DIRECT INCOME PAYMENTS: TURKISH EXPERIENCE

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ABSTRACT

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In 2001, Turkey started an agricultural reform program which ended at the end of 2008. The major component of the reform program was to make the transfers decoupled from production. In this scope, direct income support (DIS) was the tool that has been used to reduce the price distortions. DIS received noteworthy criticisms since the first signs of it and now, even after it is over, the prejudice against DIS prevails in Turkey. On the other hand, Turkey's commitments to WTO's Agreement on Agriculture insist on replacing price supports with non-distortionary policy tools and its candidacy to the membership of the EU requires harmonizing its agricultural policy to the CAP which is shifting towards direct income payments. Criticisms against DIS in Turkey are determined in this thesis, grouped and analyzed by investigating official data to see whether the fears came true. There were both rational and irrational criticisms and consequently, they could not be justified and agricultural issues were not worse off in DIS years. Turkey will eventually have to implement direct income payments again due to both domestic and international forces. Therefore, it is essentially important to understand how it was implemented previously and which aspects of it were exposed to criticisms, and design future policies accordingly.

Keywords: Direct Income Supports (DIS), Reform in Turkish Agriculture

ÖZ

DOĞRUDAN GELİR DESTEĞİ: TÜRKİYE DENEYİMİ

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Türkiye, 2001 yılında, 2008 yılı sonunda sona eren bir tarım reformu programına başladı. Bu reform programının en büyük bileşeni, üretimle ilişkilendirilmemiş bir destek verilmesiydi. Bu kapsamda, doğrudan gelir desteği (DGD), fiyat çarpıklığını azaltmak için kullanılan bir araçtı. DGD, reformun ilk sinyallerinin verildiği günden itibaren kayda değer eleştiri aldı ve destek kaldırılmış olmasına rağmen DGD'ye karşı önyargılar hala devam etmekte. Öte yandan, Türkiye'nin Dünya Ticaret Örgütü'nün Tarım Anlaşması kapsamındaki taahhütleri, tarımda piyasa mekanizmasını bozmayan politika araçlarının fiyat desteklerinin yerine geçmesini zorunlu kılmakta. Avrupa Birliği'ne adaylığı da Türkiye'nin, tarım politikasını, doğrudan gelir desteğine doğru kayan Ortak Tarım Politika'sına uyumlaştırmasını gerektiriyor. Bu tezde DGD'ye yöneltilen eleştiriler belirlendi, sınıflandırıldı ve resmi veriler incelenerek eleştirilerin gerçekleşip gerçekleşmediği analiz edildi. DGD'ye karşı hem makul hem de makul olmayan eleştiriler bulundu; bunlar resmi verilerle doğrulanamadı ve tarımla ilgili hususlarda DGD yıllarında bir gerileme gözlenmedi. Hem ulusal hem de uluslararası zorunluluklar nedeniyle Türkiye, DGD'yi sonunda tekrar uygulamak durumunda kalacaktır. O sebeple, DGD'nin önceden nasıl uygulandığını, hangi yönlerden eleştiriye maruz kaldığını anlamak ve yeni politikaları bunlara göre tasarlamak son derece önemlidir.

Anahtar Kelimeler: Doğrudan Gelir Desteği (DGD), Türkiye Tarımında Reform

To My Precious Mother,

Memnune ÇETİN

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CHAPTER I

INTRODUCTION

Agriculture, with its unique features, maintains its importance in terms of contributing to GDP and providing employment. It has always been on the agendas of governments all over the world. Moreover, there are domestic and international actors both of which have significant positions in policy discussion talks. Agricultural producers, consumers of agricultural products, producers who provide inputs for agriculture, industries which process agricultural products and taxpayers who pay for the agricultural supports are among domestic actors. In addition, agricultural sector and agricultural support policies affect other countries via international trade. Hence, other countries' producers, their consumers, international institutions are all international actors. In this respect, there are so many stakeholders in agriculture that it is a challenge for policymakers to take into consideration all parts and establish a policy accordingly. It is also essential to upgrade the capacity of agricultural policy environment to handle the policy reforms (Çakmak, Akder and Kasnakoğlu, 1999). Otherwise, the success chance of the new policies would be minimal.

Since it is on the agenda of all stakeholders both domestic and international, it brings about considerable debates regarding how and how much to support. It also attracts attention of international organizations which have various studies about not only how or how much to support agriculture, but also how to measure the degree of support and its consequences.

Regarding the "How to support?" question, it would be better to start with what policy makers tries to achieve by these support schemes. In general, the objectives of agricultural policies should be defined clearly. It is important that the objectives set out by policymakers have a legitimate rationale and that the chosen policies should be better at furthering these objectives than the available alternatives (Brook et al., 1999). Moreover there should also be well-functioning monitoring and evaluation systems so that if the objectives could not be reached in the specified time, corrective actions could be taken by revising either the objective or the instruments. In this sense, after objectives of agricultural policies are set out, there are many alternative tools to apply. For instance, the government may choose to support farmers by providing, say, price supports, input supports, direct income payments, or any combination of those tools. When implemented at appropriate levels, these all help reach the objectives. However, the consequences will be different. Each of them will have distinctive advantages and disadvantages. Therefore, when setting out objectives, the side-effects and probable outcomes should also be taken into consideration. Furthermore, to be realistic, there are no policies that support each farmer to the same extent. In any kind of reform, the overall objective is naturally to increase the net social and economic welfare of the country. Nevertheless, there will always be a group of farmers who gain more, and another group who even lose. The important issue, then, is establishing a system that will provide the absolute losers with security and creating an opportunity to adapt to changes (Çakmak and Akder, 2005).

Agricultural support policies may be diversified in accordance with the objectives and needs. Moreover, any policy, agricultural or otherwise, needs to be evaluated in terms of its success, relative to other policies, in attaining worthwhile policy objectives (Brook et al., 1999). It is essentially important to note this because in Turkey the objectives and the tools are often confused. Labeling a policy tool as good or bad is not correct because a tool cannot be right or wrong, good or bad on its own. It could only be assessed whether the tool is appropriate to reach the objective (Akder, 2003). Thus, one should consider the objective and the outcome together, and assess the policy tool accordingly. However, it is hard to find such an attitude in

the criticisms against DIS in Turkey where the direct income payments are generally labeled as "bad" without even mentioning the objectives of the agricultural policy.

Price supports, which were implemented for years and resulted in desensitization of producers to market signals, excluded efficiency from being a criteria for surviving in the market (Çakmak et al., 2008b). Whichever policy is decided to be pursued, it should be implemented in a way that is effective and efficient. Increasing efficiency of production, however, is not an easy task. The factors that affect efficiency have a complicated pattern so that any reform program that aim to change the structure should be designed to address the issues arising from this complex system (Dudu, 2006). Moreover, supporting agriculture is not at all costs. When applied in an inefficient way, subsidies may have opposite consequences than the objective.

When it comes to "How much to support?" question, there are no standard answers for that. It depends on various factors ranging from the objective of agricultural policy and the instruments used to achieve it. Moreover, calculating the size of support is not a straightforward process, it requires complicated estimations. Still, the monetary value of transfers to agricultural sector is needed to evaluate the policy instruments or to be able to make comparisons among countries. In this respect, OECD has certain indicators of monetary value of transfers resulting from agricultural policies. Among these indicators are Consumer Support Estimate (CSE), Total Support Estimate (TSE), and Nominal Assistance Coefficient (NAC). Yet, the first and the foremost one is Producer Support Estimate (PSE). As described by OECD (OECD, 2004), PSE shows the annual monetary transfers to farmers from policy measures that maintain domestic prices for farm goods at levels higher than those at the country's border and to provide payments to farmers, based on criteria such as the quantity of a commodity produced, the amount of inputs used, the number of animals kept, the area farmed, or the revenue or income received by farmers (budgetary payments). It is also pointed out by OECD (OECD, 2004) that support to agriculture not only comprises budgetary payments that appear in government accounts, but also the price gap for farm goods between domestic and world markets, as measured at a country's border.

In Turkey, on the domestic side, prevailing support schemes which consisted of mainly price supports caused increases in agricultural products' prices and created production surpluses in supported products. Still, the most outstanding motive behind the need to change agricultural support schemes was the significant burden on the finances of the governments which turned out to be unsustainable towards the end of 1990s. On the international side, there are two main stakeholders to mention. First, World Trade Organization (WTO)'s Agreement on Agriculture which regulates agricultural trade as well as domestic support schemes imposes binding constraints on the countries. Any contracting country has to comply with the WTO's rules, the most prominent of which is entailing non-distortionary ways of support in agriculture. In this manner, price support schemes prior to reform in agriculture were against the rules of Agreement on Agriculture. Understanding the regulations in the Agreement on Agriculture of WTO is crucial to be able to fulfill the commitments by designing optimum agricultural support schemes and avoid sanctions which will be enforced in case of delinquency. Recognizing "neutral" tools that do not distort the markets and their impacts on the country is also important for Turkey to place itself appropriately during the ongoing Doha Round talks which are also on non-distortionary support tools. Second, although Customs Union between Turkey and the EU currently does not include agricultural products, Turkey will eventually have to liberalize its agricultural policy with the EU. Being a candidate member state in the European Union (EU), Turkey has to harmonize its agricultural policy to the Common Agricultural Policy (CAP) which applies, after a series of reforms, decoupled direct income payments now. Assuming that the prevailing EU and Turkish agricultural policies remain intact, the customs union or membership will be definitely beneficial to the consumers due to mainly the decline in price levels. On the other hand, the impacts on producers will depend heavily on the implementation of CAP payments (Eruygur, 2006). In this sense, Turkey's direct income payments experience becomes more of an issue both to study what went wrong in the past and how can they be improved in the future in case of a membership.

Studying Turkey's experience in direct income support (DIS) will therefore have both past-revising and forward-looking perspective. Although it was implemented in the period from 2001 to the end of 2008 countrywide and abolished after, DIS is not just over. Turkey, unless it forgoes its route to the EU membership, will ultimately have to implement it again. Moreover, its commitments to WTO require Turkey to implement non-distortionary agricultural support policies. Even though direct income payments scheme is not the only tool that is in line with WTO commitments, it is one of the easiest to apply. Therefore, it is important to understand how it was implemented in Turkey and which aspects of it were criticized to be able to plan future support policies that are in line with the overall objective in agricultural sector and complying with the responsibilities in international arena.

In Turkey, the reform of agricultural support policy was a radical shift from price support to direct payments scheme. However, this shift occurred overnight. Although there was a one-year pilot implementation in certain districts, no transition period was put countrywide in policy. Neither the farmers nor other stakeholders such as taxpayers were informed clearly about the changes. Although it was a policy change of Turkish government itself, the reform was launched as if it was an imposition of international forces (Akder, 2010). These and many other factors resulted in great misunderstanding of direct income payments. This support scheme in Turkey has received noteworthy criticism since the day it was established. Today, even after it was abolished after 8 years of appliance, criticisms are still fierce.

The Treasury, the World Bank and MARA were the prominent players in agricultural reform studies in Turkey. On the other hand, consumers, farmers and processors remained outside the policy network during formulation of ARIP (Akder, 2010). This might be another motive behind criticizing direct income payments so severely. Important stakeholders were not included in the process of reform so that they could not get adequate and timely information about what would adjust in agricultural support policies. This, in turn, increased their resistance towards change.

This thesis explains the progression of the agricultural reform in Turkey from the perspective of the motives that lead to implementation of DIS and how it was implemented, and also from the perspective of issues to take lessons by gathering together the criticisms against direct income payments. DIS scheme, which is just a tool used to accomplish the overall objective in agricultural policy, has been fiercely criticized since the first implies of it in Turkey. Among these criticisms, there are both rational and irrational ones, frequently stated and almost never mentioned, realized and did not come true at all and so on. In this respect, the purpose of this study is not to label the DIS scheme in Turkey as good or bad. Instead, it is to explore the process and the criticisms against it, and find out to what extent the fears came true. In other words, in the thesis, it is intended to find out whether the criticism about decoupled payments are justifiable by investigating related statistical data.

In the analyses, official data from government agencies such as Turkish Statistical Institute (Turkstat), Ministry of Agriculture and Rural Affairs (MARA), and Prime Ministry State Planning Organization (SPO) are used beside the data of international organizations such as World Trade Organization (WTO), the World Bank and Organization for Economic Development and Cooperation (OECD). Moreover, to be able to capture the trends, 8 years of DIS implementation are supplemented by 8 years of previous support policy implementation period. That is, 8 years prior to DIS from 1993 to the end of 2000 is considered "previous" and 8 years of DIS from 2001 to the end of 2008 is considered "current" situation. In addition, the regional analysis are conducted on Nomenclature of Territorial Units for Statistics regions at the second level (NUTS2) which was developed and regulated by the EU for statistical purposes.

In this study, after the introduction chapter, brief information about World Trade Organization, its binding regulations and Turkey's commitments regarding agriculture is provided in Chapter II. In the following chapter, other country experiences of DIS are explained with comparisons to Turkish experience. In this section, direct income payments in Mexico, Romania, the United States of America

and the European Union are reviewed. Chapter IV is devoted to the need for a reform in Turkish agriculture which will be discussed in economic, agricultural, and international aspects. Chapter V is reserved for the core of the thesis which explains Turkey's experience of direct income payments. In this chapter, the readers first see the related legislation ranging from development plans to laws, followed by explanation of implementation year by year as tracked on implementation notifications. The next sub-chapters will be about the criticisms against DIS in Turkey and their assessments by using related official data. In these sub-chapters a total of eight groups of criticisms will be discussed comprehensively. Finally, concluding remarks are provided in Chapter VI.

This thesis will provide a comprehensive vision regarding direct income payments experience of Turkey from the beginning to the end of the implementation stage. Moreover, there are no researches which seek out the criticisms, group and analyze them. Since agriculture maintains its importance on the agenda of Turkey, implementing direct income payments and abolishing it after 8 years is an important experience for policy makers to take lessons and consider when designing new policies. These criticisms are essential because they not only are academic discussions, but also constitute the motives behind the resistance to change in policy tools. Knowing which areas were open to criticisms will give policymakers power in any probable restructuring agricultural policy in the future, in the sense that they will be able to focus on those issues and minimize the reactions of the stakeholders.

CHAPTER II

WORLD TRADE ORGANIZATION AND AGRICULTURE

The agricultural sector has an unchallengeable importance. Supporting agriculture is fair enough within the boundaries of a country that can choose to apply whichever policy it wishes, support whatever group of producers, and give however much to the beneficiaries. Still, in a globalized world where goods and services can move liberally among open economies, domestic support policy of a country is not isolated from the other countries. Economies are all in interaction and policies implemented within the borders of countries influence each other either positively or negatively. Yet, the degree of that influence differs depending on the magnitude of the economy. For instance, a small country has a small trading volume, constituting only a little fraction in international trade. Hereby, it cannot influence world prices. On the other hand, if the country's trade volume is high enough, its domestic support policy, which affects production and thus trade volume, can alter the world price. As an example, farmers of such a country, who are subsidized highly with domestic support policy, increase their production. This results in excess supply of agricultural products domestically. Then, to get rid of this excess supply, export subsidies are granted. These policies, in general, make international supply of agricultural goods increase, causing world prices to decrease with high levels of variation. Since increased variance and decreased world prices means instable market conditions, the global economy and mostly developing countries' economies experience problems. Developing countries whose agricultural sectors are more vulnerable to external factors face difficulties in constructing their agricultural policies. Protection and

subsidization in developed countries has also pushed domestic agricultural producers to adopt intensive-farming methods that have been damaging to the environment through increased water pollution, soil degradation, and loss of biodiversity (Orden et al., 2002). Therefore, a supreme authority is needed to regulate international trade in order to prevent such market-distorting course of actions. These were all experienced in agricultural trade and hereby, needs gave birth to General Agreements on Tariffs and Trade (GATT) and later on World Trade Organization (WTO).

GATT served like a forum for international trade issues from the day it was established until the day WTO was founded. It was a set of multilateral trade agreements whose basic objective was to eliminate all barriers of international trade gradually (Runge et al., 1988). GATT, with its aim of a more liberal trade, witnessed several conferences and rounds. The last finalized round –the famous Uruguay Round– which lasted for 15 years, was concluded with establishment of World Trade Organization in 1995.

The Uruguay Round was a milestone in the sense that by regulating international trade, it drew a line for distortionary ways of supporting farmers. Moreover, countries finally agreed that domestic policies are not only "domestic" any more. Therefore, in the globalized world, countries are ready to relinquish their internal policy-making power for the goal of increasing their wealth. They deliberately limit their domestic authority and make commitments to comply with the rules that this international body regulates. Turkey, as a member of WTO, also has commitments regarding its domestic agricultural policy. Along with it, members are subject to certain sanctions in cases of non-compliance. In this manner, Turkey's commitments to WTO establish a ground in reshaping agricultural policies.

Then, what are WTO's regulations and Turkey's commitments in respect to this? Indeed, the Uruguay Round's "Agreement on Agriculture" was formed on three main components. First, in market access dimension, tariffs were to be adopted instead of all nontariff import barriers. This process, known as tarification, was defined by OECD (OECD, 2010c) as replacement of quantitative restrictions on imports with

their estimated tariff equivalents. Turkey, in times of negotiations, did not have any non-tariff barriers in imports of agricultural products (DTM, 2010). Hence, this rule was already satisfied and there was nothing to do in this dimension for Turkey.

Apart from tarification, utilization of tariff-rate quotas was also regulated by this agreement. This was a new concept put forward in Uruguay Round. Certain countries protected some of their agricultural products by non-tariff barriers before this round. These countries agreed to provide minimum import opportunities for such products (OECD, 2010d). This import system established a quota and a two-tier tariff regime for affected commodities. Imports within the quota enter at a lower (in-quota) tariff rate while a higher (out-of-quota) tariff rate is used for imports above the concessionary access level (OECD, 2001). Since Turkey did not need to apply tarification, there were not any tariff-quotas either.

In addition, upper bounds of all tariffs were to be determined and lowered gradually over the implementation period by specified rates. Turkey, classifying itself as a developing country, made a commitment to lower its tariffs by 24% on average in aggregate agricultural products and at least by 10% for each agricultural product. Moreover, Turkey consolidated all its agricultural products to WTO, except for fisheries (DTM, 2010). For those products, which are of great importance for domestic producers, commitments were kept at the lowest level and high tariffs were implemented for products such as animal products, tea, and cereals. On the other hand, for the products that are intermediate goods for the industry and that Turkey was a net importer, tariffs were kept low and discounts were decided to be high (Çakmak, Akder and Kasnakoğlu, 1999).

Another dimension of the agreement was about reducing agricultural export subsidies. It was agreed to limit existing export subsidies in both quantity and value of expenditure. In this issue, Turkey had commitments to limit export subsidies, in terms of both quantity and expenditure, for 44 products or product groups (Çakmak, Akder and Kasnakoğlu, 1999).

The third dimension of Agreement on Agriculture was about reducing the aggregate level of domestic support for the farmers. This is the most interesting issue in this agreement because by letting an international institution decide on how much to support their farmers, countries limit their sovereignty in a sense. Agricultural sector in a country is normally supported by its own funds for its own farmers. Countries still use their own funds to support their own farmers; nonetheless, they can no longer choose individually how and how much to support. Rather, supporting agriculture is now an international issue.

It is explained by WTO (WTO, 2010) that in its terminology, subsidies in general are identified by "boxes" which are given the colors of traffic lights: green (permitted), amber (slow down — i.e. be reduced), red (forbidden). Indeed, the Agriculture Agreement has no red box, although domestic support exceeding the reduction commitment levels in the amber box is prohibited; and there is a blue box for subsidies that are tied to programmes that limit production. Brief information about these colored boxes is as follows: All domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box. These include measures to support prices, or subsidies directly related to production quantities. These supports are subject to limits: "de minimis" minimal supports are allowed (5% of agricultural production for developed countries, 10% for developing countries). Blue box, on the other hand, is the "amber box with conditions", that is, conditions designed to reduce distortion. Any support that would normally be in the amber box is placed in the blue box if the support also requires farmers to limit production. Lastly, in order to be qualified in the green box, subsidies must not distort trade, or at most cause minimal distortion. They tend to be programmes that are not targeted at particular products, and include direct income supports for farmers that are not related to (are "decoupled" from) current production levels or prices. They also include environmental protection and regional development programmes. "Green box" subsidies are therefore allowed without limits, provided they comply with the policy-specific criteria.

In negotiations of the Uruguay Round, domestic support policies were asserted to be sources of market and trade distortions as explained briefly above, thus they needed to be bounded. In this issue, for the developing countries, any subsidy above 10% of the product's production value was considered in the amber box and subject to discount commitments. Subsidies below 10% were considered acceptable under the "de minimis" rule and did not require reduction in domestic support levels (Dinler, 2008). In Turkey, the amount of agricultural subsidy was declared as less than 10% of production value. Thus, no commitments regarding decreasing the extent of domestic support were declared. However, signing the agreement puts the countries under obligation to not exceed the upper bound of 10% in domestic supports for each agricultural commodity, as well (DTM, 2010). Therefore, even though Turkey does not have to decrease its domestic supports, it cannot increase the supports either.

Furthermore, not only supports in the de minimis limit, but also domestic subsidy programs that do not have distortionary effects, i.e. green box subsidies, are out of the scope of WTO limitations. In this sense, direct income payments are an appropriate way to support domestic farmers because when decoupled, these payments do not have distortionary effects on production or trade. In other words, direct income payments are among the tools to support agriculture that are in line with WTO commitments. Specifically, insofar as direct payments lead to smaller distortions in production and consumption decisions, they are likely to have a less distorting impact on trade patterns. This, in turn, implies fewer tensions in international trading relations (Brook et al., 1999).

The Agreement on Agriculture of WTO expired in 2000 for developed countries and in 2004 for developing ones. In the meantime, a new round of negotiations was launched in Doha in November 2001. It could approve a framework only after three years of negotiations. Substantial overall tariff reductions would be received as a final result from negotiations, as affirmed by the Framework Agreement (Eruygur, 2006). Towards the end of 2005, removal of export subsidies were agreed, giving a chance to ensuring a more liberal trade by 2013. However, no agreement could be reached about reducing farming subsidies and lowering import taxes in 2006

negotiations. The most recent meeting was held on 2008 but no conclusions could be reached by now and issues are still to be negotiated. Whether the Agreement on Agriculture could come up with the intended results so far is out of the scope of this paper. Yet, until the new WTO Agreement on Agriculture is concluded, old commitments will be valid. Therefore, Turkey needs to be careful about its obligations regarding agricultural policies. Moreover, assessing the potential effects of a new WTO agreement is crucial both to determine the attitude of Turkey during negotiations and to design necessary agricultural policies for the impacts (Eruygur, 2006).

International pressures always supplement domestic pressures in times of a need for a reform. Turkey is bounded by international forces, as well. For instance, its liberalized economy, candidate membership to the EU, and international commitments such as the Custom's Union and WTO's Agreement on Agriculture are all among international forces. Therefore, even though supporting farmers is a domestic issue, international commitments cannot be ignored. These are binding legal documents and if not complied with, sanctions are to be forced. If any member of WTO has objections about Turkey's agricultural policies, Turkey would be in trouble. As a result, it is important that Turkey be aware of its international commitments besides national objectives in agriculture. Direct income payments were important for Turkey for these issues, as well. This scheme is one of the easiest ways to support agriculture without distorting the markets so it is on the safe side of the commitments. On the other hand, if policy makers insist on previous support policy tools such as price supports, then it will be against the commitments and Turkey will be sailing close to the wind.

CHAPTER III

OTHER COUNTRY EXPERIENCES WITH DIS

Direct income payments, being one of the alternative tools to support agriculture to reach the overall objective, were conducted in some other countries, as well. Although each country has its unique way of enforcement, it is important to find out their experiences. This will, on one hand, broaden our viewpoints by learning other possible ways of implementation. On the other hand, others' experience will be lessons for us to take and be careful about not to repeat the same mistakes or try to conduct similar accuracies.

This chapter is not devoted to explain in detail how other countries implemented their direct income payments scheme and discuss these systems in terms of advantages or disadvantages. Rather, keeping in mind the motive explained above behind the importance of others experiences, alternative ways to implement direct income payments are intended to be reviewed. This will be done by making comparisons between those and Turkey's implementation. In this way, similarities and differences of alternative forms of direct income payments will be revealed. This will, in turn, help policymakers in designing new ways of support in case of a new reform in agriculture.

In this manner, Turkey's implementation will be compared to first Mexico's, followed by that of Romania's. After that, comparisons with the United States of America's experience of direct payments will be provided. Finally, this chapter will conclude with its largest section, which covers a brief review of the reform process

of the European Union and then comparisons with Turkey of both the process and ongoing implementations.

3.1. MEXICO

Mexico started to implement a new agricultural support policy scheme in 1994 and this new policy tool made its agricultural sector more market oriented than it was previously. More specifically, this programme was called PROCAMPO and aimed at the liberalization of agricultural markets and supported the sector by implementing direct income payments as opposed to price supports (Babacan, 1999). This is one of the similarities between Turkey's and Mexico's restructuring in agriculture. Both countries implemented price support schemes previously in the agricultural sector as the main subsidy policy, ultimately switching to direct income payments. Constructing a more liberal agricultural sector and ensuring market orientation might be considered other similarities in these two examples of agricultural restructuring. However, there was a remarkable difference in terms of the duration of the programme. In Mexico, although it could not be concluded as planned, PROCAMPO was designed to proceed for 15 years (Babacan, 1999). On the other hand, Turkey did not declare a specific time period on which DIS would be implemented. This is one of the issues that could be criticized in the Turkish DIS experience. It is known that programs of direct income payments should be limited in duration, implying a time limit helps to ensure that payments are made for adjustment purposes only (World Bank, 2005). Mexico's experience was better planned in this aspect.

It is important to note that the year 1994 was a milestone in Mexico, not only in agricultural support systems but also in becoming an affiliate to NAFTA. In this aspect, direct income payments were mainly designed to compensate the loss that farmers would experience in their income after Mexico's membership to NAFTA, and decrease in other agricultural support schemes such as price support (Demirci, 2000). Comparatively, in Turkey, this aspect could be perceived through Turkey's

ongoing efforts to become a member of the European Union resulting in compliance with the rules of the WTO. There were also political, economic and social objectives in Mexico's agricultural support policy. For instance, direct payments were implemented to increase acceptability of the free trade agreement amongst farmers as one of the political objectives. If Turkey's experience is considered through the point of view of the project called Agricultural Reform Implementation Project (ARIP), it also had supplementary objectives besides agricultural ones such as economic or financial goals. For instance, as it was declared by the World Bank (World Bank, 2010), ARIP was proposed to mitigate potential short-term adverse impacts of subsidy removal. Moreover, aside from promoting allocative efficiency, the reforms being implemented were necessary for fiscal stabilization. There were also elements in the program which focused on the quasi-governmental sales cooperatives unions and encouraging farmers to quit producing crops which were currently heavily over-produced. Furthermore, one of the components in ARIP included support services such as the public information campaign or advisory services. Therefore, like Mexico's reform in agriculture, Turkey's experience in this matter could also be considered not narrow-scoped, but comprehensive in terms of covering political, economic, fiscal or social issues besides merely agricultural ones.

Apart from similarities in the two agricultural policy reforms, there were also dissimilarities. For instance, in Mexico's experience, there were some limitations on the payments that were available for farmers who planted one of the officially specified crops in the previous three crop years starting from 1993 (Babacan, 1999) implying that not all producers were eligible for the payment. Comparably, in Turkey, the ARIP was planned to deliver direct income support for all farmers. There were no specified crops or specified farmers in this case. This was regulated in the notifications as well. More specifically, farmers who were registered in the Farmer Registry System and conducted agricultural production activities were the eligible ones. There were no such limitations as Mexico had applied in terms of eligible farmers in Turkey.

In Mexico, prohibitions of setting the land aside or using it for purposes other than agricultural activity (Babacan, 1999) might be considered as cross-compliance for direct income payments. Likewise, in Turkey, farmlands which were set aside without carrying out any production activities were kept out of the scope of the DIS payments as regulated by the notifications.

Both countries' experiences in direct income payments might also be studied in terms of farmers. To begin with, in Mexico, both natural and juridical farmers who plant or hire agricultural land could benefit from direct income payments (Babacan, 1999). This is regulated in the notifications in the items which legalized definition of farmers in Turkey. For the years from 2001 to 2004, only real persons were counted as farmers. However, for the last three years of the DIS implementation, both juridical and real persons were considered farmers who could apply for the payments. Thus, both countries' policies converged in time. Secondly, both programmes were based on voluntariness. That is to say, farmers who wished to participate in the programme needed to apply for the programme each year in both countries.

One of the outstanding disparities in implementation of both countries policies was the issue of the transitory period. In Mexico, there was a three-year transitory period when support price was decreased and direct payments were increased (Demirci, 2000). On the other hand, in Turkey there was no such transitory period, there was however only a one-year pilot implementation in specified districts. Impacts of the transitory period in Mexico on the acceptance of the reform is the subject of another research, but it could easily be inferred that lack of such a period in which the public would be informed and could get used to the new support scheme in Turkey negatively affected the adoption of DIS.

Payments in both countries were also regulated in direct income payment schemes. First of all, payments which were fixed in real value were based on historical cultivation areas in Mexico (Demirci, 2000) implying that they were decoupled from yield or production. Turkish experience was dissimilar in this issue in the sense that

payments were not fixed but determined specifically each year by the legislators. What is more, since there was no registry system in Turkey before DIS, historical cultivation areas could not be used for the payments. Rather, direct income payments were paid on currently registered areas. Although the agricultural support policy in Turkey was also decoupled from current production and yield, using current as opposed to historical areas as base for payments invoked criticisms asserting that DIS caused division of farmland. Hence, it would be more acceptable to establish a farmer registry system before implementing direct income payments paid based on the farmland area. Then Mexico's approach could be employed by using the data of historical area in this registry system, as a result, misrepresentation of farmers and their farmlands would be confronted and there would be no artificial registries of farmers and farmlands which were recorded merely to receive DIS payments. Secondly, there were upper limits in the eligible area in both countries, but in different magnitudes. In particular, in Mexico, at most 100 hectares could be eligible for the payments and any farmer in Mexico could receive a maximum of $6,700 (Demirci, 2000), whereas in Turkey the upper limit was half of the limit of Mexico's and there wasn't an explicitly declared upper limit in total payments in Turkey. Instead, the upper limit for the eligible area and per decare payments for that specific year was declared, and the upper limits in total payments were implicitly regulated.

The PROCAMPO was planned to end after 15 years of implementation; however Mexico imposed a new sectoral programme for the periods 2007-2012 which specified a new deadline. This programme called Sectoral Development Programme on Agriculture, Livestock and Fisheries 2007-2012 has four main instruments in implementing agricultural policy which have market price supports provided through tariffs and tariff rate quotas, output payments, direct payments, and payments based on on-farm investment or fixed capital and farm credit support policy (OECD, 2009a). Although economics assert that direct income payments should be implemented on its own without any other distortionary policy tools, Mexico as well as Turkey continued to implement other policies as complementary tools. However, it is known that if there are other coupled support programs, the decoupled program may not eliminate the incentives to overproduce (World Bank, 2005). In this manner,

other policy tools would have lessened the positive effects of direct payments in both countries.

3.2. ROMANIA

Romania became a member state of the European Union in January 2007 and applied EU regulations (OECD, 2009a). Starting from 2007, it did not have a discrete agricultural policy other than the CAP of the Union; however, it is worth mentioning the case of Romania as it implemented direct payments towards the end of 1990s before accessing membership into the EU.

Romania had its first democratic elections in the early 1990s and agriculture was to be transformed into a sector based on private ownership. The aim, in this respect, was to create a market-oriented and internationally competitive agricultural sector (ECSSD, 2005). Although Turkey had private ownership long ago, the intent of creating a market-oriented and internationally competitive sector was among its objectives of agricultural reform, as well. Like Romania that forwarded the changes in its agricultural policies to the harmonization of EU legislation since 2000, Turkey, as a candidate member state, also had to find such ways to support its farmers that would not contradict with how the EU supports its agricultural sector. In this respect, Romanian experience would give clues of what should and what should not be done in agricultural support policy issues.

Like all other countries which implemented direct income payments, Romania also focused on compensating the revenue losses that farmers faced due to abolishment of previous agricultural subsidies (Demirci, 2000). As declared by the World Bank in its project information document (World Bank, 2002), Turkey's project was also formulated to mitigate potential short-term adverse impacts of subsidy removal besides other targets. However, in Turkey's case, the intention was not to compensate every farmer fully for income lost by removal of the old subsidy system,

but rather to cushion the short-term losses and continue to provide adequate support to the agricultural sector, but in an incentive-neutral way (World Bank, 2006).

Apart from similar objectives, Romania also aimed to support usage of modern inputs, providing farmers with low interest loans, and attracting private sector to the input markets (Demirci, 2000). In this sense, both Romania and Turkey had more than one complementary objective in their reform programs depending on their individual needs and agricultural sector characteristics. Nevertheless, in Turkish experience the heart of the reform was direct income payments and other components of the program supplemented direct payments in other related aspects. Unlike Turkey, Romania regulated intervention to inputs market, agricultural credits and so on with the help of the World Bank. By the way, the World Bank was one of the similarities between Romanian and Turkish reform programs since both were conducted with the help of the Bank.

There were both similarities and discrepancies regarding payments in these two agricultural reforms. Firstly, payments in Romania's program were delivered based on the size of the farmland up to 6 hectares as vouchers or stamps (Demirci, 2000). Thus, in both programs of Romania and Turkey the payments were made based on farmland area, so they were both decoupled from current production. Secondly, even though Turkey's was less than Romania's, there were upper limits in farmland area to be eligible for the payments in both. Despite these correspondences, the way the disbursements were made was totally different. In Romanian case, they were not in cash but in vouchers which the beneficiaries could use to purchase inputs such as fertilizers, seeds, fuel oils and so on. On the other hand, in Turkey, disbursements were first paid in cash, and then were deposited in the beneficiaries' bank accounts. In any case, beneficiaries in Turkey received money, not vouchers. Paying in cash or in vouchers would have considerably distinctive impacts on economy such that vouchers could be used to purchase agricultural inputs, while cash could be used to purchase anything the farmers wished.

Direct payments scheme in Romania evolved over time, and in 2005 four main groups of direct support measures were present in the budget and these constituted 82% of total agricultural support programs (World Bank, 2005). Among the direct support measures, there were price supplements, input subsidies, cash transfers to small farmers, and investment supports as well as some other direct payments. Hence, direct income payments were not the mere support tool in Romania, whereas they were formulated to be the only way of support in Turkey.

3.3. THE UNITED STATES OF AMERICA

The case of the United States of America (USA) also had similarities and differences in comparison to Turkey's experience of agricultural policy reform. The USA underwent significant changes in its tools to support agriculture earlier than Turkey in the year 1996 when the United States shifted from deficiency payments to the direct income policy (Demirci, 2000). Although Turkey shifted from price supports while the USA shifted from deficiency payments to direct income payments, the most significant similarity of both countries' new agricultural policy tools was that both were decoupled from production.

The USA systematically introduced certain rules and regulations on the subject of agriculture contrary to Turkey that did not renew the implementations after the project of ARIP was over. Specifically, the USA had the Federal Agricultural Improvement and Reform (FAIR) Act implemented during the years 1996-2002, Farm Bill during the years 2002-2008, and finally The Food, Conservation and Energy Act (FCEA) during the years 2008-2012.

As it was the case for other countries, the USA also had international forces effective in reforming its agricultural policy beside its national forces. Particularly in the first shift in its policy, the GATT Uruguay Round negotiations were one of the compressive forces as deficiency payments were one of the most distorting ways of

supporting agriculture, and parties of negotiations had to abandon them. Being one of the biggest actors in the international trade of agricultural products, the USA could distort international market with its high volumes of trade. Therefore, it was important for the United States to find a non-distortionary way to support its agricultural sector. In this sense, every country's experience of agricultural reform has an aspect of international forces in one way or other, including the USA and Turkey. Furthermore, from the national standpoint, budgetary cost was a problem and budget had to be kept in control in the USA (Babacan, 1999). This was also common for both Turkey and the United States. In addition, the most common objective of agricultural policy reforms in the world which was to increase market orientation, competitiveness and exports of the domestic crops applied for the USA, as well.

As mentioned above, the USA would be implementing the FCEA in the period from 2008 to 2012 as its basic legislation which had three main policy instruments, namely direct payments (DP) for crop, counter cyclical payments (CCP), and support provisions such as marketing loan assistance (OECD, 2009a). In this manner, direct income payments were not applied by itself in the USA. Instead, they were supplemented with other tools unlike Turkey which planned DIS as its sole agricultural support tool. One more thing to note is that in the USA, regulations are multi annual with definite starting and ending points. However, in Turkey, DIS was regulated mainly in annual implementation notifications which did not specify an explicit expiration time.

Direct payments in the USA were decoupled from current production since the payments were fixed on pre-determined rates and historical data on production (OECD, 2009a). Although Turkish direct payments were also decoupled, they were based on not historical but current data on farmland area as there was no farmer registry system which could be used to gather information about historical production or area before DIS in Turkey. Use of cultivated land as the basis for subsidy payments in Turkey had important additional advantages as compared to US

system. For instance, the amount of cultivated land was said to be relatively stable since the 1960s according to agricultural census (World Bank, 2000).

Direct payments in the USA are explained by United States Department of Agriculture (USDA)'s Economic Research Service (ERS) in their briefing rooms on their website (USDA, 2010) which was the main source of data about the USA. To begin with, payments were not available to all farmers producing all kinds of crops in the USA. Instead, they were paid to farmers with eligible historical production of 10 specified crops. On the other hand, implementation notifications regulated that DIS payments were available to all farmers involved in agricultural activities and registered in the farmer registry system in Turkey. Secondly, when beneficiaries chose to participate also in other programs such as Average Crop Revenue Election (ACRE), they were paid 80% of direct payments in the USA. On the other hand, in Turkey which also had other programs available for farmers such as diesel fuel supports which were also paid as direct payments, beneficiaries were paid complete DIS and the payments of other programs were in addition to DIS.

Furthermore, as explained by the ERS (USDA, 2010), direct payments in the United States were regulated with a number of rules. First of all, agricultural producers needed to enroll annually in the program in order to receive the payments which were based on three basic data: the producer's historical program payment acres, historical yields and payment rates specified officially in the 2008 Farm Act. The case of the USA was unique in the sense that on a per acre basis, the value of direct payments was not fixed for all commodities while it varied by location indirectly through payment yields. Even though Turkish implementation of DIS also required annual application to the programme, unlike the case in the USA, yield values were not taken into account. Moreover, payments were not determined for the whole implementation period, but determined annually in Turkey; no need to mention again that historical data of area were not available so that current registries of farmland were used to base payments. Incidentally, both the USA's and Turkey's implementations had limitations on the eligible areas, but in different ways. Specifically, Turkey officially declared at most how many decares would be

supported via DIS; while the USA took only a portion such as 85% of total area into account when calculating the payments. There were also limitations regarding the payments in both countries. For instance, in the USA producers who did not participate in ACRE program could receive at most $40,000 per crop year. Moreover, farmers whose agricultural income was at least $750,000 in the last three years average were not eligible to enroll in the program. Comparatively, Turkey had limitations on the payments implicitly by limiting the size of eligible farmland area. Thus, Turkey didn't have such an explicitly declared upper limit for total annual payments, nor had it any regulations about who could apply for DIS in terms of the beneficiaries' medium-term incomes. This would not be surprising considering there was no registry system previous to the DIS which was implemented.

Apart from regulations about the payments, both policies had regulations regarding cross compliance. In the USA, farmers had to keep their land in agricultural use and comply with certain conservation and provisions (Demirci, 2000) which were also regulated in Turkey in notifications.

3.4. THE EUROPEAN UNION

In the previous sections, individual countries which also implemented direct income payments were discussed with comparisons of those with the Turkish experience. In this section the European Union's chronicle of its agricultural policy reforms will be explained. Since Turkey is a candidate state in the EU and would have to implement the common policy regarding agriculture in case of its membership, the case of the EU has special importance for Turkey. As a result, the EU deserves to be discussed in more detail than other country. The agricultural policy of the Union is examined from the beginning, to the current date with specific reforms it underwent in the below. Moreover, comparisons of the EU's and Turkey's experiences will be provided where applicable.

The European Union's history dates back to 1950s; but its Common Agricultural Policy (CAP)'s birth was later, near the end of the 1960s. It was a tough issue to regulate the agriculture of the Union with a common policy, and severe criticism was exerted for the CAP. It was first designed to produce more to ensure a stable supply of food after World War II (EC, 2007). Price support was determined to be the general support instrument that the entire production of farmers was guaranteed to be purchased at the intervention price which was generously high. Price support was complemented by variable levy on imports and export subsidies, as well. Turkish agricultural policy looked like this initial form of the EU's CAP before DIS. Price support scheme was implemented in Turkey and some other policy tools were utilized at the international trade side. Although the volume of both parties differed significantly so that the impacts of each on the world price would also differ significantly, both had certain measures at the borders.

The CAP was successful in meeting its objectives during those early years. However, over time, the price support policy turned out to be generating excess production, causing both budgetary troubles and environmental problems (EC, 2007). Some of these surpluses were exported with the help of CAP export subsidies, but the rest had to be stored or disposed of within the EU (Eruygur, 2006). High levels of price support became an excessive burden on the budget that could not be sustained for long. Incentives to produce more also ruined the environment because farmers were exhausting the land. These constituted the financial and social/political aspects of the pressures to reform the CAP. In addition, at those times, the Uruguay Round had been held where domestic supports and export subsidies were negotiated in the international arena. The trade distorting ways of support were discussed to ensure a market-oriented production and more liberal international trade. However, the CAP in its original form was a great obstacle for a conclusion of the round (EuroChoices, 2008). The EU, as a result of having a big share in the international trade, had the influence to alter world prices. Price support system encouraged production and this excess production was launched to the international market via export subsidies. As a result, there was a great pressure on the CAP to change in international aspects also.

The first reform of the CAP accrued in 1992 when the so-called MacSharry Plan was proposed. The principle elements of the reform were reduction in guaranteed prices with supply control mechanisms such as set-asides and compensatory direct payments. In its outstanding innovation, the MacSharry reform introduced direct payments paid to farmers based on area. In this scheme, farmers were compensated for the revenue loss by payments based upon the difference between the old and the new support levels. This was a new concept of "decoupling" support from current production level (Garzon, 2006).

After the reform, levels of production reduced and price levels declined, converging to the world price levels. However, it was not the remedy for all problems. The needs to limit budgetary expenditures and to decrease production were still valid and the agricultural markets were still unbalanced. Moreover, in public, the opposition to the way farmers were supported increased since intense farming harmed the environment and there were nothing required for farmers to do in return to get the support (Garzon, 2006). Rural development and multi-functionality were also the main focuses of public debates. The deepening of the MacSharry reform was inevitable and eventually in 1999, the Agenda 2000 proposal was accepted (Swinbank et al., 2007). In this agenda, budget was to be limited with the CAP expenditures' growth rate kept steady. Moreover, the CAP was based on two pillars: Pillar I encompassed market and price support, and Pillar II consisted of rural development measures (World Bank, 2005). Another new issue put forward in Agenda 2000 was the concept of modulation (EC, 2007). This concept asserted that the savings obtained from cutting the budgetary expenditures should be used to finance rural development.

Like in previous reforms, in the 2000s, there were economic, international and social/political pressures on the CAP. The expenditures could not be kept limited even after Agenda 2000. Therefore, there still was a need to find a more efficient way to support agriculture. Moreover, a new round of WTO negotiations, known as the Doha Round, was launched in Doha in November 2001. The EU was actively involved in negotiations but over time it became clear that the Agenda 2000 package

was to be resolved for a conclusion in the round (Garzon, 2006). Eventually, in 2003, a new reform known as the Fischler II Reform was implemented into action.

This reform was outstanding with its significant changes in certain issues. For instance, after this reform, all the support paid to farmers became fully decoupled from production. Subsidies have been decoupled part by part since the first reform in 1992. Still, if not fully decoupled, these payments have the potential to influence production decisions. Therefore, partial decoupling was not enough to be market oriented and until this last reform it was hard to convince agricultural producers to produce what they could produce the best. Supporting agriculture in a way that is not linked to production or yield was common in the EU and Turkey. Still, it is worth noting that Turkey started to implement full-decoupled DIS in 2001, while the EU ensured full decoupling after its reform in 2003. Incidentally, the EU's policy converged to that of Turkey's in this case.

Apart from decoupling, the Single Payment System, which was put forward by this reform in 2003, ensured that all types of aids were gathered into a single aid (Ortaç et al., 2006). It provided a coherent support system. In this single aid scheme, it became easier to keep budget under control since there were no complicated budget items anymore. Additionally, it was clear for farmers to see how much aid in total they would get. Thus, they could do their future planning with certainty in a more realistic way. These characteristics of the reformed CAP were also common for the Union and Turkey. In both, all other support policy tools were planned to be discarded, and direct income payments would be the sole tool to support agriculture. Like in the case of full decoupling, Turkey was first to introduce the single aid scheme and the EU followed suit.

Furthermore, with cross-compliance and modulation components of the reform, rural development measures were taken in a more concrete way. It was highlighted in previous reforms but then it was voluntary. However, after the 2003 reform, farmers who were to benefit from subsidies were entailed to comply with these measures. In other words, they became compulsory rather than voluntary. With measures of cross-

compliance, agriculture became more environment-friendly. Also with measures of modulation, aids became more fairly distributed. Although the concept of modulation was not explicitly mentioned in the legal documents, Turkey also had some measures that could be considered cross compliance such as having to plant the farmland and keep it in good conditions to get the payments[1].

The single payment scheme in the EU may be "regionalized" with a high degree of discretion given to Member States in its application (Eruygur, 2006). On the other hand, in Turkish experience, the defined rules and rates applied for all farmers throughout the country.

The EU's CAP reforms were important for Turkey in several aspects. To begin with, it represented a good benchmark about how to reform. The EU could monitor changes in both international and domestic circumstances that were forcing the policies to change. For instance, in the 1960s, the main problem was shortfalls of agricultural goods so the CAP was designed to overcome that trouble initially. Then the problem turned out to be not underproduction but overproduction and the CAP had to change in accordance to limit production. In this respect, the EU managed to realize the changing circumstances and make provisions accordingly. It is hard to assert that Turkey could take action even when it realized the need to change. Comprehending the need to change is the core of the reforms and getting it acceptable is not an easy task given people's nature to resist changes. The EU was successful in this manner that CAP underwent three major reforms. On the other hand, it could be conceivable that the Turkish public information campaign failed to inform people about the new support system and win over their acceptance.

Moreover, reform for the EU was a process rather than a one-time job. The EU did not change all the policies overnight. Instead, it changed step by step. For instance, guaranteed price levels were first reduced and aids contained compensatory direct

[1] It should also be noted that setting it obligatory to perform agricultural production for DIS payments actually contradicts WTO rules which impose non-distortionary policy tools. Yet, discussions on the related issues were conducted on how it was implemented in Turkey.

payments. Then price supports were abolished and direct payments became the main support policy. This issue could also be observed in decoupling supports from production. Initially there were only partial decoupling, but overtime it became full decoupling, breaking all ties between aids and production. For cross-compliance and modulation, a similar manner is present. These measures were voluntary in their first introduction and then they turned out to be compulsory. In this way, the EU introduced new policies to the farmers and other related agents. It communicated with people, gave time to get familiar with the new issues. In a way, it made reforms acceptable by extending them over a period of time. This was one of the inadequacies that Turkey experienced. Particularly, although there was a year of pilot implementation, public information activities were not enough resulting in the DIS scheme in Turkey collecting so much criticism. From the point of view of many critics, a brand new agricultural support system that nobody had any idea about was in force overnight in Turkey. Consequently, its negative impacts on the acceptance and internalization of direct income payments could not be neglected.

One more thing worth mentioning is that the EU took into consideration of all related agents when formalizing the reforms. It tried to ensure adequate supply of agricultural products when its population was worried about shortfalls of goods. Then it tried to provide its farmers with reasonable standards of living with a reasonable and stable income. When intensive production brought about environmental problems, environmentalists' concerns gained importance and new policies took into consideration of those issues. In general, the reforms of CAP tried to find a compromise, although each time some parties would always be unhappy about the changes.

Still, intense civil society dialogue, discussion forums, debates, and alike helped to persuade the parties about the reforms and this increased the potential of the reforms to gain acceptance. On the contrary, arguing against the DIS scheme in Turkey was like a fashion that everybody kept up with without querying. There were hardly any writers who corroborated DIS, and claims of majority of the opposed referred to only a few research papers available.

The experience of the EU in reforming its CAP is also important for Turkey in their relationship. For the time being, Turkey is a candidate state for the European Union. Since the CAP is the Union's common policy, all member states eventually have to implement it. Membership of Turkey will lead to full liberalization of agricultural trade with the EU (Eruygur and Çakmak, 2007) since the agricultural components of agro-food products are excluded in the current customs union agreement between EU and Turkey. The possible results of the abolition of trade barriers in agriculture have the outmost importance for the policy makers both in the EU and Turkey (Eruygur, 2006). Therefore, it is important to take into consideration these non-domestic issues in designing agricultural support policies. If Turkey does not change its route to the EU, it will have to re-implement direct income payments. In this respect, applying a policy for a while and then abolishing it, and then applying it again will be a challenge for Turkey. Turkey could not communicate with the public and gain their support during the first time it implemented direct payments; and it will be most probably the case in the future when it re-applies this scheme.

CHAPTER IV

NEED FOR A REFORM IN TURKISH AGRICULTURE

Supporting agriculture is not unique to Turkey. Every country supports its agriculture for one reason or another. For instance, a country may support agriculture to ensure self-sufficiency in food, yet another might choose to subsidize the sector to limit price fluctuations in both directions. Besides, the way the agricultural sector is supported varies widely amongst differing countries. An illustration of this is as follows; agricultural producers may be supported via guaranteed prices by the administration, or they may be provided with payments which are decoupled from production. The main motives behind such alternatives, as well as the consequences also differ. Even though supporting agriculture is the everlasting issue, agricultural policies to support the sector evolve over time as circumstances change. In this respect, in 2001, Turkey experienced a reform in its agricultural policy, which was inevitable due to both domestic and international pressures. Although it was not at the start of the crisis in 2001 when the initial demand for reform came (Akder, 2010), the structural transformation was regulated in the Disinflation Program in 2000, and the Transition to the Strong Economy Program in 2001, which were carried out to combat the negative effects of the crises. Before discussing pressures specific to agriculture, it would be supportive to mention the significant crises in Turkey and forces behind it from the point of previous course of agricultural policies. In fact, previous policies have created a net inflow of resources from the government to agriculture, but have had many negative effects on the agricultural sector and the economy as a whole (Eruygur, 2006). Therefore, it is important to understand the consequences of previous policies before assessing the new policy tool.

4.1. ISSUES RELATED TO GENERAL ECONOMY

Just after World War I, the world experienced an economic crisis that prevailed throughout the world and crashed economies. Ensuring agricultural production was essential to provide citizens with sufficient food in this period, thus protective policies gained importance. Turkey also kept up with the times with its protective attitude towards agriculture.

In the 1930s, certain institutions such as the Agricultural Products Office (TMO) and Agricultural Sales Cooperatives, which became the main intermediate institutions in agricultural support policies, were established. During those times, agricultural producers were given both financial aid and aid in kind beside support purchases. Afterward, in the 1960s, Turkey entered into the period of planned development and from then on, subsidy programs have been held in development plans. In these plans, the objectives of agricultural policies and their instruments were defined, and both the aims and means varied across them (Özkaya et al., 2001).

In the 1990s, Turkey experienced several crises caused by both fundamental problems in the economy and external pressures. In this regard, basic domestic problems might be considered in two main categories: unsustainable internal debt stocks, and financial system's –especially public banks'– inefficient structure. Agriculture and the way it was supported contributed to both issues in certain aspects. To begin with, among the factors that caused increases in public debt were agricultural support policies that could not even satisfy the needs (CBRT, 2001). Moreover, a system of inefficient state economic enterprises (SEE) added to the increases in public deficit, and this was true for agricultural SEEs, as well. Indeed, fiscal discipline was depreciating seriously not only with support payments done from the budget, but also with payments conducted via SEEs and several funds (Çakmak et al., 2008b). Secondly, financial structures of public banks were highly

distorted by poor management, interventions of the governments, and more importantly, by duty losses. These losses of SEEs occurred as a result of duties given to these banks for supporting activities mainly in agricultural sector (CBRT, 2001). Other factors such as inadequate tax revenues, high shares of interest payments in the budget all together caused a kind of vicious cycle in the economy. As a consequence, reforms in several sectors were inevitable and in 2000, the "Disinflation Program" was in place with objectives of decreasing the inflation and reconstructing the economy. This program led to the introduction of ARIP in agriculture in 2001, and later, its extension in time and scope, for the period 2005-2007 (OECD, 2008). In the context of ARIP, pilot implementations of direct income payments were applied in selected regions in Ankara, Adıyaman, Trabzon and Antalya. Although the outcomes of pilot implementations were affirmative, the need for restructuring the sector survived (CBRT, 2001). The economy as a whole could not recover the crisis as well, resulting in abolishment of the Disinflation Program and the introduction of a new program. This new program was called "Transition to the Strong Economy Program" and it consisted of reforms to further restructure the economy including certain measures regarding agriculture. To begin with, duty losses in both public banks and SEEs were to be regulated. Duties that were essential to be conducted by these institutions would be performed in accordance with established rules from then on. For instance, expenses of duties given to them would be covered in the budget and would be paid in advance to the institutions (CBRT, 2001). Agricultural issues were handled in income policies section of the program also. It was stated that the main principle would be to support via direct income payments lower-income farmers, who could not benefit from the previous supporting system adequately.

4.2. ISSUES RELATED TO AGRICULTURE

Apart from problems regarding general economy of the country, there were also problems in agricultural policies themselves, which constituted another side of drives

for the reform. First of all, agricultural policies were insufficient in the sense that even though high amounts of subsidies were transferred to this sector, productivity remained at its low levels (Treasury, 2002). Indeed, it has always been one of the priorities of agricultural policies to ensure quality and productivity in fundamental agricultural products. Moreover, quality and productivity are considered to be among the main factors that contribute to stable agricultural sector (Saçlı et al., 2008). Quality and yield not only have an effect on stability of the sector but also shape the international trade of the sector's products. In fact, quality and yield being at such low levels decreased the competitive power of the Turkish agricultural products in the international arena (Kamacı, 2006). Research in this issue point out that the producers of some products will not be able to remain competitive under EU membership scenarios, and Turkey seems to become a net importer of agricultural products. Thus, well-defined policies should be directed to improve the competitiveness of the alarming sectors via improving their productivity (Eruygur, 2006).

Additionally, in rural regions, economic and social development could not be increased to the desired levels. Regional disparities did not diminish either as a consequence of agricultural support policies (ARIP, 2009a). Indeed, in previous support systems, developed regions got advantage of the supports more than least developed ones (Ağırbaş, 2006). Thus, it was not possible to ensure a balanced development among the regions in Turkey as long as the price support system was implemented in agricultural policy.

One of the biggest problems of the agricultural sector was the lack of the farmer registry system. Without such a system, patterns of agricultural products, land usages or farmers' profiles could not be determined. Moreover, up-to-date information about the supply of the agricultural products such as which crops are grown on which lands and volumes of this production could not be attained properly (ARIP, 2009b). As a result, the supply and demand could not be managed appropriately and equilibrium in agricultural markets could not be ensured. Consequently, the need for a well-

functioning farmer registry system was one of the drives behind the reform in agriculture.

Another issue was that prevailing policies focused mainly on agricultural production by determining several related objectives in the development plans such as increasing input productivity. However, supplementary issues such as marketing were typically not taken into consideration (Çakmak, Akder and Kasnakoğlu, 1999) and the agricultural sector could not be handled in a comprehensive approach. This could easily be observed in the development plans of Turkey. For instance, in 6th Development Plan, which was implemented in the periods between 1990 and 1994, the main objective regarding agriculture was determined to be limiting the dependence of production on weather conditions by modernization of production methods, meeting the foodstuff requirements of increasing population, and raising exports of agricultural products. Likewise, in the 7th Development Plan, which applied to the years from 1996 to 2000, the main objective was ensuring adequate and balanced nutrition of the increasing population, enhancing production and exports of the products in which Turkey had comparative advantages, and providing agricultural producers with increased and stable incomes. It is important to note what is included in the plans and what is not. In this sense, whilst there was a commitment to improving farm incomes, this was not made with respect to an explicit benchmark and there was no commitment to reducing income inequality (Brook et al., 1999). These development plans indicate the long-term direction of Turkey's policies. In this sense, it could be concluded that no measures were taken regarding issues other than production in agricultural sector. It would be neither rational nor sustainable to focus all policies only on one aspect of a sector. A comprehensive set of objectives had to be determined to ensure extensive development. As a matter of fact, this incompetence was recognized and the gap was started to be filled by 8th Development Plan (2001-2005) in which the main objective of agricultural policy was defined as establishing an agricultural sector which is organized, highly competitive and sustainable, and handling economic, social, environmental and international aspects comprehensively in the framework of the principle of efficient use of resources.

Until the crisis in 2001, governments tended to use agricultural support that is based on price interventions as a tool for political gains, thus determined support prices considerably higher than the world prices (Çakmak et al., 2008b). This support prices were translated into higher consumer prices. Indeed, prior to reforms, agricultural subsidies imposed a heavy burden on consumers by keeping agricultural prices about 25-30 percent above international levels. Turkish consumers, by this way, financed 55 percent of the overall support provided to farmers in the form of higher food prices (Lundell et al., 2004). This issue gains more importance when considered that the deprived consumers who pay considerably higher than the world prices for the food products, indeed, allocate a significant share of their budget to these products (Çakmak et al., 2008b) implying that negative impact of high prices is more significant on the poor. Thus price supports actually ruin the distribution of income. Government interventions, moreover, are not costless. They have their own costs such as administrative costs associated with government programs and deadweight costs incurred when those groups which are affected by policy lobby to influence government decisions (Brook et al., 1999). These costs, even if not directly incurred, should also be considered while evaluating costs of policies. Although high agricultural product prices and burden on consumers are not brought forward as much as the agricultural supports, they are important and should be handled properly because high prices not only do harm to consumers but also distort the markets by impeding efficient allocation of resources. Guaranteed high prices, in this sense, resulted in supporting the producers who could not produce efficiently (Çakmak et al., 2008b). Supporting agriculture with guaranteed high prices impedes production in a competitive market. Producers could not learn how to catch the signals of the market, how to analyze the demand and use their resources in the most efficient way. Thus, prevailing agricultural policies that had been implemented since the 1930s obstructed the growth of the free market economy in this sector. However, in a globalized world, it is impossible to have foreign trade and protected domestic markets for a long period of time, as it would be like forcing all pillars in an impossible trinity in macroeconomics. Indeed, a support measure that sustains the domestic price above the level at which a country can import requires an

accompanying restriction on imports (OECD, 2003). On the other hand, international commitments require lowering restrictions on trade, meaning that these commitments will eventually induce reductions in domestic price supports and liberalization of international trade. Thus, if a country's producers are not capable of competing in a competitive market, they will sooner or later dissolve. Accordingly, countries have to ensure smooth adaptation to free market economy of their producers. In this manner, farmers in Turkey had to adjust to this market system to be able to survive in a competitive market. The reform of the agricultural sector was important in this respect also. Moreover, among the Copenhagen criteria, economic criterion is defined as (EU, 2009) "existence of a functioning market economy and the capacity to cope with competitive pressure and market forces within the Union". Therefore, as long as Turkey remains to be a candidate member state of the EU, it has to meet these criteria. In this sense, ensuring a well-functioning market is essential for Turkey, a country seeking its membership as a state of the EU.

It should also be noted that no matter whether the state intervened into output markets or not, product exchange markets are indispensable (Çakmak, Akder and Kasnakoğlu, 1999). However, previous policies kept the sector from building up the agricultural product exchange market. Not only product exchange markets but also futures markets could not develop in the sector. Futures are important in the sense that prices in futures point out the perceptions of buyers and sellers. It includes a clue of how prices would be shaped in the future. This would, in turn, help the agricultural producers to determine their future position regarding how much to produce, at what price to sell and so on. Moreover, this hedging would protect them against price fluctuations and help them reduce uncertainty of the future and base their decisions on more realistic data. However, the support purchases of agricultural SEEs hindered maturity of these markets. Subsidized farmers could neither face the need to organize to act as a group, lobby, and take part in decision-making processes with these groups (Ortaç et al., 2006). These factors might be considered other reasons to change the way agriculture was supported. Indeed, making agricultural producer organizations effective to improve yield and marketing opportunities

intended for eliminating the negative impacts of price fluctuations is among the priorities of Turkey (Saçlı et al., 2008).

As is known, agricultural production mainly depends on the climate. Moreover, it is not very likely to increase the land, which is the basic input for agriculture. Since it is not possible to shift the land to more productive regions, policies aimed to increase the quality of the land, and decrease the dependence of production process to the precipitation should be implemented (Çakmak et al., 2008b). Still, agricultural production has its natural limits unlike other sectors. This means that, the elasticity of supply in agriculture is low. Moreover, agricultural products are mainly necessary goods for people. It means that, the demand's elasticity of income is also low. Subsequently, incomes of the farmers are highly vulnerable to external effects so that farmers could not get a certain and foreknown income. This is, however, unfavorable in both social and economic aspects. It also makes it hard to evaluate the distribution of income and improve it. Switching from support purchases to direct income payments was expected to eliminate fluctuations in farmers' incomes. Direct income payments, moreover, are strong policy tools in the sense that the support can be targeted to deliver the desired distributional effect (Brook et al., 1999). Accordingly, this issue constituted another drive for a reform in agriculture in Turkey.

In support purchases, guaranteed high prices serve to producers but the cost is paid by the consumers who consume agricultural products at high prices. Although there was no consideration of reasonable prices for consumers in agricultural policies in Turkey unlike the EU who had one of its objectives of agricultural policy[2] as "to provide consumers with food at reasonable prices", loading the burden of a policy on a group of consumers was not sustainable in the long run. Furthermore, price support policies have a bad reputation of causing excess production of agricultural goods, and subsequently causing excess stocks of those goods. Some of these stocks could be exported by the help of export subsidies; however, most of them turn out to be worthless. This was valid for Turkey as well. Therefore, a new way of support that would not cause excessive stocks of useless products had to be established.

[2] The Treaty of Rome, Article 39, 1957

One of the central problems of price support system in Turkey was that small producers could not get adequate share of the support budget. Subsidies and supports were captured mainly by large farmers to the extent that only 10 percent of the benefits reached the intended recipients who are poor and small farmers as estimated by the Turkish Treasury (World Bank, 2000). This undesirable situation was another motive for a reform in agricultural policies.

One of the main differences of supporting agriculture via support purchases and direct income payments lies in whether the fund is available or not. In support purchase scheme, no budget income is devoted for agricultural support. Instead, SEEs are held responsible and only after support purchases are conducted, the expenses are paid by the Treasury to the SEEs. On the other hand, in direct income payments scheme, the planning is made long before the payments are done. The fund devoted to agricultural policy has to be put in the general budget and as a universal rule of budget, resources of all expenses has to be determined when the budget is discussed. Turkey implemented support purchases for years without finding out how to finance it. Implementing a support policy that had already turned out to be inefficient without determining its source accelerated financial problems. There had been a significant burden of interest payments due to this policy. For instance, the Treasury stated that in 1999 the fund disbursed to agriculture totaled to 4 billion USD; however, the cost of this disbursement to the public was 12.7 billion USD. The difference of 8.7 USD was the price of interest payments arising from reimbursing the payments without any specific resource (Treasury, 2002). It was, thus, essential to find a more efficient way to support farmers.

In Turkey, agricultural policy was considered the policy of the government, not the state. This reinforced the approach to increase the supports to the agriculture to get political support of the citizens. In this issue, it is interesting to note that subsidies had rises in years of election and falls in subsequent years (Çakmak, Akder and Kasnakoğlu, 1999). Yet, with its unique characteristics, agriculture has to be supported via consistent policies. In other words, the agricultural support policy

should be the state's policy and preserved from changes with political concerns. Otherwise, not just the farmers but also the whole country would end up paying for it.

4.3. ISSUES RELATED TO INTERNATIONAL COMMITMENTS

Apart from domestic pressures such as economic crises and agricultural sector's problems, there had been external pressures stemming from international agreements and commitments, as well. For instance, Turkey has commitments for the WTO's Agreement on Agriculture. This issue has been discussed in Chapter II in detail. Still, it is worth emphasizing it here because this agreement comprises the framework of agricultural policies. All contracting parties made commitments to shape their agricultural policies, including domestic support, in accordance with it. In this regard, World Trade Organization's Agreement on Agriculture constitutes the basis for agricultural subsidy program for Turkey. Even so, Turkey's measures prior to the agricultural reform did not comply with WTO regulations because support purchases were considered under the red box and thus were forbidden. Although it was under de-minimis bound, Turkey had to reform its agricultural policy of price support measures to comply fully with WTO rules.

Apart from WTO commitments, Turkey had also established Customs Union with the European Union in 1996. According to the Decision No:1/95 of The EC–Turkey Association Council on Implementing The Final Phase of The Customs Union, the regulations about free movement of goods do not apply for agricultural products. In other words, agricultural products are exempt from Customs Union rules. However, in Article 25 of the Decision, it is stated "Turkey shall adjust its policy in such a way as to adopt the common agricultural policy measures required to establish freedom of movement of agricultural products. It shall communicate to the Community the decisions taken in that respect." In this manner, Turkey had to adapt its agricultural

policy to that of the EU even though it is not a member state. Turkey will have to shift from price supports to direct payments to converge to the CAP measures. This could be considered another pressure to reform agricultural policy in Turkey.

If the CAP covered Turkish farmers before a noteworthy transformation is accomplished, this would mean that the cost of inefficient production in Turkish agriculture would be bear by the European taxpayers and consumers (Çakmak et al., 2008b). It is obvious that the EU would not allow such a compromise. Therefore, unless Turkey restructures its agriculture to produce in an efficient way, agriculture will always be an obstacle in its membership to the Union.

All these briefly explained forces added to the need for a reform in Turkish agricultural sector. Pressures were so strong that dramatic changes in support policies were inevitable. As a result, the government of Turkey consulted with the World Bank to get its both financial and technical assistance to reform agricultural policies. A project, called Agricultural Reform Implementation Project (ARIP), was developed in this scope. The government declared the need for a reform in its ARIP documents (ARIP, 2009a) as "A permanent reform is needed to elevate Turkish agriculture to the level of those of developed countries, to initiate shift to European Union Common Agricultural Policy, to elevate farmers' welfare level and to overcome current problems in agriculture." It was also mentioned in the documents that this need was not only due to structural problems Turkish agriculture faced, but also due to obligations to comply with international treaties signed with international organizations such as World Trade Organization, as well as to adapt to the CAP of European Union. Direct income payments scheme being one of the components in the project, was chosen to be the successor policy tool that would replace previous tools.

CHAPTER V

DIRECT INCOME PAYMENTS EXPERIENCE OF TURKEY

This chapter of the thesis focuses on implementation of direct income payments in Turkey. In this respect, first, the legal framework of agricultural policies will be discussed. Since agriculture has been one the most important and vulnerable sectors, there are several regulations about it in various forms. These legal papers are reviewed over the related items in time sequence of the legislation. The second part of this chapter is devoted to the criticisms against DIS in Turkey. These criticisms are analyzed in three main headings according to what is really criticized about DIS. For instance, criticisms focusing on the payments and the beneficiaries are analyzed under the same headings because they both emphasize something in the actual implementation of DIS in Turkey. Likewise, concerns about agricultural production, input use, macroeconomic impacts of DIS, and farmland issues are all about the consequences of DIS implementation, thus, they are grouped and analyzed from the same point of view. Finally, there are some criticisms that indeed criticize the policy in general, so criticisms of benchmarking and those regarding legal basis are grouped under this heading and analyzed accordingly.

Before elaborating on the criticisms, a few points should be emphasized. First of all, in discussing these criticisms, one should keep in mind that DIS in Turkey was not implemented as it was planned; rather there were considerable dilutions of the program. The most significant dilution was in the issue of implementing direct income payments as the sole agricultural policy tool, without any supplements.

Although it was declared that DIS would replace all other policy tools, it could not be implemented in such a way. For instance, from 2002 to 2004, price-based supports reached to their previous levels (Çakmak et al., 2008b). Since this kind of supports deteriorate the connection of production with the market, its effect can also be observed in the differences of prices in domestic and world market. This is examined in detail in the section about criticisms regarding input use and illustrated that the range between world prices and domestic prices in wheat has widened although domestic prices should have converged to world prices in a direct income support scheme.

The compromise from the ARIP could also be observed in the components of the supports to households. In particular, new payments constituted 24 percent of total support distributed to households in 2004. Thus, only 13 percent of the increase in support payments arose from increases in DIS, the rest 37 percent arose from the newly implemented support programmes (Çakmak et al., 2008b). The components of the transfers to households make difference especially in the issue of who to bear the burden of the support expenditures. In agricultural support policies, there are two main parties who bear the burden of support expenditures, namely consumers and taxpayers. In brief, when the agricultural sector is supported via price supports, consumers pay for it since they consume higher-priced agricultural products. However, when support expenditures are paid from the budget such as in the case of direct income payments, all taxpayers pay for it. In this regard, the composition of sources of agricultural transfers gives information about who bears the burden and thus about what kind of support schemes are dominant in the sector.

The evolution of agricultural policy expenditures regarding who bears the burden in Turkey could be seen in the figure below. Here, transfers from consumers are illustrated as the area below and transfers from taxpayers are depicted as the area above. Thus, the uppermost line indicates total transfers, from both consumers and taxpayers.

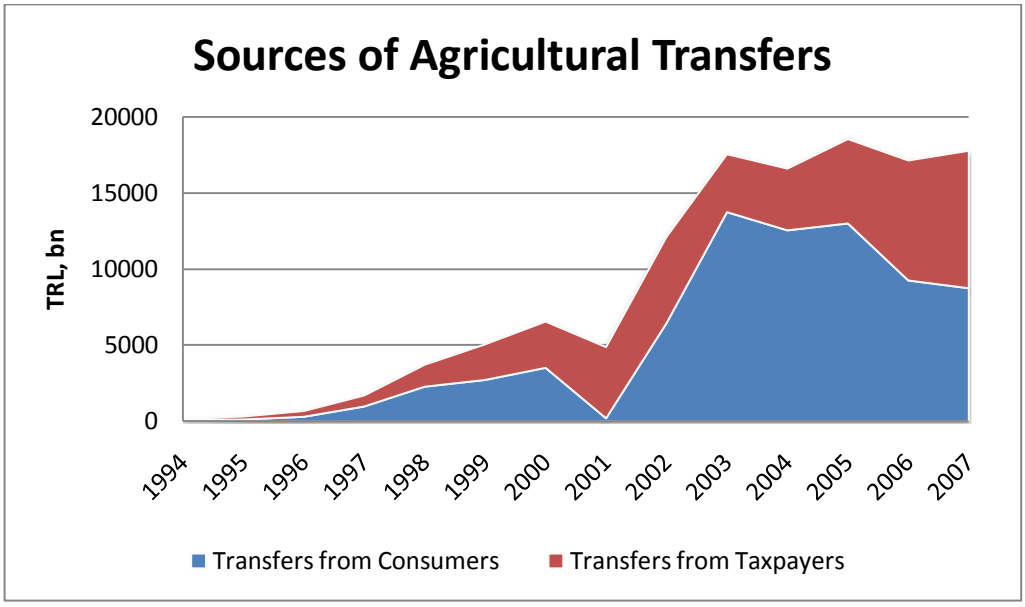


Figure 1: Sources of Agricultural Transfers

Source: OECD, 2009b

It is worth noting again that in 2001, Turkey had an agricultural reform and switched to direct income payment by abolishing price supports. This is reflected in the figure as the transfers from consumers being almost zero in 2001, implying almost none price-based supports in this year. The support expenditures were transferred from taxpayers in 2001; however after then until 2003, transfers from consumers increased sharply while transfers from taxpayers were kept almost stable. Afterwards, transfers from consumers started to fall down, whereas transfers from taxpayers were relatively steady. This progress implies that only in 2001, price-based supports were abolished but then they were introduced again, with an increasing scale. The share of budget-based supports has increased only since 2004 and outpaced price-based supports only in 2007. If ARIP were implemented as it was planned by abolishing price supports, total transfers would be comprised of, if not only, mostly transfers from the taxpayers. In fact, the consumers in Turkey transferred 9,700 million USD which corresponds to 2.6 percent of total GDP to agricultural sector in 2005 due to price distortionary policies (Eruygur, 2006).

5.1. LEGISLATION AND IMPLEMENTATION

This section of the chapter describes the legal framework of agricultural support policies in general and legislation about direct income payments in detail. In this regard, first legislation will be explained in all kind of regulations related to agricultural issues. Then, the implementation will be demonstrated based on the notifications.

5.1.1. Legislation

Agriculture constitutes a considerable portion of legislation in view of the fact that it is one of the essential sectors in all countries. In Turkey, there are items regarding agriculture in development plans, medium-term plans and annual programs. There are also specific regulations such as laws, bylaws and notifications. Among these, development plans are the long-term plans and with strategy papers they indicate the direction of agricultural policies. Besides, implementation notifications are the most detailed legal papers which regulate how and how much to support agriculture each year.

In this section, items in the long-term documents, which cover other sectors and matters too, will be discussed only on the scope of related agricultural issues. A brief review of related law and strategy will be provided next. Finally, notifications which regulate merely direct income payments will be explained in detail.

Eighth Development Plan (2001–2005)

At the outset, it is important to take into consideration the point that a policy tool should be evaluated based on the objectives of the policy. In this aspect, thoroughly understanding the objectives is essential before assessing effectiveness of the tools. It is also crucial that the basic unit of measurement should be the long-term economic welfare of the people that are affected by agricultural policy, and the performance of policy needs to be evaluated according to its effects on this measure (Brook et al., 1999). In this respect, the Eight Development Plan, which was agreed in the parliament as the Decree No: 697[3] in 2000, defined the overall objective regarding agriculture as to construct a sustainable agricultural sector which is organized, highly competitive, and handling the dimensions of economic, social, environmental and international developments in the context of effective use of resources for the periods from 2001 to the end of 2005.

Apart from the overall objective, it also discussed ongoing problems of the agricultural sector. In particular, it stated that implemented support policies so far could not help stabilize producers' incomes. Furthermore, support prices which were greatly above the world prices encouraged broadening some crops' cultivating area, causing excess production. This, in turn, resulted in high costs of stocking which were afforded by the state which was eventually financed by taxpayers. To overcome these problems, the plan brought up the concept of direct income payments which were already being applied as pilot implementation in 2000. Moreover, according to the plan, direct income payments scheme would be implemented countrywide in 2001 based on the results of the pilot implementation.

[3] It was published in the 05.07.2000 and 24100 day and numbered Official Gazette.

Agricultural Strategy (2006–2010)

Agricultural Strategy which covers the periods of 2006-2010 was accepted by the Higher Planning Council[4] in 2004. The main objective of the strategy was defined the same as the agricultural objective in the Eight Development Plan. There were also certain strategic objectives mentioned in the paper such as ensuring food safety and food security, increasing incomes of agricultural producers, taking measures to satisfy consumer demands, and promoting rural development projects and producer organizations.

It was also emphasized in the paper that harmonization to the EU's CAP and compliance with WTO's Agreement on Agricultural would be the main principle. Moreover, it was asserted that agricultural support instruments which did not distort market mechanisms would be implemented. Since the CAP consists of decoupled direct payments and WTO rules prohibit any distortionary interventions including domestic support, previous agricultural support schemes such as price supports were kept out of the scope of this strategy.

In agricultural strategy, instruments that could be used to subsidize agriculture were already mentioned by name, and also defined in certain aspects such as the scope and portion of budget dedicated to each of them. As expected, direct income payments were the first among these instruments. It was clearly put forward that direct payments would be paid based on the area. Furthermore, the share of the budget allocated to direct income payments, which would always constitute the highest share, would be phased out from 78% to 45% over time.

In the paper, it is also stated that justification of agricultural support payments, target groups, mode of payments, and time for payments will be determined in related legislation.

[4] 30.11.2004 and 2004/92 day and numbered Decision

Agricultural Law (2006)

In 2006, a law related to agriculture was accepted in the parliament with the number of 5488[5]. This law, still in force, has the overall objective of identifying and regulating policies which are essential to develop and support agricultural sector and rural territory in line with development plans and strategies.

In the law, direct income payments are defined as 'income transfers to producers which do not affect product and input prices directly'. Moreover, compliance with international commitments and use of support tools which do not distort market mechanisms are listed among the principles of agricultural policies. In this manner, support policies which have the influence to alter production decisions of farmers such as price supports are inconsistent with the law. The law also regulates that methods and principles regarding direct income payments will be determined each year by notifications of Ministry of Agriculture and Rural Affairs (MARA) which will be examined in detail in the following sections.

Apart from objectives of agricultural policies, there are targets and principles of agricultural supports defined in the law. *Agricultural policies* aim to enhance the welfare in the agricultural sector via certain measures in line with both domestic and international demand. On the other hand, *agricultural supports* aim to contribute to resolution of prior problems of agricultural sector, enhancing the effectiveness of implemented policies, and facilitate the harmonization of the sector to these policies. There are certain principles and strategies determined in the law to be taken into consideration when determining agricultural support programs. Compliance to the EU legislation and international commitments are mentioned once again among these principles. Furthermore, producers were to carry out their activities in the market conditions. These principles indicate the tendency of switching from a state of intense government intervention and highly protective agricultural markets to a competitive agricultural market and minimum intervention of the government to the

[5] It was published in the 25.04.2006 and 26149 day and numbered Official Gazette.

market. These are repeated in almost all legislative papers. In this aspect, Turkey seemed to be decisive in liberating the agricultural market in line with its commitments to WTO and the EU. However, it is hard to observe this in implementation. For instance, price supports should be eliminated due to Turkey's commitments to international organizations because they hinder competitiveness in the market. These kinds of support policies provide incentives for farmers to produce the supported products, thus they distort the market. They affect farmers' decision as what and how much to produce, so they also distort effective use of resources in the market. It is known that the transfer efficiency of market price support is lower than that of decoupled policies; that transfer efficiency falls as the level of assistance increases; and that transfer efficiency is impeded by imperfectly competitive markets (Brook et al., 1999). As a result, a country which has commitments to WTO and tries to be a member of the EU has to find other ways of supporting than price supports considering efficiency as well. However, Turkey still has some kinds of market price support policies. For instance, on 11.06.2009 support purchase prices of cereals was declared on the website of MARA[6]. In this declaration, both intervention purchase prices and sale prices were announced distorting both input and output markets. Since price supports are considered in red box which is totally forbidden in the WTO's Agreement on Agriculture and not permitted in the EU's CAP, declaring intervention prices is not in line with the rules at all. Keeping in mind that besides international commitments, it was regulated in domestic legislation as well that "neutral" policy tools were to be used not to distort the markets. In this aspect, it should not be wrong to conclude that practice is not always in line with legal papers in Turkey.

Like the strategy, the Agricultural Law also defines agricultural support tools name by name. Direct income support (DIS) scheme is one of them. Apart from DIS, there are deficiency payments, compensatory payments, animal husbandry payments, agricultural insurance payments, rural development payments, Environmentally Based Agricultural Land Protection (ÇATAK) payments, and other payments such as

[6]http://www.tarim.gov.tr/TMO_Hububat_%20Alim_Fiyatlari,hububat_alim_fiyatlari.html (Last checked on 05.01.2010)

research and development supports defined in the law as available tools of agricultural support. It is evident that support purchases are not considered a tool to support this sector. Any practice of price supports will contradict with the law according to this item.

Ninth Development Plan (2007 - 2013)

Ninth Development Plan was prepared covering seven years starting from 2007. It was accepted in the parliament as Decree No: 877[7] and showed the long term strategy and targets of Turkey in several aspects.

This plan which is still in force constitutes a basis for agricultural policies. Any further regulation should be in line with it. Therefore, it is important to understand its items.

Regarding agriculture, Ninth Development Plan stated that starting from 2001, price supports have been eliminated and the sector has been supported via direct income payments. Moreover, a registry system of farmers has been established in which farmers have to register to benefit from support payments.

The propensity to redesign agricultural policy tools towards direct income payments is observed in the Ninth Development Plan, as well. Since this plan was decided in the middle of the year 2006 and covers the following 7 years, it gives the impression that direct income payments would survive at least to the end of 2013. Otherwise, a long-term development plan and all the research and study behind it would turn out to be only void. Unfortunately, Turkey seems to be willing to sacrifice all these work.

[7] It was published in the 01.07.2006 and 26215 day and numbered Official Gazette.

Implementation Notifications[8]

As reviewed briefly above, long-term papers define the scope and the direction and let other papers legalize implementation. In this manner, both pilot and countrywide implementations of DIS were regulated in detail by notifications. Definitions of related issues, methods and rules of implementation are presented in the notification. Throughout the whole implementation period, some definitions and rules such as how farmers were defined or which documents had to be presented had changed. Therefore, to catch the rationale of whom and how to support by this policy, important definitions and issues which appeared in the notifications is explained in the next section of this chapter. In this way, it is intended to let the reader be able to follow the changes in policy implementation year by year.

These notifications start by stating the objective of regulation. One thing to note regarding the objectives is that the first three notifications (of 2001, 2002, and 2003) aimed to change existing support policies in agriculture. Starting from 2004, no expressions about changing current policies were mentioned in notifications. They only stated the objective of making direct income payments to farmers for some reasons.

Furthermore, these notifications regulated whom and which agricultural lands were not considered eligible to get the payments. For instance, starting from 2001 till 2007, farmers who did not apply for the payments in the application period with the necessary documents would not be supported by DIS. As this item suggests, benefiting from direct income payments was only voluntary. In general, farmers knew how, when, and with which documents to apply, and how much to get. They then decided on whether to apply it or not. They may need to consider transaction costs of application and trade-offs, and then decide accordingly. There may have been some farmers who were eligible for the payments but preferred not to apply without any particular reason. So the participation rate to the programs would also

[8] A table of comparisons of the implementation notifications is available at the Appendix C.

signal the effectiveness of the program (transaction costs, for instance) or the public information campaign (for instance, the fear of paying back the support).

Implementation notifications also determined the amount of payments per decare, and upper and lower bounds of farmland to base the payments. Both the base payment and upper and lower bounds of eligible lands changed year by year. For instance, upper limit of land area was increased from 200 in 2001 to 500 decare in 2002. Upper limit of DIS was put forward to limit big-size farmers to benefit from the payments and save financial resource to support smaller-size farmers who needed to be supported heavily. In other words, upper limit would help to focus on the small-size farmers who actually needed supporting. However, if determined inappropriately, upper limit could result in splitting farmlands to get more payments. Therefore, policy makers should be careful in balancing the advantages and disadvantages of determining the limit and decide accordingly.

5.1.2. Implementation

This part of the paper will focus on implementation of DIS scheme in Turkey. As mentioned before, items about the agricultural sector are present in development plans, medium-term programs, as well as strategy papers and laws. Still, the most detailed regulation regarding implementation of the policy is the notifications. Thus, implementation of DIS experience in Turkey will be tracked from these notifications.

Before implementing direct income payment policy throughout the country, pilot programs were applied in 4 provinces in 7 districts, namely Ankara Polatli, Antalya Serik and Manavgat, Adiyaman Merkez and Kahta, finally Trabzon Akçaabat and Sürmene (Notification No:2000/14)[9]. The amount of payments was also determined in this year's notification. It was regulated that each farmer would get TL equivalent of 5 USD per decare. There were upper and lower limits of farm areas to get

[9] It was published in the 04.04.2000 and 24010 day and numbered Official Gazette.

payments defined as follows: Each target farmer could get direct income payments for at most 199 decare of their land. Moreover, farm lands under 500 m^2 areas would be ignored while lands bigger than 500 m^2 but smaller than 1 decare would be considered 1 decare and paid accordingly. The necessary source of financing of this pilot implementation was decided to be provided from funds allocated to the Treasury budget's "Expenses of the Project of Improving Agricultural Support Policies" expense item and credits provided from the World Bank. The payments were to be done in two installments in the period that the Treasury would determine via the Ziraat Bankasi in cash or on account.

The task of monitoring and evaluation of the pilot implementation was assigned to Ankara Agricultural Economics Research Institute (AERI). So in March 2001, AERI published a report called "Monitoring and Evaluation of Direct Income Payments Pilot Implementation" (Bayaner et al., 2001). In this paper, survey results and general impressions were explained. For instance, it was found in this research that majority of farmers who received the payments were satisfied with the policy. Moreover, when asked whether they preferred DIS over previous support policies or not, farmers predominantly preferred direct payments. Another question in the research was about troubles during payments and a great portion of farmers reported that they did not encounter any problems. Surveys were also applied to farmers who were outside of the pilot districts, and a great portion of them expressed their willingness to get direct income payments.

Pilot implementation results were considered satisfactory so that at the end of 2000, a cabinet decree was signed stating that direct income payments were to be available country-wide to farmers who dealt with agricultural production based on cultivated farm lands (Cabinet Decree 2000/2172)[10]. An implementation notification which would be prepared by the ministry that is responsible for the Treasury and Ministry of Agriculture and Rural Affairs (MARA) would be referred for any further information regarding the criteria of eligible land and the program's method and principles.

[10] It was published in the 03.04.2001 and 24362 day and numbered Official Gazette.

Based on this cabinet decree, in 2001, an implementation notification (Notification No: 2001/15)[11] was made. Its purpose was declared as changing existing support policies, establishing farmer registry system, and making direct income payments to the farmers who dealt with agricultural production.

In this implementation notification, a farmer was defined as a person who would get direct income payments due to his/her performing agricultural activity by actively utilizing agricultural production resources. Moreover, only real persons would be considered farmers and paid DIS accordingly. Apart from answering to the definition of a farmer, agricultural producers also had to meet the criterion of beneficiary farmers. In 2001, farmers who dealt with agricultural production across the country and were registered in line with specified methods and principles were decided to be eligible for the payments. In the notification, it was put clear that farmers who misstated in application would not get DIS. This item was put in all implementation notification of 2001-2007. Farmers who were involved in agricultural production in the farmland where the land was publicized and legal entity farmers who dealt with agricultural products were also out of the scope of eligible farmers for direct income payments in 2001.

In 2001, payment per decare was 10 million TL. (It should be kept in mind that before 2005, Turkish Lira (TL) was expressed in millions; however, starting from 2005, 6 digits of zeros at the end of the lira were cancelled. Thus, 10 million TL in 2001 is the equivalent of 10 YTL after 2005.) Moreover, the farmlands over 200 decares were not taken into account. In other words, farmlands only up to 200 decares (including 200) were eligible for direct income payments. In addition, farmlands smaller than 5 decares would be paid over 5 decares.

According to the data sets of MARA, in 2001 in total over 2 million farmers were provided with direct income payments based on total farmland area of approximately 118 million decares. Moreover, since an eligible decare of land would get 10 million

[11] It was published in the 21.06.2001 and 24439 day and numbered Official Gazette.

TL, direct income payments totaled up to approximately 1.18 quadrillion TL in 2001. This amount was the equivalent of 1.18 billion YTL.

2002's implementation notification regarding direct income payments (Notification No: 2002/41) [12] was prepared with reference to 2002/4165 numbered Cabinet Decree's appendix's fourth item[13]. It was decided in the Cabinet Decree that farmers would be paid direct income payments based on cultivated farmlands and the payments would be made via Ziraat Bankasi. Moreover, the necessary financial resources would be determined in the budget. The decree also let the methods and principles are determined in implementation notifications. As a result, Notification No: 2002/41 was prepared and the purpose of this notification was set the same as 2001.

The definition of farmer in 2002 was the same as the previous year except for a real person farmer needed to be older than 18 years old or legally mature. Juridical persons still could not benefit from the payments. In 2002, beneficiary farmers were defined with a reference to Farmer Registry System (FRS). From 2002 and on, any farmer had to be registered in FRS to get direct income payments.

2002 was unique among the other years in that farmers were required to deliver a document which was approved by village headman and reported that the farmer cultivated and harvested the land. In this sense, producing was compulsory to get the payments and it had to be proved. This was also stated in the part of the notification describing which lands or farmers were out of the scope of the payments. Particularly, farmlands on which there had not been done any production activity (i.e. free fields) within the production year were not considered eligible for payments. This rule was also kept until the end of the implementation period. Although there were no regulations regarding which product to cultivate in these notifications, there was obligation to keep producing. This item is especially important to note because one of the mostly cited criticisms was on this issue. It was argued that farmers would

[12] It was published in the 31.07.2001 and 24832 day and numbered Official Gazette.
[13] It was published in the 14.06.2002 and 24785 day and numbered Official Gazette.

cease production when they got direct payments. However, legislation regulated this concern with this item.

2002 was unique in another item in the notification, as well. Among the requested documents, there was a letter of undertaking which stated that the farmer was not actively working and registered to Retirement Fund (RF) or Social Security Organization (SSO). By this way, the notification excluded people who work as civil servants in public sector or workers in private sector from getting the payments. This issue was restated in other items of the notification, as well. For instance, people who worked de facto under the registry of RF or SSO were counted among the farmers who could not get the payments.

In 2002, the upper bound of farmland area was decided to be 500 decares. Any land with an area bigger than 500 decares would not be considered eligible for the payments. Moreover, lands smaller than 1 decare were not to be paid direct income payments. Amount of payment per decare was determined slightly more than the previous year. Eligible farmers would get 13.5 million TL (equivalently 13.5 YTL after 2005) for each decare of their land.

Ultimately, more than 2.5 million farmers received direct income payments in 2002. These payments were made based on a total of about 162 million decare farmland. Furthermore, accumulated payments of the entire 81 provinces were 2.19 quadrillion TL in that year's terms which was the equivalent of 2.19 billion YTL.

2003 implementation notification (Notification No: 2003/13)[14] was to a great extent the same as that of 2002. The objective, reference cabinet decree, and definition of farmer were exactly the same. Beneficiary farmers were also defined in the same manner that farmers who were registered to FRS in line with specified methods and principles were those who would get the payments. Regarding principles about the farmlands on which DIS would be paid; the upper bound of the area of land was 500 decares which was the same as the previous year. However, the lower limit was

[14] It was published in the 02.05.2003 and 25096 day and numbered Official Gazette.

decreased. In the previous year, lower limit was set at 1 decare, whereas in 2003 it was determined as 100 m^2. In this way, the range had widened and farmers who cultivated farmlands with areas smaller than 1 but bigger than 0.10 decares could also benefit from the payments. Therefore, it should be expected that more application and more farmers who got direct income payments. As a matter of fact, more than 2.7 million farmers were supported via direct payments in 2003. When compared to previous year, number of farmers who benefited from the payments increased by about 200 thousand. These farmers received DIS for a total amount of 167 million decare land. Finally, total expenditures for agricultural support scheme of direct payments in 2003 was about 2.67 quadrillion TL which was the equivalent of 2.67 billion YTL.

Juridical persons still could not benefit from the payments in 2003; however, there was no mention of not working under RD or SSO. Among the non-supported farmlands, free lands where there had been no production were counted, meaning that production was still obligatory to get the payments

The amount of payments per decare was determined to be 16 million TL (correspondingly 16 YTL) this year. Before 2003, the payments were financed from the allowance allocated to "Services Regarding Improving Agricultural Support Policies" disbursement. However in 2003 and 2004, source of finance was not defined as specific as previously. The notifications just stated that allowances allocated to related disbursement items in the budget would pay for direct income payment; but did not specify the spending item.

In 2003, beside direct income payments, there were direct payments for diesel fuel consumed in agricultural activities. Fuel was considered to be one of the main inputs, thus affect production costs significantly. Therefore, it was decided to be supported separately. It is important to keep in mind that although the name of the support suggested consumption of fuel, the support was not given based on liters of diesel fuel that was consumed. In other words, diesel support was paid as direct income payments which were based on cultivated and registered farmland area. Regarding

this diesel fuel support, a cabinet decree (Decree No: 2003/5514)[15] was published declaring that farmers who were registered in the FRS would get 3,900,000 TL (equivalent of 3.90 YTL). Payments for diesel fuel were conceptually the same as direct income payments: they were based on farmland area and decoupled from amounts of input or output, they were paid to farmers who were registered in FRS, and there were upper and lower limits for farmland area to be eligible for the payments and so on. Moreover, necessary financial resources would be provided in the budget from expense item assigned to direct income payments. Therefore, this kind of diesel fuel support payment could be thought of *direct income payment* which is named differently. As a result, farmers who benefited from direct income payments in 2002 and 2003 could get additional payments in the scope of diesel fuel support payments.

2004 was the last year of first implementation period. Starting from 2005, there had been significant changes in many aspects of notifications ranging from the purpose to introducing additional direct income payments. Still, 2004 was more or less the same as 2003, even in terms of payment per decare in its notification (Notification No: 2004/22)[16]. It was prepared as reference to the two previous notifications' reference cabinet decree. Nevertheless, "altering existing support policies" was not in the purpose any more. This might be a clue that after implementation of three years country-wide, direct income payments were considered "existing" support policy so that the purpose of 2004 implementation notification was defined as only establishing FRS and making DIS to farmers who were engaged in agricultural activity. In addition, definitions of farmer, beneficiaries, or required documents were all the same as the previous year.

In 2004, farmers who dealt with agricultural production in more than one district and applied for the payments in more than one place, and juridical-person farmers could not benefit from direct income payments. In addition, farmers who did not produce

[15] It was published in the 02.05.2003 and 25096 day and numbered Official Gazette.
[16] It was published in the 13.05.2004 and 25461 day and numbered Official Gazette.

any agricultural product in the production year were not considered eligible for DIS. Therefore, farmers had to cultivate the farmlands and produce in 2004, as well.

Upper and lower limit for a farmland to be eligible for the payments in 2004 were also kept the same as the previous year, so that direct income payments were paid up to 500 decare of land and no payments were made for areas under 0.10 decares. Moreover eligible farmers would get 16 million TL (equivalently 16 YTL) for each decare of their registered farmland. In 2004, it was still possible to receive the payments in cash in the Ziraat Bankasi.

According to the data of MARA, the number of beneficiaries was slightly less than the previous year's value although more than 2.7 million farmers were supported in 2004 too. These farmers received the payments based on a total of about 166 million decares farmland. Moreover, in 2004 total DIS expenditure was 2.66 quadrillion TL (2.66 billion YTL).

2005 implementation notification (Notification No:2005/21)[17] expressed its purpose as to make DIS payments to farmers who were engaged in plant production to develop and support the agricultural sector and rural territory in line with development objectives and strategies This year was the first time that rural territory was expressed explicitly in implementation notifications. Moreover, development targets and strategies were referenced for the first time in 2005. These two new issues were also kept in latter notifications. In 2005 and 2006, the implementation notifications were prepared as reference to a new cabinet decree (Decree No: 2005/8629) which was agreed on by the cabinet on 28.03.2005 and stated that DIS would be made to farmers who dealt with plant production. In addition, there could be additional direct payments on the farmlands where certified seeds were used, soil tests were done, farmland aggregation was conducted, or environment protection courses were run. Furthermore, this decree assigned MARA the duty of determining the methods and procedures regarding the implementation of the decree. Notification No: 2005/21 which was prepared in this manner defined farmers more broadly than

[17] It was published in the 30.04.2005 and 25801 day and numbered Official Gazette.

previous notifications. First of all, juridical persons were also considered farmers from 2005 and on. Secondly, there were no mention of dealing with agricultural production in the definition of farmers but there was a specific emphasis on being registered at FRS to be considered farmers. Farmers who were eligible for DIS were defined as the same way as the previous year.

The size of eligible farmland was determined as 500 decares at most and 1 decare at least. Any farmer who applied for the payments based on their farmland with a size smaller than 1 decare would not receive DIS. One of the most important modifications in implementation in 2005 was introducing additional direct payments on farmlands where recommended production techniques were utilized. Farmers who did soil test and those who dealt with organic farming would get additional payments based on their registered farmland on which they conducted these activities. The regulations regarding farmers who were considered to be eligible for the payments were in line with previous ones. For instance, it was still compulsory to be registered in the FRS in addition to the requirement of applying for the DIS each year. In 2005, which was the first year of additional direct payments implementation, farmers who applied for additional payments had to provide the invoice of at least one input such as fertilizer or seed. In the notification in 2005, there were fewer restrictions on the farmers or fields that were not to be supported by DIS. Among the few restrictions, it stated that only public corporation could not get benefit of the payments. This was a significant change in the sense that previously only real persons could apply for DIS; but then juridical persons could also get the payments provided that they were not public. Besides, the criteria of engaging in agricultural production in the production year remained in 2005.

Apart from direct income payments, in 2005, farmers were to be paid chemical fertilizer and diesel fuel support payments. First, for the diesel fuel support, the purpose of the notification (Notification No: 2005/38) was defined as determining the methods and principles regarding supporting diesel fuel which was one of the primary inputs in agricultural production and affected production costs to a great extent. For the diesel fuel used in agricultural production, farmers would get

payments based on the agricultural product groups that they produced and farmlands that they registered to the FRS in 2004.

Table 1: Diesel Payments for Supported Product Groups, 2005

Product Group	Diesel Consumption per Decare	Payment per Decare
Vegetables, fruits, foliage plants, meadow, forestry products	5 liters	1.5 YTL
Cereals, feed crops, legumes, tuber crops	8 liters	2.4 YTL
Oil seed plants, industry plants	15 liters	4.5 YTL

Source: Notification No.2005/38

In the above table, supported product groups and related diesel and payment information is depicted. Farmers producing only these agricultural products would be considered eligible for additional payments. For each group, payments were calculated based on predicted diesel consumption per decare.

The other notification (Notification No: 2005/42)[18] in 2005 was about fertilizer support. In this notification, the purpose was defined as to determine the methods and principles of supporting fertilizer usage. A table of product groups and how much payment would be made to them is depicted below.

Table 2: 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

[18] It was published in the 15.09.2005and 25973 day and numbered Official Gazette.

In 2005, both fertilizer and diesel fuel support payments were based on farmland area although their name suggested consumption of inputs. Both payments were partially decoupled in the sense that none were based on production levels of outputs or actual consumption levels of inputs. Nevertheless, they were a mixture of decoupled and product-specific support. Given that product-specific support schemes provide incentives to produce those groups of products, they distort market orientation of the sector. Although direct income payments were not limited to certain product groups, payments for fertilizer or diesel were. Thus, they are not indeed in line with WTO commitments which are mentioned previously in this paper.

For the year 2005, per decare payments were declared as 10 YTL for basic DIS and 3 YTL for organic farming and 1 YTL for soil test. Eventually, about 2.7 million farmers were paid DIS for slightly more than 164 million decare of farmland. On the other hand, about 44 thousand decare of land was the base for organic farming support and 600 thousand decare of land was for soil test. In total 1.64 billion YTL was paid to farmers for their engagement in agricultural production and conduction recommended production techniques.

2006 implementation was also based on a notification (Notification No: 2006/27)[19] which was the same as 2005 except for a few details. For instance, implementation notification of 2006 stated the purpose as to support the farmers who dealt with *agricultural activities* as opposed to *plant production*. Upper and lower bounds of eligible farmlands were kept the same as 500 decares and 1 decare respectively. Like 2005 implementation, in 2006 there would be additional direct income payments based on the areas on which recommended production techniques were utilized beside basic direct income payments. The amounts of both basic and additional payments were to be declared later on by the ministry. Payments would be financed from the related expense items in the budget and would be deposited in the accounts of eligible farmers. Moreover, farmers who wished to benefit from additional payments had to apply for additional DIS separately. As mentioned previously, all

[19] It was published in the 30.05.2006 and 26183 day and numbered Official Gazette.

real and juridical persons except for public corporations could apply for the payments in 2006 also. However, there were still some limitations regarding the farmland to be the base for DIS. First of all, the fields on which no agricultural production was engaged in the production year were out of the scope of direct income payments. Moreover, farmlands which were considered in the scope of Protecting Agriculture Lands for Environmental Purposes (ÇATAK) programme were kept out of the scope of DIS to prevent the same farmland from getting benefit of both programmes.

In 2006 implementation, amount of direct payments were kept the same as the previous year. Specifically, basic direct income payment was decided to be 10 YTL per decare. Moreover, farmers would get 3 YTL per decare for organic farming and 1 YTL per decare for soil test provided that they satisfied all the requirements. As a result, in 2006, about 2.6 million farmers were supported in total. Moreover, about 163 million decare areas did get basic direct income payments, besides about 117 thousand decare and 3.9 million decares did get direct payments for organic farming and for soil test respectively. Total expenditure of direct payments in 2006 added up to 1.63 billion YTL.

In 2006, there was another cabinet decree (Decree No: 2006/11438) [20] about agricultural policies. As it was the case in 2005, farmers were supported with payments for diesel fuel and fertilizer. These payments were made to farmers who were registered in the FRS and benefited from DIS. Like direct income payments, they were paid based on farmland area; but unlike DIS, they were product specific.

[20] It was published in the 07.01.2007 and 26396 day and numbered Official Gazette.

Table 3: 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	5.40 YTL	3.00 YTL

Source: Cabinet Decree No.2006/11483

In the table above, amounts of payments for diesel fuel and fertilizer is depicted. For instance, any farmer in the scope of direct income payments would get additional per decare 5.4 YTL for diesel and 3.0 YTL for fertilizer support if he cultivated oil seed plants or industry plants. When compared to 2005 amounts of support for the same product groups, in 2006 both diesel fuel and fertilizer support amounts were increased.

Although some farmers could be happy with these kinds of additional payments, they all distort the market and hinder the efficiency of direct income payments. As a policy tool, DIS has to be decoupled, i.e. in no way should it provide incentives to produce certain products at certain amounts. All decisions should be left to the market to be determined and farmers have to catch the signals of the market and produce accordingly. Over time, each farmer would be producing what the market demands in his farmland by utilizing the land in the most efficient way. However, when there are support payments made based on farmland area but specific only to certain group of products, market signals are blow out. In this sense, adding new subsidies to the program and giving a portion of direct payments as fuel and fertilizer subsidy with different rates for different crops were dilutions of the program. All these make it difficult to argue that DIS was an incentive-free and decoupled instrument in the way it was implemented in Turkey (Akder, 2010). Making both decoupled direct income payments and product-specific direct payments also distorts

farmers' ability to adapt to the new support system and thus deter the chance of success of the policy tool. For that reason, when evaluating any policy tool, these kinds of distortions should be kept in mind.

Notification of 2007 (Notification No: 2007/14)[21] was published at the beginning of the year. In the last year of DIS, the purpose was defined by mentioning the concern of distorting output and input prices. It was stated in the notification that the purpose was to develop and support agricultural sector and rural territory in line with development targets and strategies by paying DIS to farmers who dealt with agricultural activities without directly affecting output and input prices. This notification was based on Item No.19 of Agricultural Law (Law No: 5488). It is different from all previous notifications in the sense that previous notifications were based on cabinet decrees but this was based on a law.

There were no significant changes in methods and principles in 2007 implementation. Upper and lower bounds of the farmland area were kept the same as the previous years. Payments were made to farmers for both basic DIS and additional DIS, to the bank accounts of the farmers. Public juridical corporations and farmers who did not engage in agricultural production in the production year were kept out of the scope of the payments. Besides, amounts of direct income payments were left to be determined by a cabinet decree which declared later on that basic DIS would be 7 YTL, DIS for organic farming would be 5 YTL, and DIS for soil test would be 1 YTL per decare. In 2007, per decare amount of payments for basic DIS was decreased whereas it was kept the same for soil test. On the other hand, DIS per decare for organic farming was raised.

In 2007, in total about 2.6 million farmers were supported. Moreover, about 1.13 billion YTL as basic direct income payments, about 0.7 million YTL as DIS for organic payments and about 1.4 million YTL as DIS for soil test was paid. In total, approximately 1.14 billion YTL was transferred to farmers in the scope of all kind of direct payments in the year 2007.

[21] It was published in the 16.02.2007 and 26436 day and numbered Official Gazette.

A figure of payments per decare for all implementation period could be observed below. For the basic direct income payments, per decare values increased gradually from 10 in 2001 to 16 in 2003 and 2004. Then, basic DIS decreased while additional DIS was introduced in 2005. The additional DIS paid for soil test remained the same throughout its implementation period; however, for organic farming, it increased from 3 YTL in 2005 to 5 YTL in 2007.

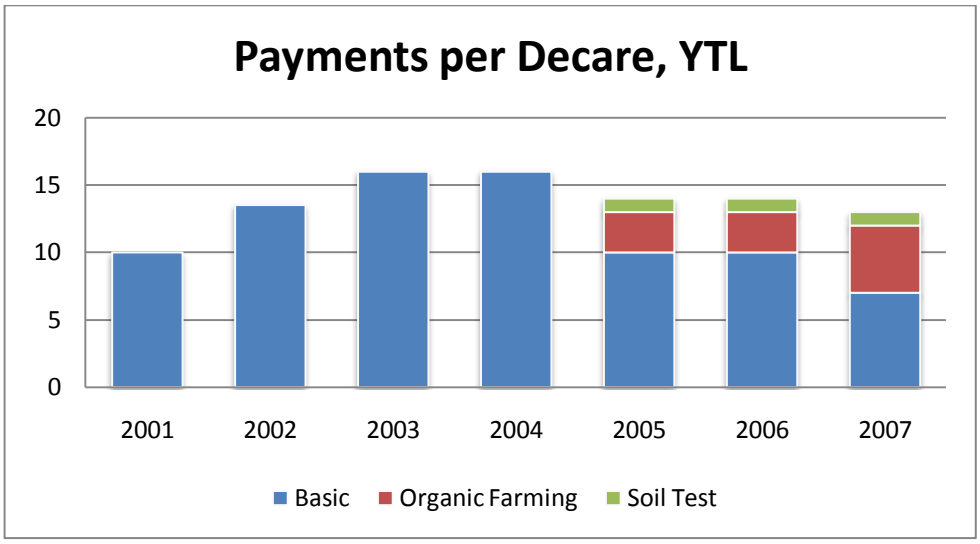


Figure 2: Direct Income Payments per Decare (2001-2007)

Source: Implementation Notifications and Cabinet Decrees

In the figure below, total number of farmers who registered to FRS and benefited from direct payments is depicted. It can be observed in the figure that fewest farmers benefited from DIS in the first year of implementation in 2001. This might be due to lack of knowledge and inexperience of farmers about direct income payments. In time, farmers would get familiar with the new support system, thus more farmers could apply for the payments in the following years. This is observed in 2002 and

2003. Then, the number of farmers declined slightly and remained at the level of around 2.5 million.

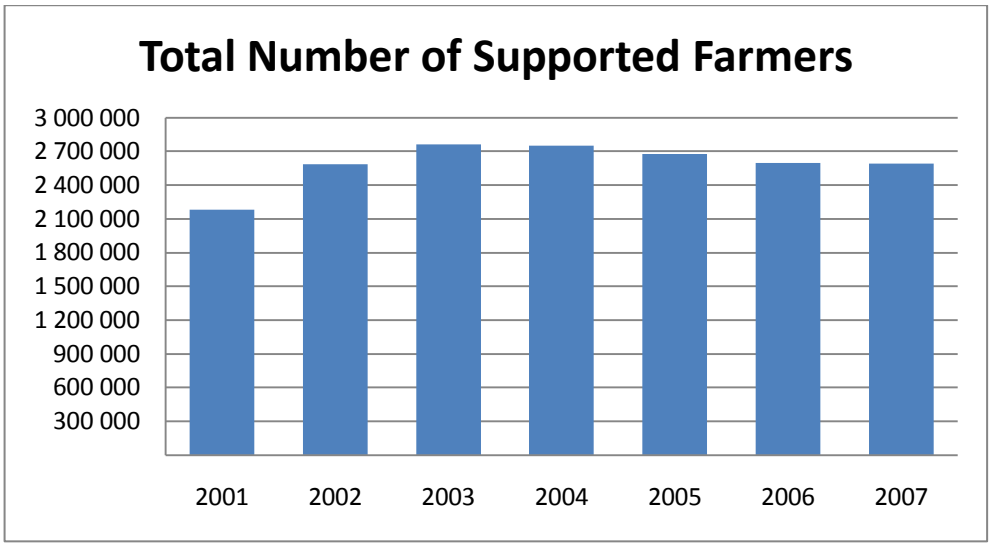


Figure 3: Total Number of Supported Farmers (2001-2007)

Source: MARA, 2009

Total farmland area that was paid direct income payments and total payments are depicted in the below figures. Firstly, total supported area is observed in Figure 4. In line with the figure above, in the first year total farmland area which was registered and paid DIS was the smallest. It, then, increased in 2002 and 2003. The total supported area remained quite stable in the last four years of implementation.

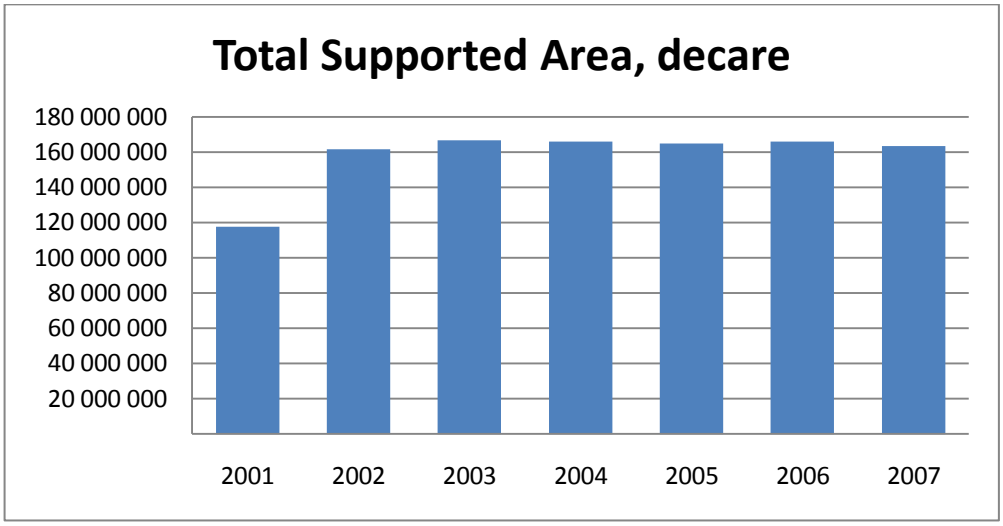


Figure 4: Total Supported Area (2001-2007)

Source: MARA, 2009

It should be noted that in the figures, total supported area and total payments include both basic and additional direct income payments for the years 2005, 2006 and 2007. Furthermore, in 2005 TL was renewed by removing last 6 digits of zeros. This is considered when depicting the figures so that all amounts of payments were transformed into new terms of TL without last 6 digits, i.e. into YTL.

In the figure below, total direct income payments are depicted. In the first four years of implementation, the base payment per decare has increased gradually. The increase in total payments in these years could mainly be attributed to the increase in base payments since the total supported area has increased only slightly while per decare payment increased from 10 to 16. In 2005, although additional DIS was introduced, per decare payment of basic DIS was decreased by almost 50%. This caused a sharp decrease in total payments. In 2006, the base payments remained the same as 2005 so total payments was stable in this year. However, in 2007, the base payment per decare was decreased from 10 to 7 YTL, therefore total direct income payments declined.

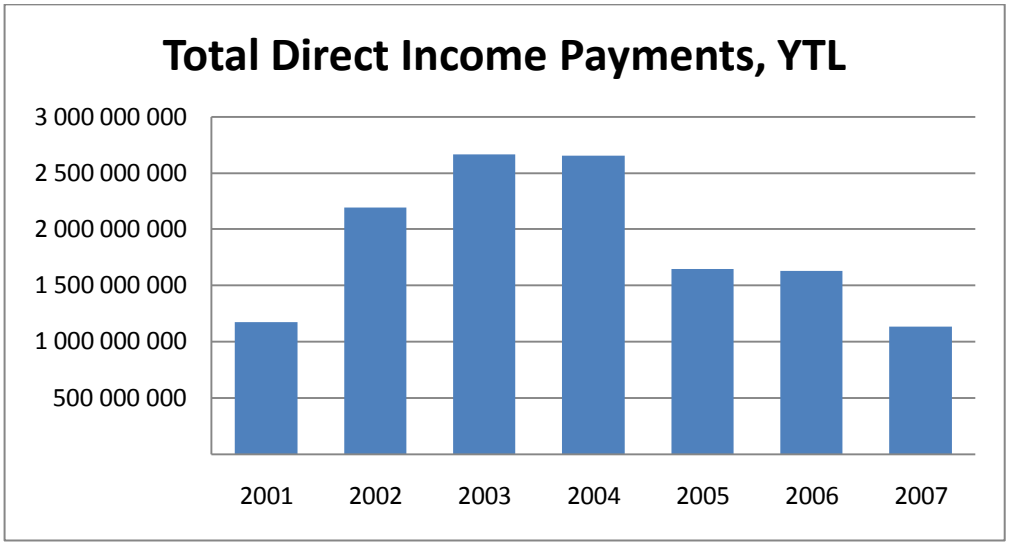


Figure 5: Total Direct Income Payments (2001-2007)

Source: MARA, 2009

The overall review of the DIS period could also be conducted by investigating the shares of provinces in total. For this purpose, all 7 years' figures of supported farmers, supported total area, and supported area per supported farmers are computed on average. For the distribution of these average figures among all provinces in Turkey, the maps in the Appendix B could be referred.

5.2. CRITICISMS ABOUT DE FACTO IMPLEMENTATION OF DIS

This part of the thesis focuses on the criticisms about actual implementation of direct income payments in Turkey in the aspects of payments and beneficiaries. Regarding the payments of DIS, criticisms are mainly in terms of issues such as value, timing, or share of the payments in farmers' incomes. In the next section, DIS is discussed in

terms of beneficiaries of the payments. In this part, criticisms about the subject of who should get the payments are questioned.

5.2.1. Regarding the Payments

Criticisms Regarding Payments of DIS:

1. The amount of direct income payments in Turkey was well below that of OECD average (Kızılaslan et al., 2007).
2. DIS' real value was lowered by payments in installments in the following year due to inflation rate. It was not paid before seeding on time. It should have been paid all at once and in seedtime so that it would not lose value in real terms and not be used for purposes other than agricultural inputs (Kızılaslan et al., 2007; Çetin, 2005; Ağırbaş, 2006).
3. In the previous agricultural support policies, subsidized crops were given 19 USD per decare, whereas they will be given only 5 USD in DIS (Özkaya et al., 2001).
4. The amount of DIS payments should have been increased in times when the prices declined too much, so that income fluctuations would be minimal. However, DIS was always paid before the production period by taking into consideration certain criteria (Dinler, 2008).
5. The share of DIS payments in total family income is far too low. So, it is not possible to increase income levels of small family businesses with this system (Ağırbaş, 2006; MPM, 2002; Bor, 2005).

This group of criticisms mainly focuses on the amounts of payments. Some of them compare DIS payments in Turkey with other countries while some others compare DIS experience in Turkey with previous policy tools. Furthermore, timing of the payments were discussed and criticized. However, none of these criticisms is based on specific indicators. For instance, DIS payments in Turkey is said to be compared with that of OECD's; but it is not explained which indicator is used. Likewise, the share of DIS payments in total family income is said to be low, but there are no

discussions about the value of DIS payments or total family incomes. Therefore, it is not possible to understand up to what extent those payments would be considered low. There are hardly any figures in the criticisms even if payments are discussed and criticized. This fact implies that criticisms are not based on sound arguments but on superficial investigation.

In the globalized world, the agricultural sector is subject to international competition and domestic policies of those countries, which control a great majority of international trade, directly influence the effectiveness of agricultural subsidy policies of small-scale traders. There is a thoroughly discussion about this issue in Chapter II. Thus, it is important to learn how agriculture is supported and how much support is given in other countries. Here, it should be recognized that to support might mean different in different countries. Thus, a common understanding and common indicators should be used in comparing different countries in their agricultural policies. In this respect, OECD's terminology and related agricultural policy indicators will be used in this paper to discuss this group of criticisms. To begin with, the OECD uses the term "support" to estimate the monetary value of transfers resulting from agricultural policies, whatever the intended objectives of those policies are (OECD, 2004). It means that no matter what the overall objective is, a kind of transfer occurs due to agricultural support policies. In other words, impacts of agricultural policies could be traced in the transfers from and to different stakeholders in the economy. Moreover, to measure how agriculture is supported and how much, a number of indicators with different explanations are used. Among these indicators, the ones that OECD describes are the most favored indicators throughout the world. The most important and central one is the producer support estimate (PSE) which shows the annual monetary transfers to farmers as policy measures. It is important to realize that support, and hence PSE, not only comprises budgetary payments that appear in government accounts, but also the price gap of farm goods between domestic and world markets, as measured at a country's border (OECD, 2004). Thus, one should be careful in reaching conclusions about the magnitude of the support by looking at only monetary transfers that go to the farmers' accounts.

Still, PSE could be used to measure individual countries' agricultural supports as well as to compare them with each other.

It is worth explaining that PSE indicators are expressed in both absolute monetary terms, such as billions of dollars, and relative terms –as a percentage of the value of gross farm receipts (%PSE), per hectare of farmland and per full time farmer equivalents (OECD, 2004). It is not surprising that any indicator in monetary value terms is subject to direct determination of variables such as magnitude of the sector, structure of the economy as a whole (from the point of the volume of production) or inflation level in the country (from the point of value of the production). Therefore, in assessing policy tools, absolute monetary terms should be used very carefully as it could be misleading especially in the comparisons of different countries. On the other hand, percentage indicators are more appropriate in making comparisons among country policies, supports given to different commodities or in different times. In agriculture, percentage PSE is measured by the OECD in this perspective. Specifically, 25% in percentage PSE terms imply that 25 cents of every dollar of farmers' gross receipts of the average OECD farmer is provided by the implemented support policy. From the point of the other side, a farmer could earn only 75 cents instead of 1 dollar if he had to sell his products at the world market price when there were no border restrictions. Therefore, the higher the %PSE value, the more the difference between the prices the farmers receive and the prices at the world market.

These discussions underline that, apart from the issue of with whom to compare, it is important to choose a rational indicator to compare as well. For instance, two related figures about agricultural policy indicators, PSE and percentage PSE of the OECD, is depicted below. In the first one, the policy expenditures are expressed in million USD while in the second one; it is expressed in percentage values. These figures are self-evident of the fact that one could reach totally opposite conclusions in comparing the same two countries. As it is seen on the first figure, when absolute amount of the support is compared, Turkey supports considerably less than the USA. Nevertheless, Turkey's support values are more than the USA when percentage

terms are compared. Then, Turkey supports both more and less than the USA depending on which indicator is used in comparison.

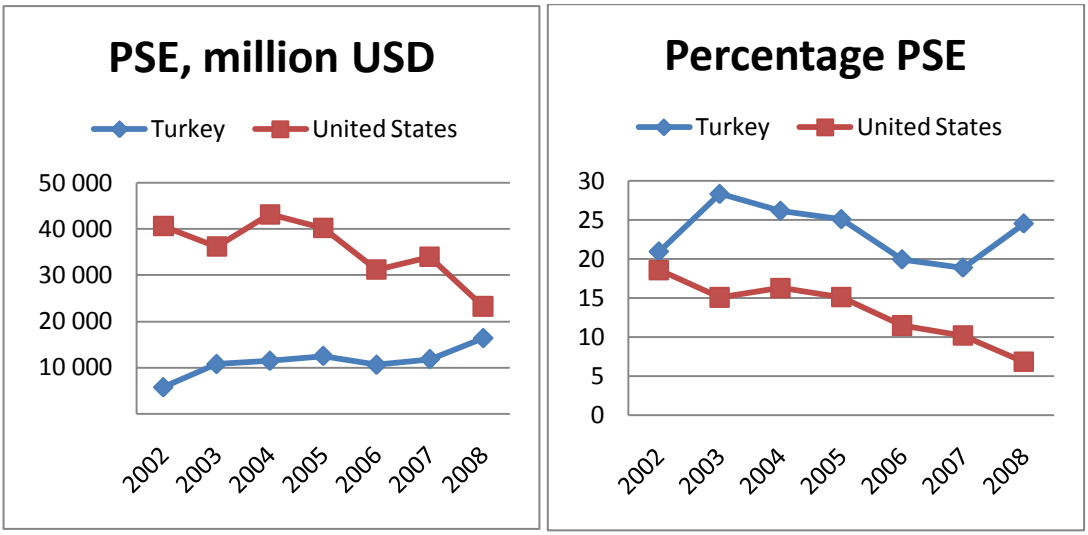


Figure 6: PSE and Percentage PSE for Turkey and the USA

Source: OECD, 2010a

Criticisms stating that Turkey did not support as much as developed countries therefore, have to explain first, on which indicator they base their assertions. If percentage PSE is used, Turkey supports well more than the USA so one could easily claim that Turkey should decrease expenditures on agricultural policy. Of course, it would be misleading if none of the other factors were taken into consideration. Yet, it is essential to find rational and supportable indicators when comparing different countries or different policy tools.

There are a number of criticisms stating that in Turkey, DIS payments were less than OECD average. Not all member countries in the OECD implements direct income payments schemes so that it is not possible to compare directly DIS payments.

Rather, percentage PSE is used in this paper to analyze Turkey's situation among selected OECD members.

In the figure below, percentage PSE values are depicted for the selected OECD countries for the year 2008. It could easily be seen on the figure that OECD statistics do not justify the claims asserting that Turkish agricultural sector was not supported as much as other countries. It could be observed that Turkey's percentage PSE of 25 is the same as the European Union average. This value is even greater than OECD average, which is only 21. There are countries among OECD members whose percentage PSE is more than 50, while there are others with percentage PSE lower than 10. Therefore, one should be careful in comparing the percentage PSE values of different countries since any statement of 'agricultural support in Turkey is less than *the others*' is too general to be true.

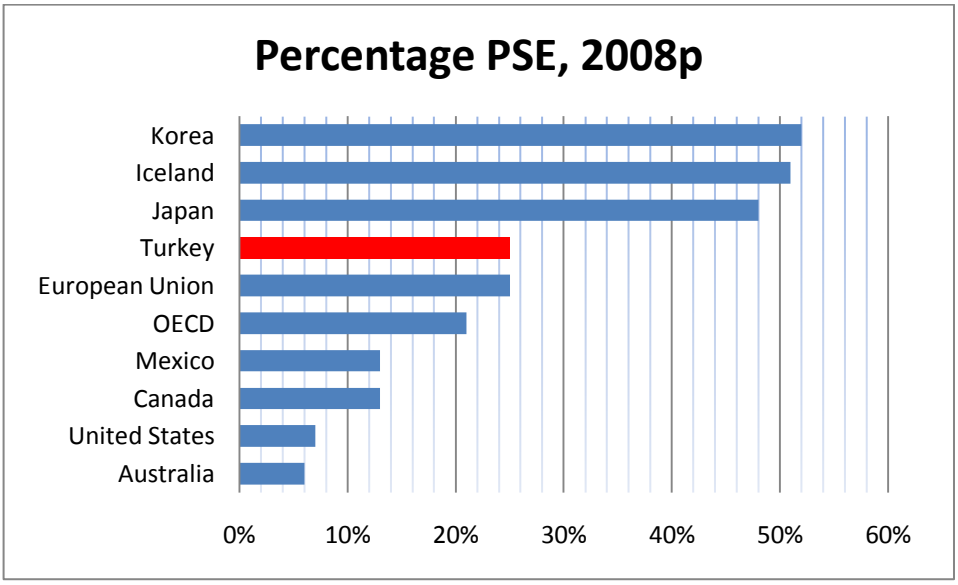


Figure 7: Percentage PSE for Selected OECD Countries, 2008 Provisional

Source: OECD, 2009a

To emphasize once again, it could easily be observed in the figure that Turkey's percentage PSE is not less than average of those of OECD's or European Union's. Therefore, these data confute those criticisms stating that the amount of direct income payments in Turkey was well below that of OECD average.

Another group of critics focuses on the timing of the payments. They blame inflation in lowering real value of DIS payments when it is paid in two installments. More specifically, these criticisms assert that farmers would receive less in real terms due to inflation when they were not paid in seeding time in lump sum. In addition, they prefer payments in seeding time not to let farmers to buy anything out of the scope of agriculture. This issue of for what to spend support payments is discussed in the section where the criticisms regarding input use are reviewed. To rephrase, a farmer could spend his money on whatever he wants no matter which agricultural policy tool was used to transfer the money. Even in price support, farmers could spend the extra money they receive due to intervention prices higher than the market prices on their private consumptions. Also, it is not rational to expect farmers to spend all direct income payments back in agriculture even though they were paid in lump during seeding time.

Regarding being paid in the following year, these criticisms are valid to an extent. However, they focus on the confusing side of the issue. Their main concern is the inflation and they wish to pay the farmers their DIS on time to preserve the payments' real value from depreciating. This issue could be construed in different points of view. First, one should note that in previous support policies, namely support purchases, farmers first cultivated their land, harvested, and then sold their products to the government institutions to receive the support. Hence, they could receive the payments only after all production process is completed. In this perspective, if price supports were all right for the critics, DIS should also be acceptable. Since DIS is said to be paid after the cultivation period, all concerns related to timing of the payments such as preserving the real value or preventing them from being spent on private consumptions apply for both previous policy tools and DIS.

Secondly, inflation levels could be observed to see whether the real value of payments actually depreciated due to annual inflation rate. In the figure below, annual increase in the prices received by farmers and increases in general price levels in the country, i.e. inflation rate, is supplied for the years DIS was in force.

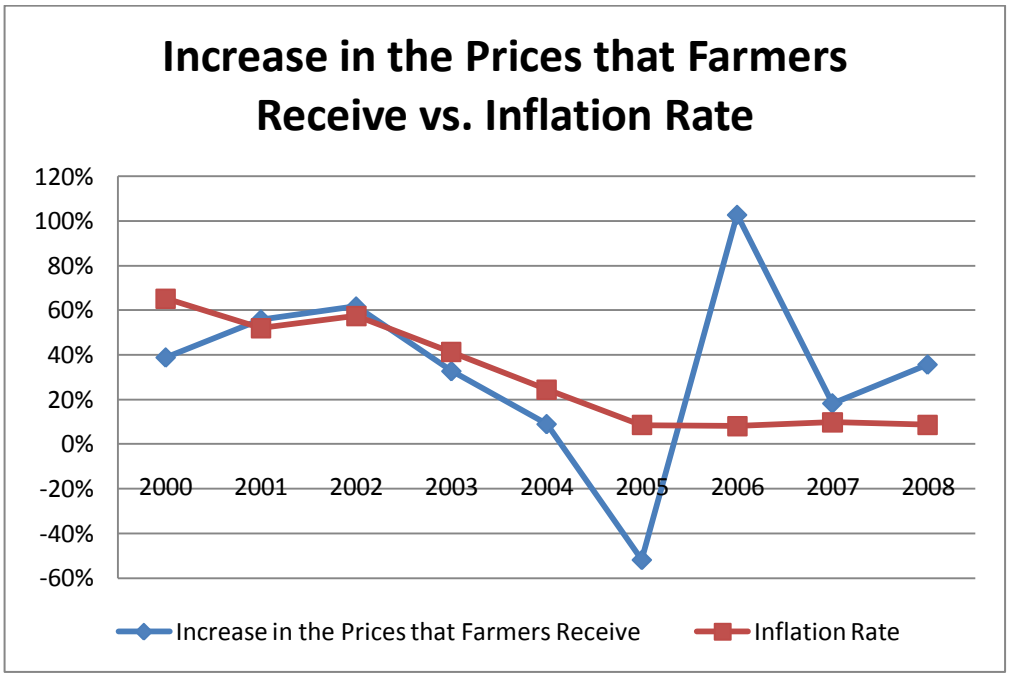


Figure 8: Increase in the Wheat Prices Received by Farmers vs. Inflation Rate

Source: Author's calculations from Turkstat, 2010b and Turkstat, 2010c

Although inflation rate fell consistently after 2000 as a result of a number of economic stabilization programs and remained at levels less than 10 percent starting from 2005, increase in the prices that farmers receive fluctuated greatly. In 2000, inflation rate was so high that the prices that farmers receive could not increase more than that. Nevertheless, inflation started to decline in 2001 while farmers received a higher price than the previous year. Rate of increase in prices received by farmers remained above the inflation rate for the following two years and then they both

started to decline. It should be noted that farmers had a greater range in both increases and decreases. That is to say, in times when both the inflation rate and the prices that farmers receive fell, the magnitude of reduction in the prices that farmers receive was higher than reduction in the inflation. In a similar way, when both of them increase, the magnitude of increase in the prices that farmers receive was greater than the magnitude of increase in the inflation rate. Anyhow, prices received by farmers increased less than inflation rate for a few years, and then a sharp rise was observed in 2006. After then, even though inflation rate remained at its considerably low levels, farmers had great increases in the prices they received. Therefore, it is not possible to claim that inflation did always depreciated payments farmers received as there were years when inflation rate was at its minimum levels while prices received by farmers were at its maximum levels.

These critics implicitly assume that inflation prevails in the country so that even one year of lag would result in diminished real value of the payments. At this point, inflation should be considered in both the demand and supply side. That is to say, since farmers are both consumers and producers, inflation might also benefit them by increasing prices of their products. Anyway, if the inflation was supposed to be high, the ultimate effect of it on farmers would be determined after the reduction in their purchasing power is compensated by increase in their revenue. This increase in revenue would be experienced because their products would be sold in the market at higher prices due to inflation. On the contrary, if inflation were supposed to be acceptable, then there would be no need to concern about being paid in the following year. Nevertheless, none of these criticisms mentions low inflation rates or the producer characteristic of the farmers beside consumer characteristics. Hence, it is not possible to understand how they base their assertions. Furthermore, the figure above clearly indicates that during DIS years, inflation rate fell sharply and consistently. Therefore, in those years, inflation might not have had a considerable influence on the real value of the payments even if they were paid in the following year.

A number of other criticisms focus on the timing of the payments from other perspectives. Some of them assert that DIS payments should be paid before the seedtime, some wish to be paid during the seedtime, while some oppose the payments before production period. In addition, there are critics who think that DIS payments should be determined by the prices in the way that payments should be increased in times when prices fall too much. Thus, there is no consensus among the critics about timing of the payments. Still, none of these criticisms is in line with the logic of direct income payments.

Decoupled payments have to be paid before production decisions are taken to be effective in rationalizing the agricultural sector. It would have no effect in optimizing utilization of factors of production if it was paid after the seed is purchased, the farmland is cultivated, and the irrigation system is established and so on. The production process cannot be changed overnight from one product to another. It requires time, money, labor and so on to equip the process for another crop production. It is at just this point when DIS payments are essential. Farmers who analyze the market demand and their own factors of production, especially farmland, and decide to alter their agricultural product have to begin modification before the production process starts. They need money at that moment. Therefore, decoupled DIS payments should be paid before these decisions are made so that farmers who intend to change their production of one crop to another could make the necessary investments. Otherwise, decoupled DIS would have no difference from coupled price support in terms of market orientation.

Likewise, if DIS payments were indexed to prices, that scheme would be a kind of compensatory payments such as deficiency payments. This would also deteriorate market orientation of DIS. In economics, it is only natural for supply of a product to decrease if price of that product is decreased. As an economic actor, a farmer takes part in production activities to earn money to be able to meet his own needs. Thus, if he cannot earn enough in production of one crop when its price falls, he will revise his decision on production of that crop and analyze the market to find out any other profitable crops. In a competitive market, he will shift from production of

unprofitable crops to profitable ones and a new equilibrium will be established in the market. However, if there is an intervention in the market such as increasing support in times of decreased prices, this mechanism will be hindered. Agricultural producers will be producing unprofitable crops when the revenue loss is compensated by increased DIS payments. No need to say that this will contradict with market orientation characteristics of DIS. As a result, the criticisms about timing of direct income payments are not rational in this aspect.

Some of these criticisms mention per decare value of the payments and compare it with previous agricultural policies. Specifically, in some papers it is stated that in support purchases, supported products were given 19 USD per decare whereas they would be given 5 USD in direct income payments. Thus, there was a concern of lowered support for per decare farmland. It is out of the scope of this paper to calculate monetary value of previous agricultural policy tools in terms of average payments per farmland area; yet per decare payments of DIS could be observed to see its trend.

It should be noted first, though, that those exchange rates of USD in previous support policy years are almost half of the exchange rate in DIS years. As it was explained in detail in Chapter IV, Turkish economy faced an economic crisis in 2001 when TL depreciated significantly. To be specific, in the Central Bank of Turkey's official data, 1 USD was worth 623,270 TL in its then value when TL was expressed in millions with six digits of zeros before 2001. Nevertheless, as one of the consequences of the crisis, Turkish Lira depreciated and the exchange rate adjusted to 1,224,550 TL. Taking into consideration the fact of unmanageable external factors such as economic crisis, which depreciated domestic currency, it is hard to separate the impacts of each and every variable on the aggregate. Therefore, as a basic rule of economics, effects of individual factors should be considered in ceteris paribus assumption, keeping all other factors constant. Therefore, it would be misleading if USD equivalents of payments in TL before 2001 were compared with USD equivalents of payments in TL for the years starting from 2001. Since in Turkey, medium of exchange is TL and exchange rate was stabilized after a series of

economic reform programs after 2001, it would be unfair to compare USD equivalents of TL payments of previous policy tools and DIS as calculated with the related year's exchange rate. Rather, the rate of exchange in 1999 is used to convert all payments to their US Dollars equivalents to be able to compare previous payments in USD. The year 1999 was considered a benchmark because the value of previous support policies was calculated in that year's exchange rates and there are no other computed USD equivalents of supports given in TL.

The figure indicating USD equivalents of TL payments of both previous policy tools and DIS is depicted below. The values of previous policy tools' payments are taken as given by the critics, whereas values of DIS payments are calculated by using the Central Bank of Turkey's officially declared exchange rate for the year 1999 and per decare payments in DIS years as declared by legal notifications and Ministry of Agriculture and Rural Affairs. It is worth mentioning that the related criticism was published in 2001, so only the pilot implementation payment of 5 USD was mentioned there. However, since 2000 was the year of pilot implementation, it could not be representative of the whole DIS period. So the figure is depicted for the years starting from the first year of countrywide implementation.

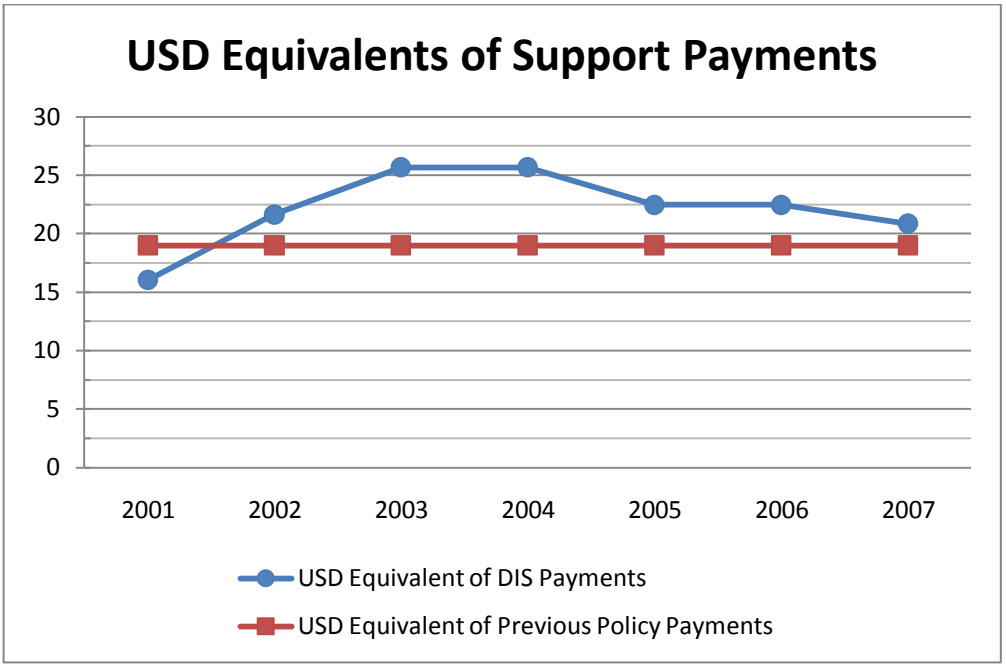


Figure 9: USD Equivalents of Direct Income Payments (2001-2007)

Source: Author's calculations from CBRT, 2010 and related legislation

In the figure, 19 USD line that indicates per decare payments of previous policy tools is also depicted beside DIS curve which is computed by using the exchange rate of the year 1999 to be able to see the divergence. As it could easily be seen on the figure, only for the first year of DIS its payments in USD terms are slightly below 19. Starting from 2002, DIS payments exceeded previous payments and were above the benchmark of 19 until the end of the implementation period. USD equivalent of DIS payments per decare was 16 in 2001, and then it increased gradually to 26 until 2005. Then it decreased slightly and was around 21 in the last year. It is obvious that USD comparisons of TL payments could cause confusing conclusions especially in crisis years when the real value of currency could depreciate overnight. The most appropriate approach in this case would be to determine purchasing power of the payments in the country. Apart from it, comparing USD equivalents would not mean much. Even so, DIS payments could purchase more USD than previous tools if there were no crisis. As a result, these discussions underline the fact that the concern of

decreased support as compared previous policy tools with DIS in USD terms has no baseline.

Lastly, in this section, some criticisms focus on the payments in different aspects. For instance, in some papers, DIS payments were expected to minimize fluctuations in incomes of farmers. In some other papers, DIS is criticized for being incompetent in increasing farmers' income levels. Besides, it is explained above why DIS payments should not be increased to compensate for the income lost as asserted by the critics who claimed that DIS should be used to prevent income fluctuations.

What is more, critics who claim that income levels of small family businesses cannot be increased by DIS, base their criticisms on the fact that DIS payments constitute only trivial share of total family income. This assertion is like a flip-flop in the sense that if it were true that DIS payments are insignificant in total income, then there would be no need to support the incomes of these people, as they would be earning someway. On the other hand, if DIS payments constitute a great share of total income, then it would be all right for the critics since incomes of farmers would be increased by DIS. Furthermore, although the problem of low incomes is a rural issue rather than a specifically agricultural one, establishing a minimum level of income costs several times higher in price supports than in a limited direct payments scheme (Brook et al., 1999). Thus, if increasing small farmers' income was the goal, direct income payments would be more appropriate than previous support tools.

5.2.2. Regarding the Beneficiaries

Criticisms Regarding Beneficiaries:

1. Since DIS was paid to landowners, those people who owned the land but not engaged in farming took advantage of the payments. Even though it was regulated that plant production would be taken as the basis in implementation notifications, in practice DIS was paid based on land assets. Agricultural producers who did not own farmland could not get the support payments

(Kızılaslan et al., 2007; Ağırbaş, 2006; MPM, 2002; Gül et al., 2001; Dinler, 2008).

2. Farmers would get DIS regardless if they cultivated their land or not. Any support paid to farmland that is not cultivated cannot be classified as agricultural support. Those who left their land fallow could also benefit from DIS since it would be paid without any requirement to cultivate and harvest the land (MPM, 2002; Özkaya et al., 2001; Ortaç et al., 2006).
3. Beneficiaries faced problems in applications.
    a. Transaction costs of applying for DIS totaled more than the DIS payments especially for deprived farmers. Ambiguity and difficulties in land registry cadastre and inheritance transactions tired farmers and made them reluctant towards DIS. On the other hand, most of those who did not or could not apply for DIS payments were small-scale farmers that needed this support (Çakmak, Akder and Kasnakoğlu, 1999; Kızılaslan et al., 2007; Akder, 2010; Ağırbaş, 2006).
    b. The general feeling in this issue was that DIS payments would not be paid or the beneficiaries would have to repay it later. Applications remained at low levels in fear of having to pay higher taxes or repay the payments later (Kızılaslan et al., 2007; Ağırbaş, 2006).
    c. It should have discriminated between farmers who produced efficiently and those who produced ineffectually. Peasants in the Middle or Eastern Anatolia and farmers in Aegean or Cukurova received the same amount of payments. Thus, DIS is not advantageous for poor farmers. Regional disparities should have been taken into consideration and farmers in the least developed regions should have been paid more than those in developed regions (MPM, 2002; Öztürk et al., 2002; Özkaya et al., 2001; Bor, 2005; Çetin, 2005).
4. It should not have been given evenly to all eligible farmers. It was not fair to pay the same amount for all size of farmland and all crops in all districts.
    a. DIS was such as to support big farmers rather than small ones. Although it aimed to protect owners of small farmlands, owners of big

farmlands benefited more than them (Yılmaz et al., 2006; Kızılaslan et al., 2007; Çetin, 2005; Yılmaz et al., 2008; Babacan, 1999; Öztürk et al., 2002; Bor, 2005).

b. It should support farmers who needed income support, i.e. small farmers (Yılmaz et al., 2006; Kızılaslan, 2007).
c. DIS affected negatively big scale farmers who operated rational while keeping small farmers in the agricultural sector. Big scale farmers who operated rationally with their capital invested in agriculture and techniques implemented were punished by DIS in a sense; while public resources were transferred to inefficiently operating producers (Eraktan, 2001; Ağırbaş, 2006).
d. Small-scale farmers were encouraged to keep operating in the agricultural sector. This, in turn, resulted in failure of structural improvements and reducing number of people employed in agriculture. When small farmers were encouraged to be employed in agriculture and farmland mobility was limited by DIS, they would have negative consequences (Eraktan, 2001).

This group of criticisms focuses on the beneficiaries of the payments – who should get the support and who should not. They mainly have a pair of beneficiaries in their claims based on which they make comparisons and assert that one of them should be the beneficiary as opposed to the other. For instance, there are pairs of small vs. big farmers, landowners vs. producers who did not own the land, farmers in developed regions vs. farmers in undeveloped regions, and so on. There are also quite conflicting criticisms. For instance, none of the critics is happy for the evenly paid DIS; nonetheless some of them claim that small farmers should get more of the payments while others believe big scale farmers were punished by getting less of the DIS payments. This is interesting in the sense that although the data are common, their visions differ greatly so that people reach totally opposite conclusions.

The criticisms have different point of views in asserting their claims. For instance, some of them consider the issue of beneficiary of DIS payments from the point of

requirement of any social state, some take into consideration structural developments and farmland mobility in the agricultural sector. In addition, some critics concern the use of public resources and worry about transferring them into unproductive areas in the economy.

Even though the question of who should get the DIS payments is one of the mostly written issues, criticisms about it can be collected under a few headings. Among these, the frequently written matter of whether to support big-scale or small-scale farmers is the most controversial one. Some of the criticisms about this subject fiercely oppose DIS because it was supporting the big farmers more than the small ones, while some others indict DIS for imposing a penalty on the big farmers, whose value added is more than small ones, by supporting them less. This situation implies that whatever policy tool is implemented and whoever is supported more, it is impossible to avoid disapprovals and there would always be people who are unhappy about the policy implementations.

Some authors criticized DIS based on their misinterpretation of the items in implementation notifications. In particular, critics asserted that plant production was determined as the basis for payments in the notifications, not the farmland area. However, production is mentioned in the items of the notifications describing the farmers, not as the criteria over which DIS will be paid. Besides, it is not plant production but agricultural production that is regulated in the notifications as one of the determinants of farmers. Moreover, as discussed in detail in the previous sections of this chapter, these notifications determine the amount of DIS payments explicitly in "per decare" terms. None of them bases the payments on production levels. Therefore, any critics asserting that in legal papers plant production was regulated to be the basis confuse the items of the notifications. The items related to eligible farmers are misinterpreted as if they were regulating the basement for the payments.

In legal notifications, DIS was regulated to be paid to the producer, not to the landowner. Indeed, related notifications defined farmers in detail and the items referred to the *farmers* not *landowners*. As a matter of fact, the World Bank

suggested paying the landowners; however, Turkey opposed that suggestion and favored paying the agricultural producers (Çakmak et al., 2008a). Still, in the economics perspective, it does not make any difference between paying the producer or the landowner. As long as the farmland is the most important input which has the lion's share in production costs, it is inevitable to experience appreciation in its value due to support policies. Consider an agricultural policy tool in which not landowner but the farmer who rented the land gets direct income payments. The farmer will, in the first year, put this extra income in his pocket. However, in the following years, the landowner would demand more rent from the sharecropper since his asset's (i.e. farmland's) return has increased. As a result, the landowner will transfer the DIS payments into his pocket without doing anything illegal or corrupt (Akder, 2003). This is valid for other policy tools, as well. Basic economic theory, as well as evidence from price support programs all over the world, shows that the benefits of any payment program (including price support programs) go eventually to the landowners, even if the direct recipients of the payments are renters or share-croppers (World Bank, 2000). It is also interesting to note that there is only a slight difference between paying the area-based support to producer or landowner in Turkey (Çakmak et al., 2008b). As it is discussed in the next section of this chapter reviewing criticisms about farmland issues, majority of the farmers in Turkey operate on their own land anyway. Specifically, 97.83% of the lands were operated by the owners of the land, and 97.82% of the holdings operated on their land.

The matter of paying the landowners is criticized by other authors in different aspects, also. It is said that farmland mobility is hindered by payments based only on landlordship and this will, in turn, negatively affect the process of expanding businesses via land mobility (Eraktan, 2001). It is asserted by the critics that if any support payments were disbursed on the land, it would make the landowners reluctant to sell or rent their farmland but encourage them to hold on to it. Then, if an agricultural business was to expand its business by taking over other small businesses to benefit from economies of scale in its production processes, it could not persuade owners of other businesses to sell their lands. This criticism certainly lacks the perspective of economics. The owners of small businesses would not wish

to sell their farmland to the others when they get DIS until the proposed price covers the opportunity cost of not holding the land which includes DIS payments as well. If the proposed price did not take into consideration the value of DIS on that farmland, it is only normal for the owners to hold their land. In addition, in the rural, there are hardly any other area of businesses, thus if agricultural producers sell their land, they have almost no alternative occupations. This would, naturally, discourage farmers from selling their farmland, no matter whatever the agricultural support policy tool is implemented. Therefore, keeping in mind that land mobility has not been well functioning in Turkey already, criticizing DIS for not encouraging it is unfair.

It is one of the most discussed issues of DIS, that the people whose main occupation was not farming and who did not reside in the countryside did actually get the payments. If there are any incidents that people who are not at all engaged in agricultural production applied for DIS and got the payments, this is not the fault of the type of the support (Çakmak et al., 2008a). Legal notifications regulate who are considered farmers, and who are the eligible ones for the payments. Notifications regulate a number of constraints regarding which farmers and farmland cannot be eligible for DIS as well as documents required to submit during application. If somebody applied for DIS unduly by false declaration and got the payments, it is not the matter of the vain policy tool, but a matter of lack of a well-functioning control system or honest citizens. Besides, procedures to prevent unfair payments could be established by imposing constraints on the registry system by, for instance, querying the applicants' social security numbers. The problem of unjust payments is not unique to direct income payments schemes, but it is the one that is the easiest to control (Çakmak et al., 2008a). As a matter of fact, there was a regulation in the implementation notification in 2002, which excluded people who worked de facto and registered to social security institutions, which are related to people working in the public and private sectors from DIS payments. Constraints such as this one would minimize unjust payments easily. It is also noteworthy that since direct income payments are capable of superior targeting, the losses are smaller in terms of less income being transferred to non-target groups (Brook et al., 1999). Hence, opponents who fiercely criticize DIS for its vulnerability to unfair payments are being relentless.

They ignore the fact that this issue is the problem of other policy tools as well, and it is only exceptional to reside in the urban while owning the farmland and getting the agricultural support payments. As it was mentioned above, majority of the farmers are the landowners of the land they cultivate. Therefore, the criticism of paying to the landowners who are not farmers might apply for only minor fraction of the society and it should be kept in mind that all types of agricultural support policy tools are subject to this issue.

One of the most emphasized and faulty criticism regarding direct income payments is the one asserting that DIS encouraged not producing because it would be paid even though the farmers did not cultivate their lands. Official data on production are analyzed in detail in the next section discussing impacts of DIS on agricultural production. It is concluded there that no significant decreases in production volumes were observed during DIS years. This fact, on its own, is adequate to counter-argue these criticisms. Still, it is worthy to elaborate on this issue. This group of criticisms can be clustered into two main sections and discussed accordingly: the ones that assert that DIS would be paid even if the farmer left the land idle and the others that assert that DIS promoted un-production.

To begin with, claiming that the farmers would be paid even if they did not conduct production activities is totally misleading. Regarding direct income payments in Turkey, the main reference legal papers are the implementation notifications. Thus, issues such as this can be validated by studying them. Since legislation and implementation were discussed in detail in previous sections, they will not be repeated here. Yet, it is important to note here again that these notifications have a special item about this issue. In particular, except for the year in 2001, all notifications regulated that idle farmlands would be considered ineligible for DIS payments. In other words, farmlands that were not cultivated in the production year (idle farmlands) were excluded from DIS legally. Thus, on the contrary to what the criticisms assert, there was a requirement to cultivate and harvest the land to be qualified for the payments. Still, some farmers could have got DIS payments without conducting agricultural production activities by deceiving the offices. However, this

case which takes place due to the lack of an operative control system would be the only exception (Çakmak et al., 2008a). Furthermore, research on this issue indicates that DIS was not paid to farmlands which were not cultivated. For instance, Yılmaz et al. concluded in their research that to the contrary of criticisms; lands which are not planted were not paid direct income payments (Yılmaz et al., 2008).

Secondly, DIS was accused of discouraging producing or encouraging holding the land idle. Even though legal regulations impose constraints on the idle farmlands, they do not say anything about what or how much to produce. Hence, DIS could not encourage or discourage production. The only matter to note here is that by DIS it is expected that production of overly produced crops would be limited and the resources devoted to their production would be allocated to the production of other inadequately produced crops. In this point of view, DIS encourages to shift from production of excess-supply crops to production of excess-demand crops. Interpreting this subject as encouraging not producing is invalid.

Some of the criticisms in this group focus on problems faced in the application phase of DIS scheme and discuss the reasons behind so-called low application rates. Particularly, transaction cost are claimed to be more than DIS payments due to land registry cadastre and inheritance procedures. There may indeed be formalities in cadastral or inheritance operations which is totally unrelated to any agricultural support policy tools. These procedures have nothing to do with direct income payments, but responsibilities of citizens. Since public resources were used for DIS payments, it had to be regulated and controlled strictly. Hence, documents to be submitted are also determined in legal notifications. It is also important to note that DIS was configured as a voluntary system. Its rules and regulations were determined by the notifications and if deemed reasonable, farmers would apply for it with the required documents. Along with regular forms such as application forms, the one that might take a long time to prepare was the form that were required if the farmland belonged to more than one person. Farmland that belonged to a number of members in a family had to register their land on specific persons. This might be troublesome only if procedures of makeover or inheritance transactions were not conducted on

time. Otherwise, all required documents would be ready at hand and there would be nothing to worry about. Hence, these troubles would not be a problem of direct income payments, but consequences of negligence of not doing what needed to be done on time.

Some authors mentioned the fear of repayment as a motive behind not applying for DIS. In fact, there might be people who chose not to apply for DIS and not to get the payments. As mentioned before, DIS was functioning on the basis of voluntary applications. Therefore, any farmer could choose not to apply for it for any reason. It is their decision and responsibility in bearing their choices' consequences. Notwithstanding, if the farmers' decisions were derived from incorrect judgments, such as having to repay it later, there must have been something wrong in publicity of DIS. Direct income payments were not going to be repaid by the beneficiaries in the following years. However, if such a belief got about among the farmers, related public institutions should have increased their publicity effort and inform farmers about the accurate implementation rules. Therefore, blaming an agricultural policy tool for getting less than expected application is unreasonable. It is obvious that concerns regarding application processes of DIS are not actually the problems of direct income payments, but consequences of inadequate public relations and delay in carrying out legal formalities of makeover or inheritance.

Some other criticisms argue that efficient and inefficient production or farmers in developed and undeveloped regions should be discriminated and DIS should be paid accordingly. These criticisms imply that people farming on unproductive land should be supported more and since DIS was paid on per decare basis which was the same throughout the country, they could not get more of the subsidy. DIS was disclaimed to be to the benefit of those farmers. However, it was one of the motives behind the reform in agricultural policy that in the previous support scheme, developed regions got majority of the supports (Ağırbaş, 2006). Thus, it was all agreed that the previous support scheme was not at all to the benefit of farmers in the least developed regions. It might; on the other hand, be deceptive to compare farmers in productive or unproductive land directly. Discriminating support payments by taking into

consideration of regional disparities misleads even more. It is well known that the share of agricultural sector in the economy decreases as the economy develops. Hence, the size of farmlands or the number of farmers is expected to be more in the least developed regions as compared to developed ones. Correspondingly, everything else kept constant, they will get more of area/farmer based agricultural subsidies as compared to developed regions. Thus, comparing developed and undeveloped regions might not mean much in this manner.

In the figure below, NUTS2 regions are ordered in line from the most developed to the least developed region according to the socio-economic development index as calculated by the State Planning Organization (SPO)[22]. On the vertical axis, the percentage shares of the regions in total support budget for the period 2001-2007 are indicated. It is straightforward in the figure that the rank of development is unrelated with the share the region gets from the support budget. In other words, the least developed regions are not supported more, neither the most developed ones are supported less. Besides, it cannot be asserted that the least developed regions are supported less than developed regions. The correlation between the rank in the development index and the share of support budget allocated to the region is calculated as 0.27 which is quite close to zero –the level of total irrelevance. This is not surprising in the sense that neither agricultural land is distributed evenly among the regions, nor the objective of DIS is to differentiate between developed and undeveloped regions and allocate support budget accordingly.

[22] http://www.dpt.gov.tr/bgyu/seg/duzey12003.html (Last checked on 28.06.2010)

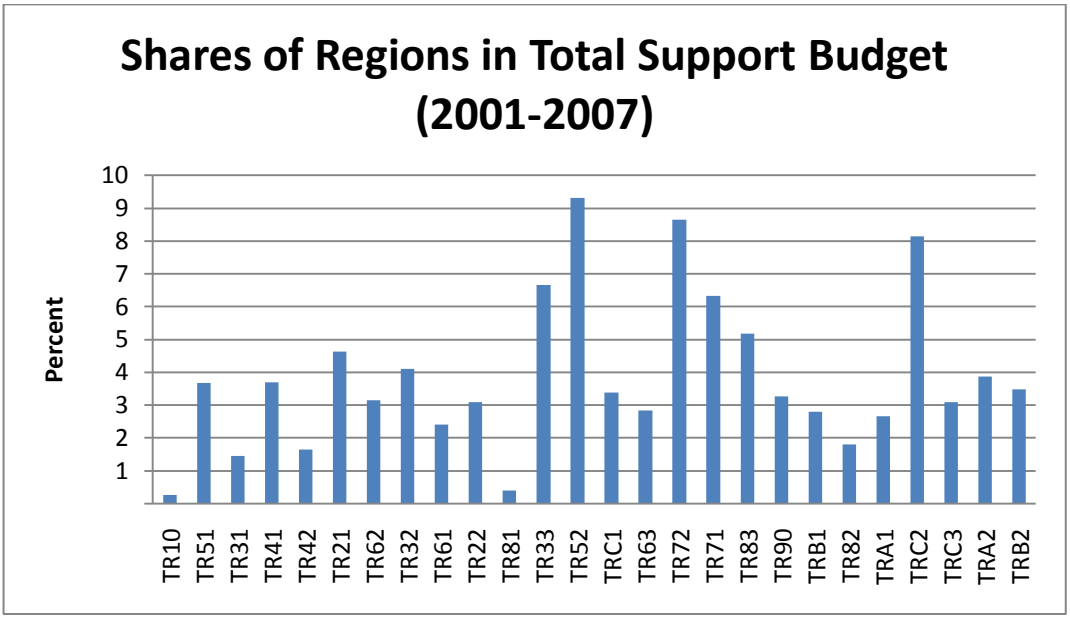


Figure 10: Shares of NUTS2 Regions in Agricultural Support Budget (2001-2007)

Source: Author's calculations from MARA, 2009

Another comparison among the regions is done in terms of productivity. In agricultural production, a land cannot be considered productive in production of all crops. Each crop needs specific nutrients in land, specific growing conditions such as drought or rainy weather, and so on. Undoubtedly, there might be certain interference to external conditions such as using fertilizers to a degree that requires purchasing power which might be linked to development levels of the regions. Nevertheless, directly comparing regions in terms of their development and basing agricultural support payments on this comparison would be mistaken. Agricultural productivity might not be linked directly to the development level of the region. Moreover, a farmland might be productive in production of one crop but not another.

One thing to keep in mind is that productivity is not only related to the land but also to the weather conditions. It is not possible to attain high levels of yields in a region

where the winter lasts for 6 months such as eastern Turkey, implying that labeling a land as productive or unproductive needs careful consideration. Even so, DIS is more appropriate to support farmers with so-called unproductive lands than the previous support tools. Consider for instance the same crop was cultivated in both productive and unproductive land by two different farmers. Everything else kept constant and the same for both lands, productive land would produce more outputs as compared to the unproductive one. Thus, while the unproductive land's farmer got 1 unit of output for each unit of inputs, productive land's farmers would get, say, 2 units of output. After production process is completed, both farmers would take their outputs to the institution that provided support purchases, sell their outputs, and get payment depending on the amounts of their crops. Therefore, the farmer in productive land would get 2 units of support while the other one would get only 1 unit of support from the government. In this case, previous support policy tools such as price support would benefit the farmer in productive land more than the farmer in unproductive land. However, when DIS was applied with the same rate of per decare payments, they would get the same amount of payments. If the matter is the share of support payments that is allocated to the farmers with unproductive lands as compared to farmers with productive lands, then DIS is a more appropriate way than price supports in supporting agriculture. As explained in the case above, the unproductive land's farmer gets 1 share over 3 units of support in support purchase scheme; whereas he gets half of the support payments in DIS. Therefore, any criticism asserting that DIS is not to the advantage of farmers in unproductive regions is not valid in this perspective[23].

Still, the most controversial issue in this group of criticisms is whether to support big scale or small-scale farmers. There are authors who strictly assert that DIS was to the net benefit of big scale farmer whereas it had to support small ones more. On the other hand, some authors claim that DIS was an inappropriate policy tool because it supported small-scale farmers while punishing the big ones which added more value to the sector. It is obvious that there are both advantages and disadvantages of

[23] For further discussions about the distribution of previous support and direct income payments among the provinces in Turkey, Section 5.3.2 could be referred.

supporting big and small-scale farmers. As the main problem of economics, the resources are limited but the needs are infinite. Consider for instance that a glass of water has to be divided between different sectors, the water representing total resources in the economy. Then, each sector has only a portion of total water as its resources. This means that for agriculture, there are only, say, one-third glass of water which has to be allocated between big and small farmers, efficient and inefficient farmlands, developed and undeveloped regions and so on. Since the resource is only restricted, there is always a tradeoff between supporting one part or the other. Increasing the payment for a part is directly reflected in decreases in the payments for the others. Consequently, in any case there will be unhappy people about the implemented policy tools. Since there is no consensus in the issue of whether to support big or small farmers, there are no alternative achievable policy tools to satisfy every needs. Whatever is done, some people will criticize the work. In this perspective, DIS cannot be expected to solve the main problem of economics in agricultural sector.

Furthermore, since the critics do not put forward specific justifications for their criticisms, it is hard to analyze them statistically with official data. Yet, the most appropriate way to investigate whether big or small-scale farmers were supported more is to look at average farmland area which is calculated as 64.07 decares for the country. As it was explained in sections explaining the implementation legislation, the upper limit for DIS payments was 200 decares in 2001 and 500 decares afterwards. Combining the two statistics, the overall average is certainly too little compared to the upper limit. Thus, on the countrywide average, supported area is not as big when compared to upper limits. This approach can be applied to NUTS2 regions which would give more detail about average supported areas. For that analysis, the figure below could be observed. In the figure, total amount of supported farmland is divided by total number of supported farmers in all NUTS2 regions. In this way, average farmland size is calculated for each region.

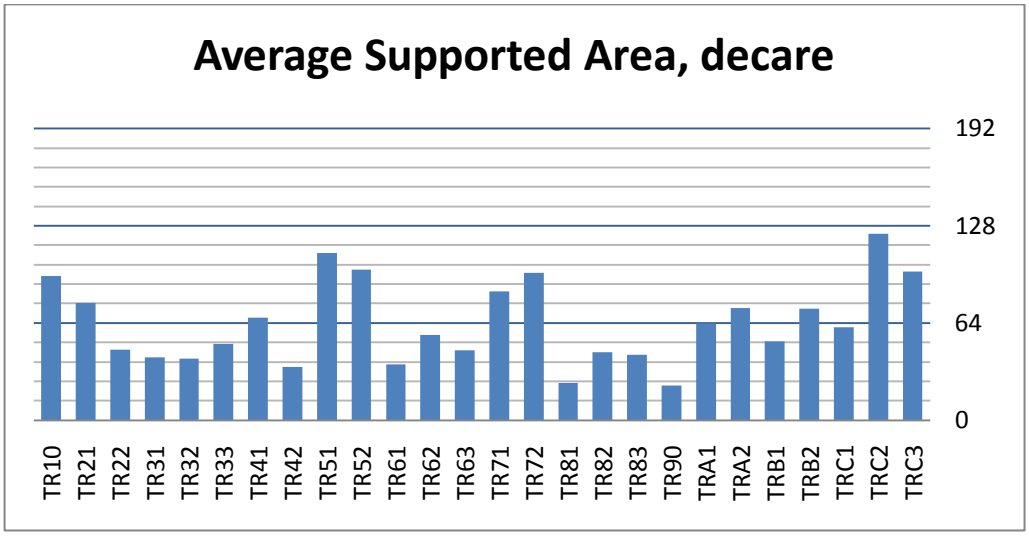


Figure 11: Average Supported Area in NUTS2 Regions

Source: Author's calculations from MARA, 2009

It is obvious in the figure that the average area of farmlands which received DIS payments was well below the upper limits in all NUTS2 regions. Thus, it is unlikely that most of the farmers in these regions are big-scaled. The biggest average farmland area is calculated in TRC2 region with 122.73 decare which is also well below upper limits. This figure of average supported area also indicates that most of the regions' average farmland sizes are less than the average of total. As a result, official data of Ministry of Agriculture and Rural Affairs do not validate the assertions of big farmers' receiving more of the DIS payments.

Average size of farmlands could be analyzed on a yearly basis, as well. In this sense, average supported area is calculated for each year of DIS implementation and depicted below. The biggest average area was observed in the second year of the implementation period with slightly more than 62 decares. Keeping in mind that the upper limit was 500 decares for that year, this average value is far too small. For the other years, the average farmland of beneficiaries was even less. As it could easily be seen on the figure, average supported area was less than one-fifth of the upper limits.

Then, in none of the years in which DIS was implemented, the average supported area was close to the upper limits. Therefore, it would be extreme to claim that big scale farmers benefited more than small scale ones from DIS scheme based on these data.

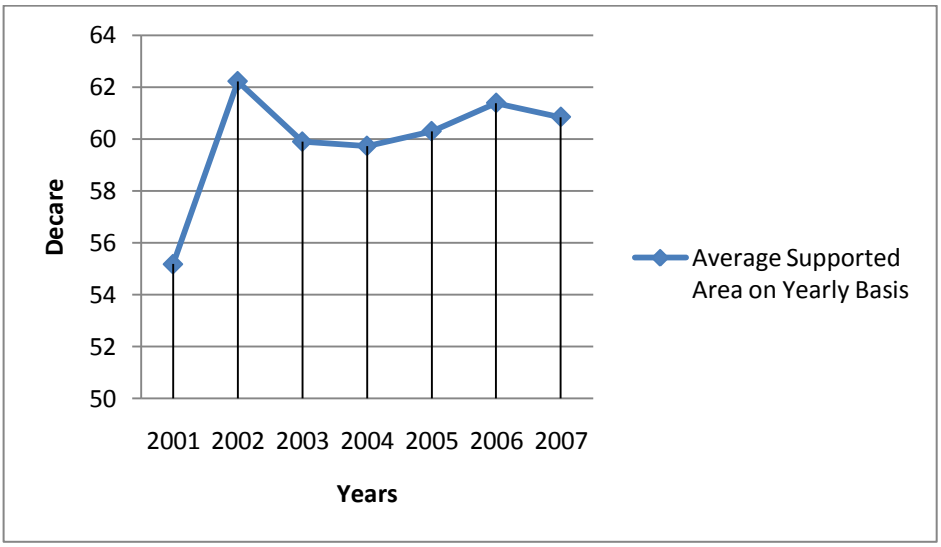


Figure 12: Average Supported Areas on Yearly Basis (2001-2007)

Source: Author's calculations from MARA, 2009

It should be noted here that DIS is paid on area basis and per decare payments are the same for all. In other words, nominal amount of payments are directly proportionate to farm size. Consequently, it is only natural for big scale farmers to get more nominal payments than small-scale farmers. Moreover, DIS is not the unique support tool that big farmers benefit more. It was the case in previous support tools such as input or price supports, as well. Since a small number of producers possess a big share of more qualified (i.e. irrigated) farmlands, they get the advantage of price supports more than the minority small ones. Moreover, since they utilize more inputs in their big scale farmlands, they get the benefit of input subsidies more than small ones as well (Çakmak, Akder and Kasnakoğlu, 1999). This could also be concluded

in a social accounting matrix analysis. In particular, it is found that only a small portion of the benefits of previous agricultural policy benefited low-income households. It is also interesting to note that a considerable proportion of the overall benefits "leak" to non-agricultural households, since these households produce both the intermediate goods demanded by the agricultural sector and the final products demanded by agricultural households (Brook et al., 1999). Thus, any policy tool providing incentive to produce more, increases demand for agricultural inputs and thus increases input prices. This, in turn, results in transferring some of the support delivered to agricultural producers to those agricultural input providers. Therefore, criticizing DIS for benefiting big farmers more than small ones and favoring price supports requires explaining this kind of transfer leakages of previous policy tools. Having said that, DIS cannot be held responsible for supporting the big farmers more than the smaller ones. Likewise, the size of the land cannot be the reason behind not getting DIS payments. Indeed, there was no statistically reasonable relation between the reason of passing up the payments and the size of the farmlands (Yılmaz et al., 2008). Consequently, it needs a deeper analysis to conclude DIS is more of an advantage to either small or big size farmers and related criticisms seem unsubstantial.

5.3. CRITICISMS ABOUT THE CONSEQUENCES OF DIS

This part of the thesis is devoted to the criticisms that are related to the consequences of the DIS experience in Turkey. Although the number of criticisms in this matter is plentiful, they can be gathered into four main headings. In this regard, in the first section, impacts of DIS implementation on agricultural production will be questioned. The criticisms of decreased production and productivity are the main subject matters of this section. Next, criticisms regarding input use will be discussed. This section will cover the issues of spending the support payments back in the agricultural sector in terms of inputs, input prices, and some specific issues about the fertilizers. After that, concerns about the impacts of the DIS on macroeconomic matters will be

studied. The issues of share of agriculture in GDP, burden of the payments on taxpayers, migration and deteriorating distribution of income as caused by DIS will be the main subjects of this section. Finally, farmland issues which were discussed frequently by the critics will be analyzed in the last section. DIS' influence on the number of parcels and prices of farmlands, as well as administration of DIS in terms of farmlands will be the focus of this section.

5.3.1. Regarding Agricultural Production

Criticisms Regarding Agricultural Production:

1. No significant increase was observed in agricultural production levels. There were no noteworthy changes in cultivated area and production levels (Kızılaslan et al., 2007).
2. No increases in productivity were evident. Many crops experienced decreases in production and yield levels during the years DIS was applied (Çetin, 2005; Kızılaslan et al., 2007).
3. Since production and yield were not taken into consideration, quality problems and problems of cultivating crops which needed less input would be experienced (Ağırbaş, 2006).
4. Agricultural producers who received direct payments would develop permanent expectations regarding the payments. Therefore, those farmers who produced in hard conditions would cease production finally (Öztürk et al., 2002).
5. Since producers would receive decoupled subsidy, they would prefer low-cost and easy-to-produce crops, and exert minimum effort to increase production. Indeed, most farmers applied for DIS just because it was outright and paid in cash. Thus, there emerged the risk of producing just for DIS payments without considering productivity, competition, and profitability in the sector (Gül et al., 2001; Bor, 2005).

6. Decoupling agricultural support would bring about decreases in production levels. It would press on the farmers to receive money without cultivating or exerting effort (Çetin, 2005; Çamur, 2001).

This group of criticisms focuses on the levels of production and productivity. The main concern is about experiencing decreases in production. Some criticisms are stricter in the sense that they expected increases in production levels because of DIS and do not accept even the same level of production. Although it is not explicitly expressed, according to those who criticize DIS in production levels perspective, farmers produce only to receive subsidies. Behind their fear of declines in agricultural production lies the assumption that farmers are lazy intrinsically and will not bother themselves with production if they are not forced via subsidies. It is argued that unless there are coupled support payments, agricultural production would not increase; however, if supports were decoupled, production would decrease. Moreover, these criticisms indicate the belief that in Turkey farmers produce not for the market but for themselves. None of them mentions what the market demands but focus only on the supply side. Furthermore, the supply of agricultural market is discussed only from the viewpoint of production costs. In other words, optimal utilization of land and other factors of production are not taken into consideration. For instance, farmers might shift the crop they cultivate due to optimization of factors of production utilization or shifts in market demand; however, these criticisms disregard these issues. In addition, agricultural producers are assumed ignorant about trade and economics so that when they cultivate crops that cost less, it is expressed as a drawback of DIS. Conversely, if the market demands a specific crop and it requires lower production costs, farmers' switching to that specific crop is what should be expected.

Criticisms regarding production levels also disregard the fact that agricultural production mainly depends on the climate and also it is not very probable to increase the land used which is the basic input for agriculture; so the elasticity of supply in agriculture is low. Although there are some procedures to increase agricultural production such as use of fertilizers, agriculture is not a sector that can be extended

to a significant degree. In other words, in agriculture, the fundamental factor of production is land whose supply is limited and technological development is cruelly slow. According to microeconomics theory, given one of the inputs is fixed, when the variable input is increasingly used, the production process will be subject to diminishing marginal returns. This will be observed in agriculture when labor, which is the variable input in this sense, cannot be canalized to other sectors and work in agricultural sector in an increasing rate. As a result, since technological progress is very hard and limited, and diminishing marginal returns rule applies when more and more labor is employed in agriculture, increases in production levels are always subject to constraints (Dinler, 2008).

One more thing to emphasize is that in the beginning, the main objective was to ensure agricultural producers, who would be in difficulty because of decreases in tariffs, government interventions in goods market, and elimination of fertilizer subsidy, a kind of safety net and start farmers registry system. However, objectives of DIS could never be understood well (Çakmak and Akder, 2005). As a result, most criticisms focus on the issues that direct income payments are irrelevant by its nature. For instance, decreases in production and productivity levels are criticized as if DIS aimed to increase them. It needs to be emphasized here that as a matter of fact, the second initiative under the ARIP program was planned to encourage farmers to quit producing crops which were currently heavily overproduced (World Bank, 2001). In this sense, production levels of certain crops should, indeed, decline; otherwise it would be the failure of the project. Thus, before criticizing the consequences of a policy, one should understand the objectives of it very well.

Direct income payments do not have such an objective to increase production in any country implementing it. Rather, it is expected to decrease the production of previously supported and overproduced products by letting the market decide what and how much to produce. If the demand in the market favored crops other than the one that was given price supports, and the soil of the farmland is suitable for those as well, farmers would no longer produce the supported crop. Instead, farmers would, by optimally utilizing the factors of production, start to produce what the market

demands. Eventually, production of some crops might increase and some might decrease. These discussions imply that it would be meaningful to criticize a policy only if it was evaluated according to its objectives and the degree of achieving those. Criticizing this tool due to something that it does not aim at all is fairly subjective.

Still, related official data is examined below to see whether there were decreases in production. Turkstat's latest news bulletin (Turkstat, 2010a) declared that in 2009, total cereals production was 33.6 million tons and this constituted 43.6% of total production of cereals, vegetables and fruits. Moreover, among cereals, wheat constituted 61.3% with its production of 20.6 million tons, barley constituted 21.7% with a production level of 7.3 million tons. Moreover, 4.3 million tons of maize was produced which constituted 12.8% of cereal production. In other words, wheat, barley and maize production constituted 95.8% of cereal production. Therefore, these three crops are considered representative of agricultural sector and statistical analysis are conducted on them. Furthermore, to be able to track changes, the time range is started from 1993 so that 8 years prior to DIS could be compared to 8 years of DIS programme.

To begin with, production levels of wheat are depicted in the figure below.

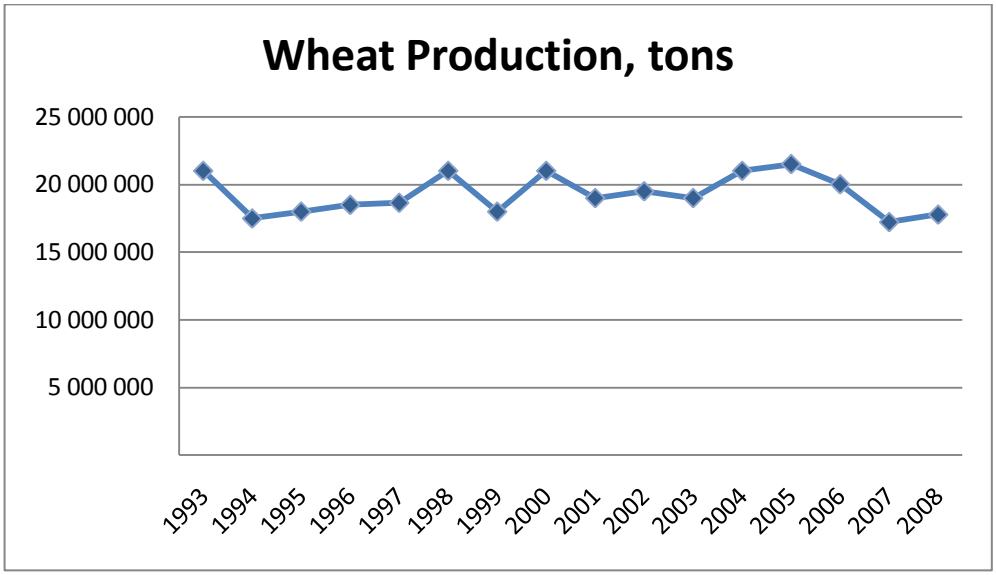


Figure 13: Wheat Production in Turkey (1993-2008)

Source: Turkstat, 2010d

As it could be seen in the figure, although production levels have slight rises and falls, wheat production remains quite stable at around 20 million tons. There were no sharp decreases in the production levels after DIS was implemented. On the contrary, during these 8 years, wheat production experienced its highest level in 2005 when DIS was in force. The only significant decrease was observed in 2007 when there was a worldwide drought. According to Turkish State Meteorological Service (TSMS) 2006-2007 Agricultural Year Raining Report (Yağcı, 2007) 7.5 months' cumulative rainfall levels were 45% less in Aegean Region, 42% Marmara Region, and 18% less in Turkey as a whole when compared to the previous year. Moreover, in another report (TSMS, 2010), the year 2007 is explained as the fourth hottest year in the previous 10 years. Therefore, to be able to assert that DIS caused the decreases in agricultural production, one should first eliminate the impact of the drought on production. Since none of these criticisms take into account climate, it is hard to justify them.

Table 4: Wheat Production in Turkey (1993-2008)

Years	Average Annual Production In The Period (ton)	Total Production In The Period (ton)
1993-2000	19,206,250	153,650,000
2001-2008	19,378,250	155,026,000

Source: Author's calculations from Turkstat, 2010d

In respect to production levels, total production and average production might be a clue to see whether any decrease in production is observed. Total production during the years 1993-2000 was more than 153.5 million tones whereas production during 2001-2008 totaled up to about 155 million tones. In other words, average production in the pre-DIS years was 19.2 million tons; however, average production in DIS years was about 19.4 tons. As a result, the criticism of DIS' causing decline in wheat production cannot be verified with data gathered from Turkstat.

A similar trend is observed in barley production. Production levels are depicted in the figure below. It could be seen on the figure that barley production is almost stable around 8 million tons. There were no sharp decreases in production levels after DIS was in force in 2001. As it was the case for wheat, barley production was also affected from the drought in 2007. Thus, production started to decline in the latest years.

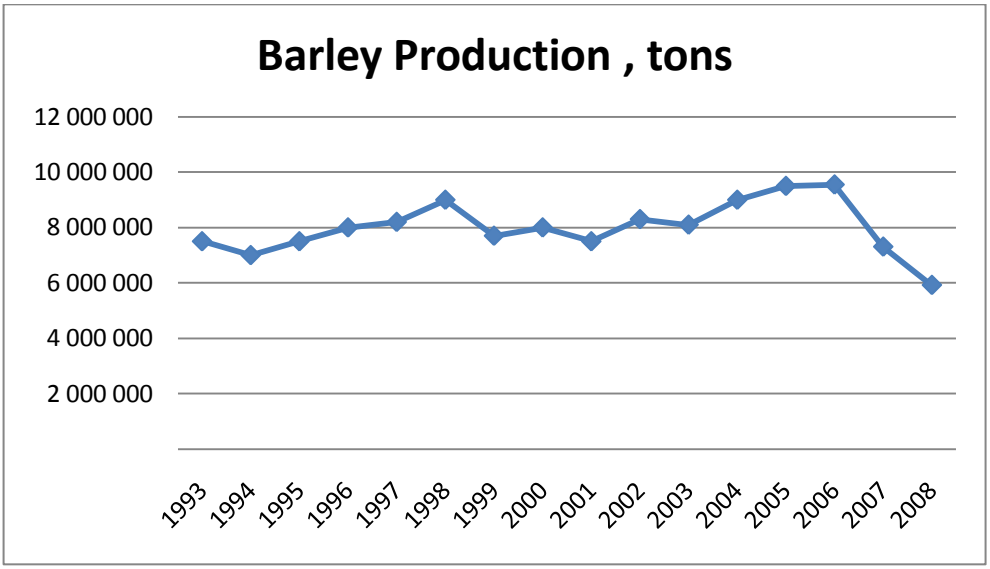


Figure 14: Barley Production in Turkey (1993-2008)

Source: Turkstat, 2010d

Barley production could also be studied in aggregated tables. For instance, a table of average and total production levels is depicted below. It could be observed in the table that total production in the years prior to DIS was less than total production in the years when DIS was in force. To see the effect annually, total production in the selected periods is averaged. It is obviously seen that in DIS period, production did not decline. Therefore, in barley these claims cannot be verified by official statistical data.

Table 5: Barley Production in Turkey (1993-2008)

Years	Average Annual Production In The Period (ton)	Total Production In The Period (ton)
1993-2000	7,862,500	62,900,000
2001-2008	8,147,600	65,180,800

Source: Author's calculations from Turkstat, 2010d

Finally, maize production levels are examined and the related figure is depicted below. Although maize production shows a different pattern than wheat and barley, it is hard to claim that direct income payments caused its production level decline. On the contrary, the production gradually increased during DIS years.

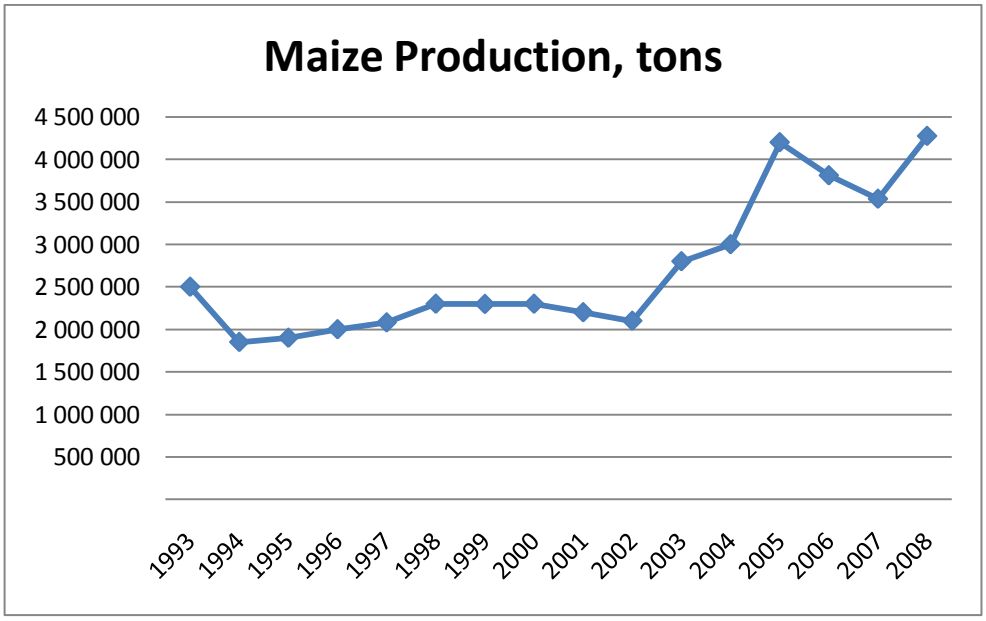


Figure 15: Maize Production in Turkey (1993-2008)

Source: Turkstat, 2010d

Table 6: Maize Production in Turkey (1993-2008)

Years	Average Annual Production In The Period (ton)	Total Production In The Period (ton)
1993-2000	2,153,375	17,227,000
2001-2008	3,240,000	25,920,000

Source: Author's calculations from Turkstat, 2010d

As it is obvious in the figure, total production of seed maize in the years from 2001 to 2008 when DIS was in force is well above total production during the years 1993 to 2000. This could also be observed in the table above. Moreover, for the pre-DIS years, annual average production was around 2 million tons; while for DIS years, it was more than 3 million tons. As a result, maize production data, which are gathered from the state's official statistical institution, do not justify these criticisms as well.

Although raw data of production levels do not signal any decreases, it could also be analyzed with DIS payment levels to question whether there are any correlation between direct income payments and production levels. Correlation coefficients between production levels of the three main crops in Turkey and total DIS payments for the years 2001-2007 are calculated by using production data of Turkstat and DIS data of MARA. The results are presented in the table below.

Table 7: Correlation Coefficients between DIS Payments and Production Levels

Correlation coefficients between DIS payments and:	
Wheat production	0.41
Barley production	0.32
Maize production	-0.17

Source: Author's calculations from Turkstat, 2010d and MARA, 2009

The correlation coefficient between wheat production and DIS payments is found to be 0.41. Correlation, which shows the relation between two or more variables, can be any number between and including 1 and -1. If coefficient correlation is positive, both sets of variables react in the same direction; and if it is negative, they react in the opposite direction. Moreover, the closer it is to 1 in either direction, the greater the degree of correlation. On the other hand, the closer it is to 0, the less the correlation. Based on this basic information, none of the crops has a correlation coefficient close to either 1 or -1. Although this coefficient does not imply any causality, it can still be concluded that DIS payments and production levels do not

react together. What is more important than the sign of the coefficient is the closeness of it to 0. For maize, for instance, correlation coefficient is very close to zero. Therefore, it is hard to determine any relation between DIS payments and production levels of maize.

The criticisms also assert that cultivated area would decline due to severing the subsidy from production.

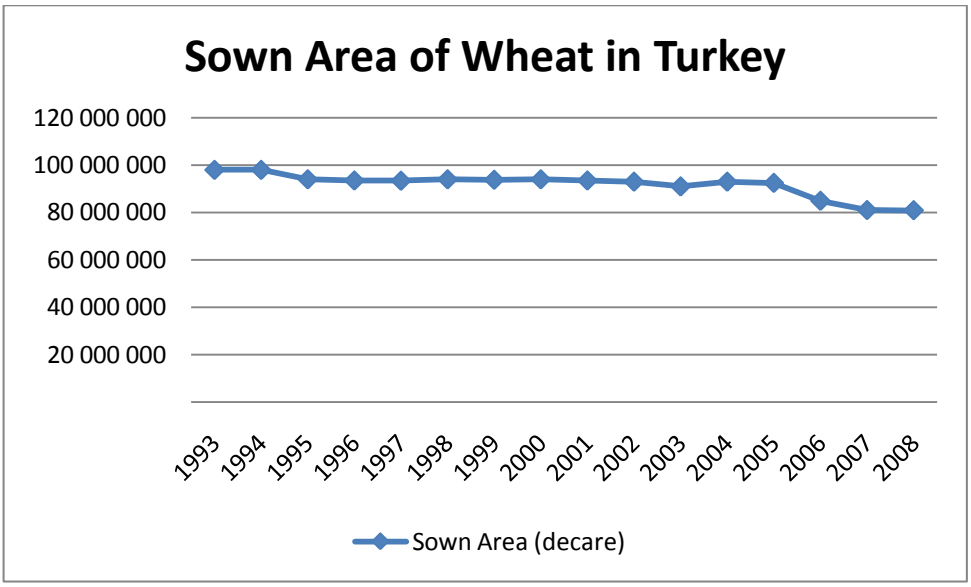


Figure 16: Sown Area of Wheat in Turkey (1993-2008)

Source: Turkstat, 2010d

In the figure above, sown area in wheat cultivation is depicted on yearly basis. It is obvious in the figure that sown area did not fell at all when DIS took effect in 2001. On the contrary, it remained stable until the years of drought.

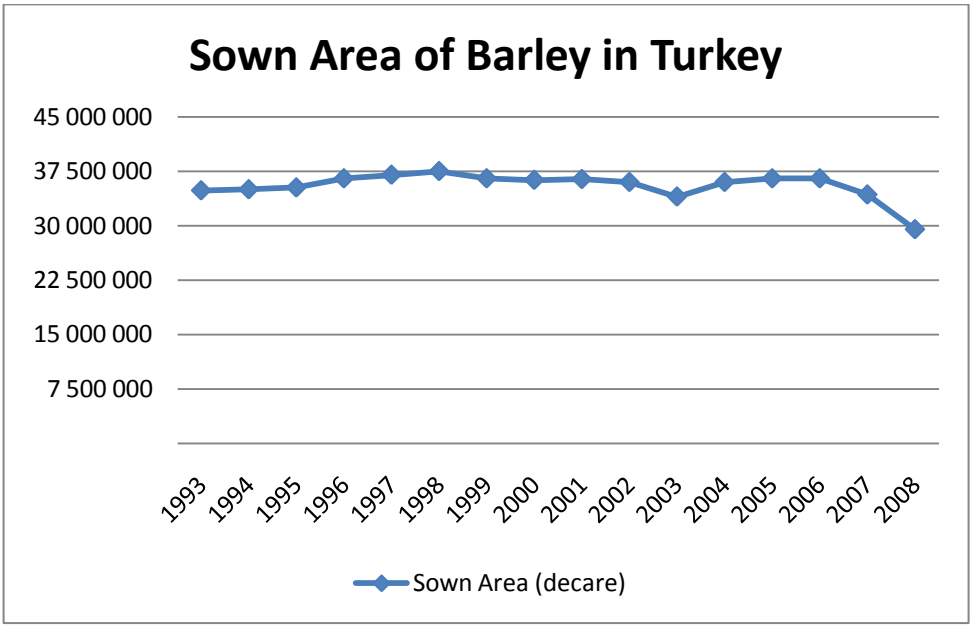


Figure 17: Sown Area of Barley in Turkey (1993-2008)

Source: Turkstat, 2010d

The farmland area dedicated to barley production could be examined in the figure above. Unlike the criticisms, sown areas did not decrease during the years DIS was in force until drought, as an external influence, was effective. Cultivated area remained quite stable throughout the investigated period. Therefore, it is hard to assert that DIS caused sown areas of barley to decline in Turkey.

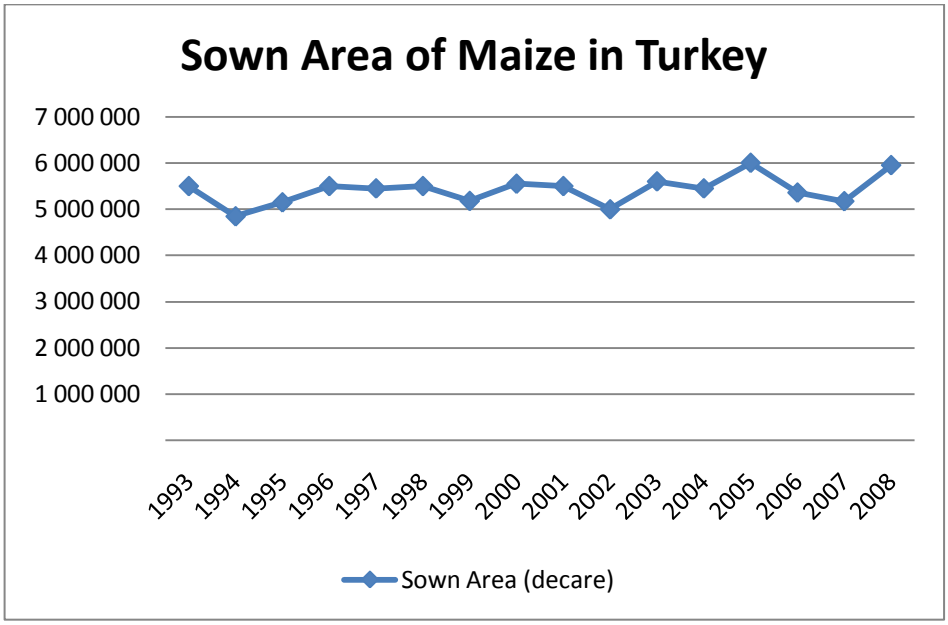


Figure 18: Sown Area of Maize in Turkey (1993-2008)

Source: Turkstat, 2010d

Maize production data shows a similar trend in its sown area. In the figure above, size of farmlands on which maize was cultivated was almost always between 5 and 6 million decare. On the turning point of a shift in support scheme, no significant decrease was experienced. Sown area of maize was still in the same range.

The data of sown areas for the main crops was analyzed above and as it could be straightforwardly observed in the figures, official statistical data fail to support the criticisms. None of the crops' cultivated area declined after DIS was in force. Indeed, they continued their own line, refuting the arguments of critics.

There are some criticisms regarding yields in agricultural production. They mainly state that DIS caused yield to decline as if DIS had to increase it. As a matter of fact, DIS aims to increase the overall efficiency in agriculture by optimally utilizing factors of production. This increase in efficiency might be thought as the decrease in

deadweight loss which occurs due to not employing the factors of production in the optimum resource allocation. Since efficiency in this manner is a comprehensive concept, it would not be rational to restrict the scope of efficiency to merely yield issues in agricultural production. Hence, it would not be wrong to say that direct income payments do not aim to increase yields. When agricultural support scheme is linked to production, increased yield results in increased output, which in turn increases support purchases. This, on one hand, worsens support budget, on the other hand, lowers market price of the crops due to increased supply. Therefore, yield in agricultural sector is handled differently than other sectors. Unlike general attitude, increase in yields in agriculture is not something that is always desired and DIS is not a tool with an objective of increasing it. Thus, it cannot be charged with yield issues. Still, yield data in terms of kilogram per decare could be analyzed to see whether yields fell or not in reality.

Yields of main crops in Turkey are examined below. To begin with, wheat yields are depicted in the figure below for the years from 1993 to 2008. Although yield values fluctuate in the late 1990s, there is an apparent increase in the DIS years. For the first eight years of the period under analysis, average yield is 204.88 kg/da and for the last eight years when DIS was applied, wheat yield averaged 221.69 kg/da. Hence, official data on wheat yields do not indicate any decrease in wheat yields. On the contrary, it increased a little.

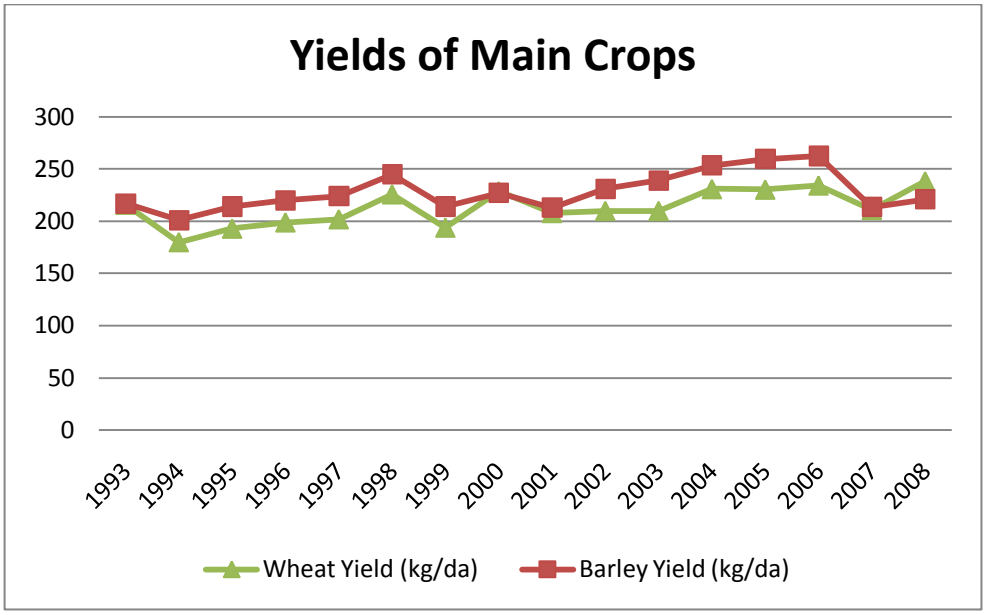


Figure 19: Yields of Main Crops in Turkey (1993-2008)

Source: Turkstat, 2010d

For barley, the situation is similar to that of wheat. Yield levels increased slightly during DIS years of 2001 to 2008 on the figure. In fact, average yield before DIS is 220.25 kg/da whereas average yield during DIS is 236.63 kg/da. Thus, according to the official data it is not true that yield for barley decreased when direct income payments were the prevailing support scheme.

Apart from the ones that are analyzed above, there are criticisms about small farmers such as they would cease producing when support became decoupled. Total supported area could be considered as an indicator of big and small farmers. Since DIS was paid on farmland, the smaller the payment, the smaller the land and the smaller the land, the smaller the farmer. Thus, data about total payments give clues about size of farmers. To analyze regional impact of direct income payments, official NUTS2 regions are taken into account in this paper. After DIS data is re-organized in NUTS2 region and sorted according to total payments, total supported areas, and total supported farmers, the same two NUTS2 regions appear in the last ranks. To be

precise, TR10 NUTS2 region that is composed of Istanbul is the lowest region in all three aspects. That is to say, TR10 region has the least farmers registered for the smallest farmland area and received the least DIS. Moreover, TR81 region, which covers Zonguldak, Karabük, and Bartın provinces, is placed in the second rank in all aspects. Therefore, these two regions are considered representing smaller farmers.

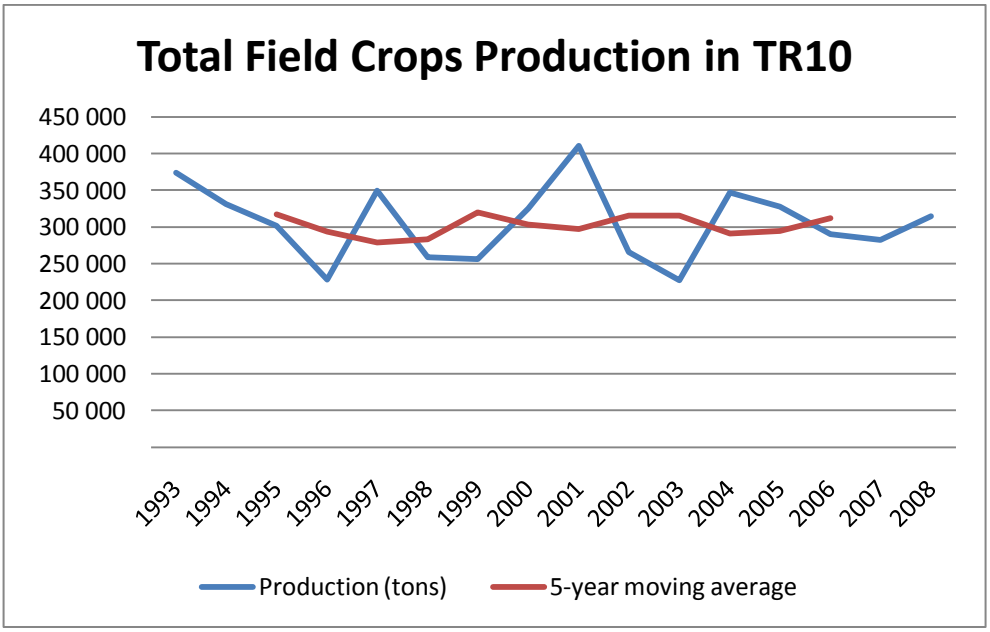


Figure 20: Total Field Crops Production in TR10 NUTS2 Region (1993-2008)

Source: Turkstat, 2010d

On the figure above, total production of field crops in TR10 NUTS2 region is shown. Production follows a fluctuating path with increases in some years and decreases in subsequent years. To be able to depict the trend, 5-year moving average is used. In the moving average line, the increase in production levels could be observed. In terms of values, 2,424,748 tons of field crops were produced during the years 1993-2000 and for the period of 2001 to 2008, total field crops production was 2,465,040 tons. The fact that total production did not decline during DIS years from 2001 to

2008 is obvious in these data. Although the average production increased only slightly from 303,094 to 308,130 in the second 8-year period under inspection, it did not decrease unlike the criticisms assert.

The same analysis can be conducted for the TR81 NUTS2 region as well. The related figure is illustrated below.

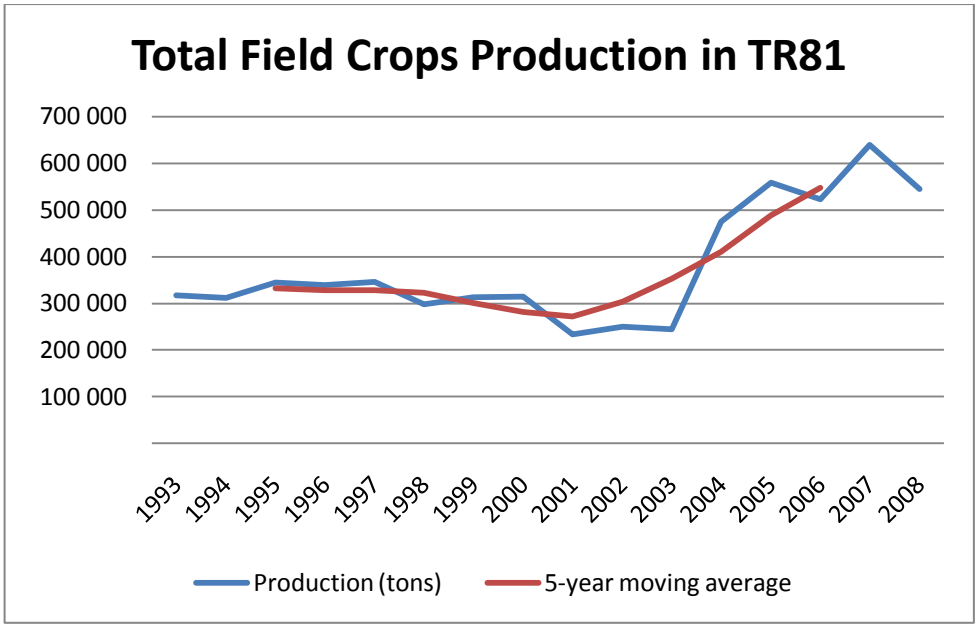


Figure 21: Total Field Crops Production in TR81 NUTS2 Region (1993-2008)

Source: Turkstat, 2010d

In the TR81 region, the level of total field crops was about 350,000 tons until DIS was in force. In the first year of DIS, production fell by about 100,000 tons and kept its level in 2002 and 2003. However, starting from 2004, the production level increased sharply. When periods of pre-DIS and DIS is considered, the production did not decrease during DIS years. The trend could be observed better in the 5-year

moving average line depicted on the figure. Total field crops production for TR81 region with its official data gathered from Turkstat do not comply with the criticism.

These criticisms about small farmers as to they would cease producing when support became decoupled is studied by the figures above. "Small" farmers were considered in terms of NUTS2 regions and production data were gathered accordingly. These discussions imply that there were no decreases in production in these regions. Therefore, claiming that small farmers would cease production cannot be justified with official data in this manner.

To see whether production path in Turkey changed with DIS payments, the figure below could be examined. Here, total agricultural production and total DIS payments are depicted. Payments are in terms of billion TL; while sown areas are indicated in hectare terms.

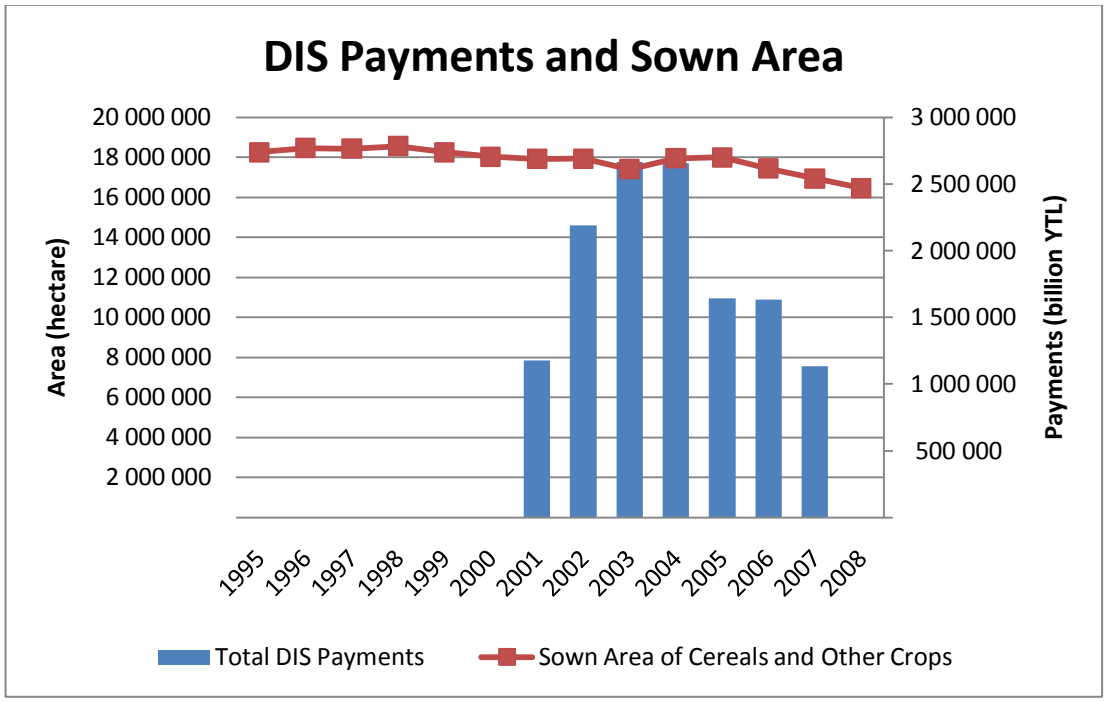


Figure 22: DIS Payments and Sown Area in Turkey

Source: Turkstat, 2010d and MARA, 2009

It is obvious in the figure that sown area does not change in line with the amount of DIS payments. Rather it follows its own path with little fluctuations. Total payments rose for the first three years of DIS, then it declined. However, sown area did not show any similar trend. The cultivated area in Turkey did neither increase with increases in DIS payments nor did it decrease in years when less DIS payments were provided. Therefore, it is not possible to claim that production level was adversely affected by direct income payments in Turkey. This fact is faced in several survey results as well. For instance, in a survey, the ratio of farmers who thought of forgoing agricultural production was found to be very low (Yılmaz et al., 2006). Farmers continued to cultivate the land and produce no matter how they were supported. This might be due to the fact that in the countryside there are hardly any other occupations and since changing way of life is very hard, especially in such a short time, production levels or cultivated areas do not vary with support systems. Instead, they have their own trends.

The issue of production is one of the most interesting issues to analyze in the sense that what the ARIP wanted to accomplish and what the related authors expected it to provide is totally different. The program specifically aimed to lower production of excess-supply crops, whereas people in Turkey expect DIS to increase production and criticize the policy tool if otherwise. What is more interesting is that, production did neither decrease nor increase. Neither the program could accomplish its objective, nor did what the critics assert come true. In this aspect, production does not seem to be policy-sensitive and it continued to be conducted on its own path.

5.3.2. Regarding Input Usage

Criticisms Regarding Input Usage:

1. Direct income payments were used for non-agricultural private consumption (Kızılaslan et al., 2007; Çetin, 2005; Öztürk et al., 2002).

2. There was no increase in fertilizer consumption. Direct income payments were not used for agricultural inputs (Kızılaslan et al., 2007; Ağırbaş, 2006).
3. Prices of agricultural products will decline as a result of abolishment of agricultural support. However, farmers will suffer from increases in input prices due to inflation (Çamur, 2001).
4. When support for fertilizer usage is abolished and agricultural support scheme is based only on DIS, the share of fertilizer in production costs will gradually increase. The most important effect of this will be that those farmers who use inadequate fertilizer will decrease their fertilizer consumption; and this will regress already low agricultural productivity even more (Özkaya et al., 2001).

These criticisms focus on the issues about where the subsidies were disbursed. Decreases in fertilizer consumption are the main concerns. They inherently assume that support payments paid to agricultural producers should be spend in agriculture. Otherwise, they thought that subsidies are not convincing. In addition, the only matter regarding agricultural inputs is fertilizers. That is, agricultural machines and equipments or tractors are not taken into consideration in the criticisms. Moreover, no concerns about seeds or irrigation were mentioned except for fertilizer usage.

The criticisms take into consideration neither soil analysis nor the effects of excessive fertilizer usage on the environment. They do not take into account optimum use of fertilizer, either. Therefore, these criticisms implicitly assume that the more fertilizer used the better.

Criticisms primarily assert that when fertilizer support is abolished, fertilizer usage will decrease. Indeed, fertilizer's share in total costs is less than 15 percent for small producers so that even if fertilizer was supported, the gain of those producers would be only 15 percent. Thus, such subsidies benefit big holdings more than small ones (SPO, 2000). Decrease in fertilizer support, then, would not mean much for small farmers although it would bother big ones. Normally, a farmer uses fertilizer if his farmland needs it, no matter how much subsidy he gets from the government. For

those producers who need to use fertilizer in their farmlands, declines in fertilizer support should not be criteria regarding how much fertilizer to consume. Still, if an agricultural producer lowers his consumption levels of fertilizer because of decreased fertilizer support, this could be due to two reasons: he has been either using fertilizer just to obtain the support and when the support is abolished he quitted using it or lacking purchasing power and could not get fertilizer even though he needs it. The first alternative inherently occurs and there is nothing to criticize in that. Therefore, the criticisms must be considering the second issue. Since decreasing levels of fertilizer usage is one of the most cited criticisms, the critics should be implicitly assuming that the second issue is prevailing countrywide. It is also noteworthy that, fertilizer support was introduced to promote its usage, and use of fertilizer was naturally expected to increase the yields. Thus, fertilizer consumption and yields should be considered together to see whether increasing levels of fertilizer use actually increases yields. In this perspective, in Turkey, although the level of fertilizer consumption increased, there were no significant increases in yields for years. This was one of the rationale of the World Bank in asserting that fertilizer subsidy completed its promotional period and this support scheme was not necessary in Turkey anymore. Therefore, criticisms should also justify their assertions in terms of the need to increase fertilizer consumption.

Critics in this group agree that agricultural products were sold at high prices due to previous support systems so that prices will decline with the introduction of the DIS. This inholds the information that consumers faced higher prices in agricultural products before the DIS. In the price support systems, the price that agricultural products are bought by the government is decided above the equilibrium of the market. This would, on one hand support the farmers by letting them sell their products at higher prices than would be otherwise. On the other hand, it would harm the consumers by causing them to buy agricultural products at higher costs. Therefore, there is a trade-off between consumers and producers in this issue, and these critics implicitly support producers as opposed to consumers.

Specifically, it is asserted that DIS payments were not used for agricultural inputs; rather they were paid for private consumption. The concern of where the support payments did flow is mentioned only for DIS; however, it applies to all support schemes no matter in what form they are paid. In the first years of DIS when there was an economic crisis prevailing in Turkey, the payments were used as modest loans by the beneficiary farmers. Yet, even though they were not, it should not be considered a problem (Akder, 2003). Think about fertilizer support, for instance. Agricultural producers, by the help of this support, use fertilizers in their farmlands and experience increases in yields. Given that prices are appropriate, increase in yields will result in increase in income. Just like direct income payments, fertilizer support in this example do also raise producers' incomes, but there are no arguments about where the increases in these incomes are spent for. The same is true for other support schemes as well. Direct income payments supports this income that was not questioned previously either (Akder, 2003).

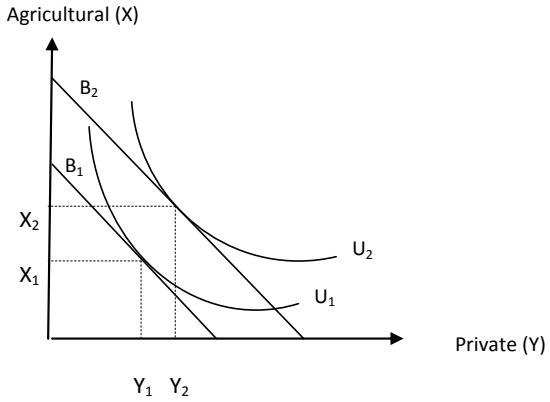


Figure 23: Utility Maximization Problem of a Consumer

In the figure above, the basic problem of consumers is illustrated. Briefly, a consumer tries to maximize his utility level of consuming products under his budget constraint. In the figure, the consumer is considered an agricultural producer. He

utilizes factors of production such as land, fertilizer, seeds, and labor and produces output such as wheat or maize. He, then, sells his output and earns money. He might prefer to spend his budget into private consumption or agricultural inputs as a kind of investment. He might for instance, spend some of his income on fertilizer or seeds to use in the next production process. Besides, he will have to buy some food, clothing, or he will get services such as doctor consultancies. Therefore, to be able to analyze the behavior of the consumer, his consumption is aggregated into two parts: agricultural and private. In other words, this consumer distributes his entire budget on either agricultural inputs or private goods. Under the assumption that he is rational, he will try to maximize his utility by spending his money on both goods in a way that will let him reach the farthest indifference curve from the origin. Moreover, under certain assumptions such as nonzero prices and positive budget with local non-satiation, the consumers' problem will have a solution.

Before receiving direct income payments, his budget line is B_1 given relative prices of the goods. With this money, the maximum utility he could get is U_1 and the equilibrium occurs at X_1 units of agricultural consumption and Y_1 units of other private consumption. When he receives direct income payments, everything else held constant, his budget line shifts upward as he now has more money to spend on both goods. His new budget line becomes B_2 and by microeconomics theory, his new equilibrium occurs at (X_2, Y2) point. It is obvious that with increases in his income, he consumes more of both goods. It is what one would expect since, given both goods are normal, consumption will increase with increases in income and there are no contradictory data about agricultural inputs being normal. When a farmer's income rises, he would spend some of his extra money on agriculture. The share of his budget dedicated to agriculture might change with increases in income. He might choose to spend more of his new income on private goods and less on agriculture. However, he would not decrease the level of agricultural inputs he utilizes as long as they are normal. Consequently, the criticisms asserting that DIS payments are not spent on agriculture at all, are not feasible according to microeconomics theory, either.

Although fertilizer, diesel, and pesticide are predominantly used to increase the productivity of the land which is the most important input in agriculture (Çakmak et al., 2008b), usage of fertilizers is not the only item to consider regarding inputs. Agricultural producers utilize many others for their production processes. To be precise, in agricultural production activities, seeds, pesticides, agricultural machines and equipment, irrigation, and agricultural credits are considered other inputs besides fertilizers. Intensive usage of these inputs signals an advanced agricultural sector. However, inputs that are used more than necessary amount cause both product quality problems and soil and air pollution. Moreover, it is hard to increase quality and yield in agricultural production by using only one input. Rather, all inputs should be used in a balanced and appropriate manner (Çelik, 2000). However, the criticisms lack this perspective and focus only on specific input usage.

In the figure below, fertilizer consumption in Turkey is depicted for the years 1994-2007 for the three main fertilizer nutrients. Although the level of fertilizer consumption actually fell in the first year of DIS implementation in 2001, it recovered soon and became quite constant.

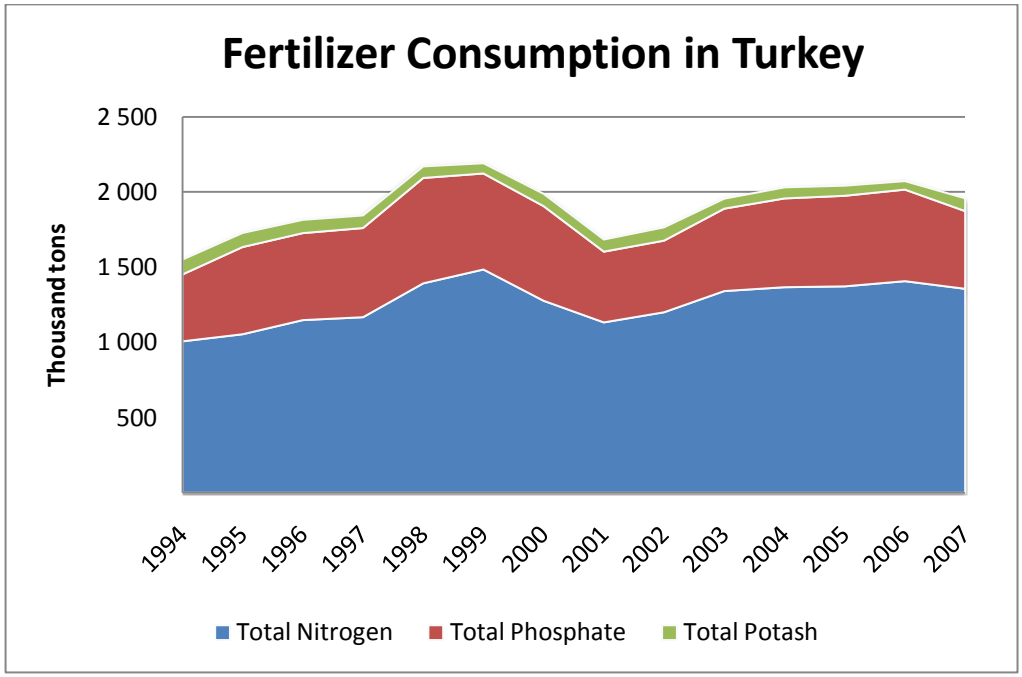


Figure 24: Fertilizer Consumption in Turkey (1994-2007)

Source: IFA, 2010

Beside the figure about fertilizer consumption in Turkey above, aggregated values are also depicted in the table below. To be able to compare the periods, total nitrogen, phosphate, and potash consumption levels in terms of thousand tones are calculated. In these main fertilizers, nitrogen consumption increased and others decreased a little in DIS years. In total, fertilizer utilization has increased from 13,279.8 million tons to 13,501.1 million tons. Thus, it is not possible to claim that DIS caused decreases in fertilizer consumption.

Table 8: Fertilizer Consumption in Turkey

('000 tons nutrients)	Nitrogen	Phosphate	Potash	Total
pre-DIS years	8,527.1	4,161.0	591.7	13,279.8
DIS years	9,173.6	3,810.2	517.3	13,501.1

Source: IFA, 2010

The issue of whether fertilizer and pesticide use really declined in DIS years was studied in several papers. In one paper, it was stated that although use of these inputs was relatively higher in West and South regions of Turkey and the level of use decreased to the North and East, they were utilized more on average throughout the country between the years 2002 and 2004 (Çakmak et al., 2008b). Also in another paper, it was found in their survey that in terms of indicators of input use, the share of the households who stated that there was no change in their input use was greater than the others (Yılmaz et al., 2006).

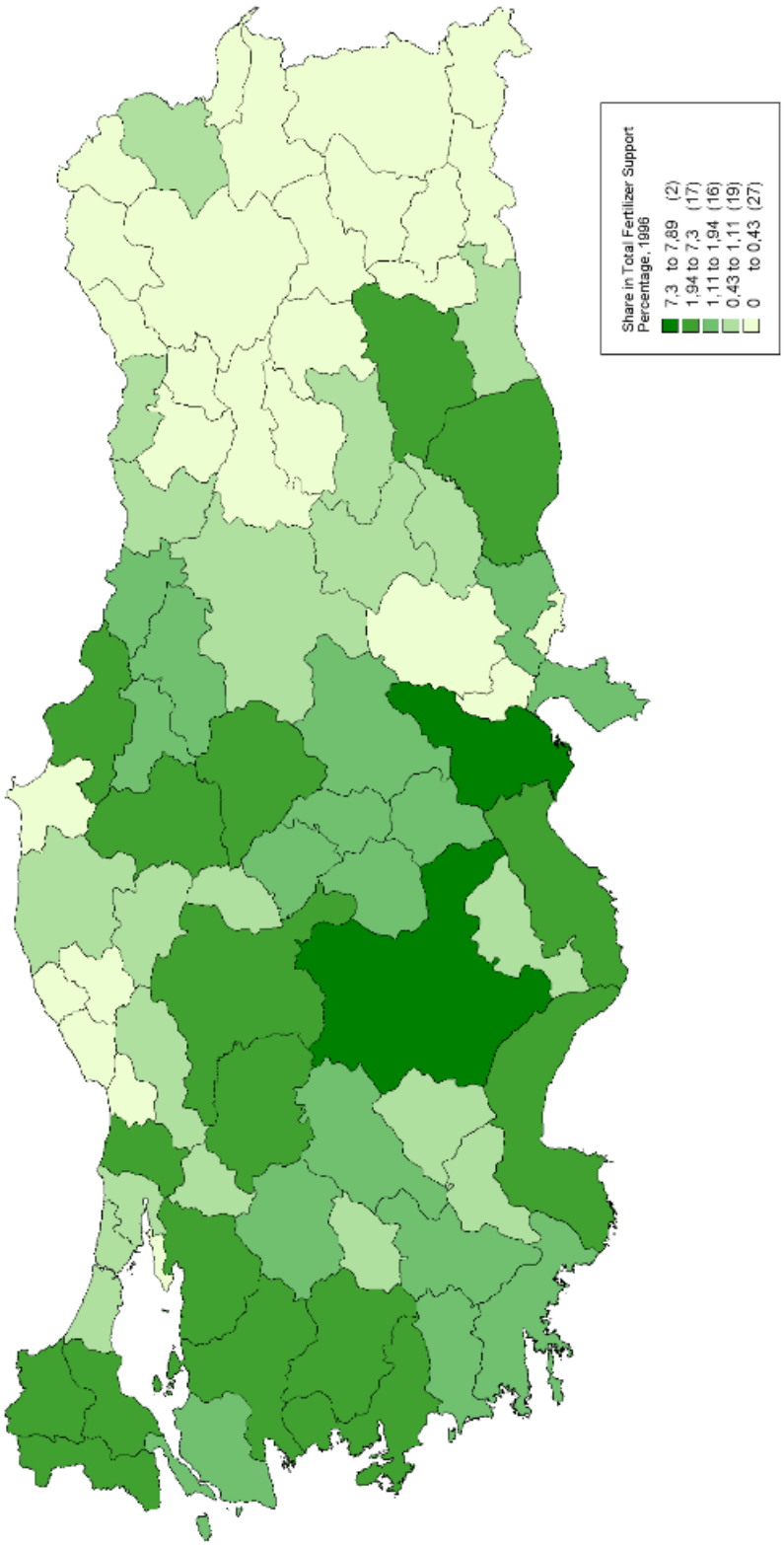
Another way to see whether DIS caused input use, especially use of fertilizer, is to look at the correlation coefficient between fertilizer use and DIS payments. As is well known, if the coefficient is positive, these two sets of variables move in the same direction. In this respect, correlation coefficient between fertilizer use (Turkstat, 2004) and DIS payments gathered from MARA for the year 2004 based on provinces is calculated as 0.78. This coefficient is not only positive but considerably close to 1. This means that the more DIS payments, the more the use of fertilizers. In other words, among all provinces, those provinces which get more DIS use more fertilizer; thus DIS is not accompanied with reduced fertilizer use. Moreover, the degree of correlation is rather high so that not only these two values move in the same direction, but also they increase by similar ratios. Although this analysis does not indicate any cause-result relationship, it still refutes the criticisms asserting that DIS payments would decrease fertilizer consumption.

The issue of fertilizer consumption is directly related to one of the previous support schemes, namely fertilizer subsidy. Since this subsidy is given based on fertilizer used, fertilizer consumption levels of the provinces might be considered reflecting fertilizer support received by those provinces. In this sense, any distribution of fertilizer consumption among the provinces could be handled as distribution of fertilizer support throughout the country. This approach is adopted in this study and the two maps below are used in elaborating on how the supports of fertilizer and direct income payments were distributed among the provinces. In the first map, shares of provinces in total fertilizer consumption are depicted for the year 1996,

reflecting their shares in total fertilizer support. In the second one, direct income payments are distributed among the provinces according to their shares in total support budget for the year 2004.

It could easily be seen on the Map 1 that the coastal regions and middle Anatolia received more of the fertilizer support than especially the east and southeast regions. In general, fertilizer consumption and thus fertilizer support fell from the west to the east of Turkey. This might also be considered as follows: fertilizer support mainly benefited the farmers who conducted intensive farming while all those conducting extensive farming received less than 0.5 percent of total support. Particularly, Konya and Adana were the two provinces that got the biggest share in fertilizer support. This is not surprising since Konya is considered "grain elevator" of Turkey and Adana is famous for its cotton production in "Çukurova". Generally, it is easily noticeable in the map that the fertilizer support is concentrated on certain regions and other parts of the country could not benefit from it as much as these regions.

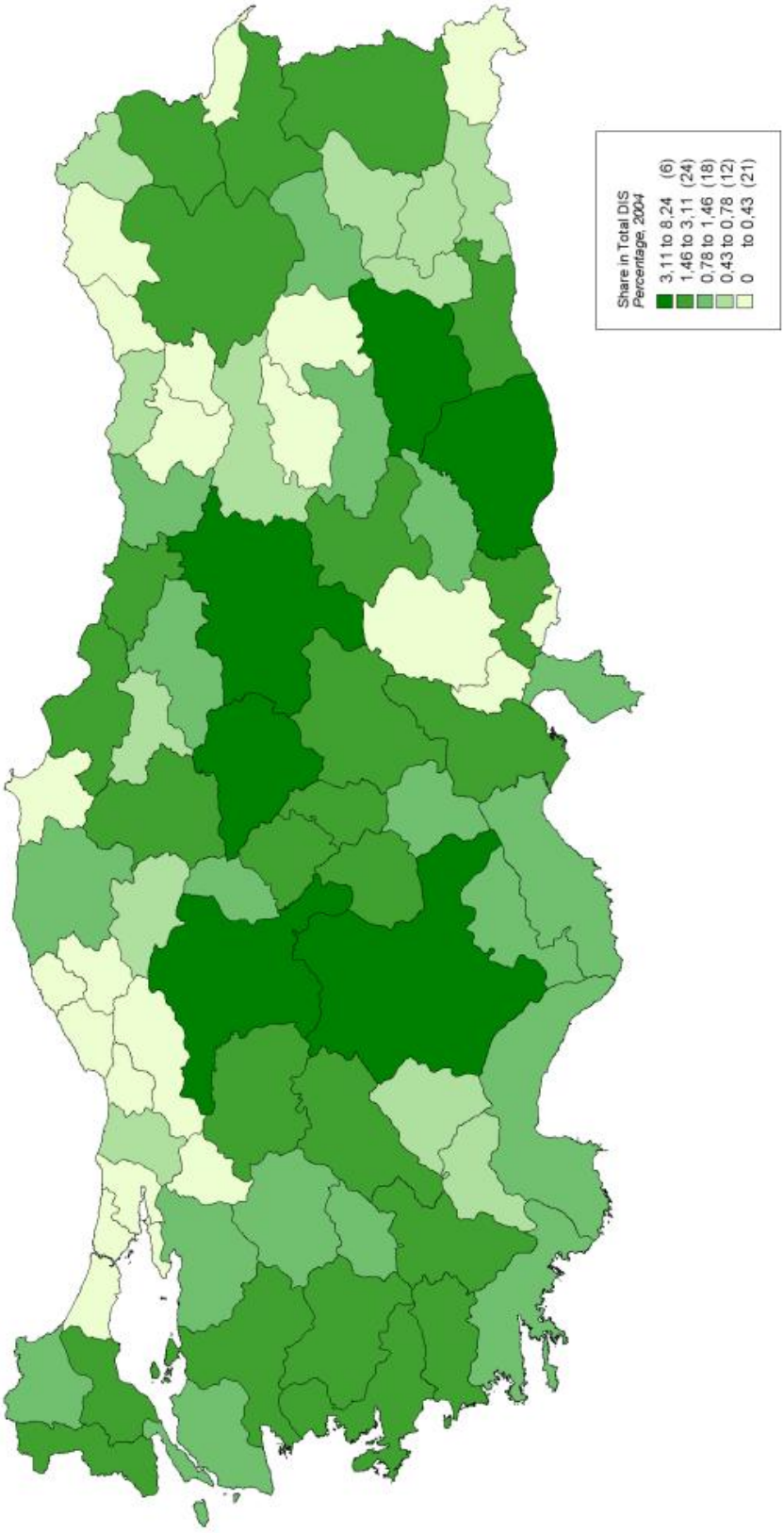
In the second map, shares of all 81 provinces in total DIS payments could be observed. Although some provinces received more or less the same shares of the payments as in the previous support scheme, there were significant changes in the distribution of the support. For instance, although it still received a high portion of the payments as compared to other provinces, Adana's share in total supports decreased from about 8 percent to slightly more than 2 percent (including Osmaniye's share in DIS years since Osmaniye was a district of Adana in 1996, so in fertilizer support Adana's share included both Adana and Osmaniye). Likewise, Antalya lost its share by 2 percent. In general, 27 provinces, all of which are in the upper ranks in socio-economic development indexes, experienced declines in their shares of total supports by 23 percent in total. On the other hand, 45 provinces received more of the total supports by DIS than fertilizer support. It is especially important to note that the eastern of the country was the region that benefited the most from DIS as their share in total payments quadrupled. This might also be thought as the regions which perform extensive farming getting advantage of the reform in agricultural policy scheme more than the others.



Map 1: Shares of Provinces in Total Fertilizer Consumption[24], 1996

Source: Author's calculations and mapping from Turkstat, 2004

[24] Since fertilizer support is given based on fertilizer consumption levels, shares of provinces in total fertilizer consumption are considered representing shares of provinces in total fertilizer support.



Map 2: Shares of Provinces in Total DIS Payments, 2004

Source: Author's calculations and mapping from MARA, 2009

In general, it is observable in the maps that DIS is relatively more equally distributed throughout the country as compared to fertilizer support. When these data are examined, it is calculated that the standard deviation of provincial shares of fertilizer support is 1.37 whereas it is 1.19 for direct income payments. This statistics also imply that shares of provinces in DIS payments fluctuate less than shares of provinces in fertilizer support; hence DIS is more evenly distributed among the provinces in Turkey. This inference is in line with what the Map 2 suggests. Still, in total, relatively undeveloped regions of Turkey could not benefit from the DIS as much as other regions. Thus, even if DIS is a more appropriate way to support agriculture, certain measures should be taken to ensure undeveloped regions and small farmers benefited from this programme also (Çakmak et al., 2008b).

Fairer distribution of DIS payments throughout the country could also be tracked as follows: in fertilizer support, 42 percent of the provinces whose shares in total support is above the average received 80.35 percent of the support. Direct income payments; on the other hand, was received mostly by 41 percent of the provinces and their shares in the payments totaled to 72.27 percent. In other words, those provinces which received the supports less than average increased their share in payments from 19.65 percent to 23.93 percent.

Fertilizer support and DIS scheme could also be evaluated by the help of a Lorenz curve which represents cumulative distributions of the payments. In this regard, the Lorenz curve for 1996 fertilizer support and the Lorenz curve for 2004 DIS payments are depicted in the below. It is easily observable on the figures that from 1996 to 2004, the distribution of the payments improved. That is, direct income payments in 2004 were relatively more evenly distributed among the provinces than fertilizer support in 1996. This fact is also apparent in the gini coefficients calculated for these two support schemes. The gini coefficient is computed as 0.48 in fertilizer support and 0.40 in DIS scheme. Since the perfect equity is represented by a gini coefficient of 0 and the inequity increases as the gini coefficient gets bigger, there is substantial evidence that DIS payments in 2004 was distributed in a more equitable way than fertilizer support in 1996.

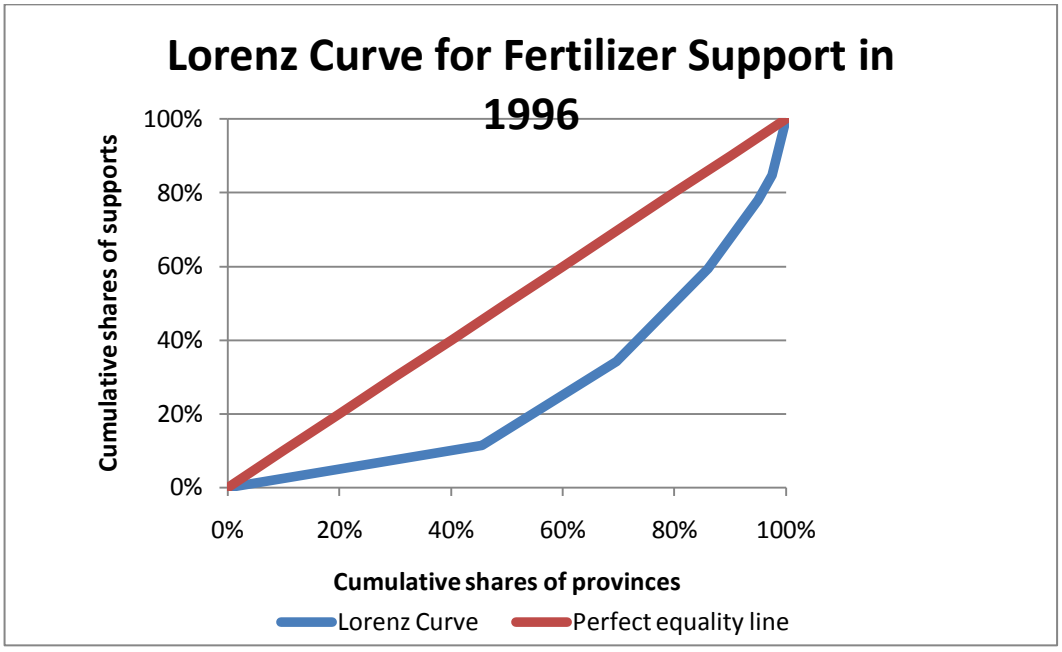


Figure 25: Lorenz Curve for Fertilizer Support, 1996

Source: Author's calculations from Turkstat, 2004

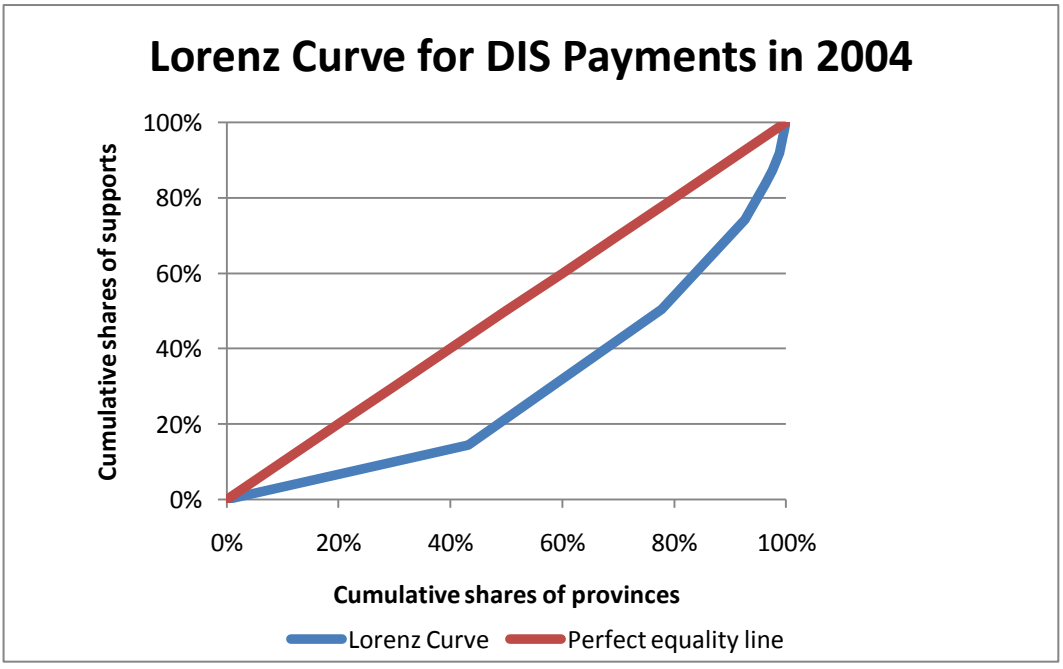


Figure 26: Lorenz Curve for DIS Payments, 2004

Source: Author's calculations from MARA, 2009

It should be noted here that although the DIS benefited regions with extensive farming and provinces that received less than the average of the previous supports more, those who were hurt by restructuring of the agricultural policies became more popular. This might be due to the fact that the farmers in the regions that utilized fertilizer more, hence benefited from fertilizer support more are more educated and conscious. They are unionized in organization such as cooperatives and thus have power to lobby and exert pressure on the policymakers. For that reason, when their share in total support budget decreases, they can criticize loudly and gain attention. On the other hand, those who benefited from DIS more are not organized or their organizations are not as dominant as the others. This might be one of the explanations of why direct income payments were criticized so fiercely but their advantages to either consumers or producers who could not benefit from previous support systems adequately were not spelled at all. Since established interests in domestic agricultural policy have such an influence on the reform efforts in agriculture, the real reform would require strong national leadership that would successfully confront these established interests (Akder, 2007).

This issue could also be approached from the perspective of the political economy which suggests that these policies exist not because they improve economic welfare, but primarily because the beneficiaries are more effective in exerting political pressure than the losers. Producers, in this sense, have a greater ability and incentive to mobilize politically, while consumers and taxpayers tend to be less effective because the potential gains are not worth the costs of political effort, and it is too easy to "free-ride" on organized political activity (Brook et al., 1999).

Besides the level of fertilizer consumption, machines that are used to spread the fertilizer could also signal fertilizer use. This approach reflects the assumption that agricultural producers are rational in the sense that they would not purchase a machine if they did not exploit it in their production process. Likewise, they would not need a broadcaster to distribute fertilizers if they did not use fertilizers in their farmlands. It is known that fertilizer broadcasters distribute fertilizers more

efficiently than by hand, so by avoiding overdose nutrients in some parts of the farmland and under-dose in others, they might even be decreasing use of fertilizers. That is, by evenly distributing the fertilizer, a broadcaster might ensure the same level of yields by less fertilizer nutrients. As observed above, the levels of fertilizer consumption did not decline in DIS years, even if it was, fertilizer broadcaster should be considered, by itself, a kind of investment in agriculture. Therefore, in either case, increasing number of fertilizer broadcasters would signal improvements in agriculture.

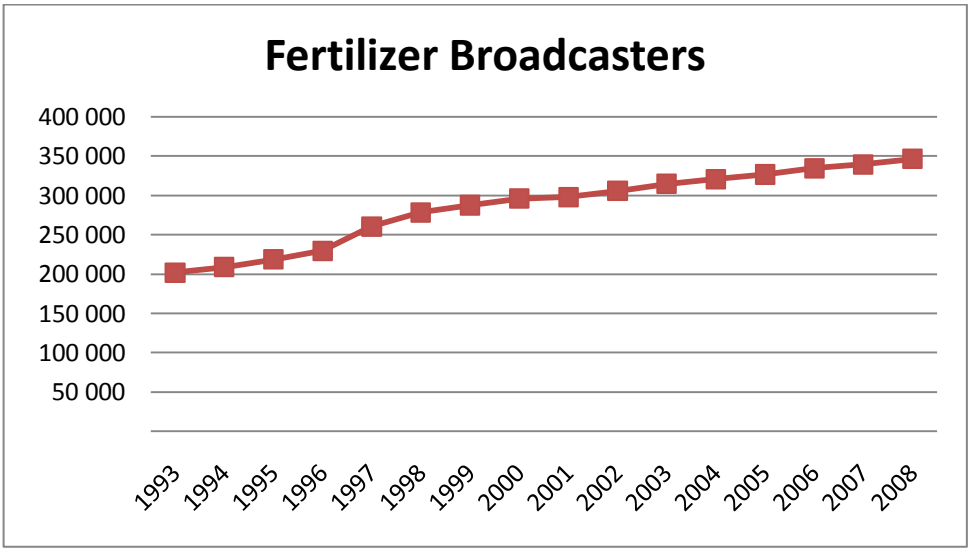


Figure 27: Fertilizer Broadcasters in Turkey (1993-2008)

Source: Turkstat, 2010e

The number of fertilizer broadcaster utilized by the producers has an ever-increasing path in the period under examination. At the beginning of the DIS application, the units of fertilizer broadcaster were about 300 thousand and use of it increased each year, totaling to about 350 thousand at the end of the period.

Increasing number of fertilizer machines, on one hand suggests expansion in fertilizer usage, on the other hand gives a hint about investing in the agricultural sector. No matter what the source of finance is, agriculture as a sector did not face any decreases in inputs used, machines utilized, levels of crops produced, and so on. Based on official data, it is not possible to justify this group of criticisms.

As mentioned earlier, fertilizer is not the only input; there are many others. Consumption of some of the other inputs is depicted below. For instance, the number of agricultural machines and equipment could be considered as another indication of inputs usage. Unlike fertilizer, agricultural machines and equipment have never been a part of subsidy schemes and farmers have to afford all the costs. Therefore, if someone were to explore whether the agricultural sector is still given importance so that use of inputs has increased, number of agricultural machines, equipment, and tractors would be suitable indicators.

Number of agricultural machines and equipment for the years from 1994 to 2008 is shown in the figure below. It is obvious that the trend never went downward and machines and equipment used in agriculture increased step by step even in the DIS years.

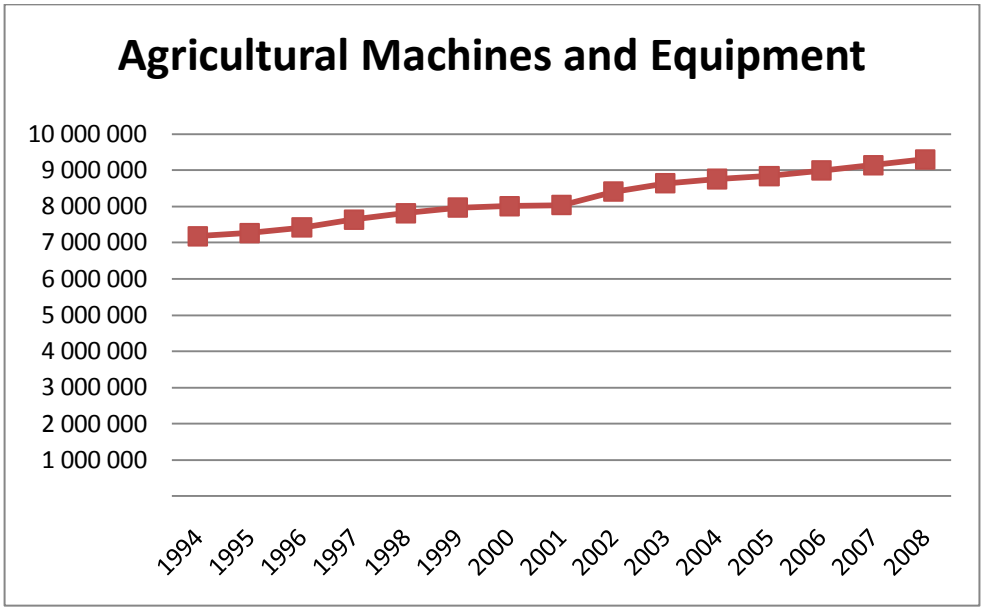


Figure 28: Total Agricultural Machines and Equipments in Turkey (1994-2008)

Source: Turkstat, 2010e

Although the criticisms do not distinguish between total and per farmland usage of inputs, both can be used to analyze whether or not the use of agricultural inputs increased during DIS years. Since both machines/equipment and total farmland vary from time to time according to official data, per hectare data could be a more appropriate indicator. The related figure is depicted below. Agricultural machines and equipment per hectare farmland increased year after year. Average number of machines and equipment was 179 in 1994 and 207 in 2000. In the first year of DIS, it declined to 196; however, agricultural machines and equipment per hectare increased gradually to 238 at the end of DIS period.

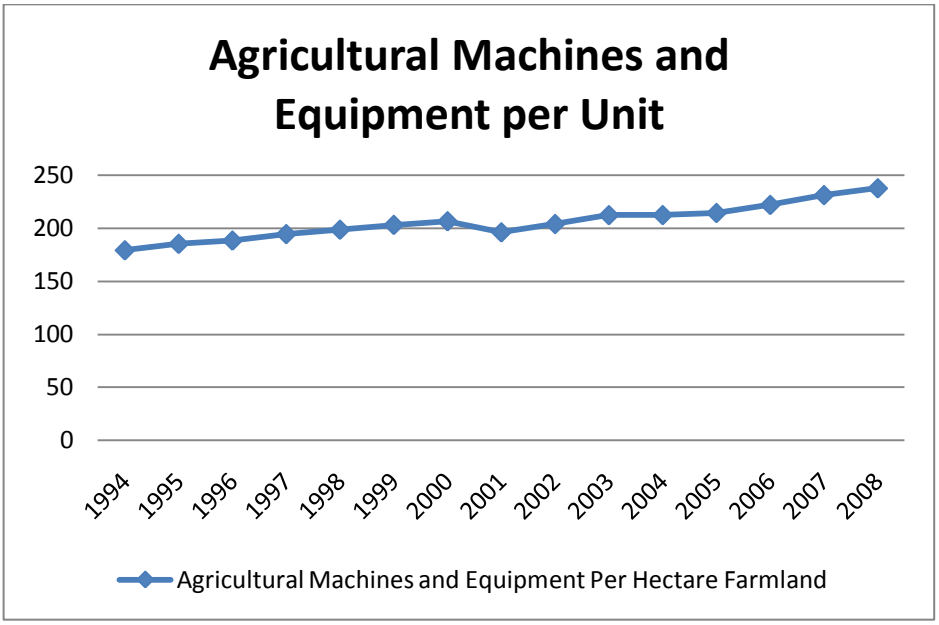


Figure 29: Agricultural Machines and Equipment per Unit in Turkey (1994-2008)

Source: Author's calculations from Turkstat, 2010d and Turkstat, 2010e

Some of the criticisms focused on the prices rather than level of use. Specifically, they suggested that when fertilizer subsidy was placed by direct income payments, on the one hand, prices of outputs would decrease, on the other hand, prices of inputs such as fertilizers would increase. Consequently, this would hurt farmers in both output and input sides. However, official data of the prices that farmers receive in wheat and inflation rate imply that agricultural producers did not suffer from price fluctuations. Inflation was about 80 percent before DIS period and it decreased gradually until 2001 when direct income payments were in force. After a slight increase in inflation in 2002, it again started to decrease sharply and remained at around 10 percent since 2005. Comparatively, the prices that farmers receive continued to increase consistently. Starting from 2005, inflation rate has stayed relatively constant and prices that farmers receive have continued to increase. It is also interesting to note that although increase in the prices that farmers receive kept

falling from 2002 to 2004; research on this issue indicates that for the sample under investigation, incomes of households increased 32% in real terms in this period (Çakmak et al., 2008b). Therefore, the concerns of decreased incomes for farmers are not binding.

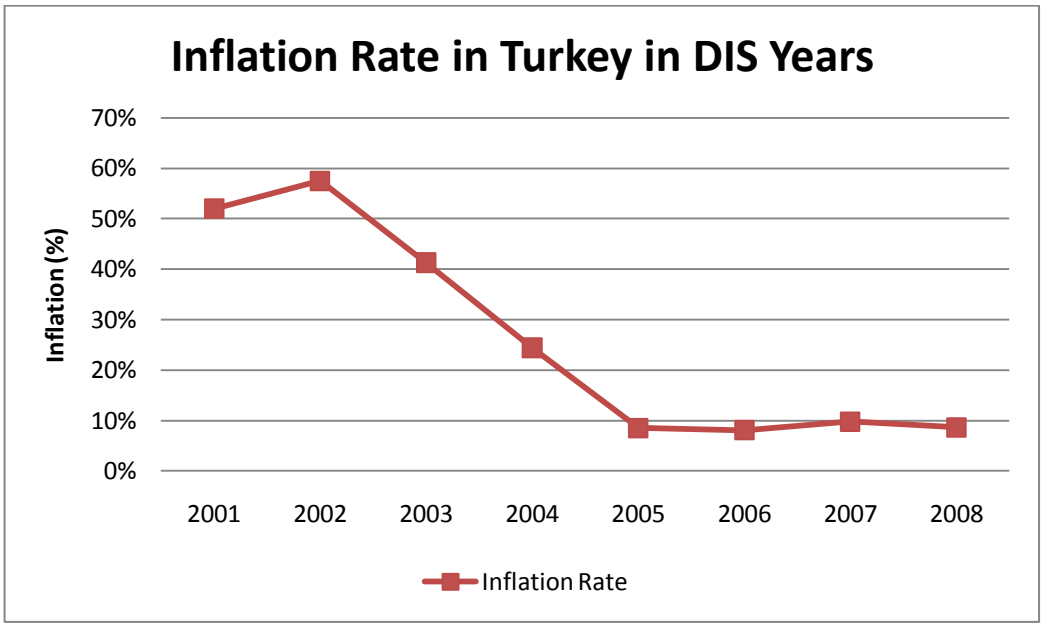


Figure 30: Inflation Rate in Turkey in DIS Years

Source: Turkstat, 2010b

Another way to illustrate the issue is by investigating domestic prices versus world prices. If farmers in Turkey actually faced cuts in prices, agricultural domestic prices would converge to world prices. However, this is not the case for wheat, which is the most prominent crop in Turkish agriculture. This is depicted in the figure below.

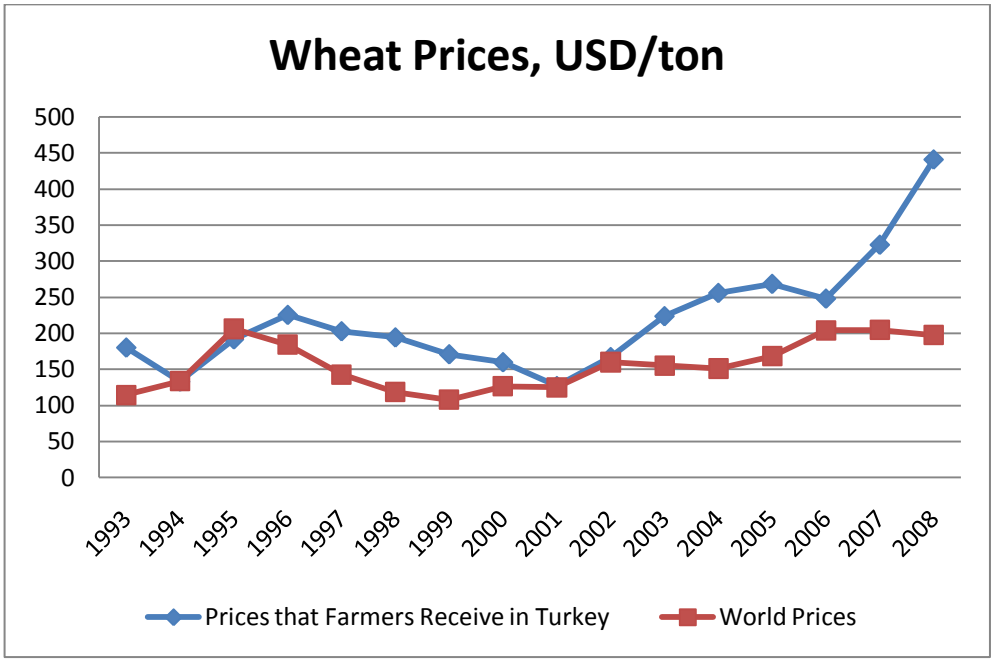


Figure 31: Wheat Prices (1993-2008)

Source: Author's calculations from Turkstat, 2010c and CBRT, 2010; OECD, 2010b

Prices that farmers in Turkey receive in YTL is converted to US Dollars in the Central Bank of Turkey's official exchange rate and along with it, world wheat price statistics of OECD as stated in US Dollars per tons are depicted in the figure. It can be observed that world prices fluctuate more in the first years of the period under inspection. It should be noted that the maximum level of world prices was experienced in the 1995 and then it started to decline by establishment of World Trade Organization. In 1999, world prices declined to the minimum levels. Afterwards, prices prevailing in the world market increased a little and floated around 200 USD in recent years. On the other hand, from 1994 to 2001, the prices that farmers receive in Turkey moved in line with world prices. As one would expect, world prices and domestic prices were almost at the same level in the first year of direct income payments scheme in Turkey. However, even surprisingly, domestic prices have started to increase since then, even though price levels in the world market remained quite stable. The gap between world price and domestic price in

Turkey in wheat widened progressively so that in 2008 world price level was around 200 USD whereas domestic price level was almost 450 USD. These data suggest that in Turkey, farmers receive more than twice their colleagues in the world market, even throughout the DIS years. Therefore, criticisms stating losses of agricultural producers due to falls in prices have no justified grounds.

This difference in the world prices and prices in Turkey might be signaling dilutions of direct income payments programme, since by its nature, direct income payments scheme would be expected to make domestic prices converge to the world prices. However, DIS implementation's impact in this manner was only limited in Turkey. One of the reasons for this fact could be that price-based supports reached to their previous levels from 2002 to 2004 and this deteriorated the connection of production with the market (Çakmak et al., 2008b). As it could also be seen on the figure, the range between the world prices and prices in Turkey widened from 2002 to 2004. These kinds of compromises not only restrain the chance of accomplish the project, but also give rise to criticisms which were already severe from the beginning. It is important to explain these dilutions so that before criticizing the consequences of a policy tool, one could take them into consideration and interpret the success of the tool accordingly. In this aspect, it is very hard to analyze the impacts of direct income payments experience in Turkey. To be able to accurately measure it, the impacts of these dilutions should be segregated. Otherwise, measurements and conclusions based on them would be unscientific and highly subjective. Unfortunately, criticisms against DIS in Turkey lack this kind of analysis.

5.3.3. Regarding Macroeconomics

Criticisms Regarding Macroeconomics of Turkey:

1. The share of agriculture in GDP decreased (Çetin, 2005).
2. In previous subsidy systems, selected crops and producers were supported. DIS will be an irreversible and all-encompassing subsidy scheme. As a result,

the scope of subsidy will broaden, all farmers will benefit from DIS and there will be extra burden on the budget (Özkaya et al., 2001).

3. DIS will increase migration from the rural to the urban. This, in turn, will amplify social and economic costs. Social cost of migration of farmers who could no longer be supported adequately will place more burdens on public finance (Öztürk et al., 2002; Ağırbaş, 2006; MPM, 2002; Yılmaz et al., 2006).
4. DIS will be a danger for Turkey in terms of agricultural products' sufficiency and food security. It will cause supply shortages in several crops, decreases in exports, and unnecessary increases in imports. DIS will cause imports of agricultural products to increase, as well. As a result, foreign deficit will deteriorate. Production cost structure in agricultural sector is corrupted, and a great degree of import requirement will be experienced in certain crops such as wheat and cotton (Ortaç et al., 2006).
5. Since it will be paid directly from the budget, DIS will cause taxes to increase and this will affect the whole economy adversely. Even though its total cost is the same as the previous support scheme, burden on the budget and taxpayers will increase (Demirci, 2000; Yükseler, 1999; Ağırbaş, 2006; Gül et al., 2001; Eraktan, 2001; Gökdemir, 2004).
6. Its burden on the budget is not as light as presumed. Previous supports cost 0.9 billion US Dollars, whereas DIS payments totaled about 1.8 billion US Dollars. Moreover, it has an increasing effect on public expenditures rather than decreasing due to transferring the burden from the consumers to the taxpayers. It will increase budget deficits, which became chronic (Çetin, 2005).
7. If it is applied for a long time, DIS payments will have a negative effect on income distribution. DIS could not solve the problem of income distribution (Ağırbaş, 2006; Bor, 2005; Yılmaz et al., 2008; Akder, 2003; Eraktan, 2001).

This group of criticisms mainly focuses on impacts of direct income payments on macroeconomic issues, both economic and social, such as the GDP, migration, income distribution, current account, or taxes. In general, they assert that DIS would affect all issues in the scope of macroeconomics negatively.

Before investigating whether those concerns came true or not, it would be better to explain what the natural consequences of economic growths are. Economies, as a general rule have three main sectors, namely agriculture, industry and services as differentiated by several economists (Dinler, 2008). Agriculture represents raw materials as the primary sector, manufacturing represents the secondary sector, and services represent the tertiary sector. Some of the criticisms could be explained by the three-sector hypothesis according to which economies follow a path from having the primary sector as the dominant sector in national incomes, to the secondary and finally tertiary. Undeveloped countries are associated with low national income and primarily producing agricultural products. With developments in the country, they become developing countries and industry becomes their main sector. In the third phase of their development, countries become service providers rather than manufacturers. Because a sector dominates the others in the country in each stage, one should also expect labor working in each sector to change as the country goes through a phase. For instance, if the primary sector is the leading one, majority of labor force will be working in agriculture. In the second stage, labor force that is working in manufacturing and services would increase by the labor quitting agriculture. Since the prevailing sector is services in the last stage, majority of labor force will be working in this tertiary sector. As a conclusion, as countries develop, they pass through certain stages with certain conditions; and the distribution of labor force among the three sectors change in accordance with the leading sector. Therefore, it is only natural for a country to experience declines in the share of labor force that are working in agricultural sector in its development path. In Turkey, from the proclamation of Republic to the present, shares of the main sectors in national income follow the path that is in line with the three-sector hypothesis (Dinler, 2008).

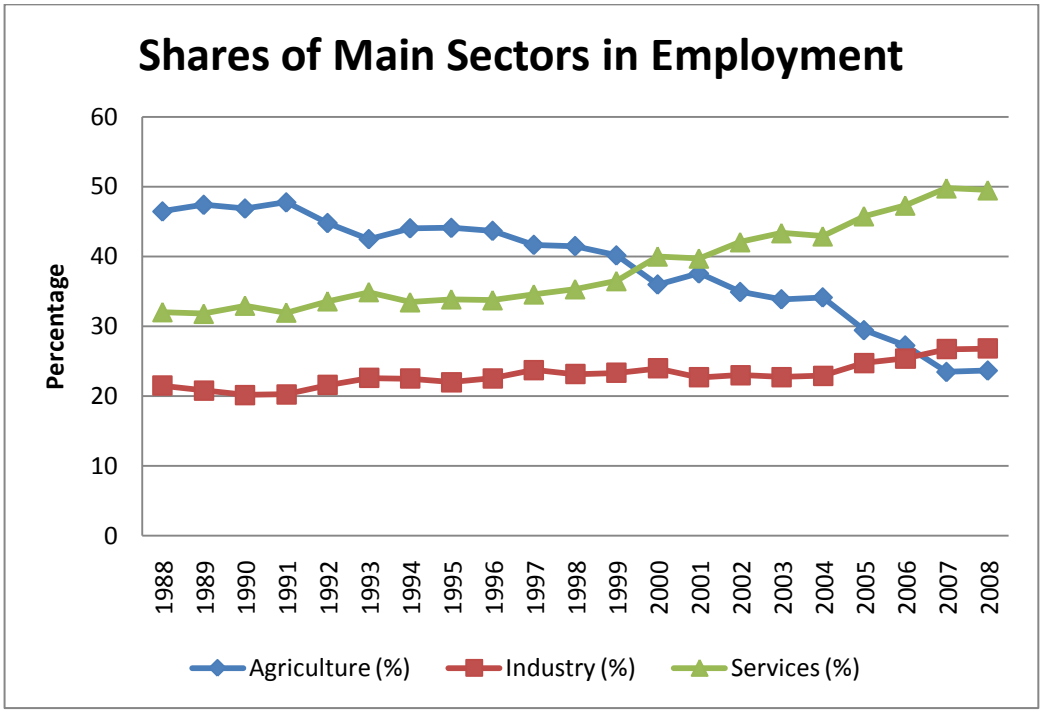


Figure 32: Shares of Main Sectors in Employment in Turkey

Source: Author's calculations from Turkstat, 2010f

In the figure above, shares of basic sectors in total employment in Turkey is depicted for the years 1988 to 2008. It can easily be seen on the figure that people working in services sector constitutes more and more share in Turkish labor force as the economy grows. Correspondingly, people working in agricultural sector move to other sectors, especially to services. Therefore, share of agriculture in national income and in total employment diminishes as a natural result of economic growth. The declining importance of agriculture fits the standard profile of economic developments, and does not, by itself, imply that there is something 'wrong' either at the structural or policy levels. Indeed, the declining importance of agriculture is largely a product of success, since demand is satisfied with fewer resources being allocated to production (Brook et al., 1999). However, this group of criticisms disregards this fact.

Criticisms regarding DIS payments' impacts on macroeconomics are mainly the ones that confuse consequences with problems. Most of these criticisms are put forward as drawbacks of DIS; however, they are the results of structure of the economy and employment, subsidy schemes applied so far, and so on (Akder, 2003). As explained above, decreases in the share of agriculture on labor force is not a problem, rather it is the outcome of economic growth. Changes in foreign export composition is also a consequence of economic developments such as opening economy to foreign markets, changes in real exchange rates, or turning into an exporter of processed goods while importing raw materials like unprocessed agricultural goods. Prior to reaching to conclusions about policies, it is important that one first distinguish between problems and consequences.

Some critics focus on the budget and assert that taxpayers will carry the burden. They implicitly state that it would be preferred to have consumers pay the cost rather than taxpayers. This could be explained as follows, providing price support is rational only if government purchases agricultural products at a higher price than the market price. Otherwise, farmers would sell their outputs directly to the markets bypassing the governmental institutions. This, on one hand, supports producers by ensuring them high prices, on the other hand, disadvantages consumers by causing them pay more for agricultural goods. Low-income consumers spend more of their incomes for agricultural products then high-income ones. Keeping this in mind, increased prices would make low-income consumers worse than high-income consumers, as compared to their previous situation. Direct income payments; however, do not distort market prices, thus agricultural products would be purchased and sold at the market equilibrium price levels. In this way, the burden of support is not carried by only a group of mostly poor citizens. Rather, DIS is financed in the budget, diffusing the burden over all taxpayers. Since agriculture is a special sector with its unique characteristics, all countries, no matter developed or developing, support it to an extent. In addition, all people, no matter rich or poor, consume agricultural products. Thus, distributing the cost to taxpayers who are the beneficiaries of this sector is consistent with being a social state. In conclusion, in a

statement criticizing DIS in terms of extra burden on taxpayers, there are certain underlying preferences such as how to distribute the cost of the policy.

Someone could always assert that agriculture should not be supported. However, if supporting this sector is agreed, some sources of finance should be determined. As a rule in economics, there is no free lunch, someone has to pay for it. In agriculture, deciding on the support policy tool is at the same time, deciding on who will carry the burden. Therefore, if DIS is criticized for imposing a burden on taxpayers, this will imply that taxpayers are favored against consumers. Likewise, agricultural producers are favored against consumers because of the price issue explained above. Critics may of course favor any; however, without any justification for these preferences, it is hard to stand up for their criticisms.

Specifically, it is asserted as a drawback of DIS that agriculture's share in the GDP declined. As mentioned above, this is what should be expected as the economy grows according to the three-sector hypothesis: Agricultural production is displaced by industry first. Rather than focusing on agriculture, manufacturing becomes more important. Then, the service sector comes into prominence, outpacing both agricultural and industry sectors.

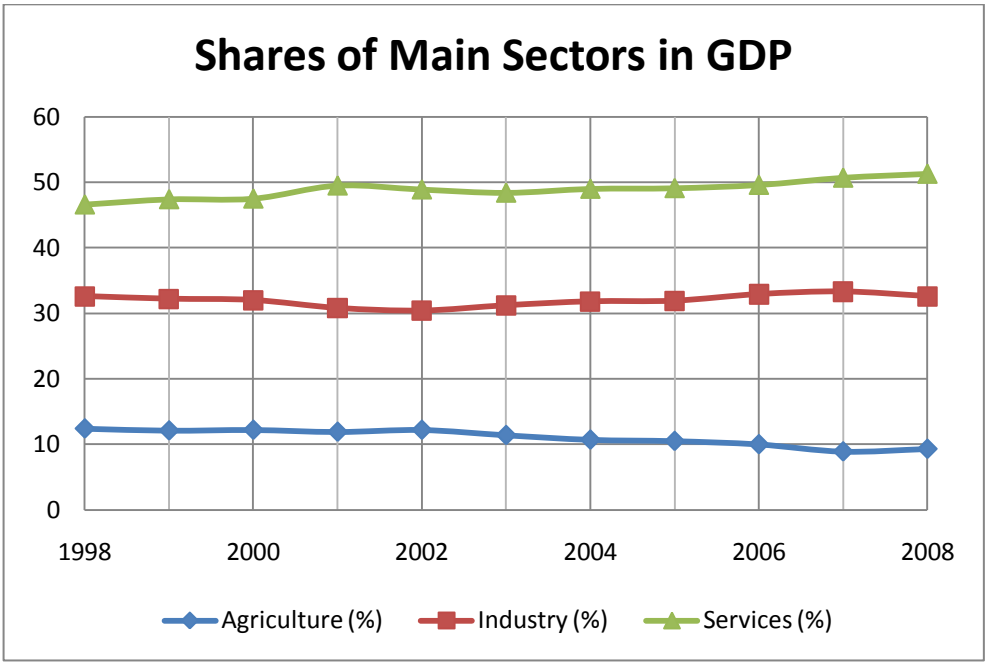


Figure 33: Shares of Main Sectors in GDP in Turkey

Source: Author's calculations from Turkstat, 2010g

In the figure above, contributions of main sectors to national income accounts are depicted for the period 1998-2008 at constant 1998 prices. In the first year of DIS, the agriculture's share was 11.9 percent whereas the industry's and services' were 30.8 percent, and 49.5 percent respectively. In time, agriculture's share declined while other two sectors' shares increased. In 2008, shares of agriculture, industry and services were 9.3, 32.6, and 51.3 percent respectively. Therefore, what is asserted in the criticism is observed; agriculture now contributes less to the GDP. However, this is one of the consequences of economic growth. Like employing less labor, agricultural production adds less to national income. This natural outcome of economics cannot be attributed to DIS or any agricultural subsidy systems.

In other criticisms, it is put forward as a drawback of the DIS that this support scheme is irreversible. Being irreversible is a concept very broad and subjective. At first, return does not have to be in cash only. The return of an agricultural support

policy could be in increased yield, optimal use of factors of production, or decreases in domestic agricultural prices which converge to the world prices. Moreover, even if farmers who received DIS spent this money on private consumption goods, this would also be a return in terms of increased economic activities in the country. Suppose that a farmer receives his direct income payments and purchases a TV with some portion of this DIS. That money will be the income of the TV retailer, and this retailer will purchase furniture with some of the money he accumulated by selling the TV to the farmer. Therefore, the retailer's purchase will be the income of the furniture seller. This will go on like that, creating a multiplier effect in the economy. As a result, in macroeconomics perspective, direct income payments in agriculture will have returns to the economy.

What is more to discuss about irreversibility is that agricultural support systems are subsidy schemes. It is generally accepted that agriculture has to be supported due to its unique characteristics. Motives behind the justification of support may change from country to country. One may support for social motives to ensure adequate income for the relatively poor fraction of the population, the other may give subsidies to ensure continuity of production in agricultural sector. Yet, irreversibility is common for all. Funds allocated to agricultural subsidies are not expected to be repaid. If so, the payments would be credits, not subsidies. Besides, previous support schemes in Turkey were also irreversible. When farmers were given price supports, that is, their outputs were purchased at prices higher than the market by the government, they earned more than they would earn in the market. However, farmers were not required to pay back this extra income to the government. In this sense, previous support systems were not repaid as well. Irreversibility is not peculiar to DIS. However, critics disregard this fact and put it forward as a shortcoming of direct income payments.

Interestingly, some critics emphasize that DIS will cover more farmers and this will deteriorate the budget. On the other hand, most of the criticisms focus on scope of the DIS such that it cannot cover all farmers, small-scale farmers could not apply for the payments. This is one of the examples of conflicting criticisms. The DIS is like a

glass that is half-full. Some people criticize it for being half-full, and some others criticize it for being half-empty. This support scheme, which is applied in many developed countries now, cannot satisfy anyone in Turkey.

Regarding budget, criticisms seem to disregard the fact that previous support policies were conducted by agricultural state economic enterprises whose budgets were not integrated in the general budget, thus these policies' funding was hidden in the duty losses of the state economic enterprises. With DIS, agricultural support schemes started to take part in the general budget. Therefore, if someone were to check the budget for agricultural funds, he would see an item allocated to agricultural support policies after DIS. Moreover, burden on general budget could be misleading if related aspects such as how many farmers were supported is not taken into account. For instance, the burden on the budget would be the same if only 2 farmers were supported by 50 TL and 50 farmers were supported by 2 TL. However, the impact of these two policies would be different. Therefore, before claiming that burden on the budget increased, one should keep all these in mind. One of the criticisms in this issue specifically focuses on the volume of the budget and claim that DIS cost about 1.8 billion US Dollars. In the table below, DIS payments in TL and their USD equivalents, as calculated by using Central Bank of Republic of Turkey's (CBRT) exchange rate data for the related years, are supplied.

Table 9: Total DIS Payments in TL and USD

Years	Total DIS Payments (TL)	Total DIS Payments (USD)
2001	1,175,739,022.17	960,139,661.24
2002	2,182,310,855.95	1,450,242,795.30
2003	2,664,023,495.68	1,785,514,601.47
2004	2,656,518,960.26	1,869,011,123.41
2005	1,643,545,048.74	1,226,645,158.66
2006	1,631,874,634.00	1,141,075,318.16
2007	1,135,176,834.94	872,810,114.52

Source: Author's calculations from MARA, 2009 and CBRT, 2010

DIS payments in USD started with slightly more than 960 million in 2001, increased until 2005, and then fell back to about 900 million USD. DIS payments have a broad range from 0.9 to 1.9 billion. Therefore, the conclusion will differ depending on which year's payments are compared to previous support policy costs. If the peak year were compared to previous schemes, it would look as if the cost has tripled; whereas if 2007 payments were compared, the cost would seem decreased. Therefore, it is subject to directing to wrong conclusions when only specific years are considered. Furthermore, it should be kept in mind that these payments are cost from the viewpoint of budget and state. However, they are subsidy payments paid for supporting agriculture from the viewpoints of agricultural producers. Consequently, there is a tradeoff between cost in the budget and support for the farmers. If either one is aimed to be decreased, the other one also has to be decreased and vice versa. Hence, one could hurt agricultural producers by complaining about costs. It is for this reason that instead of directly measuring how much was spent for each policy tool, their efficiency, in terms of both accomplishing the objectives and utilizing the resources in the way that has the least dead-weight cost, should be taken into consideration. In this aspect, although taxpayer-financed transfers also induce distortions in terms of deadweight costs, they are likely to be less inefficient than market-based methods of intervention (Brook et al., 1999). Thus, totaling the amounts on the budget might be misleading in measuring the cost to the economy as a whole.

Increased burden on the budget is discussed by many authors. It is certain that given everything else constant, switching from price support to DIS will increase the budget because unlike price supports, DIS will constitute a specific item on the budget. This will on one hand, help ensure transparency and predictability, on the other hand, cause taxes to increase. If an expense item appears in the general budget, the government has to find a source of finance for it before being realized. This would provide a kind of auto-control in the sense that the volume of subsidies will be limited by funding feasibilities. Unrealistically high payments and non-institutional individual attitudes would be prevented. Even more, citizens could see what percent

of total funds, mostly taxes, are allocated for agricultural support schemes. By this way, if they think that subsidies are more or less than enough, they can lobby and force the politicians to change the allocation in the budget. For rational taxpayers, it should be important to control where their taxes are spent and call the government to account. Thus, also accountability is possible in DIS. In this respect, DIS is a more appropriate way of supporting farmers than previous schemes. In price support, state economic enterprises conduct the purchases and pay for the outputs of agricultural producers. Since they announce the price only, there is no limitation on how many tons of crops will be purchased by them. Therefore, the cost of purchases could not be foreseen and they result in duty losses, which are financed by the Treasury later. Because no fund was assigned to these duty losses and given the Treasury did not have idle funds, it would have to borrow. Since this would be unpredictable, the Treasury would have to pay higher interest rates for this extra requirement. Keeping all these in mind, it is unattainable to predict the cost of agricultural support policy in support purchases, whereas DIS compensates for the transparency and predictability drawbacks of price support.

Having a certain policy disbursements in the budget is also important in terms of attributing the policy to the parliament. Before the general budget became law, fierce discussions are held in the parliament. Items are argued by both the government and opposition. In other words, policies are under control of opposition. Therefore, as compared to policies that are not among the budget items, DIS could be perceived as a policy on which all parties come to a mutual understanding. However, criticisms focusing on budget issues do not mention all these and address DIS only for a certain aspect without considering the others.

As one of the basic differences between price supports and direct income payments, the burden of the payments shifts from consumers to taxpayers when price support is converted to DIS. This is the nature of direct income payments. Consumers who pay high prices for agricultural products carry the load of policy tool in support purchases. However, in DIS, prices would be determined in the market so that consumers would not be subject to paying more than the market price. Instead, taxpayers would be the

carrier of the burden of agricultural support policies. Therefore, it is natural that DIS' burden on the budget and taxpayers is higher than the previous support policies by its character. Criticisms emphasize this part, but none of them seems to mention decreased burden on the consumers and state economic enterprises. As mentioned before, there is a tradeoff between consumers and taxpayers in this issue. Either one party or the other has to pay for the policy. If consumers pay, poor people will suffer more than the rich, as they assign relatively higher shares of their income to basic food. On the other hand, if DIS is applied, although it could be financed by limiting some other expense items, funds needed for DIS are generated commonly by increased taxes whose burden would depend on whether it is direct or indirect. It should be noted that, if increases were experienced in direct taxes, consumers in the low-income group would be affected positively whereas it would have negative impacts on other groups. Conversely, if indirect taxes were increased, society as a whole would suffer (Demirci, 2000). Therefore, it is important that DIS be financed by increases in direct taxes. Otherwise, indirect taxes would not result in increases in wealth of low-income groups of the society (Yükseler, 1999).

One of the mostly cited criticisms is that DIS would cause deterioration in sufficiency in agricultural products and food security. Supply shortages were expected because of direct income payments. This criticism is related to those that express concerns about experiencing decreases in production level, but considers the demand side as well as the supply. In this regard, Turkstat's data regarding self-sufficiency for barley and wheat is depicted in a figure below to trace changes in self-sufficiency.

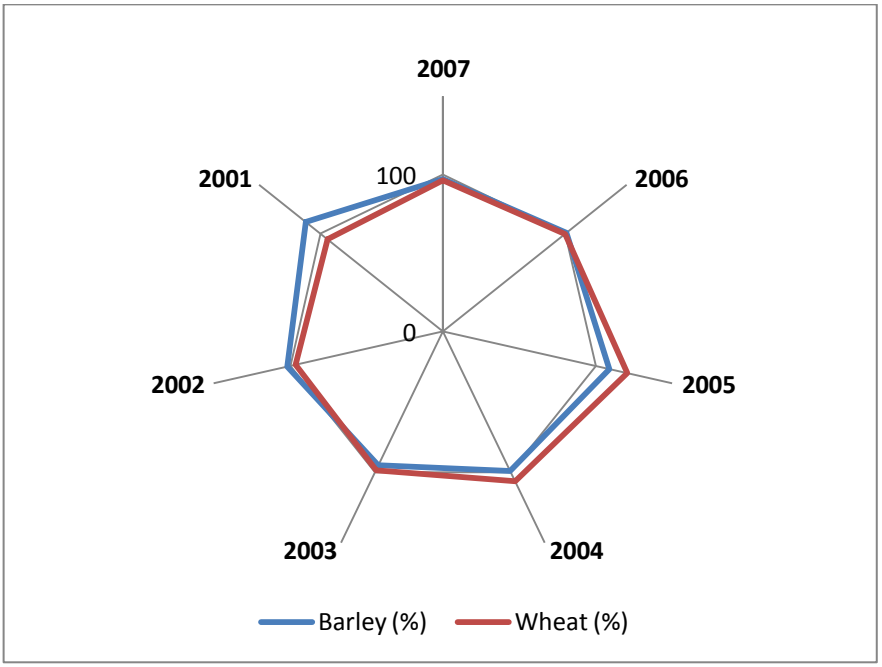


Figure 34: Degree of Self-Sufficiency in Barley and Wheat

Source: Turkstat, 2010h

This figure shows the degree of self-sufficiency in percent values for the two main crops in Turkey. It could be observed in the figure that, in no periods, self-sufficiency degree fell far below 100 percent. Although there were some years when the supply of the crops could meet about 95 percent of the demand, the degree of self-sufficiency was at least 100 percent in 5 years over 7. Therefore, DIS, as a way of supporting agricultural products, did not pose a danger in terms of self-sufficiency and food security. The values of self-sufficiency degrees also indicate that supply shortages are not experienced in the years DIS was in force.

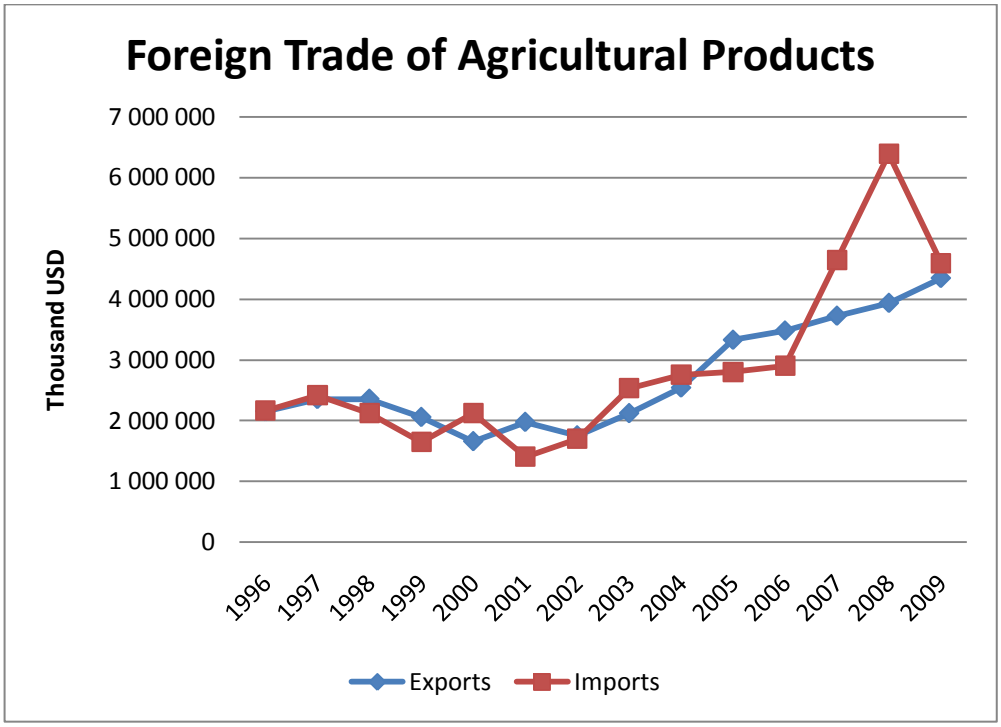


Figure 35: Foreign Trade of Agricultural Products in Turkey

Source: Turkstat, 2010i

Foreign trade figures could be analyzed to see the changes in exports and imports. Although the share of agriculture in total exports decreased, the value of agricultural exports increased in itself. Turkey's foreign trade volume increases as the economy grows, and combination of foreign trade changes in favor of manufacturing and against agriculture. In the figure above, foreign trade of agricultural products is depicted for the years 1996-2009. Exports of agricultural products increased in the years DIS was applied. The criticism that exports would fall has no ground based on this data gathered from Turkey's official statistics institution. It should also be kept in mind that exports of an agricultural product might be declining when that product is being processed at home rather than exported as raw materials. Exports of raw materials might be sacrificed for exports of processed products which have more value added. In fact, the processed agricultural products represent the main part of

net export position of Turkey against the rest of the world other than the EU (Eruygur, 2006). Decreased exports may also be due to use of agricultural products in other sectors at home. For instance, exports of cotton have declined as an increasing proportion of output is absorbed by the domestic textile industry (Brook et al., 1999). Then, although export of agricultural products is increasing, it would not signal anything wrong even if it was declining.

Moreover, imports of agricultural products moved approximately in line with exports. However, to claim that increase in imports as a consequence of a tool used to support agriculture is detrimental, one should analyze how the imported goods were utilized. For instance, consider an economy has limited resources to be assigned to either to produce agricultural products and to process those products. In this case, it would be rational to import the agricultural products as raw material and process them domestically because in general its value added would be more than producing those products at home. Then, increasing imports would not be an alarming issue. It is out of the scope of this paper to analyze how the imported products are utilized; nevertheless, related criticisms do not seem to investigate whether the imported agricultural goods were used as raw materials or as final output. Therefore, their assertions are not based on data and these claims are highly subjective.

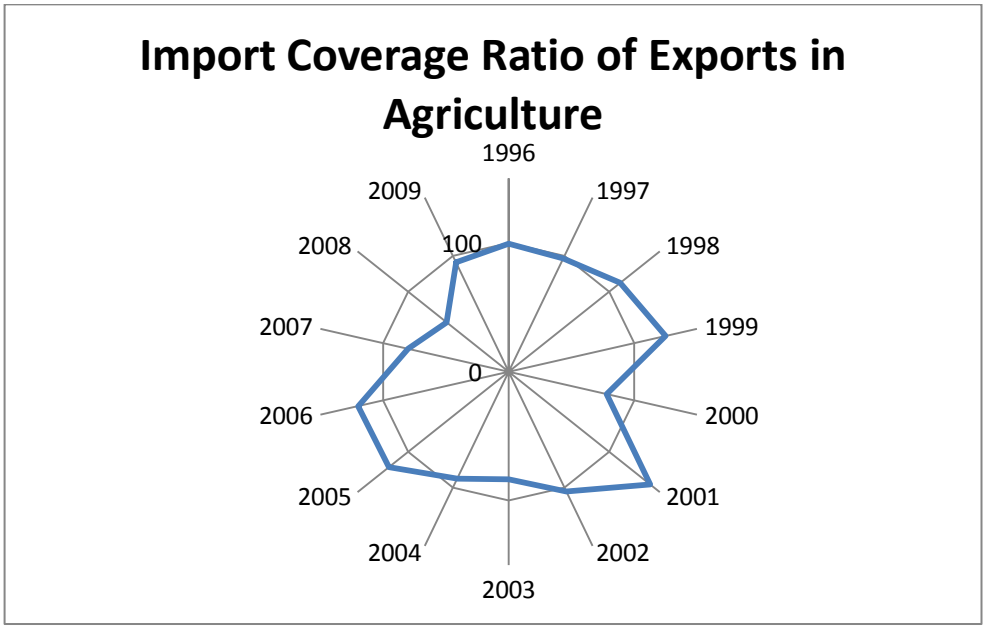


Figure 36: Import Coverage Ratios of Exports in Agriculture

Source: Author's calculations from Turkstat, 2010i

Another indicator regarding foreign trade is the coverage ratio. It shows to what degree exports can cover imports. In open economies, every product is both exported and imported to an extent. If exports are more than imports, this will improve the current account. On the other hand, if imports exceed exports, the current account will deteriorate. Therefore, the comparison of exports and imports are important for countries and import coverage ratio of exports is one of the essential knowledge. In the figure above, import coverage ratio of exports for agricultural sector is depicted. The ring, around which the coverage ratio curve wraps, shows 100 percent. If the curve lies in the circle, the coverage ratio falls behind 100 percent implying imports exceed exports. If it is out of the circle, exports are more than imports. When the figure is examined, it is easily observed that import coverage ratio of exports did not fall in 2001 when DIS was applied for the first time. On the contrary, it was 140 percent in 2001 and 103 percent in 2002. It declined slightly for the following two years and then increased again over 100 percent. This rise and fall could be observed

throughout the period no matter which agricultural support policy is applied. Therefore, it is hard to claim that DIS caused fluctuations in coverage ratio. Besides, on average, import coverage ratio of exports in agriculture is 100 percent. As a result, criticisms asserting that DIS will cause agricultural products' exports to decrease and imports to increase cannot be verified by official data.

DIS was also criticized for being the driving factor behind migration from rural to urban territories and causing social and economic costs of DIS to exceed previous support policies. Migration is a deep issue that has to be analyzed intensely. The motives behind it could not be restricted to any support policy. More than agricultural support scheme, living conditions in rural is important. If standards of living in the countryside are not at least as high as the urban areas, migration from the rural to the urban areas will not be evitable, no matter which support policy is applied. As the economy and technology grows, life in urban areas becomes easier. Moreover, education, health services and alike also affect people's decision regarding where to live. If there were no teachers in schools in the countryside, people who would like their children to have education would consider moving to cities even though their agricultural production was supported via price supports. Likewise, hospitals in the urban areas are fully equipped, doctors and nurses in these urban hospitals are well educated, and healthcare services are better performed in the urban areas than the countryside. These opportunities are at the heart of migration decisions. In addition, diversity in economic activities, business opportunities, social activity facilities, alike are especially important for the youth in rural areas. As a result, implemented agricultural support policy could play a role in migration decisions only slightly. It should also be noted that there is a serious excess employment in agricultural production. This might be one of the motives behind migration because the agricultural sector cannot feed all these excess labor working in the sector. The best thing to do would be, in this case, instead of displacing people working in agricultural sector, conducting policies to generate alternative job opportunities (Çakmak et al., 2008b). As is obvious, migration is not an effect of the agricultural support policy tools, but a consequence of all policies conducted for years such as education, health, social security, social program that educate people in

the rural and so on, and should be handled comprehensively by taking into consideration all related issues.

Besides, the data about sown area and production levels are studied previously in the section about criticisms regarding agricultural production. Those data do not indicate any decreases in agricultural production activities. It means that some people keep cultivating the land and conducting agricultural production. If DIS had caused migration to urban areas as the criticisms asserted, less people would have been left in the rural areas and production levels would have fallen. However, official data do not verify such a trend. Therefore, it is hard to claim that DIS would reduce people left in agricultural production and encourage migration to urban areas.

The issue of migration due to DIS is questioned in different ways in several researches, also. For instance, in a research, it was found that the share of farmers who considered quitting agricultural production was considerably low. Agricultural producers wanted to keep farming no matter how (Yılmaz et al., 2006). This finding implies that agricultural producers, who do not even think about quitting farming, will not migrate to urban due to DIS. Thus, it is notably unlikely to experience migration from rural due to the reform in agricultural policy.

Another criticism against DIS regarding macroeconomics asserted that effectiveness of the reform in agriculture will be only limited without comprehensive structural reforms in the whole economy. Although it has some justifiable points, this issue should be considered from the point of view of the main motive behind implementing DIS. That is to say, well functioning factor and final product markets, competitiveness, easy access to credits and so on are important for agricultural sector's development. It is hard to establish an agricultural sector that is as competitive as other sectors without these. Then, the effectiveness of agricultural reforms, which aim to liberalize the market, will be restricted. Suppose that a farmer cultivates crop X that is supported via price supports. He could also cultivate crop Y in his farmland with efficiency degrees that are higher than crop X. Nevertheless, because X is the supported crop, he does not switch to Y even though it is sold at

higher prices in the market than X. When DIS is implemented, these farmers will consider ceasing producing crop X and switch to crop Y which is more appropriate to both the market conditions and farmland characteristics. However, switching from one crop to another requires some investments. For instance, crop Y may require use of some other irrigation techniques than crop X. Likewise, different machines and equipment may be used in cultivation of Y. Moreover, fertilizers or pesticides may differ from crop to crop. All these require money, or in other words, credits. If there is a well functioning credit system for agricultural producers, farmers will get credit, make necessary investments and switch to producing crop Y instead of X. Then, DIS payments could be used for paying the installments of the credit in this case. On the other hand, if such a credit system does not exist, DIS payments could hardly turn into investments. In this case, farmers could not switch to crops that are more profitable even if they wish to. Therefore, the effectiveness of DIS is directly related to credit systems. Unless farmers are provided with economical and customized credit options, DIS could not fulfill such basic functions. As a result, agricultural policies should also be supported by financial policies, for instance. It is true that reform in agriculture should be complemented by reforms in other sectors to ensure effectiveness and sustainability. Making reforms throughout the economy is a political issue that is out of the control of the agricultural sector and similar arguments could be put forward for any support schemes. Consequently, it would be unfair to criticize DIS for the issues that it has no control over.

Other criticisms against DIS regarding macroeconomic issues focus on distribution of income. It is asserted that DIS, could not in Turkey's experience and cannot in theory, be the solution to unfair distribution of income. However, it is known that direct income payments can be tailored to provide the desired distributional effect with their ability to better targeting (Brook et al., 1999). Still, the data of income distribution in Turkey is gathered from reports of State Planning Organization (SPO) and Turkstat, and depicted in the figure below. Gini coefficient, which shows the degree of fairness in distribution of income, is a number between 1 and 0. As it approaches to 1, income distribution becomes unfair; whereas while it approaches to 0, income distribution becomes fairer. Therefore, if the line indicating gini

coefficient in this sense is downward sloping, distribution of income improves. Based on this basic information about gini coefficient, in Turkey, distribution of income becomes fairer in DIS period as compared to the period prior to implementation of DIS.

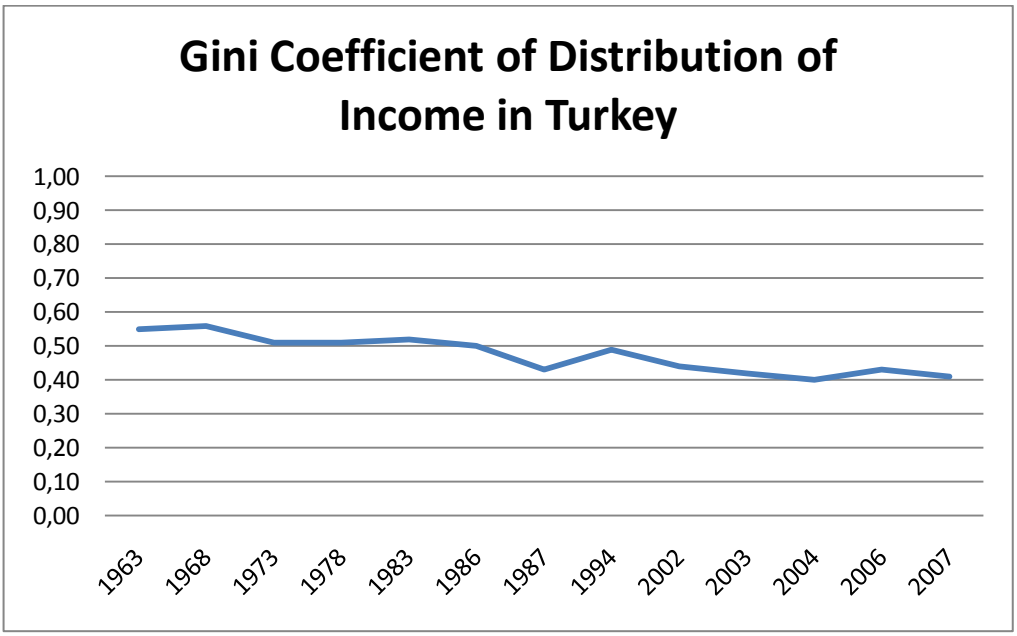


Figure 37: Gini Coefficient of Distribution of Income in Turkey

Source: SPO, 2007b and Turkstat, 2010j

It is obvious that distorted distribution of income is not a consequence of DIS, which is a tool to support farmers based on the area of farmland. Any distributional problems, in case of area-based supports, would be related to unfair distribution of farmland (Çakmak et al., 2008a). In this context, if the main objective is to establish a fair distribution in income, policy makers should first try to ensure fair distribution of farmland among agricultural producers. Otherwise, both direct income payments and other support policies would result in deteriorating income distribution. Moreover, when compared to price support, direct income payments' impact on

incomes of low-income group would be constructive. In other words, price support schemes would have a further negative impact in distribution of income. In price support policy, price of agricultural outputs increases because of state intervention to the market. Therefore, consumers, part of who consist of the producers as well, pay for the cost of the policy. Yet, low-income groups whose agricultural expenditures consist of more than 50 percent of their total incomes carry the biggest share of financial burden (Çakmak, Akder and Kasnakoğlu, 1999). Therefore, agricultural policies such as support purchases place bigger share of its cost on low-income group than high-income ones. This will obviously cause distribution of income to depreciate. This argument explains why previous support policies are worse for equality of income distribution than direct income payments in consumption perspective. A similar discussion can also be argued in another point of view. In Turkey, a small group of producers possesses a big share of total farmlands. These lands are also more qualified in terms of irrigation capacities (Çakmak, Akder and Kasnakoğlu, 1999). Therefore, their production volumes are higher than other undersized farmers. As a result, this small group of big farmers benefit from output-based supports more than the others. Moreover, since they produce in large volumes with extensive capital, they use more fertilizer and thus benefit from fertilizer supports more. Consequently, any support policy that is based on production level benefits bigger farmers more than smaller ones. If bigger farmers are considered richer, price supports will make rich farmers richer. This will also mean that distribution of income amongst farmers will be worse after implementation of such policies. Criticisms about deteriorating distribution of income cannot put forward a better way of supporting farmers in terms of income distribution. DIS is not as deteriorating as previous schemes when all these issues are considered. Criticisms in this context seem to be unfair.

Distribution of income is an issue that should be handled in a comprehensive way. Not only agricultural subsidies but all other issues such as the structure of the labor force, education opportunities, distribution of factors of production and so on should be taken into consideration and a comprehensive policy should be implemented to improve it. Moreover, in the absence of a clear picture of who wins, who loses, and

by how much, it is hard to recommend a change. On the other hand, armed with such information, policymakers can ensure that the losers are compensated, and balance economic criteria against issues such as "fairness" in the distribution of income and political feasibility (Brook et al., 1999). Therefore, evaluating a policy tool in terms of contribution to the distribution of income requires a deeper analysis. Without such analysis, the claims stating that DIS caused distribution of income to deteriorate would be vain.

5.3.4. Regarding Farmland Issues

Criticisms Regarding Effects on Farmland:

1. Regarding price of farmlands:
    a. Farmland rental would increase (Yılmaz et al., 2006).
    b. Rise in value was experienced in farmlands. DIS payments caused land prices to increase (Yılmaz et al., 2006).
2. Regarding division of farmlands:
    a. Setting an upper limit on the eligible area caused division of farmlands to get more DIS payments (Ağırbaş, 2006; Akder, 2003).
    b. New legal issues would arise in multi-owner farmlands. Furthermore, farmlands bigger than 200 decares would split even by conflicting with the rational of capitalist development. Consequently, total number of agricultural businesses would be overrated and each member of multi-child families and multi-parcel agricultural businesses would be given DIS individually. The number of family businesses would increase (Özkaya et al., 2001).
    c. Farmers who had lands bigger than the upper limit transferred some of their businesses to their relatives to be able to get DIS for their whole farmlands (Bor, 2005; Öztürk et al., 2002; Gül et al., 2001).
    d. There should not have been any limitation on the eligible area; however, it was regulated that first 20 then 50 hectares were the maximum areas to get DIS payments (Dinler, 2008).

3. Regarding the administration:
    a. In Turkey, family worker employment is at high levels and business farmlands are multi-parcel. In case of each family worker making a claim on a parcel of land, implementation of DIS would be a mess (Demirci, 2000).
    b. The number of businesses that will benefit from DIS is 4 million and each business consists of 3 parcels on average. Administration costs of a DIS program covering all businesses will be higher than other agricultural support policy tools (MPM, 2002).

This group of criticisms focuses on the consequences of DIS on farmland issues. Even though there are various criticisms in this matter, they could be classified in three main headings. First of all, there are concerns about the rental or sales prices of the lands. Since this policy tool bases its payments on the area of farmland, the value of lands are claimed to experience increases. Secondly and mostly mentioned, there is a prediction of facing divisions in farmlands to get more payments. These criticisms mainly focus on the scenario that if any land is bigger than the maximum area to be eligible for DIS, it will be split into pieces as if they were individual farmlands with different owners. This issue is one of the mostly stated criticisms among all, but there are hardly any justifications for the claims. It is written that DIS would cause agricultural holdings and farmlands to split, yet it is not explained why it is unfortunate to experience that division. Lastly, consequences on farmland are discussed from the point of administration costs. It was claimed that if farmlands were actually divided with owners for each part, costs incurred during registration, controls, and payments and so on will increase.

To begin with, the value of land was asserted to increase due to DIS. In fact, in the economics perspective, DIS would increase opportunity cost of selling out or renting farmlands. If a farmer was to rent or sell his land off, he would agree to relinquish any DIS payments he would get, considering he satisfied all the requirements of the policy. Or else, any other farmer who was to rent or purchase the farmland would gain DIS payments along with all benefits of farming, on the assumption that he met

all prerequisites. In this case, to accurately price the asset, the worth of the land should comprise prospect payments of DIS. The land, in this perspective, could be tackled like a bond paying installments regularly. Then, just like pricing the bond by discounting the coupon payments to present values, DIS payments should also be discounted to their present values to find the price of the land. Thus, the price of farmland will increase as a matter of course, if any payments are conducted based on farmland area. It should be noted here that this discussion is applicable if DIS payments are obtained by the farmers who purchased or rented the land and did agricultural production. Otherwise, there should not be any increase in the rental or sales price of land. If the initial owner of the farmland gets them, the payments would not be transferred to farmers who actively operated on the land. Therefore, the criticism of increased farmland prices applies in case of farmers, as compared to landowners, getting the payments. Otherwise, the payments would be received by the owners and no real effects would be observed in farmland prices. Then, if those who claim that DIS policy increased land prices also claim that the payments are received by the landowner not the farmer, there would be a contradiction in their claims. Unfortunately, there is this inconsistency in their papers. This implies that criticisms are so subjective and cannot be validated by any data or discussions.

It should also be kept in mind that if DIS was received by the farmers operating on the land while the payments also caused rental of the land to increase, both additional cost and additional benefit would be poured to the farmers. Then, would the farmer be better or worse off? To be able to answer this question, one should examine relative increase in costs and benefits. Without such analysis, these assertions would not be well grounded. Furthermore, from the point of view of economics, there is always an opportunity cost. If DIS payments were received by the farmer but no increase in land rentals was observed, the landowners would definitely be worse off with their under-valued farmland. On the other hand, if DIS payments were received by the landowners and rentals of the lands increased, this would be an example of imperfect competition such that in a competitive market, farmers would refuse to pay increased rent for a land due to payments that they did not receive and prices would be expected to decrease to the equilibrium.

The issue of increased prices for agricultural land could become a problem if there was a considerable amount of agricultural holding that used rented land. To see whether this was the case, data of holdings operating only rented land, as percentage of total holdings and total area is calculated and depicted below.

Table 10: Holdings Operating Only Rented Land, 2001 and 2006

	2001	2006
Share in Total Holdings	1.8 %	1.6 %
Share in Total Area	1.7 %	1.5 %

Source: Author's calculations from Turkstat, 2001 and Turkstat, 2006

Turkstat's official data, as shown in the table, suggests that in 2001 less than 2 percent of total agricultural holdings are used by farmers who rented the land. The ratio of holdings operating only on rented land even decreased in 2006. The same manner is observed in total area, as well. In terms of decare in lands, only 1.7 percent of total area is operated on rent. Moreover, in a few years' implementation, this ratio fell to 1.5 percent which is quite negligible. Summing up, there is only a slight portion of farmers who are directly affected by changes in rental prices of agricultural lands. In every policy tool, there would be gainers and losers to some degree. No single policy could be perfect to satisfy every need. Indeed, whilst the potential economic benefits from policy reform may be clear, policy change inevitably sets up a pattern of winners and losers (Brook et al., 1999). Therefore, in evaluating policy tools, one should look at the overall impact. If the remaining 99 percent of agricultural holdings is better off, then 1 percent of those who are worse off could be compensated.

Given increase in farmland prices is observed, one should still be careful in reaching conclusions as it is a bad or good thing to have increased prices. For instance, from the point of view of farmers who own their land, increased farmland prices should be

an advantage. DIS would provide them with bargaining power when their assets' price increased. On the other hand, it would negatively affect those who wished to purchase land and farm it. Then, one should investigate whether purchasing or renting the land is likely to happen in Turkey or not. In this aspect, it is known that the majority of farmers own the farmland they cultivate (Çakmak et al., 2008a). In fact, the official statistical institution of Turkey declared that almost 98 percent of holdings have their own land, while only about 2 percent did not in 2006.

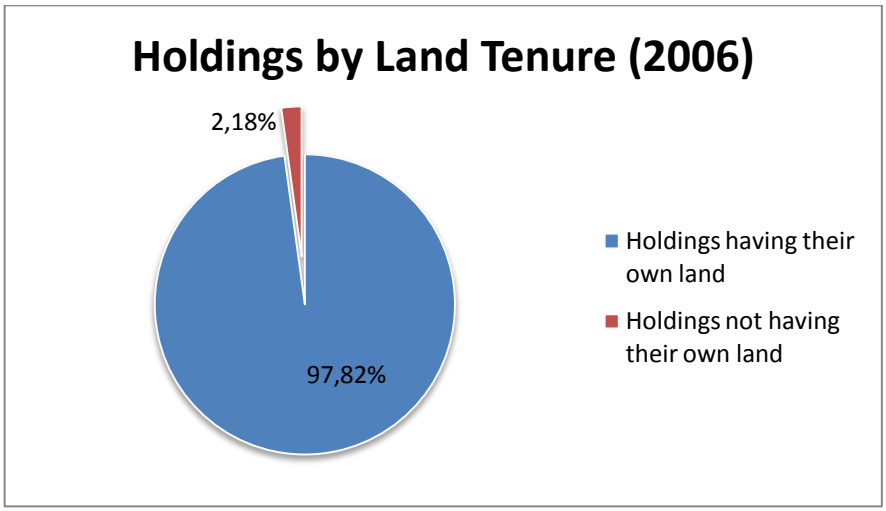


Figure 38: Holdings by Land Tenure, 2006

Source: Author's calculations from Turkstat, 2006

Land tenure in terms of agricultural land is also questioned and related statistics is declared by Turkstat. The figure of land operated by holdings by land tenure is depicted below. According to this statistics, once again, a great majority of land is operated by holdings having their own land. Only a slight portion of total agricultural land is operated by holdings which do not have their own land. Therefore, the arguments of increased prices in lands would not predominantly interest the farmers in Turkey.

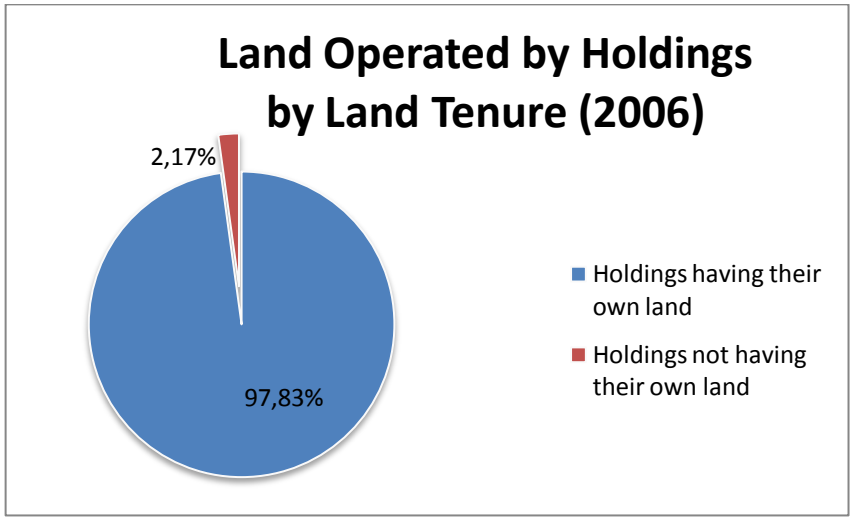


Figure 39: Land Operated by Holdings by Land Tenure, 2006

Source: Author's calculations from Turkstat, 2006

Then, for the majority of farmers in Turkey, the concern of increased rental or sales prices would be needless. Moreover, farmland is not an asset that is highly mobile. That is to say, landowners do not sell their lands when prices are high or keep them when prices are low. Liquidity of this asset is very limited. This is valid for all sizes of agricultural holdings. In the table below, shares of holdings having and not having their own land in total land that is operated by holdings are depicted in terms of holding size and land tenure. Total agricultural land is operated either by the landowners or some other persons. This table shows, for each size of holdings, the percentage share of the land that is operated by the holdings having their own land and by the holdings not having their own land. Certainly, they sum up to 100% for each size. Furthermore, to be able to track the changes from the year 2001 to 2006, related data of both years are supplied in the table. It is obvious in the table that no matter of what size the agricultural holding is, at least 90% of the land is operated by holdings having their own land in 2001. This share is even greater in 2006.

Table 11: Shares of Holdings Having and Not Having Their Own Land

Size of Agricultural Holdings (decare)	Share of Holdings Having Their Own Land		Share of Holdings not Having Their Own Land	
	2001	2006	2001	2006
0-5	0.972	0.970	0.028	0.030
5-9	0.970	0.983	0.030	0.017
10-19	0.962	0.983	0.038	0.017
20-49	0.962	0.980	0.038	0.020
50-99	0.970	0.972	0.030	0.028
100-199	0.962	0.974	0.038	0.026
200-499	0.960	0.981	0.040	0.019
500-999	0.963	0.972	0.037	0.028
1000-2499	0.966	0.997	0.034	0.003
2500-4999	0.909	0.993	0.091	0.007
5000+	0.982	0.984	0.018	0.016
Total	0.964	0.978	0.036	0.022

Source: Author's calculations from Turkstat, 2001 and Turkstat, 2006

It could easily be seen in the table that for the majority of holdings, the share of those having their own land increased in 2006 as compared to 2001. This fact implies that during DIS years, agricultural holdings were increasingly operating on their own land. Thus, DIS could not have been a disaster for these holdings. Besides, since holdings do not pay any price for their own land, increased value of agricultural land should have been to the advantage, not disadvantage of them.

Regarding splitting farmlands to get more DIS, it is hard to analyze the issue due to lack of data. The most recent data about number of parcels and related issues were released for the year 2006 by Turkstat. Moreover there was an agricultural census in 2001 conducted by the same official statistics institution. In this paper, mainly these two sets of data are used in analysis. Agricultural census data are considered representing the beginning situation in 2001 when DIS was newly applied. On the

other hand, data of 2006 are used to track the changes. It should be noted, though, that these are snapshot comparisons that do not include any tendencies or flows.

Agricultural structure in Turkey is one of the issues that policy makers should concern themselves with and develop policies to improve. One of the mostly mentioned features of this sector is its being multi-parcel. In fact, in 2001, only 11 percent of total agricultural land and about 20 percent of agricultural holdings were only 1 parcel. As it could be seen in the figure below, these ratios fell even more in 2006. In particular, according to Turkstat's officially declared data of 2006, only 3.2 percent of total agricultural land was single parcel, along with the share of agricultural holdings having single parcel fell to 10 percent in 2006. This is the characteristics of agricultural sector in Turkey which should be addressed carefully and systematically. Neither it is the consequence of DIS, nor could it be solved by direct income payments scheme.

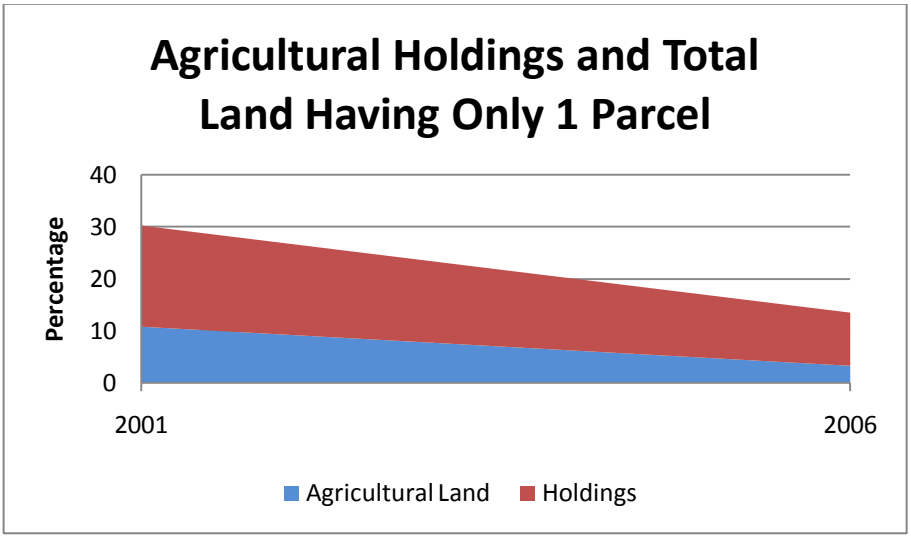


Figure 40: Agricultural Holdings and Total Land Having Only 1 Parcel

Source: Author's calculations from Turkstat, 2001 and Turkstat, 2006

This situation could also be observed in more detail as the following two figures depict. In the first figure, agricultural land is illustrated by the number of parcels as grouped in four for the years 2001 and 2006. Moreover, in the second figure, agricultural holdings are graphed in the same manner.

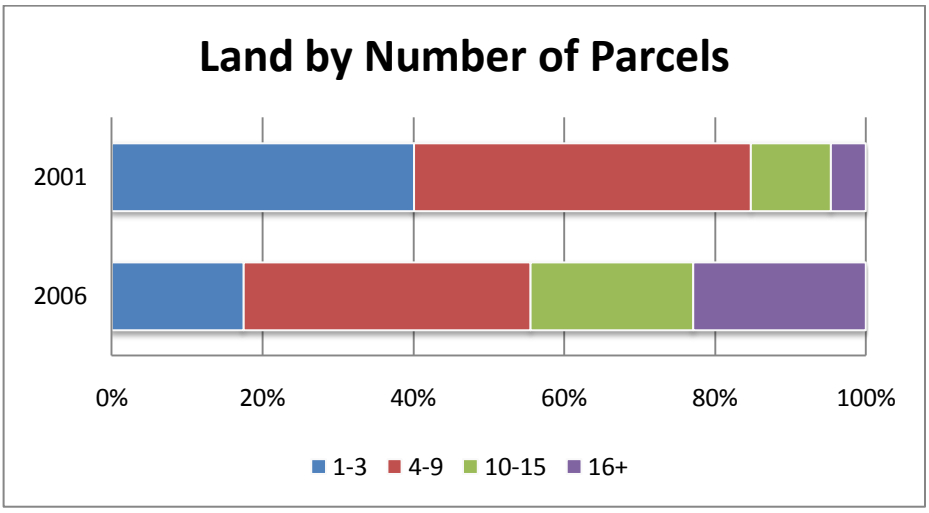


Figure 41: Land by Number of Parcels

Source: Author's calculations from Turkstat, 2001 and Turkstat, 2006

In 2001, about 40 percent of total agricultural land was 1-3 parcels, whereas about 5 percent of total land was more than 16 parcels. On the other hand, in 2006, the portion of agricultural land that is 1-3 parcels was only 17.5 percent, while land with more than 16 parcels increased to about 23 percent.

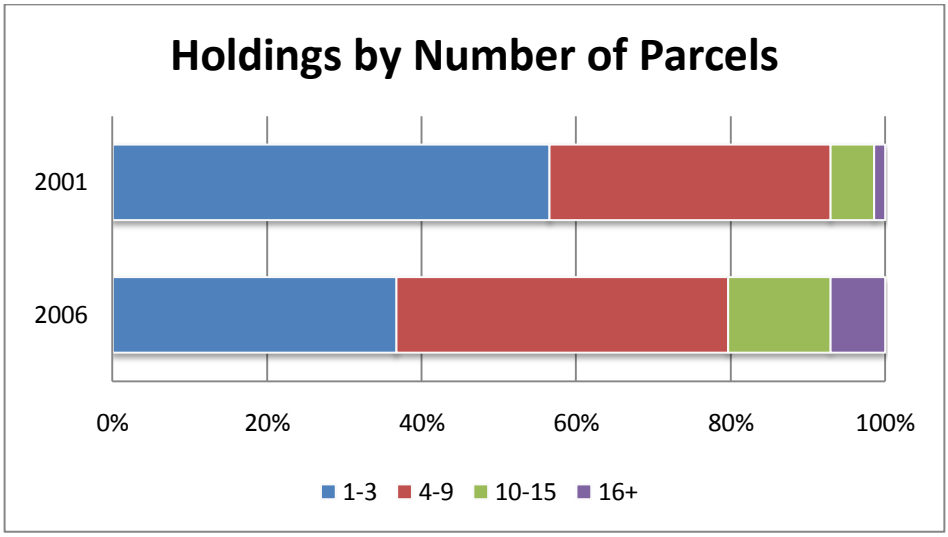


Figure 42: Holdings by Number of Parcels

Source: Author's calculations from Turkstat, 2001 and Turkstat, 2006

Regarding holdings, more than half of the holdings were 1-3 parcels in 2001 while in 2006 the portion of holdings having 1-3 parcels was less than 40 percent. The share of holdings with number of parcels more than 16 was about 1.5 percent in 2001, while it increased to 7 percent in 2006.

The share of land and holdings that have more than 16 parcels increased from the year 2001 to 2006, while those with 1-3 parcels decreased. This might be considered implying during years of DIS, lands and holdings divided into more parcels; however, it should be kept in mind that in 2001, the registry system was not complete. Farmer registry system was considered a by-product of DIS in Turkey and holdings were registered in DIS years to a great extent. To be able to see whether this change in portions is due to new registries having more parcels or just division of land or holdings, total amount of agricultural land and holdings should be analyzed. Nevertheless, there are no official data regarding that information. Turkstat's data declared in 2001 is in absolute values, whereas its data in 2006 is in percentages.

Thus, the reasons behind the changes in the number of parcels could not be tracked with the available data.

In 2001, about 3.1 million holdings were declared with a total of about 184.4 million decare of land. Since there was an upper limit on the eligible land in the DIS scheme, these holdings and farmland area could be grouped in two according to the size of land to see the shares under and above these limits. Numbers of agricultural holdings and total farmland area in decare terms with size of land smaller and bigger than 500 decares are depicted in the table below.

Table 12: Numbers of Holdings and Area by Size of Land, 2001

	Number of Holdings	Decares of Area
Size of land *smaller* than 500 decares	3 054 743	163 431 032
Size of land *bigger* than 500 decares	21 907	20 917 200

Source: Turkstat, 2001

As the values explain, in the first years of DIS, only a slight fraction of total holdings was bigger than the upper limit. Specifically, less than 1 percent of total number of holdings had more than 500 decare agricultural lands; while more than 99 percent had lands with size smaller than the upper limit. This information suggests that, in terms of holdings, DIS cannot be the reason for having multi-parcel because almost all holdings were already in the eligible limit of lands. It would be rational to divide lands which are bigger than 500 decares, with parcels each smaller than the upper limit and demand direct income payments for each. Otherwise, total payments would not change and there would be no rationale in splitting the land. In the meantime, the cost of policy intervention could be reduced by direct income payments implementation to the extent that payments to higher income farmers are limited since the richest 20% of agricultural households receive nearly ten times more income than the poorest 20% (Brook et al., 1999). Thus, considering an upper limit had to be put on the eligible area, less than 1 percent is acceptable for taking the risk

of splitting the land. Moreover, in the DIS scheme it would be just a simple matter of controlling who would receive the payments by putting certain measures on the farmer registry system. Thus, it would be very unjust to lay the blame on the policy tool but not to the other bureaucratic issues.

As it was explained previously, due to the lack of official data, division of land in DIS years cannot be measured precisely. Still, the figure below will give a clue about whether land division is likely to happen or not. In the figure, the total number of supported farmers is coupled with total supported farmland area for the years 2002 to 2007. On the vertical axis, supported areas are depicted in decare terms and on the horizontal axis, total number of beneficiary farmers is shown. Since 2001 was the first year of DIS implementation, both supported farmers and area were considerably less than the following years. Therefore, to be able to focus on the changes in couples of supported area and supported farmers from year to year, 2001 is excluded from the figure.

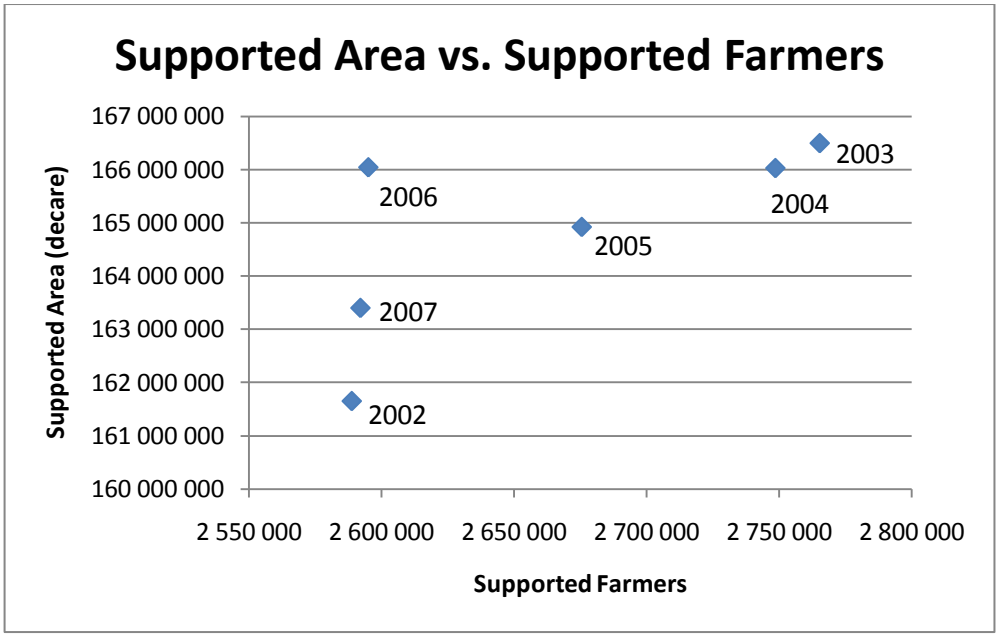


Figure 43: Supported Area vs. Supported Farmers

Source: Author's calculations from MARA, 2009

This figure indicates in each year, how many farmers were supported for how many decares of their lands. Farmland division was asserted to be encouraged by setting an upper limit so that to get more advantage of the payments, farmers would split their lands which were bigger than the upper limit. Then they would register some portion of their land on some relatives who would apply for DIS as well. Normally, if there was farmland division to get more of the payments as a family, one would expect supported area and number of supported farmers to increase. Supported area might remain stable in case of division of farmlands which are below the upper eligible limit. However, in case of bigger farmlands, supported farmlands, and in any case, supported farmers should increase. It is interesting to observe in the figure, though, that supported farmers and farmlands increased only from 2002 to 2003. After that, both terms declined from year to year. Since decreasing number of supported farmers contradicts with what would be expected in case of farmland division, this division may not be likely to happen, at least among the farmlands that were supported via DIS.

It is statistically calculated that the number of farmers and decare of area increased almost one to one. Yet, the reasons behind this increase have to be analyzed to see whether big farmers split their land and mostly relatives applied for DIS with the excess-land of upper limit or new farmers were registered and new areas were supported. Before conducting analysis on this issue, it would be unreasonable to claim that DIS caused farmers to split.

It is considerably interesting that majority of the critics focused on the issue of division of farmlands but hardly any of them mentioned the consequences of it. For a moment, let us assume that there was considerable division of farmland in DIS years. Then, what are the consequences? Are there any real impacts on economy? Have farmers become worse off? In the previous sections, many of these issues were addressed and it was found that there were actually no negative adjustments in real economy such as input usage, production levels and so on. Therefore, it is hard to

understand their motivation behind the criticisms and this makes it impossible to counter argue them.

The last group of criticisms in this issue is concerning the management cost of DIS implementations. These are also related to division of area and the problem of multi-parcels in farmlands but their focus is on the administration costs. In fact, total costs of administering a policy tool would increase by each incremental application. In the public institutions which are responsible in conducting these policies, there would be specific experts in charge of the related tasks, specific offices assigned to them, specific cabinets, files, registries and so on. When a farmer applied for DIS, a new registry would be created in a new file and put in a new shelve in the cabinet. It is not surprising that total cost incurred would increase by each new application. However, this is not unique to DIS. Whichever policy is implemented by conducting whichever tool, total cost would be positively related to number of applications. Assume for a moment that farmland areas were divided and each family worker claimed DIS on some portion of the land. Even then, management of direct income payments should not be a problem because there should already have been accurate registries and there would be no mess in policy execution. Besides, criticizing a policy tool for being messy when more farmers got benefit of it is irrational. Then, it would not be the fault of the support policy, but the consequence of inadequacy of registry system which should have already been established. The policy tool and policy implementation should be discriminated. Here, the problem is not direct income payments, but the start-up of the policy implementation before establishing a well-functioning farmer registry system.

Another aspect to be considered in this issue is that division of land would mean nothing in real terms if the division is only in registries. Consider for instance, a farmer divides his land into two and registers the second part of the land on his son's name just to receive more DIS payments. This would certainly increase the number of registered farmers and decrease the average size of the lands. However, in reality, the land would still be one parcel which continued to be cultivated and harvested at a time. It implied that if big sized farmlands were to benefit from economies of scale,

this sample land would maintain those advantages in economics perspective. Nothing would change in production issues such as inputs used, irrigation, people employed in production and so on. What matters would be that as a family, they would get more payments than they would otherwise. Probably the marginal cost of administering the policy would also increase. Still, production decisions of the farmers would not change. Thus, if the motivation behind dividing farmlands among relatives such as brothers or father and son were merely to receive more direct income payments, it would have negative impacts merely on administration costs; but no change would be observed in practice, ranging from use of inputs to volume of outputs. Although there is almost a consensus on disadvantages of division of holdings or area, there are hardly any authors who thoroughly discussed why it is so bad to experience that division. Have those who criticized DIS for being the rationale behind division of area really analyzed the cost that farmers bear during registry amendments, DIS payments, and administration costs of supporting more farmers? Besides, from the point of view of the farmers, they would condescend to change the records of their land by undertaking certain procedures to divide their area to be able to benefit from DIS more only if the payments they would get compensated for the extra expenditures they carried. Hence, criticisms asserting that DIS caused division of farmland and it was only trivial amount cannot be put in the same basket. Unfortunately, in Turkey, the majority of authors in this issue have written both of these conflicting criticisms.

In this part of the paper, effects of DIS on farmlands and agricultural holdings were discussed. Although there were several critics mentioning increases in farmland prices, division of holdings or area, and increases in administration costs, data of neither MARA nor Turkstat can justify them. It is interesting that even though these assertions were logical in theory to some extent, they were not a reality in practice. This issue suggests that agriculture in Turkey might not be policy sensitive at all. Agricultural production, for instance, does not follow the path of the theory under any policy that aimed to increase or decrease production. Likewise, in the matter of division of farmlands, theory suggests that lands might be separated if an upper limit is set for the support payments. However, it is not possible to observe this in Turkey.

Then, policy makers should be careful in designing policy tools. Otherwise they might be transferring support budget to the ineffective tools which are not capable of reaching the objectives, so wasting public resources for nothing.

5.4. CRITICISMS ABOUT THE POLICY

This section of the thesis covers the criticisms about direct income payments in Turkey from the point of the policy itself. There are two groups of criticisms examined in this section. Firstly, criticism about the policy benchmarks which compares Turkey's policy with other countries' will be discussed. Secondly, concerns about the legacy of direct income payments policy will be reviewed.

5.4.1. Regarding Other Country Experiences

Criticisms Regarding Other Country Experiences:

1. None of the developed countries implements only DIS schemes. DIS is always used as a complement to other support schemes (Çetin, 2005; Özkaya et al., 2001; Gül et al., 2001; Ortaç et al., 2006).
2. In developed countries, DIS was implemented to prevent unnecessary production and storage. However, in Turkey, agricultural production is inadequate and agriculture has to be developed. The same support system should not be implemented in Turkey by benchmarking. DIS is implemented in the world to ensure reduction in production levels; nevertheless Turkey is obliged to produce more (Çetin, 2005; Öztürk et al., 2002).
3. Direct income payments system in the European Union is coupled with production. However, the World Bank experts imposed decoupled DIS in Turkey (Dinler, 2008).
4. DIS is offered as a requirement of compliance to regulations of the World Trade Organization and European Union; whereas Turkey has no

> commitments regarding DIS in this issue. Moreover, it is not possible to comply with the European Union's CAP in the way DIS is implemented in Turkey because DIS is not the only scheme used in agricultural policy there. It is one of the common criticisms that DIS was imposed on Turkey by the European Union (Öztürk et al., 2002; Çakmak et al., 2008a).

This group of criticisms is expressed as a result of benchmarking. That is to say, they compare the system implemented in Turkey with other countries. When making comparisons, it should be kept in mind that each country has its unique agricultural sector with its unique characteristics. One should be careful in benchmarking then. A policy might be appropriate in one country in reaching its own goals –whatever it is; but not suitable for some others, depending on objectives of the policies, characteristics of the sector and so on. Therefore, agricultural policy tools should be evaluated based on these issues. This is valid in comparing policies of different countries, as well as evaluating the performance of a country's policies. In particular, the performance of Turkish agricultural policy needs to be measured according to its ability to deliver its policy goals (Brook et al., 1999), not some other countries'. In this manner, if direct income payments scheme in Turkey accomplished the policy goals in the way it was implemented in Turkey, then how the other countries implemented it would be out of question. Another aspect of the issue is that even though other county policies are experiences to guide, they might not be right. They are just examples of how agriculture could be supported. Concluding that a policy is right based on the criteria of how many countries implemented it is not a correct approach. It may not be right even though all others apply it, whereas it may be right although none of the others applied it.

This group of criticisms mainly bases their claims on other countries' having no agricultural policy that is similar to Turkey's. They assert that DIS is applied as a compliment to some other policies in developed countries; while in Turkey DIS is not a compliment; rather it is the only support policy tool. It is obvious that these criticisms miss the main point of transition implementations. Most of the countries that implemented DIS first had a transition period. In this period, countries decreased

other support policies and increased the share of direct payments in total supporting budgets. Thus, in transition period, DIS would be implemented beside other agricultural policies, while it would be implemented alone after the transition period. Then, one would reach to different conclusions based on the period taken into consideration. For instance, in the EU, support policies were based on price supports before the reforms. Then, step-by-step these policies became more decoupled by implementing compensatory payments. Finally, with Fischler II reform, the CAP of EU became full decoupled with its single payments scheme. The EU now implements DIS as its sole support policy. This fact in itself confutes these criticisms. What's more, implementing DIS as a complement to other forms of coupled support policies is paradoxical. DIS aims to let the market decide about the issues such as which crop to produce or how much to produce. Indeed, it was one of the expectations that DIS would ensure determination of agricultural products' prices in the market (Yeni et al., 2003). Therefore, there should be least state interventions in a way that cause minimum distortion. Any distortionary agricultural policy such as price supports will cancel out the effects of DIS; so it would be unreasonable to implement some other policy tools beside DIS.

Although this group of criticisms all criticize DIS experience of Turkey from the aspect of comparisons with other country implementations, there are some conflicts among the critics, and their criticisms. For instance, some of them assert that the European Union should not be the benchmark due to its developed agricultural sector, while some others compare Turkey with the EU and criticize the differences. Moreover, none of the criticisms mentions developing countries, but focus only on how the system is applied in developed ones. Since comparison is meaningful only when similar items are compared, criticisms implicitly state that Turkey is among developed countries, not developing. Then, there is a paradox in their statements in itself, as well. To be precise, they compare Turkey with developed countries; however, they also state that Turkey's economy is not similar to developed countries'. As explained in the previous sections, developed countries do not have agriculture as the most important sector in GDP or in employment. Manufacturing and services outpace agriculture. As a result, other sectors catch agriculture in terms of

importance, so the agricultural sector has to share the agenda of the country, which was predominantly devoted to it previously, with other sectors. Apart from lacking strong discussions on Turkey's so-called inadequate agricultural production, these criticisms classify Turkey as a developing country, yet compare it with developed countries such as the member states of the European Union.

The criticisms mostly misstate other country implementations regarding DIS. For instance, they focus on whether there are some other support schemes beside DIS and state that Turkey is the only country that applies merely DIS. To claim that there are no other countries having DIS as their sole support policy in agriculture, one should have analyzed all other countries' agricultural policies. Otherwise, these assertions would have no grounds. It is unrealistic to think that critics explored all other agricultural support policies in all countries. Furthermore, considering these critics' other concerns regarding DIS, it is hard to assume that it would be all right for them if other countries applied DIS as well.

There are many criticisms comparing the European Union's CAP with Turkey's agricultural policies in terms of direct income payments. Specifically, direct income payments system in the European Union is said to be coupled with production while decoupled DIS was imposed on Turkey. As discussed in detail previously, the CAP has been full decoupled since 2003. Keeping in mind that Turkey had been applying decoupled DIS since 2001; the EU modified its agricultural policy in line with Turkey's. Then, if these critics compare Turkey with the EU because what the EU implements are considered right, then decoupled DIS would be the solution. If not, there is nothing to criticize about DIS in Turkey by comparison.

It should be noted, though, that some of the criticisms were published before 2003 when the European Union's CAP underwent a radical change. Only after it, DIS was the sole support policy. Still, the trend in the EU was towards abolishing all payments by introducing single payments and it was ignored in these criticisms.

Criticisms also have concerns about international organizations such as the World Bank and World Trade Organization. They usually think that DIS started to be applied by external forces as if Turkey did not want to implement it at all but had to concede. This manner could be easily observed in the wordings that critics used. For instance, direct income payments in Turkey is said to be *imposed* rather than *suggested* by the international institutions. This kind of claims lack accurate information about policy development process in Turkey. Furthermore, World Trade Organization's Agreement on Agriculture is misunderstood by the critics. This misunderstanding is noticeable in the statements regarding requirements of the agreement. As it was discussed in the section Agreement on Agriculture was examined, WTO commitments do not insist on a certain subsidy scheme. Rather, they determine the framework regarding what is allowed and what is forbidden. Therefore, this group of criticisms misstates Turkey's obligations to the international organizations. DIS is not a requirement of WTO commitments, but previous agricultural policies such as price supports are definitely against the rules! Moreover, in the project report of ARIP (World Bank, 2002), it was stated that once completed, Turkey would be a model for other countries in reforming their agricultural policies.

Moreover, these criticisms have inadequate or wrong information regarding the formulation of DIS payments in Turkey. As is known, DIS is one of the components of a project called ARIP[25] which was prepared by Turkish government and proposed to the World Bank to get project credit. In other words, the Treasury asked the help of the World Bank not only for justification but also finance and implementation of the reform (Akder, 2010). It was the Treasury that initiated and managed ARIP as the domestic counterpart of the World Bank (Akder, 2007). Thus, asserting that external organizations "imposed" decoupled DIS on Turkey is not right, as it is the output of working reports of experts in Turkish institutions such as the Treasury. Most particularly, DIS was not imposed by the EU. On the contrary, Turkish experience had been a model for the EU, especially for the twelve states that became members of the EU in 2004 (Çakmak et al., 2008a). This explanation also confutes the claims

[25] It was approved by a Cabinet Decree No:2001/2707 published in 13.07.2001 and 24461 day and numbered Official Gazette

stating that DIS was put forward as a requirement in compliance with CAP of the EU. Yet, DIS would help Turkey in implementing CAP in case of membership of the EU. On the contrary, discontinuing DIS would be a conflicting preference in terms of compliance with the EU (Çakmak et al., 2008a).

Furthermore, DIS in its nature should limit production of over-produced crops caused by price supports. This is valid for all countries including Turkey. Therefore, discriminating developed countries and Turkey in this aspect is not rational. Turkey also experienced surpluses in certain crops and had to limit production of those. Still, these criticisms do not mention overproduced crops but insist on insufficient agricultural production in general. None of them focuses specifically on the crops and identify in which crops excess demand or supply shortage is observed. Moreover, as explained in the previous sections, official data of agricultural production do not rationalize the claims of insufficient production levels. Besides, aiming to improve production of all kinds of crops is not attainable, and it should be examined in crops basis. In any open economy, there are two main ways to satisfy the demand in the country: either produce at home or import. There are specific consequences of each choice, so one should be careful in making preferences between these two. In other words, issues such as whether the product is used as input or as final products, which of the products are imported, how much would it cost if those imported goods were produced at home and so on should be examined. In economics, to utilize factors of production in the way that will produce maximum return, alternatives should be considered in opportunity cost perspective. However, these criticisms only state the claims without any justification and none of them mentions the opportunity cost. Thus, their assertions are baseless.

Still, demand data of the products that are supported via price support could be examined to see whether Turkey had to produce more or not. Official data of crop supply balance sheets are examined below for the main crops in Turkey. In the figure, domestic uses of each crop in tons are depicted.

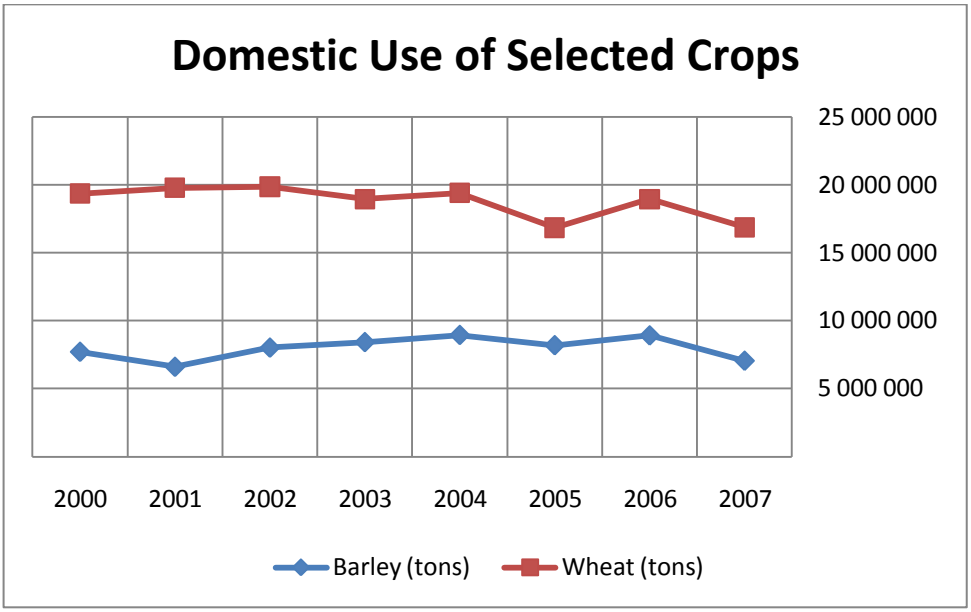


Figure 44: Domestic Uses of Selected Crops

Source: Turkstat, 2010k

This figure indicates the demand in domestic markets for these two main crops. It could be observed in the figure that domestic use of barley is around 8 million tons, and domestic use of wheat is around 20 million tons for the period between the years 2000 to 2007. Since domestic use of crops translates into the domestic demand of them, this figure also indicates that demand for such agricultural products remains stable. Then, these criticisms have to explain why Turkey must produce more in agriculture even though demand does not increase. If these crops were produced even more, then they would be either stocked at high costs or exported at the world price, which is far below domestic prices. In either case, it would not be the optimal way to support farmers in the economics perspective. One more thing to note here is that this figure indicates total domestic use in Turkey, no matter in what forms. Thus, it inholds the additional demand in agricultural products caused by increased population. In other words, domestic use of crops does not increase even though population increases. Therefore, it is not rational to claim that Turkey has to produce more.

5.4.2. Regarding Legal Basis

Criticisms Regarding the Legal Basis of DIS in Turkey:

1. Supporting agricultural producers is a constitutional task regulated in the item 45 of the constitution. Performing this task via cabinet decrees and legal notifications issued by the related Ministry indicates that DIS lacks virtual legal basis (MPM, 2002).

Among the literature about DIS and its Turkish experiences, only one of them mentions legal issues. It points out the fact that the state is endowed with authority and responsibility to support the agricultural sector.

This criticism underlines the legal basis of the agricultural subsidies. However, his conclusion about cabinet decrees and legal notifications lacks rationality. Since the criticism mentions related items in the constitution, it would be acceptable to assume that it believes in the power of the constitution; however, it does not accept notifications as having a legal basis. From the legal point of view, it is not possible to regulate every detail in the constitution. Constitution should only regulate fundamental rights and liberties; and determine the scope of other regulations. Otherwise, it would be a cumbersome and non-communicating legal document. As a result, this criticism has been unjust in stating that DIS lacks legal basis based on that assertion.

Item 45 of the constitution of the Republic of Turkey is related to agriculture, husbandry, and protection of those who work in these production fields. Precisely, it regulates that the state shall help those who deal with agriculture and husbandry in affording enterprise machines and equipments, and other inputs with the intention of increasing plant and animal production in line with agricultural production planning principles. It shall prevent misuse and the destroying of agricultural and meadow lands, as well. The state shall take necessary precautions regarding making use of

plant and animal products and ensuring real value of these products are paid to the producers.

Since it was examined in detail in previous sections, legislation and implementation of DIS will not be repeated here. Yet, it is worth mentioning that supporting agriculture is not only regulated in the constitution, but also in several papers such as development plans, strategy papers, laws, and legal notifications. Thus, agricultural subsidies have almost all types of legal documents. Each policy tool has its own type of specific regulatory paper. Some of them are conducted via state economic enterprises, whereas some of them are under direct control of MARA. Anyhow, none of the others has a specific item on the budget as a basic difference from DIS.

Constituting a particular share of the budget is important in several aspects. For instance, it ensures transparency and control by the public. Yet, more importantly, it gives DIS an even more substantial legal basis than other support schemes. As is known, budget is a law. It determines what the expected expenses are and with what kind of revenues they are planned to be absorbed. In another perspective, the budget law gives authority to collect revenues and responsibility to make expenses. Therefore, when DIS is applied, its total expenditure is one of the expense items in the budget. That is to say, apart from agricultural law and other legal documents, annual DIS payments are parts of budget law, also. Therefore, in any perspective, DIS payments do have a strong legal basis.

This criticism ignores the fact of the budget law, but focus on cabinet decrees and, mainly, legal notifications. It not only misses one of the most important aspects of the issue, but also does underestimate the legal power of notifications. As is known, these notifications are published to explain how the laws will be implemented. In a legal system, there is a hierarchy of legal documents. Constitution is on the top of every kind of legal document. Then, laws come, and notifications follow laws. There are also regulations and notices in the bottom lines. In this hierarchy, none of the below documents could embody any items that are against the items of the above. Moreover, the documents regulate *in general* at the high levels whereas they regulate

in detail in the below levels. For instance, a constitution can only determine the framework; whereas laws explain which policy tools could be implemented. Besides, legal notifications regulate whom to support, how and where to apply, how much to pay and so on. They are published based on certain laws and explain how these laws apply, meaning that they are also binding legal papers. Therefore, claiming that legal notifications lack virtual legal basis has no rationale.

CHAPTER VI

CONCLUSION

This thesis addresses the issue of direct income payments in Turkey from the beginning to the end of the process. After the introduction part, World Trade Organization and Turkey's commitments regarding its Agreement on Agriculture is explained. Then, other country experiences are discussed and compared to that of Turkey. The need for a reform in Turkish agriculture is investigated as regards to issues related to general economy, agriculture, and international commitments. After that, core of this study is placed. In this chapter, first the related legislation is examined in detail from the development plans to the yearly implementation notifications. Then, mostly cited criticisms are supplied and analyzed in 8 groups. Among these criticisms, there are both rational and irrational ones. Some of the asserted issues are even against the basic theories of economics. Although there are a few criticisms that are providing justification for their assertions, most of them lacks validation with no data. In other words, a great majority of the criticisms are only verbal. There are hardly any statistical models, graphics, or official data provided in their papers to verify their assertions. It is also interesting to note that, even though there seem many papers written in the issue of direct income payments and its implementation in Turkey, there are only a few researches on the issue and vast majority of the critics refer to this few researches. That is to say, indeed there are hardly any unique studies about DIS in Turkey basing their claims on data, rather than just spelling out what might happen. It is especially important to look at the data in case of Turkey because one of the conclusions of our analysis is that in agriculture neither policies are designed in need of the sector, nor the sector is sensitive to the

policies. For instance, the long-term objective of agricultural policies obviously needs to be the improvement of productivity in the sector. However, in Turkey, agricultural support policies focused on price supports rather than productivity issues. Consequently, Turkey could not reach its potential in agriculture. In addition, even if policies were designed in a way to increase the productivity, agriculture in Turkey might not respond as expected. This is especially apparent in production issues. On one hand, the project is designed so as to limit excess production of certain crops, on the other hand, criticisms persistently claimed that DIS would and did cause decreases in production although the opposite was aimed. Most interestingly, production neither decreased nor increased, but kept its own path. Therefore, if data were investigated, one would not reach the same conclusions as he did when no data were used. Many of the criticisms discussed in this thesis would not be present then.

Though, it is worth mentioning that in Turkey, data are not sufficiently provided. Many of the data required to analyze the policy impacts are not supplied by the official institutions that are responsible for statistical data. In addition, since the system of data collection and classification is not yet mature in Turkey, amplified with the harmonization efforts to the EU, systems in this regard change quite frequently. In a sense, the continuity of the data has not been established yet. This, in turn, makes it hard to trace any trends over long periods. In provincial analysis, the number of cities also differ between the period prior to and during DIS. Osmaniye, which was a district of Adana was determined as a province in 1996, and Düzce, after being a district of Bolu, became a province in 1999. This makes it complex to compare provinces accurately. In the thesis, any change in methods in data related issues or units (for instance, from million TL to YTL) is explained where appropriate.

One more thing to keep in mind when studying the results of a project is that if the activities of the project are not conducted in the decided manner, it is very hard to comprehend the consequences. In a project, overall objective, purpose, results and activities are defined. These have a logical hierarchy and from activities to overall objective, they should be comprehensive and supplementing each other. In this

perspective, if activities are not appropriate, the results could not be reached. If result could not be reached, purpose could not be achieved, and if purpose could not be achieved, the project could not contribute to the overall objective. For that reason, if there are any deviations in the project, all this hierarchy is impaired. Then, one can neither expect the project deliver the intended outcomes nor accept that the consequences are the results of the project activities. In case of Turkey's experience in direct income payments, the project could not be implemented as it was planned so that impact of DIS implementation was only limited. There have always been dilutions. Since there is evidence that the agricultural reform project in Turkey could not be finalized in the way it was planned to be implemented, it might be misleading to judge the project and its components based on merely the results. To criticize the components and particularly direct income payments in Turkey, one should see the accurate impacts, and to see the accurate impacts of DIS, one should construct a model that disaggregates all the effects of divergences from the project and measures the impact of merely the direct income payments. Otherwise, all the related criticisms would continue to be unjustifiable.

Regarding the agricultural sector in Turkey, prevailing support schemes which consisted of mainly price supports caused increases in agricultural prices and created production surpluses in supported products. Still, the most outstanding consequence of the previous support schemes was the significant burden on the finances of the governments which turned out to be unsustainable towards the end of 1990s. On the international side, there are two main stakeholders to mention. First, WTO's Agreement on Agriculture which regulates agricultural trade as well as domestic support schemes imposes binding constraints on the countries. Second, although the Customs Union between Turkey and the EU currently does not include agricultural products, Turkey will eventually have to liberalize its agricultural trade and harmonize its agricultural policy with the EU's CAP which applies, after a series of reforms, decoupled direct income payments now. Thus, it is important that the differences are well understood and agricultural policies are designed accordingly. In this sense, Turkey's direct income payments experience becomes more of an issue

both to study what went wrong in the past and how they can be improved in the future in case of a membership.

Studying Turkey's experience in direct income support has both past-revising (as the project is over now) and forward-looking (as WTO commitments and harmonization to the EU's CAP requires implementing non-distortionary policy tools) perspective. Therefore, it is important to understand how it was implemented in Turkey and which aspects of it were criticized to be able to plan future support policies that are in line with the overall objective in agricultural sector and complying with the responsibilities in international arena. To our knowledge, there have been no studies conducted about the criticisms against DIS in Turkey before.

This paper analyzes criticisms that are frequently stated by several authors. There are, however, other issues that are not discussed although they should have been. For instance, even though it was not mentioned at all, DIS disturbed the distribution of subsidies among the provinces in Turkey. This disturbing occurred to the advantage of eastern part of the country where extensive farming was conducted by farmers who were less organized than their colleagues in the western regions. On the other hand, fertilizer support as one of the previous support tools benefited the developed regions and organized farmers more. Since the organized groups are successful in gaining attention, they could lobby against DIS. Along with others; this issue also amplified criticisms against direct income payments in Turkey.

In Turkey, the reform of agricultural support policy was executed as a radical shift from price support to direct income payments scheme. There were also shortcomings in the way the reform was conducted. For instance, although there was a one-year pilot program in certain districts, there was no transition period throughout the country and neither the farmers nor other stakeholders such as taxpayers were informed clearly about the changes. Interestingly, although it was a policy change of Turkish government itself, the reform was misperceived as if it was an imposition of international forces. Eventually, these and many other factors resulted in great misunderstanding of direct income payments scheme and it received noteworthy

criticisms since the day it was established. Furthermore, if the farmers are to be compensated for their income losses following price reform, then the time period, over which compensation will be provided, should be explicitly declared, i.e. there should be a deadline for the payments. However, in Turkey's experience, there was no declaration about how long the DIS payments would continue. In a sense, DIS started to be implemented as if it would never end, and abolished as if it was never implemented. This will, in turn, cause problems when it will eventually have to be implemented again in case of a membership to the EU. Apart from it, there was not much discussion about the registry system. It is not surprising that the feasibility of direct income payments scheme which pays support based on farmland area depends largely on a well functioning registry system. However, the farmer registry system in Turkey was established with the ARIP as one of the targets of the project. The farmers were registered mainly when they applied for DIS payments, and hence, the registry excluded those who did not apply at all.

The subject of agricultural supports never loses its position on the agenda and direct income payments were one of the most controversial schemes implemented in Turkey. Although there are a number of papers in this issue, most of these studies refer to a few researches. Thus, in effect, there are hardly any unique studies about DIS in Turkey and to our knowledge; this issue has not been addressed before in the way we conducted. It should be realized that unless lessons are taken from this experience and kept in mind when designing new agricultural policies, all efforts and funds allocated to it will go down the drain.

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APPENDICES

Appendix A: Related Legal Papers

Table 13: Development Plans in DIS Period

Development Plan	Decree No	Number of Official Gazette	Date of Official Gazette
8th Five-Year Development Plan (2001-2005)	697	24100	05.07.2000
9th Development Plan (2007-2013)	877	26215	01.07.2006

Table 14: Strategy Papers Regarding Agriculture

Strategy Paper	Number of Higher Planning Council Decree	Date of Higher Planning Council Decree
Agricultural Strategy (2006-2010)	2004/92	30.11.2004

Table 15: Laws Regarding Agriculture

Law	Number of Official Gazette	Date of Official Gazette
Agricultural Law (Law No.5488)	26149	25.04.2006

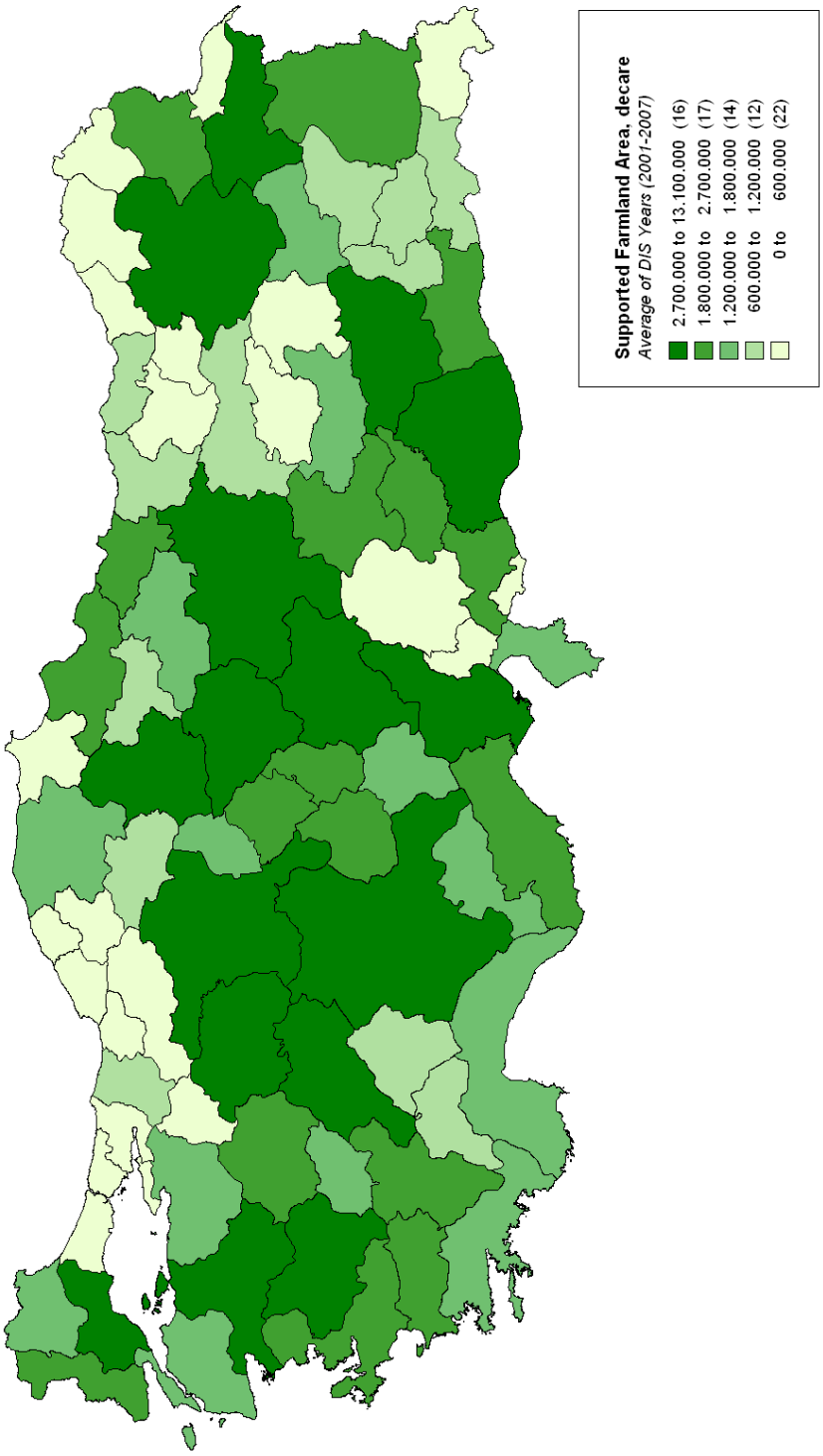
Table 16: Implementation Notifications Regarding DIS

Notification No	Number of Official Gazette	Date of Official Gazette
2000/14	24010	04.04.2000
2000/17	24031	26.04.2000
2001/15	24439	21.06.2001
2002/41	24832	31.07.2002
(amendment in 2002/41)	24922	31.10.2002
2003/13	25096	02.05.2003
2003/17	25122	29.05.2003
2004/22	25461	13.05.2004
2005/21	25801	30.04.2005
2005/38	25876	15.07.2005
2005/42	25937	15.09.2005
(amendment in 2005/21)	25964	12.10.2005
2006/27	26183	30.05.2006
2006/49	26343	11.11.2006
2007/14	26436	16.02.2007

Table 17: Cabinet Decrees Regarding DIS

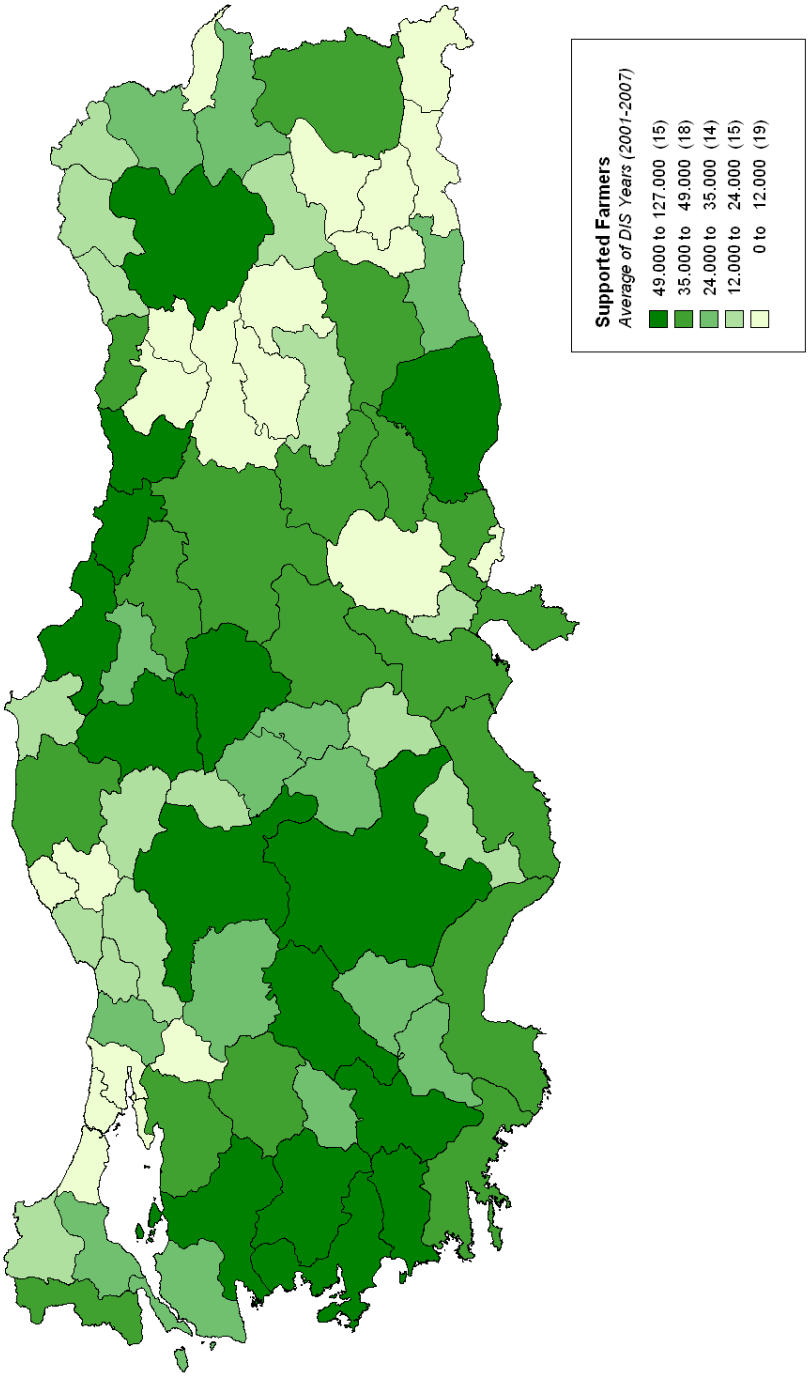
Cabinet Decree No	Number of Official Gazette	Date of Official Gazette
2000/2172	24362	03.04.2001
2002/4165	24785	14.06.2002
2003/5514	25096	02.05.2003
2005/8629	25774	02.04.2005
2006/11438	26396	07.01.2007

Appendix B: Shares of Provinces in DIS Implementation



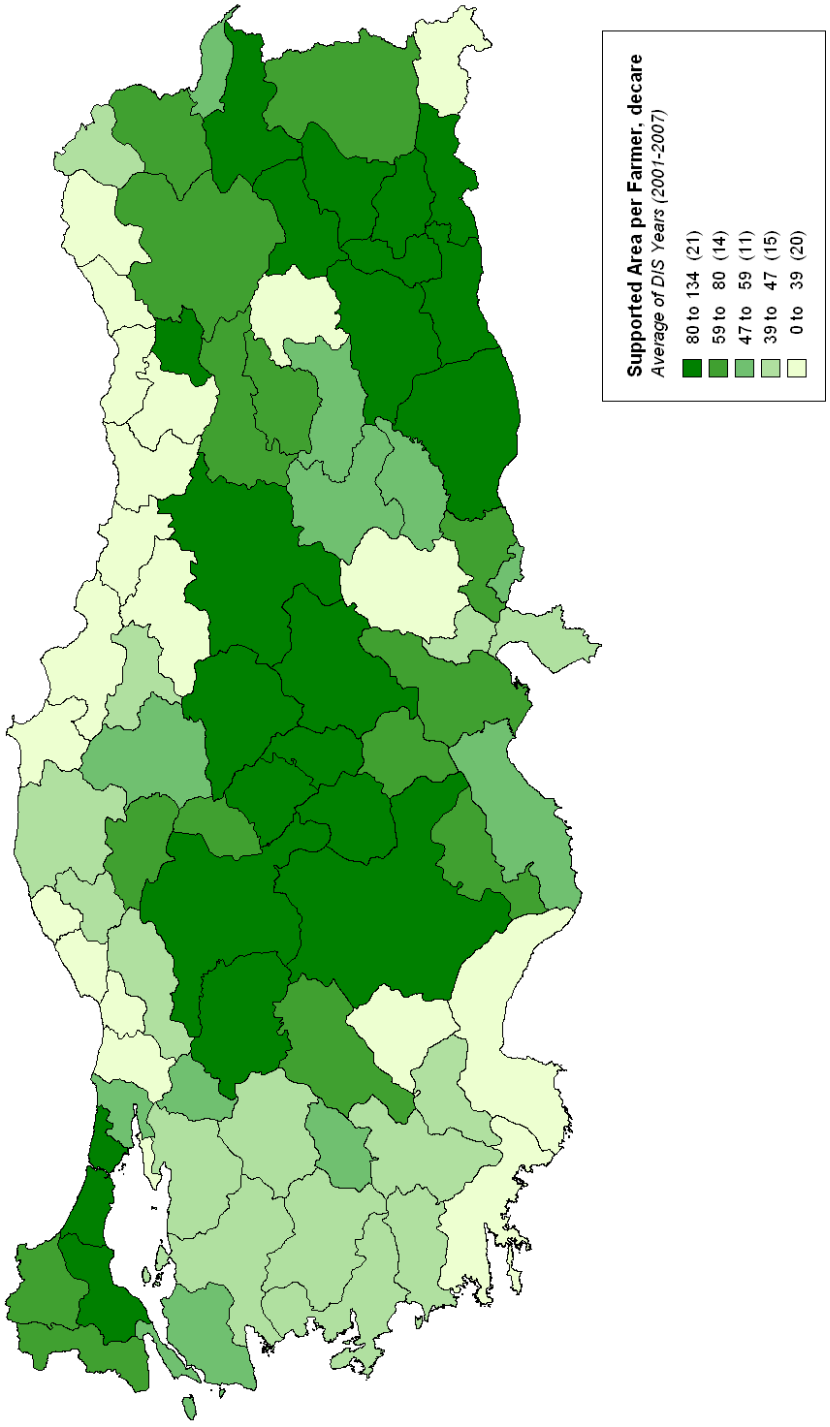
Map 3: Supported Farmland Area, average of DIS years

Source: Author's calculations and mapping from MARA, 2009



Map 4: Supported Farmers, average of DIS years

Source: Author's calculations and mapping from MARA, 2009



Map 5: Supported Area per Farmer, average of DIS years

Source: Author's calculations and mapping from MARA, 2009

Appendix C: Comparisons of Implementation Notifications

	2001	2002	2003	2004	2005	2006	2007
The objective	Establishing Farmer Registry System (FRS) and supporting farmers who dealt with agricultural production *via reforming the prevailing agricultural support policies*			Establishing Farmer Registry System (FRS) and supporting farmers who dealt with agricultural production	Paying DIS to farmers who dealt with *plant production* in order to develop and support agricultural sector and rural territory in line with development objectives and strategies	Paying DIS to farmers who dealt with *agricultural production* in order to develop and support agricultural sector and rural territory in line with development objectives and strategies	Paying farmers who dealt with agricultural production to develop and support agricultural sector and rural territory in line with development objectives and *strategies in a way that would not directly affect product and input prices*

<table>
<tr><td>Legal basis</td><td>2000/2172 numbered cabinet decree</td><td colspan="3">2002/4165 numbered cabinet decree</td><td colspan="2">2005/8629 numbered cabinet decree</td><td>Agricultural Law (Law No: 5488)</td></tr>
<tr><td rowspan="8">Definition of a farmer</td><td colspan="4">By actively utilizing agricultural production resources</td><td></td><td></td><td></td></tr>
<tr><td></td><td colspan="2"></td><td></td><td colspan="3">Registered to FRS</td></tr>
<tr><td>Those who would be let benefit from DIS for his</td><td colspan="3">Dealing with agricultural production</td><td colspan="3"></td></tr>
<tr><td colspan="4">conducting agricultural activities</td><td colspan="3">Real and judiciary persons</td></tr>
<tr><td></td><td colspan="4">Older than 18 years old/mature</td><td></td><td></td></tr>
<tr><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3">Juridical persons that comply with the methods and principles determined to benefit from agricultural supports</td><td rowspan="3"></td><td rowspan="3"></td></tr>
<tr></tr>
<tr></tr>
</table>

Farmers whom to be paid DIS	Farmers, who are registered in line with specified methods and principles, *and dealt with agricultural production across the country*	Farmers registered to FRS in line with specified methods and principles	Farmers *who dealt with agricultural production* and registered to FRS in line with specified methods and principles	Farmers who are registered to FRS and dealt with agricultural production in line with specified methods and principles
Farmland over which DIS would be paid	At most 200 decare (incl. 200) by taking into account total agricultural land cultivated in the year	At most 500 decare (incl. 500) by taking into account total agricultural land cultivated in the year		
	Those farmlands smaller than 5 decares would be paid over 5 decares	Farmlands smaller than 1 decare would be excluded from DIS	Parcels with total size or per applicant size of 100 m^2 would be excluded from DIS	Farmlands smaller than 1 decare would not be paid DIS

					Farmlands on which recommended production techniques were conducted would be paid additional DIS		
Payments (per decare)	10 million TL (10 YTL)	13.5 million TL (13.5 YTL)	16 million TL (16 YTL)	16 million TL (16 YTL)	Amounts of basic and additional DIS payments would be declared by the Ministry		
Necessary funding	The expense item allocated to "*Services regarding development of agricultural support policies*" in the budget of the year		The *related expense item* in the budget		The item of the budget *allocated to various agricultural support services*	The *related expense item* in the budget	
	Payments would be done directly to farmers *in cash* or by transferring to their bank accounts				Payments would be transferred to the bank accounts of the farmers in the related bank branch		

<table>
<tr><td rowspan="5">Documents required during the application</td><td colspan="6">Application form</td></tr>
<tr><td colspan="4">Farmer registry form</td><td>*Updated* farmer registry form</td><td colspan="2">Updated farmer registry form for the farmers whose registry in the FRS was not updated</td></tr>
<tr><td></td><td>Document stating that the farmer cultivated the land in the year, as approved by the village headman</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td colspan="3">Application form for additional DIS</td></tr>
<tr><td colspan="4">*Approved copy* of farmer registry</td><td colspan="3">Copy of farmer registry</td></tr>
</table>

Documents required during the application	Documents that affirm the ownership the farmland						
		Written declaration stating that the applicant is not working actively registered to social security institutions of the civil servants or the workers					
Farmers/farmlands that shall not get DIS payments					Farmers who are not registered to FRS or those who did not update their record in the determined period		
	Farmers who did not apply for the DIS in the determined period with the requested documents						
	Lands that are in possession of the state or that are for the public interest	Lands that are in possession of the state or that are for the public interest, as well as those which are not in the state of agricultural land and those which have been converted to agricultural land recently					
	Farmers who state or submit false declaration						
	Farmers who dealt with agricultural production in the lands that are publicized						

<table>
<tr><td rowspan="5">Farmers/farmlands that shall not get DIS payments</td><td>Juridical persons who dealt with agricultural production</td><td>Juridical persons who dealt with agricultural production and farmers who conducted agricultural production by renting the area of companies of which the farmers were also partners</td><td colspan="2">Juridical persons</td><td colspan="3">Public corporations</td></tr>
<tr><td></td><td colspan="6">Farmlands on which no agricultural production was conducted in the production year (idle lands)</td></tr>
<tr><td></td><td>Farmers who worked actively registered to social security institutions of the civil servants or the workers</td><td colspan="2"></td><td colspan="2"></td><td></td></tr>
<tr><td></td><td></td><td colspan="2"></td><td colspan="2">Farmlands that are not registered to FRS</td><td></td></tr>
</table>