SOME FORECASTS ON THE TRANSFORMATION PROCESS OF AGRICULTURAL STRUCTURE IN TURKEY, AND MEANS OF EXPORTS TO THE EUROPEAN UNION

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ABSTRACT

SOME FORECASTS ON THE TRANSFORMATION PROCESS OF AGRICULTURAL STRUCTURE IN TURKEY AND MEANS OF EXPORTS TO THE EUROPEAN UNION

Turkey is a country with a considerably high potential of agriculture. It will be possible only with the elimination of some infra-structural deficiencies in the agricultural structure for Turkey to occupy a larger share in the world markets in parallel with the agricultural potential it holds. Among the chief proposals in agricultural activities; A- Readjustment of agricultural area, in which ownership status in agricultural areas, land combination, agricultural partnerships and agricultural companies are discussed, B- Readjustment in plant production; which covers the determination and characteristics of plant species, greenhouse, organic agriculture, contractual agriculture, and C- Agricultural organizations can be cited.

Highly significant developments will take place in the agricultural sector of the country after we put into practice the above proposals and the country will bring dynamism to the union with a 72 million consumer potential both in the agricultural sector and in many areas indirectly, apart from its position as a good manufacturer country in its relations with the European Union.

Key word: Agriculture, Agriculture in Turkey, Rural Organization, Exports, European Union

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INTRODUCTION

Agricultural activities have maintained their importance throughout the history. Basically, so long as the requirement for nourishment continues, the industry of agriculture will also remain in the agenda forever. In our era, it is stated that the problem of famine would be overcome if the sources of nourishment all over the world were distributed equal; nevertheless, a major part of the people especially in the developing and under developed countries are still facing nourishment problems. This problem also prevents the developments in other industries. The agriculture industry does not only provide nourishment, but also provides raw materials for other industrial activities. In addition, agriculture employs a major part of the population, and plays the fundamental role in the formation of the sectors of the industrial and commercial sectors.

The geographical location of Turkey, its climate, and the physical properties such as the soil have been influential in the diversification of agricultural activities; and these properties have provided the required conditions to grow various agricultural products from banana and kiwi to wheat, tea, nut, and olive. Lately, despite regressing compared to other sectors, agriculture still maintains its importance, continues to develop within itself and preserves its strategic importance. This dynamism also provides a significant propelling power for the economic structure. This power will be the fundamental factor both for the strengthening of the agricultural structure, which has been neglected in recent years and subject to many concerns, and for a healthier and stronger integration of Turkish agriculture in to the structure of European Union if Turkey joins to this society. With regard to the status of agriculture in the economy, the share of agricultural production in the gross domestic production (GDP) is 15 percent. Meanwhile, the share of agriculture in total employment is 45 percent. The share of the employees of agricultural segment in the actively employed population has gradually been decreasing.

THE DISPERSION AND PROPERTIES OF AGRICULTURAL AREAS AND VEGETAL PRODUCTION

The areas allocated to agriculture in Turkey constitute 36 percent of the total area of the country. The classification of the arable land and its intended

use are shown on table 1 and table 2. As can be seen on Table 1, nearly 50 percent of the arable field consists of first and second grade agricultural lands. As seen on Table 2, 4.787.000 hectares agricultural area is being used as settlement areas, meadows-pastures and forests-shrubbery; remaining outside of the agricultural use (plantation-sewing). Meanwhile, 6.274 thousand hectares of area, which should be considered as meadow-pasture, and forest area is being used for agricultural activities. A special attention should be paid to the proper use of soil, which constitutes the basis for agricultural activities. The protection of soil is becoming a more important issue in every new day as it is a scarce resource in the overall world, which has been decaying gradually due to various reasons and becoming unsuitable for vegetal production. From this perspective, the earth in our country has not faces serious problems yet; however, due to the pollution in the overall world and the problems such as misuse, it is exposed to problems at any time.

Class	and I see	11	III	IV	Total
Land (Hectares)	5.086.087	6.772.873	7.282.763	7.425.045	26.566.768

Table 1: Dispersion of Arable Land According to Capability Classification

Source: http://www.khgm.gov.tr/kütüphane/arazi xls

Table 2: Method of Use of Arable Land (Hectares)

Agricultural	Meadow and	Forest and	Non-Agriculture	Total
Area	Pasture	Woodland	Area	Area
21.779.317	2.972.310	1.458.300	356.841	26.566.768

Source: : http://www.khgm.gov.tr/kütüphane/arazi xls

As expressed here above, some of the arable land is used for nonagricultural purposes; while a major portion of the area allocated for agriculture is used for dry agriculture (75.7 percent) (Table 3). As also shown by the values, the wet agriculture areas are quite rare. However, the capability status of the soils, and the diversity of products indicate that the potential of growth is high.

Works: the voluted works of which are to be completed by 2030. (Mdanwhile, 2

 Table 3: Dispersion of Land Use Methods in Overall Turkey According to Capability Classifications

	and all me	Capabili	ty Classifica	tions (Hect:	ares)	" alder	12 0000
LAND USE	anninan balanan	Suital	ole Lands for	r Agricultur	e	Unsuitabl Lands for Agricultur	Menical a
20100 21 25	1	II	III	IV	TOTAL	TOTAL	TOTAL
AGRICULTUREI AREA	4.825.44	6.040.59	6.036.22	4 4.877.00	51 21.779.31	7 6.274.19	0 28.053.507
Dry farming	2.531.68	5 4.497.49	6 4.977.37	9 4.277.44	10 16.284.00	0 4.971.24	8 21.255.248
Irrigated farming	1.715.47	8 973.57	6 600.30	7 198.78	3 3.488.14	4 104.24	3 3.592.387
Insufficiend Irrigated Farming	300.04	0 239.85	1 126.28	8 56.55	5 722.734	4 39.539	762.273
Vineyards	48.77	4 72.497	7 115.27	7 107.29	2 343.840	222.799	566.639
Gardens	177.66	136.197	88.454	1 722.9	5 474.607	88.118	562.725
Pistachios	5.959	17.721	16.543	14.62	8 54.851	78.963	133.814
Tea	500	1.233	1.413	9.339	12.485	75.866	88.351
Olives	26.885	74.068	78.226	60.693	3 239.872	257.572	497.444
Hazelnuts	3.656	10.590	24.544	78.780	117.570	397.489	515.059
Chestnuts		122			122	2.097	2.219
Bananas	173	1.706	231		2.110	-	2.110
Citrus fruits	12.291	10.918	3.123	630	26.962	1.103	28.065
Figs			921		921	17.506	18.427
Mulberry	2.340	4.615	3.518	626	11.099	14.974	26.073
PASTURE AND MEADOW	149.151	444.477	737.300	1.641.382	2.972.310	18.532.858	21.505.168
FOREST AND WOODLAND	13.112	178.810	420.315	846.063	1.458.300	21.769.675	23.227.975
NON- AGRICULTURAL AND	98.382	108.996	88.924	60.539	356.841	213.313	894.153
and the second	5.086.087	6.772.873	7.282.763	7.425.045	26.566.768	46.790.036	77.899.700

Source: From 2007, http://www.khgm.gov.tr/kütüphane/arazi xls.

12.5 million hectares of the agricultural lands are irrigable; however, considering the means of irrigation, the technically and economically irrigable area is calculated as 8.5 million hectares. 6.5 million hectares of that area is planned to be opened to irrigation by the General Directorate of State Water Works, the related works of which are to be completed by 2030. Meanwhile, 2 million hectares area will be irrigated by the General Directorate of Rural

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Services through the use of over ground and underground water sources (DPT, 2001. p 43).

In our era, due to the technological developments in agriculture, many innovations have been made, and agriculture has gained an intensive character. Very important steps have been taken in order to obtain the highest amount and quality of yield from the unit area. Nevertheless, due to the insufficiency of agricultural infrastructure, the peasants prefer to grow wheat, which is considered safer compared to other products that do not have sales guarantees and mostly require a higher investment (Wheat accounts for 33.3 percent of total cultivated area, 53 percent of field products, and 67.2 percent of soft commodity areas). However, the geographical conditions of Turkey are suitable for growing various products that would provide a higher income.

In Turkey, vegetal production has a very important place in agricultural activities with regard to its production value, supply of raw material for the industry, employment of labor force, share in foreign trade, and the extend of the areas used for the production. The share of vegetal production in our country is quite high compared with animal production. Compared with the European Union, it is seen that the share of animal production is higher, on the contrary.

Vegetal products consist of cereals, leguminous seeds, industrial plants, oil seeds, vegetables and fruits. 63 percent of planted-sown areas are spared for field products, 2.8 percent for vegetable gardens, and 33.9 percent for fruit ranches and others. If we are to examine as per production;

Among cereals; wheat, barley and corn are the most grown products. Wheat, being a traditional product, is a plant primarily preferred by peasants. Wheat is even grown at the areas where other productions with higher value added and commercial value would be grown. Rice agriculture in our country is very important in terms of providing employment. Besides, the income obtained from rise is approximately four times higher than that obtained from wheat. However, although there is a potential, rice growing in Turkey is not at a sufficient level.

Among leguminous plants, peas, beans and red lentil are the most grown products. Both due to their regulator effect on agricultural areas (such as increasing the productivity of the land, and ability for inclusion in rotation,

etc.), and thanks to the means of exports, the areas spared for leguminous sees should be increased.

Among industrial vegetables, the most important share belongs to sugar beet, cotton and tobacco. Apart from these three products, the plantation of other industrial vegetables should also be increased. Both the area and production of oil seeds such as peanut, soy bean and sesame should also be increased. So, our county would both obtain the oil seeds required, and also obtain a significant export income as these products have the opportunity of export. Potatoes is on the first rank among bulb plants. Among bulb plants, especially potatoes has the opportunity for exports.

Among vegetable production, tomato is on the first rank. Turkey is the third country after China and the USA, in terms of tomato production (FAO 2007). Following tomato; watermelon and melon, which we define as fruits but listed among vegetables in the literature, as well as cucumber, chili pepper, eggplant, cabbage are the major vegetables in terms of production. Natural conditions are also very suitable for vegetable growing. The important thing is to make the regulation according to the domestic and international market.

Among fruit production, grape, apple, orange, nut, lemon, and tangerine are on the first ranks. The production quantity of grapefruits among the citrus fruits, and the production quantity of hard-shelled fruits such as walnut and almond, except for nut, is little. In terms of exports, these products should be paid attention. Besides, the fruits such as kiwi and avocado should also be paid the importance that they deserve. The existence of 130 thousand kiwis at an age not mature enough to bear fruits also indicates that there are efforts in this direction.

Although there are many things to be done in vegetal productions for higher yield and quality products, it is a fact that many countries are left behind Turkey in terms of the production of various plants.

Selected Crops	Production (Ton)	Selected Crops	Production (Ton)
CEREALS	36.231.600	TUBER CROPS	6.407.000
Wheat	21.500.000	Potatoes	4.090.000
Barley	9 500 000	Dry onions	2.070.000
Maize	4.200.000	VEGETABLES	25.418.333
PULSES	1.565.360	Tomatoes	10.050.000
Chick peas	600.000	Melon-Watermelon	5.795.000
Dry beans	210.000	Green pepper	1.429.000
Lentil (red)	520.000	Cucumber	1.745.000
INDUSTRIAL CROPS	16.269.628	Tea	1.192.004
Sugar beets	15.181.247	FRUITS	14.257.000
Cotton (lint)	863.700	Grapes	3.850.000
Tabacco	135.247	Apples	2.570.000
OIL SEEDS	2.421.338	Citrus	2.913.000
Sunflower	975.000	Hazelnuts	530.000
Cotton seed	1.291.180	Olive	1.200.000
Groundnuts	85.000	A grighting Entermore and	Table St Mumber of

Table 4: Vegetal Production in Turkey

Source: Compiled from 2007, http://www.tuik.gov.tr/VeriBilgi.do

REGULATIONS REGARDING AGRICULTURAL AREAS AND VEGETAL PRODUCTION AS THE DEVELOPMENT FORESIGHTS IN AGRICULTURAL STRUCTURE

A- FORESIGHTS OF REGULATIONS REGARDING AGRICULTURAL AREAS

1- OWNERSHIP STATUS AT AGRICULTURAL AREAS

The ownership properties have very important effects on agricultural activities. From past to present, significant changes occurred in overall country in terms of the ownership status.

The criterion, which is generally used in determining the scale of the enterprise, is the size of land. The enterprises are separated into different

groups according to the sizes of their lands. However, the size of land does not always mean a developed management. Such examples can be seen Turkey. There may not be observed an intensive agriculture on a large land all the time, while an efficient enterprise dealing with intensive agriculture on a small land such as flower or vegetable growing may be observed. Large scale enterprises have many advantages compared with small scale enterprises. One of the most important advantages is, large scale enterprises may transact with nonagricultural activities in the beginning and in the end, and they play an important role in the development of other economic activities. At many large scale enterprises, the agricultural activities are mostly carried out along with industrial activities and commercial activities.

In overall Turkey, small scale enterprises hold the majority. Increasing the scale of the enterprise to a certain level is one of the main elements in terms of improving the agricultural structure and making an ideal use of the place. In the 8th Five Years Development Plan, it is stated that "The size of an enterprise that is required for annual sustentation should be minimum 200 decares for dry agriculture lands and minimum 100 decares for wet agriculture areas".

	Number of Enterprises		
	Qty	%	
Total Enterprises	3 022 127		
Without Land	54 523	Cherron Ch	
Enterprise size (decares)	Signature	name a	
- 5	178 006	5,9	
5-9	290 461	9,6	
10-19	539 816	17,9	
20-49	950 840	31,5	
50-99	560 049	18,5	
100-199	327 363	10,8	
200-299	153 685	5,1	
500+	21 907	0,7	

Table 5: Number of Agricultura	Enterprise and Sizes of	Enterprises in Turkey
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Source: With reference to TÜİK, 2006, Turkey Statistics Almanac, p.186, Table 12.15.

Although it is possible to increase the obtained productivity and income through intensive agriculture on small lands, wide lands are required for intensive agriculture, in the actual meaning. For example, in agriculture, the use of machinery on lands smaller than 50 decares is not economic. According to the general agricultural census of Turkey in 2001, average enterprise size is 61,01 decares. The enterprises smaller than 50 decares constitute 64.81 percent of total enterprises in terms of number, and hold 21.34 percent of the total area at their disposal. As also seen in Table 5, most of the enterprises are concentrated on 20-49 decares land ownership. The ratio of enterprises that have over 500 decares area is 0.74 percent. When we compare the agricultural enterprises with those in the European Union, in France, the enterprises smaller than 100 decares account for nearly 6 percent of total agricultural area, 13 percent in Germany, 2 percent in the United Kingdom, and 85 percent in our country.

Regardless of the size of the enterprise, it is identified that the field agriculture has an oppressive dominance at all enterprises. In general, large land ownership does not indicate a highly advanced agricultural management. It is not possible to mention the existence of very large enterprises.

In overall Turkey, the lands are also scattered. According to the principles included in the Turkish civil statute, the properties of a demised person are divided equally among the heirs further to law of decedent's estate. This application is rightful in terms of equality and justice; however, it also causes the fraction of the land. Due to the law of decedent's estate and population increase, an agricultural land, which might be considered as large in the beginning, shrinks down and becomes scattered so much that it would not be enough to sustain the livelihood of a family, and the enterprises get collapsed.¹

As also seen in Table 6, the lands in the overall country are highly scattered and they consist of scattered parcels. Several lands owned by a person may remain quite away from each other. Moreover, these lands are quite irregular.

The principle of equal distribution of the demised person's goods and property also requires sharing the tools and equipment, and the animals owned by the enterprise, in addition to the sharing of land. Consequently, not only the land, but also the enterprise is disintegrated.

Number of Pieces	Number of Enterprises	%
1	588 766	19,5
2-5	1 734 809	57,4
6-9	484 520	16,0
10+	214 035	7,1

Table 6: Scattered Status of Enterprises

Source: With reference to TÜİK, 2006, Turkey Statistics Almanac, p.189, table 12.17

2- FORESIGHTS REGARDING THE ORGANIZATION OF THE LANDS

a) Concentration of Lands

One of the works performed in order to make use of the land in the best way possible, is the concentration works of the land. In our country, both due to the population increase and the practices in the law of decedent's estate, the lands are becoming more and more scattered, smaller and irregular. The purpose of land concentration works includes, in one sense, the regulation of the rural space. The essential part of land concentration includes the integration of distant lands where agricultural activities cannot be maintained in economic respect due to the size and shape with problems of machinery utilization, fertilization, irrigation, transportation and other factors. The enlargement of the lands to an economically feasible size for agricultural activities leads to savings from time, labor and money. The basic target of land concentration is primarily the re-regulation of the land; the elevation of the life standards (economicsocial-cultural) in the rural area to a further advanced level; and the provision of rural development. In our country, land concentration works began in 1961, and the studies have been brought to our era with various changes made.

Regardless of the stage land concentration has reached, the lands will continue to disintegrate, become smaller and result in the regression of agricultural activities so long as the provision that requires the goods an properties to be equally shared among the heirs is not changed and other provisions that prevent the land from disintegration are not formed. Therefore, land concentration works are required to be made; meanwhile, long-term solutions should also be thought and modifications on the law of inheritance, as well as new regulations, should be made. The applications that do not harm the property ownership rights of individually; however, that also protect the land

integrity should be brought on the agenda. As expressed by Göney (GÖNEY, S. 1979), the disintegration and shrinkage of the land should be overcome, and a joint property ownership system, which respects to the property ownership rights of small-scale agricultural enterprises, should be established. The agricultural companies that have recently started to be seen in our country, although not very frequently, might be a step to overcome this challenge.

b) Agricultural Partnerships - Agricultural Companies

Both Agricultural Partnerships and Agricultural Companies, are highly important in terms of performing agriculture intensively on optimum size of lands in Turkey.

At agricultural enterprises, the farmers shall own a share according to the productivity and size of the land they own. The share of the farmer in the company may be determined with a similar practice as in the land concentration; that includes the calculation of scores according to the land's structure, location, size and various properties. The management of the agricultural enterprise may be performed by a board and subsections attached to that board. Here, a democratic participation is essential. In such a practice, the basic targets of the company founded by the farmers are established and the operations related with pre-production, production and post-production, as well as the responsible people in those cycles are determined. If required, professional assistance should also be available at certain stages (marketing, determination of product diversity, etc.). Acting with the experts of the issue at certain points would also facilitate determining the product mix, the domestic and export market demand and making production accordingly and marketing the products, thus it will increase the strength of the enterprise. With a democratic participation, a professional enterprise would increase the success both on economic and social terms. So, the agricultural lands of those establishments shall be regulated, and the lands of agriculture will increase. Optimum land sizes will be determined according to the forms of production. and a high-quality and efficient production will be realized.

At large-scale enterprises, the expenditure for inputs are reduced by approximately more than 50 percent. Even, in further stages, many inputs may be supplied within the body of the company itself; such as seed production and import, and the import of fertilizers and pesticides. In this way, an

organizational production in real terms shall be realized, which would also encourage the establishment of agricultural industry. So, both idle and decayed products will be out of question.

The role of organization is quite important in the formation of agricultural companies and agricultural partnerships. For any kind of activities to be realized in rural areas, organization increases the success of the activity; and undertakes an important role regarding the development of the rural area. With such works, the peasants shall not perceive their agricultural lands only as a land which makes the basis for their living; but also as an area where the targets regarding production should be achieved, in addition to making a living.

B- FORESIGHTS FOR VEGETAL PRODUCTION ORIENTED REGULATIONS

1- PLANT SPECIES

In addition to the regulation of the lands sizes, disintegrity and disorganization of the lands in Turkey; the grown plant species are also required to be regulated in order to obtain optimum benefit from the agricultural lands and achieve rural development. In vegetal production, especially the selection of plant species is highly important in order to benefit from and develop the existing geographical potential.

The importance of the nourishment issue has increased further in our era; and in addition to sufficient nourishment, balanced nourishment has also gained importance. The share of vegetables in balanced nourishment is quite big. The role of vegetables on the nourishment of people was understood quite better with the identification of mineral substances' effects on human health and the discovery of vitamins.

Approximately 35 percent of the dry agriculture areas consist of 1st and 2nd grade soil. First of all, these areas are required to be turned into wet agriculture areas, and intensive agriculture should be performed there. Vegetable and fruit yards do not account for a large portion in total planted area. In Turkey, where the physical conditions such as the climate, soil and water, as well as the human conditions are quite favorable; increasing the vegetable and fruit cultivation yards is an inevitable requirement for agricultural development. As we explained in the previous section; although

there is a diversity of vegetal production, it is not at a very advanced level in economic sense for the domestic and export market. The families who deal with field plants' cultivation, have kept their production limited with vegetables and could not develop themselves, as they regarded it as sufficient so long as they can make a living from that. Both tomatoes, and all other vegetables should be produced after the fresh vegetable requirement in the domestic and export market are determined and the processing capacity for such vegetables is identified. Dried vegetables and tomato paste shall be the safety fuse in order to prevent the fluctuations in canned food industry.

Tomato is the most grown vegetable in Turkey. Turkey is among the main tomato growers of the world with its current production. In addition to open spaces, tomato is also being grown in greenhouses, the quantity of which is increasing gradually. Tomato is both directly consumed and it is also a raw material for the food industry. It is very important especially due to being the raw material of tomato paste industry, which forms the basis for the food industry, and our country is one of the main tomato paste producer countries in the world. The share of tomato cultivation in the country's economy would be bigger if it is produced on wider areas with more intensive conditions. Tomato paste is almost totally obtained with domestic inputs. In this regard, the tomato paste industry is less import-dependent; therefore it reduces the loss of foreign exchange, and on the contrary, provides a foreign exchange income with the exports, provides both an industrial employment and many families dealing with agriculture thanks to contract agriculture method; which is influential in developing the production and expanding it on larger areas and increasing the productivity.

Vegetable production is carried out in two seasons as; summer and winter production. Both summer vegetables and winter vegetables are quite diversified. Besides, greenhouse production has also developed quite much in Turkey. In winter, generally the vegetables such as leek, cabbage, spinach and lettuce are grown. Cabbage and leek are among the vegetables demanded by European countries.

Vegetable growing is a labor intensive agricultural activity. The ground is required to be pecked up with certain intervals, cleaned from weeds, fertilized, pesticided, and irrigated. Therefore, vegetable growing requires intensive working. The expansion of vegetable production into larger areas with

an intensive production will also be very beneficial for the country's economy. For this reason, the required measures should be taken and works should be made in this regard.

Greenhouse Production - The principle requirement for greenhouse production is the elimination of any negativities that should influence the production, yield and quality of the product to be grown, and to provide the optimum growth conditions for that plant.

The growth of products entirely depends on the climate in general, and the weather conditions more specifically. Which causes to an instability in production and efficiency and dependence to certain products at certain periods. However, greenhouse production eliminates the negativities of the climate factor, guarantees the production and productivity, and also lets growing the product in the seasons other than its normal production season; which in turn, results in major advantages regarding the marketing of the product. Both due to the demand caused by the population increase, and the changes in the opinions related with nourishment and the increase in a largely vegetable-based balanced nourishment has caused to an increase in the quantity, productivity and quality of vegetables in recent years. The importance of greenhouse production has increased more and more as it enables growing the vegetables and other products in the other seasons than its normal seasonal conditions, and as it yields higher quality and more productive growth, meeting the demand in every season. Greenhouse production ensures optimum use of the place.

Green housing is developed in a limited part of Turkey. It is generally concentrated on the southern coast line, partially on Aegean coast, and in Marmara region. These are the areas where green housing is performed with very little or without any heating conditions, on one or two decares of land that are covered with plastic or glass. As the climatic conditions are suitable, they do not require big investments in this regard. It is possible to further expand the green housing areas. Floriculture, which has a significant market in greenhouse production should also be noted carefully.

Another group that should be emphasized in vegetal production is the leguminous and feed plants. In Turkey, as stock breeding has a special status in agricultural activities, the production of feed plants is not at a sufficient level. The development of feed plants is highly important in terms of developing

intensive stock breeding. Feed plants have bi-directional influence on agricultural life. They increase the productivity of the soil, provide feed for the animals, and may be alternated with another product (industrial plants and soft commodities) in one year-term, and ensures optimum yield from the field. The feed plants such as clover and vetch increase the yield of the land where they are grown. These lands, which are especially enriched in terms of nitrogen, indicate a high productivity and increase in quality of the product cultivated after the feed plants. The attachment of importance to this issue in Turkey, information of the peasants on this subject and their production in larger fields, inclusion of more feed plant varieties in the production, will both be influential for the development of stock breeding, and increase the productivity of the lands naturally in Turkey. The varieties of leguminous plants also increase the productivity of the soil, some of them are used as animal feeds, and some leguminous plants such as chick pea and bean have significant places in our nourishment due to their rich protein content. Accordingly, the growth areas of leguminous plants should be expanded, and especially bi-production should be realized.

In oil seeds group, there is almost no other oil plant than sunflower. Sunflower, which is grown dominantly in Turkey, is not sufficient to meet the raw material requirement of the industry. Therefore, measures should be taken in order to expand the productivity and area for sunflower production, besides, other oil plants should also be produced. Among other oil plants, soybean, peanut, safflower, and canola may be listed.

Soy beans are quite rich in terms of mineral substances. Its areas of use are quite wide. In our country, the climate and earth conditions are suitable for soybean plantation. Its alternated plantation with other products would provide the optimum evaluation of the agricultural areas.

Peanut is an important food with 50 percent oil and 25 percent protein ratio. Also being a leguminous plant, peanut increases the organic substance and nitrogen content of the soil, thus leading to a higher yield for the products grown afterwards. Besides, the stalks of peanut plants are used as animal feed. They will be quite beneficial for Turkey's agriculture and economy as a secondary product.

Sesame also has a high oil content similar to peanut and soybean (56 percent of seed weight). In addition to being used as an oil and animal feed

plant, it also has some other uses. Sesame may also be planted as a secondary product. It provides a very high revenue.

Canola, which is not widely grown, is also an important oil plant. After its oil is extracted, the remaining bagasse is very valuable as an animal feed. Canola should be planted as a primary product and its growth should be expanded. It is harvested earlier compared to wheat, and ensures a quicker preparation of the soil for the second product. Besides, as the oil plants such as soybean, sunflower, etc. are processed at the oil mills in the end of summer, the gap in summer season may be filled with canola, and the oil mills will be able to process canola in that season. Canola favors a cool and humid climate and it is not quite selective in terms of soil. Canola is a plant with low cost and high income.

Apart from these plants, other products according to the domestic and foreign market conditions should be planted. Alternative product demands should be performed as contract production in general. So, the producer will not have the risk of failing to market the products. Various medial and fragrant plants such as limonium, anise, cumin, thyme can be listed among these type of products.

2- ORGANIC AGRICULTURE

The pollutants that appeared due to the improper industrialization that accord in the world along with the rapid development, and also due to many other reasons have caused to the pollution of waters and the soil, to their deformation, and to the failure of optimum agricultural area usage. In addition to that pollution, with the extensive use of agricultural pesticides and fertilizers, undesired substances are accumulating in the soil and causing to its deformation. In recent years, organic agriculture has started to gain a special place in overall agricultural activities. Organic agricultural products receive an increasing demand day by day especially in the developed countries' markets. From this perspective, allocating the ground in Turkey for appropriate use and preserving the earth is very important. In our era, agricultural activities have turned into subjects of specialization. There are many things the society expects from the agriculture industry. The producers are required to consider the agricultural activities with a wider perspective, and in integrity with other activities. In Turkey, both the climate and soil conditions are very favorable for organic agriculture. The requirement for higher labor force in organic agriculture is also another advantage.

3- CONTRACT AGRICULTURE

The performance of agriculture as a contracted activity would also have important effects with regard to the evaluation of the agricultural place rentably. In Turkey, a systematic connection should be established between the peasants who grow the products and the people or organizations who are to purchase them. In this regard, the peasant should be informed, organized, and provided with support in addition to his own individual efforts to build connections. And accordingly, lows that would facilitate the relations and that protect both parties should be issued.

The first contract farming in Turkey was realized by Türkiye Seker Fabrikaları (Sugar Factories of Turkey) in 1965, regarding sugar beet production. It is influential in processing in various ways of the nondurable vegetal products into durable products with the producer-industrialist integration, and the diversification of the market; and it minimizes the price and income fluctuations. The producer feels the comfort of evaluating the product he raises, while the industrialist feels the comfort of obtaining the product he demands. With contracted production, the profit obtained by the producer increases; the producers are further included in the market and they start to know the market dynamics better. However, cooperativization is required in contract production in order to play an important role in the agricultureindustry-trade relation, to monitor the markets, and to become stronger. At present, there is a specialization in agricultural production and marketing, and the varieties of products demanded in the markets are increasing. Turkey, being near to major markets and possessing the production means, has to make use of these advantages in the best way possible. Contract production is one of the most common relations between the producer and consumer in the world.

C- AGRICULTURAL ORGANIZATIONS AND THEIR PROPERTIES

The role of organization is very important in the rural development in general, and specifically in the better arrangement and evaluation of the agricultural area. The farmers are required to organize and join forces in order

to realize their agricultural activities under more ideal conditions, to obtain the conditions required in this regard under easier and more convenient conditions, to obtain higher quality and yield, to market them, and to obtain all information and skills related with all stages of the agricultural activities. In Turkey, agricultural organization dates back to a very old time; however, it has not reached to the desired level at present. Peasants, who are in general familiar with mutual help and cooperation activities (working together for certain works such as onion collection, vintage, harvest, etc.), have not been able to activate the cooperativization; the one and most common agricultural organization type. As the cooperatives could not obtain a democratic structure in real terms, they cannot give what is expected from them. In developed countries, the performance of agricultural activity at the highest level and the placement of the peasant to a certain status is primarily and closely related with organization at agricultural areas. Farmers have organized and joined their forces in every area. If the producers establish cooperatives, and start to process and evaluate by themselves the products that they grow, it will both lead to an increase in the production capacity and create new employment operations in relation with it. So, the farmers' economic structure will be strengthened, they will enter in the market economy and integrate with the markets easier. Their share and competitive force based on the revenue they obtain will increase as a result.

TURKEY'S EXPORT POTENTIAL FOR EUROPEAN UNION-ORIENTED AGRICULTURAL PRODUCTS

As expressed in the opinions some of which we have put forth here above, Turkey has a rich potential to improve its agricultural activities. However, fundamental changes are required in order to increase the welfare of the rural section, to improve the agricultural structure, and reach an important place in the global trade. Especially in the accession to European Union period, the performance of these changes has gained more importance. In the Turkey-EU relation, the essential issue regarding conformity to EU Common Agricultural Policy is to increase the productivity and competitive strength of the Turkish agriculture. At this point, the initial condition is to solidify the structure of the agricultural enterprises.

In addition to being among the major agricultural product growers in the world, the European Union is also a prominent importer and exporter of

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agricultural products. The EU maintains self-sufficiency for many products: meanwhile, some products show production surplus while others indicate a shortage. Especially with the accession of Spain, Portugal and Greece to the European Union, the complementary status of the member countries has increased further; meanwhile, Turkey is still very important for the European Union. The European Union covers its insufficiency for some products through importing from other countries. Turkey is among the biggest agricultural product importers of the overall world. Therefore, it is an important market for third world countries. Although there is a very significant market in the country, our share in this market is not at the desired level. The European Union has an important place in both imports and exports of Turkey, and it constitutes the largest market for our traditional export products. Besides, it is a market with a great potential where we can increase our exports. Turkey should enter the market for the products and product groups that the EU is not selfsufficient, and for which, Turkey is advantageous due to its natural conditions. Especially at present, Turkey has no chance to compete for animals, animal products and cereals. Accordingly, as the main product and product groups for which Turkey might have the chance to compete, vegetables and fruits, and related processed vegetables and fruits, industrial products such as cotton, vegetal oils, and organically produced products can be listed. The products in question are those with high production potential in Turkey. The variety in the climatic properties of Turkey and fertile lands shall provide many gains to both Turkey and the European Union from both the agricultural perspective and from many other perspectives due to its indirect effects after the improvements in the human factors of the agricultural structure are made within the framework of conformity to common agricultural policy.

If we are to mention briefly the imports of the European Union as per products and product groups, and Turkey's export opportunities of main agricultural products to the Union;

For raw fruits, the quantity of imports from third countries decreased after the accession of Spain; meanwhile, an increase has been observed in the following years. Among the fruits, citrus fruits have an important place. Turkey has a strong opportunity to export lemon, tangerine and grapefruit to the Union. Especially, emphasis should be given on grapefruit. Accordingly, the species that are in accordance with the Union's market requirements should be heavily

produced. Apart from raw fruits, the export chance of frozen and processed fruits to the Union is at an important level. Germany and France are the world's most important frozen fruit importers. Mainly strawberry, blackberry, cherry and sour cherry are the major products. Germany accounts for nearly 36 percent of the total frozen fruit imports in the world (Çetin *et al.* 2003, p. 81).

The demand for dried and hard-shelled fruit is also quite high. Main dried and hard-shelled fruits are raisin, dried fig, walnut, almond, hazelnut, chestnut, and pistachio. There is also no time limitation for the imports of these products. Turkey domains the Union markets regarding dried fig, raising and hazelnut exports. Although Turkey also has an advantageous situation regarding this product group, Turkey's exports for the products other than hazelnut are at a low level. Therefore, the defects should be determined and the required precautions should be taken.

Regarding the industrial plants, especially cotton growth of the Union is not sufficient to meet the Union's needs. Almost the total of the cotton production are performed by Greece and Spain, which have the similar climatic properties with Turkey. Cotton requirement is satisfied through imports from third countries. Turkey is a major cotton producer country. The place of cotton in exports oriented to the Union is very strong. Turkey should assess its advantage in this regard and become able to export more cotton. Another industrial plant is tobacco. In the Union, although tobacco is being produced and the production is rapidly growing, the oriental tobacco requirement is covered from third countries. In the Union, oriental tobacco is only grown by Spain and Greece. One of the leading buyers of Turkish tobacco (oriental tobacco) is the European Union. However, Turkey has the opportunity to expand its market share further.

With regard to fresh vegetables, the society has become self-sufficient. Nevertheless, especially in the periods that are considered as out-of-season by the society (between October and April), the early species and greenhouse products will increase their market share. Geographical conditions of Turkey are quite favorable for rich variety and high-quality production. With the accession of Turkey to the European Union, this potential will increase actually. With further expansion of the organic agriculture, this share will increase further. In the total tomato production in the world, Turkey is on the third rank after China and the USA. However, with regard to global tomato

exports as per important producer countries, Turkey could not obtain an equal value. European Union also has a very big market with regard to frozen and processed vegetables. Regarding the main countries in global frozen vegetable imports, Germany, France, UK and Italy account for the first ranks. The production of frozen and processed vegetables should also be considered carefully.

Oil seeds are another product group that are required by the European Union. The oil seed imports of the Union constitute a major part of the global trade of oil seeds. In Turkey, although there is a shortage for oil seeds, it is possible to increase the production with the new policies that are to be followed. Turkey has this potential.

Regarding cereals, Turkey may exports rice and corn. However, especially because we cannot meet our own requirement for rice at present, the exports will only be possible after we increase the production. The interest in medial and fragmented plants has also been in a gradual increase recently.

Some Benefits to be Provided by Turkey to European Union Countries with Her Accession to the Union

Turkey's accession to the European Union will result in some positive effects. The peace and stability of the Union will be felt stronger in the east with the accession of Turkey to the Union. The restructuring movements of Turkey in agricultural aspect will bring an economic, culture and social welfare to individuals in Turkey, where the rural population is quite high. The accession of individuals to economic, social and cultural welfare means a further rise of the life standards which result in an increase of these peoples' demands. This means that a very big market; a market of 72 million people, may appear. This market, awaiting various services with both agricultural and industrial products, and the Middle East market just next to it, which can easily be accessed.

The concern that immigration to the Union would increase is baseless. The European Union received the immigration more due to various reasons other than the current concerns. Besides, the economic gains to be brought by this desired or undesired society to the Union should not be neglected. Now, the populist approach should be given up. Economic factors account for the first

rank on the basis of the immigration phenomena. In accordance with the permanent policies practiced, rural areas shall keep the population at themselves; besides, the developing rural industry will also employ the idle labor force. Turkey will not only provide employment for its own population, but also create an employment area in the Union. A consumer population of 72 millions will join to the single market, and that participation will bring a great dynamism to the Union's economy. Against the gradually increasing older and inactive population in the European Union, the young population which is going to join to the community will bring dynamism to the economy of the Union. Accession of Turkey to the European Union will bring more different expansions to the Union compared with other member countries. In this expansion, the most important factors are the natural conditions, population density, the strong political, social and economic relations in the region, means of access to other markets and the geo-strategic importance of Turkey. European Union market will grow its roods on a wide area which also includes Turkey but not on a smaller area that ends just outside the borderline of Turkey.

ÖZET

TÜRKİYE'DE TARIMSAL YAPIDAKİ DEĞİŞİM SÜRECİNDE BAZI ÖNGÖRÜLER VE AVRUPA BİRLİĞİNE İHRACAT İMKANLARI

Türkiye tarım potansiyeli oldukça yüksek bir ülkedir. Tarım sektörü 72 milyonluk nüfusun tarımsal ürün ihtiyacının hemen hemen tamamını karşılamakta, birçok ürünü ihraç etmekte, nüfusun %45 ini istihdam etmektedir. Türkiye'nin sahip olduğu tarımsal potansiyele paralel olarak dünya pazarlarında daha fazla yer alması, tarımsal yapıdaki bazı altyapı eksikliklerinin giderilmesiyle mümkün olacaktır. Bunun temelinde istikrarlı tarım politikalarının oluşturulması yatmakta ve bu doğrultuda çalışmalar sürdürülmektedir. Tarımsal faaliyetlerde başlıca öngörüler olarak A- Tarım alanlarının düzenlenmesi; ki bu çalışmada, tarım alanlarında mülkiyet durumu, arazi toplulaştırma, tarımsal ortaklıklar ve tarımsal şirketler ele alınmıştır. B- Bitkisel üretimdeki düzenlemeler; ki bunlar da bitki çeşitlerinin tespiti ve özellikleri, örtü altı yetiştiriciliğini, organik tarımı, sözleşmeli tarımı içermektedir. C- Tarımsal örgütlenmeler belirtilebilir.

Söz konusu öngörülerin gerçekleştirilmesiyle ülke tarım sektöründe çok önemli gelişmelerin olduğu görülecek, Avrupa Birliği ile ilişkilerinde iyi bir üretici ülke olma konumu dışında gerek tarım sektörü, gerekse dolaylı olarak birçok alanda 72 milyonluk tüketici potansiyeli ile birliğe dinamizm getirecektir. Tarım sektöründeki gelişmeyle birlikte kırsal alanda ekonomik olduğu kadar

sosyal ve kültürel gelişme artacak, bunlara bağlı olarak çeşitli mal ve hizmetlere olan talepte de çeşitlenme ve artış görülecektir.

Anahtar Kelimeler: Ziraat, Türkiye Ziraati, Kırsal Organizasyon, İhracat, Avrupa Birliği

BIBLIOGRAPHY

- Akova, S., (2002): Ergene Havzasında Mekansal Kullanımlar (Locational Use in Ergene Basin). Istanbul.
- Çetin, B., Tipi, T., Turhan, Ş., Akbudak, N., (2003): Türkiye'de Domates İşleme Sanayinin Ekonomik Yapısı ve Pazarlama Sorunları (Economic Structure and Marketing Problems of Tomato Processing Industry in Turkey), Bursa.
- **DPT (2001):** Bitkisel Üretim (Sebzecilik), Sekizinci Beş Yıllık Kalkınma Planı Özel İhtisas Komisyonu Raporu (Vegetal Production, the Eighth Five-Years Development Plan, Report of the Private Specialization Commission), Ankara.
- **DPT (2001):** Uzun Vadeli Strateji ve Sekizinci Beş Yıllık Kalkınma Planı 2001-2005 (Long-Term Strategy and the Eighth Five-Years Development Plan 2001-2005), Ankara.
- **DPT (2001):** Bitkisel Üretim (Sanayi Bitkileri), Sekizinci Beş Yıllık Kalkınma Planı Özel İhtisas Komisyonu Raporu (Vegetal Production (Industrial Plants), Eighth Five Years Development Plan, Report of the Private Specialization Commission), Ankara.
- GÖNEY, S., (1979): Türkiye Ziraatinin Coğrafi Esasları (Geographical Principles of Agriculture in Turkey), Istanbul.
- Pekizoğlu, F., Yavuz, O., (1999): Türkiye'de Dondurulmuş Meyve-Sebze İşleme Sanayi ve Avrupa Birliği Karşısındaki Durumu (Frozen Fruit-Vegetable Processing Industry in Turkey and it's Status Compared with European Union), Bursa.

TÜİK, Türkiye İstatistik Yıllığı (Turkey Statistics Almanac), 2006.

http://www.faostat.org/site/340, 2007.

http://www.europe.eu.int. (2003): Europen Commission, Luxembourg.

http://www.khgm.gov.tr/kütüphane/arazi xls, 2007.

http://www.tuik.gov.tr/VeriBilgi.do, 2007.

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BIBLIOGRAPHY

- Akoya, S., (2002); Ergene Havenurda Mekuntal Kultaundar (Locational Use in Fryene Bana).
- Cells, B., Thet T., Furbau S., Alardata N., (2003): Turbacia Dougtes ginne banavian incrollifications Vipus ve Facultari Structure (Incolonic muchus and Muchelley Fachiene eich of Tamara Basessing federation of Taxaya David.
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- GONEY, S., (1979): Tarkiya Zimutinin Getrari Esaskati (Geographical Principles of Agriculture in Tarkey), iamobali
- Pekkaogia, F., Yavue, O., (1999): "Internation Usudaminang Merve Seare Islama Sanna ve Avupa Balda Martamada Dicura Ground Collegencie Polesies Industry In Turkey and d'a States Compared with Engrecon Sector, Banak

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