,568	23.87	76.13	59.3
2001	113,658	14.43	85.57	78.0
2002	130,219	12.61	87.39	72.0
2003	145,367	15.83	84.17	60.8
2004	162,240	20.08	79.92	54.0
2005	170,116	22.49	77.51	47.6

Source: Adopted from SPO (2005), SPO (2006) and Turkish Treasury (2006)

up to 49.0 billion \$ in 1990, 118.6 billion \$ in the year 2000 and 170.1 billion \$ in the year 2005. Another negative characteristic about foreign debts is, its maturity date which is in short term time span. While the ratio of short-term debts to total foreign debts was 20% in 1980, this ratio was 21% in 1995, 24% in the year 2000 and it went down to below 22.5% in 2005. Return payments of current account deficits in Turkish economy is financed by foreign debts, then the foreign debts are rapidly increasing and their terms are getting shortened. It will be very difficult for an economy to finance foreign trade deficits with indebtedness to reach a stable development level (Table 6). Taking also the internal debts into consideration, ratio of total debts to GNP is 73% and the ratio of budget deficits to GNP is about 7.1%. The relationship between debt payments and structural adjustment policies including agriculture and agro-industries can be created a paradox with national priorities and objectives of the governments.

The most important factor bringing foreign currency was export after 1980 and the factor foreign currency taking was foreign debts. Turkey has become a country with increasing foreign dependency. Foreign debt stock constitutes a significant risk on sustainable economic development. Turkish economy has already reached the critical limit of foreign debt stock, exceeding 60% of national income, especially in the crises years and critical limit of dead weight debt, about 10% of national income (Önder, 2003). Under these conditions, a stand-by agreement was made with IMF in the year 2000 to cycle these debts. The basic objectives of this agreement were inflation control and debt management.

**Evaluation of Turkish economy based on EU economic criteria:** In Maastricht Agreement, put into effect in January 1st, 1993, stages of economic and monetary union, policies to be followed in this process and the

related institutional changes are all defined in detail. Within the framework of this regulation, before the access to the last stage of union, some convergence criteria were determined to eliminate the differences in economies of member states and enforcements were put into effect for non-compliance with these criteria. To be a member of the EU, it is necessary to achieve the stability of the institutions, guarantee democracy, the rule of law and human rights. Maastricht economic criterion is the requirement of the existence of a functioning market economy, the capacity to cope with the competitive pressure and the market forces within the EU. On 13 December 2002, the European Council futured a summit meeting in Copenhagen for EU enlargement, identified necessary legislative, economic and political preparation by the candidate country. The Copenhagen criteria were settled to the central and eastern European countries and the same criteria applied for Turkey. Eder (2003) stated that the changing nature of EU integration has inevitably affected the dynamics of enlargement and the associated Copenhagen economic criteria.

The economic reforms made in 2000s were created as Turkey came progressively close to the EU (Öniş and Bakır, 2005). Turkish economy meets the Maastricht criteria to a large extent. Ratio of foreign debts in GNP was reduced to below 60% in recent years. However, the ratio of total debts to GNP is 73% and this rate is more than the Maastricht threshold. The instability of wholesale prices and consumer prices indices have been decreased and inflation was reduced to single digit level (consumer price indices increased with an annual 8.21% in 2005 and producer price indices increased 7.66% as an annual in 2005) for the first time over a period of three decades (Turkish Treasury, 2006). But there is way to be taken about inflation rate. Although the ratio of consolidated budget deficit in GNP during the economic crises period increased up to 17%, this ratio went down to 7.1% in

2000-2004 period and it still moves above the EU norms. Annual interest rates of deposit and credit are about 3 times higher than EU averages. The imbalance between interest rates and inflation rates represents that there may be a macro economic instability and a high risk in national economy. The major economic challenges include failure to reduce the unemployment rate and the deficit of foreign trade balance due to the heavy import dependence and adopted the foreign exchange regimes.

**THE CHARACTERISTICS OF FARM STRUCTURE AND CHANGES IN AGRICULTURAL SUPPORT POLICY**

**Main characteristics of agriculture and farm structure:**

During the stage of development, while the relative importance of agriculture in national economy has been decreasing, structural relations between agriculture, industry and trade sectors of economy has been increasing and agriculture have become more dependent on the other sectors. In addition agricultural production is essential to guarantee food security and safety, employment of large population and utilization of productive resources required for rural development. The characteristics of agricultural sector have been maintaining during the republican era and the impacts of structural programs/policies in rural area have not measured by using farm accountancy data in Turkey. The large extent of informality is a major policy concern in rural Turkey.

The agricultural structure is restricted the farm income and farmers' welfare. The agricultural area of 39.2 million ha consists of arable land (24 million ha), the area used for permanent crops (2.5 million ha) and permanent meadows and pastures (12.7 million ha) (SIS, 2005). The ratio of farmland in total area is 34.4% in Turkey and 26.4% in the EU. The share of farmland in total area in Denmark, Italy and Spain is more than Turkey and EU average. The ratio of crop farming in total agricultural production value is

about 70-80% and livestock production is about 20-30% in last three decades (Tanrıvermiş and Demir, 2005). The share of livestock sector in total agricultural production value has reached to 50% in advanced countries for instance 47.4% in the EU-15 and 45.4% in the EU-25 (Commission of the European Communities, 2005).

Turkey is the largest producer and exporter of farm products in the Near East and North African region. Specialization trends on certain of activity in farms have changed parallel to developments in farm technologies and policies implemented after 1950s. While the ratio of farms dealing with only crop farming were 40% in 1950, this ratio was 30.2% in 2001. The ratio of farms dealing with only livestock was 2.1% in 1950; this ratio was 2.4% in 2001. In 1950-2001 period, the ratio of farms dealing with both crop and livestock production increased from 57.9% to 67.4% and both ratio of them in total number of farms and number of them have increased. Although Turkey has surplus in production of some crops such as hazelnut, tobacco, tea, sugar beet, poppy; self sufficiency ratios in livestock products and olive seeds are continuously decreasing due to the impacts of foreign trade policies adopted after 1980s and limited production volume (Bülbül *et al.*, 2001; Eraktan, 2001).

During the 1950-2004 period a number of changes occurred in agricultural structure. Number of farms is rapidly increasing due to impacts of high population and legal regulations. While the number of farms was 2.53 million in 1950, this numbers increased by 21.7% and reached up to 3.08 million in the year 2001. Between the years 1950-2001, the cultivated land area decreased from 19.5 million hectare to 18.4 million hectare with a 5, 24% decrease and the enterprise size decreased from 7.7 to 6.1 ha. Most of the farms do not bear the quality of being an economic size enterprise. About 67% of them have a land source of 0.1-5 ha, 18% has 5.1-10 ha, 9.75% of them have 10.1-20 ha, 4.4% has 20.1-50 ha and 0.9% has more than 50.1 ha. The land area available for cultivation has already reached up to its marginal limits

Table 7: Changes in numbers of farms and cultivated areas

Enterprise Size (Ha)	Census years (%)					
	1950		1980		2001	
	No. of Farms	Cultivated area	Number of farms	Cultivated area	No. of Farms	Cultivated area
1-2	30.6	4.3	30.2	4.1	33.36	5.32
2.1-5	31.5	14.3	31.9	15.9	31.46	16.02
5.1-10	21.9	20.7	20.2	21.3	18.54	20.68
10.1-20	10.3	19.3	11.6	23.9	10.83	23.81
20.1-50	4.2	16.6	5.3	22.8	0.73	11.35
50.1- +	1.5	24.8	0.8	12.0	0.73	11.35
Total Area (1000 Ha)	-	19,452.0	-	22,784.0	-	18,432.9
Number of Farm (1000 unit)	2,527.0	-	3,850.9	-	3,075.5	-

Source: Adopted from SIS (2004)

and due to the effects of inheritance law farmland is continuously fragmented, number of enterprise is increasing and size of farms is decreasing. There is a significant imbalance between the number of farms and cultivated land area. While the ratio of enterprises with less than 10 ha farmland was 84% and the ration of cultivated area by them was 39.3% in 1950, these ratios were 83.36% and 42.02%, respectively in the year 2001 (Table 7). On the other hand, while the ratio of farms with less than 50 ha land resources was 98.5% and the ration of cultivated area by them was 75.2% in 1950, these ratios were 99.27 and 88.65%, respectively in the year 2001. The farms with more than 50.1 ha constituted 1.5% of the total farms and 24.8% of total cultivated areas in 1950. These ratios were 0.73% and 11.35% respectively in the year 2001.

Land distribution of farms is imbalanced, lands are fragmented in several pieces and there are average 5 plots in each enterprise. Farms are continuously fragmented and enterprise sizes are decreasing and the number of family farms is increasing. The funds created and used by the small enterprises are very limited. The main characteristics of small enterprises are; production for family needs, limited saving possibility and even necessity to get into debts for old investments. The enterprise with 0.1-3 ha farmland are not able to create sufficient incomes to maintain their livelihood, the ones with 3.1-20 ha farmland are able to create income only to maintain their livelihood and the ones with more than 20.1 ha land resources are able to create savings. When the results of 1991 and 2001 agricultural census are evaluated, it has seen that 94.7% of farms were not able to create savings in 1991 and 94.2% in the year 2001. It should be pointed out that while the ratio of farms in the enterprises with enough land resources to create saving is about 4.8%, they cultivate almost 65.8% of total land resources. With the agricultural policies implemented in the republican period, the formation of commercial farms was not achieved. Saving and investment opportunities of small farms are very limited, costs are generally high and problems are common in market relations (Tanrıvermiş and Demir, 2005).

Although the land and labor availability in farms is sufficient, total assets and their distribution are not unbalanced in Turkey. Depending of regions and types of enterprises, share of lands resources in the total asset values of the farms varies between 61.1 and 98.0%. The average amount and the distribution of total assets indicate that the operating capital and technology level of farms is insufficient and these characteristics varied based on regions and types of farms. The insufficiency of working capital has compensated through the credit

sources from the both organized and unorganized credit institutions. When the results of socio-economical studies carried out in Turkey since 1950s are evaluated, it can be seen that investment toward increasing the productivity of fixed assets in agriculture were not sufficient and partial increases provided in farm income levels. Capital formation in agriculture was low and deficiencies in capital components could not be eliminated by an effective crediting system. Other reasons for this imbalance are decreases in capital formation rates in agriculture due to macro-economic policies and especially chronically high inflation rates and the policies to allocate resources from agriculture to other sectors (Erkuş *et al.*, 1995; Inan, 1998; Tanrıvermiş and Demir, 2005).

Input utilization and agricultural technologies on farms have been increased towards 1960s and reached today's levels with a sharp rise in 1980s. The usage level of chemical inputs, irrigation water, improved seeds and animals, mechanization in Turkish agriculture have increased since 1950s based on green revolution and nowadays there has been observed a dual structure from the inputs usage level between regions and cultivations. For instance, chemical fertilizer usage in farms has been increased from 2.6 to 202.8 kg as physical total per ha during the period of 1950-2004. As nutrient equivalents, these figures have reached to 85 kg ha<sup>-1</sup> in 2004. The average chemical fertilizer use in Turkish agriculture is between 2 and 8 time less than the developed countries average. The pesticide usage amount as an efficient substance in Turkey is 650 g ha<sup>-1</sup> as an average in 2002. On the one hand, in western and southern parts of Turkey, it is observed that the farm chemicals usage amount is more than the national average; on the other hand the usage amount in middle, north and eastern parts of the country is less than the national average. It was seen that farmers are using farm chemicals unconsciously particularly in covered areas and fruits and vegetables farming areas in western and southern provinces (Tanrıvermiş, 2006). There has been a rapid mechanization and thus the number of tractors increased up to more than one million in 2005. In addition to this, other machinery and equipment have also increased in number and the technological progress causes new land to be brought under cultivation (SIS, 2004, 2005). Turkey is giving high priority to improving land and water resources and expanding irrigation to decrease weather-induced production variations. The total irrigated area is about 4.5 million hectares, about 19% of the total arable land (Bayaner, 2006). It is designated about two-thirds of total public agricultural investment for land and water resources improvements. Land degradation and resource conservation are of increasing concern in rural area. Also,

there is a need for land consolidation and enhancing the rural infrastructure and improvement of the linkages between agriculture and environmental policies which are probably the most important issues in 21st century.

The results of agricultural census carried out with fifty years, it was seen that dual structure in agriculture is sustainable and thus, the impacts of agricultural policies vary by regions and farms. Also, Turkish agro-industry brings together producers of varying status and size. They range from small individual units, large and small cooperatives, to multi-national organizations that run their own research and development. A long-standing goal of the Turkish Government and one of the main component of the five-year development plan is to provide an adequate and balanced diet for a growing population and, in particular, to increase per capita consumption of animal proteins. As economic development increases dietary diversity, the country's caloric intake is approaching EU levels. In fact, the share of livestock protein in daily dietary is less than the EU and advanced countries average.

**Changes in agricultural policies:** Turkey has a wide agricultural resource base with significant potential to expand output, particularly through increased crop yields. The agricultural price intervention roots go back to the early 1930s when the governments tried to mitigate the negative impacts of the great depression and the later the World War II (Eraktan, 2001). In the past, the government has intervened agricultural sector through price supports, input subsidies, import protection, marketing monopolies and export subsidies and taxes. To increase food self-sufficiency and rural development, stabilize farmers' incomes, provide adequate nutrition and affordable food and promote exports have been adopted among government objectives. Since implementing January 24, 1980 program, Turkey has developed a series of agricultural policy reforms designed to privatize markets, to reduce agricultural subsidies, to remove trade barriers and to integrate Turkey into the global economy. Turkey's structural adjustment program improved agricultural export competitiveness and increased output and trade and from 1980 to 2005 overall volume of agricultural production and import of agricultural products has been rise. Output and yields of the major crops increased steadily by combining of inputs and improving agricultural techniques whereas the number of livestock and the production volume have been affected negatively during the liberalization policies.

The government has implemented a variety of policy tools to achieve defined objectives above including intervention purchases, input subsidy and import control

and tariffs. During the republican era, agriculture has heavily supported by the measures of high support prices or support purchases, credit supports and input subsidy. Also, inputs including credit, research, extension and training services are funded by the state to stabilize and increase farm income. Some regional development projects are also developed and implemented to reduce regional social and economic disparities. The most critical issue in the agriculture sector was the inefficient and costly system of agricultural support policies. These policies caused a heavy burden on consumers and taxpayers and also called a source of the macroeconomic problems (Bayaner, 2006). These policies resulted with some macro economic and regional socio-economic impacts. First of all, the cultivated areas of tea and hazelnut plantations, tobacco and sugar beet have been increased and production surplus and stock problems are costly become for agricultural sector. Also, the excessive use of inputs such as fertilizer, irrigation water and pesticides in south and west regions of Turkey was observed and then change in land use has been affected by implementing agricultural support policies (Tanrıvermiş, 2003, 2006). On the other hand, the financial losses of state enterprises, agricultural cooperatives and agricultural bank which have functioned in payment of agricultural supports to farmers are the main collapse for state treasure. The enhancement of farm income and the productivity in agriculture is very limited by the implementation of these policy tools. Some radical changes in agricultural policies were observed in Turkey based on the IMF standby agreements, structural program supported by the World Bank and the EU's influences.

Agricultural liberalization included the elimination of input subsidies and support prices for various products and these were replacement with direct income supports (DIS) to farmers. Agricultural Reform Implementation Project (ARIP) of 2001-2005 period which financed by the World Bank, brought radical changes in agricultural support systems. While the ratio of credit, price and input supports in total support payments was 97.2% in 1995, this ratio decreased to 88.8% in 1999, 11.8% in the year 2003 and 18.5% in the year 2005. Since the year 2001, price, input and credit supports were removed and the ratio of DIS in total farm support payments has followed an increasing trend. The ratio of DIS in total support payments was 7.6% in the year 2001, 72.6% in the year 2003 and 45.6% in the year 2005. Price, input, compensation payments and credit support left their places to DIS, deficiency payments and livestock supports. Administered prices set and implemented by the State Economic Enterprises and agricultural sales cooperatives and their unions were abolished. Deficiency

Table 8: State support payments in agricultural sector of Turkey (Million US \$)

Kinds of supports	1995	1998	1999	2000	2001	2002	2003	2004	2005
Price supports	143.97	947.89	644.83	335.25	111.43	-	-	-	-
Input supports	246.14	548.76	264.83	176.45	76.20	-	211.33	227.77	505.67
Deficiency payments	43.10	31.50	25.62	19.25	9.83	117.64	179.23	198.24	640.66
Indemnities and									
Compensation payments	99.12	43.19	274.17	344.87	303.16	26.59	26.08	28.12	78.31
Credit supports	4,531.19	1,663.17	1,461.75	563.02	275.31	-	-	-	-
Livestock improvements	-	-	-	19.25	34.41	57.82	70.89	175.75	262.53
DIS	-	-	-	-	68.69	1,253.49	1,298.73	1,491.73	1,249.25
Others (research, extension etc.)	1.31	1.31	1.15	28.87	27.04	-	2.01	4.22	9.70
Total support	5,064.83	3,235.82	2,672.35	1,486.96	906.07	1,455.54	1,788.27	2,125.83	2,746.12
Support/GNP (%)	2.95	1.57	1.42	0.74	0.63	0.80	0.75	0.70	0.77

Source: Adopted from the Records of Ministry of Agriculture and Rural Affairs, State Treasury, Agricultural Bank of Turkey, (Unpublished), 2005, Ankara

payments are implemented for sunflower, soybean, cotton, kanola, maize, olive oil and tea leaves. Among the agricultural support expenses, research, training, extension and control had the smallest share (Table 8). Under these conditions, development of new agricultural technologies, high-yield seeds and animal races, reducing the foreign dependency of agriculture expected to be very limited.

With the implementations of ARIP of 2001-2005, agricultural support system (tools and organizations) was made largely complying with EU norms. While the 18.3% of total support was composed of transfers made from state budget, this ratio increased to 47.1% in the year 2001 and was above 70% since the year 2001. Within the scope of agricultural reform implemented in Turkey, it will be easier to compensate all of agricultural supports from state budget and to evaluate the load brought by these supports. On the other hand, the ratio of total support payments in agricultural production value is less than 10% (Bayaner *et al.*, 2001). While the ratio of total support payments to agriculture in GNP went down from 2.95% to 1.42% in 1995-1999 periods, this ratio was around 1% in 2000-2005 periods (Table 8). The share of support payments in GNP has decreased as a result of economic crises in the year 2000 and structural change policies of the economy. Gerthe (2005) and Öniş and Bakır (2006) point out that the period of lengthy accession negotiations with the EU is likely to force costly adjustments in terms of restructuring of agricultural sector and implementation of the EU regulations.

The strategic objectives, principles and priorities of agricultural policies to be implemented after the ARIP are set in the agricultural policy paper 2006-2010. The purpose of the paper is to readjust the agricultural policies in line with the development plans and strategies taking into account the EU integration. The measures of agricultural supports to be used until 2010 are DIS, compensatory payments (farmer transition), livestock supports (fodder crops, artificial insemination, breeder incentive, milk

premium, risk-free livestock region, beekeeping, fisheries), insurance premium support, rural development support and environmentally sound use of farmland. In addition to these supports, funds will be allocated to selective credit support and research and development aids (Bayaner, 2006). Due to the importance and multifunctional nature of agriculture, attention will be given to provide that the funds allocated for agricultural support. However, according to Agricultural Law Nr. 5488, 25.04.2006 dated, finance of agricultural program supports will be provide internal and external sources of budget and amount of these sources that will provide from budget can not be less than 1% of GNP (Article 21).

## CONCLUSIONS

Turkey is a rapidly growing and developing country in terms of its structural characteristics and largely complies with the EU economic criteria. High economic growth rates were achieved in many years, crises were experienced and growth was not generally sustainable. The main reason of this is the unhelpful relations between growth and production. Production structure of economy is still behind the levels of industrialized countries. National income per capita is quite low and agriculture still has a large share in GNP and the share of industrial sector is still not at desired levels. Significant inequities in income distribution were reduced especially in 1994-2003 period, a positive change was achieved in Gini coefficient, but still a picture far away from modern developed structure is observed. Amount of export increased after 1980s and the export structure changed toward the favor of industrial goods. Foreign debts have increased too much and shortening terms of them negatively impact the sustainability of economic development and structural change.

Turkey is a large country in terms of population and has a large agricultural sector measured by production value, contribution of agriculture to national economy and

source of employment in rural area. It was seen that the relation among agricultural, industrial and trade sectors of the economy is not powerful and an effectively operating vertical integration does not exist. Dual structure (traditional vs modern) is effective in agriculture and food industry and the structure would in fact be sustainable. Average farm size is about 6.1 ha and it is three times less than the EU average. Small family farms are under significant population pressure and these farms have disadvantages from proving farm inputs and marketing of products. Labor productivity in agriculture is very low and it has not achieved a growth with a capacity able to absorb the extra labor of industrial and service sectors. A significant part of agricultural labor is idle, this idle labor is not well-educated and it is hard to transfer it to other sectors. Agricultural technology (including land, labor, capital and technology) represents great disparities between geographical regions. Support policies were significantly changed especially after the year 2001 and the ratio of support payments to GNP was reduced to below 1%. It is clearly obvious that the restructuring of agriculture and the implementation of the EU regulation in agricultural sector are the most important problematic and costly area of the accession process from the viewpoint of the both sides. A few research results indicated that the impacts of the common agricultural policy may also differ both across regions and types of the farming (Çakmak, 2004; Grethe, 2005). It is however necessary to support the rural population with rural development aids and to improve their life standards with social supports and to stabilize continuous migration from rural to urban areas in short run. It is also essential to reevaluate the agricultural and rural policies on the way of the EU accession negotiation process. It will be stated that the main issue of the accession negotiations of Turkey to the EU is the differences between Turkey and the EU agriculture and rural structure. In fact, realization of a structural transformation in economy and development of agricultural structure should be seen as targets that can be realized in mid-term.

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