



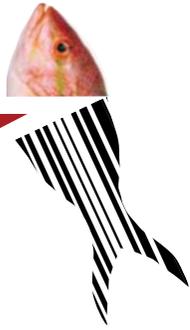
PRODUCING FOR THE WORLD

TURKEY, THE WORLD'S **SEVENTH-LARGEST COUNTRY FOR AGRICULTURE**, CONTINUES ITS RISE TO THE TOP IN WORLD RANKINGS WITH THE REFORMS AND INVESTMENTS IT HAS MADE IN AGRICULTURE AND ANIMAL HUSBANDRY.

BY CAN GÜRSÜ

With the effects of global climate change, the ice caps are melting at record levels. The risk of draught is expected to increase together with this. Data released by NASA showed that 2011 was the ninth hottest year since the 1880s. Another cause for concern is that nine of the ten hottest years in the past century occurred in the 2000s. The reports being released show how serious climate change and drought has become. Climate change is affecting a great range of things, one of which is food—food prices are nearing alarming levels.

SEAFOOD
Seafood increased 7.73% in 2011 over the previous year.



POULTRY
Chicken egg production increased 17.2% in a year.



A harsh drought is causing the sharpest increase in world food prices since 2009. Out of 24 commodities in Standard & Poor's GSCI Index, the sharpest increases were exhibited by wheat, soybeans, and corn. The index is performing better than many stocks and treasury bonds from around the world. Meanwhile, in the generally climate-stricken agriculture, food, and animal husbandry industries, Turkey is exhibiting great performance.

With the measures it has implemented, Turkey is successfully minimizing its exposure to the vagaries of nature. Despite the difficulties ailing the world, Turkey exhibited growth in agriculture in seven out of the past eight years, proving the success of its policies. By contrast to the European agricultural industry, which grew 3% in 2011, agriculture in Turkey grew 5.6% and accounted for \$62 billion of the GNP, ranking Turkey higher than the number-one country in the European Union.

Turkey, the leader in Europe in agricultural production, exported just \$4 billion worth of agricultural products a decade ago. Today, it exports \$15 billion and achieves a record export increase of 283%—in the rest of the world, increases are around 170%. Progress in agricultural exports continues via the policies being

implemented and supported. Agricultural policies geared toward industry and exports contribute positively to growth in exports by both value and amount. According to data released by the Ministry of Food, Agriculture, and Animal Husbandry shows that 2003's five million tons of agricultural exports grew to ten billion tons, with the number of countries exported to rising from 161 to 184 in this period. Turkey exports more than 1,532 products to these countries. Such achievements are what elevate Turkey to high levels in world rankings.

According to an OECD report titled "Evaluation of Agricultural Policy Reforms in Turkey," Turkey is the seventh-largest country in the world for agriculture. Although nearly two-thirds of Turkish farms are less than 50,000 square meters by area, Turkey possesses relatively large agricultural spaces relative to other countries and ranks right after high-population nations, according to the report. "Turkey is

unfortunately behind other large countries for agriculture when it comes to arable agricultural land," says Mahmut Arslan, Chairman of the TIM Industries Council Industry Board for Cereals, Pulses, Oil Seeds, and Products, though he underlines the point that the country is ranked favorably in comparison to other countries despite a lack of expansive agricultural land. The constant proliferation of sound agriculture practices, agricultural consciousness, mechanization, and irrigation technologies in Turkey is bringing with it an increase in product diversity, production amounts, and quality.

INCREASED STATE SUPPORT

Roughly 25% of Turkey's population is involved with agriculture. The state subsidy provided to farmers has been increased in the past decade from TRY 1.8 billion to TRY 7.5 billion. Growth in agriculture is positively affecting the employment rate in Turkey as well, with unemployment

BESIDES GROWING 5.6%, THE TURKISH AGRICULTURAL INDUSTRY RANKED FIRST AMONG EU COUNTRIES WITH A \$62 BILLION CONTRIBUTION TO THE GNP.

PHOTOGRAPH BY AA

being in a falling trend as of late. Half of the 160,000 pieces of equipment required by farmers are being donated to those in need. Additionally, the Contract Farmer System that many companies have put into practice is facilitating production based on consumer and buyer demand. Together with farming subsidies, training provided to farmers as well as credit opportunities and assistance are positively influencing farmers' livelihoods.

Thanks to its arable lands fit for cultivation and the ecological diversity of its regions, Turkey is one of the best countries for growing produce, with fruits and vegetables being able to grow in good conditions and at a high quality. "Turkey has a geographical position suitable for growing almost every kind of agricultural product in the world except tropical fruits and vegetables," says Eliya Alharal, Chairman of the TIM Industries' Council Industry Board for Dried Fruits and Products. He adds, "It is in the region where numerous products like figs, grapes, cherries, and olives were first grown and domesticated agriculturally." Turkey is home to 11,000 plant species, almost equal to the total number in Europe of 11,500. Experiencing all four seasons in its different regions, Turkey bolsters its geographic advantages using the necessary investments to continue its rise to the top.

Turkey also ranks high among countries in the Eastern Europe, Middle East, and North Africa region in the food industry as one of the biggest exporters of agricultural products. Salih Çalı, President of the Uludağ Fresh Fruit and Vegetable Exporters' Union and the TIM Fresh Fruit and Vegetable Industry Council Deputy Chairman, says, "By virtue of its geographic location, Turkey possesses an advantageous position whether in terms of its market or production, and it is also a gene center of many fruits and vegetables." The harvest and post-harvest preservation (via precooling, climate-controlled storage, and packaging) are done in Turkey with the latest technology and the produce is brought to the market in vehicles and conditions that best suit each product, he adds. Thanks to the investments made, the items collected from the fields maintain the nutritional value they had at the moment they were picked. Turkey is playing for world leadership in the production, seed generation, and export of many products.





WATERMELON

3.8
MILLION
TONS



246
THOUSAND
TONS

STRAWBERRIES

302
THOUSAND
TONS



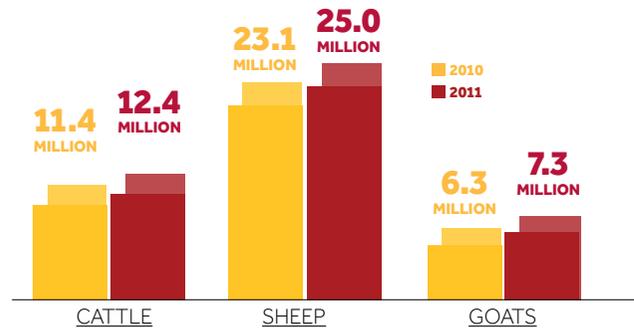
94
THOUSAND
TONS



1.6
MILLION
TONS



LIVESTOCK POPULATION, 2010-2011



According to the Food and Agriculture Association of the United Nations (FAO), Turkey ranks high globally in the production of many products. The country is number one in seven products; namely hazelnuts, apricots, figs, cherries, sour cherries, quince, and poppy seeds. It is second in six products—watermelon, melon, strawberries, leeks, honey, and vetch—and third in eight more—lentils, apples, cucumbers, green peppers, green beans, chestnuts, pistachios, and sheep's milk. Turkey is gaining the status of being the top exporter of the highest number of agricultural products after China and India.

Turkey is exhibiting such success not just in agriculture but in animal husbandry as well. The Turkish Seafood Promotion Group regularly puts on shows of strength at international fairs where it promotes Turkish fish to the rest of the world. Turkish fish is starting to stand out from its competitors in the markets. Turkey increased its fish exports threefold in the past decade to reach \$448 million. According to FAO data, Turkey is first in the production of trout (popular especially in Europe) and satisfies 50% of European demand for sea bream and sea bass. This once again shows the importance of the TRY 737 million subsidies provided to fishing over the past decade. Having increased by 202% from 2002 to 2011, Turkish seafood production attained the fastest growth in the world in this industry.

Turkey is taking giant strides in poultry production as well. Poultry production used to total 700,000 tons; today, this

figure has reached 1.6 million tons. By 2023, the country aims to have reached 2.75 million tons. The growing appetite of the domestic market is one contributing factor to the industry's development. Red meat prices have been on the rise globally, causing a daily-intensifying inclination worldwide toward the healthier white meat. The per-capita consumption of 10 kg in 2002 has risen to as high as 19 kg. Mehdi Eker, Minister of Food, Agriculture, and Animal Husbandry, indicates that Turkey's poultry industry generates \$4.5 billion in revenues.

Turkey also has high ambitions in egg production, the other half of the poultry industry. Thanks to the modern facilities installed over the past few years and its decades of accumulated know-how, the Turkish egg industry is aiming for the top by targeting a position relative to the increasing demand in Turkey. With an egg-laying chicken population of more than 60 million and an annual egg production of roughly 14 billion, the egg industry ranks second in Europe. According to the WATT Executive Guide to World Poultry Trends, Turkey ranks tenth worldwide. The breeding eggs that used to be imported, which are of critical importance to egg production, are now produced at the Ministry of Food, Agriculture, and Animal Husbandry's facility in Ankara. As a result of these investments, Turkey succeeded in increasing its export nine years ago of 32 million eggs to 3.8 billion eggs in 2011. In Q1 2012, egg exports increased 65% over the same quarter the previous year.



APPLES

2.6
MILLION
TONS



CUCUMBERS

1.7
MILLION
TONS



CHESTNUTS

60
THOUSAND
TONS



PISTACHIOS

112
THOUSAND
TONS



GREEN PEPPERS

849
THOUSAND
TONS



RED LENTILS

1.9
MILLION
TONS



AGRICULTURE

\$18,993,108
12.93%



ANIMAL PRODUCTS
\$1,593,352
1.08%

PLANT PRODUCTS
\$13,664,445
9.30%

TREES AND FORESTRY PRODUCTS
\$3,735,313
2.54%

■ GROWTH

PERIOD: LAST 12 MONTHS

ACCORDING TO THE FAO, TURKEY RANKS FIRST IN TROUT PRODUCTION IN EUROPE AND SATISFIES 50% OF THE CONTINENT'S CONSUMPTION OF SEA BREAM AND SEA BASS.

Exhibiting agile responses to the world's changing food trends, Turkey aims to be an important player in the field of organic agriculture, too. In recent years, organic agriculture and trade in organic products have been growing in line with increased concern for healthy nourishment and living on the part of consumers and more sensitivity to the natural environment on the part of producers in developed countries. To meet export demand generated by this situation, commercial organic agriculture operations in Turkey took off with eight products that have strong associations with Turkish culture, such as raisins and dried figs, and in recent years surpassed 200 products. According to the Strategic Plan for Organic Agriculture announced by the Ministry of Food, Agriculture, and Animal Husbandry, organic agriculture production in Turkey takes place on 6.14 million square meters of land that create 2.9 million tons of organic produce a year. Several NGOs in Turkey are continuing their efforts to spread organic agriculture, which has become widespread in many villages thanks to these efforts.

PRODUCT TRUSTWORTHINESS GUARANTEED VIA QUALITY SYSTEMS

Agricultural products in Turkey are subject to all kinds of quality control systems starting from production to preparation for export. These measures, which are in place to ensure the trustworthiness of products, are important for the international certification of these products as well. "The representatives in Turkey of European auditing companies meticulously carry out the quality controls and required certification (HACCP, GLOBALGAP, ISO, etc.)," says Salih Çalı. The products are harvested, stored, and packaged using the latest tech-

nology and transferred to markets using whatever vehicle and conditions are most suited to the product in question, he adds.

The agriculture industry in Turkey is progressing not only in terms of food safety but also with regards to the development plans and strategies for the industry and rural areas as outlined by the Agriculture Bill that came into effect in 2006. This bill presents a barrier to the misuse of agricultural lands. "Had we not issued this bill, an additional 400,000 hectares [4 billion sq. m.] of agricultural land would be used for other purposes," says Mehdi Eker. Issued in 2005, the bill also brought a lower limit to the division of agricultural lands by



way of inheritance, one of the biggest problems in Turkey, thereby preventing the fragmentation of large agricultural properties. An in-depth analysis by the ministry has analyzed almost all of the lands in Turkey to determine the fertility of agricultural lands and what products they are best suited for, giving farmers an excellent source of guidance.

The agricultural reforms begun by Turkey draw the interest of international investors, too. A release by the Ministry of Food, Agriculture, and Animal Husbandry indicates that \$6 billion in investment in agriculture entered Turkey from 2003 to 2012. Turkey's diversification of the markets to which it exports and its status

as a safe harbor in a global arena fraught by crisis are the leading factors that strengthen the country's hand. By increasing its 0.8% share in the world goods trade to 1%, Turkey aims to increase its exports to \$170 billion. For 2023, the bar has been set as \$500 billion—or 1.6%.

The agriculture industry, accounting for one of the largest shares of Turkey's exports with a 13.1% share, will play a key role in meeting these targets. While Turkey has less cultivated land relative to its rivals at the top of the list, Turkey is set to climb up the ladder rapidly with its value added proposition, its years of experience and know-how, and its climatic advantages.

THE MASTERS OR PRODUCTION

Turkey is exhibiting great performance thanks to its agricultural reforms. We asked the bosses of Turkish agricultural production to share their views on the matter.



DAIRY PRODUCTION
2011 increased by 11.2% in QO1 over the previous year.



DURSUŒ OĞUZ GŒRSOY

Member of Industries Council- Coordinating Chairman, Black Sea Exporters' Union

In 2011, the hazelnut and hazelnut products industry accounted for 13.3% of total agricultural exports. The industry's target for 2023 is to export 300,000 tons of shelled hazelnuts and to raise the current share of processed hazelnut exports to around 70% in order to contribute more value-added to our country. Through a long-term agricultural vision that Turkey will put forward, the Turkish agricultural producer and farmer will rise to the position of one of the world's most important actors in the world agricultural trade.



ELIYA ALHARAL

Board Member, TIM; Board Member, Aegean Dried Fruits and Products Exporters' Union

Turkey has a geographical position suitable for growing almost every kind of agricultural product in the world except tropical fruits and vegetables. Furthermore, it is in the region where numerous products like figs, grapes, cherries, and olives were first grown and domesticated agriculturally. In Turkey, where the proportion to the total population of people who busy themselves with agriculture is around 25%, the continuing increase in awareness of sound agricultural practices, mechanization, and means of irrigation; together with product diversity, production amounts, and quality; exhibiting positive developments every day If, in cooperation with all concerned ministries and institutions, we speed up efforts, it will be possible for Turkey to rank among the world's leading production centers and supplying countries in 2023.



AHMEHAMDı GŒRDOĐAN

Chairman, Eastern Black Sea Exporters' Union (DKIB)

For natural reasons—in other words, rich natural resources, biological diversity, suitable climate, and geological conditions—agriculture has always been a leading industry for Turkey. Recently, private entrepreneurs have been increasingly interested in investing in the agriculture industry. Besides being one of the world's rising stars in such ecologically superior products, Turkey is also securing significant amounts of foreign currency input in the export of products that offer a chance of exports and export revenue. Many products that are in demand abroad can be produced economically in our country. For this reason, we predict that our agricultural export will increase in the future with the advantages presented by the ecological potential in Turkey's geography.



MAHMUT ARSLAN

Board Member, TIM; Chairman, Mediterranean Grain, Legumes, Oil-Bearing Seeds Exporters' Union

Turkey ranks number one in Europe in the production and export of agricultural products, and it is among the world's top seven countries. The economic and political developments that have occurred in Middle Eastern and African countries in recent years has increased interest in Turkey and demand for Turkish products, a factor in the flare observed in the food industry. Large increases have been seen in the export to these countries. Turkish agricultural products find customers in a wide spectrum whether by virtue of quality and price range or thanks to their great taste and abundance. The industry's investments toward its 2023 targets have increased. The oil-bearing seeds, animal husbandry, and fresh produce industries' high-tech investments are rapidly increasing the share held by these industries in Turkey's total exports. We predict that the industry will easily achieve the \$40 billion envisioned in its export target for 2023.



ORHAN ŐMİT GENÇOĐLU

Chairman, Uludađ Fruit and Vegetable Exporters' Union (UMSİMB)

Turkey has two great gifts: suitable climate and land. Our country, which stands out for its diversity of agricultural products, is positioned as an important exporter of agricultural products despite its fragmented land and the small size of its agricultural businesses. A new structure has emerged in Turkey in recent years by the name of the Reorganization and Support Council in Agriculture. With the facilitation of the spread of policies that will provide structurally significant developments and progress in the agriculture industry, the industry will grow at an increased speed. Additionally, policies that will increase the fertility of the present lands and open arable but unused lands to agriculture, and the production of high-value-added products are also matters that the industry must urgently address. Should issues in the agricultural industry be overcome, Turkey will multiply its successes.



RIZA SEYYAR

Member of Industries Council and Vice Chairman, Aegean Fresh Fruit and Vegetables Exporters' Union

Especially thanks to the efforts conducted in recent years in food trustworthiness and traceability from the field to the table, it wouldn't be wrong to say that Turkey has today become a brand in several agricultural products. Considering that the endless need for agricultural products will increase together with the world's rapidly increasing population, it is a fact that the value of the agriculture economy will be much more realized compared to now. I believe that so long as Turkey places importance on R&D activities such as improving product diversity and varieties that have economic value, as has been the case in recent years, and so long as this becomes a steady state policy, Turkey's success will continue increasingly in the years ahead.



SALİH ÇALI

Chairman, Uludađ Fresh Fruits and Vegetables Exporters' Union

The Turkish agriculture industry is one that has been developing positively over six of the past seven years in spite of the crisis. And even more importantly, productivity is increasing constantly. Respite global crises and strong droughts, the agriculture industry has grown in seven out of the past eight years, exhibiting stability. Nationally, we are aiming to increase our fresh fruit and vegetable exports fivefold by 2023 to reach \$9.8 billion. We will therefore have increased our share in world fresh fruit and vegetable exports, which are expected to reach \$120 billion, to 8.2%. Various strategic targets that the industry will need in areas from production to marketing, product development, human resources, and legal issues have been set to overcome difficulties in the way of attaining the exports target.

TARGET: BEING THE AGRICULTURAL LEADER IN THE REGION

THE MINISTER OF FOOD, AGRICULTURE, AND LIVESTOCK, **MEHDI EKER PROVIDED THE TURKISH PERSPECTIVE WITH HIS ASSESSMENT OF THE AGRICULTURAL REFORM** TURKEY HAS IMPLEMENTED IN RECENT YEARS AND THE FUTURE OF THE GROWTH TREND IN AGRICULTURE TURKISH PERSPECTIVE.

BY CAN GÜRSU

TURKEY'S ACCOMPLISHMENTS in the agriculture industry over the past eight years amount to a true success story. Increasing its agricultural production from \$25 billion to \$62 billion in this period, Turkey rose to first place in Europe and from eleventh in the world to seventh by this measure. The country's aim for the year 2023 is to increase its agricultural production to \$150 billion and its exports to \$40 billion. "A road map was needed to achieve this success, and indeed we made one. We prioritized structural transformations above all," said Mehdi Eker, the Minister of Food, Agriculture, and Animal Husbandry. He says the trend of growth will continue into the period ahead, too.

Can you tell us what strategies and practices led Turkey—the seventh-biggest country for agriculture in the world—to its successes in agriculture?

Possessing great strategic, economic, social, and cultural significance, the agriculture industry is an important industry that accounts for 25.5% of total employment within our country, employing 5.7 million people. While in 2002 Turkey ranked 11th in the world by agricultural production with \$23.7 billion, today it has risen to seventh place with \$61.8 billion. In parallel with these developments, per-capita income in the agriculture industry rose from \$1,064 in 2002 to \$3,602 in 2011.



The source of our national economy's pride with all of these positive developments, the agriculture industry has also been exhibiting a rising trend every year in reports released by such important international organizations as the OECD and FAO. During the period of the Justice and Development Party governments, we launched significant efforts and brought to life many new projects to have Turkey be its region's leader in agriculture and to make agriculture a profitable industry, thereby increasing its share in the economy. A road map was needed to achieve this success, and indeed we made one. We prioritized structural transformations above all.

In this scope, first of all a sectoral depth analysis that shows the current state of the ministry and the agriculture industry and clarifies their problems was done. The industry's situation and expectations were presented with full clarity as the outcome of nearly 50,000 meetings and surveys of all parties in agriculture, including the public and private sectors and producers.

Thirteen new long-awaited laws were issued in the fields of food, agriculture, and animal husbandry, and 22 laws were changed in accordance with the needs of today. By changing the approach used in agricultural incentives, we brought a system to support agricultural production. We moved over to a planned era in agricultural practices. In this scope, we prepared firstly an agricultural strategy, rural development strategy, industry analyses, meetings of interindustry collaboration and common minds, agricultural master plans for the 81 provinces, regional agricultural master plans, the 2008-2012 Agriculture Vision, the 2012-2014 Strategic Plan, and the Rural Development Plan. Again, the subjects of focus were food safety and effective, contemporary methods in animal husbandry.

In parallel with these efforts, we brought to life in a series of fields a number of projects that are based on rational, contemporary production models but also take into account the social dimension, which we could call "firsts" in agriculture. We have accomplished many such things as the legislation of the Agriculture Bill, the creation of the Product and Support Model for Agricultural Basins, the initiation of

TARGET FOR 2023

\$40 BILLION	\$150 BILLION
AGRICULTURAL EXPORTS	AGRICULTURAL PRODUCTION

state-supported Agriculture Insurance, and the prevention of fragmentation of agricultural lands by inheritance through the designation of the "Indivisible Plot Size."

With the change and transformation programs prepared, a move has occurred from a day-to-day outlook to strategic planning in agriculture, it being a strategic, competition-based industry.

Agricultural land has been used in the world not only for agricultural production but also for the production of biofuels. There is also an increase in the prices of agricultural products. Do you find these increases realistic? How is Turkey affected by these increases?

As it could affect the supply of food in our country, using grains and oil-bearing seed plants that can be used as human food or animal feed for the purpose of biofuel is inappropriate. Effect analyses are being carried out for this purpose.

As for food prices, according to data from the International Grains Council, it is estimated that world wheat production will have dropped in 2012 by 34 million tons to 662 million tons, with world wheat stocks falling 17 million tons to 180 million tons, and a drop in corn production is expected as well. It can be seen from the figures that there is no significant crisis situation. In some products

WORLDWIDE, ORGANIC AGRICULTURAL LANDS TOTAL 80 MILLION HECTARES



such as soy, however, I believe price increases are speculative. The fluctuations in food prices have had limited effects in Turkey, as such fundamental products as wheat, barley, and corn are produced sufficiently in this country.

In the first half of 2012, the agriculture industry in Turkey was reported to grow by 4.2%. What kind of growth do you expect for the second half of the year, which in a country like Turkey is typically a time of increased agricultural production? What are the causes for this growth?

Among the fundamental causes for this growth is the revision of agricultural incentives based on a principle of productivity and quality. Important efforts in incentives are both increasing the number of incentives and diversifying incentives in terms of quality and quantity. Together with this there is the renewal of machinery, as well as the facilitation of the integration of agricultural and rural areas with the transition to a market-focused mode of production. We expect this trend of growth to continue unchanged in the period ahead, too.

Organic agriculture is becoming increasingly popular worldwide. First gaining support in 2002 with 155 kinds of organic produce, organic agriculture in Turkey grew to the point where in 2011 it produced 225 kinds of organic produce, having grown steadily in the past nine years. How does Turkey compare to the rest of the world in organic agriculture? What sorts of efforts are you conducting to support and promote organic agriculture? What incentive projects are required for the advancement of organic agriculture in Turkey?

Organic agriculture has been exhibiting rapid growth in the world in recent years. The ratios of organic agriculture fields and farms in the world's total agricultural areas are increasing. According to data for the year 2010, organic agriculture is practiced on 0.9% of the world's agricultural land. Current data indicates that 1.6 million businesses are engaged in agriculture over a 37-million-hectare area. Additionally, with 43 million hectares of natural foraging areas, the total size of organic agricultural lands reaches 80 million hectares. Pastures account for 23

million hectares of this area. To examine the matter in terms of producers, roughly 29% of producers practicing organic agriculture are located in Asia, 34% in Africa, and 18% in Europe. In parallel with the increase in production, the monetary aspect of the world organic agriculture trade is growing rapidly, too. The organic food market reached a size of \$59 billion in 2010, exhibiting a growth of roughly 5% over the previous year.

In Turkey, the lands where organic agriculture is practiced account for a 1.81% share within the total agricultural area, according to data for 2011. By taking advantage of the spread in the consumption of organic products in the world, especially in Europe, we can obtain a decent market share for our country in this area. I'd like to mention some of the efforts we are doing for this. A protocol was signed between our ministry and the General Directorate of State Waterworks. Through the protocol, which was signed jointly in order to allow organic agricultural production in the basis of dams used for drinking and general-use water, the practice has reached a total of 18 dam basins in 18 provinces.

IN THE FIRST HALF OF 2012, THE AGRICULTURE INDUSTRY IN TURKEY WAS REPORTED TO GROW BY 4.2%

Also geared toward organic agriculture was the Project to Promote and Control Organic Agriculture, which was as of 2011 being conducted by the ministry's headquarters, 18 province directorates, seven Southeast Anatolia Project province directorates, and ten research institutions. In 2012, we added eight more provinces to the project in the same scope. Research, development, education, and publication efforts concerning organic plant, animal, and water products are being done with the project. Demonstrations are being installed in 33 provinces with the purpose of increasing organic agriculture. Additionally, education and promotion efforts for producers are also being conducted. Research, demonstrations, education, and promotion activities are being conducted as part of the Project to Promote and Control Organic Agriculture in Southeast Anatolia as well. We set aside a TRY 2.5 million budget for 2012. We are engaged in international collaboration for organic agricultural production too. The Albania Organic Agriculture Project and Azerbaijan Organic Agriculture Project are being conducted within the scope of the Turkish International Cooperation and Development Agency's collaboration with our ministry.

Besides the projects, we are providing area-based incentives to organic agricultural producers that are part of the support program of TRY 35 for produce and TRY 10 for field crops in 2012. For those engaged in organic animal husbandry, we give a 50% extra payment in addition to animal husbandry incentives. Furthermore, farmers who practice organic agriculture have the option to use loans with terms of 18 months for business credit and seven years for investment credit from the Agriculture Bank at a 50% discount from the current interest rate.

Increased difficulties in agriculture due to changing climate conditions and European nations' changes to their agricultural policies are pushing many nations toward sustainable agriculture. What sort of steps is Turkey taking for sustainable agriculture? What kinds of efforts have so far been conducted in Turkey to develop sustainable agriculture?

Agriculture is a field that is directly related to climate conditions. It is at this point that sustainable agriculture comes in. With the purposes of facilitating sustainability in agriculture and increasing the fruitfulness of products against climate change; concentrating agricultural production in areas where it will fit in with the ecology and supporting, organizing, and running this in an integrated fashion; we determined 30 agricultural basins by district borders according to climate, soil, and topographic data to create an agricultural inventory. With this project, we developed a production and support model for agricultural basins with the purpose of ensuring the preservation and sustainable use of natural resources by growing the right crops in the right places and in the correct amounts. Efforts to revise and develop the model continue. Furthermore, with the purpose of determining the soil's fertilizer need based on soil analysis and the application of fertilizer with consideration of the crop to be planted, we are supporting farmers who are having soil analyses done.

Under the leadership of your government, Turkey is preparing for the year 2023—its republican centennial—with a combined \$500 billion export target for all its industries. Can you discuss your ministry's goals for the year 2023 and what the ministry will do to reach these?

Turkey possesses significant potential in the agriculture industry. We have shown this with our deeds over the past eight years. Firstly, we examined agriculture as a strategic industry and conducted a sectoral depth analysis. Then we turned the mirror to ourselves. We facilitated close to fifty thousand meetings concerning the industry. We presented the depth analysis study and issues new laws that Turkish agriculture has awaited for years. With the

strategies, policies, and projects we brought to life, we increased Turkey's agricultural production from \$23 billion to \$62 billion. In terms of agricultural production, we rose to first place in Europe and from 11th to seventh place in the world. These facts are recognized by international institutions, too. OECD's agriculture report for 2011 says Turkey has shown great progress in the past ten years and rose to seventh place in the world in terms of the amount of agricultural productions. The United Nations' Food and Agriculture Organization's report also tells of Turkey's success story. But for us, these are not enough; and for 2023, too, we have drawn a vision for ourselves. We aim to raise the agricultural productions of \$62 billion to \$150 billion,



WHEN WE REACH OUR TARGETS, TURKEY BE AMONG THE WORLD'S TOP FIVE COUNTRIES BY AGRICULTURAL ECONOMIC SIZE

and our export target is \$40 billion. These are realistic targets. The things we have done by today show that we will reach our next goals.

We are working with all our might to achieve these goals. Most recently, we took a giant step in food safety. When producing for other markets, the food industry, packaging, storage, sales, and sales centers come into the equation. Different opera-

tions are done in each of these. We are in the position of having to audit this chain in every area from the market to the table, the farm to the fork, and from the pasture to the plate. And for this, we had to set up a food safety system. We have published 102 directives, and these directives are at EU standards.

Also with regard to our goals, our efforts to make the agricultural organization more effective, develop the industry, and facilitate rural development will continue in the coming term. Our aim is to see in Turkey that in the year 2023 is feeding its population with sufficient, high-quality, trustworthy food and has further improved its position as a net exporter of agricultural products,

increased its competitive ability, and has a say in the world and its region when it comes to agriculture. When we reach these targets, Turkey will have become a country that is among the world's top five countries by the agricultural economic size, has increased its agricultural GNP to \$150 billion, and has had its agricultural exports surpass \$40 billion.

Significant steps are being taken every year for the animal husbandry industry, which as of 2011 reached \$1.73 billion in subsidies. What sort of incentives are you planning for the period ahead? What are your plans to draw foreign investors? While the share of animal husbandry incentives within overall agricultural incentives was 4.3% in 2002, we increased this to 24.4% in 2011.

With our projects and the incentive policies we are practicing, we aim for our farmers to engage in production that complies to EU norms by solving such fundamental problems as accelerating improvement efforts, increasing business capacity and productivity, developing registration systems, addressing the deficit of coarse grains, promoting animal health services, and establishing awareness of collective organization.

In order to continue the momentum we have achieved in production and productivity, we will continue providing the present support in the future, too.

Meanwhile, for the purpose of developing the industry, various projects will be brought to life for raising breeder cattle and developing animal breeds. An intervention institution will be established to facilitate price stability in red meat and other animal products. The production and use of local sperm will be incentivized. In consideration of our country's geography, incentives given for raising sheep and goats will be increased in order to develop it. The incentives provided to increase regional scale breeding angora goats, water buffalos, silkworms, and the bombus bee will be increased, too.

Do you have any projects to address the fluctuation of meat prices in Turkey? Do you believe that the organized animal husbandry zones project that was brought to life in Diyarbakır will be a solution? Are you aiming for animal husbandry in Turkey to be shifted to organized animal husbandry zones?

In 2010, we established the National Meat Council in order to determine problems concerning the meat industry and to propose solutions for these.

A supply deficit in red meat caused by increased demand is created in times when the national economy is growing. For the purpose of eliminating the periodically occurring supply deficit, the customs tax rates on imported red meat and livestock are revised to obtain price stability.

We are providing feed support in order to eliminate the pressure on the costs of local producers due to imports. We pro-



vided TRY 300 per head of cattle in 2011. This practice will continue into 2012, too.

We are conducting efforts to make it easier for pastures to be used for animal husbandry in order to reduce production costs and contribute to eliminating the recent coarse grain deficit.

Within the scope of the new incentives, we are paying TRY 225 per mother cow of beef cattle, TRY 60 in the case that these cattle are registered in the breed registration system, TRY 75 for calves born of artificial insemination and beef breeds, and an additional TRY 25 for hybrid calves born of artificial insemination.

Improving red meat production and bringing it to a level of self-sufficiency are among our fundamental policies.

Meanwhile, we are establishing agriculture-based organized agriculture and animal husbandry zones with the purpose of improving agriculture-industry integration for the support and development of vegetal and animal production and the industries based on these; the packaging, processing, and storage of the products;

TURKEY AIMS TO INCREASE ITS \$62 BILLION AGRICULTURAL PRODUCTION TO \$150 BILLION IN 2013

the provision of technical support; and the supply of suitable, quality raw materials that can increase competitiveness.

New technologies and animal breeding techniques will be practiced in these zones. Sufficiently sized, more modern animal husbandry facilities will be established together with the model. Production in these places will be more fruitful and of better quality. Our producers' incomes and levels of prosperity will thereby rise as well. Additionally, the waste material created at these establishments will be put to use, preventing pollution of the environment.

Turkey is playing for world leadership in the production and export of many agricultural and animal husbandry products, such as hazelnuts, pomegranates, cherries, figs, and eggs. What is behind these very quickly obtained successes?

With the purpose of reducing input costs in production, producers registered in the Farmer Registration System are given area-based incentive payments for new vineyards and orchards they set up using certified or standard fruit saplings on areas of at least 5,000 square meters for shrub or semishrub saplings and at least 10,000 square meters for other kinds of saplings.

Additionally, we are providing area-based support for hazelnuts in the areas of organic agriculture, agricultural best practices, fuel, and analyses of fertilizer and soils. Again within the scope of the program to support investments in rural development (storage, product processing and packaging, machinery and equipment), we are giving as a donation 50% support. We are also supporting low-interest loans and R&D projects.

Meanwhile, we have also begun efforts to facilitate production and quality increases in fruit cultivation and to establish modern fruit orchards with the purposes of reducing costs and increasing the exports ratio. With these efforts, fruit production will take place in better-suited land and ecologically appropriate areas. Fruit production will therefore be done according to the needs of the domestic and foreign markets, taking into consideration the balances of supply and demand.