RESTRUCTURING AGRICULTURE AND ADAPTIVE PROCESSES IN RURAL AREAS: THE CASE OF COTTON SECTOR IN ADANA-KARATAŞ

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

EKREM AYALP

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
REGIONAL PLANNING
IN
THE DEPARTMENT OF CITY AND REGIONAL PLANNING

DECEMBER 2007

Approval of the thesis:

RESTRUCTURING AGRICULTURE AND
ADAPTIVE PROCESSES IN RURAL AREAS: THE CASE OF COTTON
SECTOR IN ADANA-KARATAŞ

submitted by **EKREM AYALP** in partial fulfillment of the requirements for the degree of **Master of Science in City and Regional Planning Department, Middle East Technical University** by,

Prof. Dr. Canan Özgen
Dean, Graduate School of Natural and Applied Sciences _____

Prof. Dr. Melih Ersoy
Head of Department, City and Regional Planning _____

Assoc. Prof. Dr. Melih Pınarcıoğlu
Supervisor, City and Regional Planning Dept., METU _____

Examining Committee Members:

Assoc. Prof. Dr. Oğuz Işık
City and Regional Planning Dept., METU _____

Assoc. Prof. Dr. Melih Pınarcıoğlu
City and Regional Planning Dept., METU _____

Assoc. Prof. Dr. Serap Kayasü
City and Regional Planning Dept., METU _____

Assoc. Prof. Dr. Sibel Kalaycıoğlu
Sociology Dept., METU _____

Dr. Adnan Akçay
Sociology Dept., METU _____

Date: _____

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Ekrem AYALP

Signature :

ABSTRACT

RESTRUCTURING AGRICULTURE AND
ADAPTIVE PROCESSES IN RURAL AREAS: THE CASE OF COTTON
SECTOR IN ADANA-KARATAŞ

AYALP, Ekrem
M.S., Department of City and Regional Planning
Supervisor: Assoc. Prof. Dr. Melih PINARCIOĞLU

December 2007, 164 pages

While there has been an ongoing transformation of traditional agriculture and new regulations on agricultural institutional formations and market structures, the aim of this thesis is tracing forward to identify who the losers and the winners of this process would be. The background question is about the new faces of the rural areas and, the study considers what the current importance of agriculture in those areas is and if rural areas as living formations are in transition, then what will be the implications of this restructuring in terms of agriculture. These issues are investigated with reference to the operational structure of cotton sector at Adana and, the cotton producers at the three villages in Karataş District are examined as an unit of concern.

Keywords: agricultural restructuring, rural response, cotton sector

ÖZ

YENİDEN YAPILANAN TARIM VE
KIRSAL ALANLARDA İNTİBAK SÜREÇLERİ: ADANA-KARATAŞ'TA
PAMUK SEKTÖRÜ ÖRNEĞİ

AYALP, Ekrem
Yüksek Lisans, Şehir ve Bölge Planlama Bölümü
Tez Yöneticisi: Doç. Dr. Melih PINARCIOĞLU

Aralık 2007, 164 sayfa

Geleneksel tarımda süregelen dönüşümler yaşanıp, tarımsal kurumsal teşekkül ve piyasa yapılarında yeni düzenlemeler söz konusu iken, bu tezin amacı yaşanan bu sürecin kazanan ve kaybedenlerinin kimler olabileceğinin tarifini yapmaktır. Arka plandaki soru kırsal alanların yeni çehresine dairdir ve çalışma bu alanlarda tarımın mevcut durumdaki öneminin ne düzeyde olduğu ve eğer kırsal alanlar birer yaşam formasyonu olarak dönüşüm içerisinde ise, bu yeniden yapılanmanın tarım açısından tezahürlerinin neler olacağını dikkate almaktadır. Bu hususlar Adana'da pamuk sektörünün işleyiş yapısına referansla incelenmiş ve Karataş İlçesindeki üç köydeki pamuk üreticileri ilgimizin birimleri olarak tetkik edilmiştir.

Anahtar Kelimeler: tarımsal yeniden yapılanma, kırsal tepki, pamuk sektörü

ACKNOWLEDGMENTS

I would like to express my thanks and gratitude, firstly, to Assoc. Prof. Dr. Melih Pınarcıoğlu the supervisor of this thesis, for his guidance during my thesis study. I would also thank to jury members Assoc. Prof. Dr. Oğuz Işık, Assoc. Prof. Dr. Serap Kayasü, Assoc. Prof. Dr. Sibel Kalaycıoğlu and Dr. Adnan Akçay for their contributions to my thesis.

TÜBİTAK (The Scientific and Technological Research Council of Turkey) made one of the major contribution to the thesis by allowing to utilize the questionnaires of -106K119- coded project; named as "Rural Poverty in Turkey within the Context of Agricultural Restructuring" and conducted at the villages of Adana-Karataş.

I wish to express my special thanks to Kazım İlkan at ILO Office at Adana-Karataş for his invaluable supports during the field study. He made significant contributions in the organization of interviews and share his invaluable evaluations. Koray Çalışkan showed delicacy by sharing his works, even the unpublished ones. Special thanks go to my friends Yalkın Romano for his tolerant assistance, as well to İzzet Saygın Akkaş, Mehmet Penpecioğlu, Egemen Yumurtacı Güzel, Süleyman Serkan Altıntaş and Burak Doğan due to their moral support.

No need to express my appreciation to my family for standing by me during the thesis writing.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AoA – WTO Agreement on Agriculture

ARIP – Agricultural Reform Implementation Project

ASCU – Agricultural Sales Cooperative Unions

ÇUKOBİRLİK – Çukurova Pamuk, Yerfıstığı ve Yağlı Tohumlar Tarım Satış Kooperatifleri Birliği

CAP – EU Common Agriculture Policy

DFID – UK Department for International Development

DIS – Direct Income Support

DİE – Devlet İstatistik Enstitüsü (State Institute of Statistics)

EBK – Et ve Balık Kurumu

EU – European Union

FAO – Food and Agriculture Organization of the United Nations

FRS – Farmer Registration System

GATT – General Agreement on Tariffs and Trade

GDP – Gross Domestic Product

GNP – Gross National Product

ICAC – International Cotton Advisory Committee

IFAD – International Fund for Agricultural Development

IFPRI – The International Food Policy Research Institute

ILO – International Labour Organization

IPEC – ILO International Programme on the Elimination of Child Labour

MERNİS – Merkezi Nüfus İdaresi Sistemi

ODI – Overseas Development Institute

OECD – Organization for Economic Co-operation and Development

TARİŞ – İncir, Üzüm, Pamuk ve Yağlı Tohumlar Tarım Satış Kooperatifleri Birlikleri

TMO – Toprak Mahsülleri Ofisi

TRIP – Trade-related Intellectual Property Rights

TÜBİTAK – Türkiye Bilimsel ve Teknolojik Araştırma Kurumu

TURKSTAT – Turkish Statistical Institute

WTO – World Trade Organization

CHAPTER I

INTRODUCTION

> *Things economic and social move by their own momentum and the ensuing situations compel individuals and groups to behave in certain ways whatever they may wish to do-not indeed by destroying their freedom of choice but by shaping the choosing mentalities and by narrowing the list of possibilities from which to choose.*
> -Joseph Schumpeter-[1]

"There happens a Silent Revolution" affirms Koray Çalışkan in his latest column[2], that it is the first time, peasants are announced not being the preminent global class anymore. According to the ILOs' *Global Employment Trends Report* (2007); in 2006, at first time in history, agricultural employment accounted to 38,7%, whereas, employment in industry and service sectors are announced as 21,3% and 40% respectively.

In Turkey, only during the last 6 years between 1999 to 2006, approximately 3 million farmers has gone out of agriculture. This means one third of the employment has quit their jobs in that period of time. Çalışkan also tells us that, in the year 2007, one farmer goes bankrupt in every one minute.

Similar statistics come from Boratav (2007); he figures out that apart from fall in the shares of agricultural employment as from 60% to %27 between 1980 and 2007, absolute numbers in agricultural production shows us the lost of one third of the population in the same period of time.

---

[1] Schumpeter, J. (1950), "*Capitalism, Socialism and Democracy"*, New York: Harper and Row.

[2] Çalışkan K, "Sessiz bir devrim oldu", www.birgun.net/index.php?sayfa=73&view_author=152&article=10178, 13.08.2007, last accessed at August, 2007

Table 1.1. Employment and Labour Productivity in Industry and Agriculture, Indexes

Years	Industry Employment	Ind. Labour Productivity	Agriculture Employment	Agr. Labour Productivity
1980	100,00	100,00	**100,00**	**100,00**
1988	118,60	147,70	**92,10**	**123,40**
1992	133,90	161,90	**95,20**	**121,80**
1997	156,50	187,40	**92,60**	**127,60**
1998	157,60	189,80	**94,50**	**135,50**
1999	157,50	180,40	**99,00**	**122,90**
2000	169,20	178,10	**86,70**	**145,70**
2001	166,60	167,30	**90,30**	**130,80**
2002	173,50	175,70	**83,30**	**151,60**
2003	170,40	192,90	**80,00**	**153,90**
2004	176,80	203,30	**82,60**	**152,00**
2005	190,00	201,40	**72,50**	**183,00**
2006	194,70	211,10	**67,90**	**200,80**
Annual Change %				
1980-2006	2,57	2,51	-1,00	2,18
1980-1988	2,44	5,06	-0,70	2,05
1988-1998	2,93	2,44	-0,12	1,36
1998-2006	2,56	1,96	**-4,04**	**5,15**

Source; Boratav, 2007.

The above trend is questioned by what do these numbers really mean. The considerably high degree of agricultural employment in Turkish sectoral composition is well known[3] and seems obvious. It might be argued that, 'rapid and/or late' displacement of agricultural employment is because of a late and amenable recovery in the structure of the economy. On the other hand, might it be a process of 'depeasantisation', that, in one of his articles Samir Amin (2003) argued.

If the latest statistics are taken into account; from 1998 to 2006 unemployment increases about 2,4 million; decrease in the labour force participation rates from 53% to 48% and; 23% increase in the number people in rural areas working in non-agricultural sectors by reaching 3,8 millions. According to these indicators, Boratav (2007) argues the second prospect is more possible.

[3] Akman (1998) reaches the fundemental conclusion that the labour supply in agriculture is 2,5 times higher than the labour demand, for Turkey as a whole. According to his calculations, only 57% of the labour force capacity is used in Turkey, even in the harvest season when the demand for labour is the most intense.

In a case of a future outlook, it may be derived from above arguments that; the world agricultural requirement will be met by thirty million farmers, where it is met by three billions today. Akder and Çakmak (2005) also state that, development of the countries is not due to the decrease in the share of agricultural employment, but on the contrary by the development of the countries the share of agricultural employment falls. Can we consider the development problem within a framework of a "trend planning"! By following the path of the current direction and, by accepting the ongoing process as *given*? Rather than considering the future of 'agriculture', it might be possible to show opposition by discussing the issue from 'rural restructuring' side.

1.1. Aim of the Study and the Major Research Questions

Throughout the last ten to fifteen years, studies on agriculture and rural areas have focused on the restructuring of the agriculture and food industry. The growing importance of the multinational companies on the reorganization of global agricultural input and product markets and, progress in biotechnology are the new research areas. Extensive emphasis have been given on food regimes, global agricultural commodity systems and the new agricultural division of labour. In other words, most of the recent studies have been interested in global economic and political processes rather than enterprise scale (Keyder and Yenal, 2004).

On the other hand, Keyder and Yenal (2004) argued that, studies in Turkey during the 1970s and 1980s, were concentrated on agricultural policies, commercialization, commoditisation and mechanization and their concentration on land, the ways of labour control and gender relations. Priority has been given to understanding the dynamics in villages and enterprise level, production relations and, social-structural transformations in agriculture.

In our study, we are aiming to analyse local contexts with their own characteristics and complexity on the one side and, their immanent relations with global and non-agricultural factors. Substantially, the thesis concentrates on questioning 'will it be possible to develop a new farming practice in Turkey?' by the help of trailing several sub-level discussion areas which help to create a base for searching for what the social and human, political and also physical conditions for such restructuring is.

While there has been an ongoing transformation of traditional agriculture and new regulations on agricultural institutional formations and market structures, the thesis is going to trace forward to identify who the losers and the winners would be. An another background question is about the new faces of the rural areas and the study considers what the current importance of agriculture in those areas is and if rural areas as living formations are in transition, then what will be the implications of this restructuring in terms of agriculture.

Characterization of the transition process can be presented with respect to the responses of the cotton producers, either through a long haul adaptation by qualifying the necessary assets to take the advantage of new opportunities presented by free market environment and on the other hand avoiding from its possible hazards, or through a short term survival strategy. In understanding the dynamics of the transition period, uncertainities in agricultural decision making processes and risk perceptions at the countryside needs to be investigated. The thesis traces forward for the conditions in answering the query that; would there be a future for small-farms by developing risk reducing mechanisms.

The study aims to make contribution, additionally, on answering the question of what dynamics, in the last instance, will determine the way of reaching at final picture. In such a process in which the old equilibrium has gone and new regulations appearing according to the new economic reality; all interested parties will try to enjoy this new trend. Therefore, the moment of this transition may be characterized by 'undecidability'. The old order must change, but the path and direction of the transformation is cloudy. For this reason, it could not be a path dependent way of transition, but more of a dynamic process. It becomes very difficult to make predictions on post-structure, with reference to the pre-transition characteristics of the agrarian society. According to Keyder's (1993) view; apart from classical Marxist and modernist approaches, asserting that the market mechanisms and economic dynamics are the leading determinants of transition period; class struggles and intervention of the state, in other words, political and social components of the process actually matters.

At present in Turkey, millions of expeasants are living in cities. For decades, their cultural and living perceptions have changed due to the experiences they have been facing with changes in rural lifes. However, they still have sensitivities over 'villages'. 'Victimized peasant' image finds a niche in these new urbaners' minds. Being aggrieved by the policies

regarding rural areas and thereby peasants, are strongly reacted by society. Besides, according to the strong adherence to their lands, Borchgrevink (2001) says, they remain peasants[4] even though their non-peasant activities have been taking on increasingly greater economic importance. The peasants' links to their land continue to be strong. Land, after all, offers some security in a large hostile world. Therefore, confirming mutual understanding and regarding social choice mechanisms in policy development appear as important issues regarding the future of the rural areas and agriculture.

1.2. Motives Behind The Study And Approaching The Issue

1.2.1. A Brief Overview for Inclusive Development Strategies

Agricultural production has been evaluated as the engine and the main component of development in the rural areas for long periods. This claim maintains most of its validity but the transformation in agricultural production inevitably opens a road for the re-evaluation of development in a comprehensive manner. When approaching to the development issue first we have to decide on our position towards serious complexities between 'problems' and 'consequences'. Here, by regarding development as an ongoing process, perception of the interveners and their preferences becomes particularly important. But it could be stated that "*individual choices are neither reached in a vacuum nor within standard set of available alternatives, but rather within the constraints imposed by social conventions and institutions as well as pressures of change"* (Ertürk, 1998). In a historical look these transformation moments metaphorically could be defined as an "ambivalence moment". Also this could be regarded as a process of taking the advantage of new opportunities and avoiding from the threats which the change brings forth. At this point the question of "whether a development process could be defined, that has been determined with social choices, through a way comprising differences and elements to free people" comes to the front. Defining "the rights" could be regarded as a way of it.

[4] Borchgrevink (2001) defines peasants according to four criteria; an agricultural livelihood combining subsistance and commodity production; production based on family labour; subordination to states and markets; and a cultural orientation tied to the local community. According to his observations on the current situation in Turkish rural areas, Stirling (1993) offers to name them 'villagers' but not 'peasants' referring its classical representation.

The rights are subject to the problematic domain of production and distribution which take shape on the basis of justice and liberties. The tension is exposed between productivity and fair distribution. Within literature there are several theoretical approaches indicating the distinct aspects of this tension. Also development that can be evaluated as a sum of elements allocated for fair distribution is not apart from the causes of this tension.

Harvey (2003) claims that, productivity and social justice provision must be simultaneously executed. He gives the priority to the social justice distribution because of the problems we have mentioned. The huge surplus consistency at capitalist market economy must be melted without threatening the permanency of scarcity which market economy depends on. Raising total social production without depending on price determining market processes is a must for social justice.

Amartya Sen (1999) considers ethics and justice with respect to Rawlsian's notions (*justice as fairness*) in his 'development as a freedom' approach. He points out to develop and strengthen the freedoms under five basic levels. He describes these as political liberties, economic opportunities, social opportunities, transparency guarantees, and protective security. He highlights that; practical implication can be achieved only by having a *special knowledge* for determining on different principles.

As in the theoretical debates the position of development for rural areas is a matter of justice, distribution and opportunities, but also more important than all, a commitment comprising the whole groups through reconciliation. This is a commitment that attempt to render villagers one of the essential actors within decision making processes. The values that affect the people would be in different styles. First, these could be resulted from "thoughts and analyses"; secondly, these can be resulted from acting through the traditional expectations; thirdly, 'public discussion' can be effective on value creation. Buchanan points out that; description of democracy as management by arguing/discussing shows that individual values can be changed within decision making processes; and fourthly, 'evolutionary selection' can play a vital role (Sen, 1999).

The policy makers are interested in social justice issues because of two related reasons. First justice is a basic concept in determining the targets of the public policies and in following the process of determination of the instruments for chosen goals. This is particularly

important for the persuasiveness of public policies and the effect of the impact. Secondly, public policies are developed according to the behaviours and attitudes of individuals and social groups. It is important to understand public values including justice feelings of the people. In this respect, development as a progress could never be regarded as successful if the diversity within (rural or urban) society, differences in their approaches, attitudes and perceptions, values are not considered in the right way. At this point what seems to be important is not premeditating the life and living forms of people, but rather to think about how they are going to feel freedom and justice and participate to decision making processes in equal conditions through the opportunities created by means of the process of development. Therefore, it has to be kept in mind that the transformation paths of the rural areas would vary widely, as has been before, and in the last instance local context will matter. While developing a future design in rural areas, the critical issue is who and what do we focus on for making the process more cognizable. Finally, encompassing these people in attempting to develop intervention models and tools appears as the main objective.

1.2.2. Why Cotton?

The most significant international process evolving the future of agricultural trade has been conducted through WTO meetings, since 1994. Particularly after the Singapore meeting in 1997 and following the Asian Crisis in 1997-1998; there happened a formation/block consisting Asian, Latin American and African countries against USA, EU and Japan, aiming to resist to the current direct and indirect interventions on agricultural markets. Negotiations on cotton trading reveals as a primary issue and becomes a ‘poster’ which displays the developing countries’ ‘rocking the boat’.

The issue was particularly with respect to African cotton sector. Cotton is one of the agricultural products for which Africa could effectively compete in world markets if a level of playing field existed. In 2001, United States subsidies for cotton producers amounted to 3.4 billion dollars, which encouraged overproduction and drove world prices to a 30-year low. Notwithstanding the fact that farmers in western and central African countries produce cotton at about one quarter of United States production costs, losses for the region as a whole amounted to 301 million dollars, with small farmers being hardest hit. An estimated 10-11 million households in the region depend on cotton for their livelihood. A 25% increase in

cotton prices would lift 250000 people out of poverty in Benin alone (IFAD, 2004). Because of not including support purchases, base price or input subsidies, US direct payments around 150 000 dollars per one cotton producer, are not considered as creating 'trade diversion effect'!

Cotton becomes one of the most important issue in poverty creation in the rural areas where the African cotton producers are operating. The problem is basically originated from undifferentiation in economies of most of the developing countries, as stated in IFAD report (2004) that, fifty-four developing countries depend on three or fewer commodities for 20% of their export earnings. Over 40 countries depend on a single agricultural commodity for more than 20% of their total export income. Of these, 12 countries earn more than 40% of their total export income from one commodity.

As a result, recent worldwide progress in cotton sector, causes critical lock-in situations for such countries having shallow economic composition. On the other hand, in countries which have diversified their economies, the developmentalist focus is more on dealing with the social appearings after the cotton producers' possible quit.

Regarding the future perspective of cotton sector in Turkey, Customs Union Agreement and so the engagements, made us concern the plant again. According to the Customs Union Agreement (1996) with EU, cotton as an industrial raw material; is included whereas agricultural products are not subject to tariffs. Thus, cotton sector is the primer area (pilot case) for Turkey in trade liberization under unequal conditions.

Choosing 'cotton sector', after all, is due to several reasons regarding both the global scale and the Turkish local context. As Çalışkan (2005) explained, cotton is located at the intersection of both industrial, financial and agricultural relations of exchange and production that connect more than a billion people to each other through routes putting agriculture, trade and textile manufacture in continuous contact with each other in multiple fields of world cotton markets.

Every year more than fifty million farmers from eightyone countries produce around ninety million bales of cotton (Çalışkan, 2005). The total area of the agricultural land used for cotton production is slightly larger than England and Switzerland combined. Compared to

other cash earning crops world farmers rely on, excluding those that can directly be consumed by farmers such as wheat, cotton has the largest area of production in the world, followed by sugar cane, sunflower, coffee and tobacco (Çalışkan, 2005).

In terms of trade volume, no other agricultural commodity can come close to the circulation of cotton in the world. Every year, one third of cotton produced in the world crosses the boundaries of nation states and is consumed in a country other than its original location of production. This is the largest share of any agricultural market in the world.

Raw cotton is a fiber, food and feed crop. Two thirds of the harvested crop is composed of the seed, which is processed to separate its three products: oil, meal and hulls. Cottonseed oil is a major component of cooking oil industries. In Turkey, for instance, cottonseed oil composes twenty percent of the total vegetable oil used (Çalışkan, 2005). In the US cottonseed oil is used extensively in the production of snack foods: almost all junk food is cooked in cotton seed oil. Moreover, most farm fish is fed by cotton seed hull. Cotton meal and hulls are also used as animal fodder and fertilizer.

The remaining part of raw cotton is called the lint. After it is ginned[5], the plant's fiber, or lint cotton, is processed to be used in diverse ways. Cotton fibers are used to produce yarn. We dress ourselves with cotton textiles.

In the 19th century the composition of the materials used in textiles as a fibre was 78% wool, 18% linen and 4% cotton; coming up to the 20th century, the usage of cotton reaches to an extent that it accounts 74% of the fibers whereas wool constitutes 20% of the consumption (Thompson,1994). Consequently, with the wording of Çalışkan, "*the plant's fibers touch the most vital sectors of our economies and the busiest intersections of our social relations*". Even money is made out of cotton. In 1997 alone, 30,551 bales of cotton were used to print new denominations.

It was stated by Çalışkan (2005) that, because the plant was located at the heart of the making of the Industrial Revolution, no other commodity has contributed to the emergence

[5] Before the invention of the 'cotton gin' in the year of 1793 by Eli Whitney who was living at Savannah, only for 453 gr. of cotton, picking the seed out of its cone occupied one workers' full workday. After the invention the amount reached to 22,7 kilos per day, therefore the southern farmers in USA, planted whole fields almost in a nighttime with cotton (Thompson,1994).

of capitalism and colonialism more than cotton. Its production fueled colonial struggles to secure the main input product of the textile factories. The institutions of its trading contributed the earliest financial instruments of world trade.

> *Cotton merchants were the first market actors in the world who imagined a world of markets. Atlantic cable was laid by a merchant who owed his wealth to cotton, cotton merchants were first to use telegraph to exchange quotations, John Jones's Annual Cotton Handbook was the first publication or enframework that made visible in its pages the first habilitative context of a global market* (Çalışkan, 2005).

Colonialism and its imperial technologies, Çalışkan (2005) argues, was the only time in world trade when more than half of the bales produced in the world crossed national borders to be opened in a different location. After decades of neo-liberal reforms and World Trade Organization imposed regimes of exchange, only thirty percent of cotton is now being exported.

> *Marx opens Capital with the discussion of commodity markets by drawing on a hypothetical trading example of cotton itself. In his famous M-C-M and C-M-C discussion in which he discloses the "general formula for capital," perhaps one of the most important parts of the entire three volumes, the commodity's C also refers to cotton* (Çalışkan, 2005).

Finally, the growth and circulation of cotton in the world even contributed to the imagination of various paradigms of global economy. There might be proposed that the most telling visual image of the world economic order was Edgar Degas's famous painting of cotton merchants in New Orleans, "Un bureau de cotton a la Nouvelle-Orleans, 1873".

Figure 1.1. Un bureau de cotton a la Nouvelle-Orleans, 1873
Source: http://www.letturaweb.net/images_gcl/zoomify/Gas_II_ingr.jpg, last accessed November, 2007.

Growing of cotton, its 'production' requires a simultaneous engagement of relations, not only consists of exchange and production but a series of activities that make up a complex and under-theorized world of encounters and struggles between pests, worms, children, merchants, migrant workers, women, farmers, cotton, economists, ginners, *elçis*, traders, the state and the others (Çalışkan, 2005).

1.2.3. Why Karataş?

It is important to note that the reasoning of choosing cotton production in Adana-Karataş is due to several components of our development understanding. Contribution of agriculture to development; in such a place and in such sector; by not only means of global economical indicators but regarding the key issues as determining the characteristics of business culture, entrepreneural behaviours, the structure of the labour market and institutional and organizational reality that is covering both formal and informal appliances; can be seen and

investigated deeply and plainly in such a socio-spatial environment: Adana. Even though the prevalent production of cotton in the region trace back to the 1800's first half, in the ages of Egyptian İbrahim Pasha, the ultimate form of cotton production today and the structure of land-ownership patterns began to take form by the end of 1920's (Aktan, 1999). This means that, we are substantially dealing with more or less the 2nd to 4th generation of cotton producers and with their built-in socio-cultural and economical habitat. Certainly, some of them are not in cotton production anymore, even not in agriculture. Also, some of them could only be partially considered as farmers. During decades, especially after 1980's, they have attempts to expand their income basis by managing and diversifying their monetary and household capitals. We have seen and find statistical stands for that kind of restructuring being experienced in Turkish rural areas.

Table 1.2. Income sources and distribution by residences of the households, having agriculture-based income, 1987[6]

Income sources of the Household	Village		Rural Area		Urban Area		Turkey	
	#	%	#	%	#	%	#	%
Only agriculture	1193 472	**38.3**	1385 798	**32.9**	57 917	**16.8**	1443 715	**31.6**
Agriculture+non-agriculture	1919 924	**61.7**	2827 435	**67.1**	287 635	**83.2**	3115 070	**68.3**
Total	3113 396	**100**	4213 233	**100**	345 552	**100**	4558 785	**100**

Note: Villages considered as places which have population less than 2000, and Rural Area as places which have population less than 20000.

Source: DİE, 1990.

In Karataş, nearly 1300 farmers are growing cotton. 8-9 percent of the cotton planted areas in Turkey are at Adana. Although some changes have been observed from year to year approximately 42% of the cotton planted areas in Adana are provided by Karataş District (18700 ha out of 44500)[7]. In the last years the number of ginner firms have considerably decreased. Many of the remaining 41 operating ginner firms which was 66 only ten years

[6] Although 2002 Household Budget Survey study does not allow us to make similar calculations, there are evidences asserting that diversification of household income basis have been considerably expanded throughout the last twenty years. Pamuk (2000) pointed out with reference to the 1994 Household Income Distribution Survey that, the portion of having 'only agriculture' as an income source declines to 25,34 in rural areas. Additionally, according to Oğuzlar (2006), the portion of agricultural income in rural areas has declined from 47,8 in 1994 to 30,2 in 2003.

[7] The statistics are obtained from "Republic of Turkey Ministry of Agriculture and Rural Affairs National Registry of Farmers" in November 2007.

ago, are either located at Karataş or on the way of Karataş from Adana city centre. Until two years ago, there were 35000 seasonal agricultural workers at Karataş region mostly for cotton harvesting, however, according to our evaluations, after the widespread usage of cotton picking machines it might have decreased to 15000 in current times. Thus, however, Karataş is still a junction point for observing cotton sector and one of the best place for our study.

Assesing the convenient research area in order to observe the latest trends triggered by the restructuring process in agriculture and changing structure of rural areas, by representing a dense socio-economic life and employment, wide range of landholding patterns, historical background of relatively earlier commercialisation of agricultural production and diversified socio-cultural environment of the villages also by their ethnic and sectarian differences; made studying 'cotton production in Karataş' attractive.

1.2.4. Who Do We Focus On and How Do We Assess the Responds?

According to Wegren (2004) during the restructuring period, the hostile economic climate was characterized by disadvantageous terms of trade, severe price scissors between agricultural and non-agricultural goods and services, wage arrears for farm employees, a lack of access to agricultural credit, rising farm unprofitability and insolvency, reductions in financial flows to agricultural sector and low protection from foreign imports.

Seemingly, in Turkish academia and media, wide consensus confirmed through which regards competativeness and so supporting the ones who seems also have comperative advantages[8]. Akder offers such policy decision; in order to be competitive, policies would be designed through potential winners. On the other hand, Boratav, Çalışkan and some others emphasize on the productive small farmers (i.e. cotton producers), special occasion of women workers in agriculture, trends in biotechnologies and threats coming from the demolishment of bio-diversity in the hands of multi-national firms. Thus they suggest to stay

[8] Note that, in one of the Impact Assessment Report of EU, it is estimated that, after Turkeys' membership, competative agricultural products in Turkey will be limited to fresh fruits and vegetables, hazelnuts, some of the pulses and mutton (cited in Boratav 2003).

at smallholders and disadvantaged producers' side. Being on the side of smallholders is also beneficial in such a sensitive and brittle economy.

Table 1.3. Disposable Income, 1994 and 2002 (at 1994 prices)

	Turkey	Rural	Urban	Agriculture	Non-Agriculture
Share in Total					
1994 (percent)	100	35,5	64,5	23,3	76,7
2002 (percent)	100	34,6	65,4	19,3	80,7
Average Income per Employed Household Member (at 1994 prices)					
1994 (Turkey=100)	100	60,4	156,4	46,4	154,2
2002 (Turkey=100)	100	67,2	134,8	48,1	134,9
Change from 1994 to 2002 (percent)	-3,1	7,8	-16,5	0,5	-15,3
Gini, 1994	0,49	0,41	0,51	n.a.	n.a.
Gini, 2002	0,44	0,42	0,44	n.a.	n.a.

Note: Transfer Payments are not included.

Source: Çakmak, 2004.

According to Çakmak (2004), the table indicates rather large rural-urban and agricultural-non agricultural income disparities. The changes from 1994 to 2002 are more informative in terms of the differential effects of a serious economic crisis. Rural income registered positive change, agricultural incomes did not decrease, whereas urban and non-agricultural incomes declined drastically by about 16 percent. Over-employment in agriculture which is generally attributed as a structural problem may alleviate the social and economic costs of resolving the crisis. It seems that the employment in agriculture can be included as another public aspect "multifunctional agriculture" for a developing economy like Turkey.

In such a hostile environment, at the end, there will be winners and also losers. Possible priority choices in political arena will be the determiner regarding the agricultural sector. The issue is also goes beyond the borders of agriculture and becomes a subject of a wider context, namely rural areas. The priority choice mechanisms are mainly related to either economical base point or socio-political extent. It seems three broad positions have been discussed;

i. Accept the demise of the peasantry and work with large-scale farmers whose success will act as a catalyst to generate wealth and jobs for those whose farms are not viable. Proponents

of this view identify changes in global supply chains as being major new obstacles to smallholders that will prove insuperable for many or most.

ii. Work with smallholders, but accept that most innovation, investment and commercialisation will come from only that (possibly very small) portion with more land and capital than their neighbours. Some claim that these farmers will then create enough jobs locally, through hiring labour and spending on local goods and services, to boost the welfare of other farm households.

iii. Focus on the poorest and most disadvantaged smallholders to beat poverty and hunger and reduce vulnerability directly.

If the cotton sector have been facing with challanging dynamics, and producers are becoming the passive contributers of the game never seen as before; price is not formed by production-consumption linkages but rather subject to more trader-driven chain development; then are rural dwellers' responses have chance or power to change/transform rural livings?

By Çalışkan's (2005) words; "*the making of prices is carried out by constant interventions to the making of the markets by different forms of perceptions, standardizations of the object of exchange, prostheses, rumors, indexes, research in the wild, scientific statements like neo-classical assumptions, and their rejection*". Therefore, it can be stated that, rural households are increasingly "*pulled into a cashed nexus"* in reproducing their livelihood, the rules of which are too alien to their sphere of know-how. As a result, their response to the changes and fluctuations in the national and international markets is, by and large, based on partial, and sometimes distorted information of the market and their own familiar institutional ways and means (Ertürk, 1998).

In point of the above statements, as "*the market does not trade on reality, but it trades on perceptions"* (Çalışkan, 2003); the problem is that how rural households response to changing dynamics and accordingly, what are their coping mechanisms. The issue has been shaped between the contexts of 'adaptation' and 'survival'. With respect to this distinction, Wegren (2004) argues; an analytical problem concerns measurement. The fact is that rural household members do not sit down at the family table and say 'we are going to adapt' or

'we are going to survive'. The analytical problem becomes acute when we recognize that adaptation is incremental and gradual, which is to say that rural dwellers react to their micro and macro environments opportunistically, calculating what is advantageous and what is not for that particular situation. But the task of differentiating adaptation from survival is not easy and is prone to controversy. Interpreting, an increase in livestock holdings, the purchase of a motorized transport, an increase in household food production or increased household food sales; depends on the local contexts. The problematic area of whether those steps are indicators of survival strategies or of long-term adaptation, will have to lead us to search for developmental openings, by capabilistic approaches.

Important to note that, regarding these difficulties mentioned above; in research study, expectations from questionnaire results have been narrowed and accordingly in-depth interview framework was tried be to designed through a range of hypothesis somewhat given and coming from overall related literature, specific arguments which have done by researchers about the transforming dynamics in Turkish rural areas and, the acquired stakeholders' opinions edited throughout the survey both in subsequent interviews and in media sources. During the field survey, it has been tried to test these hypothesis by questioning 'why' and 'how' and therefore, while analysing the questionnaire results, it will be presented the general characteristics of the cotton growing enterprises, will be tested previously introduced hypothesis and will be tried to overcomed the inconsistencies between different sources of our knowledge accumulation about the task.

1.3. Research Methodology and Field Study

Interest and observation regarding the thesis study extend for the last three years. 4 visits have been made to the research area, one of which was in April 2005. The visit was about a master course and the aim was that to develop an opinion report for ILO which was coordinating a project on the elimination of the worst forms of child labour in Adana-Karataş. The project was focusing on the seasonal commercial agricultural workers and targeted the eradication of the situation by education. During the 4-days journey, there have found chance to understand the social and economical structure of cotton production. Additionally, about 70 questionnaires were conducted with seasonal agricultural workers,

and in-depth interviews with 4 *elçis* and with four cotton producers in three villages were carried out.

The remaining three visits has been done in March, May[9] and July in 2007. The first one was done in order to decide on questionnaire sampling. During the second visit in May, it was tried to supervise the safety of the survey and interviewed with three producers. 120 questionnaires have been conducted with farmers in 3 villages with corresponding quantities;

Table 1.4. Questionnaire Sampling in Karataş District

KARATAŞ District	**Sampling**
Bahçe(B)	49
Çakırören	34
Yemişli	38
Total	**121**

In our research, the stage of selecting the most adequate sample and so villages is coordinated by several methods. At first we have examined the Population Census results of the year 2000 and tried to analyse the distribution and density of rural population in the region. Secondly, by using the 1997 investigation of SIS 'Village Inventory', we have tried to understand the rural and agricultural characteristics of the region. The analyses of statistical indicators made us to create a mental base for subsequent visits. Finally, we have decided on sampling of villages in March visit, regarding the potential of cotton producers, their differentiations by means of land holding types and commercialisation levels, villages' socio-cultural subjectivities and their expressions of intent in our study.

Apart from the former visits, in July other than in-depth interviews with 8 cotton producers, there have been done 12 in-depth interviews with the officials, both from governmental and non-governmental organizations having interests in cotton sector:

- Adana Chamber of Commerce – *Chairman Şaban BAŞ*

[9] March and May visits have been done within the project which is funded by TÜBİTAK (The Scientific and Technological Research Council of Turkey), coded -106K119- and coordinated by Melih Pınarcıoğlu, named "Rural Poverty in Turkey within the Context of Agricultural Restructuring". The writer of this thesis was also included in this project as a project assistant.

- Adana Chamber of Industry – *EU-Foreign Trade Business Development Representative Özgür OPSAR*
- Adana Merchantile Exchange Market - *Chairman Fethi COŞKUNTUNCEL*
- ÇUKOBİRLİK – *Deputy Director General Ömer ERSİNADIM, Marketing & Selling Manager Gökhan ÖZTÜRK, Cooperatives Affairs Director Ömer ÖZDOĞAN*
- Adana Chamber of Agriculture – *Chairman Ayhan BARUT*
- Karataş Chamber of Agriculture - *Chairman Mustafa YEŞİLYAPRAK and other two officials*
- Karataş District Directorate of Agriculture – *one official*
- Karataş District Directorate of Census - *director*
- Karataş ILO Office – *officials Kazım İlkan and Remziye Kozan*

During the implementation of the questionnaires, we have faced with some obstacles and problems. According to our observations, the villages involved in our sample differs in their characteristics related to wide range of determinants. Particularly in the ones which organize their agricultural production in a more market oriented manner, relatively higher incomes and large scale production, tend to boggle at answering some questions. While conducting questionnaires about agricultural desicion making, another difficulty comes from 'preattentive processes'[10] of the farmers. These problems and controversies have been tried to overcomed by supporting discussions with trustful contacts and by the in-depth interviews. For the safety of the research, consistency between some results have been tried to ensured by cross-checkings with the secondary resources; such as official reports, news, and articles subjected to the issue.

Consequently, the thesis is concentrated on the unique perceptions of the local people and socio-cultural routines regarding sectoral operative structure. In-depth interviews with 8 cotton producers and with 12 officials, and 121 questionnaires conducted with the cotton producers at the three villages of Karataş are the sources of the thesis field survey.

[10] H. Gladwin & Murtaugh (1980) refine the concept of 'preattention', defined as information processing which lies outside of ordinary attention and awareness. Decisions and parts of decisions in everyday life lie in the preattentive sphere, and the reasoning behind the rejection of innovations or the allocation of resources may similarily be found in farmers' preattentive processes. Farmers can talk about these issues when asked, thereby moving the decision into the attentive sphere.

CHAPTER II

RESTRUCTURING AND AGRICULTURE'S CONTRIBUTION TO DEVELOPMENT

2.1. An Overview of the Restructuring Process in Agriculture

Changes in the global environment for agricultural growth that began in the 1990s raise questions about the future role of agriculture in development. The ongoing process of restructuring in agriculture accompanied by changing global forces will strongly influence economic growth, poverty, and the supply of agricultural commodities (Byerlee et al., 2005):

i. Changing market conditions: From the local to the global level, markets and demand for agricultural commodities are changing rapidly, especially for higher value products such as horticultural crops and other niche products.[11] For developing countries, these changes constitute an opportunity to diversify their agriculture and exploit their advantage in providing labour-intensive products. They also constitute a growing challenge, especially to small-scale farmers, to deliver products that meet strict standards and to coordinate their activities more effectively. It is seen from the country experiences that, producers of export crops have responded fastest and benefited most from trade and market reforms. Small-scale or subsistence-oriented farmers in remote or marginal areas may have been relatively unaffected or, in some cases, they may have lost access to subsidies and price supports. In these situations rural income inequality often worsened, because farmers in more favored areas with better access to markets gained the most.

ii. Climate change and natural resource degradation: Widespread environmental change is altering agricultural potential throughout the world. Producers will require new knowledge and technology to cope adequately with the challenges and opportunities that arise.

[11] Restructuring in agriculture have been eventuated in a new division of producing agricultural crops. Developing countries have been more concentrated on more value-added and labour intensive type of production such as tropical crops, fruits and vegetables, whereas, developed countries of the western world become producers of capital intensive crops, as cereals.

iii. Demography and health: As more people migrate to urban areas in search of employment, the rural population will decline in some regions and become older, and women will play an even more prominent role in agriculture.

iv. Agricultural science and technology: Advances in agricultural knowledge and technology can create an array of new choices for producers, altering what is produced, where it is produced, and how it is produced. Promising prospects for solving food and agricultural problems may elude developing countries and poor farmers if they fail to access the new knowledge and technology developed by the private sector.

v. Stakeholders' changing roles and interests: The private sector and markets will drive agricultural growth. The public sector must work more closely with the private sector and non-governmental organizations.

Assessing the role of agriculture to growth, especially at the times of post-war period, economic development viewed as a growth process of relocating factors of production, especially labour, from an agricultural sector characterized by low productivity and the use of traditional technology to a modern industrial sector with higher productivity. The contribution of agriculture to development was passive. Agriculture acted more as a source of food and labour rather than a source of growth.

Although passive, agricultural growth was still seen as necessary for successful economic transformation for two reasons; to ensure the supply of food and prevent rising food prices and real wages from undermining industrial development; and, to utilize a major natural resource, land, as an additional 'free' source of growth that would not compete with resources for industrial growth.

According to the ascendant understandings during the 1950s and 1960s, the structural transformation meant that increased profits from a rising share for industrial output would replace the important role of agricultural savings in the early stage of industrialization. Reducing the extraction of resources from agriculture was not desirable at this early stage because it would slow the expansion of industry. Later, agriculture was no longer important, and there was no point in developing it.

As early as the 1960s a more positive attitude about the agricultural sector was beginning to emerge. Emphasis was placed on 'role' rather than the more forced concept of 'contribution' of agriculture. Five roles are listed for agriculture in economic development as; increase the supply of food for domestic consumption, release labour for industrial employment, enlarge the size of the market for industrial output, increase the supply of domestic savings, and earn foreign exchange (Timmer 2002).

While the thinking about the role of agriculture has changed over time, the dominant paradigm from the 1970s has seen agriculture as an 'engine of growth' in the early stages of development because of its high share of economic activity and its strong growth linkages with the rest of economy, including the rural nonfarm economy. Because of the strong growth linkage effects, agricultural growth can lead wider economic growth in many countries, even open economies, during their early stages of industrialization, a strategy later labeled 'agricultural-demand-led-industrialization'.

Using 'Social Accounting Matrices' for 27 countries, Diao et al. (2005) mentioned, the study examined the strength of the linkages between agriculture and rest of the economy at different development stages. At early stages of development, the backward linkages were very strong, while the forward linkages were much weaker. Rising household incomes represented almost 70 percent of the backward linkages. Along the development path, the forward input-output linkage strengthened due to the greater integration of the sector into the broader economy.

The major revision in the classical view of agriculture as a passive contributor to economic development happened by the emergence of namely the 'Green Revolution'. Yield increases from the green revolutions have been dramatic, but highly concentrated in a few ecologically advantaged regions of the Third World. Asia, and to a much lesser degree Latin America, have captured the benefits from the new grain varieties, while Africa has experienced few gains.

This view of agriculture as having an active role, stimulated in large part by the emerging experience in Asia, was founded on two core contributions. First, it was recognized that traditional agriculture could be transformed rapidly into a modern sector through the adoption of science-based technology, thereby making a large contribution to overall growth.

Second, economists now explicitly identified the strong growth linkages and multiplier effects of agricultural growth to the nonagricultural sectors. Agriculture has strong, direct forward linkages to agricultural processing and backward linkages to input-supply industries (Byerlee et al. et al. 2005). It is known empirically that a large share of manufacturing in the early stages of development is agriculturally related. This multiplier effect is not insignificant[12]. Recent work in Latin America indicates that after accounting for these backward and forward linkages in an input-output framework, agriculture's share of GDP is about 50 percent higher than official statistical estimates (Perry et al. 2005).

Understanding the historical and political background of Green Revolution is essential for catching on the worldwide power struggles about agriculture and means a good many. Increases in Third World grain production were largely derived from the state-sponsored adoption of the high-input US agro-industrial model which was most clearly extended to the Third World via the Green Revolution. The Green Revolution involved the adoption of internationally developed rice and wheat varieties which, with adequate fertilizer, pesticides and water, produce substantially higher yields than older varieties. Collaborating with international funding agencies, most Third World governments promoted this new production system through extension programmes and by subsidizing agricultural chemicals, tractors, irrigation and credit (Kazgan, 2003). The profoundity of political-economy behind the issue is because of post-war context. After the war, demographic changes due to the provision of antibiotics confront many countries with the threat of hunger. US-driven new technologies succeeded in overcoming this threat, the only exception was African countries.

In the late 1970s, apart from developed western countries, the major populated countries such as China and India had largely solved their 'self-sufficiency' problem. Coming up to the 1980s, it was the moment of starting power and technology struggles for capturing the newly emerging markets. It was because of the rapid increases in population in developing countries, whereas, developed countries was facing with a stagnant type of demographic progress. While subsidizing their decreasing portion of efficient producers with great deal of

[12] The extent to which changes in agricultural performance influence the wider economy is determined by the size of the 'multiplier'. This is a measure of the extent to which a unit change in income earned in agriculture causes a change in income in the non-farm sector. The size of the multiplier will vary between places and over time, reflecting differences and changes in factors such as the amount of farm income spent on imported goods or saved. Thirtle et al. (2003) presents evidence from a number of studies and found multipliers ranging from 1.35 to 4.62.

financial instruments, the basic motive was to liquidate their increasing surplus into this newly emerging potential markets. Struggle on reaching to the consumer markets of Third World countries between US, EC and Japan have resulted in a rapid fall in prices.

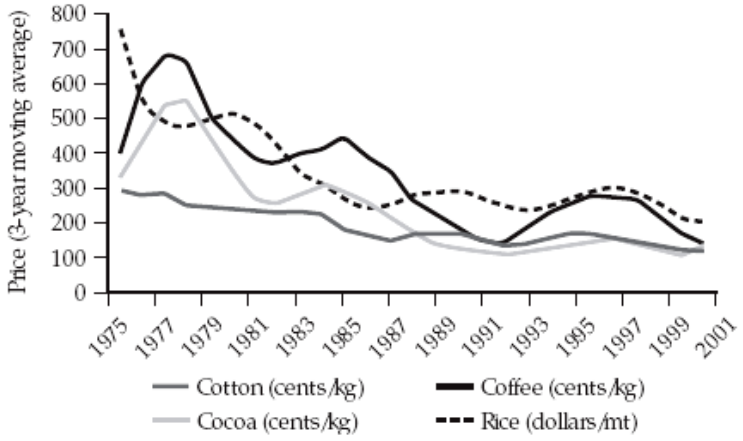

Figure 2.1. Real Commodity Prices, 1975–2001
Source; The World Bank, 2005.

To opening up this global crises and regulating the simultaneous developments in biotechnology, the uneasy process of GATT-UR meetings and ongoing negotiations on trade and tariff standarts started at the mid-80s.

From an economical point of view, it is suggested that, the role of agriculture in structural transformation was demonstrated successfully through the green revolution in many countries, where agriculture now has a declining share in their economies. However, apart from assessing agricultural change in a perspective of a pro-poor growth, many of the countries, especially the ones that have been diversified their economical composition in the former decades beyond agricultural dominancy, have been facing with a development problematic with respect to their agrarian society. Agenda, in these countries has focusing on the elimination of the worsening conditions of people who have been obliged to quit from their production. In brief, more than dealing with the lock-in situation in many economies as seen in African cases, regarding agricultural crises; most of the middle-income countries, like Turkey, have been facing with a rural transformation and social cohesion problem, today.

The questions about restructuring process in agriculture are brought by low commodity prices in world markets, the apparent lack of new technological breakthroughs in agriculture, and the growing importance of trade in a globalizing economy.

It is recommended by a group of 'agro-pessimists' that, many of the least developed countries are rich in mineral and oil resources, and it may be possible for these countries to depend on food imports, perhaps eliminating the need to modernize their agricultural sectors. Countries may even be able to embark directly on labour-intensive manufacturing of exports, using the proceeds to import food.

The above argument is misleading according to Boratav (2003), since, large part of the countries are trying to avoid macroeconomic and political instability from food price shocks, therefore, most countries pursued food self-sufficiency policies. He gives an example from Malawi, that the country in 2000 had around 2,5 million tonnes of a huge corn harvesting. The objection come from IMF and suggested them to sold out their stock. The rationale behind this advice was that stocking such an expensive and abundant yield is a dissipation. In case of a need, purchasing from world market was suggested as a rational economical decision to Malawi. In 2001, after selling out the stockings, Malawi had lower amount of harvesting, and finally import from 255 US dollars, though they had exported the same yield in former year by 45 US dollars.

Discussions around the stagnation of the technological progress is an another cloudy space in agricultural restructuring. While consistent productivity gains have been achieved in Green Revolution since then, growth has been much slower, and there are concerns about "yield stagnation".

Biotechnology[13] shows much promise for the future but, driven by private and commercial agricultural interests, it has yet to have impacts on food crops grown by small-scale farmers in the developing world (Byerlee et al., 2005).

[13] Principle areas of biotechnological research explained by Buttel et. al. (1985) include yield improvement, achievement of nitrogen fixation in nonleguminous crops, enhancement of photosynthetic activity, manipulation of growth regulators, improved stress tolerance (to cold, moisture, drought, salinity, and other soil conditions), pest and pathogen resistance, and plant architecture.

Friends of the Earth International released a report "*Sale of the Century?*" in 2001, focusing on the issue of property rights, patents and developments in biotechnology. The winners of the restructuring period was announced as transnational companies and, on the other side the losers were told as local farmers everywhere and indigenous peoples in developing countries. In that report it is argued that 97% of all patents are held by industrialised countries. It is estimated that about 750,000 patents are granted annually. It is also estimated that 90% of technology and product patents are held by Trans-National Companies. The use of patents has increased dramatically in recent years as biotechnology and genetic engineering companies have sought protection for 'inventions' such as Monsanto's Round-up Ready soya bean and the 'terminator gene'. Although Monsanto and other companies have now pledged not to commercialise its 'terminator' technology, companies - such as Syngenta – continue to research and/or patent biologically-engineered sterile seed.

In the US, biotechnology is seen as a way of maintaining the US's position as the world's leader in agriculture, and agrochemical and biotechnology companies wield considerable influence. In the US, formal consultative committees exist to create links between the administration and different sectors of business and society. The case is explained in the report in such wording;

> *The President's Advisory Committee for Trade Policy and Negotiations (ACTPN) gives recommendations on US Trade Policy. Robert Shapiro, former chairman of Monsanto (now non-executive chair of the recently merged company Pharmacia/Upjohn/ Monsanto), is a member of this important body, directly nominated by the President of the United States. Similarly, the US Trade Representative for much of the Uruguay Round, Mickey Kantor, is now a board member of Monsanto* (Friends of the Earth International, 2001).

WTO's Trade-related Intellectual Property Rights (TRIPs) Agreement and the use of patents expropriates knowledge from local farmers and indigenous peoples in developing countries who, in many cases, have been cultivators, researchers and protectors of plants for thousands of years. As such, companies have alienated a large number of people and farmers. For example, under WTO enforced patent law, Monsanto has the right to take farmers to court if they collect and use seeds from its patented plant varieties.

The promotion of patented varieties, backed by legal action, could pose a significant threat to food security in the developing world. Approximately 1.4 billion people around the world

depend on farm-saved seed for their security of production. Çalışkan (2007) is also touch on to the issue and argue that with the provision of Seed Law in Turkey, there appears a series of serious problems regarding the environment and and bio-diversity.

In recent years, particularly in the last ten years in Turkey, counter arguments have advanced their evidence bases against global discourses and advices made by international organizations. Several recommendations have been done to overcome the problems of restucturing pains. The one global recommendation is that, 'keep going on traditional exports'. Counter argument comes from the case of coffee; between 1971 and 1994 the share of exporter countries on the final prices are fell from 51% to %20. In the former status 51% was shared between the farmer and the government by 27% and 24%, respectively. In 1994 the farmers' part was accounted as 17% and the government was 3%. Similarly, from 1990 to 2000, exporter countries share declined from 37% to 8%. The situation is mainly because of the demolition of the states' marketing organizations and then filling the void by multinational companies and supermarket chains.

'Diversify your products; sell fruits, vegetables and flowers'. Boratav (2003) argues that, compliance of the argument is also related to the growing domination of the supermarkets. In Kenya-origin fresh vegetables the countries share is accounted as 27%. In Zimbabwean case it is 23%. In a recently done study about the supermarkets in England, it is shown that the difference in prices between packaged carrots and the ones that are not processed is about 2,2 times. The researchers argue that the exporter countries have very limited shares on that added value (Boratav, 2003).

Protection faced by developing-country exporters of agricultural products in industrialized country markets is four-to-seven times higher than that faced by exporters of manufactured products. Commodity-specific tariffs, quotas and safeguards, as well as subsidies in industrialized country markets, represent major barriers to access by developing country agriculture.

'Selling after processing' also seems challenging for the developing countries, since important change in world trade regulations, which currently have escalating tariffs on processed or semi-processed goods compared with raw materials. The expansion of value production and retention seems to be much greater in the area of agro-processing than in the

production of raw materials. The gap between consumer and producer prices is widening, with growers receiving 4-8% of the final price for raw cotton and tobacco and 11-24% for jute and coffee. The following table on tariff escalation illustrates an important underlying reality of the agricultural trade regime; not only is agricultural production highly protected in the developed world, but so is agro-processing. In fact, processed agricultural products are subject to higher tariffs than raw materials.

Table 2.1. Tariff Escalation of Processed Agricultural Products

Product	Processing Level	Tariff		
		USA	EU	Japan
Cocoa	Beans	0	0	0
	Chocolate	6,9	21,1	21,3
Coffee	Green	0	0	0
	Roasted	0	9,0	12,0
Sugar	Raw	32,8	134,7	224,9
	Refined	42,5	161,1	328,1
Oranges	Fresh	3,5	16,7	24,0
	Juice	11,0	34,9	31,0

Source; FAO, 2003

Above discussions arise from the context of global commodity chain approaches. Rapidly changing global environment and dynamics stems from transforming structures of buyers, suppliers and traders, results in new division of production and consumption patterns. The challenges appearing within the restructuring in agriculture highlights two important issues. One is the distribution problem among agricultural sector and the rest of the sectors (intra sphere). On the other side, distribution problems arise within the agricultural sector (inner sphere). From that aspect, local context matters in such a global environment. 'Globalized Agriculture', the main supporters of which is enterprises using agricultural raw materials, chains of food product buyers and supermarket chains; is not interested in production side, but rather focus on supply chains, agricultural commodity trade, related services.

Global value chains can be understood as networks of functionally interrelated producers and buyers that are involved on a global scale in processes of value creation as products pass across borders and between different actors in the chain (Hartwich et al., 2005).

The causal relationships between market liberalization and chain coordination are reciprocal. On one hand, market liberalization has spurred the emergence of value chains by granting globally operating buyers and suppliers better access to markets. On the other hand, market liberalization results in part from the activities of interest groups representing globally operating chain actors who lobby for a better access to input and consumer markets (Hartwich et al., 2005). Other factors as well as market liberalization explain the emergence of agricultural value and commodity chains: changing consumer demands, new food safety regulations and quality protocols, advances in production, processing, information and transportation technologies and increasing competition among buyers and suppliers of agricultural products.

Five broad global chains are identified according to the different characteristics of the products (Hartwich et al., 2005):

Traditional primary commodity chains: The chains are governed by a handful of internationally operating traders, trade is centralized but traders exercise little control on production and quality. Quality is enforced through price and not through exclusion. The main source of profitability is volume rather than margins. The economic development potential of such chains, in which developing countries are usually producers of the primary products, is limited because of inelastic demand but technical change can alter the chain dynamics. Typical examples for such chains include coffee, cocoa and cotton. Commodities such as rice, wheat, soy, and tea have similar features, but tend to include producers of larger size.

Traditional plantation product chains: The banana, pineapple, melon, palm oil, sugar, rubber and, to a certain extent, tea sectors are characterized by a high level of integration all through the chain up to the retailers. Primary production is carried out on relatively large estates in developing countries, which are in many cases owned by the international traders and processors. Alternatively, traders outsource production through contract farming.

Developing countries profit from employment in primary production, but very little from the value added that is generated. These chains also have a limited development potential due to inelastic demands and the possibility that multinational traders have to move production to countries that offer the best economic opportunities.

Processing and retailing chains: In some sectors, such as canned food, milk and dairy or furniture, developing countries have moved from primary production to often labour intensive processing, profiting from cheap local primary production and local labour. Such chains are sometimes dominated by local large-scale agro-industries and cooperatives, and in other cases, by transnational companies.

Fresh product chains: In such chains retailers in high value markets in developed countries or increasingly supermarkets in developing countries set quality standards. This mainly applies to off-season products and exotic fruits and vegetables, fresh fish and crustaceans and special beef products. Participation in the chains requires rigorous application of latest technologies in production, storage and transportation. Some few countries such as Chile, Costa Rica and Kenya have been able to profit from such chains on a large scale.

Alternative product chains: Such chains relate to niche or high-value products, such as those that comply with ecological standards or fair trade regimes. The chains are governed by buyers in the North or by local buyers such as supermarkets and exporters. Where those chains deal with products produced by small-scale farmers, a major obstacle is organization and a homogenous high quality.

Increasing diversification in production design, growing importance of trade in a globalizing economy accompanied with the low commodity prices in world markets and technological stagnation; have not welcomed such a country, Turkey, where agriculture has still keep its economic and political importance. Economic adjustment and reform programmes, cohesion with EU programmes and commitments and WTO discussions have been carried on concomitantly, although their objectives, contexts and time perspectives are quite different.

2.2. Agricultural System And Policies In Turkey

Historically, the agriculture sector has been Turkey's largest employer and a major contributor to the country's GDP, exports and industrial growth. Begining from the foundation of the republic, the transformations in the agricultural policies are generally determined as a result of significant macroeconomic policy changes or crises. We believe that by following this approach it’s possible to understand and clarify the main policies

which shaped the agricultural structure. To repeat the well-known: In the period before the Second World War state's policy practices were formed in two main lines. During the first years of the foundation mostly liberal policies were prefered as a part of the capitalist economy in the world system and these practices maintained its dominance until the Great Economic Crisis of 1929. After that in order to build a national economic system, which is protected from the effects of the crisis, policies depending on state controlled industrialization gained importance and the intervention of the state over the markets and prices increased during war time. In the post-war era, agriculture sector became one of the important issues in the economy. The technical developments and financial assistances reshaped the structure of the sector including its effects on migration. Begining from the 1960s until the end of the 1970s, the priority was on national development through planning and industrialization in order to form an internal market. Different from the preceding periods, the 1980s represent opening of a new era. During these years Turkey witnessed a severe transformation from an inward-oriented economy to a more market-directed and exported-oriented system. Until the 1990s this period was characterized by economic stabilization policies and strategies on growth through exportation. The influences of the neo-liberal policies and the pressure of the international organizations were also becoming more effective similar to the other countries in the world (Köymen, 1999).

2.2.1. A Short History of Agriculture in Turkey

2.2.1.1. Early Republican Period

When the republic was founded, the total population of Turkey was 13.6 million. 10.3 millions of this population was living in the villages, and only 5-10 % of the arable fields were planted. In the beginning of 1920s, the effects arising from the legacy of the Ottoman period were continuing. The main characteristics of this legacy were unfair land distribution and the existence of different regions changing according to their market development.

Agriculture census made in 1912-1913 revealed that, 1% of the agriculturist households were holding 39% of the total land, and 87% of the households were the owner of 35% of the total land (Köymen, 1999).

Demolition of most of the industrial institutions after the First World War has caused many countries to turn towards agriculture and the wheat stocks increased especially in producer countries as a result of the increase in production. During the 1920s when there was an agricultural over production in the world market, European countries were making effort in order to protect their national markets against USA. But Turkey had no chance to follow the same strategy until 1929 because of the rules took part in the Lausanne Treaty of Peace. For that reason, in one side while wheat was imported from USA, on the other side, policies encouraging mechanization in agriculture were applied in order to increase the national agrarian production.

At that time, 57% of the total cereal production (planting) was wheat, 26% barley, 35% cotton, 25% tobacco and 16% sesame. 85% of the total wheat was produced in six regions, and 35% of this production was covered by inner Anatolia region and the other half was supplied by Aegean, Marmara and Mediterranean regions.

In 1924, there were 501 tractors entire Turkey of which 486 of them were owned by the state. 72 % of these tractors were accumulated in the eleven cities of Aegean, Marmara and Mediterranean regions.

Between the periods of 1920-1929, two main programmes enforced. First, efforts in order to abolish the Ottoman agricultural institutions made by which Civil Code enacted in 1926, removed the restrictions about the private ownership in land (arising from Ottoman *miri* land regime) and *aşar* tax was abolished in 1925. Secondly, new institutions established; The Agriculture Bank in 1924, as a company in 1937 as public institution, Agriculture Credit Cooperatives in 1935 and The Agricultural Products Office is founded in 1938 as a state economic enterprise (Kazgan, 2003).

2.2.1.2. The Great Economic Crisis of 1929 & After

The relatively poor performance of the agricultural sector reflected in part government policies that had made rapid industrialization a national priority since the 1930s. In addition, farmers were slow to adopt modern techniques, with agricultural output suffering from

insufficient mechanization, limited use of fertilizer, excessive fallow land, and unexploited water resources. The result has been low yields.

During this period, the goverment was subsidizing basic industrial inputs like cotton and sugar beet, and at the same time began to apply the lowest (minimum) price policy in wheat. The main purpose of these practices was to sustain the capital accumulation acceleration in the industrial sector and to subsidize the agrarian products used as the raw materials in the industry. In this respect, it can be said that the existence of the national industry without any worry about making profit also supported farmers who would not have any chance in the free market conditions.

The arguments on First Land Reform Arguments started from the begining of the 1930s were mainly based on distributing treasury lands to landless peasants without disturbing the big land owners. The arguments went on nearly ten years and during this time the resistence of the land owners in the parliament did not come to an end. Just before the elections in 1950 the law was reshaped in order to prevent the nationalization of any private land.

During the Second World War, as the level intervention of state to the national economy was expanding, the policies based on state control were becoming loose. The war economy conditions which were effective from 1938 until 1948 accelerated the capital accumulation particularly accumulation arising from the agriculture. In addition to this, another indicator of the capital accumulation in agriculture was the migration which began to gain speed during these years.

Main policies starting from 1929 and after could be explained through three major stages as; application of subsidy policies in wheat because of the unusual decline of the prices after The Great Economic Crisis of 1929 through the Agriculture Bank and The Agricultural Products Office; establishment of state economic enterprises (EBK, SEK) in order to give widespread service in regions, to balance the market price through state subsidy; and, two main policies was generated with price supports and credit policies.

In price support mechanism, the main objective was to prevent strong price unstabilities and to determine the price level above the average production costs. State economic enterprises were fulfilling this function by buying the products from the level determined by the

government. The criticisms of this mechanism were collected under three headlines: *a.* the political factors in the determination of price level instead of economic factors; *b.* the negative effects on the income share in agricultural sector, *c.* uncontrolled stock levels for the subsidized products and decline of other unsupported products.

In credit policies, the main institution was the Agriculture Bank. The demand for agricultural credits increased mainly after World War II when the agricultural system was opened to market and the level of modern input usage increased in production. From 1925 to 1980 the share of the agricultural credits among total credits was 20-25% (Köymen, 1999). The main features of the credit mechanism are; the low interest rate compare to other credits, and the role of Central Bank until 1980 in financement of agriculture (TEKEL, tobacco; ÇAYKUR, tea plant; TMO, grain).

2.2.1.3. The 1950s: A Turning Point

After the WWII, the policies expressed for the developing countries were generally based on the modernization of their agricultural sector. It was expected that, by using modern technics and inputs these countries were going to develop through exportation of agrarian products. During the 1950s, these policies supported with Marshall credits and aids resulted with two important situation; rapid mechanization in the agricultural sector and migration from rural regions to urban areas.

The years covering from 1950 to 1960 represents the transition in the usage of widespread agricultural technologies which was mostly determined by the increase in the number of the tractors. In addition, during this period the share of the cultivated lands increased from 18% to 30% in total.

After 1950 commercialization of agriculture accelerated the changes in land-use and tenure patterns. Many of the large holdings on the coastal plains of the Aegean and Mediterranean Sea were converted to modern farms, often benefiting from irrigation projects and specializing in high value fruits or industrial crops; and mostly landless families supplied the labour for such modern farms.

According to agriculture census in 1950, which was the first data collection after the foundation of the republic, there were 336.860 landless households (total 2.760.304) living in the villages. The most unfair land distribution was intensive in three regions: Mediterranean, Southeast Anatolia and Aegean.

During this period the main policy was the transfer of sources from agricultural sector: *a.* During war time by taxation (direct and indirect taxes); in the 1950s mainly by the exportation, by preserving the over valued level of TL and the level of agricultural investments by public sector which counts more than half of the total.

Technological change and the use of inputs were constituted another main policy area. Transition to mechanical agriculture is managed by increase in the quantity and the use of tractors; transition to technology increased the productivity per unit of land by the use of chemical fertilizer, seeds, irrigation, agricultural chemicals after 1950. Furthermore, increase in the productivity of land and labour is achieved by technological developments, expansion of cultivated lands and increase of the land per active population.

2.2.1.4. After the 1960s

During the 1960s, Turkey followed an inwardly oriented development strategy. By the mid-1960s, Turkey chose an import-substituted industrialization policy. This policy required high protection, achieved through tariffs, quotas, and an over-valued exchange rate. During this period, the foreign exchange regime was strictly controlled, and capital movement was restricted. These policies helped to keep import demand under control. The foreign trade policies followed during the period led to balance-of-payment difficulties toward the end of the 1960s. The Turkish Lira was devalued in August 1971. The rise of oil prices between 1973 and 1974 and the 1974-75 world recession adversely affected the Turkish economy.

Government intervention in agriculture during this period consisted of agricultural price supports and market guarantees, agricultural input production and distribution, agricultural commodity trade by state-owned or state-controlled marketing institutions, input price subsidies, export subsidies, exchange rate controls, import and export licenses, food price controls, and so on.

During the 1960s, agricultural policies were focused on increasing the productivity of the land by intensive agriculture technologies and irrigation. Although the main economic structure was based on industrialization, agricultural subsidy policies kept its importance.

The Second Land Reform Arguments began to be discussed, namely the second unsuccessful attempt, in order to make a land reform to widen the internal market for industrial production and obtain social justice. The Land and Agriculture Reform Law enacted in 1973 was valid only for 5 years. And the main consquence was the distribution of 18.000 hectars of land to 1200 families.

2.3. Definition of Main Agricultural Policies Prior to 1980

Agricultural policies prior to 1980 can be divided into two groups. The first group is called as *productive policies* since it aims at the improvement of efficiency in the use of resources both in production and consumption. Areas such as, research, reduction of transaction costs, infrastructural services, quality and standard control, crop insurance and extension services, all based on increasing the economic growth, are included in this group.

The aim of these policies are to increase yields and production levels by; expansion of cultivated land, promotion of the use of chemical inputs, and credits at subsidized interest rates, combined with heavy public investment on irrigation increased both yields and volume of production.

Second group which can be defined as *distributional policies*, consists of policies such as price supports, deficiency payments, input subsidies, subsidized credits, by which wealth and income are transferred to agricultural producers from the rest of the economy. The aim of these policies are to increase agricultural incomes and achieving income stability by the government interventions on output price supports and trade measures to prevent at least the decrease in agricultural income and bringing the agricultural per capita income to a level compatible with the rest of the economy.

Economic and political returns of the policies embodied in the first group are paid back throughout the time, and especially during the initial periods, it requires to transform the

institutional structure and use of public resources for effective organization. On the other hand, political returns of the policies that only include transfers, are taken back in the short run; according to the preferred tool, the burden of the transfers on consumers and budget could reach to unaffordable levels. With an historical perspective, governments in Turkey tend to choose the second group in order to strengthen their political power.

Table 2.2. Decrease in the Relative Importance of Agriculture (1925-1983)

Years	The Rural Population (Agrarian) in the Active Population [%]	Years	The Share of Agrarian Income in GDP [%]	Years	The share of agricultural products in total exportation [%]
1935	80.0	1925-44	46.5	1925-40	87.0
1955	77.4	1945-54	45.0	1950	93.0
1960	75.0	1955-64	40.0	1960	85.3
1970	67.6	1965-74	29.5	1970	75.2
1980	55.1	1975-80	24.5	1980	57.4
		1981-83	21.8	1981	47.2
				1982	37.3
				1983	32.9

Source; G. Kazgan, 2003, derived from various tables.

2.3.1. After 1980: Transformation in Agricultural Policies[14]

During the last two decades, until the 2000s, agricultural GDP grew at a slower rate than the overall economy, resulting in a declining share of agriculture in GDP from 22.6% in 1980 to 13.3% in 1997. In addition, the fluctuation in the growth rates of agricultural GDP increased in the 1990s, with more frequent negative growth rates.

Following the historical trend in the development process of most developing countries, the share of agricultural labour in total labour force has declined from 55% in 1980 to 44% in 1997. Despite the decrease in the share of employment, a major structural transformation point has not taken place and the level of agricultural employment is almost constant till the 2000s (Akder, 2005). Labour productivity in agriculture shows an upward trend, but growth rates declined steadily, and turned negative in the mid-1990s. Growth of land productivity

[14] This economical analysis depends on mainly to the extensive information given in the articles of E. Çakmak (1998).

showed a similar trend. Yields are still increasing but at a decreasing rate. Since the limits of cultivable land has been reached, constant labour and constant land imply no significant change in land per worker.

Another factor which compounded the slow growth of agricultural GDP was the declining importance of agricultural fixed investment in total fixed investment. The growth rate of fixed investment fluctuated throughout the period. Moreover, contraction of agricultural credit exacerbated the unfavorable environment for capital accumulation in the agricultural economy. Indices of terms of trade can be cited as an important indicator of the extraction of economic surplus from agriculture. With the implementation of the structural adjustment program in 1980, cutbacks in support prices, biased export incentives directed almost exclusively to manufacturing, and the reduction of the purchasing power of urban workers caused a substantial fall in the relative net prices of the agricultural sector. Starting from the early 1990s, terms of trade showed strong recovery, and till the end of 1990s back to the levels of the pre-structural adjustment period, partly because of the upward trend in the prices of major products, but mainly through government intervention.

Table 2.3. Basic Indicators (1980-1997)

	1980-85	**1986-89**	**1990-92**	**1993**	**1994**	**1995**	**1996**	**1997**
Growth Rates of (%)								
GDP	3.65	4.72	5.39	8.04	-5.46	7.19	7.01	7.23
Agricultural GDP	0.24	1.34	3.40	-1.28	-0.72	1.96	4.40	-1.97
Shares of Agriculture in (%)								
GDP	22.47	18.35	16.67	14.97	15.72	14.96	14.59	13.34
Employment	52.5	48.3	46.9	45.4	45.7	47.6	46.2	44.0
Terms of Trade (1987=100)*	99.66	96.33	94.54	103.49	98.04	105.85	118.65	115.42
Labour Prodcutivity								
Agriculture (1987=100)	93.72	100.52	102.85	106.06	101.80	96.10	102.32	107.00
Non-Agriculture / Agriculture	3.83	4.17	4.42	4.73	4.52	5.17	5.02	5.10
Agricultural Fixed Investment (%)								
Share in Total	9.49	6.11	5.35	5.02	4.10	5.50	5.90	5.99
Share in Private	9.77	4.64	3.28	3.30	2.56	4.11	4.72	4.53
Share in Public	9.12	8.76	9.89	9.60	10.19	12.00	10.51	10.98
Growth Rate	6.32	1.74	3.38	24.48	-28.75	41.79	19.80	9.05

Source; E.Çakmak, 1998.

Since the structural adjustment program launched in 1980, macroeconomic and agricultural policies have been changing. The same year food prices and exchange rate controls were removed. During the following years, the import and export regime was relaxed in stages. Exchange transfers were facilitated, most state-owned companies privatized, a value-added tax introduced, and the private sector was allowed to become involved in agricultural input production, importing, and distribution, such as seeds and live animals.

Transformation of the controlled economic system into an opened and export-oriented economy had significant consequences for Turkey's agricultural structure. After 1980, when the interest rates were determined according to the open market rules, and also public subsidies were minimized, agricultural sector had to take credits from high level of interest rates. The most important consequence of this situation was the decline in agricultural investments and production. The burden of support to agriculture became heavier and as a result of this budget pressure public investments decreased. Also, during 1998-2001, the share of private agricultural investments in total investments decreased around 50% (Kazgan, 2003).

Implementation of the new policies and commitments made by agreements with the international organizations and Customs Union agreement in 1995 were created the simultenaously ongoing agenda of Turkish economy, particularly in the 1990s. Entrance of agricultural products from EU and USA, decrease in the taxes on grain from 45% to 5% almost in 10 years have forced agricultural sector to confront with the compelling restructuring. With the end of subsidy policies, producers had to buy fertilizer, fuel and other inputs from market prices.

The agricultural institutions and state economic enterprises which structured entire agricultural system since the begining of the foundation of the republic were privatized or became autonomous.

State economic enterprises supporting stockbreeding were privatized (SEK, EBK, etc.), The Agriculture Bank mostly lost its public function and became half private and half autonomous. In 2002, credit support mechanism was also abolished. Institutions supplying chemical fertilizers and similar inputs (TÜGSAŞ, İGSAŞ), agricultural machinery (TZDK), are either privatized or abolished (Kazgan, 2003).

2.3.2. 2000 and ARIP (Agricultural Reform Implementation Project)

After the mid 1990s the agricultural policies started to become more market oriented in Turkey. Efforts in order to build an agricultural "reform" program gained speed in 2001.

- Producer price subsidies through state support are replaced with *direct income transfer program* within a limited time frame.
- The primary development objective of the Agricultural Reform Implementation Project (ARIP) is to help in implementing the Government's agricultural reform program, which is aimed at reducing government subsidies.
- The project is designed to mitigate potential short-term negative impacts of subsidy removal, and facilitate the transition to efficient production patterns.
- Aside from promoting efficiency, the reforms to be implemented were necessary for fiscal stabilization. Almost all input subsidies are removed and the state support activities are declining.
- The privatization of related state economic enterprises and restructuring the sales cooperatives to make farmers more self-reliant are other objectives.

2.3.3. ARIP and "Direct Income Support (DIS) System[15]

The objective of the "Agricultural Reform Implementation Project" (ARIP 2001- 2005)[16] is to phase out price support and credit subsidies and to withdraw the State from direct involvement in the production, processing and marketing of the crops. A Direct Income Support (DIS) system is being introduced, which is based on land rather than inputs and outputs. At present, all farmers registered under the Farmer Registration System (FRS) and cultivating between 0.5 ha and 50 ha of crops are eligible for the DIS payment. In 2003, 2.765.000 farmers were registered to the system and it is estimated about 75% of the Turkish farms are eligible for the DIS, the remaining is mainly because of transfer inheritance and other registration problems.

---

[15] European Commission Directorate-General for Agriculture, *Agricultural Situation in the Candidate Countries, Country Report: Turkey,* 2003.

[16] The project was then extended to 2007.

ARIP consists of four major components:
i. Design and implementation of the DIS system with a view to introduce a unified national programme of direct income support, *ii.* farmers' transition towards more profitable crops, *iii.* restructuring of Agricultural Sales Cooperative Unions (ASCUs) in order to turn it into private sector, and *iv.* link domestic prices to world prices and reduce the intervention stocks.

The government intends to restructure ARIP and to add new components. Starting from 2006, the weight of DIS payments in the total budgetary support to agriculture is being decreased. The payment per hectare will remain constant in nominal terms, but the payments are more targeted. The share of crop specific deficiency payments, alternative crop grants and support to livestock production are slightly increased.

2.4. A Framework for Agricultural Policies

Looking at to the agricultural policies in time, the Turkish Government has used various measures to fulfill its objectives. In the crop sector, measures have been primarily domestic input price subsidy and/or output support price, and quantitative restrictions on imports in the past and high specific duties recently. In the livestock sector, trade measures have been the main mechanism to put a wedge between the domestic and import prices. The instruments of agricultural policy are summarized below[17]:

Output Price Support: This has been the most widely used instrument of agricultural policy in Turkey. It has always been at the center of policy discussions and has gained popularity among other instruments. Since 1994, support purchases by state economic enterprises have been limited to cereals, tobacco, tea and sugarbeets, but several agricultural sales cooperative unions are commissioned to buy sunflower, cotton, hazelnuts, dried figs and raisins from producers using subsidized loans from the Government.

Trade Policies: Prior to 1980, import of agricultural commodities were highly restricted and export restrictions in the form of licensing and registration requirements existed for several agricultural products and inputs. After 1980, there have been significant changes in trade

[17] This part depends on mainly to the extensive information given in the articles of E. Çakmak (2004) and Akder (2005).

policies in the direction of elimination of licenses, monopolies and reduction of duties in favor of special fund taxes. After the Uruguay Round-Agreement on Agriculture, Turkey made the necessary commitments on tariffs and export subsidies. Border measures consist of tariffs without any specific duties and import restrictions, and export subsidies are as per commitments to WTO.

Supply Control Measures: Limited use was made of supply controls in agricultural policy. Tobacco, hazelnuts, and tea are under area controls. Sugarbeet production is controlled by Turkish Sugar Factories, Inc. through contracts, but recently privatized sugar plants are allowed to have contracts with farmers.

Direct Payments: Direct payments constitute a minor part of the support system in Turkey. Natural disaster relief, returning of sugarbeet pulp to producers after processing, incentive premiums for milk sold to processing plants are some examples of direct payments observed in Turkey. Area and livestock payments or diversion payments are not employed.

Reduction in Input Costs: Input subsidies constitute the second important component of agricultural support policies. The most important categories are; interest concessions for agricultural credits, price subsidies on fertilizers, seeds and pesticides, irrigation subsidies through operation and maintenance costs.

General Services: State investments in irrigation, land improvement, soil and water conservation, roads, electricity, water and pasture land improvement are the major elements of infrastructure services. In addition, general services provided to producers either free or at subsidized costs include; research, training and extension services, inspection services, pest and disease control services.

2.5. New Agricultural Factors Effecting Turkey after 1980

2.5.1. Agriculture and the GATT-Uruguay Round [18]

The GATT Uruguay Round Agreements, including the Agreement on Agriculture (AoA), came into effect in 1995. The original General Agreement on Tariffs and Trade (GATT) had not excluded agriculture. However, almost from the outset, countries sought for exemptions, effectively protecting agricultural programs from challenge under multilateral trade law. With the signing of the Uruguay Round Agreement on Agriculture (AoA), international agricultural trade was put under much stronger GATT disciplines. These disciplines capped and reduced export subsidies, import barriers and domestic support. Trade in agricultural products remains somewhat of a category apart, subject to different rules than other goods in the multilateral trading system. However, with the AoA, agriculture ceased to be the exception to trade rules.

Governments decided to consider serious disciplines on agriculture under GATT in the 1980s for a number of reasons. By then the European Community (now the European Union) was worried about the cost of the Common Agricultural Policy (the CAP), which tripled in the 1980s while average real farm incomes remained almost constant. The United States was experiencing a similar trend towards fewer and larger farms with continuing high levels of surplus production. EU member states were also interested to secure agreements related to trade in services, intellectual property rights protection and trade-related investment measures, all of which were under negotiation during the Uruguay Round.

Many developing country negotiators wanted to stabilise and increase world prices for their food exports[19], particularly temperate agricultural commodities that competed with subsidized production in developed countries. Stable prices were impossible while developed countries continued to dump surplus production on world markets. Developing countries were also willing to increase their market access to developed country markets. Many developing countries had liberalised their markets under structural adjustment programmes,

---

18 S. Murphy, The Uruguay Round Agreement on Agriculture and its Renegotiation, FES-Focus on WTO, Part 1and 2.

[19] The Food and Agriculture Organisation (FAO) originally estimated that the food import bill for low-income food deficit countries would be $9.8 billion higher in 2000 than it was in 1988 (an increase of 55%). Of this increase, $3.6 billion would be as a direct result of the last Uruguay Round of trade negotiations.

and they wanted to secure reciprocal liberalisation from developed countries. Agriculture is vastly more important to developing countries' economies than to the economies of developed countries, so the economists that saw trade as an essential engine for economic growth wanted to promote increased trade in agricultural commodities to stimulate development.

The Agreement on Agriculture (AoA) has three assumed features: market access, domestic support and export subsidies. In general terms, the commitments in the agreement require WTO member states to increase market access, and to reduce both domestic support and export subsidy expenditures. All parties to the agreement had to take steps in this direction, although Least Developed Countries (LDCs) were exempt from some obligations and developing countries overall had smaller reduction commitments than developed countries. The implementation period was five years for developed countries and nine for developing countries. That is, developed countries had to make their reductions by 2000 while developing countries have until 2004. Least Developed Countries were not dependent to any reduction commitment, but they did commit themselves to not introducing certain policies in the future and they did have to fix their tariffs, meaning that they could lower but no longer raise their tariffs above a given level.

Table 2.4. The structure of the Agreement on Agriculture (AoA) – For Developing Countries

	RULES	LIBERALISATION	GUARANTEES
IMPORTATION	▪ Tariffs for untariffed barriers ▪ Constituting tariff quotas ▪ Top limits for all tariffs	▪ Dumping the tariffs (the new tariffs) around 24% in 10 years. ▪ Dumping the each tariff at least 10%.	▪ Guarantee for exporters in order to reach market by tariff quotas. ▪ Special gurantees for the importers.
EXPORTATION	▪ Limitations for the existing exportation subsidies ▪ No new exportation subsidies	▪ Reducing the costs around 24% in 10 years. ▪ Reducing the subsidized exportation amount around 24% in 10 years.	▪ Obeying food assitance rules.
PRODUCTION	▪ "Green box" for the permitted subsidies	▪ Reducing the supports which make deviation around 13.3% in 10 years.	▪ Subsidy exceptions for the developing countries. ▪ Exceptions for the programmes which limits the production.

Note: The rates determined in the table are valid for the developing countries. These rates are 2/3 of the developed countries and application period is twice of the developed countries.

Source; Akder, 1998.

In 1995 by signing the agreement and accepting the GATT rules Turkey directly approved the obligations which were the consequences of this process. In addition to this, Turkey guaranteed to realize the responsibilities on the basis of the three features of the GATT process mentioned above; market access, domestic support and export subsidies.

Market access: According to the agreement, developed countries will reduce their customs (taxes) around 36% in 6 years, and developing countries will reduce them around 24% in 10 years.

Domestic support: By taking into consideration the tariffs between 1986 to 1988, developed countries will reduce their supports to agriculture around 20% in 6 years, and developing countries around 13.3% in 10 years. An exception under domestic support title is minimum support. According to the agreement, the minimum support, should not go beyond 10% of the production value of the product in developing countries, and 5% in developed countries.

Export subsidies: This title can be thought with dumping, like the other two. According to the agreement, developed countries will reduce their export subsidies around 36% and also the amount subsidized products around 24% in 6 years. For developing countries these rates are 24% and 14% for 10 years.

Table 2.5. The reductions in agricultural subsidies and protection agreed in the Uruguay Round

	Developed countries 6 years: 1995-2000	**Developing countries** 10 years: 1995-2004
Tariffs		
Average cut for all agricultural products	-36%	-24%
Minimum cut per product	-15%	-10%
Domestic support		
Cuts in total ("AMS") support for the sector	-20%	-13%
Exports		
Value of subsidie (outlays)	-36%	-24%
Subsidized quantities	-21%	-14%

Source; http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm3_e.htm, last accessed November, 2007.

The process started in 1995 with GATT-Uruguay Round, then reshaped under WTO, went forward with three main steps. The first one was in 2001, Doha meeting, in the fifth year of the negotiations. After that, deadline for producing numerical targets, formulas and other "modalities" for countries' commitments in 2003 was missed. A revised draft "modalities" paper was put on the negotiating table in March 2003 and although it was not agreed, it was used to discuss technical details in subsequent months. A number of "framework" proposals dealing with main points of the modalities were submitted and discussed before and during the Fifth Ministerial Conference in Cancún, Mexico, September 2003, but it was not until 1 August 2004 that a "framework" was agreed. Some members have suggested the negotiations might unofficially aim to complete the "modalities" by the Hong Kong Ministerial Conference in December 2005, but without making a formal commitment. The Doha Declaration had envisaged that countries would submit comprehensive draft commitments, based on the "modalities", by the Cancún Ministerial Conference but without modalities, this target was not met either. Meanwhile, the final deadline for completing the negotiations, 1 January 2005, was officially postponed on 1 August 2004, without a new date set.

2.5.2. The Customs Union Process

The customs union agreement contained in Decision No. 1/95 issued by the EC-Turkey Association Council became effective on January 1, 1996. This trade agreement is a significant milestone for Turkey's becoming a full member of the European Union (EU), a process that began more than 35 years ago. The agreement eliminates trade barriers between Turkey and the EU in industrial goods and processed agricultural products. In addition, Turkey has adopted the EU's Common External Tariff for trade with third-world countries and is aligning its domestic policies with the EU's common commercial policy (Customs Union 1998).[20]

During Cardiff Summit in 1998, a strategy paper was prepared for Turkey, mainly containing issues about; determination of the differences between EU and Turkish agricultural policies,

[20] A.A. Koç, D.B. Smith, F. Fuller, J. Fabiosa, 1998, *The Turkish Agricultural Policy Analysis Model*

technical and financial assistance to Turkey in order to undertake the CAP and, starting the technical assistances after the preparation of Turkey's priorities.

Turkey's reform efforts started in 2000 according to the obligations to CAP. By this intention, transition to direct income support system and making the prices more closer to the Union's and constituting rural development strategies were the prior objectives. In this scope, Turkey constituted farmer registration system, and made improvements about animal and plant health issues parallel to EU practices. Turkey's short term priorities ended in May 2004, and mid term priorities ended in 2005.

Both two agreements (WTO, AoA and EU, CAP[21]) are distinct according to their objectives. While Agreement on Agriculture is an agreement in order to regulate whole world trade and intends to remove all trade barriers, EU aims to build an integrated economic structure and harmonization of economic and political institutions of the member states. This two agreements brings different restrictions to Turkey.

2.6. Current Situation of the Turkish Agriculture

In terms of employment, agriculture is still an important sector in the Turkish economy. Its contribution to total GDP makes it also one of the most important sectors. Since 1980, however, the share of agriculture in GDP has declined from 20% to 13.6% in 2000 and 10.7% in 2005. This indicates an increasing importance of the industrial sector since the early 1990s. The gross value added of agricultural sector (GVA at constant prices) grew by 3.9% in the year 2000. In that year, agriculture benefited from a good situation for cereals, fruit and vegetables.

[21] In recent years, particularly with the enlargement, there appears changes in the understanding of Comman Agricultural Policy, namely it is seen more suitable to tell it 'European Model of Agriculture', as it considers local priorities and context.

Table 2.6. Selected Indicators (1996-2005)

	1996-97	1998-99	2000	2001	2002	2003	2004	2005*
Growth and Accumulation								
GDP (USD billion)	186,0	192,3	199,9	145,7	184,5	241,1	301,8	_
Real GDP Growth (per.)	7,3	-0,8	7,4	-7,5	7,9	5,8	8,9	_
GDP per capita (USD)	2,932	2,928	2,963	2,123	2,644	3,402	4,219	_
Real GDP per capita Growth (percent)	5,3	-2,6	5,5	-9,0	6,2	4,1	7,6	_
GDP per capita PPP (USD)	5,688	5,89	6,247	5,932	6,365	6,749	n.a.	_
Gross fixed investments (USD billion)	48,6	45,6	45,8	27,3	31,5	38,2	56,8e	_
Share of Agr. in Gross fixed inv. (per.)	5,8	5,1	4,4	4,2	4,6	4,2	4,5e	_
Distribution								
Inflation - CPI (percent)	83,2	74,9	54,6	54,4	45	25,3	10,6	_
Unemployment Rate - Turkey (per.)	6,2	7,2	6,5	8,4	10,3	10,5	10,3	10,3
Unemployment Rate - Rural (percent)	3,5	3,5	3,9	4,7	5,7	6,5	5,9	6,8
Employment in Agriculture (million)	8,9	9,0	7,8	8,1	7,5	7,2	7,4	6,5
Share of Agr. in Employment (percent)	44,1	41,0	36,0	37,6	34,9	33,9	34,0	29,5
Share of Agr. in GDP (percent)	13,9	13,9	13,4	13,6	13,4	12,4	11,6	11,4
Growth of Agr. VA (percent)	1,0	1,7	3,9	-6,5	6,9	-2,5	2,0	5,6
Agricultural VA per employed (USD)	3,253	3,517	3,622	2,173	2,862	3,941	4,601	5,742
Growth of Agr. VA per employed (per.)	3,5	-1,2	22,8	-10,2	15,9	1,5	1,2	20,4
Internationalization								
Imports/GDP	24,8	22,5	27,3	28,4	27,9	28,5	32,4	_
Exports/GDP	13,3	13,9	13,9	21,5	19,5	19,5	21,0	_
Exports/Imports	53,7	62,1	51,0	75,7	69,9	68,4	64,7	_
Stock of External Debt (USD billion)	81,7	99,7	118,8	113,9	130,4	145,8	153,2	_
Foreign TOT (1994=100)	100,6	101,6	92,6	90,5	90,3	91,1	93,9	_
Agr. Exports/Agr. Imports	151,5	162,3	115,7	175,4	125,8	120,8	134,9	_
Agr. Imports/Total	7,1	6,4	5,7	5,6	5,8	5,8	4,5	3,9
Agr. Exports/Total	20,1	16,9	13,0	13,1	10,4	10,3	9,4	10,5

Source; Akder (2005) and Eruygur (2006)*.

Agriculture has suffered as much as the rest of the economy, particularly during the last ten years. The share of agriculture in total fixed investment decreased, coupled with the inescapable downward trend in total gross fixed investment. Employment in agriculture is sharply declined both in absolute and relative terms. Jumps in the rural unemployment rates are alarming. Agriculture is the major employment source in the rural area with about 70 percent share in total rural employment. The climate dependent nature of the agricultural production can be apparently seen in agricultural value added indicators. The drastic decline in 2001 shows the impact of a 'crisis' year together with the impact of policy shift in agriculture. However, the sector seems to be recovering in the last three years. Imports

expended faster than exports, and the share of agricultural products in total exports and imports are declining (Çakmak, 2004).

a. Agricultural Labour: An increasing urbanisation of Turkey has led to a decline of the rural population from 61.5% in 1970 to 34.2% in 2002. In the latest years the combination of severe factors led to an important decrease of the labour force in the agricultural sector which now represents about 27 percent[22] of the whole labour force. Agricultural sector employs 21.7 percent of employed males and 51.6 percent of employed females with 3.5 and 3.0 million, respectively. It is seen that sector stand-alone employs half of the employed females in Turkey. It can also be observed from the below table that agricultural sector provides employment for almost all females in the rural areas with about 84 percent share in the rural employment. Furthermore, Çakmak (2004) reports that 75 percent of total employed females in agriculture (2.3 million) work as "*unpaid family labour*". The figures reveal the importance of agricultural sector in terms of total and rural employment in Turkey, especially for employed females. Particularly in the age groups below 50, women represent the majority of employment in agriculture with 56.2% in the 20-24 year old group and 52.5% in the 45-49 age groups.

Table 2.7. Agricultural Employment in Turkey, 2000-2001 and 2005

	Employment (1000)		**Percent of Total Emp.**		**Percent of Rural Emp.**	
	2000-01	**2005**	**2000-01**	**2005**	**2000-01**	**2005**
Agricultural Emp.	7,929	6,493	36,8	29,5	71,5	61,4
Male	4,285	3,550	27,4	21,7	60,7	50,1
Female	3,644	2,943	61,9	51,6	90,2	83,9

Source; Eruygur, 2006.

The increasing urbanisation, the share and changing composition of employment in agriculture has set the pace and direction of structural change in Turkish agriculture. Despite structural change in the Turkish economy, agriculture is still characterised by hidden unemployment, which is an enormous challenge in the economic development.

[22] According to the Household Labour Survey results in April 2007 by TUİK, the share of agricultural labour in total labour force declined sharply to 26,7%.

Table 2.8. Labour Force Participation and Unemployment, 2000-04 (percent)

	Labor Force Participation Rate				Unemployment Rate			
	2000-01	**2002**	**2003**	**2004**	**2000-01**	**2002**	**2003**	**2004**
Turkey	49,9	49,6	48,3	48,7	7,4	10,3	10,5	10,3
Male	73,3	71,6	70,4	72,3	7,6	10,7	10,7	10,5
Female	26,9	27,9	26,6	25,4	6,9	9,4	10,1	9,7
Rural	58,7	57,6	55,5	55,4	4,3	5,7	6,5	5,9
Male	77,1	74,5	72,9	74,7	5,7	7,3	7,9	7,3
Female	41,0	41,4	39,0	36,7	1,9	2,9	4,1	3,2
Urban	44,0	44,4	43,8	44,5	10,2	14,2	13,8	13,6
Male	70,8	69,8	68,9	70,8	9,0	13,0	12,6	12,5
Female	17,3	19,1	18,5	18,3	14,8	18,7	18,3	17,9

Sources; Çakmak, 2004 and Akder, 2005.

The labour force participation rates in the rural areas are higher than urban areas. In addition, the female-male differential in labour force participation rates is higher in urban areas than rural areas. The dominant role of agriculture in the rural areas combined with different working conditions can explain this differences. Relatively faster decline in the rates in the rural areas combined with higher growth in unemployment in the rural areas is due to the adjustment efforts of the labour force in the rural areas to the new conditions shaping the agricultural sector.

b. Agricultural Holdings: The average farm size is around 6 ha in 2001, compared to an average around 19 ha in the EU in 1999/2000. About 65% of them have less than 5 ha land and 83% less than 10 ha. About 6% of the holdings have a size larger than 20 ha. When 1991 census results are concerned, mixed cropping-livestock holdings constitute the greatest share of all farm types with about 1 million holdings (25.6%). Field cropping with 931.460 holdings (22.9%) is the second most important specialisation, followed by specialist grazing livestock with 847.310 holdings (20.9%) and specialist permanent crops with 535.185 holdings (13.2%).

Table 2.9. Size Distribution of Land, 1991 and 2001 (percent)

Size of Holdings (ha)	1991		2001	
	Farm HH's	Cultivated Area	Farm HH's	Cultivated Area
No Land	2,50		1,77	
< 0,5	6,19	0,29	5,78	0,26
0,5 - 0,9	9,37	1,08	9,44	1,02
1 - 1,9	18,49	4,28	17,54	3,82
2 - 4,9	31,33	16,28	30,91	15,48
5 - 9,9	17,53	19,80	18,21	20,41
10 - 19,9	9,42	21,21	10,64	24,05
20 - 49,9	4,27	20,23	5,00	23,69
50 - 99,9	0,59	6,49	0,57	6,32
100 - 249,9	0,25	5,63	0,14	3,07
250 - 499,9	0,05	2,88	0,01	0,40
500 +	0,01	1,83	0,00	1,50
Total	100,00	100,00	100,00	100,00
Gini Coefficient		**0,60**		**0,59**
	(1000 HH's)	**(1000 ha)**	**(1000 HH's)**	**(1000 ha)**
Village Head Census	4,092	21,103	3,698	22,156
HH Survey	4,068	21,449	3,076	17,164

Source; Çakmak 2004.

A slight trend could be mentioned between the two census studies is that, the distribution of agricultural land remained skewed, with a slight tendency towards the medium ranges from smaller sizes in the considered decade.

In Turkey, 35% out of the total agricultural holdings are located in Aegean and Black Sea regions as compared to about 15% in the eastern zones. A relatively higher number of larger and more specialised farms are located in the Aegean and Mediterranean regions.

c. Value of Agricultural Production: Crops are the most important products with 55.8% of total value of agricultural production, split between cereals (11.6%), industrial crops such as sugar beet and tobacco (6.4%), vegetables (13.7%), fruits (17.4%) and other crops. Wheat is the most important single crop with 7,9% of total output value. Livestock production and animal products contribute with 24.9% and 19.3% of total value respectively.

Field crops have occupied 87 percent of cultivated area since 1985. The share of vegetable production has been increasing steadily. Land left fallow declined from 21 percent to 18

percent of the cultivated land, causing an increase in cropping intensity of 2 percentage points.

Table 2.10. Turkey: Field Crop Areas (period averages)

Crop	1985-87		1995-97		2000-03	
	Area (million ha)	Share (percent)	Area (million ha)	Share (percent)	Area (million ha)	Share (percent)
Cereals	13,82	50,0	13,85	50,4	13,70	52,1
Wheat	9,37	33,9	9,36	34,1	9,25	35,2
Barley	3,34	12,1	3,61	13,1	3,55	13,5
Maize	0,57	2,0	0,54	2,0	0,54	2,0
Rice	0,06	0,2	0,05	0,2	0,06	0,2
Pulses	1,74	6,3	1,83	6,7	1,56	5,9
Chick peas	0,53	1,9	0,75	2,7	0,65	2,5
Lentils	0,75	2,7	0,61	2,2	0,47	1,8
Industrial Crops	1,24	4,5	1,48	5,4	1,36	5,2
Tobacco	0,18	0,7	0,25	0,9	0,19	0,7
Sugarbeet	0,35	1,3	0,40	1,5	0,35	1,3
Cotton	0,61	2,2	0,74	2,7	0,68	2,6
Oilseed	0,93	3,4	0,72	2,6	0,64	2,4
Sunflower	0,70	2,5	0,57	2,1	0,54	2,0
Soybeans	0,09	0,3	0,02	0,1	0,02	0,1
Tuber crops	0,29	1,0	0,34	1,2	0,30	1,1
Onion, dry	0,08	0,3	0,12	0,4	0,09	0,3
Potatoes	0,20	0,7	0,21	0,8	0,20	0,8
Total cultivated area	27,65	65,2	26,90	66,3	26,37	66,7

Source; Çakmak 2004.

Most of the agricultural production in Turkey originates from the coastal regions, with a certain importance of the Aegean and Mediterranean regions. Output in these two coastal regions is dominated by fruit and vegetables production, which corresponds well to the climatic conditions. In the northern and eastern parts of Turkey the importance of livestock production is quite evident. The relatively low agricultural production potential of eastern regions is conditioned by the natural conditions such as lower rainfall, lower temperature and higher altitudes. It also corresponds to the socio-economic conditions in rural areas as expressed by small-scale farming and subsistence production.

d. Agricultural Trade: Turkey exports about 6,2 billion USD and imports about 4,4 billion USD worth of agricultural and food products. Turkey's main trade partners are the EU and

USA. Turkey has a comfortable trade surplus with the EU mainly due to exports of edible fruits and nuts, preparations of fruit and vegetables as well as tobacco and tobacco products. Turkey has also important trade relations and a trade surplus with countries in the Mediterranean basin and the Gulf region.

Regarding the product configuration of agricultural imports; Turkey is the importer of cereals, oilseeds and cotton, especially from non-EU trade partners. The situation indicates that, the exports of the processed goods of Turkey is the ones that are using raw agricultural products from outside.

Table 2.11. Agricultural Imports and Exports of Turkey (2003-05 average)

	International Trade (million USD)			
	EU-25	**USA**	**ROW**	**TOTAL**
Exports				
All Products	32,917	4,507	23,875	61,299
Agricultural Products	2,972	328	2,889	6,189
Raw	2,281	296	2,093	4,67
Processed	691	32	796	1,519
Imports				
All Products	42,719	4,537	47,294	94,551
Agricultural Products	1,185	1,075	2,106	4,366
Raw	819	1,031	2,048	3,898
Processed	366	43	58	468
Net Exports				
All Products	-9,803	-30	-23,419	-33,252
Agricultural Products	1,787	-747	783	1,823
Raw	1,462	-736	45	772
Processed	325	-11	738	1,051

Note: ROW is *Rest of the World*.

Source; Eruygur, 2006.

The trade in agricultural products has a share of 10.1% of total exports and 4,6% of total imports between the years of 2003-2005 in average. Agricultural products are of significantly greater importance for Turkish exports than in the EU. The agricultural trade increased in value during the last decade. The market share of the EU-25 in Turkey's agricultural imports is 27.1%.

Turkey has a trade surplus with the EU-25 in the field of agriculture. In recent years Turkey expanded significantly its exports nearly to 3 billion USD. Imports from the EU reached about 1,2 billion USD.

e. Agricultural Policies and Support: From the point of view of agricultural policies, the competitiveness of Turkish agriculture and food industries is one of the major political and economic challenges for the future. Apart from measures directly targeted at improving competitiveness, it would also implicate the development of rural regions, which would have a positive indirect effect. Efforts in that direction would be certainly resource consuming as the Turkish agriculture employs 27% of the work force and is, unlike most regions of the EU, the predominant economic sector in rural areas.

According to the OECD estimate the support for agriculture in Turkey is lower on a per-ha and a per-capita basis than in the EU and in the OECD countries on average. However, agricultural policies in Turkey absorb a significant higher share of the GDP as compared to the OECD average (Akder, 2005).

2.7. Future Outlook for Turkish Agriculture

Examining the indexes of agricultural terms of trade[23] is a good way of evaluating the conditions that small farmers confronting throughout the last decade. In the period of 1998 to 2006, which includes the crisis year of 2001, considerable downward trend occured, 1,8 percent in yearly average. Erosion of 39 percent between these nine years had happened, 23 percent of which is due to the 2001 crisis. Apart from the crisis in 1994, the latter presents a character of permanency along with the amplifying effect of the 'Agricultural Reform' policies.

[23] Terms of trade is an index of the price of a country's exports in terms of its imports. The terms of trade are said to improve if that index rises. An improvement in a nation's terms of trade is good for that country in the sense that it has to pay less for the products it imports, that is, it has to give up fewer exports for the imports it receives.

Table 2.12. Agricultural Terms of Trade, Indexes

Years	Turkey	World
1968	100	100
1974	127,6	176,9
1978	131,0	106,3
1988	70,0	69,6
1992	77,6	58,0
1997	100,7	72,4
1998	126,3	65,3
1999	109,3	55,4
2000	102,3	55,2
2001	78,6	55,0
2002	78,6	57,6
2003	89,9	60,3
2004	91,8	62,6
2005	82,7	n.a.
2006	77,1	n.a.

Source; Boratav, 2007.

In the case of deregulations are confirmed by multilateral trade liberalization agreements, it is estimated that there will be an upward price movement in agricultural products. Increase in prices would be maintained mainly because of downfall in government subsidies. In such a case, however, Akder (2005) argues that the price increase is supposed to be about %15 in cotton, for example. Therefore, it is recommended that striving in order to overcome structural problems of the agricultural sector is inevitable and, escalating rural problems would arise as a critical diary for most developing countries in the near future. In addition to the dim future of the product prices, cotton sector has already been troubled with the level of market prices particularly in the last ten years.

Table 2.13. Agricultural Products Relative Price Indexes

Years	Wheat	Maize	Hazelnut	Sunflower	Cotton
1976	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
1988	63,1	69,3	127,1	67,6	**63,5**
1992	74,8	93,3	85,2	76,7	**63,4**
1997	96,4	78,9	144,2	85,7	**68,7**
1998	92,0	91,9	169,3	91,4	**60,7**
1999	85,5	88,3	164,6	74,0	**47,3**
2000	75,7	84,1	153,6	62,0	**49,4**
2001	75,7	85,5	121,9	63,5	**45,3**
2002	81,5	90,2	101,5	67,8	**36,6**
2003	86,2	86,5	91,8	98,6	**45,1**
2004	88,4	83,4	166,9	97,4	**40,7**
2005	80,9	59,8	225,4	85,8	**34,3**
2006	**79,2**	**73,7**	**110,7**	**79,2**	**34,8**
Annual Growth %					
1976-2006	0,55	-0,25	2,01	0,58	**-2,40**
1976-1988	-1,68	-2,49	2,86	-0,05	**-2,04**
1988-1998	3,31	2,03	4,77	2,36	**0,04**
1998-2006	-0,54	-3,36	-1,45	2,05	**-5,80**

Source; Boratav, 2007.

There have remarkable changes especially in industrial agriculture took place and have resulted in new division of roles in controlling the market dynamics. In order to compete in agricultural markets, several factors can be addressed; productive agricultural land, convenient weather conditions, skillful producers, modern production techniques, advanced input markets, transportation, processing and marketing infrastructures, commodity markets and financial institutions enable price formation and risk transfers. Apart from the first three of these factors, Akder (2005) states that the problems in Turkish agricultural sector are originated from poor production and market conditions, essential for competitiveness.

In the former years, producers used to be the focal point in the sectoral chains. The new allocation of power relations has been witnessed especially during the last two decades and consumers in agro-food chains became the basic determinant. In the side of industrial crops, however, traders gained power in market relations so as well implicitly in production and exchange phases. Traders in general have willingness to declining world prices so that they can benefit from margins. By the same amount of capital they have, more business can be made. By the extensive provision of future markets and options exchange in price creation, the world prices have been subjected to sharp declines (Çalışkan, 2005).

Designing the future of agriculture sector needs new understandings in both policy planning and intervention techniques. Akder (2005) summarizes the recent and/or ongoing trends in the conceptualization of the transformation age.

Table 2.14. Revision in the Concepts of Agriculture

	Old Concept	**New Concept**
AGRICULTURAL GOODS and PRODUCTS	Goods	Specific/diversified raw materials
	Basic nutrients	Fashion/niche products
	Geographical agglomeration in production	Geographical segregation in production
	Agriculture is an art	Agriculture is primarily based on science
	Traditions/remembering	New ideas/forgetting
	Independence	Dependence/system approach
	Price risk	Interaction risk
	Sell product/service is free	Sell service/product is free
	Open markets with no personal contact	Close markets with personal contacts and bargaining
	Antagonist relations with sellers and customers	Partnerships with sellers and customers
	Procurement from varying points	Procurement from certain point
	Produce your inputs	Purchase your inputs
	Price subsidies/assured purchase	Cut backs on costs
	Utilization/exploitation of resources	Conservation of the resources
FACTORS OF PRODUCTION	Physical assets (land, machinary) as the main source of strategic competitive advantage	Non-physical assets (human,organisation) as the main source of strategic competitive advantage
	Possessing the assets	Controlling the assets
	Finance as the main source of power and control	Knowledge as the main source of power and control
	Labor is a cost, machinary is an investment	Labor is an investment, machinary is a cost
	Technical skills bring success	Individual communications bring success
	Technological transformation and innovation	Institutional transformation and innovation
	Public/open knowledge and R&D	Private/protected property rights and R&D

Source; Akder, 2005.

Basic motives and factors behind the transformations of the conceptualizations are owing to technological developments, structural changes in the processing and marketing, and government policies (Akder, 2005). Responds of the local agents in the agricultural sector differentiates upon their unique subjectivities. Inverted characteristics of the economic environment takes its form in the local context by showing dependency to the way of approaching to the issue. Hence, the critical mission has to be assumed by the government as

a policy developer. In accordance with the changing concepts in agriculture, Akder exhibits the new qualifications of the agricultural policies.

Table 2.15. Revision in the Concepts of Agricultural Policies

Old Concept	**New Concept**
Agriculture is farming	Agriculture is production and distribution system of food
Fluctuating supply	Consistant supply (worlwide production)
Domestic market is critical	Foreign and industrial markets are critical
Risk for scarcity and high prices for consumer	Portion for food expenditures and scarcity risk are falling
Consumers believe that food is safe	Consumers questions the food safety
Remarkable political effect	Limited political effect
Sufficient budget resources	Budget deficits and falls in transfers
Producing yield	Producing foodstuffs
Subsidization is farmers' right	Subsidization is conditional

Source; Akder, 2005.

Evidential reasonings could be introduced by examining the recent evolving understanding of the EU policy schemes. The primary target is decoupling the relationship between production and direct income support. This is clear indicator of the intention to support rural areas rather than the sector. Secondly, 'cross-compliance' is tried to adapted by subsidizing the sector depending on a conditional manner; up to environment, food safety and hygienic issues. Developing a farm advisory system appears as a third priority. For building resource rich rural development scheme, transfer of the amounts which has gone to the large enterprises by direct income support mechanism, is objected by the Union. New rural development measures are also seem as an another mechanism in order to cover up the costs (Akder, 2003).

Recent debates over the agricultural policies in EU happen due to the equity considerations both for between countries and for every single individual. Since the major problematic area is the enlargement, policy orientation from 'Common Agricultural Policy' to 'European Model of Agriculture' went into effect. Model is much more aware of the 'non-common' dimensions among the sectoral and socio-spatial structures of member countries (Akder, 2005). Apart from unified prices, for instance, more flexible system based on effective resource distribution and policy creation regarding the countries' specialities is taken into consideration.

In terms of the position of Turkey, expectancies of plentiful financial transfers by the membership process seems of no avail. Çalışkan (2007) notes about the lockout situation in the Union, especially after the last enlargement. He suggests in a pathetic way that the EU will busy with the one million repetant Polish farmer during the next 15 years. To be more technical, support mechanisms are strongly defined in conditinal terms and only usable through regional and rural development programmes. Since, structural reform efforts have not been seriously considered the capability analysis and long-run income transfers in Turkey, the possibility of success in the cohesion period and the operational capacity of the actors in the sector is questionable.

Not only WTO and EU processes but also trade agreements with third parties are going to be critical issues confronting Turkey in the near future. Furthermore, new openings in the trade relations of EU with other countries, especially with the North Africans throughout the Barcelona process, will introduce prominent challanges that Turkey should face by considering its role in the competitive agricultural markets (Akder, 2005).

Subsidization and financial transfers to the agriculture has been declining both in national and international levels. Official development assistance for agriculture provided by the OECD countries and unilateral agencies fell from 9.4 billion dollars in 1980 to 3.5 billion dollars in 2000. Development assistance declined in relative terms, from 18 percent of total assistance by OECD countries in 1980 to 7 percent in 2002. The World Bank funding for agriculture fell from about 2.5 billion USD per year in the early 1990s to less than 1.0 billion USD in 2001, before recovering to 1.5 billion USD in 2004.

In Turkey, similarly, there seems a fluctuating supporting from year to year, but the total transfer amount has declined in the last couple of years. In 2006 the rate of budget was about 7 percents in total, accounts for 2,4 million Euros. The level of transfers were about 4 to 5 times less than the EU inspirations[24]. It can be estimated from the current political and economic conjuncture and due to the antecedent commitments, financial support of the agricultural sector would continue to fall down.

[24] According to the 2004 Progress Report dated 06.10.2004, apart from 2,3 billion Euros for Rural/Regional Development; Turkey has been suggested for budgeting around 9 billion Euros; 8 billion of which is for Direct Payments.

Behaviour in allocating these financial resources is also constitutes problematic area. In Turkey along with its special weather, geography and structural characteristics which are not only causes weaknesses but also opportunities; the share of R&D spending accounted for 0,2 to 0,4 percent of the total transfers to agriculture. According to Akder (2003), this indicates the myopic foresight of Turkish Governments.

The overall picture about Turkish agricultural sector presented above demonstrates, by all means, an unrestful process of restructuring. Under the discussed conditions, the most important aspect is about the 'rural people' who are not only the object but also the subject of the transformation process. In accordance with our development understanding, by defining utility as 'capacity to act' rather than 'wealth', the basic indicators regarding the characteristics of the rural people might be directive.

Table 2.16. Job Status of Agricultural Employment, 2000-04

	Employed (1,000)				Share in Total (percent)			
	2000-01	2002	2003	2004	2000-01	2002	2003	2004
Total	7,929	7,456	7,165	7,400	100	100	100	100
Wage Earner	393	395	389	499	5	5,3	5,4	6,7
Employer or Self Employed	3,314	3,156	3,130	3,139	41,8	42,3	43,7	42,4
Unpaid Family Labor	4,223	3,905	3,646	3,762	53,3	52,4	50,9	50,8
Male	4,285	3,783	3,719	4,101	100	100	100	100
Wage Earner	274	240	268	337	6,4	6,3	7,2	8,2
Employer or Self Employed	2,749	2,519	2,552	2,705	64,1	66,6	68,6	66,6
Unpaid Family Labor	1,263	1,024	899	1,059	29,5	27,1	24,2	25,8
Female	3,644	3,673	3,446	3,299	100	100	100	100
Wage Earner	119	155	121	162	3,3	4,2	3,5	4,9
Employer or Self Employed	565	637	578	434	15,5	17,3	16,8	13,2
Unpaid Family Labor	2,96	2,881	2,747	2,703	81,2	78,4	79,7	81,9

Source; Akder, 2005.

Job status of the agricultural employment provides clues about the structure of employed labour force in the sector. Salaried workers in agriculture make up only about 5 percent of the employment. Half of the labour force shares the household income as "unpaid family labour". Major contributer to this unpaid labours is females. About 70 percent of the total female labour force is presented in agricultural sector. Additionally, employed females presents about 45 percent share in agricultural employment where 28.5 percent are illeterate. The education levels in the sector also indicate the low contribution of the labour force to the capability function in rural lifes. Women would face an off-guard position in case of a harsh transition.

Table 2.17. Employment and Education, 2003 (percent)

	Illeterate	Literate-no school	Primary	Junior High	High School	Higher Education	Total
Agriculture	18,1	6,1	65,0	6,0	4,4	0,4	100
Male	8,5	6,5	69,7	8,0	6,7	0,6	100
Female	28,5	5,8	59,9	3,8	1,9	0,1	100
Manufacturing	1,2	1,1	51,9	15,1	23,5	7,2	100
Construction	2,6	2,6	58,2	13,8	15,8	7,2	100
Trade and Services	1,4	1,1	34,2	13,9	28,2	21,3	100
Total	7,1	2,9	48,8	11,4	18,8	11,0	100

Source; Çakmak, 2004.

Despite significant decline in the last two decades, illeteracy in agricultural employment remains as high as 18 percent, compared to 7 percent of all employed. One of the most important determinant in becoming competitive in agricultural markets depending upon the availability of young and educated labour force in production, is not confirmed in the case of Turkey.

In the year of 2007, the general perception for most of the rural dwellers in Turkey might be defined as being in a position of desolateness. Even, the Prime Minister Erdoğan berated the farmer who said “Your politics made my mother cry!” in Mersin by saying “Take your momma, get you gone!”. One might says that, there seems their villages are the only place for them to return, after all. During decades they are somewhat passivizated and unlike the former generation of urban migrants, rural dwellers can not benefit from the creative power of informal systems which was decided as a leading mechanism for survival in the urban areas. (Işık and Pınarcıoğlu, 2004). It is generally accepted that the peasant behaviour is directed through risk reducing rather than profit maximazing. On the other hand, the organization and management of the agricultural sector has not been well-established, therefore the way of being in production and business is mostly hold down by sector’s informal relations and techniques. By the new comer regulations go into effect, there might be encountered with harmonization problems which could only be overcomed by radical changes in the mindsets of actors. Unfortunately, because of the reluctant government behaviour in taking over the political responsibilities in such reformist periods, agricultural producers or in more extensive means the rural households are, by Ertürk’s (1998) saying, increasingly pulled into a cashed nexus in reproducing their livelihood, the rules of which are too alien to their sphere of know-how.

The feeling of being stalemated is basically originated from the discourses mentioned above and also access to the public service and goods in rural areas are essential factors for safe living conditions.

Table 2.18. Social Security Coverage and Age Distribution of Labor, 2003 (percent)

	with Social Security	Age				
		<35	35-44	45-54	55-64	>64
Agriculture	8,9	39,1	20,6	18,5	13,7	8,1
Male	16,3	36,9	19,7	18,7	14,9	9,8
Female	0,8	41,4	21,5	18,4	12,4	6,2
Construction	36,2	49	29,9	17,1	3,4	0,5
Trade	57,8	58,9	24,2	12,4	3,4	1,1
All Employed	48,3	50,4	25,1	14,9	6,5	3,2

Source; Çakmak, 2004.

The social security coverage in agricultural sector is the lowest in all sectors with only 9 percent. Considering nearly non-existent agricultural insurance schemes, the agricultural workers are fully dependent on returns from production activities and despite the recent implementations in the organization of health sector, most of them have been deprived from the state supported health services. This situation seems to be compensated by the relatively young agricultural workers given the pattern of agricultural production (Çakmak, 2004).

Along with the problems arising from the structure and characteristics of the agricultural employment, availability of their “ability spaces” and utilization from public goods and services; they have also been suffered from low capital intensities and rising risk-open areas as soil degredation and global warming. In the next section, we are going to investigate the debates on rural responses under the restructuring process both in agriculture and country economics.

CHAPTER III

ADAPTIVE PROCESSES AND TRANSFORMATION OF RURAL AREAS

Rural area implies a living formation. They have been formed throughout the history in their peculiar local contexts, by the result of cultural, social, economical and political accumulations. The arising threat of "manless rural spaces" has become one of the very precision of the masses of people by the ongoing restructuring process that we have defined in the previous section. The significance of agriculture in this content goes beyond of only being an economical sector or an occupation for those people. On the other side, however, it has been changing, transforming and being transformed like all other production formations. Agriculture has been performed all of those by not only an interaction with all other earthy factors but also depending upon to the behaviours and decisions of people who are the very *subje's*. Although the emphasis is over the determining characteristic of the new players and dynamics, nevertheless no one can anticipate that the people in the rural areas has come to an end in developing capabilities for the actualization of their own life's. The transformation paths of the rural areas would vary widely, as has been before, and in the last instance local context will matter. While developing a future design in rural areas, the critical issue is who and what do we focus on for making the process more readable. Finally, encompassing these people in attempting to develop intervention models and tools appears as the main objective.

In Turkey in the 1980s, after the initiation of market reform policies, the results of which were described by the international financial institutions[25] as an "undoubted success", the overall economic environment substantially changed. Particularly after the 1990s the country have undergone severe economic crises. The crisis in Turkey has been the worst of its modern history. In 2001 crises, the value of the Turkish Lira was almost halved within a week. The people lost one third of their savings, who had invested in the domestic currency.

[25] Turkey, in particular, has been one of the two largest recipients of World Bank structural adjustment loans, which were used to foster free market reforms. It has received over one-third of the Bank's all policy-based lending in the 1980s (Öniş, 1998).

Çalışkan (2003) described the situation as; "Approximately one million workers, just about five percent of the total working population, lost their jobs and working class income was halved in real terms from the last year. Inflation jumped over eighty one percent and the GDP shrunk 9.4 percent ". This performance was argued adumbratively by some of the economists as of course something of a miracle.

While agricultural sector had been experiencing a comprehensive worldwide restructuring, the crisis had been seen as an important opportunity for introducing the reform programme in order to overcome the chronical structural problems of the Turkish agriculture. Only in such extraordinary conditions, it could be expected that people can bear to the budget restrictions. In addition, crisis might present new opportunities for people, encourage entrepreneurship and could result in a 'creative destruction' depending on the effective management of the crises environment.

After seven years of implementation period, considerations about the current situation of the rural areas and the foresights about the issue has generated a cloudy discussion atmosphere. On the one hand, the government has been criticized for not undertaking the political responsibilities and poor performance in explaining and governing the reform movement (Akder, 2003), on the other hand, the agricultural sector, namely the farmers, have been accused by being unproductive, unwilling and state-dependent[26]. Farmers are accepted as lacking the assets necessary to take advantage of new opportunities presented by free market environment.

Sentiments about the issues of rural transformation and rural development have been shaped and emphasis have been put on some key issues; the extent to which we can rely on agriculture as the engine of rural development, the future viability of small farms, the potential of the non-farm rural economy, the challenges of new thinking on poverty; participation, and implementation problems. Especially after the 2000s, the rural development discussions have been considered important for poverty reduction policies. 'Rural poverty' becomes the leading theme in international development policy agenda and rather than being subject to development problematic considering rural areas as a living

[26] Yet more came from Altan, in his speculative discussion he wrote, "Turkey blinded itself so as to see its problems: The strongest structural impediment preventing us from developing is peasantry and agriculture" (Altan, 2001).

formation, alleviation or total eradication of the worst forms of poverty in rural areas have been highlighted. Along with the urban bias development understandings and the declining economical interests on rural regions, billions of people encounters of being excluded from socio-economic life.

Farmer communities have always been thought of as dormant, unchanging and static. Volumes of social and historical research have sustained this position, helped create an urban bias, and presented the city as the dynamic opposite of static rural. Particularly after the mid-seventies it has become commonsensical to think that farmers can develop only if they are left alone; without the guidance and support of the state.

After a long rambling period, Çalışkan (2007) argued that the scholarship has shown that farmers tended to move not towards the market but towards increased self-provisioning and protection from ongoing policies once their economies took successful steps towards free market reforms. Furthermore, for the first time in human history, social researchers began to discuss whether the process of 'disappearing peasantries' has been globally underway. Çalışkan added on that, "*it seems as if the reforms aiming at improving the economic conditions of the global countryside entailed getting rid of small farmers, falling short of releasing their productive potential by rolling the state back*" (Çalışkan, 2007).

From an another standpoint, however, it has been demonstrated particularly during the last two decades that the rural areas have been changed dramatically. At first, agriculture has lost its relative importance in rural areas. The importance of agricultural income has declined in the rural households income bases. The integration of rural and urban areas with the rapid expansion in transportation and communication systems, have caused remarkable developments in the restructuring of the rural areas. The classical meaning of the village has disappeared and isolated spatial units could not been observed in many of the ethnographic rural studies. Income bases of the rural households have been gradually diversified and within the diminishing importance of the state's agricultural subsidies it was asserted that the 'aggrieved peasant' image does not seem to be fitting for most of the rural areas (Hann and Hann, 2001). Keyder and Yenal (2004) stated that, throughout the specified trends in rural areas and the urban conditions become harder, rural households will much more engaged with their homelands and attempt to make it liveable.

Keeping people down on the rural areas is widely regarded as less costly in comparison with creating job opportunities and providing convenient facilities and services in urban areas (Behar et. al., 1999). In certain times fear of uncontrolled population movements made governments intervene on rural lifes especially by means of agricultural subsidization policies. That kind of intervention strategy was regarded as the most limiting factor for the farmers of the less developed rural areas by inhibiting their capability improvement and restraining the development of essential coping with strategies (Işık and Pınarcıoğlu, 2004).

Regarding the condensed time section, from the year of the crises and the provision of the reform policies till now, there have been considerable changes in the rural areas. But the mechanisms through which global and national economic or political convulsions in company with the agricultural reform interventions have been translated into local impacts and responses remain unclear. The possibility that the transformation of economic systems, including their impact on stratification systems, often contains interesting mixes of elements that perhaps would not have been predicted beforehand. For this reason the notion of 'path alternatives' is preferable to 'path dependencies'. Comparative dimensions, historical depth, and local level research in its broader context, are thus important elements in the understanding of how rural dwellers, in various places and social groups, experience and respond to the current restructuring process.

Rural communities and producers may reacted; by diversifying their rural resource base by developing non-farm activities and indulging in rural-urban labour mobility, or by intensifying food crop agriculture and switching to cash-crop farming or even by withdrawing into subsistence agriculture after completely switching their main income source to non-farm activities. At the end of these adaptive processes, increasing rural-urban interaction may even engender a process of rural 'in situ' urbanisation; urbanisation without a massive dislocation of the population. In some of the contemporary media resources informants mention about such circumstances happening at the outskirts of the small towns which would be functioning as places of temporary inhabitation.

The possible transformations determining the fate of rural areas would occur depending upon the consequences of different struggle areas. Changes will probably be identified through market forces, state interventions and socio-economic struggles. In making the uncertainity conditions more consistant, the rural development interferences not by the invisible hands

but possible external actions by visible hands to reduce possible mechanism distortions would play the great role[27].

The blending of formal and informal institutions to facilitate the adaptation of households to changing conditions is a point articulated in Joseph Stiglitz's critique of purely market-driven economic development strategies[28]. The essential point, he argues, is not the replacement of informal institutions by formal ones, or vice versa, but rather to find ways that formal institutions can complement the strengths of pre-existing informal institutions.

The process also involves changing perceptions of opportunities, constraints, and incentives that result in a shift in household economic behavior. When rational actors are faced with insecure production conditions or asymmetric information, they will rely upon highly dense informal social-helping networks that are based on very strong bonds of kinship or friendship. Additionally, rural residents might regarded as behaving like foreign investors who hesitate to put their capital into transitional economies until they have a reasonable degree of certainty that contracts and other institutional arrangements of a wellfunctioning market economy will be enforced.

Rural practices will be shaped in accordance with the behaviours and strategies of adaptation on the one hand which might be considered as a long haul socio-economic restructuring and, survival and subsistence strategies of the others. The process will also bring out the winners and the losers. The asset endowments of the rural households and capital accumulation and management in rural areas containing physical, human, social and institutional capital conditions should be taken into consideration. How those variables affect household behaviour, in particular the formation and use of social networks, as well as how social capital variables affect households' movement area appear as the key research areas.

[27] It has been generally observed that due to small market size, high risks, and information failures, private services have been slow to replace public services in rural areas.

[28] Joseph E. Stiglitz, *Globalization and Its Discontents* (New York: Norton, 2002).

3.1. Need for a Rural Policy

Globally, 1.2 billion people live in 'extreme poverty', they subsist on less than one dollar a day. According to the IFAD report on the situation of rural poverty, in 2001, it is told that, seventy five per cent of the poor work and live in rural areas; 60% are expected to do so in 2020 and 50% in 2035. Country datas from poverty surveys in the 1990s also indicated that, 95% of the poor are rural in Uganda, 89% in Bangladesh, 82% in Kenya, 78% in India, 69% in China and 48% in Brazil (Ashley and Maxwell, 2001).

The economic disadvantages of the rural areas has some common features and these could be summarized as; *i.* Low-density settlements and geographical isolation, implying poorly funded public sectors and costly provision of basic needs services, *ii.* Lack of diversification in economic activity, implying high income exposure to sudden displacements of employment, *iii.* Low-skilled labour force employed in low wage traditional industries that face enhanced foreign competition with progress in globalization, *iv.* Declining employment in resource based sectors, and *v.* Rigid social stratification that limits social mobility for specific groups of citizens (Galston and Baehler, 1995 cited-in de Janvry et al., 2002)

In order to understand what has been going on in the rural areas and getting over the problems of the people living at those areas, agricultural development interventions and policies are not sufficient. Rural economics and the design of rural policies to achieve rural development constitute a broader subject than agricultural economics, with spatial as opposed to a sectoral definition. The fields of application of rural economics include resource allocation by households and their choices of income strategies, the emergence and performance of agrarian institutions, income levels achieved by specific categories of rural inhabitants, poverty and inequality, income and food security, the satisfaction of basic needs which in particular refers access to public goods and services such as health and education. There can also be mentioned about intergenerational equity, and the broad characterization of the quality of life for rural households which includes features such as individual freedoms, the range of available opportunities and capabilities, community relations and congeniality, the rule of law and respect of human rights and political rights (de Janvry et. al., 2002). Rural economics requires focusing importantly on the heterogeneity of rural populations that inhibit a particular region since the determinants of welfare are highly

varied. In respect to evaluating the poverty in rural areas, different units of rural regions may need different poverty definitions.

The World Bank's World Development Report in 2000 adopted a multi-dimensional definition of poverty, and had a better-balanced triplet: opportunity, empowerment, and security. 'Opportunity' mainly refers to growth, with emphasis on making markets work better for the poor, and on how to expand the assets of the poor. 'Empowerment' is about making state institutions responsive to poor people and about building social capital, and 'security' is about managing risk and reducing vulnerability.

Large segments of smallholders particularly in the developing countries were at a clear disadvantage in facing the challenges of competativeness relative to commercial farmers due to low quality assets, market failures for credit and insurance, limited access to new technologies and information, and high transaction costs on markets. High transaction costs are identified as insufficient and unequal access to information, imperfect competition, externalities, and state failures to provide public goods. With such market and state failures, initial asset endowments are considered as the critical factor of affecting the efficiency of resource use and thus the well-being of households (The World Bank, 2007).

The variety of assets affecting the performance of the rural poors at the household, community, and supra-community levels can be classified into four groups (Khan, 2000); their physical assets include the natural capital; private and common property rights in land, pastures, forest and water; machines and tools and structures, stocks of domestic animals and food, and financial capital such as jewelry, insurance, savings, and access to credit. The human assets are the labour pools with their age, gender, skills, and health in the household and communities. The infrastructural assets are the publicly and privately provided means of transport and communications, access to schools and health centers, storage, potable water, and sanitation. The institutional assets include the legally protected rights and freedoms and participation in making decisions at the level of household, community, and supra-community. The first two categories of assets are largely regulated through formal and informal networks between individuals and communities.

IFAD (2001) declared five aspects as having critical importance for understanding the challenges that rural poverty eradication interventions are facing. Firstly, it is told that

smallholder production and production of food staples play a critical role in the livelihoods of the rural poor. Secondly, reducing rural poverty requires better allocation and distribution of water to increase the output of staples. Redistribution in favour of the rural poor was required as the third aspect for achieving the poverty target. Fourth gave special attention on the situation of the women. At last, participatory and decentralized methods was considered as an effective ways for rural poverty alleviation. Underlying all these themes is the fact that labour-intensive approaches were regarded appropriate to rural poverty reduction.

Not only in the less developed and/or developing countries but also in more developed countries rural development interventions are needed. Even in United States, per capita income in non-metropolitan counties was 26 percent below that in metropolitan counties in 1994 (de Janvry et. al., 2002). The problem of inexpugnable rural underdevelopment and through which policies the state should intervene to rural lifes have experienced an evolutionary process. Coming up to the 1990s, following the general failures of community development, redistributive land reform, and integrated rural development under state-led initiatives, and the retrogression of rural areas under adjustment policies and descaling of government interventions; there appeared new perpectives for rural development in the context of; *i.* the recovery of growth following the years of debt crisis and structural adjustment, and *ii.* the theoretical progress made by rural economists in the understanding of the behaviour of households and communities, the logic of agrarian institutions, and the endogenous determinants of regional growth (de Janvry et al., 2002).

Ellis and Biggs (2001) summarized the historical phases in rural development practice in particular focus on developing country transitions since after war years as, from community development in the 1950s to the emphasis on small-farm growth in the 1960s; continuing small-farm growth within integrated rural development in the 1970s; from state-led rural development in the 1970s to market liberalisation in the 1980s; process, participation, empowerment and actor approaches in the 1980s and the 1990s and emergence of sustainable livelihoods as an integrating framework in the 1990s; and finally mainstreaming rural development in poverty reduction strategy papers in the 2000s.

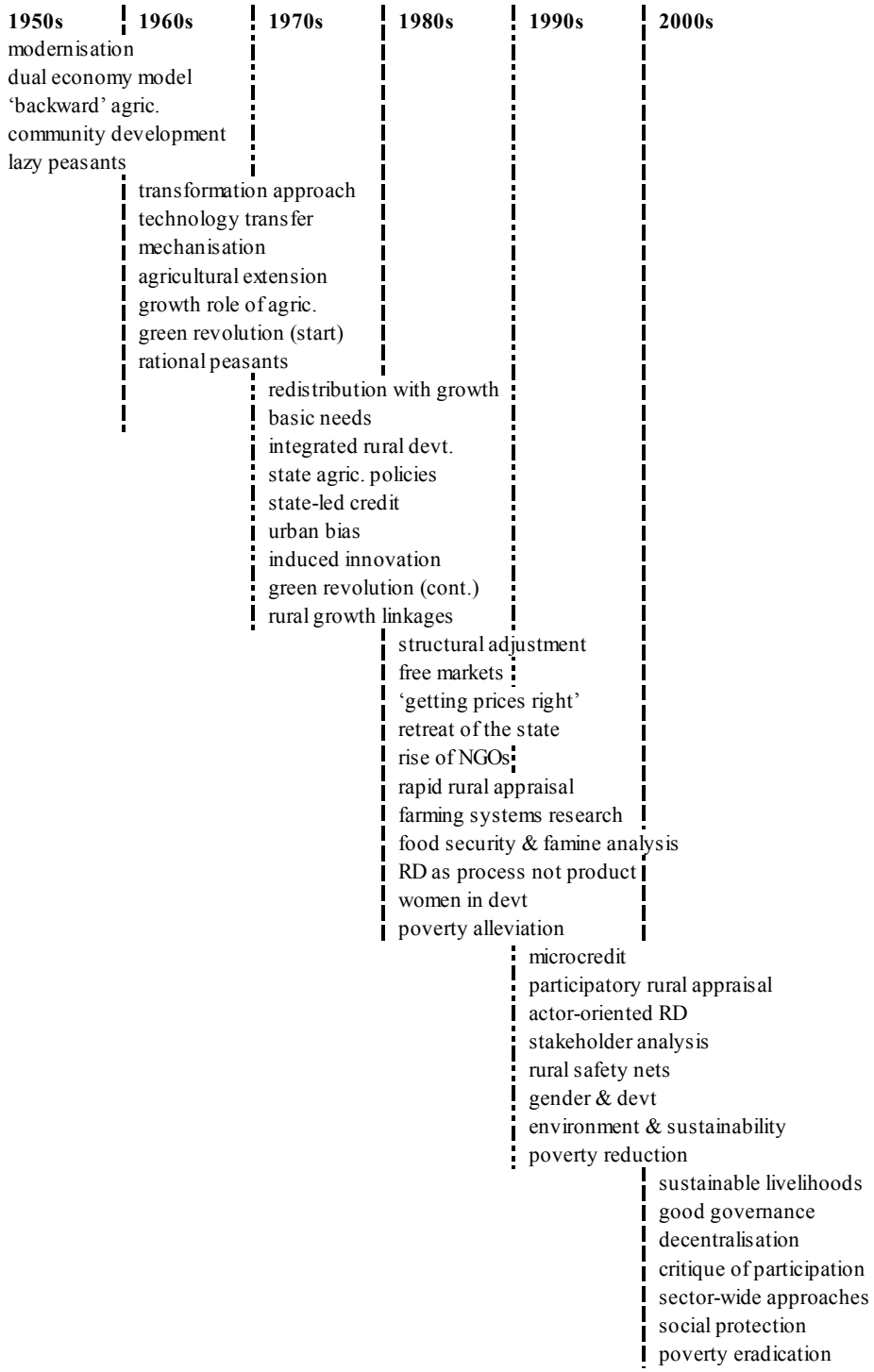

Figure 3.1. Rural Development Ideas Timeline
Source; Ellis and Biggs, 2001.

After the long-standing rural development practices, Ashley and Maxwell (2001) identified the terms of a successful rural development strategy as: *i.* recognising the great diversity of

rural situations; *ii.* responding to past and future changes in rural areas; *iii.* being consistent with wider poverty reduction policy; *iv.* reflecting wider moves to democratic decentralisation; and *v.* making the case for the productive sectors in rural development, as a strategy both to maximise growth and to reduce poverty. The most important discern in the meantime is the recognition of rural areas as highly heterogeneous. Most rural households have a diverse and geographically dispersed portfolio of income sources and therefore they pursue multi-locational and multi-occupational livelihood strategies. Regarding their path alternatives, the common acceptance is that many rural households move out of poverty through agricultural entrepreneurship, many through the rural labour market and the rural nonfarm economy. Additionally, many by migrating to towns, cities, or other countries. The three pathways are functioned as complementary (The World Bank, 2007); nonfarm incomes can enhance the potential of farming as a pathway out of poverty, and agriculture can facilitate the labour and migration pathways.

3.2. What Has Been Happening in the Villages?

The debate on the destruction of the 'natural economy' of the peasant extends over the nineteenth century and found its Marxist expression in Kautsky's *Agrarian Question*. The basics of this approach was that within the transition from peasant economy to petty commodity production, the inevitable destruction of the peasantry happens. The market mechanism is uncritically accepted as the determinant of the transition from peasant to petty commodity production and it is suggested that the peasant relations end when the market replaces the community as both the source and the measure of economic reproduction (Keyder, 1993). Keyder opposed modernist and marxist statements, the former was mainly interested in the impact of the destruction of the rural society on agrarian classes;

> *If petty commodity production does prevail this is due to the political struggle unfolding in favour of small ownership rather than a bias in market relations towards one type of property relations versus another. The factors which determine whether capitalist agriculture or petty commodity production emerge out of the peasant background are those mediated by and directly emanating from the state. Essentially, they result from the class struggle; although it must be remembered that the actions of the state do not directly reflect the balances obtaining in the class struggle* (Keyder, 1993).

At least in Turkey, experience facilitate that peasantry and/or small ownership could still exist. Different localities have succeeded that by various mechanisms. With respect to small farmers, there have been mentioned about several features in prospering to survive and their comperative advantages. At first small farmers are accepted as efficient decision makers. Using family labour intensively is regarded as an another factor. In doing so they can avoid the supervision constraint of managing a large, hired labour force. They tend to be located in places that militate against mechanisation such as slopes. Therefore, they maximize return to land, which is the scarce resource for them. Another point is that they can participate successfully in marketing chains, either on their own, or with the help of co-operatives. They cause less environmental damage than large farms; and they spend more of incremental income on locally produced goods and services, thus maximizing growth linkages in rural economics (Ashley and Maxwell, 2001).

In a much more broader context, there has to be mentioned that rural areas had not been depleted. There can be several livelihood strategies distinguished in order to identify rural resistance. Rural households engage in farming, labour, and migration, but one of these activities usually dominates as a source of income. Some farm households derive most of their income from actively engaging in agricultural markets namely the market-oriented smallholders. Others primarily depend on farming for their livelihoods, but use the majority of their produce for home consumption namely the subsistence-oriented farmers. The labour-oriented households derive the larger part of their incomes from wage work in agriculture or the rural nonfarm economy, or from nonagricultural self-employment. Some households might choose to leave the rural sector entirely, or depend on transfers from members who have migrated namely the migration-oriented households. Finally, diversified households combine income from farming, off-farm labour, and migration (The World Bank, 2007).

The ongoing trend in income diversification is observed through various studies. In the transforming and urbanized countries, the share of rural income from on-farm activities and agricultural wages is between 27 and 48 percent. So, participating in agricultural activities does not always translate into high agricultural income shares. It is pointed out in recent surveys that non-farm sources account for 40-45% of average rural household income in sub-Saharan Africa and Latin America, and 30-40% in South Asia, with the majority coming from local rural sources rather than urban migration (The World Bank, 2007).

The migration dynamics in rural areas on the other hand, as an another strategy area for rural households, seems to reach a stagnation phase at least in comperatively industrialized countries. It is estimated in the last World Development Report 2008 that, about 575 million people migrated from rural to urban areas in developing countries over the past 25 years. Of these, 400 million lived in transforming countries, where migration flows increased to almost 20 million a year between 2000 and 2005. Share of the rural population in migration flows have been traditionally highest in urbanized economies, but they have fallen over 2000-2005 to an annual rate of 1,25 percent (The World Bank, 2007). On the other hand, in transforming and agriculture-based economies, the annual flow of out-migration steadily increased to 0.8 percent and 0.7 percent of the rural population, respectively.

During decades, rural dwellers have constructed different patterns of coping, inside the environment surrounding them includes both the natural environment and the cultural, social, and political environment created by other human beings. Their adaptive behaviour in response to the external dynamics have varied according to their local contexts. Modernist traditions of research have failed in taking the explanatory space of social actions into account. Social networking, cooperative relations and arrangements in household labour composition played considerable roles in their survival strategies. Stirling (1993) pointed out that both modernisation and marxist/socialist theories treated 'culture' as a set of economically irrelevant pleasures and custums and they considered tradition as 'irrational' practices and attitudes which were thought as factors for inhibiting progress. He also criticized the approach for advocating a universal road for happiness which is based on rational, egalitarian and selfless cooperation and equility, organized by justifiable public control.

While the previous strategies of the rural dwellers insured some achievement, whether the people which have still been a part of the 'rural problem' would resist the new problems and fulfill the necessities of the contemporary situation, or not, is not easy to forecast. Furthermore, making a study of choice mechanisms about agricultural production practices in rural areas needs two divergent goals to be combined; to determine the farmers' own conceptions of what they are doing and why and to study these decisions from an outsiders' perspective. Many tools of economics are designed to recommend ideal practices, rather than to describe the actual practices of farmers and criterias of choice mechanisms in farming.

Stirling (1993) noted the below statement;

> *The villagers of course always knew effectively about their own organisations; households, farming, marriages, villages, markets and relations with their State. But they have also learned an enormous amount about outside organisations of many kinds. They learn mainly ad hoc what it is in their interest to know, what helps them to solve the next problem. They can only do this within the limits of their existing knowledge, perceptions and experience; and of their own morality. Enriching their household, or doing favours for kin, friends and allies is a moral duty; far more important than observing specific laws or formal rules, or pursuing the planned purposes of other people's organizations* (Stirling, 1993).

Today, people who are doing new jobs, operating in new organizations and social networks could be considered, a more or a less, living in new cognitive worlds. In a village, the occupation of peasant is not an identity. A man is not what he does but more the owner of a specific house or specific land. In the town, on the contrary, a man is what he does. Stirling (1993) points out that, people learn all kinds of skills and find all kinds of jobs, and by doing so, they become new persons with different identities, and "*they now belong, both immediately and potentially, to a much more complex social structure, with many new kinds of social relations; and with different futures*" (Stirling, 1993).

Even in very remote regions, the isolation of rural populations is rapidly breaking down. While Barlett (1980) considers farmers as not actually forecasting the future but rather formulating expectations of the future based on recent past experiences, the contemporary risky environment would necessitates rapid and flexible positionings. There would have been short-range choices of individuals as adjustments to their environments which can be considered as adaptive strategies and on the other hand the long-range changes in adaptive processes that result from these choices.

Answering the queries positively that if it will be possible to develop a new farming practice and by doing so, can rural phenomenon quit itself from being a 'bench' for 'urban game' could be attainable by only confirming the enrichment of the farmer's capability spaces and by reducing the uncertainities.

3.2.1. Risk in Agriculture and Rural Development

Increasing attention has been given in recent years to risk and uncertainty in agricultural decisions and research has shown that household resources are closely connected with the responses to risky or uncertain choices. Decision-making takes place in an environment of imperfect knowledge of the future and is associated with risk which is normally defined as 'uncertainty of outcomes' resulting in losses negatively affecting an individual's welfare (Anderson, 2003).

In the working document of European Commission (2001) the most important risks particularly associated with the farming practices were classified in a six stage taxonomy. First is the 'human or personal risks' which are related to illness or injury of the farm operator and/or its labour force. 'Asset risks', secondly, are associated with theft, fire and other loss or damage of equipment, buildings and other agricultural assets used for production. Third one is the 'production and yield risks' and these are often related to weather, such as excessive and insufficient rainfall, hail or extreme temperatures, but also include risks like plant and animal diseases. Fourthly, 'price risk' is explained as the risk of falling output and/or rising input prices after a production decision has been taken. 'Institutional risk' is associated with changes in the policy framework which intervene with production and/or marketing decisions and in the end negatively affect the financial result of a farm. Institutional risks as the fifth, also include contracting risk. At last farmers might face with 'financial risks' including rising cost of capital, exchange rate risk, insufficient liquidity and loss of equity.

Mainly, two types of risk management strategies are distinguished; one of which is 'on-farm' strategies. The strategy concerns farm management and include selecting products with low risk exposure, choosing products with short production cycles, diversifying production programmes or holding sufficient liquidity. The second type of risk management strategy is 'risk sharing' strategies including marketing contracts, production contracts, vertical integration, hedging on futures markets, participation in mutual funds and insurance (E.C. 2001). The adopted strategy will differ according to the relationship between the various risks faced, the costs of the various instruments, the farmer's income and his capacity to bear

risk as well as his risk perception. Risk perception of the farmer varies depending on the farmer's own experience and on the degree of risk aversion[29].

Concerning the very vulnerability in rural areas as an another aspect of the issue, Kahn (2000) urged on variety of mechanisms to manage risks that rural poors and/or potential losers have been facing with. He described three aspect of risk management; reducing risk, mitigating risk, and coping with the effects of risk. Additionally, there are two mechanisms as informal and formal, for each of three aspects. The informal mechanisms are at the household and community levels, and the formal mechanisms involve the market and public sectors.

Table 3.1. Mechanisms to Manage Risks

Risk Strategy	**Informal Mechanisms**		**Formal Mechanisms**	
	Individual/Household	**Group/Community**	**Market Sector**	**Public Sector**
Reducing Risk	Preventive healthcare, Migration, Diversification of income sources	Actions for infrastructure and common property management		Sound macroeconomic, educational, public health, infrastructure, labor, and environmental policies
Mitigating Risk	Land and crop diversification investment in capital (physical and human) extended families, sharecropping, buffer stocks	Associations for occupations savings and loans, associations social capital (reciprocal exchange networks)	Savings and loans in banks, microfinance, insurance for old age and disability	Protection of property rights, liberal trade, agricultural extension, pension systems, unemployment and disability insurance
Coping with Effects of Risk/Shock	Sale of assets, loans from money-lenders, child labor, reduced food consumption	Transfers from social networks of mutual support	Sale of financial assets, loans from banks and other financial institutions	Social assistance, workfare, subsidies, social funds, cash transfers

Source; Khan, 2000.

Risk is reduced informally through diversification of income sources, preventive health care, management of common property and infrastructure, and migration. The formal mechanisms

[29] In a survey on risk perception in the Dutch livestock sector, price risk was identified as the major source of risk, followed by personal and institutional risk. Financial risks were perceived as the least important. According to an another survey which was carried out in U.S., it was showed that risk perception differed depending on the production programme. Wheat, corn and soybean producers, for example, were most concerned about yield and price risks, whereas livestock farmers perceived institutional risks as particularly high (E.C. 2001).

are all in the public sector for risk reduction, including sound policies on macroeconomic management, labour and product markets, environment, and provision of infrastructure and services for basic education, health care, sanitation. Risk can be mitigated informally by building buffer stocks, investing in human capital, diversifying land and crops, and forming community associations for savings and loans and networks for reciprocal exchange or cash transfers. The formal mechanisms can include both the market and public sectors, like banks and insurance in the market sector and the protection of property rights, microfinance, works program, extension service, and targeted subsidies on food or nutrition. However, these are either weak or nonexistent for the rural poor in most developing countries (Khan, 2000). Also it has to be pointed out that, the coping mechanisms are all very costly, even disastrous, especially for the individual households and communities affected by shocks.

While the vulnerable rural poors have a very low capacity to absorb shocks and potential risks have been endangers them by weakening their ability to get out of poverty situation, regarding that agriculture is becoming increasingly a business, it also has to be considered that farmers must be prepared to bear some risks. The forces of change has been precluding the image of "happy peasant"[30] by deepening the inequalities between farmers and opening up of the scissors between them.

As it has been mentioned before, farmers do not actually forecast the future, but rather formulate expectations of the future based on recent past experience. Presuming farmers as strict maximizers must consider that their decisions are based on estimated probabilities[31] and that their risk aversion fits utility curves (Barlett, 1980). It has to be concerned that, today, farmers have difficulties in taking rapid precautions against risks which are provided by external dynamics. For this reason, one of the most important subjective in the forthcoming period would be the inclusion of these farmers into formal risk prevention and management mechanisms. Nevertheless some research results justifiably suggested that, contrary to the expectation that farmers act on knowledge, in certain situations farmers must often act before they can know (Barlett, 1980). Profit is the reward for risk-taking

[30] This is about the story by Ulrich Beck (1992) of the happy peasant who, in order to maximize his individual interest, decides not to become a capitalist, in spite of the possibility of significant earnings, in order not to take the risk to find himself again in the initial condition, with just little more money, after hard work and loss of serenity.

[31] Some writers argues that these assumptions are incorrect, since farmers may not even be able to determine the probability of an outcome (Barlett, 1980).

(Anderson, 2003), therefore profit seekers in the business of farming, in direction of future openings, should have to behave through a long-term adaptive manner by developing their risk coping capacities.

3.2.2. Implications About Keeping Farmers Down On The Farms

Migration practices has been in progress for about half a century and the socio-economic composition in rural areas has considerably changed. Implementation of different migration strategies in community and household levels has also been resulted in diversified social structures in different rural regions. Apart from the multi-locational and multi-occupational rural dwellers, there have been also some who could have regarded as having only limited relationship with their rural nets. Therefore, while the actor and casting composition has been changing, the level of agriculture in the economical and social ranking of its importance has notably switched.

In terms of rural to urban migration, it is noted out in the literature that, does generally not tend to equalise incomes, between or within regions. First, the selective nature of migration, providing higher returns to the better-off and better-educated, prevents equalisation within areas of origin. Second, there are costs and barriers in accessing to information about opportunities and this tends to steer the gains of migration to the rich. Third, absence of the most productive household members leads to a lowering of labour-intensity. According to Lipton (cited in de Haan, 1999) it is '*socially maladaptive, especially in the medium run, while the rural workforce is growing much faster than other, scarcer... factors of production*'. Another factor is that the volume of net remittances is usually low, and finally, return migrants are likely to be the old and/or unsuccessful (de Haan, 1999).

Diversification of migration practices are motivated or determined due to four distinct factors (Rhoda, 1983). 'Origin factors' are generally identified by push and pull forces at the origin. Ilcan (1994) describes the major push factors or reasons that compel groups to migrate as poverty, low income, the lack of educational and medical facilities and the absence of sufficient arable land to support a growing rural population. The major pull factors on the other hand could be summarized as opportunities for employment and higher income and the availability of social services such as educational and medical facilities. The

reasons of rural pull factors are also valid for 'destination factors'. The third determinant is described as 'intervening obstacles' regarding both the origin and possible destinations (Rhoda, 1983). Distance is the most obvious one which consists physical and sociocultural distances. Physical distance is related to the time and cost of traveling to urban areas. Sociocultural distance includes differences between origins and destinations with respect to language, degree of modernity, religion, values and social behavior systems. Lack of information concerning opportunities and characteristics of potential destinations is related to sociocultural distance. In some cases, physical barriers and enforced migration restrictions also act as intervening obstacles to migration. Finally, there could be mentioned about 'personal factors'. Regarding the personal factors in decision making of migration, perceptions of origin and destination factors and of intervening obstacles are crucial.

Regarding economical motives are the arbiter, some models assume that people will migrate when the benefits outweigh the costs. Benefits of migration are defined as the present value of potential income gains resulting from the difference in income between origins and destinations. Nonmonetary benefits such as those arising from location preference also are included. The perceptions of expected income rather than actual wage rates affect migration decisions. Finally, according to 'intersectoral linkage model' which takes rural-urban interconnections into account, agricultural backward and forward linkages are regarded as generally inducing rural-urban migration (Rhoda, 1983).

> *Agricultural development is associated with increased demand for farm inputs; this backward linkage results in the growth of such urban activities as production and distribution of farm implements and machinery, fertilizer, credit and agricultural information. Forward linkages include transport and storage of agricultural commodities, agriprocessing activities and the wholesaling, transporting and retailing of agriculturally based products. Final demand linkages resulting from increased rural incomes are particularly important. Rural-produced goods tend to be income inelastic while urban goods and services are generally income elastic. Consequently, as incomes rise, rural consumers are expected to spend an increasing proportion of added income on urban goods and services* (Rhoda, 1983).

Evidence from various studies worldwide have shown that there is no generic causal relationship can be defined on migration regarding the characteristics of origins and characteristics of migrants, and also their reactions to agricultural development interventions, development of off-farm employment opportunities and provision of rural services.

Studies which mostly evaluated the 1960s and the 1970s data suggested that in Asian countries low incomes or low yields tend to have relatively high rates of out-migration. On the other hand, studies from Africa and Latin America revealed high rates of outmigration from rural areas with relatively high levels of income or education. Studies of rural areas in India, Columbia and New Hebrides indicated a positive correlation between high rates of rural out-migration and commercialization of agriculture (Rhoda, 1983). However, evidence from Turkey suggested a negative correlation (Findley, 1977 cited-in Rhoda, 1983).

With respect to the characteristics of migrants, Rhoda (1983) figured out an idealized relationship between rate of rural out-migration and level of individual or family socioeconomic status.

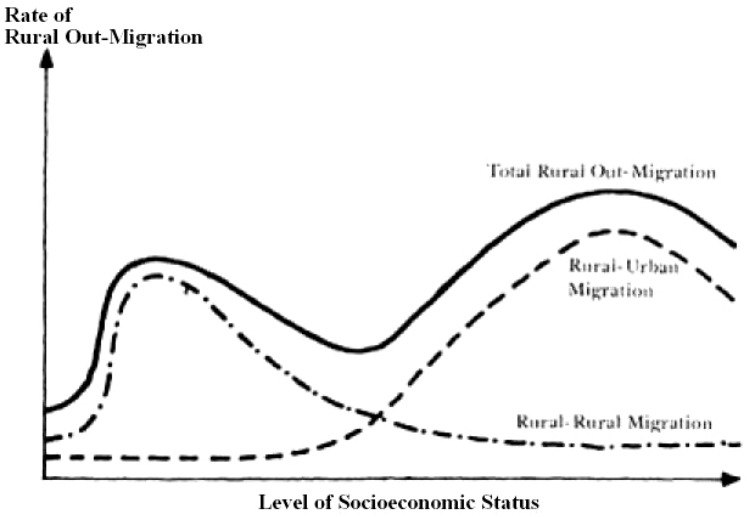

Figure 3.2. Idealized relationship between rate of rural out-migration and level of individual or family socioeconomic status.
Source; Rhoda, 1983.

The correlation appears to imply that as a rural family's income increases so does the probability that one or more of its members will migrate to urban areas[32]. Lower income groups tend to move to nearby rural areas, or perhaps small towns, while those from the higher groups are more apt to move greater distances into larger urban areas. Wealthier rural income groups are more apt to migrate or send their educated youth to larger cities in order

[32] Rhoda (1983) noted that the causal link between family income level and migration is ambiguous; income growth may stimulate migration or successful migration and remittances may lead to an increase in family income.

to take advantage of their higher education levels or modern skills. On the other hand, people from the poorer areas can only afforded to migrate short distances and were expected to search for either agricultural or unskilled work in nearby areas because they generally lack the education, skills and information needed to compete in larger cities (de Haan, 1999). According to the village studies in India, de Haan (1999) pointed out that the landless are least likely to migrate. The middle income rural dwellers, on the other side, might be less apt to migrate because they were fairly secure as farmers or petty entrepreneurs and they lacked the urban skills which might motivate migration (Rhoda, 1983).

Agricultural development interventions via land reform, green revolution and agricultural mechanization have had various consequences depending on the intervention specifity and characteristics of the implementation area. Whereas land reform practices in India and Latin America provided some support for declining migration due to equitable land distribution, land reform schemes in Peru and Iran broke up large holdings, decreased demand for hired labour and stimulated out-migration of the landless labour who did not gain from the reform (Rhoda, 1983).

Reasons for inequitable distribution of benefits from agricultural development interventions which generally increase fertility rates, are often defined as including unequal access to credit, greater political power of large owners, the focus of extension programs on progressive farmers, differences in risk-taking propensity and indivisibilities of related inputs such as tractors and tubewells. In country experiences it has been seen that while in some, there appeared an increasing demand for labour and so negative correlation for rural out-migration; in others there happened an eviction of tenant farmers. Actually, these evicted tenants were generally hired as landless labourers in the area or moved to other rural areas. Therefore, in both cases there can not be seen great migration movements to urban areas.

Regarding the provision of agricultural services in rural areas, in general, benefits from institutional credit and extension have accrued to large farmers. Most institutional credit organizations exclude small farmers by placing conditions on loans such as time consuming application procedures, collateral, land title and credit references. Although there is no emprical research focusing explicitly on the migration motive of agricultural services, it has known that this reality, on the one hand, leads the former ‘happy peasants’ who becomes very vulnerable because of the global crisis and other local factors, in a position of

desperateness and, on the other hand prevent the possible progressive producers on account of their various advantages, opportunities or motivations, from making new attempts in their businesses.

In some rural regions, because of the sustained gradual leaving of the areas, rural social capacities have substantially weakened. In terms of the absence of the productive members of the population, people recognized the risk that of 'deskilling of agricultural populations'. Similarly, de Janvry (2002) have noticed about the lack of a middle class as middle income and better educated adults have left for metropolitan environments with more abundant opportunities.

In many of the rural areas while the ongoing trend on ageing population creates some pessimism[33] regarding the future of agricultural productivity, the remaining youngs in their hometowns are also either unskilled or undesirous for sustaining agricultural production[34]. Another point is that, since land is still an important means of investment, land become concentrated in the hands of migrant families, who turned into non-farmers, which contributed to decrease in production because of passive usage or possession of land. Migration of upper classes also signifies, according to Boratav and Şen (1998) that, a process of agricultural disinvestment or of moving assets out of the rural economy.

3.3. Turkish Rural Areas in Transition

In Turkey, discussions on the problematique of transition in rural areas and in agricultural structures were dense especially from the 1960s till the 1990s, when the great urbanization was occured and policies towards open-market economy had been introduced. Most of the studies in Turkey during the 1970s and the 1980s, were concentrated on agricultural policies, commercialization, commoditisation and mechanization and their concentration on land, the ways of labour control and gender relations. Priority has been given to understanding the dynamics in villages and enterprise level, production relations and, social-structural

[33] The elderly or unsuccessful returners could also regarded for such pessimism.

[34] Throughout the field studies in the year 2007, the common ambience has been observed in several villages by the writer of this thesis. When it is asked that what the youngs are doing if they are not interested in their lands, the common answer in different regions is that they are playing *okey* in village *kahves*.

transformations in agriculture. With reference to these studies, there can be found support for Turkish experience in that the transformation paths were widely varied regarding their peculiar local contexts, therefore for some rural regions there can not be mentioned about the classical isolated and static villages. Many households has became multi-occupational and multi-locational and many became the new urbaners with very limited and in some cases rather passive relations with their hometowns. Additionally, there can be mentioned for others who has been expanding their living environment as one in the village and one in another in town, creates a dual settling. Consequently, for the ones who are still a part of rural life, throughout the adventure of 'striving of being in the rural', state interventions and social class struggles has played a great deal.

In the 1960s, Kıray hypothesised land and class polarisation through commercialisation, cash crop production, mechanisation, and credit usage processes. These processes were seen to operate in villages characterised by large land ownership, in places where polarisation was going to take place between the large landowner and sharecroppers (Akşit, 1993). Toward such anticipation implying a process of depeasantisation, however, as Akçay (1999) argued, small enterprises in agricultural production can survive by the elimination of productivity differences between the small and the large type of enterprises, by their endurance against economical crises by their self-exploitation, and maybe the most importantly because of the state's ascendant ideology in favour of small production. Even in Southeastern Anatolia, maybe the most characteristic place for expacting the defined polarisation, the successful resistance of the small farmers made political authorities to withdraw their supports from large landowners (Keyder, 1999).

Come up with the year 2007, the rural population accounts about 33 percent[35] of the total that it is halved from 1960. Even this percent dissembles the reality as it can be observed in field studies that in most of the villages at least one third of the total population declared in official statistics, are not actually settling at the place. This is generally because of the dual settling reality in Turkey. In harvesting season and in summer when the schools are closed, doubling or more of population increases has became the routine in these rural areas[36].

[35] The World Bank (2007), "World Development Report 2008: Agriculture for Development".

[36] In 2007 it was observed in places such as Aydın, Ordu, Çankırı and Adana that according to the unofficial results of the MERNİS (Central Population Management System) Registration Project most of the officials declared that they are expecting declines in population statistics ranging between 15 percent to 30 percent from

On the other hand, delusion in regard to rural population as not decreasing to an expected level because of these official statistical miss outs is only the one reason. Taking account of the actual rural residents, it can be asserted that the villages in some part of Turkey has lost their population as well as they can lose, and so the remainings are either the older or 'the poors'.

Table 3.2. Migrated Population by Places of Residence

Places of residence	**1975-1980**	**1980-1985**	**1985-1990**	**1995-2000**
Total	**3 584 421**	**3 819 910**	**5 402 690**	**6 692 263**
%	***100***	***100***	***100***	***100***
From city to city	1 752 817	2 146 110	3 359 357	3 867 979
%	*48,90*	*56,18*	*62,18*	*57,80*
From village to city	610 067	860 438	969 871	1 168 285
%	*17,02*	*22,53*	*17,95*	*17,46*
From city to village	692 828	490 653	680 527	1 342 518
%	*19,33*	*12,84*	*12,60*	*20,06*
From village to village	528 709	322 709	392 935	313 481
%	*14,75*	*8,45*	*7,27*	*4,68*

Source: www.tuik.gov.tr, last accessed at October, 2007

Not regarding the regional diversities, between 1995 and 2000 the most exciting figure is about the trend of migration from cities to villages as accounted for 20 percent of the total. This was defined by Özbay and Yücel (2001) as 'shuttle migration' which was a result of an increase in rural population who are moving to nearer cities or towns for temporary and seasonal works. Furthermore, it was due to the expansion of non-farm employment opportunities inside the rural areas. 'Shuttle migration' was widely happened at western and southern parts of Turkey where there have been comperative dynamism (Keyder and Yenal, 2004).

The reason that the rates of migration to cities occured below the expected levels is also because of, according to Keyder and Yenal (2004), disappearance of the broad distinction between the rural and the urban areas. Urban bias obsession caused to neglect considerable

---

the previous the year 2000 Population Census results. The most important reason for choosing to be counted in their villages is due to their willingness to affect mukhtar elections and also because of their moral adherences.

changes in rural areas and that taking some advantages of globalization process. Developments in communication and transportation facilities considered as making the rural areas more liveable.

Poverty situation in rural areas, according to the Turkish Statistical Institute's (TURKSTAT) annual "Poverty Study", can be considered as more frequent comperative to the urban areas. Complete poverty ratio in rural areas in 2002 was accounted 35,5 percent and deepened during the following two years as 37,1 and 40 percent respectively. In the year 2005 there happened a decline and accounted as about 33 percent, however the ratio of 'below 1 dolar per capita per day' was doubled indicating a deepening for the ones in the worst situation, if the statistics can be regarded as reliable[37]. Moreover, in 2002 36,8 percent of the people in agricultural sector in rural areas were poor. In 2003 the ratio increases to 40,9 and 42,3 in 2004 (Oral, 2006).

Table 3.3. Individual Poverty Ratio, Turkey

	Individual Poverty Ratio (%)											
	Turkey				Urban				Rural			
Methods	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005
Food Poverty	1,35	1,29	1,29	0,87	0,92	0,74	0,62	0,64	2,01	2,15	2,36	1,24
Complete poverty (food+nonfood)	26,96	28,12	25,6	20,5	21,95	22,3	16,57	12,83	35,48	37,13	39,97	32,95
Below 1 $ per capita per day	0,2	0,01	0,02	0,01	0,03	0,01	0,01	0	0,46	0,01	0,02	0,04
Below 2,15 $ per capita per day	3,04	2,39	2,49	1,55	2,37	1,54	1,23	0,97	4,06	3,71	4,51	2,49
Below 4,3 $ per capita per day	30,3	23,75	20,89	16,36	24,62	18,31	13,51	10,05	38,82	32,18	32,62	26,59
Relative poverty based on expenditure	14,74	15,51	14,18	16,16	11,33	11,26	8,34	9,89	19,86	22,08	23,48	26,35

Source: www.tuik.gov.tr, prepared from various tables.

The general characteristics of poverty situation in rural areas for the remaining residuals are not so surprising. Crises environment generally affect the chronic losers by worsening their conditions, but they can bear by limiting their consumptions, selling out their accumulations

[37] Many criticisms were declared against TURKSTAT especially after the announcement of the bulletin in 2005 on poverty; (16.02.2006 *Milliyet*).

or production equipments either in cash or estate, exploiting female labour and by getting into debt[38]. Aydın (2001) argued based upon his study in two villages; one in the Aegean region dealing with cotton production and one in the Central Anatolia; that the social activities such as journeys, visits to relatives, and gifts for *düğün*s can be rarely encountered particularly among the poors.

But what is more to the point is that, correspondence problem between the realities and their representations causes major misunderstandings[39] especially when studying the rural phenomenon. It has been known that statistical methods based on enouncing and sampling could be very misleading, and it might be worst in rural areas. Therefore the situation of poverty in rural areas might be worse or better than the declared official statistics.

While interests on rural studies has been declined, regarding the transition in rural areas, field studies in the last twenty years exhibits some important findings. In rural regions, geographical and historical factors, type of produced crops, level of integration with the regional product and labour markets and state policies have affected the formation of social and economic preferences (Sönmez, 2001). For most farm families, the fundamental decision framework has been formed on appropriate allocation of resource endowments as is labour-time, skills, and financial; to off-farm and on-farm work and nonwork activities. With respect to rural households, household background characteristics, household physical assets, social capital, transaction costs, livelihood development services, and regional variables have been the variables influencing increased participation to economic life and diversification of income bases.

Keyder and Yenal (2004) described the trends regarding the typical regions of Turkey as, eastern and southeastern parts still[40] have a potential to out-migrate and Central Anatolia has been stagnating. Western and southern regions, on the other hand has been facing with an

[38] Indebtedness is the most critical issue for most of the rural households. It enforces the permanancy effect of the crises in which poverty can not be overcomed even in longer terms.

[39] Comperability of the statistical indicators are the one another difficulty with respect to regional diversities. Hann and Hann (2001) argued that less mechanizated agricultural practice of tea production in Rize in comparison with the cereal production in Central Anatolia does not mean that they are more peasants rather than commercialised farmers because they owned fewer tractors.

[40] In recent years, there have been willingness in order to turnback to the region after a massive out-migration in the last 20 years between 1986 and 2005, one of the only reason bacause of "compulsory migration" accounts about 900.000 people to migrate from rural areas (Hacettepe Üniversitesi Nüfus Etüdleri Enstitüsü (2006); Akşit and Akçay, 1999).

upward trend in in-migration because of its comperatively dynamic rural economy. Commercialization of agricutural production, diversification of crop patterns and provision of incentives through state interventions on production of several cash-crops in particular regions generated significant effects. Production of tea plant in Rize became an equivalence factor for small farmers against traditional dependency on large landowners. Under the state's patronage many can achieved to increase their incomes by fraudulency and over production (Hann and Hann, 2001). In addition, apart from improvements in the wealths of both the elites and the small land owners, there had been an in-migration of labourers and sharecroppers, causes an increase in social stratification. According to an another study which was conducted in fifteen villages in Samsun, Sinop, Çorum and Van, while after starting production of tobacco and others from irrigated farming in Bafra, a town on Central Black Sea Coast at Samsun, out-migration to western cities stopped and the town had even become a center of attraction for seasonal workers (Ertürk, 1998). In Çorum, on the other hand, most of the rural households migrated to metropolitan areas and in most of the villages, schools were even closed because of the lack of sufficient population in school age[41]. Agriculture became only an extra source for their income bases. In Sinop, on the contrary, non-farm activities made contribution to household budget.

Sönmez (2001) pointed out that with reference to his study in a typical village at Black Sea Region specialized on hazelnut production, including the landless, all households had incomes from hazelnut production. Earnings from the production comprised about 24 percent of household's income, and by other agricultural revenues it reached at about 32 percent. However, there was a controversy between the amount of contributions from agricultural facilities and imputed importance in that. Priority had still been given to agriculture in livelihood activities and was regarded as the most reliable income source. While after hazelnut had became a monoculture in the region, the previous 'cereals markets' were entirely vanished. Instead, there appeared a special marketplace named '*karılar pazarı*'[42] arising from the fact that women domination on subsistance type of farming

[41] During the field studies in 2007, similar facts was observed in Çankırı; villages without a coffeehouse. This is the basic indication of manless rural spaces especially in winter.

[42] '*Karılar pazarı*' refers to a marketplace where women are the sellers.

whereas mans are responsible for the organization of market oriented agricultural activities[43] (Sönmez, 2001).

Evidences from the rural studies also underpins the fact that, synthesis of migration and non-farm activities has been the most important part of the survival strategies for the rural households and could identify the evolution of social stratifications and ways of transpositioning in that stratas. Sönmez (2001) presents that while in previous periods, the success had come from the strata of peasants who were actively dealing with agricultural production, later on the former sharecroppers and/or agricultural workers could save the revenues from outmigration and took steps towards being a capitalist by the help of their savings obtained at abroad. Hazelnut merchants operating in the city center were the two of those. Sirman (1987) was also exhibited similar results in her study of family businesses in cotton production, and built a stratification model. According to that model, while the 'poor peasants' could only afford to maintain cotton production by basing upon their family labour force, that is by self-exploitation; peasants from mid-stratum on the other hand, had to enforce non-farm income opportunities in order to become a 'rich peasant'.

Middle and large scale enterprises were either try to specialize on less labour intensive and less costly yield types (Sirman, 1987) or try to expand their lands by renting and/or sharecropping (Sirman, 1987; Aydın, 2001), small farmers on the other hand were either concentrate more on labour intensive production (Sirman, 1987) or by renting or sharecropping their lands they tried to manage their remaining time and labour force on non-farm income generating activities (Aydın, 2001). In regions which are mostly specialized in labour intensive type of production, rural permanent or seasonal outmigration have not been observed in high levels, but in most of the regions especially making dry farming, at least one or more member of the every household were working in non-farm sectors out of their villages (Aydın, 2001; Akşit and Akçay, 1999; Boratav and Şen, 1998). Boratav and Şen (1998) extrapolated with reference to their intensive study that;

[43] Local expressions just as *'fındık ayı erkek ayı'* and '*karı gibi tarla dörünmeye devam ediyorsun; fındık dik, cebin erkek gibi para görsün'* can be given as an example for the relation between commercialized farming and masculine culture.

> *Poorer rural groups adapt by migrating and richer groups adapt by disinvesting and shifting resources out of agriculture... But, every exchange consists of two sides and the "resource transfer out of agriculture" process appears to operate simultaneously with a process of increased concentration in land ownership* (Boratav and Şen, 1998).

Flight of capital which is generated inside the rural economy by the hands of tradesman was seen as the most hindering factor for the development of rural areas. As was shown by Aydın (2001), middle and rich peasants were invested intensely on commercial and financial sectors by public bonds, foreign currency and repo, and therefore leads up to downfalls in agricultural productivity. On the other hand in Turkey, engagement with the hometowns and lands have still been a priority. Moreover, land owners whose primary source of income had become non-farm activities, could have transferred cash for the agricultural operations (Sönmez, 2001).

Rural out-migration was regarded as a must by some rural economists for a "take-off" in development (Ilcan, 1994), and in fact in Turkish practice it has been proved that the small farmers could benefited from such movements (Akşit, 1999). Although the capital accumulations could have been transfered for land investments, in most cases, this was not created a dynamism for new developments in agricultural production and farming practices because of the passive and/or safe production choices. Speculative expectancies on land prices often made farmers to engage even more.

Because of the worsening conditions in urban areas and moral and speculative importance of land owning, living in rural areas has still been the primary choice. However, studies shown that for the next generations, urban alternatives are the prevalent desire. As Akşit and Akçay (1999) remarked, rural areas are not demanded, since for not being of production units but more of a formation of social existance.

CHAPTER IV

THE NOSTALGIA OF 'WHITE-GOLD' STORY AND THE AGONY OF THE COTTON SECTOR IN ADANA-KARATAŞ

4.1. Introducing the Issue

The main reason for the interest on cotton sector in Adana was both having regard to 'the plant' and 'the region'. Cotton is the peculiar industrial crop also for Turkey, located at the intersection of industrial, financial and agricultural relations of exchange and production that connect thousands of people to each other through routes putting agriculture, trade and textile manufacture in close contact. Adana on the other side, have been the primate city in *Çukurova* plain which is the geographical space that the cotton production have been conducted for centuries, especially since the nineteenth century. Adana throughout the history had times of 'rise' and times of 'fall' with regard to the events affecting its strategic position. In its late history, Berlin-Baghdad and Adana-Mersin railway projects and, development of export facilities via seaports generated significant transformations in social and economic environment in the second half of that century. Cotton becomes the leading factor of economical force for the city and is subjected to an other rise.

In the Republican period the city becomes a figure of wealth and profit[44] by calling 'the plant' as "white gold". In the 1950s, the first take-off period for the industrial sector which was also based on cotton related manufacturing. The city began to be commemorated with its famous industrialists basically operated in cotton sector. On the other side, for sure, these were the days of immigration and/or mobilization especially for the eastern origin people for harvesting or for working in cotton related industry and trade. Among these, some reckless entrepreneurs, having mercantilist motives, were taking up the risks and benefited from the opportunity environment (Aktan, 1999).

[44] The expression of "*Adana'ya kâra mı gidiyon aga?*" was commonly used since that times, and a good example for trade oriented motivations and mentality.

Adana has been the typical example for agriculture-led development experience. Urban economy has been dominated by cotton related industry and trade. The industrialists of the sector, henceforward, has diversified their investments in different fields of the economy. Although the urban economy is much more diversified in the last two decades, rural origin of the business-men and the agricultural origin of the productive activities has considerably affected both the operation of the economic and daily lifes. Seasonal routines of high engagement in cotton production have still been remaining and creating urban extensions with regard to both cotton related urban activities and daily rural visits of cotton producers or land leasers.

There have been many actors included in 'the production of cotton' in Adana, some was disappeared but many has still been activating; small landholder cotton producers, large landholder cotton producers, *aga*s, renters, sharecroppers, landless agricultural workers, seasonal agricultural workers, Armenian landowners and Jews, *Nusayri*s[45], *Yörük*s, *Kurd*s, *elci*s, traders, moneylenders, brokers, ginners, spinners, input suppliers, credit suppliers, ÇUKOBİRLİK and other producer organizations, and the losers and the winners. The casting of these actors and their behavioral structures in order to survive and/or adapt, has been shaped depending on both the external dynamics influence their economic decisions and the internal dynamics with regard to close contacts and new positionings among these people. They have been either gone out of the game, try to resist to overcome the negative effects of restructuring , or succeeded by developing their businesses or even uprised to an upper level either in the same sector or in the other.

In recent years, cotton sector in the region continually lose its cultivated area, labour force and therefore the overall importance. While textile sector has an important share both in the country's and the city's industry sector, cotton as the main staple has been facing with a declining production trend and import shares have been increasing. Total cotton cultivated areas at Çukurova have been declined approximately 65 percent since 1980 (Özüdoğru, 2006).

In one of the visit to Adana, when we were introducing ourselves and explaining that the reason for being in this place was for invastigating the state of rural poverty regarding the

[45] *Nusayri*s are the Arabian *Alewi*s.

recent negative trends in cotton production; one official said to us that " *you have came to the richest place, so you may have come to the wrong place!* ".

Adana was one of the prominent city and a role model for most developing regions[46] based on agricultural development. Most of the innovations could have been seen in farming practices regarding the city's comperatively longer tradition in agriculture and related economic activities. However, we knew that cotton had still been an important crop but had been blacken. The price downfalls and declines to more than its half in the last ten years (see Table 2.13). The country was experienced its most hurtful economical crisis only about six years ago and the impact has been further deepened for the farmers by the implementation of agricultural reform programme.

Regarding the price levels in the year 2006, approximately 60 percent of the net agricultural incomes from cotton production come from government subsidies. This was both an indicator of a state dependent productive engagement and also implies the low level representation of the plant's market value. However, the southern part of the Çukurova plain in Adana was still engaged with cotton, the primary crop of Karataş district.

In the forthcoming chapter, the thesis is going to concentrate on recent trends regarding the cotton sector by reviewing the market settings, trade policies and the overall organization of cotton production practice in Turkey. Invastigating on the issues that, how an agriculture-led development based on a dominancy of a single crop affected the regional settings and how the production of cotton has been performed are also going to be aimed to be clarified. Cotton producers and the other rural dwellers in the three typical cotton producing villages of Karataş and officials from various organizations who are those concerned in the cotton sector, are the contributers as opinion owners of the issue. In the last instance, what has really been happening at the stage is going to be researched. Is that really the wrong place?

[46] Chairman of Diyarbakır Merchantile exchange Market who was also the owner of a ginner and a spinner factory, informed us in a meeting about the lack of specialized technicers and need for transfers of experienced workers from Adana in order to employ in cotton related industries.

4.2. Cotton: Market Setting and The Future Envisagement for the Sector

Cotton is the largest revenue earning non-food crop produced in the world. Production and processing of the plant provide a partial or all of the cash income of over 250 million people worldwide, including almost seven percent of the labor force in developing countries (Gillson et al., 2004). In relation with the restructuring process in agriculture, the structure of power in the global cotton industry have been in transition. Global commodity chain analysis, in that manner, locates power along the chain and allow for clarifying the forces driving technology development, the way value is determined and future requirements in the chain. Traders are considered as of greater influence on chain functioning, decision making and the distribution of value, particularly in the cotton-to-textile chain (Greenberg, 2004). Regarding who these traders are, growing integration within the multinational agribusiness environment made it function in a more complex and differentiated way. Where it was possible and profit is maintained, there could have been vertical integration between input supply, production and processing, distribution and, marketing and selling stages (Greenberg, 2004). Traders in general, buy and sell, organize transport and offer price-hedging services. In the global scale, Greenberg (2004) states that, they are often vertically integrated; supplying credit, inputs, agronomic information and market news to producers, gin cotton and market both seed and lint.

In the working document of the Overseas Development Institute (ODI), it was stated out that there are 19 large firms out of the total 475 engaged in international trade in cotton, handling around one-third of world production (Gillson et al., 2004). In the same report, it is mentioned about the ongoing trend that since the mid-1990s these largest trading companies have expanded their operations through investing in supplying countries and in some cases by investments in ginneries. They become more involved in producing countries in order to ensure a constant supply to spinners from variety of origins and of sufficient volume.

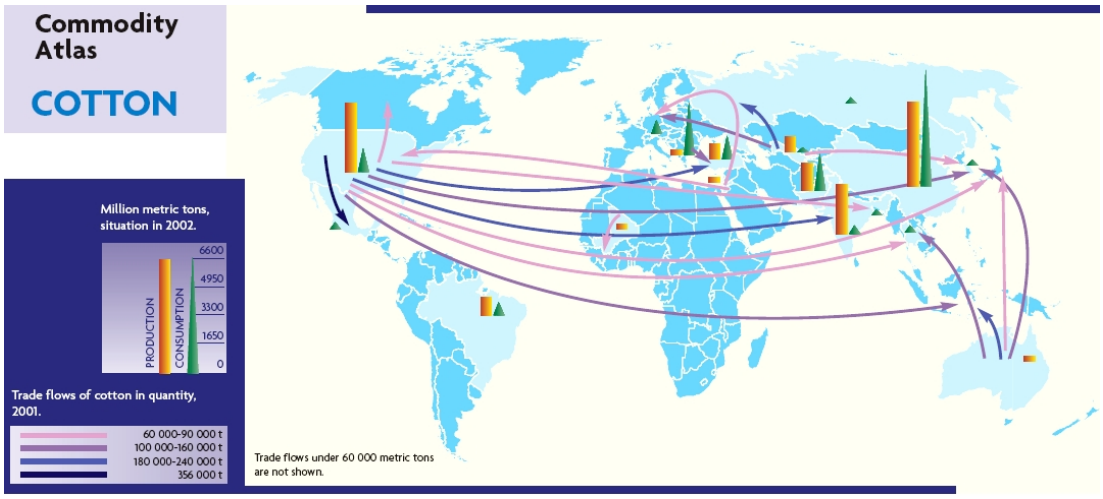

Figure 4.1. Commodity Atlas: Cotton
Source; http://www.unctad.org/en/docs/ditccom20041ch7_en.pdf last accessed at September, 2007

Gibbon (2000) on the other hand, asserted that there is limited vertical integration between spinners and international traders. By the improvements in fibre classification systems, there is a growing trend towards contracting between producers, ginners and spinners without the aid of traders. Direct relationship give chance to spinners in requesting very spesific qualities from producers and ginners (Greenberg, 2004).

ODI Document mentioned about two major reasons for trader companies being the key intermediate agents in cotton trade. First, the geographical and economic fragmentation in global cotton production is high in comparison with other commodity chains such as cocoa and coffee, and the cotton producers and consumers are many and dispersed. Inspecting the entire market and performing all trade functions would be costly for producers and consumers. Some spinners for example, have to favour blends of different national origins and qualities for obtaining the demanded blend in the textile industry (Gillson et al., 2004). As a result of that, traders provide services for the users of cotton and function as for obtaining market information and management of sourcing. Secondly, spinners have increasingly out-sourced their storage functions to trading segment. Thus, working capital costs and financial risk are transferred to the traders who also increase cash flow by hedging on the future markets.

While trader-driven commodity relation has shown an increasing dominancy in the global scale, in most of the developing countries the contemporary sectoral mechanism is operated

by the hands of state organisations and driven by the market regulatory tools, domestically. In that kind of a 'government driven' market functioning the flow of financial, material and human resources through the chain is influenced strongly by the policies and actions of government agencies. As in the case of Turkey, although there have been an ongoing market liberalisation in agriculture, the combination of agricultural research, policy, credit, and input provision has still influenced the allocation decisions of farmers.

Either driven by traders or more of a government driven sectoral organization, most cotton producing farmers, except the ones of having such an unlimited government subsidies, are squeezed between rising input costs and declining producer prices. There are several factors affecting the world price levels of cotton. One is about the competition between cotton and its substitutes. Cotton's most important competitors are natural and synthetic man-made fibers such as rayon and polyester. The share of all man-made fibers in total fiber consumption reached 22 percent in 1960 and now stands at about 57 percent (Baffes, 2005). Between 1960 and 2002, man-made fiber consumption grew at an annual rate of 4.7 percent, compared to just 1.8 percent for cotton. For long years, price indicator of man-made fibers declined, mainly a reflection of the technological improvements in the chemical fiber industry. After reaching parity with cotton prices in 1972, polyester to cotton price ratio has increased at an average rate of one percent per year (Baffes, 2005). Although they are priced at similar levels, polyester has made small pricing gains[47].

The reasons for the long-term decline, according to Baffes (2005), are also because of reduction in the costs of production due to the technological improvements and slow demand growth. The introduction of improved cotton varieties, expansion of irrigation, use of chemicals and fertilizers, and mechanical harvesting affected the productivity of production. There can be also mentioned about developments in genetically modified seed technology[48] and precision farming during the late 1990s, create expectations for further reduction in the costs of production. In the textile sector, there have been substantial technological

[47] It has to be considered that polyester as a chemical fiber is sensible to the movements of oil prices.

[48] There have been misdoubts about the benefits from genetically modified varieties. Baffes (2005) argues that, while the major share of the benefits from growing that varieties of cotton in China went to farmers and by reducing the production costs and doubling the net income for cotton growers most of whom are smallholders, most of the benefits associated with genetically modified products in the other cotton producing countries go to biotech and seed companies.

improvements made it possible to obtain high-quality fabric from lower-quality cotton (Baffes, 2005). Innovations in transportation and information technology have lowered costs of transporting cotton and reduced the need to hold large inventories.

While some of the overall long-term decline in prices can be explained by reductions in production costs as a result of technological advances, slow demand growth, and strong competition from synthetic fibres, the recent volatility and depressed cotton prices are more of a direct consequence of the subsidies granted by rich cotton producing countries notably, the US, China and the EU (Gillson et al., 2004).

Looking at the global balance of cotton, China and the United States as the two largest cotton producers, each account for approximately 20 percent of world output, followed by India by 12 percent, Pakistan by 8 percent, and Uzbekistan by 5 percent. Other significant cotton producers are the countries of Francophone Africa, Turkey, Brazil, Australia, and Greece, which account for a combined 18 percent of global output (Baffes, 2005).

The consumption pattern of cotton is primarily determined by the size of the textile industries of the dominant cotton consumers. China, the leading textile producer, absorbed more than a quarter of global cotton output during the late 1990s. Other major textile producers are India, the United States, and Turkey, which, together with China, account for three-quarters of global cotton consumption (Baffes, 2005).

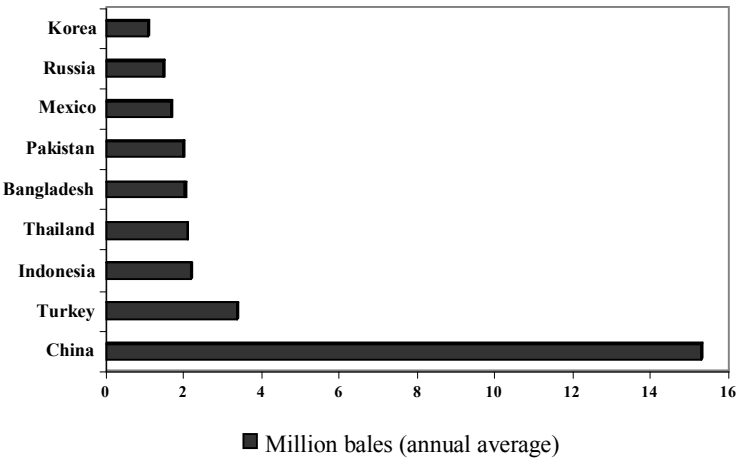

Figure 4.2. Leading Cotton Importers, 2004-06
Source; United States Department of Agriculture, 2007.

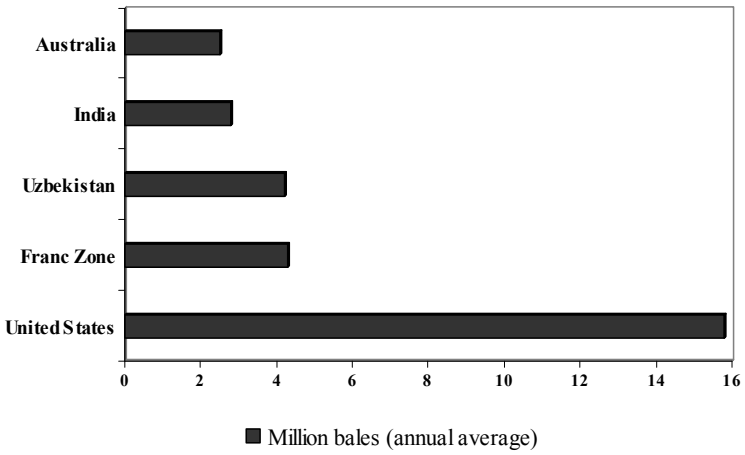

Figure 4.3. Leading Cotton Exporters, 2004-06
Source; United States Department of Agriculture, 2007.

As being the two major holders of cotton stocks, the stockholding policies of the United States and China have affected the level and volatility of prices. As Baffes (2005) pointed out that two major cotton destocking episodes are associated with periods of considerable price variability; the 1985 shift in US policy from stockholding to price support and the 1999 reforms in China.

> *Between 1960 and 1984, nominal cotton prices were stable at around US dollars of 2.62/kg. There followed a sharp decline in the 1983-1984 season when prices almost halved from 1.93 dollars to 1.07 dollars in 1985-1986. During the 1990s prices stabilised around US dollars of 1.59/kg subsequently falling to 0.92/kg in season 2001-2002, their lowest level in 30 years* (Fairtrade Organization, 2005).

The ICAC (International Cotton Advisory Committee), has monitored the level of assistance to cotton production by major producers, found that eight countries; Brazil, China, Arab Republic of Egypt, Greece, Mexico, Spain, Turkey, and the United States; provided direct support to cotton production. For the 2001-2002 season, direct government assistance to U.S. cotton producers was accounted for 3.9 billion[49] dollars; China's support totaled 1.2 billion;

[49] It was argued in a briefing paper of Fairtrade Organization (2005), in the crop year 2004-2005 US producers received about 4.2 billion dollars in subsidies, a sum equivalent to the total value of the crop. The subsidies are concentrated amongst the biggest agri-business, since ten top recipients received 61 percent of all cotton subsidies. It appears as a clear indicator that U.S. subsidy programmes are not a means of helping the small family farms to survive.

and the European Union's[50] was almost 1 billion. Producers in Brazil, Egypt, Mexico, and Turkey[51] received a combined total of 150 million in support (Baffes, 2005).

Impact of the distortions on cotton market because of these direct supports and possible future prospects have been studied by several studies. It is widely accepted that removal of subsidies would result in lower production in the countries that receive them and hence higher prices in the short term, such impact would be partially offset by shifting production to non-subsidizing countries in the medium to longer terms. Baffes (2005) argues, on the other hand, higher prices are likely to reduce the growth of cotton consumption, making the long-run impact less striking.

The recent World Development Report (The World Bank, 2007) asserts that with full trade liberalization, international agricultural commodity prices are estimated to increase on average by 5.5 percent, while those of cotton are expected to increase by 21 percent and oilseeds by 15 percent. Under different scenerios of reductions in cotton subsidies, Gillson and others (2004) stated that cotton production earnings after the elimination of subsidies could result in a range of 18 percent to 36 percent for Turkey.

While there are positive expectancies in case of an elimination of price distorting producer supports, the downward trend with regard to the production areas and volumes, are not so promising for the producers in Turkey. In the side of domestic demand, it is estimated for 2007-2008 season that an increase of 6.5 percent which correspond to 1650 thousand tonnes, resulted from a partial recovery in Turkish textile sector. Supply side on the other hand, is expected about 750 thousand tonnes with 14.3 percent decline (Cotlook, 2007). Turkey can hardly provide about half of the demanded amount and most of the exports come from U.S. with 60 percent and Greece with 22 percent (Özüdoğru, 2006). Current declines in exchange rates of Turkish Lira against foreign exchanges has also increased the demand on exports.

[50] EU farmers produce only 2.5 percent of the world's cotton but receive about 17 percent of all world cotton subsidies (Fairtrade Organization, 2005).

[51] Turkey was accounted for 57 million US dollars assistance to cotton producers in the year 2002 (Baffes, 2005). However, the largest payment item, namely the premium payments has been increased from 5.13 cent per kilogram in 2002 to 19.7 cent per kilogram in 2006 (Özüdoğru, 2006).

Owing to the higher domestic prices[52], many spinners and other textile firms using intermediary goods have tended to go towards import goods. One of the reason of current depressed cotton market and prices is reasoned by increasing yarn and raw fabric imports particularly from India and Pakistan (İTKİB, 2007). In one of the recent thesis study, Penpecioğlu (2007) found that, most of the textile firms in Denizli have been tended to import cotton yarn, and rarely cotton fabric from China, Pakistan and India. He added that the largest textile factory which was functioning as the supplier of fibre and weaved fabric for the towel, bathrobe and home textile producers, *Abalıoğlu Tekstil*, was closed. More close to the Adana region, there was several news about ships full of Greek cotton in Mersin Port in order to feed up spinners in *Maraş* where there have been high agglomeration of spinning industry. Even though there have been an increasing demand for foreign cotton, most of the spinners tend to be conservative (Gillson et al., 2004), because different national origins generally require slightly different settings on spinning machines and successfully adjusting a factory to new settings involves a process of trial and error. "*Once they have hit on a particular blend of different lint types that suits the product that they are making, they like to stay with it if they can"* (Gillson et al., 2004).

Purchases of Agricultural Sales Cooperatives Unions; ÇUKOBİRLİK[53], Tariş, Antbirlik and Gapbirlik; has also declined and reached to about 12 percent of the total cotton production, where it was 24 percent six years ago (Özüdoğru, 2006). Cooperative Unions provide agricultural inputs under favorable prices and convenient payback conditions, and assure selling guarantee for cotton farmers. Production costs in cotton farming is very sensitive about input costs, particularly in Çukurova because of comperatively higher usage due its soil structure and moist weather conditions. Cotton plants are susceptible to a large variety of pests and diseases that can cause stunted growth, poor color, lower yields, or even death. Pesticide use in cotton alone is valued at 2 to 3 billion US dollars annually, which is one quarter of the total insecticide consumption in the world. It has become a significant

[52] According to the İzmir Merchantile Exchange dataset (www.itb.org.tr, October 2007), difference between the annual average prices of Liverpool A and İzmir Std.1 was accounted about 6.5 percent in the year 2006.

[53] ÇUKOBİRLİK, composed of 35 cooperatives in 14 provinces and having 65000 shareholders, has also extinguished its industrial functions and since then have been operating only as a producer union.

proportion of production costs, and constitute close to one tenth[54] of the annual value of the cotton crop (Banuri, 1998).

Cotton farmers in Turkey are the most productive amongst the ones producing at considerable amounts. In 2005-2006 season average productivity per donum[55] has reached to 410 kilogrammes where it was around 200-250 for U.S. and Uzbekistan, and a bit more of 300 kilogrammes in China (Özüdoğru, 2006). Therefore, increasing the amount of cotton production in Turkey is regarded as attainable only by expanding the cultivated fields (Gençer et al., 2005). Çukurova was accounted 22 percent of total outturn in 2005-2006 season where Aegean, South Eastern and Antalya Regions accounted 22%, 52% and 1% respectively. While at three of these regions, cotton planted areas have became narrower, expansion of cotton planting is moved through GAP (South Eastern Anatolia Project) Region which is estimated as would have doubled the cotton planted areas and by that an annual outturn of 1300 thousand tonnes for the whole country in the near future (Gençer et al., 2005). As a consequence of these, the cotton production is expected to continue to decline in Çukurova and so does in Adana.

4.3. The Evolution of Cotton Sector in Adana

Although it has been known that the plantation of cotton in Çukurova has been done since the ancient ages, vitalization of the production was performed at the ages of Egyptian Ibrahim Pasha between 1833 and 1840. Under the motive of fulfilling the lack of cotton supply arising from the American Civil War, cotton plantation in Çukurova was encouraged by testing new seed varieties, establishing agricultural hatcheries and stimulating the mechanization. When the War finished in 1870, the production was stopped again. Meanwhile, the production area had quadrupled and the first high technology ginning mill had been established in 1864 (Aktan, 1999).

[54] According to the annual statistics provided by Chamber of Agriculture Engineers, unit cost of pesticides used in cotton production constitudes about 15 percent of all cost items in Turkey. However, in that statistics some neglectable and irrational cost items are taken into account, argued by many officials, therefore the portion of pesticide costs must be higher than the declared.

[55] 1 donum is equal to 1000 square meters.

Kıray (1999) stated that, during the 19th century there had been two distinct types of villages had emerged. On the one side there were the old nomads who had then become permanent settlers and, Balkan and Arabic emigrants in the villages of small landholdings. On the other side, Armenian and Arabian large landowner's farms where there were also their sharecroppers, seasonal workers and local labourers. The farmers of the first type could only do subsistence farming, whereas in the second type, some surplus was obtained, enables commercialisation of agricultural production.

Non-muslims, particularly the Armenians had been the major group of capitalists and entrepreneurs. In the late 1800s, rich Armenian *aga*s of the Central Anatolia had came to the region and had enclosed large lands especially from the fertile southern parts of the plain until 1915. There were struggles regarding the Armenian inhabitance supported by many Europeans on the one side and Ottoman *Saray* with allied Germans in favor of Turkmen settling in the region against Armenian expansion (Aktan, 1999). Most of the private enterprises as it were the first spinning and weaving mills, were hold by these Armenians while cotton industry was at the stage of rise in the pre-war years. In the meantime, while chamber of commerce in Adana was established in 1894, Adana Merchantile Exchange Market could have started to operate as late as in 1913 because of the unsettled political and social environment. From 1914 to 1922 exchange market was under the domination of Armenian business groups. But after the restless period of eventful collapse of the Ottoman Empire and foundation of the new Turkish Republic, Armenians had to leave and, sharecroppers and some landless workers gained the possession of the lands, but only for a short period of time (Kıray, 1999; Aktan, 1999). Coming up to the end of the 1920s, after the intense struggles for the domination on lands, a group of large landholders who were in close interrelation with the new regime, had emerged (Kıray, 1999; Kıray and Hinderink, 1968).

At the time when the republican government taken over the city of Adana, there were about 11 ginning mills and some other unspecialized flour mills and ice plants (Aktan, 1999). Since there were lack of entrepreneurial capacity after the population exchanges and Armenians' abandonement and, there were several productive units which had been remaining inactive during the wartime, postwar years can be specified as the years of restructuring. Between 1925 and 1927 cotton production was recovered, Union of Cotton Producers was established and cotton congress was gathered at twice times till 1925 (Aktan,1999). Cotton weaving industry became one of the priority during the 1929 Crisis

period and, according to the 'First Industrial Plan' cotton reclamation studies for better variaties were started for which the new textile industry was necessitating (Tekeli and İlkin, 1999). Weaving mills of the Sümerbank had established in 1933 and the descent enterprises and factories were nationalized[56].

Regarding the rural areas a series of social and economical changes brought about by the the decision on introducing a new cotton variety; "Akala", in the early 1940s. Akala was the medium staple type and increased yields of seed cotton per donum (Kıray, 1999). According to Aktan (1999), this could be entitled as the "Akala Revolution" because it increased the earnings of the farmers from cotton planting on the one side and, created seasonal unemployment, increased the disputes on lands and risen the land prices on the other side. Apart from the previous type which was called '*yerli*', the new varieties necessitates harvesting in a short period of time, just between the end of September and early October, not longer than three weeks. Therefore, massive seasonal migrations which then became the regional routine, was originated from these agricultural and agrotechnical changes (Kıray, 1999; Kıray and Hinderink, 1968). In most of the fields, cereal growing had disappeared and crop rotation was abandoned. Sharecropping, based on fifty-fifty principle had transformed into 1/3 and 1/4 sharing agreement.

In 1940 "Çukurova Agricultural Sales Cooperatives Union" namely ÇUKOBİRLİK which had then became one of the biggest hosiery worldwide with its integrated plants, was founded (Aktan, 1999). Moreover, as Aktan stated that ÇUKOBİRLİK has then been considered as a local state by many of the farmers. During the II. World War there appeared a scarcity of yarn and again a need for longer stapled cotton. While at the industrial side, new investments was directed to thin yarn production and weaving, at the farm side a new type of Akala was introduced. The 1950s were the days of mechanisation and agrotechnical changes stimulated by post-war external loans and aids. According to Kıray (1999), along with the introduction of the new variety of Akala cotton which caused an increased interest in cotton-growing, there was the stimulation of mechanisation having led to greater social stratifications within the villages. Mechanisation was enhanced by the fact that land was in the hands of large landholders. Therefore, they could afford the expense of purchasing

[56] The factory of *Mavromati* was tranformed and had started to operate as *Çukurova Mensucat A.Ş.* in 1940 and, *Simyonoğlu* started to operate as *Milli Mensucat* (Aktan, 1999).

agricultural machinery and could make economic use of it by enlarging their lands (Kıray and Hinderink, 1968).

> *It was possible for one tractor and its equipment to displace ten village farmers, together with their animals and most of their wooden implements. In the area under consideration, sharecropping totally disappeared within a short time. What replaced it was a demand for a few weeks' work per year available as casual wage labour connected with unmechanised farm operations. There were a limited number of jobs offered for tractor drivers, their assistants, overseers, and chauffeurs* (Kıray and Hinderink, 1968).

Lacking the necessary capital in order to invest on agricultural technologies, small landholders had no chance to involve in agricultural restructuring process. The ones which were taking up the risk and get credit, often lost their lands which were subjected to providing the collateral. These processes were some of the sure evidences of polarisation and base for 'depeasantisation' prospects which was going to take place in the rural areas (Akşit, 1993).

While there was such transformations at the rural side, between 1950 and 1962, it was the bright period for the urban economy which was also regarded as the first 'take-off' time for the industry and the trade of Adana, notably driven by cotton related[57] economic activities (Aktan, 1999). Adana's leadership of being the regional center was strengthen by the concentration of businesses and their offices at the city center. In company with the ongoing capital accumulation, financial sector had started to engage in regional economy; first private bank was opened in 1948 and, particularly for supporting the cotton sector Pamukbank was founded at 1955 in Adana.

In terms of the capital flows within the regional economy, investments were much more concentrated on textile industries, especially on weaving. While cotton production and ginning phases had been in a decline and moving to nearby regions, simultaneously, there were some symptoms indicating a correlative capital investments between the agricultural production in the rural areas and industrial and commercial activities. According to the study in 'Gök köyü' at Adana, Akşit was arguing that the owners of the large farms were also the ones operating in urban industries and trade (Akşit, 1999). Transferring of commercial

[57] At the times of the first 'take-off', Aktan (1999) stated that, huge investments were done such as; Paktaş, Güney Sanayii A.Ş., Akdeniz Mensucat A.Ş., BOSSA, etc.

capital accumulations to agricultural lands and production was the frequent motive for most landowners.

After the 1970s, there was the second 'take-off' of the regional economy enhanced by more concentration on upper stages of cotton chain and also diversification of the industrial structure (Aktan, 1999). Many enterprises became holding companies and have transcended their business environments beyond the city and regional boundaries. It is clear that cotton production and ginning has been diminishing and agriculture has been of secondary importance since the 1950s. According to the industrial statistics acquired from Adana Chamber of Industry (2007), in 1994 there were 18 spinning mills, 20 weaving mills and 66 ginning mills either of saw-gin or roller-gin technology. Coming up to 2007, according to the recent data, there are 16 spinning and 19 weaving mills operating whereas there are 50 ginning mills, 9 of which are not actively operating.

In Adana where the plantation area of cotton has been decreased about 45 percent between the ten years period from 1994 to 2004, most of the agricultural production has been gone towards producing citrus fruits[58] and greenhouse systems (Aktan, 1999). There has been very limited number of rural studies particularly in the last 20-30 years and so emphasis on transformative power of the agricultural restructurings, not only regarding our special framework of cotton production in Adana, but also regarding the whole country. From now on, the thesis is going to concentrate on rural lives and aspects of the production of cotton at Karataş District, located at the southern part of the province and a territory at the plain where it touches the Mediterranean Sea. Understanding what has been going on in the villages where the cotton plant has still been grown[59] despite that producing cotton is said to not be saving, will again composes the thesis' objective.

[58] During the same period of time, from 1994 to 2004 the production of citrus fruits had increased about 40 percent (TUİK, 1994 and 2004).

[59] The cotton cultivated areas at Karataş constitudes about 45 percent of the total in Adana.

4.4. The Production of Cotton

> *Cotton and cows die as humans struggle to survive. Insects are produced and exterminated for cotton to grow and disappear. Women are exploited more as they are not included in monetary forms of exchange, like the way farmers are not included in prosthetic price deployment in spot, futures and options.*
> -Koray Çalışkan-[60]

During the growing of cotton, the fragile plant conduces toward a host of activities for about five to six months from the preparation of its field to the having of its 'fruits' in multiple fields of its use. The whole busy process brings different consequences for different participants. While the economics of the production of cotton generates dualities as usual, in some cases cotton could have been shown as the reason for causing "lock-in"s for regions and even named as "the mother of poverty"[61] in places where people convicted to produce the necessary crop in order that people can dress theirselves.

The field of research study in this thesis encompasses the homeland of approximately two thousand cotton farmers[62] that is one third of the cotton farmers in the province, an area of 19000 hectares which covers 42 percent of the cotton plantation areas at Adana. In Karataş there are 37 villages, every of them are producing cotton within a range from 120 to 27500 *donum*s (National Registry of Farmers, 2007).

---

[60] Çalışkan, K. (2007), "*Markets and Fields: An Ethnography of Cotton Production and Exchange in a Turkish Village"*, New Perspectives on Turkey, Fall 2007 No.37, Homer Kitabevi.

[61] For broader view on cotton as a poverty generator; Isaacman A.; Stephen M.; Adam Y.; Homen M. J.; Macamo E.; Pililao A. (1980), *"Cotton Is the Mother of Poverty: Peasant Resistance to Forced Cotton Production in Mozambique, 1938-1961"*, The International Journal of African Historical Studies, Vol. 13, No.4., pp. 581-615.

[62] In 2002, 2254 farmers were registred for premium payments in cotton production, whereas, according to the unpublished statistics from "National Registry of Farmers", the registred number of cotton producing farmers declined to 1985 in 2007 at Karataş District.

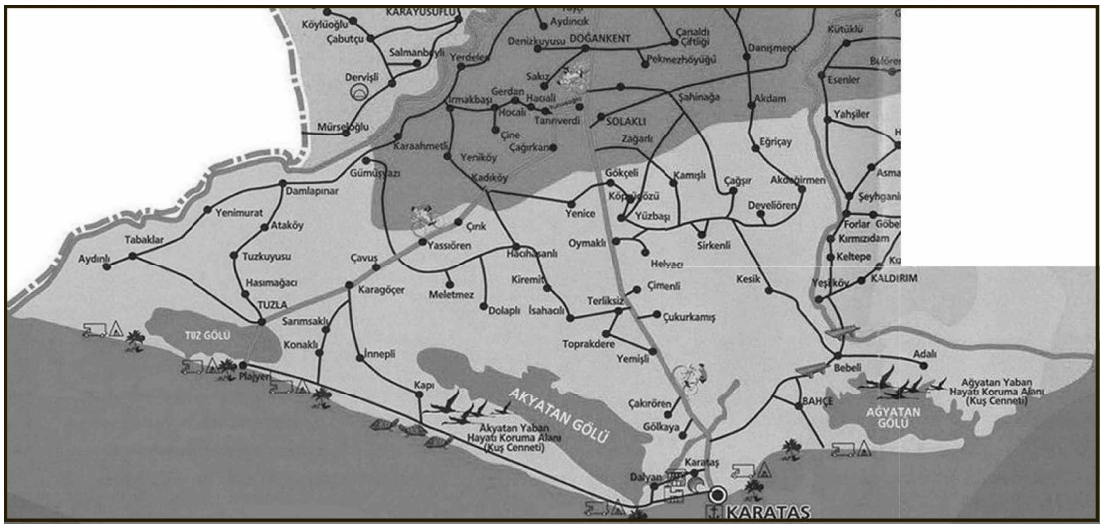

Figure 4.3. Villages and the Territory of Karataş

Source; http://www.adana.gov.tr/resimler/haritalar/il_haritasi/dosyalar/il_haritasi_index.htm, last accessed at November 2007.

Coming up to the 1980s, Keyder identified four distinct types of villages after long-time struggles for survival (Akşit, 1999). The first type of villages were the ones doing subsistance farming and also the ones which had been losing a great part of their population through migration either to cities or abroad because of the limited capacity of their lands for efficient agricultural production. At the second type of villages people can diversify their income basis either by rural non-farm activities or by benefiting from nearer settlements and economies by the help of developments in accessibility. The third type were characterized by medium-sized farms dealing with commercialized agricultural production with modern equipments, using household labour force. These villages were specialized in the production of industrial crops in general and, also did commercialized type of cereal production. At last as the forth type, the villages where there is the domination of capitalist farms, were defined. Although rural researches which were conducted by Kıray and Hinderink and, Akşit in Adana and Söke Plains defined distinct type of cotton farms which operated like a factory (Sirman, 1987), today it is hard to see such forms of organization in cotton production in Adana, at least in Karataş. The production of cotton at Karataş can be roughly regarded as more likely to happen in the villages of the Keyder's third type.

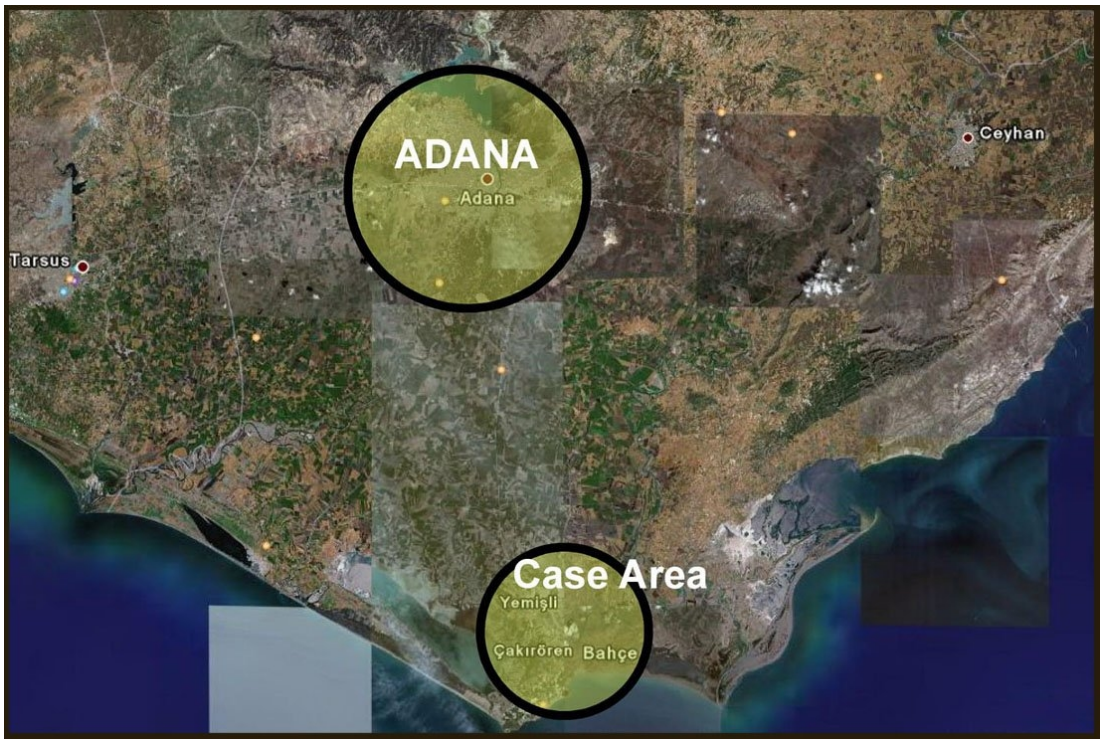

Figure 4.4. Location of the Research Field
Note: The image is provided from "Google Earth" satellite images.

The total number of 3168 agricultural enterprises at Karataş differs by their choices for what they are producing. The production of every single crop have different necessities and costs, and different returns. Farmers react to their micro and macro environments in a rational way, know the potentiality of their lands that which yields the best, consider the cost of production and labour, calculate the cash flows which are critical for doing the necessary things at right times and, after all they know their plants well. Accordingly, the farmers at Karataş use 33 percent of their lands for cotton production, 36 percent for wheat and 20 percent for maize (National Registry of Farmers, 2007). The mediterranean climate gives farmers and plants 7 to 8 months of convenient weather, so that they have chance to make crop rotation either maize after wheat or cotton after wheat[63]. At the western side, the lands close to the sea and surrounded by two natural lagoons; Tuz Lake and Akyatan Lake, composed of grainy sand. Therefore, farmers can produce some vegetables and the famous watermelon type "kum karpuzu" can be produced at that special lands.

[63] Some farmers declared that at the northern lands of the territory the production of soybean after wheat gives better results.

Moving on the way from Adana city center to Karataş, about fifty kilometres long way, coming close to the district center near the sea, cotton fields considerably increases. Four years ago, when the writer of this thesis have had the first visit to the region there was attempts to grow maize instead of cotton, but both because of productivity problems of maize in that comperatively salty soil and increases in the subsidies for cotton production made farmers grow cotton again. Rapid proliferation of cotton-picking machines in the region fosters the interest on cotton production and some ex-producers of the plant have even return to their old flame, cotton. One of the remaining farm which evokes the Akşit's definition of the farm operated like a factory, is located on the Adana-Karataş Roadway at the location of Gökçeli and named 'Gökçe Çiftliği'. This farm had not been growing cotton for twenty years, but it was stated that they started to grow cotton in an area of about 300 *donum*s last year. At the times when they were producing cotton at rented lands of about 2000 *donum*s, there was a need for 100 to 150 agricultural workers, whereas for the production of maize 10 workers are enough. The most labour intensive stage, cotton picking has been partly eliminated by the introduction of machines[64], so that larger enterprises for whom the most disincentive factor of production has been the costs of labour in every means, has started to pay attention to cotton production and has began trials in some parts of their lands.

Cotton plants reach maturity in approximately five months with the help of hot, sunny and rainless weather. As such in Çalışkan's (2007) depiction, the leaves of the plant follow the sun during the day like sunflowers, in order to absorb as much energy as possible. If farmers grow cotton as a single crop, they use the first five months of this good weather by sowing the seeds in mid of April. But most of the cotton producers in Karataş prefer crop rotation for efficient use of their lands and they sow at the beginning of June right after harvesting of wheat. Farmers tend to sell their yields immediately because of their lack of liquidity which is necessitated for the production of cotton. Government often declares the base prices for wheat after the first half of June, therefore farmers usually complains about being forced to sell their yields with lower prices to private purchasers.

[64] It is stated out by the chairman of the Adana Merchantile Exchange Market that, in 2007 the number of cotton picking machines at the region reach to 116 after the introduction of second-hand machines from U.S. and Greece.

Producing cotton as a secondary crop after wheat is risky, since the time for picking the cotton extends to late months of the harvesting season, therefore the possibility of pre-harvest rain makes farmers anxious during the whole process. Rain decreases the quality of fibers, making them wet and dirty (Çalışkan, 2007) and creating rain spots, each of which reduces the price about 1 to 2 Ykr (Yeni kuruş) on the lint. Moreover, it would be more costly for farmers since wet soil decreases the speed of workers. Additionally, as workers are paid for the total amount (in kilos) of picked cotton, rain increases the weight of cotton, thus increase the cost of daily wage workers.

The production of cotton is composed of six stages, following the steps of the plant's bio-economic life cycle of growth and marketing; field preparation, sowing, hoeing and selection, watering, harvesting, and finally marketing (Çalışkan, 2007).

The soil has to be freshened up by aerating before sowing the seeds and need for ploughing the field after applying the fertilizers, mostly with the help of tractors. Renting or bartering the necessary agricultural equipments are not so widespread in contrast with the Aegean examples (Çalışkan, 2007; Aydın, 2001). Most of the farmers in the region has owned the essential equipments by use of their savings which have been accumulated during the good-old days. Furthermore, cotton production as being a busy process, compell farmers to own their agricultural equipments in order that to avoid from critical dependencies and since for most of them the scale of production requires such productive investments.

Cotton production is also an input intensive type of production. Thus, it is very sensitive to the input prices. The difficulty in providing the hard cash for supplying the inputs is overcomed with the help of ÇUKOBİRLİK for most of the cotton producers. ÇUKOBİRLİK extends indirect credits by supplying farmers with fertilizer, seed or pesticide during the production process and deduce their price when farmers sell their yields back to the cooperative. Although the amount of purchases of ÇUKOBİRLİK has considerably declined from 153000 tonnes in 2001 to 87000 tonnes in 2006, Karataş is still sustained its position of being the most important territory[65] for ÇUKOBİRLİK.

[65] During the meetings with the officials at ÇUKOBİRLİK Administrative Office, it is stated out with the words of the officials that "*Karataş bizim mıntıkamız*".

In order to use in the production of other crops or for fulfilling the further demand in cotton production and also for some cotton farmers who are generally locked into relations of debt, there are sales offices of input suppliers located either at the entry of the city center on Adana-Karataş Roadway or at the District Center. Relation of debt operates on lose-lose principle for the farmers, since they can not negotiate on terms of payments, and even can not ask for the prices of supplies which are purchased on credit, called *veresiye*. The owner of these sales offices are generally the rich farmers of the region, as input supplier offices and/or ginning mills have been functioned like a footstep before promoting to the urban industry and trade until the sufficient accumulation is confirmed and necessary social and economic relations are established for the new business concern.

The route of the creation of capital and its management in the production of cotton has been conducted in the direction of some immutable entrepreneural motives. Marketing of the crop could have been subjected to peaks and bottoms within one production season in terms of its value; and since for cotton related industries one of the most vital phase of the production process is supplying the required cotton at right time and at rigt price, "lucrative trading"[66] becomes the basic motive for local people. Aktan (1999) described the image of industrialists as "merchant-minded industrialists". In order to confirm the necessitated input, additionally, there could be mentioned about some type of a vertical integration between cotton production and cotton related industries and trade, not only through the investments on agricultural lands but also there could have been seen contract farming type of relations between industrialists and cotton producers, functioning informally (Aktan, 1999). Industrialists provide agricultural inputs and rarely credit for farmers, so that they can guarantee the next year's cotton.

Right after sowing the seeds, a series of activities begin at the field. Following the appearance of the first shoots of the plant which starts to greened the fields, the second most labour-intensive stage of cotton growing after the harvesting begins (Çalışkan, 2007). Farmers hire workers for hand-hoeing either from their villages or from a close village or, from the camps of seasonal agricultural workers who has began to come to the region in mid of April. Daily wage workers are usually the landless or small-plot owner peasants who comprises approximately 10 to 20 percent of the total households at the villages which were

[66] The motive also found its expression in a local statement; "*zengin olmak istiyorsan al sat, batmak istiyorsan yap sat*".

observed during the field study. These peasants are either do sharecropping at the fields of landowners who are not actively dealing with their lands and permanently staying at Adana or, work on daily wages at the fields of other farmers. In some cases, they are hired by large landowners, locally named *aga*s, as the chief workers through comperatively longer-term informal contracts. They actively work at the field; do hoeing, watering, ride tractor and do servicing for other workers from village to the field and back by this tractor. They can be regarded as the assistants of the rich farmers. Rich farmers of the villages prefer these local workers inhibiting at their villages, because they know each other and could trust for the management of farm works when landowners have gone outside the village for various reasons.

During the hand-hoeing and selection about two thirds of the the cotton is selected and the remaining is cleared away, so that the feasible channels for not only for watering but also for building up easy working paths inside the field for workers can be confirmed. Thereby, with the help of this rarefaction process the plant could find convenient environment for reaching the maximum sun light and minerals.

While the plant keep going its struggles to grow, farmers have to get contact with the Kurdish agricultural intermediaries, called *elci*[67]. Especially before the start of harvesting season, *elci*s meet with landowners to assess the number of workers needed and to receive the advance funds with which to recruit them. The amount paid in advance varies with respect to the extent of the land to be worked, workers' demands and what each landowner can afford. In securing an agreement with an intermediary, landowners expect their needs for labour will be met, without the necessity of interviewing and hiring workers or discussing wages and working conditions on an individual basis. *Elci*s are generally from the strong families of rural South Eastern Region and they usually own a grocery shop in their homelands, so that they can let their future workers shop on credit during the winter. They have their own capital in addition to the hard cash received from the cotton farmers in advance ranging between 20% to 50% of the total amount. They[68] offer the potential workers cash advances to meet their needs in winter in return for their guaranteed labour during the

[67] Agricultural intermediaries are known by different names in different regions in Turkey. These include; elçi, çavuş, dayıbaşı, elçibaşı, boladur, dragoman, kahya, başkan and başçıl.

[68] Provincial officials estimate that of the 1300 to 1500 individuals acting as agricultural intermediaries in Adana, over 80 percent are able to do so without a license. It is stated that 42 percent of intermediaries in Karataş were found to be unlicensed (ILO-IPEC, 2004).

peak agricultural season. During the working season, intermediaries also provide workers with cash advances, contact families and make necessary arrangements in cases where sick workers need to be sent home. In addition, they also engage with transportation; working and living conditions; and mediating in disputes arising among workers (ILO-IPEC, 2004).

*Elci*s at the region becomes the ordinary figures as they have been mediated at least for ten to fifteen years. Although some cultural segregations could have been seen between villages on account of their ethnic origins and also between the villages and the temporary settlements of the seasonal agricultural workers which are the Kurdish men, *elci*s are considered as local persons by the rural dwellers. At the *kahve*s where is the registry place for daily routine activities in the villages, it is quite possible to see the landowner and *elci* playing the traditional mens' game *tavla* with each other and discuss about daily news. Either at Yemişli, a *yörük* village or at Bahçe and Çakırören in which the residents are *Nusayri*s, the Kurdish seasonal workers are not so welcomed like *elci*s and evited from being object to them. In some comperatively permanent nomadics' camps which are located at the optimum places both close to the village and to the agricultural fields, children of the workers and the local residents go to the same school but that can sometimes causes disputes between them. Large landowners, additionally, not only stand apart from seasonal workers but also from small-plot owning 'poor' farmers. This situation is regarded as an social stratification within the villages by some interviewers, "*...class division much the same of in the cities*".

After a range of activities have been conducted consisting hoeing the field at several times, spraying pesticides on plants and killing all the insects and living organisms trying to benefit from the plant or soil, and applying various fertilizers by mixing with soil, the most difficult period of work starts in which the first step is irrigation. Although the farmers in Çukurova are much more lucky than most of their counterparts at the other parts of Turkey, since the territory is located at the contraction place of the Seyhan and Ceyhan Rivers which are the life-bloods of the Plain and because the irrigation channels have been servicing to most of the fields, some villages and their agricultural territories have been suffering from unexecuted irrigation infrastructure investments, as such in Bahçe village. About a kilometre away from the village square directly at the eastern side there is an incompleted irrigation channel which was told us about four years ago by the provincial chairman that it would have been completed in a couple of years. However, nothing has changed during this period of time, it still remained incomplete at the summer of 2007.

While among villages there are some locational advantages in attaining the infrastructural facilities, the ongoing drought not only affected the fields at Karataş but also the whole country. First time at the remembered past at the farmers' memories, it was needed watering the wheat-planted fields during the spring season. Çukurova has been comperatively the advantegous one in terms of irrigation facilities, however over-irrigation causes one of the most important problem, soil salinization, especially at the places where the level of ground water is high. There have been attempts to construct trickle irrigation systems by the instigation of government supports related with rural development programmes of the European Union, in order to overcome this problem. It has been achieved not only that of preventing drought but also the number of workers has declined from 25 to 3 after the construction of trickle irrigation systems at the fields of 'Gökçe Çiftliği'.

Towards the end of August, time draws on for harvesting for the farmers who cultivate cotton as a single crop, as the ones sowing the seeds in April. Therefore, preperations has to be done before masses of seasonal workers arrive to the region. Workers locate at various places, particularly at the fields of landowners with whom they have been contracted under the organization of their gangleaders, *elci*s. In that tent camps, temporary settlers need firewood and water for daily uses, therefore water tanker had to be repaired and cleaned before the workers' arrival. Need for worker particularly depends on the size of land. In order to harvest an area of about 100 *dönüm*s, fourty workers are needed to pluck the cotton for ten days. With the introduction of cotton-picking machines at the region during the last two production season, demand for seasonal workers has declined considerably. Machines can replace about 450 workers by doing the equal amount of work in a one-tenth of time that previously fourty workers were doing. Approximately 120 machines[69] were operating at Adana in that harvesting season, doing 80 percent of the picking. ILO working document prepared by Gülçubuk and others (2003) estimated that 35100 seasonal agricultural workers had been coming at Karataş, that is before the using of machines become widespread. According to our calculations by considering the rate of labour force in cotton picking which has been replaced by machines, demanded number of workers should have decreased to around 15000, an approximately 57 percent of decline.

[69] First hand machines are generally owned by using leasing credit option and costs around 240000 US dollars plus VAT, from 1% interest rate.

Harvesting stage of cotton production by using agricultural wage labours have been causing some difficulties for landowners and subjected to everlasting complaints. Apart from providing logistics and meeting the demands of that crowded camps, there have been probable losses during the picking. After the harvesting, the level of losses can be understood by looking at the fields where is often covered with a dirty-white colour of wasted cotton pieces. Ten percent of cotton fiber is wasted during the hand-picking process on average.

Additionally, filling the bags with materials other than cotton make landowners angry with the workers. Since the workers are paid in return for the amount of plucked fiber, increasing the weight of sacks with other parts of the plant or even with soil and stones is the typical cheating method[70] which not only costs farmers by paying higher amounts of wages but also deteriorates the quality of the fiber[71], thus endangers the marketing of the yield. Picking-machines, on the other hand, are not perfect-functioning machines and henceforth necessitates proper arrangements regarding the order of cultivation of plants in the field and also the machine is responsive to the height of the plant. Emerging complaints are declared during the recent harvesting season, indicating that most of the yields remained at the fields after machine-picking, causing a need for one more hand-picking process.

Either by hand-picking or by using the self-owned or rental picking-machines, farmers want their yields harvested as soon as possible, so that they can both have chance to release their yields sooner which makes it possible to sell with higher prices because of limited supply at the early times of harvesting season, and can also avoid from the risk of early rains. Since most of the farmers do not have warehouses, tonnes of unginned cotton have to be sold out instantly. Cotton producers which has been locked into debt relations with the moneylenders, are obliged to sell at giveaway prices. Most of them chose not to borrow from the Agricultural Bank because the bank required the farmer to have land under his name as collateral. Presently in Karataş, like the all other agricultural fields in the country, one of the most challanging obstacle for restructuring the agricultural market is stated as the transfer of inheritance. At the places where there are lack of necessary and proper regulations for well-

[70] One worker during a one working day can pluck between 80 to 100 kilogrammes of cotton, however some farmers told that there can be these cheaters come to weight with the sacks weight 250 kilogrammes.

[71] Fibre quality is a combination of physical and microbiological attributes like fibre length, fineness, maturity, strength, colour and impurity content. Cotton fibre value increases as the bulk-average fibres increase in whiteness, length, strength and micronaire.

functioning agricultural market setting, informal regulatories and informal agents have been naturally generated. These informal bankers generally apply quite high interest rates and then manage to buy the farmers' cotton for less money, thus contributes to the temporary depression of prices during the harvesting season (Çalışkan, 2007).

One another problem of price deterioration emerges in terms of the abundance of cotton after the introduction of picking-machines. Since the machines harvest the yields more rapidly, the chairman of Adana Chamber of Agriculture states that, seven to eight times of more cotton was released into the market, decreasing the price of unginned cotton to 50-55 Ykr. While at the beginning of the season it was around 75-80 Ykr.

The great number of farmers at Karataş are pledged into selling their cotton to their cooperative ÇUKOBİRLİK. The price is not demanded but accepted both because of that they are obliged to apply their yields in return for their debts, and also the Union usually pays at reasonable prices. Throughout the harvesting of cotton, farmers have monitored the instant prices and try to sell out their cotton to which brings the most. *Simsar*s who are the agents of ginning mills or the ones of self-employed bargain over the prices by coming up to the farmlands or farmers load their trailers with cotton and look for the best purchaser which are generally located along the road from Karataş to the city center. However, the amount of cash they can earn from this selling after deducting the expenses could only constitutes around 40 percent of their net incomes from the production of cotton. They need a long wait if not that is a season before the 'general elections', until the premium payments which was about[72] 340 Ykr. per kilogramme last year, have been paid by the government.

4.5. Cotton Producers in the Three Villages of Karataş

Throughout the previous sections, it has become apparent that in order to compete in agricultural markets, a series of factors needed to be confirmed; productive agricultural land, convenient weather conditions, skillful producers, modern production techniques, advanced input markets, transportation, processing and marketing infrastructures, commodity markets and financial institutions enable price formation and risk transfers. Regarding the

[72] The exact payments were 320 Ykr and 348 Ykr. per kilogrammes and the latter was paid in case of using a certificated cotton seed.

specificities of the cotton production environment that we have tried to exhibit in Karataş, some of these factors appeared as providing vantages for the producers of the region. However, on the other side, still there is not a productive agricultural economy because of system malfunctions most of which have not been due to the farmers but the agricultural regulatory and executive tools and mechanisms.

In that part of the study, the thesis is focusing on cotton producing landowners in the three villages of Karataş. The sampling consists the landowners actively involved in the production of cotton, either permanently settling at the village or at the city. Cotton production at that villages is conducted by these producers in the fields ranging from 30 to 1200 *donum*s. In terms of the representation level of the sampling with regard to comprise the contributers of the production practice at the territory of survey, it has to be specified that the landless villagers who are generally engaged either in agricultural daily wage works or in several non-farm works; and the landowners who are not the permanent settlers of the villages, renting or sharecropping their lands, are the ones out of the scope of the survey study.

During the conduction of the survey, there were 121 farmers interviewed with, 49 in Bahçe, 34 in Çakırören and 38 of which are in Yemişli village. In that three villages, according to the dataset of 'National Registry of Farmers' (2007), there are 661 cotton producing farmers which accounts 23 percent of the cotton producers in Karataş and cultivating about one-fourth of the cotton planting areas.

Table 4.1. Share of cotton producing enterprises and cotton plantation areas at the villages

Villages	Total # of enterprises	# of cotton producing enterprises	# of cotton production plots	Total area of cultivation (da)	Total area of cotton plantation (da)	% of cotton planted areas
Bahçe	330	181	1 073	20 260	11 111	54,8
Çakırören	237	148	2 898	10 903	6 931	63,6
Yemişli	531	332	1 655	47 958	27 478	57,3

Note: Table is produced by using the statistics obtained from 'National Registry of Farmers', 2007

Yemişli is the one which is prominent not only among these three villages but known as the biggest in terms of its agricultural territory and in which some of the richest farmers have been operating at Karataş. Yemişli is a typical *Yörük* village located at the Adana-Karataş Roadway. Since the village is at a central point, there are three restaurants, a market, a

bottled-gas retailer and two tractor repairers. Bahçe village, located at the eastern side and quite distant from the main road is the second having the largest cotton planting territory following Yemişli. Bahçe, along with Çakırören, are the ones among these three villages where the residents are *Nusayri*s. Bahçe is comperatively isolated not only in terms of its geographical location but because of cultural factors arising from their sect difference. That introversion in most of the *Alewi* villages provide advantages to them in coping with the poverty situations during the bad-times with the help of social cooperation networks, but not provide them avoiding from this particular situation.

Figure 4.5. Location of the villages at Karataş
Note: The image is provided from "Google Earth" satellite images.

According to the results of the 'Population Census, 2000', Bahçe is the most populated village with 2800 person, Yemişli and Çakırören have 2180 and 711 respectively (TUİK, 2002). However, as is more or less the same in most of the rural areas in the country, the population of these villages are overcounted. Not only the officials at Karataş District Directorate of Census stated that the actual population is about 20 to 25 percent below the declared, but also it has been observed during the research at the field that the actual number of residents can be as half of the official numbers especially at the villages like Yemişli

where a great number of rich farmers have a dual settling, one in Adana and one in the village. Although the survey results state that 85 percent of the 121 households are the permanent settlers in the villages, this is more of an indicator of the involvement of the full-time farmers operating actively at their works and the small landowners who can not afford to migrate or can not afford to have a dual settling in the survey sampling. Farmers, actually settling at the villages are the ones clinging to their lands and agriculture.

According to the survey results, 94 percent of the net income of the farmers is generated from agricultural incomes, in monetary terms. The remaining part of income is generated particularly due to the earnings from passive investment resources or retirement pensions (see Table 4.2.). This is a clear indicator of the lack of non-farm economy in the region. In Karataş District Center which is on average 10 km. away from the villages, the local economy is mainly based on fishing and transportation provided by 60 *dolmuş*s departing in every 30 minutes during regular days. Other than those, there have been expectations about development of tourism sector however this seems as a desperate hope because the only reference point in that development scenerio is the beach very close to Bahçe. Weekenders come either by their cars or by *dolmuş*s but directly and immediately to the beach both because of low-level of servicing and high prices at the district center. Therefore, it has stated that these comers particularly from Adana city center, prefer shopping at the city or from the settlements on the way to Karataş. Consequently and substantially, since the district center is not on the way of Adana but at the opposite and since there is a limited resource base in order to generate a living economy, 'Karataş' offers quite a few for villages.

Table 4.2. Secondary income resources of the farmers

Secondary income sources	#	%
animal husbandry	17	32,7
retirement pensions	18	34,6
financial flows from passive investments	13	25
irregular incomes/daily wages	4	7,7
Total	52	100

Source; Questionnaire results of three villages in Karataş, 2007.

Almost all farmers at the villages are cotton producers either applying crop rotation or cultivating cotton as a single crop. Owing to unfavorable prices most of the farmers have

applied crop rotation particularly in the last 10 years, therefore the duration of cultivation at the fields prolonged from five to eleven months[73]. 30 farmers of the 121 are the single crop cotton producers. Motives behind the choice are originated from several rationales. During the interviews, the level of net returns[74] in monetary terms with respect to crop alternatives, were stated by the farmers as for about a hundred decares of land, cotton earns 20-22 billion Turkish Liras and wheat earns 10-11 billion Turkish Liras[75]. Although the production of wheat in addition to cotton planting seemingly brings comperatively easy money, like all other dry farming practices, one-fourth of the farmers do not prefer crop rotating. One of the main reason for that is avoiding from early-rain risk. Additionally, these farmers plan to compensate their losses originated from not making crop rotation by higher selling prices during the early harvesting season. The survey results do not expose statistically significant relation between production-crop choices and size of the landholdings, however the major part of the single crop producers are the large landowners. Larger enterprises tend to specialize in cotton production for not only because of the above advantages but also single cropping returns higher yields per decare.

Most of the lands under the name of each landowner is not a single-piece. As it can be seen in Table 4.1., the official registration data indicates a multipartite landownership pattern[76]. The fragmantation of lands are basically due to inheritence law, however the concentration of lands not through land reform but through the natural routes of rural economics can be performed in the villages like Yemişli where economies of scale is much more maintained through larger landownership and mono-plot plantation fields.

Despite the overall patchworked picture of the landholdings, these statistics exhibit the exaggerated face of the reality for two main reasons. Apart from the premium payments which is given for the amount (per kilos), Direct Income Support, Diesel Oil Support and Fertilizer Support payments are given for per-decare to the enterprises which own less than

[73] Sowing is done at the mid of April and harvesting starts by the early September if not applied crop rotation. In case of rotation, from November till June, the fields have engaged with the wheat plant and right after harvesting the wheat, the second crop cotton is sowed in June.

[74] Net returns consists the agricultural subsidy payments.

[75] Sirman (1987) stated that profitability of cotton to wheat was about 5 times higher in 1977. Current convergence of profitability between the crops is not mainly due to an increase in the value of wheat but because of both the price depression in the cotton market and increasing input costs.

[76] Average number of plots per enterprise in Yemişli is about 5 whereas in Çakırören it reaches approximately to 20.

500 decares of land. In order to be paid, the landowners register their lands under different people's names. Additionally, according to "Income Tax Law" (Law Number: 193), the production of cotton at the lands more than 400 decares are tribute to the Law. Thus, the farmers have to pay income taxes and insurance payments of their labours. By averting from paying and utilizing from the government supports, farmers distort the registries by increasing the number of enterprises and decreasing the average landholding sizes. According to the statistics of 'National Registry of Farmers', there is not any farmers holding more than 500 decares but on the contrary, even in the sampling of this study, there are 10 farmers informed as owning 500 decares and more. Misguidance of the registries is also strengthened by the chronical problem of 'transfer of titles'.

The second reason of the exaggeration is derived from the actual possession of the lands. Although the official registration of the lands are fragmental, devisees of the inherited lands make mutual agreements and try to defragment the production fields. However, in some cases farmers own two or more separate fields and sometimes they prefer different crop planting in that different plots. If that is not due to the soil characteristics of the lands (for maximum return of yield), the situation is derived either from the lack of operational capital or the strategy of ensuring a continuous cash earning flow; that is one wheat harvest at the end of May, one cotton harvest at early September and, one more cotton harvest as a secondary crop at the late October.

Average holding sizes at the villages exhibits the nature of farming at the villages. Yemişli has the largest average with 321 decares and followed by Bahçe with 194 decares. In Çakırören almost the entire holdings are smaller than 200 decares and an average of 107 decares implying that the village is the place of comperatively small landholdings.

Table 4.3. Size of the Holdings at the three villages

Size of Holdings (da)	Bahçe	Çakırören	Yemişli	Total
0-100	22	19	8	49
%	44,9	38,8	16,3	100,0
100-200	11	12	9	32
%	34,4	37,5	28,1	100,0
200-400	9	3	10	22
%	40,9	13,6	45,5	100,0
400-<	7	0	11	18
%	38,9	0,0	61,1	100,0
Total	49	34	38	121

Source; Questionnaire results of three villages in Karataş, 2007.

General structure of the holding patterns at the villages and the divergence of incomes within the internal economies of the villages are almost entirely show consistency with the holding sizes, since the level of non-farm income sources at the villages is negligible. Differences both among and within the villages become more apparent while examining the income intervals of the farmers.

Table 4.4. Income intervals at the three villages (in YTL)

	<10000	10000-20000	20000-30000	30000-50000	50000-100000	100000<	Total
Bahçe	5	17	11	11	2	3	49
%	**10,20**	**34,69**	**22,45**	**22,45**	**4,08**	**6,12**	**100,00**
Çakırören	5	6	16	5	2	0	34
%	**14,71**	**17,65**	**47,06**	**14,71**	**5,88**	**0,00**	**100,00**
Yemişli	1	8	4	10	9	6	38
%	**2,63**	**21,05**	**10,53**	**26,32**	**23,68**	**15,79**	**100,00**
Toplam	11	31	31	26	13	9	121
%	**9,09**	**25,62**	**25,62**	**21,49**	**10,74**	**7,44**	**100,00**

Note: Income values presented at the interval row are the annual net incomes of the households.
Source; Questionnaire results of three villages in Karataş, 2007.

At a first glance the level of incomes of the farmers could be regarded as striking with respect to the expectancies from such a rural-agricultural economy. About 65 percent of the interviewees informed that the household annual net income is more than 20000 YTL and the highest section of 18 percent get above 50000 YTL per annum. Although this level of incomes remind us the official's saying that it is the wrong place for investigating the depression of rural areas and agricultural practices, it has to be kept in mind that from 50 to 60 percent of the incomes in cotton production depends on assistance payments of the government. Additionally, it has been known from the interviews that, a great number of

farmers are in debt[77] which is regarded by most of the informants as a situation which can not be easily tackled with even if the farmers provide their entire assets. Nevertheless, the contribution of cotton to rural economies has been considerable especially at the places where economies of scale is maintained. In terms of rural living and the level of differentiation of living standarts among villages, some information regarding the asset endowments can be helpful for figuring them out.

Table 4.5. Asset endowments of the farmers (automobile)

Villages	**Have you got an automobile?**						
	yes				**no**		**Total**
	for the last five years	older	Total		Total		
			#	% of the villages	#	% of the villages	
Bahçe	11	15	26	53,1	23	46,9	49
Çakırören	2	11	13	38,2	21	61,8	34
Yemişli	21	11	32	84,2	6	15,8	38
Total	34	37	71	58,7	50	41,3	121

Source; Questionnaire results of three villages in Karataş, 2007.

Table 4.6. Asset endowments of the farmers (computer)

Villages	**Have you got a computer?**						
	yes				**no**		**Total**
	for the last five years	older	Total		Total		
			#	% of the villages	#	% of the villages	
Bahçe	2	0	2	4,1	47	95,9	49
Çakırören	1	0	1	2,9	33	97,1	34
Yemişli	10	1	11	28,9	27	71,1	38
Total	13	1	14	11,6	107	88,4	121

Source; Questionnaire results of three villages in Karataş, 2007.

[77] Unfortunately, there is not an exact information about the amount of debts, however almost all of the informants complaint about indebtness either to banks or to moneylender and relatives. The situation is originated from the problematic nature of fiscal management in cotton production, since high level of initial capital investment required for productive purposes and there are risks of price depression and/or natural hazards which can cause the loss of entire yield.

Table 4.7. Asset endowments of the farmers (internet connection)

Villages	Have you got an internet connection?						
	yes				no		Total
	for the last five years	older	Total		Total		
			#	% of the villages	#	% of the villages	
Bahçe	1	0	1	2,0	48	98,0	49
Çakırören	1	0	1	2,9	33	97,1	34
Yemişli	8	1	9	23,7	29	76,3	38
Total	10	1	11	9,1	110	90,9	121

Source; Questionnaire results of three villages in Karataş, 2007.

While there is almost any settling outside the villages among the landowners who holds smaller than 200 decares, in Yemişli village where the accessibility to the city center is much easier, 40 percent of the landowners who are among the ones regarded as the riches[78] of the village and holding more than 200 decares inform their permanent settling that in the city center. At Bahçe village where the remaining rich landowners of our sampling is involved, only 2 out of 16 farmers (equal to 12,5 percent of the riches) are settling at the city. In that type of villages, the producers of cotton plant which requires intense interest and involvement, has prefered to stay at their villages. In Bahçe, in contrast to Yemişli where the time and the labour saving has been significantly maintained after the introduction of cotton-picking machines, being at the head of affairs and managing the workers and daily works has still necessitated because of the limited opportunity for using the machines at the rough agricultural territory of the village. In Çakırören, on the other hand, all of the informants are staying at their villages. They have limited access to Adana and the services provided for the bureaucratic prosedures of their agricultural businesses and some other shopping activities are supplied from district center.

In all three of the villages, it is hard to say that the generation of capital through agricultural businesses could have been adapted for revitalizing the rural environments. Although there are villas with large gardens of the wealthy landowners, villages are lacking the necessary requirements of social and physical infrastructures. Therefore, living at the villages would rejected whenever some possibility appear for urban alternatives.

[78] The actual net earnings of the farmers who hold 200 decares of land is approximately at least 40000 YTL per annum. The consideration of the rich farmer in this study is based on the annual incomes, the asset endowments and both the monetary and the physical power for compansating the possible crises in the future.

Towards a focus on farmer responses, the coping patterns, survival strategies and adaptation mechanisms can be explored with reference to three distinct response spaces which have been presented in that thesis throughout the discussions on adaptive processes in rural areas; adaptive processes through agricultural entrepreneurship, off-farm income generation and migration. While giving priority to farming practices, the coping and/or adaptive mechanisms can be inquired with reference to the fields of research just as; cost reduction and yield increasing strategies, land enlargement, ability to accumulate and manage capital and, entrepreneural attitudes. However, on the other hand, when analysing the enterprise behaviour patterns, different stratas contribute to the process through different ways and thus make the path alternatives apparent.

The problematic nature of classifying the agricultural holdings is due to its context dependent representation necessity. Köymen and Öztürkcan (1999) argued that the classification of the holdings should be developed in accordance with regionally diversified criterias; the level of market-oriented production, the degree of applied wage labour, the productivity of land, the level of mechanisation and annual agricultural incomes. For identifying the self-sufficient and/or large-capitalist agricultural holdings, there were several studies have done. The one, for instance, identified the lower bound for self-sufficient cotton producing enterprise in *Çukurova* as 48 decares for irrigated farming and 134 decares for dry farming under the conditions of the years of 1970s (Köymen and Öztürkcan, 1999). Additionally, Akçay (1999) indicated variety of 'large agricultural holding' descriptions, some of which identifies the large holding bound in *Çukurova* between a range of 250 and 1000 decares differentiated particularly through the crop type, status of irrigation and the particular conditions at the time of the studies were done. In addition to those, Akçay favored to give point to the transformative abilities of the holdings/landowners on rural economies and development, and thus identified that type of productive units as large agricultural holding (Akçay, 1999).

In the way of analysing farmer responses in cotton production at the villages of Karataş, significant representation of the stratas/holding sizes could have been determined by considering the all above arguments and their determinant parameters. In fact, in such comperatively small sampling sizes, determination of the intervals are in need of a coherent representative ability. Accordingly, the threshold for self-sufficiency in the peculiar

agricultural economy at the region is determined as 100 decares[79]. 400 decares appeared as a upper bound for not only because of the nature of the sampling but also the farmers at this interval are the ones who can make capital accumulation and additionally having the most intense concentration on progressive agricultural production.

Household income levels during the recent period of depression in the cotton markets have been considerably declined. The crises environment during the last five to six years has worsen the incomes of approximately 60 percent of the farmers. On the other hand, about 30 percent of the informants stated that there have been ups and downs particularly depending upon price and profit determining factors. Agricultural input costs and the level of assistance payments by the government are the most important factors for the level of agricultural earnings.

Table 4.8. Household Income Changes During the Last Five Years

Size of Holdings	Household income changes during the last five years				
	more or less the same	getting better	getting worse	up and downs	Total
0-100	3	2	41	3	49
%	*6,1*	*4,1*	*83,7*	*6,1*	*100*
100-200	2	0	19	11	32
%	*6,3*	*0,0*	*59,4*	*34,4*	*100*
200-400	2	0	11	9	22
%	*9,1*	*0,0*	*50,0*	*40,9*	*100*
400-<	2	0	2	14	18
%	*11,1*	*0,0*	*11,1*	*77,8*	*100*
Total	9	2	73	37	121
%	*7,4*	*1,7*	*60,3*	*30,6*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Survey results about the farmers' sequencing of agricultural problems also indicates the presedence of input costs. Apart from these cost items, insufficient land sizes for the maintenance of the economies of scale in the production process, irrigation problems and high labour costs were specified particularly by the landholders of the 1-200 interval, settling at Çakırören and Bahçe villages.

[79] 0-100 decares interval consists 49 holdings.

Table 4.9. Sequencing of the Agricultural Problems

Agricultural problems	%
high fuel costs	20,4
high fertilizer costs	16,8
insufficient land sizes	13,3
irrigation problems	13,1
high labour costs	10,6
low soil quality	6,6
high pesticide costs	6,4
desertification	5,2
natural hazards	4,2
high seed costs	3,5

Source; Questionnaire results of three villages in Karataş, 2007.

The farmers' consideration about their agricultural income sufficiency depends substantially on comparisons with their wealth levels of the previous years and consideration of secondary income resources. The small landholders who have regular retirement pensions in addition to their agricultural incomes, consider their agricultural earnings as sufficient. On the other hand, the reason for the negative evaluation of the landowners holding 200 decares and more is either due to debt burdens which is the crisis' gift, or derived from farmers' discontent which have been the case at all places where the agricultural production and market are dominated by state assistance. The unending complaints from some of the farmers, even though their wealthy position is known by all of the dwellers of the villages, has become a reflexive expression for their activities. This factuality has been one of the main challenging factor in accessing the reliable information during the field study of the thesis.

Table 4.10. Is agricultural earning sufficient?

Size of Holdings	Is agricultural earning sufficient?		
	yes	no	Total
0-100	7	42	49
%	*14,3*	*85,7*	*100*
100-200	9	23	32
%	*28,1*	*71,9*	*100*
200-400	12	10	22
%	*54,5*	*45,5*	*100*
400-<	16	2	18
%	*88,9*	*11,1*	*100*
Total	44	77	121
%	*36,4*	*63,6*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Cotton producers' subsistence strategies in case of insufficient agricultural earnings are various but condensed on doing extra works and borrowing. Since, there is scarce off-farm working opportunities, small landowners go for daily farming works in the fields of others, but this is not so frequent since working at others' lands is regarded as insulting. Working at others' lands is much more a duty for south-eastern nomads. Therefore they prefer borrowing, either from their relatives or moneylenders. Whereas the upper stratas can afford to pay-off on time after the harvest, small landholders can often not, and thus the mechanism of paying debt with debt operates.

Table 4.11. Household subsistence strategies

Size of Holdings	doing extra work	borrowing	external financial support	selling household assets	cutting down on expenditure	Total
0-100	13	24	2	5	4	48
%	*27,1*	*50,0*	*4,2*	*10,4*	*8,3*	*100*
100-200	2	12	2	2	2	20
%	*10,0*	*60,0*	*10,0*	*10,0*	*10,0*	*100*
200-400	3	3	1	1	0	8
%	*37,5*	*37,5*	*12,5*	*12,5*	*0,0*	*100*
400-<	1	2	0	1	0	4
%	*25*	*50*	*0*	*25*	*0*	*100*
Total	19	41	5	9	6	80
%	*23,8*	*51,3*	*6,3*	*11,3*	*7,5*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Borrowing is needed mostly for covering the production expenses which is essential for the maintenance of agricultural production. The only way for getting out of indebtness is their lands; either by selling out or by persisting to produce more intensely. Borrowing from formal institutions is not so applicable for the small landholders since the problem of transfer of inheritance is much more subjected to those. Therefore, borrowings from Agricultural Bank have declined in the last 5 years because the small landowners often can not confirm the requirement of collateral. Nonetheless, Agricultural Bank still maintains the primary position in credit supplying for most of the farmers. Only 24 farmer informed that they have applied credit from banks, 80 percent of whom are the 1-200 size land holders. The applications have been done particularly during preproduction season of cotton in February, March and April.

Table 4.12. The mission of the borrowings applied

for what purposes the borrowings are used	%
for distrains and paying debts	17,1
production costs	61,0
daily expenditures	22,0
Total	100

Source; Questionnaire results of three villages in Karataş, 2007.

Two-thirds of the 44 farmers who informed that their agricultural earnings is sufficient can afford to make savings. The direction of the flows of capital generated through agriculture is the most important determinant for the regeneration of the rural economies. As it was previously stated, 'lucrative trade' and 'merchant-minded entrepreneurship motive' constitutes the dominant capital accumulation and management culture at the region. While particularly during the pre-crisis period transfer of the savings to passive investment tools had been the favorite and while dealing with the investment tools just as interest rates, foreign exchange rates, gold and stock exchanges had become the primary occupancy for most of the rich landholders, today those interests have still been motivating most of the landholders even though there have been some decline due to the decreasing returns in fiscal markets during the recent years.

Table 4.13. The degree of making savings

Size of Holdings	Can you afford to make savings?		
	yes	no	Total
0-100	3	4	7
%	*42,9*	*57,1*	*100*
100-200	3	6	9
%	*33,3*	*66,7*	*100*
200-400	7	5	12
%	*58,3*	*41,7*	*100*
400-<	16	0	16
%	*100*	*0*	*100*
Total	29	15	44
%	*65,9*	*34,1*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Transfer of agriculturally generated capital toward agricultural business concerns is the primacy for the farmers who can afford sufficient level of savings. Besides, the farmers'

interest and concern in Çukurova about agricultural innovations, techniques and tools have been their key feature. Especially the large landowners have been keen on owning the latest models of tractors and equipment. As an indicator of richness these investments have been made even though could cause unneccessary capital losses. Nevertheless, as the most recent innovation in the farming practice of cotton production, cotton-picking machines were almost primarily introduced at Yemişli where there are 7 of them in the village today. The innovation not only results in declining labour costs and better time management opportunity for the owners but also brings these farmers both an extra regular income generation through renting and also brings prestige. On the other hand, there can not be seen the same intense for implementing other research and development techniques such as soil analysis or seed variety testing. Farmers at the region tend to short-term thinking and look for immediate results. Their motivation for eliminating the risk factors is low whereas the motivation of avoiding from the problems of at sight and of being suffered are high.

Table 4.14. Passive investments[80]

Size of Holdings	Passive investments				
	bank	foreign exchange	gold	fixed property	Total
0-100	3	1	2	0	6
%	*50*	*16,7*	*33,3*	*0*	*100*
100-200	2	1	2	2	7
%	*28,6*	*14,3*	*28,6*	*28,6*	*100*
200-400	2	4	4	2	12
%	*16,7*	*33,3*	*33,3*	*16,7*	*100*
400-<	6	14	8	1	29
%	*20,7*	*48,3*	*27,6*	*3,4*	*100*
Total	13	20	16	5	54
%	*24,1*	*37,0*	*29,6*	*9,3*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Agricultural land market at the region is not so lively. At the summer of 2007, the prices were from 2500 to 4000 YTL per donum, apart from productivity of the soil depending mainly on the location factors in terms of an easy access for producers to the land and easy access for the land to irrigation and servicing infrastructures. Disposing the land is only

[80] The number of the total investment items could be more than the number of investor households since one household can invest to particular investment items.

applied in the worst cases and accordingly, during the last production season (2006-2007) almost any changes in the landholding sizes were informed by the interviewees.

Table 4.15. Active investments

Size of Holdings	Active Investments			
	agricultural equipment	agricultural land	non-agricultural business	Total
0-100	0	0	0	0
%	*0*	*0*	*0*	*0*
100-200	2	1	0	3
%	*66,7*	*33,3*	*0*	*100*
200-400	2	2	0	4
%	*50*	*50*	*0*	*100*
400-<	12	6	2	20
%	*60*	*30*	*10*	*100*
Total	16	9	2	27
%	*59,3*	*33,3*	*7,4*	100

Source; Questionnaire results of three villages in Karataş, 2007.

The most important coping strategy for the small landholder with insufficient incomes is driving agricultural production at the rented lands. The owner of these rented lands are usually the expatriated villagers who have not been farmers for long years. The great proportion of these passive landholders are the ones who had immigrated to European countries, especially to Germany, during the period of the 1960s and 1970s. The migration movements towards urban areas or foreign countries has contributed to the survival of small landowners. At first, they rented their lands to the relatives at reasonable prices and even at no charge in some cases. Through financial assistance, they have made the additional and substantial contribution to the small landowner households.

Table 4.16. Land Renting

Size of Holdings	Renting agricultural land		
	yes	no	Total
0-100	28	21	49
%	*57,1*	*42,9*	*100*
100-200	8	24	32
%	*25*	*75*	*100*
200-400	1	21	22
%	*4,5*	*95,5*	*100*
400-<	2	16	18
%	*11,1*	*88,9*	*100*
Total	39	82	121
%	*32,2*	*67,8*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Leasing of essential agricultural equipments is rarely applied and approximately 90 percent of the farmers have their own minimum set of agricultural instruments; tractor, trailer, disc harrow, plow, cultivator, spraying machine, etc. The remaining requirements, if necessary, could be rented from or bartered with other farmers. If the farmer has a land which is at least 100 decares, he has to equip the necessary set so as to be in cotton production.

Two thirds of the producers informed that they are actively working in the production processes. Need for labour depends on the production phase but every landholder has to employ wage workers. The small landholders could apply for household labour force at the early stages of cotton production, but during the hand-hoeing and harvesting stages when the seasonal wage workers have been at the field, the working of household members at the fields is not desired. On the other part, the ones who informed that they have not attended actively to the production, are not exclusively the rich landholders but also some elderly farmers and the ones who works for some secondary incomes do not contribute actively to the processes at the field.

Although significant portion of the landholders, operating more than 200 decares have dual settling and informed their permanent residence as city or town center, they have to stay at their villages and inspect the growing of cotton at least for three months. During the remaining times daily comings from the city center for inspection and for arranging the managerial duties can be managed by the help of their private cars.

Table 4.17. Place of the Permanent Residence

Size of Holdings	Permanent residence			
	city	town	village	Total
0-100	0	0	49	49
%	*0,0*	*0,0*	*100,0*	*100*
100-200	2	0	30	32
%	*6,3*	*0,0*	*93,8*	*100*
200-400	7	0	15	22
%	*31,8*	*0,0*	*68,2*	*100*
400-<	7	2	9	18
%	*38,9*	*11,1*	*50,0*	*100*
Total	16	2	103	121
%	*13,2*	*1,7*	*85,1*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

In addition to the periodical dwellers who have generated an urban-rural mobility throughout the year having dual settling, when we subtract the expatriated household members either as a seasonal or permanent migrants from the sampling population, the outlook for the rural areas becomes more apparent in terms of indicating the demographic potentials and the current inclinations at the villages. While the concentration of the permanent settlers is particularly at the 35 to 50 age farmers with their families, the contraction at 25-35 and 0-10 age group presents the urban migrants with their children. In recent years it was stated by the interviewees that almost anyone have stayed at the villages after getting married.

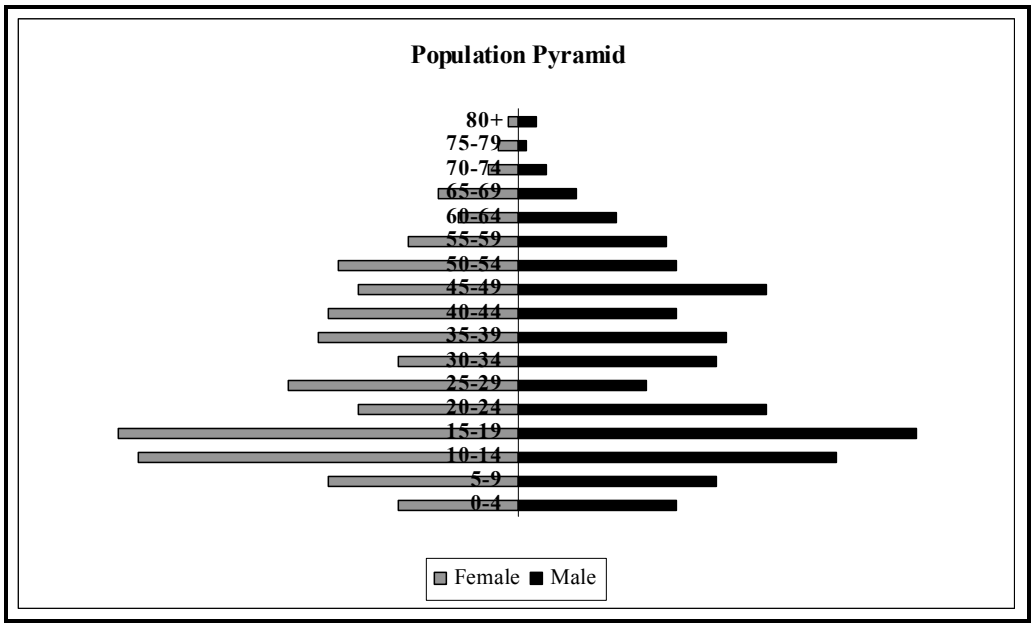

Figure 4.6. Population Pyramid of the permanent settlers at the villages
Source; Questionnaire results of three villages in Karataş, 2007.

Apart from the dual settling of the comperatively wealthy households, generating two separate settling units usually after the marriages, as one at the village for the parents and one at the city for the kids is identified as the risk reducing strategy for the low income households by the farmers. By that mutual assistance through nutriment and financial aids between the villagers and the new urbaners, compensation of the lack of necessities could be provided. In the absence of a rural off-farm working opportunities, this situation could be regarded as a labour diversification strategy for the households.

Table 4.18. The migrated household members

Size of Holdings	Is there any household member migrated?		
	yes	no	Total
0-100	14	35	49
%	*28,6*	*71,4*	*100*
100-200	14	18	32
%	*43,8*	*56,3*	*100*
200-400	10	12	22
%	*45,5*	*54,5*	*100*
400-<	8	10	18
%	*44,4*	*55,6*	*100*
Total	46	75	121
%	*38,0*	*62,0*	*100*

Source; Questionnaire results of three villages in Karataş, 2007.

Urban migrations from the villages have started to increase especially after 1994 and have speeded up in the last 5 to 6 years. The main reasons of migration are informed as marriages and educational moves. It has been informed by some of the interviewees that, while after the implementation of the TOKİ (Housing Development Administration of Turkey) projects, there appeared an opportunity for the villager for settling at Adana with reasonable housing prices. The proportion of the moves originated from unemployment and landlessness, on the other hand, is remarkably low. Even the ones in the worst situation can not venture upon making the risky choice of migrating to the city. The non-farm capabilities could have not been developed in such region of having high dependence on agricultural economy. Only 7 percent of the household members are informed as being worked in a non-agricultural sector before.

Table 4.19. The reasons for migrating

Reason to migrate	%
unemployment/landlessness	13,6
education	27,1
marriage	52,5
for working	6,8
Total	100

Source; Questionnaire results of three villages in Karataş, 2007.

Among the 101 migrated household members, 67 percent is informed as the female migrants. Eventually, villages have been giving away the brides and students, not particularly the poors.

Because of the worsening conditions in urban areas and moral and speculative importance of land owning, living in rural areas has still been the primary choice. However in point of future prospects for next generations, urban alternatives are the prevalent desire. Very similar findings have appeared with the Akşit and Akçay's (1999) study which was conducted at south eastern part of Anatolia, indicating that the rural areas are not demanded, since for not being of production units but more of a formation of social existance.

Table 4.20. Migration motives and future considerations for the next generation

	plans to go	town is better	wants next generation live in the village
	%	%	%
yes	18	69	12
no	82	18	73
doubtful	-	13	15

Source; Questionnaire results of three villages in Karataş, 2007.

Overall tendency have been indicating that the future of landowners, their devisees, rural areas and cotton would be all interdependent. The agricultural economy have been increasingly transformed towards a combatant one. But the combat would be more of a quiet one in comparison with the previous struggles at the region during the recent history. While cotton has been losing its worth, the struggle at the rural areas is more of with the value creation processes and less between the landowners.

The reason could be correlated to the utmost level of commercialisation of agriculture at the region provided by the specific nature of the cotton production. In simple terms the economics at the cotton sector is based on four factors of production. Since the marketing stage is somewhat the least problematic issue for the cotton producers at Karataş (but not the selling prices); quality and quantity measures of the land, the organization and costs of labour, the ownership of financial and physical capital assets and technology, and finally the overall organization and management of the production factors in relation with the household economics will be the determinants till the cotton finds its worth at least some. Regarding these production factors, in the case of being incapable to provide innovative techniques or technologies which could contribute to total utility of the farmers, the inevitable combatting for fixed resource bases (in other words; for factor bases) operates. The ordinary losers of the combat have been the small holdings, if not they can generate non-farm labouring alternatives either in rural areas or elsewhere.

CHAPTER V

CONCLUSION

During the restructuring process in agriculture, it could be specified that the economic climate has been characterized by disadvantageous terms of trade, severe price scissors between agricultural and non-agricultural goods and services, wage arrears for agricultural workers, a lack of access to agricultural credit, rising farm unprofitability and insolvency, reductions in financial flows to agricultural sector and low protection from foreign imports. While the farmers are accepted as lacking the assets necessary to take the advantage of new opportunities presented by free market environment, the basics for not being succeed is correlated with low quality assets of the farmers. Additionally, market failures for credit and insurance, limited access to new technologies and information, and high transaction costs on markets have made the vulnerable section of the agricultural producers even more depending on external assistance and subsidies.

The experiences have exposed distinct strategy spaces for the people in rural places in order to survive throughout the restructuring period (The World Bank, 2007). Some farm households derive most of their income from actively engaging in agricultural markets namely the market-oriented smallholders. Others as the subsistence-oriented farmers, primarily depend on farming for their livelihoods, but use the majority of their produce for home consumption. The labor-oriented households derive the larger part of their incomes from wage work in agriculture or the rural non-farm economy, or from non-agricultural self-employment. Some households might choose to leave the rural sector entirely, or depend on transfers from members who have migrated namely the migration-oriented households. Finally, diversified households could be exposed as the ones combining income from farming, off-farm labor, and migration.

The case of cotton production at the southern part of Adana where has become the last ‘private’ for the intense production place of cotton in the province has been facing with the

facts in its own context. The cotton producers, deployed in the midst of the Mediterranean and the three of lagoons, *Seyhan* and *Ceyhan* Rivers and the metropolitan area of the city of Adana, and on the route for textile manufacturers, input suppliers and traders have long been in restless routines. Restlessness at the countryside is not only the appearing of the physical burdens and series of arrangements have to be accomplished, but more of its convergence through the anxiety regarding the prices and demanding position in terms of transfers and assistance payments from the governments. Regarding the net cash earned, practically they could have not been paid in return for their 'cotton-unginned' since almost the entire amount is spent for the expenses, but paid by the government through assistance payments for being in the production of cotton and for being at the field. The anxiety is accrued since the producers have all excluded from both the production of the prices and the political processes. Even though the organized power of farmers under ÇUKOBİRLİK provide them some advantages in terms of price deployment and selling guarantee, the most important price depressing set of effects are fundemantally created in distant places which are both physically and mentally away from farmers and beyond that they can afford.

In the meantime the textile manufacturers, most of whom are the ex-producers of cotton and although some of them have still been owning agricultural lands for supplying some of their demand, they are content with the prices since they have been provided easy access to 'export cotton' and/or imported yarn particularly from Central and Southern Asian Countries. Traders have also been satisfied with the volume of trade, since the more the price is depressed, the more they can buy from the producers and can sell for less to the manufacturers. Therefore, insecurity is the reason of loss for the farmers and an opportunity for traders for making more money (Çalışkan, 2007). Similarly, insecurity of the farmers make moneylenders more involved in the relations of debt. Locking into the relations of debt results in for the producers by losing the control over their businesses and management of the cycling capital.

While farmers are excluded by traders from the production of the prices, on the other side of the story the seasonal agricultural workers; picking, hoeing and selecting the cotton which are then allowed to grow, are excluded by the farmers not only from social relations but also from the villages. *Elci*s also enchain the seasonal workers through indebting during the winter time when they are at their homelands, in order to guarantee the labour supply that

they will have needed during the peak agricultural season in accordance with the mutual contracts they have agreed with the landowners beforehand.

While commercialised capitalist type of cotton production at the region has brought forth the above all dualities and interdependencies, the landownership patterns has been reshaped not only due to regular division throughout the time between generations but in accordance with the diminishing worth of the cotton fibre. As cotton has been losing its bright from day to day, the farmers at the other territories of the plain could have differentiated their crop types and income basis, whereas almost the entire income of the farmer households in the villages of Karataş have been generated through cotton production in rotation with wheat farming. Since the productivity factors have been substantially balanced up through mechanisation and infrastructural facilities between the enterprises, the major source for increasing the earnings have become the land holding in Karataş. As so the earnings have declined, large landholders look for further lands and the quiet combat between 'the haves' and 'the have nots' for the fertile and the risky lands proceeds. Lands have risky even more for the smallholders who are lacking both the initial capital for cycling the production process and the accumulated capital for absorbing the shocks either coming from the nature or from the markets.

The insecure farmers of the region; the potential losers 'hanged by a single cotton thread', have failed to reduce risks since the rural economy can not give a chance for diversifying the sources of income. Moreover, as they most know the farming but having no other capabilities, the urban pull have only operated for the wealthy landowners of the villages. And at the meantime, the essential contribution for the smallholders come from the paradoxical flows of capital between the rural-agricultural and urban areas. While the capital generated through agricultural production have been invested either for passive investment or for urban trade, on the other hand the off-farm capital accumulations of the ex-villagers have tended to be invested on lands, to their homelands. Hereby the smallholders could have abled to compansate their losses through enlarging their production fields by renting and/or sharecropping the lands of these inactive landowners.

While the disengagement of the smallholders and the disappearing of the peasantary have long been awaited, at that particular 'time zone' at Adana-Karataş most of the landholders are depending and clinging to their lands. Although they have partially succeeded in

resisting, the buffer stocks have melted-down on account of the hot debt situations while on the other hand side their social cooperation and solidarity networks has eroded significantly. Public policy development attempts are in need of a further understanding on rural structures and agricultural practices, otherwise the villagers can not avoid themselves from being regarded as lazy and uncooperative as has been before, due to the imposement of externally initiated cooperative solutions.

Henceforth, answering the queries positively that if it will be possible to develop a new farming practice which enables farmers to construct their own lives and lands and by doing so, can rural phenomenon quit itself from being a 'bench' for 'urban game' could seems attainable by only confirming the enrichment of the farmer's capability spaces and by reducing the uncertainities.

REFERENCES

Akçay, A. (1999), "Toprak Ağalığından Kapitalist İşletmeciliğe Türkiye Tarımında Büyük Topraklı İşletmeler", *75 Yılda Köylerden Şehirlere* içinde, İstanbul: Tarih Vakfı Yayınları, s.115-131.

Akder, H., Çakmak, E., Kasnakoğlu, H. (1999), *Tarım Politikalarında Yeni Denge Arayışları ve Türkiye*, TÜSİAD, TY/196/1999.

Akder, H., Çakmak, E., Kasnakoğlu, H. (2000), *A Search for New Agricultural Policies: The Case of Turkey*, Executive Summary, TÜSİAD Publication No. T/2000-3/280.

Akder, H. (2003), *Türkiye Tarim Politikasinda "Destekleme Reformu",* ASOMEDYA, Aralık 2003, s.46-68.

Akder, H., Çakmak, E., (2005), *DTÖ ve AB'deki Gelişmeler Işığında 21.Yüzyılda Türkiye Tarımı*, TÜSİAD, Yayın No.TÜSAD-T/2005-06/397, Haziran 2005.

Akman, N. (1998), "Agricultural Labor Demand and Supply Balance in Turkey and Internal Migration", Bulutay, Tuncer (eds.) , *Agricultural Structure and Employment In Turkey*, Ankara: State Institute of Statistics.

Akşit, B. (1993), "Studies in Rural Transformation in Turkey 1950-1990", Stirling, Paul (eds.), *Culture and Economy, Changes in Turkish Villages,* Cambridgeshire: The Eothen Press.

Akşit, B. ve Akçay, A. (1999), "GAP Bölgesinde Nüfus Hareketleri", *75 Yılda Köylerden Şehirlere* , İstanbul: Tarih Vakfı Yayınları, s.323-332.

Aktan, O. (1999), *Adana'da Pamuğa Dayalı Sanayi ve Ticaret İşletmelerinde Sosyal-kültürel Etkiler*, Gündoğan Yayınları.

Altan, M. (2001), *Köylüler Ne Zaman Manşet Olur?*, İstanbul: Zaman Yayınları.

Amin, S. (2003), "World Poverty, Pauperization and Capital Accumulation", *Monthly Review*, October 2003.

Anderson, J.R. (2002), "Risk in Rural Development: challenges for managers and policy makers", *Agricultural Systems*, Vol 75, pp. 161-197.

Ashley, C., Maxwell, S. (2001), "Rethinking Rural Development", *Development Policy Review*, 19 (4): pp. 395-425.

Aydın, Z. (2001), "Yapısal Uyum Politikaları ve Kırsal Alanda Beka Stratejilerinin Özelleştirilmesi: Söke'nin Tuzburgazı ve Sivrihisar'ın Kınık Köyleri Örneği", *Toplum ve Bilim*, Bahar 88.

Aydın, Z. (2002), "The New Right, Structural Adjustment and Turkish Agriculture: Rural Responses and Survival Strategies", *The European Journal of Development Research*, Vol.14, No.2, December 2002, pp.183–208.

Baffes, J. (2005), "Cotton: Market Setting, Trade Policies, and Issues", Aksoy, M. A. and J. C. Beghin (eds.) *Global Agricultural Trade and Developing Countries*, The World Bank, pp. 259-274.

Bağımsız Sosyal Bilimciler 2006 Yılı Raporu, *IMF Gözetiminde On Uzun Yıl, 1998-2008: Farklı Hükumetler, Tek Siyaset*, http://www.bagimsizsosyalbilimciler.org/Yazilar_BSB/BSB2006_Final.pdf, last accessed at August, 2007.

Banuri, T. (1998), *Pakistan: Environmental Impact of Cotton Production and Trade*, International Institute for Sustainable Development, Canada.

Barlett, P.F. (1980), "Adaptive Strategies in Peasant Agricultural Production", *Annual Review of Anthropology*, Vol. 9., pp. 545-573.

Beck, U. (1992), *Risk society : towards a new modernity*, London: Sage Publications.

Behar, C., Işık, O., Güvenç, M., Erder, S., Ercan, H. (1999), "*Türkiye'nin Fırsat Penceresi, Demografik Dönüşüm ve İzdüşümleri*", TÜSİAD Yayın No. TÜSİAD-T/99-1-251.

Boratav, K. (1980), *Tarımsal Yapılar ve Kapitalizm*, Ankara Üniversitesi Siyasal Bilgiler Fakültesi Yayınları, Ankara.

Boratav, K. ve Şen, M. (1998), "Socio-Economic Stratification and Labour Use in Turkish Agriculture: an Overview of Findings on Some Village Household Surveys", Tuncer Bulutay

(eds.) , *Agricultural Structure and Employment In Turkey*. Ankara: State Institute of Statistics, pp. 451-494.

Boratav, K. (2003), Cancun'daki Tıkanma Üzerine Çeşitlemeler, http://www.bagimsizsosyalbilimciler.org/bsbtoplum.html, last accessed at September, 2007.

Boratav, K. (2007), Tarımsal Fiyatlar, İstihdam ve Köylülüğün Kaderi, http://www.bagimsizsosyalbilimciler.org/bsbtoplum.html, last accessed at September, 2007.

Borchgrevink, A. (2001), "Agrarian Questions and Enduring Peasants: A Classic Debate Enters the Age of Globalization", *The European Journal of Development Research*, 13 (1): 178-189.

Bülent GÜLÇUBUK, Ertan KARABIYIK, Ferdi TANIR (2003), *Tarım Sektöründe En Kötü Biçimdeki Çocuk İşçiliği Temel Araştırmas: Adana İli-Karataş İlçesinde Pamuk Toplamada Çalışan Çocuklar Örneği*, unpublished working document for ILO-IPEC.

Byerlee, D., Diao, X., Jackson, C. (2005), *Agriculture, Rural Development, and Pro-poor Growth: Country Experiences in the Post Reform Era*, World Bank, Agricultural and Rural Development Discussion Paper 21

Çakmak, E. (1998), *Agricultural Policy Reforms Reforms And Rural Development In Turkey*, Economic Development And Poverty Reduction Workshop, Mediterranean Development Forum September 3-6, Marrakech, Morocco.

Çakmak, E. (2003), *Evaluation of the past and future agricultural policies in Turkey: are they capable to achieve sustainability*, CIHEAM-Options Méditerranéennes, Sér. A/No.52.

Çakmak, E. (2004), *Structural Change and Market Opening in Agriculture: Turkey towards EU Accession*, ERC Working Papers in Economics 04/10, METU: Ankara.

Çalışkan, K. (2003), *Market Maintenance: Cotton, Power and Poverty in Egypt, Turkey and Abroad*, International Center for Advanced Studies, Working Paper: No.14, New York University.

Çalışkan, K. (2005), *"Making a Global Commodity: The Production of Markets and Cotton in Egypt, Turkey, and the United States"*, unpublished PhD Thesis, New York University

Çalışkan, K. (2007), "Markets and Fields: An Ethnography of Cotton Production and Exchange in a Turkish Village", *New Perspectives on Turkey*, Fall 2007 No.37, Homer Kitabevi.

Çalışkan K. (2007), *Sessiz bir devrim oldu*, www.birgun.net, 13.08.2007, last accessed at September, 2007.

De Haan, A. (1999), "Livelihoods and Poverty: the Role of Migration, A Critical Review of the Migration Literature", *Journal of Development Studies*, vol.36, no.2.

De Janvry, A. Sadoulet, E. Murgai, R. (2002), "Rural Development and Rural Policy", Bruce Gardner and Gordon Rausser (eds.) *Handbook of agricultural economics, Agricultural and food policy,* Vol.2A Amsterdam: Elsevier pp.1593-1658

Diao, X., P. Hazell, D. Resnick, and J. Thurlow (2005*), The Role of Agriculture in Pro-Poor Growth in Sub-Saharan Africa*, IFPRI, Washington, D.C.

DİE (1990), Hane Halkı Gelir ve Tüketim Harcamaları Anketi Sonuçları 1987, Ankara.

Ellis, F., Biggs, S. (2001), "Evolving Themes in Rural Development 1950s-2000s", *Development Policy Review*, 19 (4): pp. 437-448.

Ertürk, Y. (1998), "Community, Convention and Trends of Change in Rural Turkey", Tuncer Bulutay (eds.) , *Agricultural Structure and Employment In Turkey*. Ankara: State Institute of Statistics

Eruygur, O. (2006), *Impacts Of Polıcy Changes On Turkısh Agrıculture: An Optımızatıon Model Wıth Maxımum Entropy*, unpublished PhD Thesis, Ankara: Middle East Technical University

European Commission Directorate-General for Agriculture (2001), *Risk Management Tools for EU Agriculture, with a special focus on insurance*, working document.

European Commission Directorate-General for Agriculture (2003), *Agricultural Situation in the Candidate Countries, Country Report: Turkey*, November 2003.

Fairtrade Foundation (2005), *Redressing a Global Imbalance: The Case for Fairtrade Certified Cotton*, Briefing Paper.

Findley, S. (1977), *Planning for Internal Migration: A Review of Issues and Policies in Developing Countries,* Washington, D.C.: USGPO.

Friends of the Earth International (2001), *Sale Of The Century? The world trade system: Winners and Losers*, http://www.foe.co.uk/resource/reports/qatar_winners_losers.pdf, last accessed at November, 2007.

Gençer, O., Özüdoğru, T., Kaynak, M.A., Yılmaz, A., Ören, N. (2005), *Türkiye'de Pamuk Üretimi ve Sorunları*, www.zmo.org.tr, last accessed at November, 2007.

Gibbon, P. (2000), *Global Commodity Chains and Economic Upgrading in Less Developed Countries*, Centre for Development Research Working Paper 0.02, Subseries on Globalisation and Economic Restructuring in Africa no. viii, CDR, Copenhagen.

Gillson, I., Poulton, C., Balcombe, K., Page S. (2004), *Understanding the Impact of Cotton Subsidies on Developing Countries*, Working Paper of ODI (Overseas Development Institute).

Gladwin, C. H., Murtaugh, M. (1980), "The Attentive/Preattentive Distinction In Agricultural Decision Making", Barlett, P.F. (eds.), *Agricultural Decision Making: Anthropological Contributions to Rural Development,* , New York: Academic.

Greenberg, S. (2004), *Global Agriculture and Genetically Modified Cotton in Africa*, African Centre for Biosafety.

Hacettepe Üniversitesi Nüfus Etüdleri Enstitüsü (2006), *Türkiye Göç ve Yerinden Olmuş Nüfus Araştırması*, Yayın No. NEE-HÜ.06.01, Ankara.

Hann, C. ve Hann, I.B. (2001), "Mazlum Olan Kim? Rize'de Çay Üreticileri Örneği", *Toplum ve Bilim*, Bahar 88

Hartwich, F., Ekboir, J., Porras R.D. (2005), *Chain Development in the Context of Market Liberalization: Upgrading of Pro-poor Agrichains under Conditions of Increased Competition*, Conference on International Agricultural Research for Development, Stuttgart-Hohenheim, October 11-13, http://www.tropentag.de/2005/abstracts/full/677.pdf, last accessed at September, 2007.

Harvey, D. (2003), *Sosyal Adalet ve Şehir*, Metis Yayınları.

Ilcan, S. (1994), "Peasant Struggles and Social Change: Migration, Households, and Gender in Rural Turkish Society" *International Migration Review*. No.28-3: pp. 554-579.

ILO-IPEC (2004), *Elimination of Worst Forms of Child Labour in Seasonal Commercial Agriculture Through Education*, unpublished working document on 'Action Programme on Child Labour in Seasonal Commercial Agriculture in Connection with Project of Support to the Turkish TBPPF'.

Isaacman A.; Stephen M.; Adam Y.; Homen M. J.; Macamo E.; Pililao A. (1980), *"Cotton Is the Mother of Poverty: Peasant Resistance to Forced Cotton Production in Mozambique, 1938-1961"*, The International Journal of African Historical Studies, Vol. 13, No.4., pp. 581-615.

Işık, O., Pınarcıoğlu, M. (2004), *Yeni Kalkınmacılık: Bölge Kalkınmada Yeni Arayışlar*, GAP-GİDEM Yayınları, No.4

Kazgan, G. (2003), *Tarım ve Gelişme*, Bilgi Üniversitesi Yayınları: İstanbul.

Keyder, Ç. (1993), "The Genesis of Petty Commodity production in Agriculture, The Case of Turkey", in *Culture and Economy, Changes in Turkish Villages*, ed. Stirling, P., Cambridgeshire:The Eothen Press.

Keyder, Ç. (1999), "Türkiye'de Tarımda Küçük Meta Üretiminin Oluşumu", *75 Yılda Köylerden Şehirlere*, İstanbul: Tarih Vakfı Yayınları.

Keyder, Ç. ve Yenal, Z. (2004), "Kalkınmacılık Sonrası Dönemde Türkiye'de Kırsal Dönüşüm Eğilimleri ve Sosyal Politikalar", in *Küresel Düzen, Birikim, Devlet ve Sınıflar*, ed. Köse, A.H., Şenses, F. ve Yeldan, E., İstanbul: İletişim Yayınları.

Khan, H.M. (2000), *Rural poverty in developing countries: Issues and policies*, IMF Working Paper WP/00/78, IMF Institute.

Kıray, M., Hinderink J. (1968), "Interdependence between Agroeconomic Development and Social Change: A Comparative Study in the Cukurova Region of Southern Turkey", The Journal of Development Studies, 4(4): pp. 497-528.

Kıray, M. (1998), "Sosyo-ekonomik Hayatın Değişen Düzeni: Kendiliğinden Dört Köyün Monografik Karşılaştırması", *Değişen Toplum Yapısı*, İstanbul: Bağlam Yayınları.

Kıray, M. (1999), "Sosyo-ekonomik Hayatın Değişen Düzeni: Kendiliğinden Dört Köyün Monografik Karşılaştırması", *75 Yılda Köylerden Şehirlere*, İstanbul: Tarih Vakfı Yayınları, s.151-162.

Koç A., Smith D.B., Fuller, F., Fabiosa, J. (1998), *The Turkish Agricultural Policy Analysis Model*, Center for Agricultural and Rural Development, Iowa State University, Technical Report 98-TR 42.

Köymen, O. (1999), "Cumhuriyet Döneminde Tarımsal Yapı ve Tarım Politikaları", *75 Yılda Köylerden Şehirlere,* İstanbul: Tarih Vakfı Yayınları.

Köymen, O. ve Öztürkcan, M. (1999), "Türkiye'de Toprak Dağılımı Üstüne Bazı Notlar", *75 Yılda Köylerden Şehirlere*, İstanbul: Tarih Vakfı Yayınları.

National Registry of Farmers (2007), unpublished set of statistics of Republic of Turkey Ministry of Agriculture and Rural Affairs.

Oğuzlar, A. (2006), *Hanehalkı Tipi ve Kır-Kent Ayırımının Diskriminant Analizi ile İncelenmesi*, Akdeniz İ.İ.B.F. Dergisi, s.70-84.

Oral, N. (2006), IMF-DB Programının Sonucu: Tarım Çözülüyor, http://www.bianet.org/bianet/kategori/ekonomi/83763, last accessed at September, 2007.

Öniş, Z. (1998), *State and Market: Political Economy of Turkey*, Bogazici University Press.

Özbay, F., Yücel B. (2001), "Türkiye'de Göç Hareketleri, Devlet Politikalari ve Demografik Yapı" *Nüfus ve Kalkınma: Göç, Eğitim, Demokrasi, Yaşam Kalitesi*, Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara.

Özüdoğru, T. (2006), *Pamuk Durum ve Tahmin 2006-2007*, Tarımsal Ekonomi Araştırma Enstitüsü, Ankara.

Pamuk, M. (2000), "Kırsal Yerlerde Yoksulluk", *DİE İşgücü Piyasaları Analizleri 1999 (1)*, DİE Yayınları, Ankara.

Perry, G., D. de Ferranti, D. Lederman, W. Foster, and A. Valdes. (2005), *Beyond the City: The Rural Contribution to Development*. Washington, D.C: World Bank.

Perry, G., de Ferranti, D., Lederman, D., Foster, V., Valdes, A., (2005), *Beyond the City: The Rural Contribution to Development*. Washington, D.C: World Bank.

Rhoda, R. (1983), *Rural Development and Urban Migration: Can We Keep Them Down on the Farm?*, International Migration Review, Vol.17, No.1, pp.34-64
Schumpeter, J. (1950), *Capitalism, Socialism and Democracy*, New York: Harper and Row.

Sen, A. (1999), *Özgürlükle Kalkınma*, Ayrıntı Yayınları

Sirman, N. (1987), "Pamuk Üretiminde Aile İşletmeleri", Ş. Pamuk ve Z. Toprak (der.), *Türkiye'de Tarımsal Yapılar (1923-2000)* içinde, Ankara: Yurt Yayınları.

Sönmez, A. (2001), "Doğu Karadeniz Bölgesi Fındık Üretim Kuşağında Toprak Ağalığı, Köylülük ve Kırsal Dönüşüm", *Toplum ve Bilim*, Bahar 88.

Stiglitz J.E. (2002), *Globalization and Its Discontents*, New York: Norton.

Stirling, P. (1993), "Growth and Changes – Speed Scale Complexity", in *Culture and Economy, Changes in Turkish Villages* (ed. Stirling, Paul), Cambridgeshire:The Eothen Press.

Tekeli, İ., İlkin, S. (1999), Devletçilik Dönemi Tarım Politikaları (Modernleşme Çabaları), *75 Yılda Köylerden Şehirlere*, İstanbul: Tarih Vakfı Yayınları, s.43-56.

The World Bank (2005), A*gricultural Growth for the Poor: An Agenda for Development*, Directions in Development, Washington D.C.

The World Bank (2007), World Development Report 2008: Agriculture for Development, Washington DC.

Thirtle, C., L. Lin, and J. Piesse. (2003), "*The Impact of Research Led Agriculture Productivity Growth on Poverty Reduction in Africa, Asia and Latin America*." World Development 31 (12): 1959-75.

Thompson, J. (1994), "Tarihten Sayfalar: Pamuk", *National Geographic Türkiye*, No. October 2005.

Timmer P.C. (2002) "Agriculture and economic development", Bruce Gardner and Gordon Rausser (eds.) *Handbook of agricultural economics, Agricultural and food policy,* Vol.2A*,* Amsterdam: Elsevier pp. 1487-1546.

TÜİK (2002), 2000 Genel Nüfus Sayımı - Nüfusun Sosyal ve Ekonomik Nitelikleri: Adana, DİE Yayınları, Ankara.

TÜİK (2004), 2001 Genel Tarım Sayımı Sonuçları: Tarımsal İşletmeler (Hanehalkı), Yayın No. 2924.

Wegren, S.K. (2004), "Rural Adaptation in Russia: Who Responds and How Do We Measure It?", *Journal of Agrarian Change*, Vol. 4 No. 4, October 2004, pp. 553–578.

APPENDIX A:

QUESTIONNAIRE FORM

This Questionnaire Form is the abridged version of the Questionnaire of the project funded by TÜBİTAK (The Scientific and Technological Research Council of Turkey), coded -106K119- and coordinated by Assoc. Prof. Dr. Melih Pınarcıoğlu, named "Rural Poverty in Turkey within the Context of Agricultural Restructuring".

A. Hanehalkı Genel Bilgileri - Yaşam Standartı

1. Anketin yapıldığı kişi? (Hanereisi, hanereisinin eşi, hanereisinin oğlu, vb.) [.....]

2. Evinizde kaç kişi yaşıyor?

Aşağıdaki tablodaki bilgileri doldurunuz.

Gezici (öğrenci. asker. mevsimlik isci vb.) olarak haneden ayrılanlar dahil

	Hanehalkı reisine yakınlığı	Yaş	Cinsiyet	Eğitim Durumu	Doğum yeri	Çalışma Durumu	Yaptığı İş – 1		Yaptığı İş – 2		Sosyal Güvence
							nerede	iş	nerede	iş	
1.											
2.											
3.											
4.											
5.											
6.											
	1. Kendisi 2. Eşi 3. Kızı/Oğlu 4. Annesi/Babası 5. Kardeşi 6. Gelini/Damadı 7. Torunu 8. 9. Diğer akrabalar 10. Akraba		1. Kadın 2. Erkek	1- Okur-yazar 2. Okur-yazar ama 3- İlkokul terk 4- İlkokul 5- Orta okul 6- Lise 7- Meslek lisesi 8- Ön lisans 9-Üniversite/ 10. Üniv/y.okul		1. İşsiz 2. Ev kadını/kızı 3. Ücretli/maaşlı 4. Yevmiyeli 5. İşveren 6.Kendi 7.Ücretsiz aile 8. Mevsimlik 9. Öğrenci 10. Emekli 11. Asker 12. Diğer.....	Yer olarak belirtin		Yer olarak belirtin		1.Sosyal 2. Bağkur 3. SSK 4. Emekli Sandığı 5. Özel sigorta 6. Diğer

3. Hanenin sürekli oturduğu yer neresidir?

☐ Kent merkezinde oturuyoruz.
☐ İlçe merkezinde oturuyoruz.
☐ Köyde oturuyoruz.

4. Kent veya ilçe merkezinde oturuyorsa; köye geliş dönemlerini belirtiniz.

☐ Haftasonları
☐ İş zamanı (ekim, dikim, hasat)..... (*hangi aylar olduğunu belirtiniz*)
☐ Yazları
☐ Diğer .....

5. Şu anda oturduğunuz evin mülkiyet durumu nedir?

☐ Sahibi
☐ Kiracı
☐ Lojman
☐ Kira ödemeden kullanıyor
☐ Diğer

6. Aşağıdaki eşyalardan hangilerine sahipsiniz?

	1. Var **2. Yok**	**Ne kadar zamandır var?** *1. Son 5 yıldır* *2. Daha eski*	**Çalışıyor mu?** *1. Evet* *2. Hayır*
Buzdolabı			
Elektrik Süpürgesi			
Televizyon			
Çamaşır Makinası			
Bulaşık Makinası			
Elektrikli Fırın			
Radyo			
Telefon			
Cep Telefonu			
Araba			
Video			
Bilgisayar			
Internet bağlantısı			

B. Tarım - Tarımsal Üretim

7. Hanenizin temel geçim kaynaklarını, önceliğine göre sıralayınız.

☐ Tarım
☐ Hayvancılık
☐ Düzenli gelir (maaş)
☐ Emekli maaşı
☐ Ev-dükkan kirası
☐ Tarla kirası
☐ Banka, repo faizi
☐ Düzensiz gelir (yevmiye, vb.)
☐ Dışardan katkılarla/akrabalarımız para gönderiyorlar
☐ Tarım dışı kendi işinden elde ettiği kazanç .....(işi belirtin)
☐ Diğer.....

7.1. (Tarım dışı kaynaklar işaretlenmediyse) Ek bir iş ya da kaynaktan yararlanmayı düşünüyor musunuz?

☐ Evet (*işi ya da kaynağı belirtiniz*)..... ☐ Hayır

8. Hanenin sahip olduğu arazinin büyüklüğü

Arazi büyüklüğü	**2006/ Sulanan**	**2006/ Sulanmayan**	**2007/ Sulanan**	**2007/ Sulanmayan**
Tarla				
Sebze ve çiçek bahçeleri				
Meyve ve diğer uzun ömürli bitkiler				
Tarıma elverişli olduğu halde kullanılmayan arazi				
Kavaklık söğütlük				
Nadas				
Koruluk ve orman arazisi				
Tarıma elverişsiz arazi				
Toplam arazi				

9. Sizin veya hanenizden herhangi birinin **tarımsal ürün alınan/alınabilecek** toprağı varsa

9.1 Toprak kiraya veriyor musunuz?
☐Evet ..... **....(miktar)** ☐Hayır

9.2 Ortakçıya verir misiniz?
☐Evet ..... **....(miktar)** ☐Hayır

10. Sizin veya hanenizden herhangi birinin **tarımsal ürün alınan/alınabilecek** toprağı yoksa

10. 1 Toprak kiralar mısınız?
☐Evet ....(**miktar**) ☐Hayır

10.2. Ortakçılık yapar mısınız?
☐Evet ....(**miktar**) ☐Hayır

11. Toprağı işlerken kimi işçi olarak kullanıyorsunuz? *(Birden fazla seçenek işaretlenebilir)*
☐ Kendim çalışırım/Aile üyeleri
☐ Yevmiyeli işçi (yerel)
☐ Mevsimlik işçi (nereden .....)
☐ Ücretli işçi (sürekli çalışan)
☐ Diğer .....

12. 2006 yılında tarım kredisi ve/veya tarımsal üretim harcamaları için borç aldınız mı?
☐ Evet ☐ Hayır

12.1. Evetse, aldığınız kredi ve/veya borç miktarını kaynağına göre belirtiniz.

	Kredi kaynağı	**Kredi miktarı**	**Faiz oranı**	**Kredi alınan ay**
1	Ziraat Bankası			
2	Diğer Kamu Bankaları			
3	Tarım Kredi Kooperatifi			
4	Diğer Kooperatifler			
5	Diğer Özel Bankalar			
6	Tefeciler			
7	Bayiler			
8	Tüccarlar			
9	Akraba, Eş ve Dostlar			
10	Diğer			

13. Kredi dışında başka bir yardım/destek aldınız mı?
☐ Evet ☐ Hayır *(soru 23'e gidiniz)*

13.1. Evetse, ne tür bir yardım/destek aldınız?
☐ Doğrudan gelir desteği
☐ Prim desteği

☐ Fark ödeme sistemi
☐ Girdi desteği
☐ Hayvancılık desteği
☐ Ürün sigortası ödemeleri
☐ Telafi edici ödemeler (alternatif ürün programı)
☐ Diğer (açıklayınız) .....

14. Lütfen tarımsal üretimde karşılaştığınız en önemli beş problemi önceliğine göre sıralayınız.

14.1. Tarımsal üretimde karşılaşılan problemler

☐ Sulama sıkıntısı
☐ Çoraklaşma
☐ Arazinin eğimli olması
☐ Erozyon
☐ Toprağın kalitesinin düşüklüğü
☐ Toprak büyüklüğünün yetersizliği
☐ Taban suyunun yüksekliği
☐ Zirai hastalıklar
☐ Doğal afetler
☐ Gübre fiyatlarının yüksekliği
☐ Tohum fiyatlarının yüksekliği
☐ Kimyasal ilaç fiyatlarının yüksekliği
☐ Yakıt fiyatlarının yüksekliği
☐ Çalıştırılan makine giderleri
☐ Emek giderleri
☐ Pazar bulabilmenin zorluğu
☐ Zirai eğitimin yetersizliği
☐ Yeni ürün bulabilmekteki güçlük
☐ Makine bulabilmenin zorluğu
☐ Diğer .....

15. Başlıca hangi tarımsal ürünleri üretiyorsunuz? (*Öncelik sırasına göre doldurunuz ve gerektiği yerde ürün hakkında açıklama yapınız*.)

	2005				**2006**			
	Sıra	**Ürün 1**	**Ürün 2**	**Üretim Miktarı**	**Sıra**	**Ürün 1**	**Ürün 2**	**Üretim Miktarı**
Hububat (mısır, arpa, vb.)								
Sebzeler (domates, marul vb.)								
Meyve (çilek, karpuz vb.)								
Şeker pancarı								
Meyve Ağacı								
Bağcılık								
Pamuk								
Fındık								
Hayvan yemi								
Diğer								

Daha fazla ürün varsa yukarıdaki çerçeveye uygun şekilde
belirtiniz.....

16. Son beş yıl içerisinde tarımsal ve hayvansal ürün tercihlerinizde değişiklik oldu mu?
Olduysa, 5 yıl önce üretilen ürünler .....

17. Ürettiğiniz ürünleri nasıl değerlendiriyorsunuz/değerlendiriliyor? (*birden fazla işaretlenebilir*)

☐ Kendimiz kullanıyoruz/ bize ancak yetiyor
☐ Köydekilere kendimiz satıyoruz
☐ Yerel/ulusal pazarlarda satılıyor
☐ Sanayide işlenmek üzere satıyoruz (*Nereye olduğunu açıklayınız*) .....
☐ İhraç ediliyor (*Nereye olduğunu açıklayınız*) .....
☐ Diğer .....

17.1. Satıyorsa, ürünlerinizin yüzde kaçını satıyorsunuz? % .....

17.2. Elde ettiğiniz ürünleri kime satıyorsunuz?

	% kaçı?*(ürünü belirtiniz)*	% kaçı?*(ürünü belirtiniz)*
☐ Köydeki pazarda tüketiciye	…….	…….
☐ Tüccara	…….	…….
☐ Kooperatife	…….	…….
☐ Fabrikaya	…….	…….....
☐ Diğer	…….	…….

18. Satışını yaptığınız ürünlerin türü, satış miktarı ve satış fiyatı nedir?

Ürün türü	**Satış miktarı(yıllık)**	**Satış fiyatı (YTL/kg)**	**Kime?**

19. Ürettiğiniz ürünlerin pazarlanmasında sorun yaşıyor musunuz?

☐ Evet ☐ Hayır

19.1. Evetse, ne tür sorunlar yaşıyorsunuz? *(Birden fazla seçenek işaretlenebilir.)*

☐ Ürettiğimiz ürüne alıcı bulamıyoruz
☐ Pazara uzaklık nedeniyle sorunlar yaşıyoruz
☐ Üreticilerin kurduğu bir örgütün yokluğu nedeniyle sorunlar yaşıyoruz
☐ Tüccar ve aracıların hakimiyetinden kaynaklı sorunlar yaşıyoruz
☐ Ürün standardizasyonu ve zirai ilaç kalıntılarından dolayı ürünümüz geri dönüyor
☐ Diğer .....

20. Bir kooperatife ya da birliğe üye misiniz?

☐ Evet ☐ Hayır

20.1. Evetse, hangi kooperatife üyesiniz? .....

21. Aşağıdaki tarımsal alet ve makinalardan hangilerine sahipsiniz?

Tarımsal alet ve makinalar	Sayı			**Tarımsal alet ve makinalar**	Sayı		
	Kendi malı	Ortak	Kira		Kendi malı	Ortak	Kira
Biçerbağlar				Su motoru (elektrikli)			
Römork				Su motoru (akaryakıtlı)			
Diskaro				İlaçlama aleti (sırt tipi pulverizatör)			
Kültivatör				Süt sağma makinesi			
Pulluk				Mibzer			
Çapa makineleri				Batöz			
Çayır biçme makinesi				Selektör			
Hayvanla çekilen saban				Pamuk toplama makinası			
Motorlu testere				Slaj makinesi			
Traktör				İlaçlama aleti (traktöre takılan motorlu holder)			
Gübre atma makinesi				Süt soğutma tankı			
Biçerdöver				DİĞER			

22. Tarımsal ve/veya hayvansal üretim faaliyetlerinizle ilgili herhangi birinden danışmanlık ya da eğitim aldınız mı?

☐ Evet, ildeki tarımsal örgütten eğitim aldım
☐ Evet, ilçedeki tarımsal örgütten eğitim aldım
☐ Evet, ziraat mühendisinden/teknisyeninden danışmanlık hizmeti aldım
☐ Evet, veteriner hekimden danışmanlık hizmeti aldım
☐ Hayır, böyle bir hizmet almadım

23. Organik tarımla uğraşıyor musunuz?

☐ Evet ☐ Hayır

Evetse;

23.1. Ne üretiliyor .....ne zamandan itibaren üretiliyor.....
23.2. Üretimin ne kadarı organik ürün.....
23.3 Organik ürün sertifikasyonunuz var mı?
Evet☐ Hayır☐ Başvurdum☐

Hayırsa;

23.2. Organik tarım faaliyetlerinde bulunmayı düşünüyor musunuz?
☐ Evet ☐ Hayır ☐ Organik tarım hakkında bilgim yok ☐ Kararsızım

24. Sözleşmeli tarım sistemiyle üretim yapıyor musunuz?

☐ Evet ☐ Hayır

Evetse;

24.1. Ne üretiliyor .....ne zamandan itibaren üretiliyor .....
24.2. Kim için üretiliyor ....., ne zamandan beri üretiliyor .....

Hayırsa;

24.3 Sözleşmeli tarım sistemine geçmeyi düşünüyor musunuz?
☐ Evet ☐ Hayır ☐ Sözleşmeli tarım hakkında bilgim yok ☐ Kararsızım

25. Tarımsal ürün sigortanız var mı ? Evet☐ Hayır ☐

Evetse;

25.1 Hangi ürünler .....
25.2 Ne zamandan beri.....

Hayırsa;

25.3. Neden.....

26. Bir üretici olarak Türkiye'deki tarımsal sistem sizce ne yönde değişmektedir? *(Birden fazla seçenek işaretlenebilir.)*

☐ Üreticinin yararına
☐ Üreticinin zararına
☐ Tüccarın/Aracının yararına
☐ Tüccarın/Aracının zararına
☐ Devletin yararına
☐ Devletin zararına
☐ Tüketicinin yararına
☐ Tüketicinin zararına
☐ Diğer.....
☐ Diğer.....

C. Kırsal Hanenin Tarım ve Tarım Dışı Gelirleri, Harcamaları, Mülkiyet ve İstihdam Durumları

27. Yıllık ortalama toplam geliriniz ne kadar?

A	B	C=A-B	D	E=C+D
Tarımsal brüt gelir	**Tarımsal gider**	**Tarımsal net gelir**	**Tarım dışı gelir**	**Net toplam gelir**

28. Son beş yılda hanehalkının gelirinde nasıl bir değişim oldu? **(*Hayat pahalılığı, enflasyon dikkate alınacak)***

☐ Aşağı- yukarı sabit kaldı
☐ Düzenli bir artış gösterdi, iyileşme oldu
☐ Düzenli bir azalış gösterdi, kötüleşme oldu
☐ İnişler, çıkışlar gösterdi

29. Tarımdan elde ettiğiniz gelir ihtiyaçlarınızı karşılamaya yetiyor mu?

☐ Evet ☐ Hayır

29.1. Evetse, birikiminiz var mı?

☐ Evet ☐ Hayır

Birikiminiz varsa,

29.1.1.Yatırımlarınız nedir?		29.1.2. Tasarruflarınız nedir?	
1.Tarımsal iş makinası aldım		1.Banka	
2.Tarımsal arazi aldım		2.Faizsiz bankacılık / finans kurumu	
3.Hayvan aldım		3.Borsa	
4.Tarımdışı alanda iş kurdum		4.Nakit döviz	
5.Diğer		5.Altın	
		6.Gayrimenkul	
		7.Diğer	

29.2. Hayırsa, geçinebilmek için neler yapıyorsunuz? *(Birden fazla seçenek işaretlenebilir)*

☐ İlçede/kentte geçici işçilik yapıyoruz
☐ Ek işler yapıyoruz
☐ Borç alıyoruz
☐ Yardım alıyoruz
☐ Elimizdeki malları satıyoruz
☐ Diğer .....

29.2.1. Ek iş yapılıyorsa;

- Ne iş yapıyorsunuz? .....

29.2.2. Borç alınıyorsa;

- Kimden borç alıyorsunuz? .....
- Ne sıklıkta borç alıyorsunuz? .....
- Hangi dönemlerde borç alıyorsunuz? .....
- Aldığınız borcu hangi ihtiyacınızı karşılamak için kullanıyorsunuz? (geçim harcamaları, tarımsal üretim vb) .....

29.2.3. Yardım alınıyorsa;

- Nereden/Kimden yardım alıyorsunuz? .....

29.2.4. Varolan mülk elden çıkarılıyorsa;

- Hangi mülkleri satıyorsunuz? .....
- Gelen parayı nerede kullanıyorsunuz? .....

30. Hanenin tarımsal üretim harcamalarında geçen yıla oranla bir artış oldu mu?

☐ Evet ☐ Hayır

Evetse harcamalardaki bu artış ne şekilde gerçekleşti?

	Önem sırası	**Geçen yıla oranla % artış**
Tarımsal girdi harcamaları (zirai ilaç, tohum, gübre,vb.)		
Tarımsal üretimdeki emek kullanımı masrafları		
Makina – teçhizat harcamaları		
Hayvansal üretim için yapılan masrafları		
Diğer		

31. Hanenizde motorlu taşıt var mı?

☐ Evet ☐ Hayır

31.1. Evetse; ne tür bir taşıtınız var?

☐ Traktör …….. (Birden fazlaysa sayısını yazın)
☐ Otobüs …….. (Birden fazlaysa sayısını yazın)
☐ Özel araba …….. (Birden fazlaysa sayısını yazın)
☐ Ticari araç …….. (Birden fazlaysa sayısını yazın)
☐ Minibüs …….. (Birden fazlaysa sayısını yazın)
☐ Motorsiklet …….. (Birden fazlaysa sayısını yazın)
☐ Diğer …… ..…... (Birden fazlaysa sayısını yazın)

31.2. Ayda ortalama ne sıklıkta ve ne amaçla ilçe merkezine ve kent merkezine gidiyorsunuz? (ör: Ayda 1, haftada 1, hergün gibi)

	Kent Merkezine Yolculuk sayınız	*İlçe Merkezi Yolculuk sayınız*	*Çıkış sebebiniz (iş sağlık,eğitim,akraba ziyareti)*
☐ Traktör	…….....	…….....	…….....
☐ Otobüs	…….....	…….....	…….....
☐ Özel Araba	…….....	…….....	…….....
☐ Minibüs	…….....	…….....	…….....
☐ Motorsiklet	…….....	…….....	…….....
☐ Diğer	.....	…….....	…….....

32. Kırsal alanda (köyde) ve/veya kentsel alanda (şehirde) herhangi bir mülkünüz var mı?
☐ Evet ☐ Hayır

32.1. Evetse;

Kırsal Alan (köy)	Adet/alan	**Kentsel Alan (şehir)**	Adet/alan	Yer adı
Ev		Ev		
Arsa (inşaat için)		Arsa		
Dükkan		Dükkan		
Diğer.....		Diğer.....		

D. Kırsal Alanda Nüfus - Göç

33. Hanehalkı üyelerinden herhangi bir nedenden dolayı köy dışına temelli ya da mevsimlik göç eden var mı?
☐ Evet ☐ Hayır

33.1. Evetse;

Görüşülen kişiye yakınlığı	**Yaşı**	**Cinsiyeti**	**Göç yılı**	**Göç ettiği yer** *(Yeri tam olarak belirtiniz)*	**Sürekli göç**	**Mevsimlik göç**
1. Kendisi 2. Eşi 3. Kızı/Oğlu 4. Annesi/Babası 5. Kardeşi 6. Torunu 7. Diğer akrabalar 8. Akraba olmayanlar		1. Kadın 2. Erkek		1. Şehir merkezi 2. İlçe merkezi 3. Köy 4. Yurtdışı **Yer adı belirtiniz**		

33.2. Göç nedeni?

- ☐ Topraksızlık
- ☐ Tarımsal üretimin sağladığı gelirin yetersizliği/Geçim sıkıntısı
- ☐ İşsizlik/İş aramak
- ☐ Sağlık imkanları/Sosyal imkanlar
- ☐ Eğitim
- ☐ Evlilik/Aile birleşmesi
- ☐ Diğer .....

33.3. Göç eden kişi şu anda hangi faaliyette bulunmaktadır?

- ☐ Eğitim
- ☐ İşsiz
- ☐ Ücretli çalışan
- ☐ Kendi hesabına çalışan
- ☐ Diğer .....

33.3.1. Eğer çalışıyorsa, hangi sektörde çalışıyor? .....

33.3.2. Çalışan kişinin işvereni ile akrabalık ya da hemşehrilik ilişkisi var mı?

☐ Evet ☐ Hayır

33.4. Göç eden kişi köye ne sıklıkta geliyor?

- ☐ Köye her hafta geliyor
- ☐ Köye ayda bir geliyor
- ☐ Köye yılda bir geliyor
- ☐ Köye yılda birkaç kez geliyor
- ☐ Köye çok nadir geliyor
- ☐ Köye hiç gelmiyor

33.5. Göç eden kişinin köye gelişi hangi zamanlara denk düşüyor?

- ☐ Haftasonları
- ☐ İş zamanı (ekim, dikim, hasat…)
- ☐ Yazları

33.6. Göç eden kişiye gıda (kendi mahsulü, satın alınmış) yardımında bulunuyor musunuz?

☐ Evet ☐ Hayır

33.7. Göç eden kişiye parasal destekte bulunuyor musunuz?

☐ Evet ☐ Hayır

33.8. Göç eden kişi size gıda yardımında bulunuyor mu?

☐ Evet ☐ Hayır

33.9. Göç eden kişi size parasal destekte bulunuyor mu?

☐ Evet ☐ Hayır

34. Siz ya da hanenizden herhangi biri şehre göç etmeyi düşünüyor mu?

☐ Evet ☐ Hayır

34.1. <u>Evetse:</u> neden?

- ☐ Topraksızlık
- ☐ Tarımsal üretimin sağladığı gelirin yetersizliği/Geçim sıkıntısı
- ☐ İşsizlik/İş aramak
- ☐ Sağlık imkanları/Sosyal imkanlar
- ☐ Ailevi nedenler
- ☐ Diğer .....

E. Kırsal Alanda Gündelik Yaşam ve Gelecek Algısı

35. Son yıllarda aileye SIKINTI veren ne gibi durumlar yaşanmaktadır?

	Çok fazla	**Oldukça fazla**	**Biraz**	**Çok az**	**Hiç**
Geçimi sağlamada güçlük ve sıkıntı					
Evde/ailede hastalıkların çok olması nedeniyle sıkıntı					
Sağlığının bozuk olması nedeniyle sıkıntı					
Çocukların okuyamaması nedeniyle sıkıntı					
İşsizlik ve iş bulamama nedeniyle sıkıntı					

36. Yaşamınızı, yaşam koşullarınızı, aşağıdaki her bir konuda nasıl değerlendirirsiniz?

	Çok daha iyi	Biraz daha iyi	Aynı	Biraz daha kötü	Çok daha kötü
Yaşadığınız hayatı, anne babanızınki ile karşılaştırdığınızda nasıl değerlendirirsiniz?					
Sizce, çocuklarınızın hayatları sizinkine göre nasıl olacak?					
Geçim durumunuz 5 yıl öncesine göre nasıl?					
İşiniz geçmişe göre nasıl?					
Sağlık durumunuz geçmişe göre nasıl?					

37. Sizce gelecekte şu aşağıdakiler bu güne göre nasıl olacak?

	Çok daha iyi	Biraz daha iyi	Aynı	Biraz daha kötü	Çok daha kötü
İşiniz					
Geçim koşullarınız					
Çocuklarınızın işleri (sizinkine göre)					
Çocuklarınızın geçim durumu (sizinkine göre)					
Yaşayacağınız ev					

38. Çocuklarınızın gelecekte köyde yaşamalarını, burada kalmalarını istiyor musunuz?
☐ Evet ☐ Hayır ☐ Kararsızım

39. Çocuklarınızın gelecekte toprağı işlemeye devam edip, tarımla uğraşmalarını istiyor musunuz?
☐ Evet ☐ Hayır ☐ Kararsızım

40. Çocuklarınızın iyi bir eğitim alıp şehirde bir hayat kurmalarını istiyor musunuz?
☐ Evet ☐ Hayır ☐ Eğitimini alıp, yanıma dönmesini isterim

F. Kırsal Alanda Tarımdışı Faaliyet Potansiyeli

41. Çalışabilir durumda olan hane bireylerinden herhangi birinin tarım dışındaki bir sektörde/alanda çalışmasını/iş bulmasını sağlayacak bir mesleki becerisi var mı? (Diploma, sertifika, vb.)
☐ Evet.....belirtin. ☐ Hayır

42. Siz ya da hanenizden herhangi biri daha önce tarımdışı bir sektörde çalıştı mı?
☐ Evet ☐ Hayır

42.1. Evetse;

Çalıştığı yer?	
Hangi işte çalıştı?	
Ne kadar süre çalıştı?	

43. Yakın gelecekte tarımdışı bir sektörde iş aramayı/iş kurmayı düşünüyor musunuz?
☐ Evet ☐ Hayır ☐ Belki

43.1 Evet ve belki seçenekleri işaretlendiyse;

Çalışan olarak mı, iş sahibi olarak mı?

Hangi sektörde/alanda? Lütfen belirtiniz	Çalışma durumu
	1. Ücretli/maaşlı ☐ 2. Yevmiyeli ☐ 3. İşveren ☐ 4. Kendi hesabına ☐ 5. Diğer ☐

44. Köyünüzde bugüne kadar dikkate alınmamış, devlet ya da özel sektörün yardımıyla geliştirilebilecek herhangi bir potansiyel alan var mı; varsa nedir?

.....
.....

APPENDIX B:

INTERVIEW FORM 1

(Applied to the farmers)

Anket Yapılan Köy: .....

Anket No:.....

1. Pamuğun üretim safhalarına göre farklılaşmak kaydıyla; bize 1 gününüzü anlatır mısınız? Pamuğunuzun 1 yılını anlatır mısınız?

2. Karataş'ta üretilen pamuğun 'hayat döngüsü' nasıldır?

3. Yeni bir pamuk sezonuna başlarken beklentiler ve alınan pozisyonlar ne şekilde belirlenmektedir?

4. Bir üretim sezonuna girerken karşılaşabileceğinizi düşündüğünüz muhtemel riskler, aksilikler nelerdir? Bunları bertaraf etmek için alabileceğiniz önlemler nelerdir?

5. Bölgede bir "tarımsal üretim-ticaret-sanayi" (ve kurumsal-yönetsel hizmet sektörü) ağı – aktif iş ortamı var mıdır? Siz, bu ilişkiler içerisinde kendinizi yeterince aktif görüyor musunuz?

6. Üreticilerin pamuk üretimini gerçekleştirmenin dışında 'pazar'a da dahil olmaya enerji ve vakitleri var mı? Bunu onlar için kim üstlenmiş durumda?

7. Dört üretim faktörü dediğimiz; toprak, emek, sermaye ve işletme hususlarını kendi üretim pratiğiniz içerisinde nasıl örgütlüyorsunuz?

8. Karataş bağlamında, bir 'tarımsal bilgi paylaşım-aktarım ağından' söz edilebilir mi? Şayet böyle bir ağ yoksa; üretici neye dayanarak kararlar almaktadır?

9. Kaç yıllık öngörülerde bulunuyorsunuz? İktisadi faaliyetinizle ilgili karar alma, tercihte bulunma durumunda belirleyici olan etmenler nelerdir? Teknik, finansal ve pazarlama bilgilerine ulaşmakta hangi bilgi kaynaklarından yararlanıyorsunuz, kimlere danışıyorsunuz?

10. Pamuk üretimi ve daha genel konuşursak tarımsal üretim dışında, bölge insanının alternatifleri var mıdır? Üretim gelenekleri, 'pamuk sektörü'ndeki geçmişleri, uzun yıllardır pamuğa endeksli bir iş dünyası ve kültürü olması onlara ne tür avantajlar ve/veya kısıtlar sunmaktadır?

11. Tarım sektörü ve pamuk üretimi bağlamında ulusal ve bölgesel düzeyde karar alma süreçlerinde bir 'pamuk üreticileri' – 'tekstil sektörü' gerilimi, çekişmesi yaşanmakta mıdır? Sizce pamuk üretiminin şimdisini ve geleceğini belirleyen ana etmen ve aktörler nedir?

12. Aile ve akrabalık yapınızı ve tarıma dair hikayesini anlatınız. Ailenizin öyküsü Karataş ve pamuk bağlamında nedir? Göç edenlerin şu andaki durumları nedir?

13. Risk azaltma mekanizmaları – riskleri paylaşarak azaltma biçimleri nelerdir?

14. Bölgede ortakçılık ve kiracılık yoluyla üretim yapma ne biçimlerde vuku buluyor? Ortakçılık yapanlar kimlerdir? Kiracılık yapanlar kimlerdir?

15. Pamuk üretiminin değişik fazlarında, emek kullanım ihtiyaç ve miktarları nedir? Makinalı hasat bölgede ne tür değişimlere yol açmıştır?

16. Üreticilerin elciler ve mevsimlik tarım işçileri ile olan ilişkileri nasıl? (gelecek yılın ücretinin bir kısmı peşin olarak veriliyor mu? vb.)

17. Adana-Karataş'ın pamuk üretimi bakımından rakipleri kimlerdir? (pamuk üretiminin GAP bölgesine kayması ve/veya tekstil sektörünün bölgesel gelişimi bağlamında)

18. Şu an için 1 dönüm alanda farklı ürün tercihlerinizin getireceği gelirler nedir? Pamuk-buğday-karpuz-mısır vb.

19. Adana Karataş'ta pamuğun rakibi olabilecek, yerine geçebilecek bir ürün var mıdır?

20. Sizce pamuk için oluşturulacak 'adil fiyat' nedir, hangi kriterlere göre ve nasıl belirlenmeli, sektördeki aktörler arasında nasıl pay edilmelidir?

21. Tarımsal – hayvansal krediye hangi dönemlerde ihtiyaç duymaktasınız? Kredi alma ve/veya borçlanma durumunda hangi kaynaklardan yararlanıyorsunuz?

22. Pamuğunuzu depolama olanağınız var mı? Pamuğun dönemsel fiyat oluşumu nasıl bir eğilim gösteriyor. Spekülasyon araçları nelerdir?

23. Bölgede küçük işletmeci iken büyüyen çiftçi öyküsü var mı? Bunu nasıl başardı?

24. Pamuk üretiminden bir vazgeçiş söz konusu ise bunlar görece büyük çiftçiler midir, küçük çiftçiler midir? Böyle bir durumda genel eğilim hangi faaliyet alanına yönelik olmaktadır?

25. Kırsal alan kökenli (özellikle pamuk tarımı menşeli) işgücü-emek mekansal ve iş alanı olarak nerelere kayıyor?

26. Toprak fiyatları nasıl oluşmaktadır, son dönem için hangi fiyat aralığında şekillenmektedir?

27. Global göstergelerden ziyade, bölgede son yıllarda bir 'kaybeden grup' var mıdır? Bu kaybeden grubu tarifleyecek keskin bir özellikleri var mı? Kimdir bu kaybedenler? (kadınlar, küçük toprak sahipleri, vb.) Peki 'kazanan grup'? Bunları sosyal ve ekonomik hayata kazandırmak yönünde kurum ve kuruluşların bir çabası, uygulaması var mıdır?

28. Gelirlerin ve servetin köy dışına kaçması gibi bir durumdan söz edebilir miyiz? Şayet böyle bir durum var ise; bu servet kaçışı beraberinde bir aktif nüfus göçünü de yaşatmış mıdır?

Yoksa, servet sahipleri köyde yaşamaya devam etmekte ancak köy dışında yatırım mı yapmaktadırlar?

29. İktidar ilişkileri bakımından; En nüfuzlu kişi kimdir? Köy-kasaba, köylü-tüccar ilişkisi nasıl cereyan ediyor?

30. Bölge'de pamuk üreticilerinin 'pazar' mekanizmasıyla bütünleşmesini engellediğini düşündüğünüz bir sebep, bir sistem, bir kurum (Çukobirlik) var mıdır? Bölgenin pamuk ile ilintili tarihinde önemli ekonomi – politik geçişler, kırılma noktaları, başarı ve çöküş hikayeleri nelerdir?

31. Köylerin sınıfsal ve etnik yapılarının hikayesi nedir? Üretim örgütlenmeleri farklı mıdır?

32. Diyelim ki bir felaket sonucu o yıl ki tüm ürününüz heba oldu, ne yaparsınız?

33. Diyelim ki bu yıl elinize önemli miktarda bir para geçti, yapacağınız ilk birkaç şey nedir?

34. Önemli düzeyde gelir kaybına uğradığınız dönemlerde geçinmeyi nasıl başardınız?

35. Tarımda dönüşümün olumsuz etkilerini bertaraf stratejileriniz ne biçimdedir;
    a. Gelir kaynağı yaratma; birikmiş kaynakları harcama; borçlanma
    b. Tüketimi sınırlama; maliyeti düşürme

36. Neden kırsal alanda kalmaya devam ediyorsunuz? Sizi burada tutan etmenler nelerdir?

37. Kırsal alanda yaşıyor olmanızın size getirdiği en önemli zorluklar nelerdir?

38. Köyünüzü daha yaşanabilir kılmak için herhangi bir çabanız oldu mu, olacak mı?

39. Ceyhan'da (ve yakın çevrede önemli buldukları başka gelişmeler varsa) yaşanan gelişmeleri nasıl değerlendiriyorsunuz? Pamuk ve ilgili sektörlere etkisi ne olur?

40. Eski zamanları ve şimdiyi düşündüğünüzde, yaşadığımız bu süreç için; bir tarihsel kırılma anı – geçmişin yolundan başka dinamiklerle şekillenecek bir 'an'dan söz edebilir miyiz?

APPENDIX C:

INTERVIEW FORM 2

(Applied to the institutions)

1. Kurumunuz nasıl çalışmaktadır?

2. *Piyasaya dair algılar nasıl üretilmekte, tüketilmekte, insanlara ulaşmakta ve tartışılmaktadır?* Yeni bir pamuk sezonuna başlarken beklentiler ve alınan pozisyonlar ne şekilde belirlenmektedir?

3. Bir üretim sezonuna girerken karşılaşabilinen muhtemel riskler, aksilikler nelerdir? Bunları bertaraf etmek için alınabilecek önlemler nelerdir? Önemli düzeyde gelir kaybına uğranılan dönemlerde geçinmeyi nasıl başardılar?

4. Üreticilerin – köylülerin günlük hayatlarını, problemlerini ve yönetsel kurumlarla olan ilişkilerini yürütme-organize etme yolları bağlamında; enformal – bilimsel pencereden görünemez olan organizasyon biçimleri nelerdir?

5. Kaç yıllık öngörülerde bulunuyorsunuz? İktisadi faaliyetinizle ilgili karar alma, tercihte bulunma durumunda belirleyici olan etmenler nelerdir? Bu konuda hangi bilgi kaynaklarından yararlanıyorsunuz?

6. Pamuk üretimi ve daha genel konuşursak tarımsal üretim dışında, bölge insanının alternatifleri var mıdır? Üretim gelenekleri, 'pamuk sektörü'ndeki geçmişleri, uzun yıllardır pamuğa endeksli bir iş dünyası ve kültürü olması onlara ne tür avantajlar ve/veya kısıtlar sunmaktadır?

7. Pamuğun üretim safhasına dair yapılan ve yapılacak bilimsel çalışmaların, üretim teknolojilerinin bölgenin kaderini ne ölçüde değiştireceğini düşünüyorsunuz? Bu gelişmelerin bölgedeki pratiklere sirayet etmesinin yolu nedir?

8. Tarım sektörü ve pamuk üretimi bağlamında ulusal ve bölgesel düzeyde karar alma süreçlerinde bir 'pamuk üreticileri' – 'tekstil sektörü' gerilimi, çekişmesi yaşanmakta mıdır? Sizce pamuk üretiminin şimdisini ve geleceğini belirleyen ana etmen ve aktörler nedir?

9. Tekstil sektörünün pamuğa olan talebini doğrudan ve/veya dolaylı etkileyen bir düzenleme var mı? Firmaları pamuk ya da yarı-mamül denilebilecek (iplik vb.) ürünlerin ihracatına yönelten etmenler nelerdir?

10. Araştırma: Tekstil ve iplik firmaları girdi teminini nasıl yapıyorlar? Nerelerden ve ne kadar alım yapıyorlar?

11. Adana ve yakın çevresindeki tekstil sektörü, ithal edilen 600-700 bin ton pamuğun ne kadarını alıyor? Türkiye'deki pamuklu tekstili kapasitesinin ne kadarlık bir kısmı bölgede?

12. Risk azaltma mekanizmaları – riskleri paylaşarak azaltma biçimleri nelerdir?

13. Adana-Karataş'ın pamuk üretimi bakımından rakipleri kimlerdir? (pamuk üretiminin GAP bölgesine kayması ve/veya tekstil sektörünün bölgesel gelişimi bağlamında)

14. Adana Karataş'ta pamuğun rakibi olabilecek, yerine geçebilecek bir ürün var mıdır?

15. Sizce pamuk için oluşturulacak 'adil fiyat' nedir, hangi kriterlere göre ve nasıl belirlenmeli, sektördeki aktörler arasında nasıl pay edilmelidir? (genellikle köylüler, emek giderlerine duyarlı bir adil fiyat anlayışına sahiptir)

16. Tarım sektörü ve pamuk özelinde, yaratılan artı değer nasıl paylaşılmaktadır?

17. Kırsal alan kökenli (özellikle pamuk tarımı menşeli) işgücü-emek mekansal ve iş alanı olarak nerelere kayıyor?

18. Global göstergelerden ziyade, bölgede son yıllarda bir 'kaybeden grup' var mıdır? Bu kaybeden grubu tarifleyecek keskin bir özellikleri var mı? Kim bu kaybedenler? (kadınlar, küçük toprak sahipleri, vb.) Peki ya 'kazanan grup'? Bunları sosyal ve ekonomik hayata kazandırmak yönünde sizin ya da diğer kurum ve kuruluşların bir çabası, uygulaması var mıdır?

19. Gelirlerin ve servetin köy dışına kaçması gibi bir durumdan söz edebilir miyiz?Şayet böyle bir durum var ise; bu servet kaçışı beraberinde bir aktif nüfus göçünü de yaşatmış mıdır? Yoksa, servet sahipleri köyde yaşamaya devam etmekte ancak köy dışında yatırım mı yapmaktadırlar?

20. Bölge'de pamuk üreticilerinin 'pazar' mekanizmasıyla bütünleşmesini engellediğini düşündüğünüz bir sebep, bir sistem, bir kurum (Çukobirlik) var mıdır? Bölgenin pamuk ile ilintili tarihinde önemli ekonomi – politik geçişler, kırılma noktaları, başarı ve çöküş hikayeleri nelerdir?

21. Devlet politikaları dışında sektör sorunlarının çözümüne yönelik olarak özel sektörün yapabilecekleri nelerdir?

22. Bölgede politik tercihler, seçim sonuçları nasıl şekilleniyor, bugüne değin bu alanda yaşanan nedir?

23. Olanak sağlandığında (ne gibi olanaklar olduğunu açıklayınız), ileriki yıllarda neler yapabileceğinizi düşünüyorsunuz? Gerçekleştirilebilir hayalleriniz nedir?

24. Ceyhan'da (ve yakın çevrede önemli buldukları başka gelişmeler varsa) yaşanan gelişmeleri nasıl değerlendiriyorsunuz? Pamuk ve ilgili sektörlere etkisi ne olur?

25. Eski zamanları ve şimdiyi düşündüğünüzde, yaşadığımız şu süreç için; bir tarihsel kırılma anı – geçmişin yolundan başka dinamiklerle şekillenecek bir 'an'dan söz edebilir miyiz?